

## **HOW RYANAIR HAS EXPLOITED THE ECONOMIC THEORY BEHIND AIRLINE CONTESTABILITY AND DEREGULATION**

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“We [Ryanair] will become the largest airline in Europe and as such the largest airline in the world... only we can destroy ourselves”  
Michael O’Leary 11/2/03 Lecture at Trinity College Dublin

### **Introduction**

The European aviation industry has undergone enormous changes over the past decade through liberalisation and deregulation. Because of this, new airlines have been able to enter and grow within the European airline market. Some have been a success, others have failed. Ryanair has undoubtedly proved to be the success story of European air transport. This essay will show how Ryanair entered the market and ensured that its potential has been fully utilised. But in the process, has Ryanair managed to become the incumbent firm that now stops others from entering?

Section 1 introduces the economic theory behind various markets, ranging from a natural monopoly to the idealistic perfectly competitive market. Section 2 introduces Baumol’s contestable market, and how this differs from the strict economist’s view of perfect competition. Section 3 analyses how these opposing theories fit in with the airline industry. Section 4 looks at how the role of deregulation controls this theoretical activity. Section 5 compares Ryanair with the American airline Southwest, the original low fares airline, and examines how this model has been transferred into the European market. In Section 6 the essay performs an industry level analysis of European aviation at the moment by using Porter’s five forces (threat of entry, competitive rivalry, bargaining power of suppliers and buyers and the threat of substitutes). Section 7 directly identifies with Ryanair’s key strength; its cost advantages and how airline deregulation has enabled Ryanair to transform itself from David into Goliath.

Through initially outlining the economic theory and then applying it to the European aviation market and more specifically, to Ryanair, the essay will show how they have exploited airline contestability and deregulation.

## **Perfect Competition Vs Natural Monopoly**

Basic economics suggest that an economist's ideal market structure from the point of view of efficient resource allocation is "perfect competition". This is characterized by a large number of buyers and sellers, homogenous products, free entry and exit, and perfect knowledge on the part of the buyers and sellers about the conditions within the market. Through perfect competition the conditions of pareto optimality are fulfilled. Although theoretically ideal, most markets, in reality, do not come close to being perfectly competitive. But the concept itself is still very important to economists.

Until recently the airline industry in Europe was the opposite of this idealistic economic theory. There were minimal sellers (one airline to each country), entry from competitors was near impossible, and fares were ridiculously overpriced. Governments owned the airlines and generally ran them as they so wished. Natural monopolies, which in the past were run by the state, can be characterised by steadily decreasing average costs that allow one single large supplier to produce the quantity demanded by the market at lower costs than would be possible by a greater number of firms. But air transport is not a natural monopoly.

In this respect some industries such as railroad transportation, telecommunications and the distribution (rather than the production) of electricity have shown characteristics that might make it more cost-efficient to organize the production in a single enterprise instead of several. If the conditions for a natural monopoly exist, it might seem reasonable from an economic policy point of view for the state to intervene. This is accomplished either by a takeover into public ownership or by the issue of a monopoly license and strict public supervision, coupled with regulation on price or quantity. The alternative theory proposes that several problems should be solved simultaneously by the monopoly regulation or the public enterprise. On the one hand, the exploitation of technological efficiency and cost efficiency and on the other hand a restriction of the market power resulting from it. In theory both arguments have valid points, but which one proves to be the more justifiable in reality for air transport? The practical half of this essay will prove that with deregulation, new entrants (such as Ryanair) can enter the market and in the process awaken the dormant incumbent firms into more efficient operations.

## **From natural monopolies to "perfect contestability"**

The quest for a type of market that would yield the same type of results as the perfectly competitive model has led to the development of Baumol's model. In 1982 Baumol introduced the "Theory of contestable markets." The theory states that

while “real markets are rarely, if ever, perfectly contestable” (Baumol, 1982; 1) monopolies do not necessarily have to be in the public hands, or be regulated by the state in order to achieve optimal allocation. The threat of entry (potential competition) alone can be sufficient enough. The key to Baumol’s model rings bells with that of perfect competition, in that “a contestable market is one into which entry is absolutely free, and exit is absolutely costless” (Baumol, 1982; 2.).

The condition of free entry is satisfied if entry does not require any sunk costs (Baumol, 1982). This implies that there would be no discrimination against entrants in favour of incumbents. In a contestable market firms need not be small or numerous or independent in their decision making or produce homogenous products. Perfect competition is applicable as a guide only where scale economics are absent, so that a large number of rival firms can survive and prosper. Contestable markets contain only a few large firms, and since there is no regulation, cost differences arise only from distinctions in price or quality.

One of the crucial features in a contestable market is the “hit and run” idea. If there is a profit opportunity to be made, a potential entrant can go in and collect his gains before prices change. Should the climate grow hostile, they can simply depart since exit is “absolutely costless.”

When entry and exit are completely free and efficient, incumbent monopolists and oligopolists may, in fact, be able to prevent entry (Baumol, 1982). But this can only be achieved if they offer the consumers that benefits which competition brings. For any deviation from this idealistic behaviour instantly makes them vulnerable to the “hit and run” entry. Such a scenario would not, therefore, deter the market from reaching competitive prices.

Perfect contestability would also rule out inefficiency in production, either through a misallocation of resources, sheer waste, or poor organization of the industry (Baumol 1982). Furthermore with pareto optimality the price of the product cannot exceed the marginal cost. Since price is equal to the marginal cost, no cross-subsidization is possible (no predatory pricing can be used as a weapon of unfair competition).

But how adaptable is this theory in reality? Can this be transferred to a market where the new entrant (Ryanair) can compete against the inefficient incumbent (Aer Lingus) by offering it low fares? If their prices are set at such a level that the costs are not met then that firm would go bankrupt. If however through cost efficiency, fares can be radically reduced, then the new competitor easily undermines the power of the incumbent. Predatory pricing is therefore abolished as a weapon of unfair competition.

## **How do the opposing theories fit in with the air industry?**

In 1938, the Civil Aeronautics Act was introduced to regulate and control competition between US domestic carriers because the unregulated competition which prevailed before produced chaotic economy conditions, little security for investors, and low safety margins (Doganis, 1992). For many years it seemed that despite air transport not being a natural monopoly, regulation was required because unregulated competitive market forces would have adverse consequences for the public in general.

Doganis (1992) proposes three key reasons for such a stance. Firstly, it was believed that competition was wasteful competition. Air transport was not a differentiated product, there was relative ease for entry, and the economies of scale were not particularly marked. The view was that the new entrants would try to establish themselves by undercutting existing fares and a price war would result, with adverse consequences for all participants. Surely if this did occur, it would only last for a short while until the market sorted itself out. Firms that cut their prices too much and were not meeting their costs would be forced to exit the market?

Secondly, there was the concept that air transport was a public utility. The public utility nature of air transport has rightly or wrongly been considered so important that most countries have concentrated on developing one major scheduled operator, usually with direct government participation (Doganis 1992). This is an extension of the point that free unregulated competition on international air rates would endanger national interests because it might adversely affect the national airline.

Thirdly, there was a rapid development of non-scheduled air traffic. It was believed that scheduled services should be protected because they had “public service” features which imposed certain costly obligations upon them and made them particularly vulnerable to price competition.

However, during the sixties these so-called benefits from regulation began to be questioned (Doganis 1992). It was believed that a more competitive environment would benefit the consumer by lowering fares, creating greater product differentiation, and innovative pricing. The lower tariffs would force the airlines to improve their efficiency and productivity, and the lower costs would further facilitate the reduction in tariffs. Those airlines that were inefficient might then be forced out of the market, and it was argued that the economics of the airline industry did not justify the fear that freer competition would equal economic instability. A strong sense of self preservation would prevent the established carriers from going too far in a price war because of the dangers of getting “locked in.” In other words, firms would avoid successive fare reduction, which would leave each airline with

much the same share in the market but with very low and possibly unprofitable fare levels.

If firms were experiencing excess profits then new entrants would enter. Cross-subsidization would be eliminated, since it implies that excess profits can be achieved on particular routes.

Although the low cost airline is not a perfectly contestable market, the barriers to entry have come down in recent years. This is partly due to the liberalization of the industry, but also by the belief from several new entrants (such as Ryanair) that there is much money to be made in the industry.

## **Deregulation**

The deregulation of the European airways took place in the 1990's and it is from this that Ryanair has been able to exploit the Irish and subsequently the European transport market.

The twin objectives of air transport liberalisation for fair and open competition were achieved in stages (Doganis, 1992). In December 1987 the first 'package' was agreed by the European Council of Ministers. This introduced more liberal fares into the market and forced the abandonment of equal sharing of capacity on routes served by airlines of two states at either end of such routes; but it also began steps for the entry of new airlines by opening up market access. This package also acknowledged competition articles from the Treaty of Rome, which meant that a large proportion of inter-airline agreements were deemed to be anti-competitive and hence illegal.

In June 1990 a 'second package' of air transport liberalisation measures were introduced by the council. This time they loosened the previous constraints on price, capacity restrictions and market access (Doganis, 1992). On routes above a certain traffic density more flights and airlines were permitted.

But it was not just the changes in regulation that occurred at this time. Immigration and customs controls were lifted and in 1993 a single 'domestic' European market was created. This was with the third of the 3 'packages' which created an 'open skies' system whereby airlines from any member state could freely operate anywhere in the EU with full traffic rights. The most important part of this for Ryanair was that there were to be no price controls, which meant that all airlines were free to set their own fares with some limits to prevent predatory or excessive pricing. This third 'package' also went further than any of the previous measures to liberalise the skies because it was not merely a bilateral agreement and for the first time allowed cross border majority ownership.

In early 2004 ten new countries will be added to the EU “open skies” agreement, thus further broadening the liberalisation in terms of locations (Davy 2003).

Along with the liberalisation of air transport the European Commission decided that the airlines should now face the European Union’s ‘competition rules’. These competition rules cover three broad areas: cartels and restrictive agreements, monopolies and mergers, and state aid or subsidies to producers (Doganis 1992). These competition rules were required so as to ensure that the deregulation of air transport and the increase in competition that occurred was not abused by dominant airlines. This was good news for Ryanair because they now had a much bigger market to aim for as the amount of potential destinations and passengers increased dramatically. It also meant that their transition into becoming a continental airline would be somewhat protected by these competition rules.

Airline deregulation did not just affect airlines, it also affected airports as well because the ‘world of non-competing airlines was mirrored by non-competing airports’ (Barrett, 2000; .578). This was because collusion between airlines restricted airport development. In this regard airports saw regular, higher cost airlines as a more secure form of revenue because they could pass on the costs without resistance. But when the airline business became deregulated airports, were stimulated into action. Demand was also stimulated through the deregulation process with the arrival of low cost carriers. Ryanair’s policy of looking for secondary airports put them in a strong position because airports were now looking for their own business, instead of being able to charge whatever they liked, as was previously the case.

## **Comparing Ryanair with Southwest**

The American airline, Southwest, remains the role model for European low-cost airlines and therefore provides a good barometer of the likely development of low cost airlines in Europe. Michael O’Leary claims that, “We went to look at Southwest. It was like the road to Damascus. This was the way to make Ryanair work.” (Financial Times, 8/12/1998). Five years later, how exactly do they compare to one another? By naming the key factors that contribute to the success of Southwest Airlines and using these as a benchmark such a comparison can be made with Ryanair, and where, if any, Ryanair has made any advantageous steps ahead of Southwest.

While Ryanair is similar to Southwest on a majority of fronts, some of the points of difference can be important. Fluctuations in the Euro against the dollar make comparisons on cost uncertain, but on the key issue of maintaining low costs

against their local rivals each carrier has factors in their favor. Southwest enjoys better aircraft utilization and a longer average journey. On the other hand, Ryanair's marketing and distribution costs are minimized by its more developed internet usage. Generally, Ryanair cut more costs, as they have no free on-flight services and no frequent flyer programme. This has led to large amounts of bad publicity, especially in Ireland. Indeed, it was even the Taoiseach, Bertie Ahern who described Ryanair as a model of "tooth and claw capitalism". However, it would appear that Southwest operates in a lower cost environment than Ryanair, with lower airport related costs and lower fuel prices. These factors are somewhat out of the control of Ryanair to change but, more importantly, they are also out of the control of Ryanair's European-based competitors.

Ryanair may or may not be right in not following Southwest's higher spending model. The availability of free snacks and drinks and a frequent flyer programme are expenses that Ryanair could do without at the moment, especially when their nearest rivals, EasyJet and Go, do not have these extras. However, the frequent flyer programme might be one that could attract loyalty in the event of price warfare on the same routes as their rivals in the future. Southwest passengers also enjoy more convenient airport locations than Ryanair passengers do, as Ryanair continue to develop their policy of making use of secondary airports as much as possible. While this does not deter the leisure traveler, it might discourage custom from the business traveler or middle market. Another selling point for the fare-conscious business traveler is punctuality. Southwest have won awards in America for punctuality, whereas CAA statistics do not show a marked superiority for Ryanair in this regard. On the other hand, many of Ryanair's budget rivals are not outstanding in this regard either.

A key question is whether the EU market can equal or exceed the US market. The addition of ten new countries to the EU "open skies" agreement in early 2004 adds further impetus to EU market growth. This essay argues that the potential in Europe is even greater than the US as it has a larger population base with more leisure time a more even income distribution, a higher fare environment and less competition. These points accumulate a strong argument for such a statement.

## **Porter's 5 Forces**

Before the idea of Ryanair or indeed any low cost carrier was even devised the European airways industry was, as already illustrated, highly regulated. Therefore post 1992 and deregulation, great changes came about. By identifying with Porter's "five forces," one is able to ascertain what this meant for Ryanair within the European air transport market. These five factors are threat of entry,

competitive rivalry, bargaining power of suppliers, bargaining power of buyers and the threat of substitutes.

### **Threat of Entry**

Threat of entry analyses the threat that new entrants may enter the industry and diminish the returns of established companies. In the case of Ryanair a strong brand identity built up over the period since deregulation has meant that any potential new entrants would have to outlay quite an amount of money in terms of sunk costs in advertising to compete on a level playing field. Allied with this, direct bookings on the Ryanair website has meant that there have been savings in the region of 42.6% in marketing and distribution costs.

### **Competitive Rivalry**

The cost of increased competition can be quite high with customers benefiting from price wars between rival airlines. This is why Ryanair has an advantage over other airlines because their policy of bundling low frills and low prices together means that they are competing for the more price sensitive customer. Demand for short haul flights around Europe is ever expanding. It is however vital that Ryanair were among the first movers because many 'copycat' airlines have tried to follow suit. Davy (2003) believes that there are only two pan-European low cost operators where first mover advantage and scale and cost efficiencies gave the two largest players, Ryanair and Easyjet, a significant advantage. In fact, since deregulation, of the 80 low cost operators that had begun operations, 60 had gone bankrupt (Lee, 2000). Michael O'Leary is so confident that this particular aspect of Porter's 5 forces is almost inconsequential for Ryanair that he has said "at the lower end of the market Easyjet and Go don't really compete with Ryanair." Having said this, the threat of competitive rivalry is important for the industry because fierce competition can lead to a decline in sales.

### **Bargaining Power of Suppliers**

At a very basic level the airline industry suppliers are limited in two areas: actual purchase of planes and the supply of fuel. Ryanair has a very healthy relationship with the main aeroplane supplier, Boeing. With the downturn in the economy airlines were putting their purchasing on hold. Not Ryanair however, as O'Leary saw this as the perfect opportunity to buy. In addition to the 2002 contract with Boeing where they will supply up to 150 737-800 type aircraft for Ryanair, they are also required to provide various ancillary goods and services to Ryanair. These include technical support and training, spare parts support, training of the flight crews, software and field services engineering. On writing this essay, it was made public that Ryanair has ordered an additional 100 new Boeing 737-800's to

facilitate Ryanair's rapid European growth plans. On the same day as this news was made public, Ryanair opened up four new destinations in Europe, bought the airline Buzz and had thousands of seats on sale for 1 Euro. Ryanair also has also increased its option orders by 78 to 125. This will, over the next eight years, give Ryanair a fleet of 250 Boeing 737-800's, making it the youngest carrier in Europe and the second largest worldwide behind Southwest in the U.S.

In terms of the fuel price there is very little that Ryanair can do, because the price of fuel is governed by world trade and the Middle Eastern countries have market dominance.

### **Bargaining Power of Buyers**

There are many determinants to the power possessed by buyers in the airline industry. These include the standardisation of the product, elasticity of demand, brand identity and the quality of the service. In this respect buyer power in the European airline industry is quite strong because switching costs are very small. For low cost carriers, the switching costs may be found by simply clicking on a rival's website. The fact that most low cost carriers sell their seat via the internet means that any price discrepancies can be found very easily. This means that Ryanair have to keep their prices competitive in relation to the industry level.

### **The Threat of Substitutes**

The threat of substitutes to the airline industry comes in three main forms. These are road, rail and to a lesser extent the boat service. Of these, rail would seem to offer the greatest threat because, certainly around Europe, it offers an excellent continental service around the major cities that Ryanair fly to. Rail travel has several advantages over air in terms of the fact that they can be more localised and more accessible but one must endure a longer journey also. Ryanair can offer a faster journey at prices that can often be far cheaper. As an example, a return ticket from Frankfurt to Amsterdam costs between 121.20 Euros and 175.60 Euros. This compares with Ryanair's average fare of less than 50 Euros (Davy, 2003). In fact, there is even the perception that there is much greater penetration of fast trains in the EU than in the like of the US, and that this is a limiting factor on demand. However, trains in continental Europe are very expensive, which is reflected in the fact that Europeans think nothing of driving from one country to another to make a saving. Car travel offers similar advantages to that of the railways but Ryanair will always be able to boast shorter journey with less hassles. Another, less obvious threat comes in the form of global communications. As technology develops there may be less of a need to actually meet with people as business meetings could take place via video conferencing. Although, relatively speaking, this is not very prevalent at the moment, there may be less of a need to physically meet up with associates in the future.

## Ryanair's Cost Advantages

Each of Ryanair's cost advantages are analysed in the next section. These range from the in-plane seating structure, high aircraft utilisation, in-flight catering, the use of secondary airports, direct sales (mainly over the internet) and its fleet all being the same plane. A substantial reason why Ryanair is enjoying so much success at the moment is because they operate off much lower costs than any other airline in Europe, including all other low cost carriers.

Ryanair begins with two initial cost advantages stemming from their very basic principle of 'no-frills'; these are having a higher seat density and higher daily aircraft utilisation than other airlines. They do not operate a business class and narrow the galleys in between the rows of seats to reduce the seat pitch. Ryanair fit 15% more seats into their aircrafts than regular airlines. This enables them to have a higher number of passengers per flight than regular airlines. The effect of these extra passengers is exacerbated when one realises that Ryanair actually has more planes in the air. This is done because they try to achieve a 20 minute turnaround at each destination which means that the planes are rarely left idle. The one problem with this is that if one flight is slightly delayed the knock-on could be disastrous, and difficult to amend.

These short turnarounds are also helped by the fact that there is not much cleaning to be done on the plane at the end of the flight because Ryanair do not offer free in flight catering. This is another major factor which allows Ryanair to work off substantially lower costs; indeed, Ryanair has even turned this aspect of the flight into a revenue making measure through selling snacks and drinks to its passengers. For the fiscal year ended 31<sup>st</sup> March 2002 ancillary services accounted for 11.7% of Ryanair's total operating profit.

One of the biggest cost saving measures employed by Ryanair is the fact that they make use of secondary airports as much as possible. This is vital because on short haul flights in Europe the airport charges can represent 10-13% of the airlines total operating cost and therefore, as Doganis (1992) points out, reducing these charges by half can cut overall costs by 6 or 7%. According to the CAA, Ryanair's airport charges per passenger are only one third those of British Midland. In fact, since 1997, Ryanair has convinced the IATA to redesignate Beauvais, Charleroi, Hahn, Torp and Nykoking airports, obtaining concessions from them in order to fly there. Ryanair are in a particularly strong position when it comes to negotiating new agreements with the various airport officials because many of the airports they operate from have a very minimal scheduled service. These low airport fees help to keep Ryanair's costs at about 65% below those of traditional airline meaning that they can offer cheap fares and still make a profit if more than 55% of its seats are occupied (McKinsey, 2001).

Ryanair also keeps their costs low because of their direct sales method. Within 3 months of them launching the Ryanair website ([www.ryanair.com](http://www.ryanair.com)) in 2000, they were already taking 50,000 bookings a week on-line. By the end of 2001 75% of all bookings were done via the internet, whereas now it accounts for 90% of its daily bookings. These on-line bookings eliminate the travel agents booking fee which can be in the region of 7 or 8%. Ryanair do not have booking offices in the cities they fly to, thus cutting down on costly renting of prominent locations which may be required if the internet was not fully utilised. Also, since Ryanair offers a point-to-point service they do not issue for, or receive tickets from other airlines from transfers. This simplifies passenger revenue accounting and therefore allows it to be almost completely computerised. Ryanair's point-to-point service and use of secondary airports helps greatly with the fact that they keep their planes in the air for as much of the day as possible. In the fiscal year ended 31 March 2002, Ryanair flew an average of 4 flights per route per day with an average route length of 442 miles. This is much more than any regular airline.

Another cost advantage Ryanair hold over the regular carriers is that almost all of their planes are the same type (Boeing 737 series); this reduces pilots training costs and maintenance costs. This is furthered in 2002 when Ryanair agreed to purchase 100 new Boeing 737-800 aircraft plus additional rights to purchase an extra 50; and although maintenance costs increased by 29% at the end of the quarter ended June '02, this is explained by the fleet that operated increasing and a subsequent increase in the number of hours flown.

Michael O'Leary outlined that "despite strong growth Ryanair continues to deliver impressive cost discipline", this is justified by the fact that although in June '02 operating expenses had increased by 22% from the previous year, and revenues had increased by 29%

This minimalistic cost strategy might have won Ryanair passengers and profit but it has not won them everything. Ryanair's staunchly unmoving stance on low costs and shameless publicity campaigns has not won them many friends, especially in Ireland. A very recent example of this being when O'Leary claimed that, "we (Ryanair and Boeing) will kick the crap out of Airbus in Europe over the next couple of years". Indeed, as the Sunday Tribune described, "O'Leary and Ryanair are the strongest evidence of truth in the adage there's no such thing as bad publicity". So while they continue to provide a product that European travelers desire, they may run into problems not faced by Southwest in terms of customer perception.

## Conclusion

By taking the economic theory and directly correlating it to the airline industry and more importantly Ryanair, one is able to see how the industry has changed so much over the last decade. It is also clear how Ryanair has grown from being a small airline that serves a limited number of routes, to the dominant airline whose growth within Europe is all encompassing, potentially far outweighing any other firm in the market.

The airline industry is not a natural monopoly and the sunk costs are not that dramatic as planes can be both bought and sold, and the “air” that people fly through is essentially free. With deregulation however, the airline industry became a realistic version of a contestable market, and firms such as Ryanair and Easyjet were able to enter. But in the process, Ryanair has managed to take control of the European airline industry. However Ryanair have forced new entrants into investing in sunk costs far greater than when they entered the market themselves, coming through the importance and strength of the Ryanair brand name. The control and growth potential is and will be so strong that Ryanair appears to be single-handedly taking over the European airline market. This former minnow has persevered with a very simple but effective policy; people will travel for as little amount as possible. By capitalizing on this, it is now the incumbents of ten years ago who are trying to emulate the success of this “little firm that has come out of Paddyland,” (O’Leary, 2003).

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