# May the best one win

How to tell whether aviation's playing field is level what to do if it isn't.

## 1. Introduction

The metaphor of level playing field clearly relates to the world of sports. In most sports, the sheer goal of any contest is to have the best contestant win. Rules are generally catered towards reaching that specific goal and are equal for all players. Appelman *et al.* (2003) refer to this type of contest as a *rule-based level playing field*.[1] In some sports, or some specific sportive events, the rules may be changed in such a way that everyone has a fair chance of winning, despite differences in abilities. This practice is commonly known as handicapping and referred to by Appelman *et al.* (2003) as an *outcome-based level playing field*.

Unlike in sports,  the sheer goal of economics is not by definition that the best one wins. If we were to define a single goal for economics, welfare would be the obvious candidate. Without going too deep into the definition of welfare, it is safe to state that if two firms provide the exact same good at different cost levels, society as a whole would be better off if the low cost firm would provide it. Similarly, if two firms provide a good at the same cost level, but with different quality levels, society as a whole would be better off if the high quality firm would provide the good. This implies that, although it is not a goal in itself, economists would generally favor situations where the best one wins. From a welfare perspective, a rule-based level playing field would therefore be desirable; the same rules for all firms.

Before we continue, let us first take a closer look what determines who is the ‘best’ in economics. For the sake of simplicity, we will be using the example of two firms with identical goods and cost differences to identify ‘best’ (i.e. the most efficient one). The line of reason smoothly extends to other dimensions, such as quality, customer-orientation and so on. So, how can one firm have lower costs than the other when they produce exactly the same? Clever management could be a reason. If we think of it, clever management probably is the most important reason, as it determines many of the other reasons, such as access to technology, optimization of production, motivated staff, optimization of location and so on. The list is endless. There are some factors though, that managers can hardly or not at all, influence. Sheer luck would be one of them, as well as circumstances. If, for instance, a firm is restricted to being located in a certain country, the management has no choice but to obey the laws of that country, accept the culture of that country, as well as its weather, its geographical structure, its risk of natural disasters and so on.

[1] Appelman, M., J. Gorter, M. Lijesen, S. Onderstal and R. Venniker, 2003, Equal Rules or Equal Opportunities, demystifying Level Playing Field, CPB Document 34, http://www.cpb.nl/sites/default/files/publicaties/download/equal-rules-or-equal-opportunities-demystifying-level-playing-field.pdf

Should we adjust the rules to correct for those factors? Would it be better for society as a whole if we applied handicapping to firms or countries that can't help being less successful? Most of the time it would not. No one would even think of subsidizing the city of Madrid to compensate it for the fact that its geography will never allow it to become a successful seaport. It is clearly beneficial to all of us that seaports are located where mother nature provides them with the best opportunities for seaports.

Consider two firms located in two different countries and let's assume that the managers of both countries are equally clever. For some reason though, the differences between the countries are substantial, giving one firm a clear advantage over the other. On a rules based level playing field, the most likely outcome would be that the firm in the best country would win. That would be good news for the people in the best country, as well as for the consumers of the good. It could however be bad news for the employees and share holders of the company in the not-so-good country, as well as for the government (and hence tax payers) in that country. This leads us to the following question.

Who is society as a whole? Economists like to think in terms of benefits to society as a whole. But how do they define societies? Are they cities? Provinces? Countries? The world? There is no real answer to that question. The definition of society as a whole is determined by the level we happen to be looking at it. Since economists are often asked to advise on policy issues, their geographical scope happens to coincide with the level where policies are designed. In the case of competition policy, this would be the national and increasingly the European level. To maximize welfare on a national scale, we would need equal rules on a national scale. To maximize welfare on a European scale, we would need equal rules on a European scale. It is no secret that aviation is a global sector. Expanding the line of reason above, should we now call for equal rules on a global scale?

## 2. When is the playing field level?

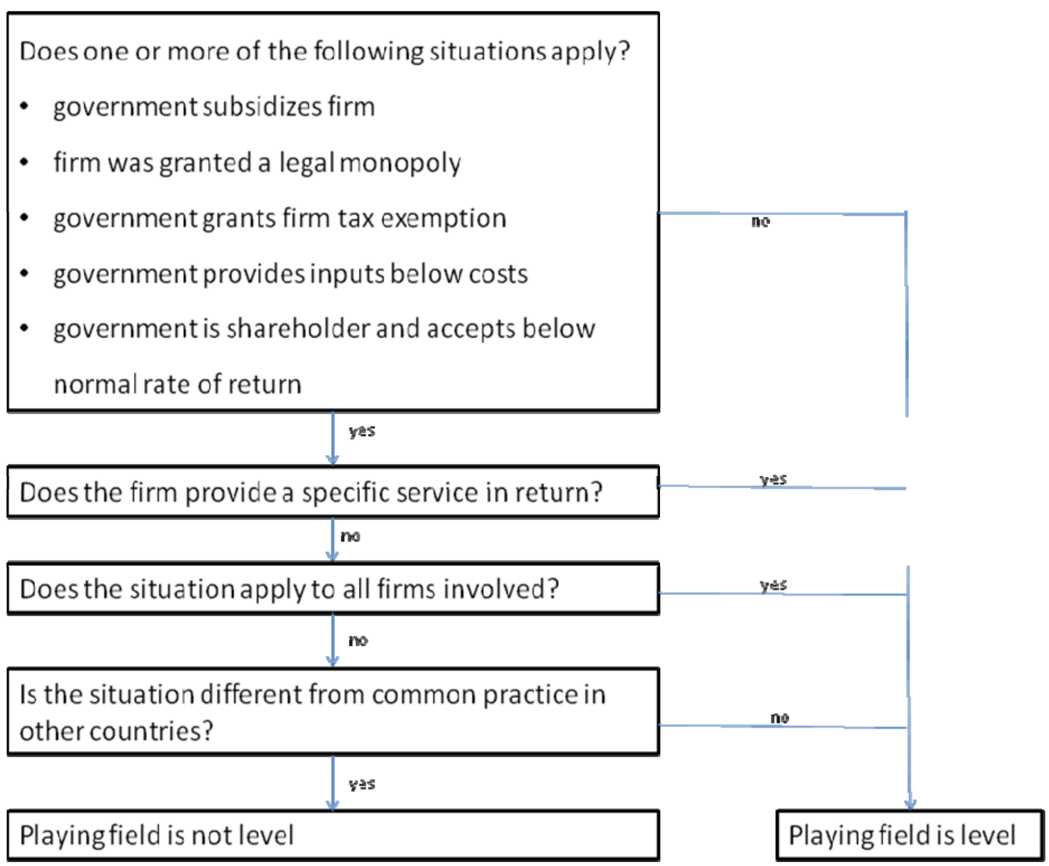
Calling for equal rules on a global scale may sound good, but it raises many questions too. Who will impose and maintain these rules? What exactly do we mean by 'rules'? In a soccer match between, say, England and San Marino, both teams have to play by the same rules. But we do not correct for the fact that English people are on average taller than people from San Marino. Or for the fact that England has a larger population base to choose soccer talents from. Or wealthier clubs, allowing local players to develop themselves in a higher level national league. All of that is no problem; everyone understands intuitively where the concept of 'rules' in soccer ends. Similarly, most people would easily understand that the current growth of long haul capacity of Gulf-based carriers, is an outcome. The outcome *may* be affected by unequal rules, but the isolated fact that Emirates orders 32 A380s provides as little information on the question whether the playing field is level as the number of goals that England would score against San Marino.

In economics, life isn't that easy. Focusing on government implied differences as an interpretation of 'rules' may seem appealing in its simplicity, but it leads us nowhere. Take space for example. If a region has ample space, ground prices are likely to be low. That seems to be a geological characteristic of that region and hence not a 'rule' in terms of the level playing field discussion. But space, and even more so the price of space, is influenced by spatial policy, such as zoning laws. That would turn space into a rule. However, zoning laws don't just drop from the blue skies either. They cater to a need, which is in turn affected by the lack or abundance of space. In a very empty region, the need for zoning laws would be much smaller than in a very densely used region. So, even though it might be a 'rule', the 'rule' is based on geography.

Moreover, quite a lot of rules have a general nature, especially within countries. If that is the case, an exception from the 'rules' would be an interesting case, rather than the rule itself. A clear example in aviation is the exemption from fuel taxes. One could argue that paying taxes on fossil fuel is the benchmark and exceptions from these taxes are an implicit subsidy. Using the same example, we may also want to extend this line of reason to the international playing field. If not-paying-taxes-whereas-other-modes-do is common practice worldwide, the global playing field for aviation is still level. Aviation may have rules that differ from other modes or other sectors, but they do not differ between aviation sectors worldwide.

It is clear from the above that identifying a (not-so) level playing field is far from easy. The graph below may act as a framework for identification, although the examples given above clearly show that it should be used with caution.

Figure 1 *Framework for identification of level playing field*



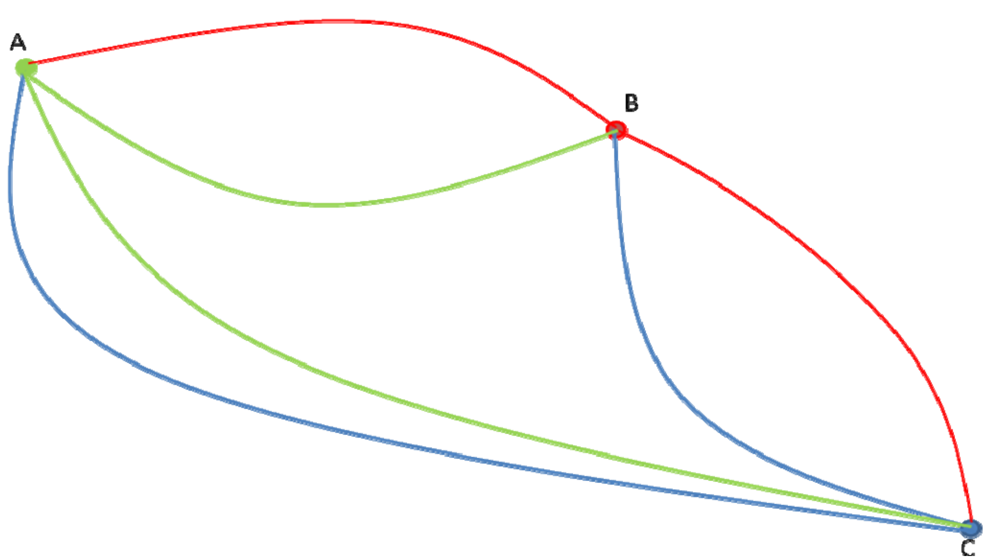
Several aviation related examples may help in understanding the framework. In some countries, governments do provide direct subsidies to airlines to serve remote regions. In many of these cases, the firm provides a specific service in return, i.e. serving routes that are not economically viable. As long as the amount of subsidy is a reasonable approximation of the cost of that service, that would not be a violation of the level playing field. Another example would be the exemption on fuel taxes mentioned earlier. An exemption on fuel taxes could point in the direction of a not-so-level playing field, but since the situation; 1) applies to aircraft from all firms refueling at any airport in the country and 2) exemptions on fuel taxes are common practice in aviation worldwide, the playing field is still level.

## 3. (why) Should we care?

We noted earlier that aviation is a global sector. True as this may be, this doesn't mean that every airline competes with every airline all around the globe. Although hub-and-spoke airlines go a long way in connecting very distant cities, one could hardly maintain that an airline serves any city-pair in the network. KLM for example serves Amsterdam – New York and Amsterdam – San Francisco, but flying New York – San Francisco through Amsterdam is simply not a viable option.

Let us further illustrate this by a simplified three-node world, where each of the nodes is used by one airline as a home base, as depicted in figure 2 below.

Figure 2 *Three node network*



First, assume that airport services at B are offered below cost price. This would affect the A-B market as well as the B-C market, but it would affect all firms using airport B alike and hence not affect the playing field (see figure 1). Now suppose that the Blue airline, flying from airport C, receives free fuel from its government, and does not provide anything in return. Other airlines serving airport C do not receive free fuel and handing out free fuel to airlines is clearly not common practice in other countries. This means that the A-B market is still a level playing field, since serving A-B through C is not a very credible option due to the long detour. However, we clearly do not have a level playing field in the A-C market and the B-C market. Now what?

The first thing we should do, is determine who 'society as a whole' is in this case. Like we said before, this largely depends on who we are and where we are. Let's just assume that we are advisors to the national government where node B is located. How is our society affected by the free fuel to the blue airline? We can distinguish between two effects:

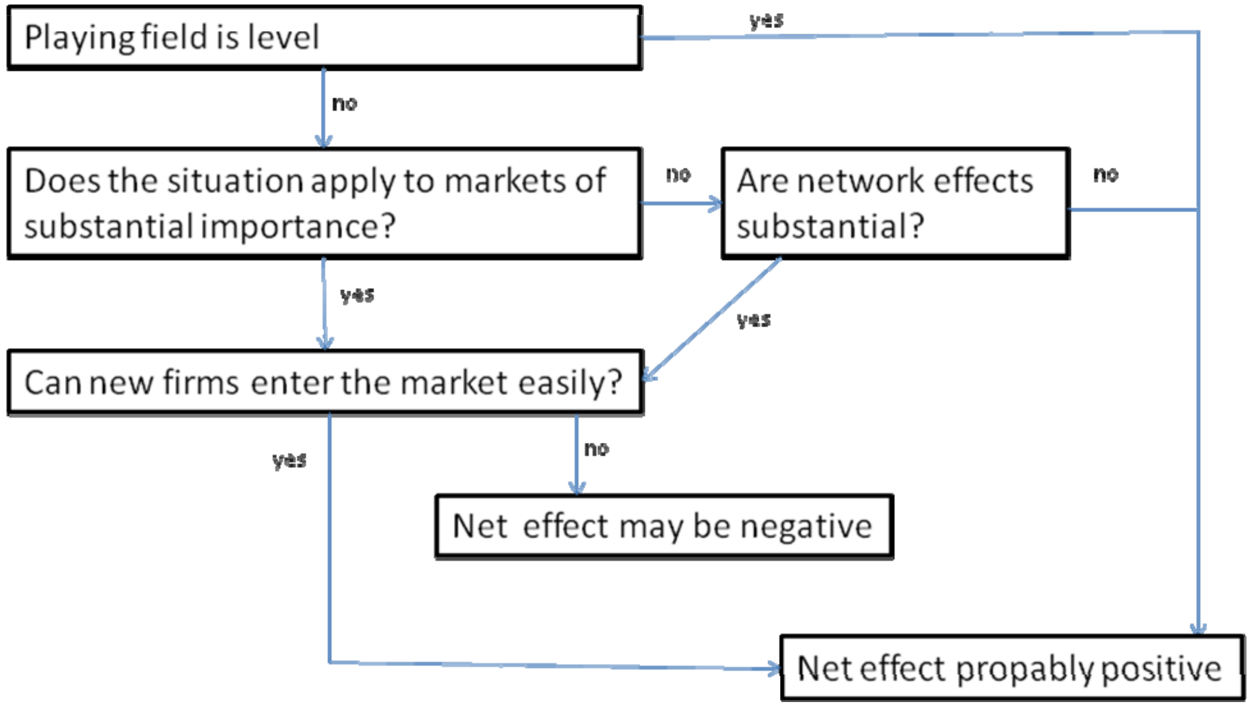
1. Our inhabitants and firms gain from lower transport costs when traveling to node C;
2. The red airline suffers from unfair competition.

The first effect is clearly beneficial to our 'society as a whole'. To put it bluntly: the government of country C subsidizes the accessibility of our country. The second effect is likely to be negative for our 'society as a whole', but the magnitude of that effect depends on several factors.

First of all, we need to wonder whether market B-C is important to the red airline. If it is not, there will still be some costs to society, but they are very unlikely to outweigh the benefits. We should keep in mind here that answering the question whether market B-C is important should also take into account the question whether network effects are substantial in that specific market. Suppose B-C is not that important in terms of revenue, but the passengers on the indirect market A-C are important to realize economies of density on route A-B. If that is the case, and unfair competition on B-C is strong enough to press the red firm to stop serving that route, this may affect the competitive position of the red airline on route A-B.

Even if the B-C market is important to the red airline *and* the red airline may be forced to leave the market as a consequence of unfair competition, the net effect to society as a whole may still be positive. We have essentially replaced one airline by a cheaper one. The fact that the replaced airline was 'ours' does not change that, nor does the fact that the cheaper one can only be cheaper through cheating. The question then is what happens after the red airline has left the market? Will the blue airline act as a monopolist and hence raise prices? Or will it continue offering subsidized lower fares? That essentially depends on the question whether a new airline can easily enter the market. If that is the case, the only way for the red airline to keep them out is by keeping prices low and hence maintaining 'their' subsidy to 'our' accessibility. The discussion above is depicted graphically in figure 3 below.

Figure 3 *Framework for identification of the net effects on 'society as a whole'.*




## 4. Time for action (!)(?)

If the net effect of an unlevel playing field is (or may be) negative, action must be taken. Must it? What action and by whom? Apart from the European Commission, no supranational governments exist, although international law may provide some solutions. Several international organizations deal with issues like the ones discussed here, like the World Trade Organization and ICAO. But these organizations have little power to impose rules. Their actions are commonly based on consensus and diplomacy. If we are dealing with countries that are deliberately tilting the playing field, how likely will it be that they agree not to?

The alternative would be unilateral action, either by individual countries or by the EU. From an economic perspective, two main types of instruments are available; we could impose trade barriers on the countries that tilt their playing fields, or we could compensate 'our' companies to re-level the playing field. Both strategies may prove to be very costly in practice and both will likely induce a reaction from the other country. Moreover, re-leveling the playing field in one part of the world, will tilt the playing field in other parts of the world, leading to responses from yet other countries. The costs of any response should be weighed carefully against the net effect of the current state of the playing field. Unsatisfactory as it may seem, the optimal response might as well be no response at all.