

Specialist Dissertation 2012

Private versus Public railways

**A comparative study of
the efficiency and
quality of British and
French railway systems**

Tristan GUYARD

Abstract	4
Introduction.....	5
Part One : The rising costs in the British railway system : a consequence of the choice to implement privatisation through franchising.....	6
Part two: These rising costs strongly reveal the previous underinvestment, and have add very positive effects on the quality of service, and on security.....	8
Part three: The recent policies adopted by the European Commission show it has been inspired but has also drawn lessons from the British experience.....	12
Conclusion.....	14

Abstract

Introduction

« Our plans for the railways are designed to bring better services for all passengers as rapidly as possible. We believe that franchising provides the best way of achieving that. » As it was declared by the leaders of the conservative party in the 1992 Conservative Manifesto, the franchising of the British railway system would enable the diminution of the State's involvement, as the franchises would be given to private companies, while improving the quality of service. In other words, this reform would improve the users' security and enjoyment, while the taxpayers would have to pay less to finance the railway system, taxes being in theory replaced by private investment.

Of course, paying less for a product and getting one of better quality is often closer to the dream than to the reality. And it did not take long for the opposition parties to criticize the project of privatisation, referring to other national industries and services privatised by the successive Thatcher's governments, which had not seen any rising quality of service, the contrary being often more true.

The burning issue of the ability of a privatised system to reduce its costs while delivering a better quality of service is now even more actual as the opening of the access or not to the national railtracks is one of the most important issues currently faced by the European commission.

It is very important to determine whether the privatisation of railway systems can complete its targets, and in which way or ways such a reform should be implemented. The stakes are very important as the performance of the transportation systems of a country are very often variables that influence strongly the economic efficiency of these countries (Maciulis et Al, 2009, p95). If Asia is currently at the heart of globalisation, and not Africa, it is also because East Asian countries developed the infrastructures to bring the massive quantity of goods on the Pacific coastlines to export them (Lakshmanan et Al, 2000). To be a winner of the globalisation, which relies on ever rising exchanges and flows of any kind, efficient transportation systems are necessary. Railway transportation systems are keys to the future, as they address in the best way the ecological challenges we are facing nowadays and thus seem conceivable on the very long term. To answer this question, we will realise a comparative study of the French and British railway systems, since the mid-nineties and the privatisation of British Rail by the Railways Act 1993. While the measurement of cost can be done quite easily, the cost per passenger.kilometer being both a very reliable and valid measurement of the unit costs of a railway system, it is harder to measure the concept of quality of service. We will use values such as proportion of delays, comfort felt by passengers, numbers of accidents and frequency of trains, while keeping in mind that these values are influenced by local external values, such as density of population or landscape difficulty. Thus, more than comparing the two countries directly (even if we will do it as often as possible), we will also compare the evolution of the two systems, one being privatised and the other one remaining public-owned.

What is the real outcome of the privatisation of the British railway system, seeing its compared evolution with the French system ? What could be improved, and what lessons could the European Union draw from the British experience ?

We will see in a first part of our argumentation that the privatisation of the British railway system has not met its primary target of costs reduction. However, cost is not the same concept as efficiency, and we will see in a second part that, rather than a lack of efficiency, the main cause of the rising costs in the British railway system is a package of political choices which focused more on an improvement of the quality of service than on diminishing costs. Balancing between one goal

and another, the process of privatisation of the British railway system has failed to achieve the two at the same time, and we will see in a third part what lessons, if they exist, the European Union has or can draw from the British experience to achieve this dream of better services at a lower cost.

I) The rising costs in the British railway system : a consequence of the choice to implement privatisation through franchising.

The period spreading from 1995 to 2010 saw the rise of the gap between the costs of the railway industry in France and the United Kingdom, at the expense of the UK. Surprising or not, it remains far from the goals announced by the conservative government of John Major which achieved the privatisation of British Rail. What is surprising however, is to see that despite a great increase of the demand, thus a great increase of the number of passenger journeys, the individual cost of these journeys has remained the same. Indeed, the cost per passenger per kilometer is 20 pence, the same as in 1995 . This number is the key element to measure the real costs of a national railway system, as it simply divides all the expenditures realised by the different actors of the system, in infrastructures, rolling stock purchase, and trains operation, by the number of passenger.km. One passenger.kilometer represents one person travelling one kilometer in a train. This figure has remained the same, while on a network that almost did not change, the passenger traffic rose from sixty percent, from 30 billion passenger.kilometer to 50 billion (McNulty, 2011).

To compare, on the same period, the figure came from 14 to 12.2 pence per passenger.kilometer in France (Office of Rail Regulation, 2008). Nearly half of the price of one passenger.kilometer in the United Kingdom. Imagine a hundred kilometer journey that costs eight pounds more in Britain. This extremely high individual cost of the journey also explains the steady need for State subsidies, contrary to what was announced in 1995. On a London to Cardiff journey, an off-peak ticket bought one month in advance costs 11.50 pounds. The journey being 250 kilometers, it could cost 250 multiplied by 0,20: fifty pounds. More than four times the price actually paid in this case. Knowing this, and added to the fact that less than half of the British passengers are satisfied of the value per ticket in the British railway system, we realise that this situation is very preoccupating.

As the individual cost has remained the same, and the passenger traffic has risen by 60 percent, the overall costs of the English railway system has risen consequently, and if it wants to keep « its licence to grow », without creating an unsustainable debt, it will have to deal with the issue of diminishing the individual cost. Indeed, it should not happen that in a privatised system, gaining customers equals losing money. The problem in the British case is that only a small part of the augmentation of global costs can be directly related to the rise of passengers traffic. Out of the four billions augmentation in the annual costs, two are due to higher costs in trains purchasing and operation, and the last two are rising costs in renewal and enhancement of the infrastructures. The costs of the maintenance of infrastructures has remained the same. As said in the report of the Department for Transport(McNulty, 2011), out of 1.7 billion pounds increased costs in the train operating, only « 0.8 billion pounds can be attributed to the increase in train.km. Most of the remaining cost increase can be attributed to an increase in staff costs ». Said otherwise, the rising train traffic in the UK is responsible for less than half of the rise of the price to make these trains run. The cost to make a train move from one point to another has risen, and has only been compensated by a slight increase in the average number of passengers per train. Similarly, even if the rise of passenger journeys equals a more intensive network utilisation, as British trains have covered 30 percent more distance in 2009 than in 1996, (McNulty, 2011) it is far from entirely explaining the fact that infrastructure maintenance, renewals, and improvements have seen their annual cost rise by two billion pounds between 1996 and 2009. Whereas network utilisation have risen by thirty percent, Network Rail (the « not-for-profit » company in charge of the infrastructure, mostly tracks and stations) has doubled its annual expenditure. Thus, we can believe there have been overspending during this period of time. If we make a comparison with France and the cost of the

infrastructure renewal realised by RFF (Réseau ferré de France, the French equivalent of Network Rail), the gap is impressive. The cost of infrastructure renewal is four times higher in the UK than in France. When dividing the total amount spent in infrastructure renewal by the total length of the network, we shift from fifteen pounds per kilometer of track annually in the France, to sixty two in the UK. Of course, there are external factors influencing this cost. France being a bigger country, stations (way more expensive structures than tracks) are less frequent on the railway lines, especially on the two thousand kilometers of high speed lines. But if we look at the track cost only, where there should be less differences, and where external factors adding costs, such as hilly and mountainous landscape are not at the expense of Britain, the ratio is still of four to one between the United Kingdom and France. We have seen that network rail has recently privileged renewal over maintenance, and there is be a bigger proportion of tracks renewed in the United Kingdom than in France. But the maintenance price per kilometer of track is the same in France and Britain, and infrastructure companies can only choose between maintenance and renewing. Thus the unit cost in infrastructure renewal and maintenance, according to the Civity (Office of Rail Regulation, 2008) report commissioned by the departement for Transport, is the around the double in Britain than in France. According to the ORR (2008) study, this gap has increased by 25% between 1996 and 2009 between « National Rail and international peers ». For the same price, RFF renews a length of track that is twice longer as the length renewed by Network Rail. Such a figure holds a very important proportion in the eight pence gap per passenger per kilometer between France and Britain. Britain saw an explosion of the capital-expenditure, infrastructure renewal and enhancement, and an increase in operating-costs, train operating costs and infrastructure maintenance. The second was more than compensated by 60 percent rise of passenger travel. The operational-cost indeed represented 17.5 pence per passenger per kilometer in 1996 and 15 in 2009. However, the capital-expenditure went from three pence per passenger per kilometer in 1996 to 5.5 in 2009. The price per passenger per kilometer remained close to 20.5, because of the explosion of capital-expenditure and because the operating-costs per passenger.kilometers did not fell as much as they could have, knowing the very important rise in passenger travel . Over the same period in France, the price per passenger.km diminished as efficiency gains reduced the operating-costs and capital-expenditure per passenger per kilometer.

The explosion of the costs in the British Railway system, which is just compensated by the rise of passenger rail travel, prevented the price per passenger.kilometer to fall down has it should have. A few explanations for this can be found in the shortcomings of the process of privatisation of the British railway system. Indeed, more than the choice of privatising British Rail, the implementation of this choice by the conservative government of John Major, but also by the Blair governments, created an unexpected over-rigidity in the decision-making processes of the different actors of the railway system, and did not create the competition that could have fostered efficiency gains. Indeed, first of all, the privatisation has been realised through franchising rather than tendering. Thus, the competition exercises over time, as companies compete for short-term franchises during which they have an almost monopoly over a defined set of tracks. This choice of implementing competition over time, rather than over space, like in the airlines market where several companies can compete on the same line. This choices leads to two major issues which undermine potential efficiency gains. (McNulty, 2011) (Preston, 1996) First, there is no real competition pushing towards policies really aiming to reduce costs (Preston, 1996). This situation of franchises quasi-monopoly is in fact very similar to a public owned system like in France. The customers' choice which theoretically drives costs down does not exist in this situation and the only call for « improvements in operating efficiency » (Pollitt and Smith, 2002) relies on the shareholders. In a situation where a few franchises are not put in a situation to make profit because of very restrictive franchise agreements, this « shareholders' demand for a return on investment » (Pollitt and Smith, 2002) is clearly undermined and there is no more lever pulling towards costs cut policies. Furthermore, this competition over time sets the problem of the shift between the length of the franchises and the rolling-stock lifespan. Whereas franchises agreements are in average set for a

duration of seven years, the rolling-stock lifespan is usually longer than thirty years. Thus, it is harder for train operating companies to make the investments needed without knowing if they will in the future still retain their access to the tracks. Despite tools like the section 54 of the Railways Act 1993, which englobes « Exercise of functions for purpose of encouraging investment in the railways. », for example in ensuring the buying of the rolling stock of the previous franchise operator by the following operator, or the Route Utilisation Strategies (RUSs), which set long term planning processes and define the rolling stock needs on a long term basis, to fight this phenomenon, it is still hard for small train operating companies to invest and bet on future choices that greatly did not depend of them (Affuso and Newbery, 2000).

Also, this large number of franchises reveals the fragmentation of the railway system since the privatisation of British Rail. More than the 19 train operating companies, there are also several other bodies in the industry like « the Rail Safety and Standards Board (RSSB), the Association of Train Operating Companies (ATOC), the National Task Force (NTF), the Technology Strategy Leadership Group (TSLG) and others » (McNulty, 2011). There are also two regulating authorities, « the ORR, which primarily regulates NR, and the Department for Transport (DfT), which regulates franchised train operators and fares » (McNulty, 2011). France, on the other side, is organised around a more classic model of three members, the SNCF (the national train operating company), RFF, and the ministry of transport, to which we can add the worker's unions regarding their power. Thus, there is a clear leadership problem in the British railway system, which is partly responsible for this high rigidity in the decision-making processes. As said by the report, « the numerous bodies involved in the rail industry and misaligned incentives between these bodies make cross-industry leadership considerably more difficult » (McNulty, 2011). Indeed, more than the fragmentation in itself, it is the inability of the different actors of the system to work efficiently together which is problematic. Collaboration is less efficient, and thus fails to find and develop the innovations that could lower the individual costs of the rail transport in Britain. Different companies do not collaborate enough on the issues of common routes or connections where efficiency gains could be reached, nor push together in the same direction when dealing with the oligopoly of the rolling stock leases (ROSCO) and fabricants to lower these costs. The « co-operation at route level between National Rail and Train Operating Companies » could also be improved to lower the infrastructure costs while maintaining the same level of security and comfort.

This lack of cooperation also reveals the issue of the over-centralisation of the British railway system. Many decisions are taken far from the realities of the market and of the needs of particular tracks. This has particular repercussions on the regional transport where the very low demand makes that every superfluous expenditure has a strong impact on the individual costs.

The 1995 to 2010 period of time has seen a large increase in the expenditures gap between France and Britain. While the individual costs have remained similar in Britain, they have slightly fallen in France, reaching an impressive cost of twelve pence per passenger per kilometre compared with the twenty pence per passenger per kilometre in Britain. There have been a few shortcomings in the implementation of the project of privatisation of the British railway system. The choice of carrying privatisation through franchising created fragmentation without competition, and thus brought superfluous costs.

- II) These rising costs strongly reveal the previous underinvestment, and have added very positive effects on the quality of service, and on security.

The privatisation of the British railway system failed to attain its first goal of reducing the State's financial involvement in the system. On the contrary, the annual income provided by the British governments rose from 1,7 billion pounds, from 3 to 4,7 billion pounds (McNulty 2011).

But if the opponents to the privatisation have blamed the Railways Act 1993 for this, it is in fact far from being the most responsible element for this explosion of costs. Indeed, efficiency is different from cost, and a product can for example see its price rise without it being linked to efficiency

losses. For example, there can be a change in the quality of the product. That is exactly what is happening in the case of the British railway system. It has to be understood that the costs of a railway system are more related to political decisions than to gains or losses in efficiency. Tony Bolden and Reg Harman (2006) demonstrated in « Let us have realism for Britain's railways » (Interesting title as it does not evoke efficiency but a more general political doctrine) that the explosion of costs had almost exclusively to do with political choices pushing towards a general improvement of the railway system. As important as how efficiently the choices made are realised, are the choices themselves.

We can agree with them or not on whether the governments are over-obsessed with these improvements and are out of the reality (Bolden and Harman, 2006), but that is not the point. The point is, we will see it, that these higher costs have a much more positive explanation than efficiency losses. They are greatly related to an improvement of many fields of the railway system, impacting on better results in the customers' surveys. These customers' surveys have seen great improvements in the customers' appreciation of the rail transport (Passenger Focus, 2012). And the increase in passengers flows on the rail network is probably related to this increased quality of service.

First, the great financial investments have shown to be realised in goal of catching back after decades of underinvestment. In short, Britain is spending more than France, but it has reduced the quality gap which existed in the past between the two systems at the expense of Britain.

The first interesting field is the issue of security. If we look at the evolution of the infrastructure costs, we can see it only rose between 2001 and 2005. The 1995 to 2001 and 2005 to 2010 periods of time have both shown decreasing infrastructure costs. In fact the costs exploded after the Hatfield crash which led to the re-nationalisation of the infrastructure operator, Network Rail. From a private infrastructure operator, Britain went back to a non-profit company, pushed by strong incentives from the different governments to avoid by all means such an accident to happen again. In short, the public powers chose to privilege security over cost reduction targets : and the security on the network has indeed been strongly improved, catching back on France (Evans, 2010, p399), in a country where the higher density of population makes it a bit more difficult. The extra-care (over-care?) about the network quality following the Hatfield trauma can explain the gap in the individual infrastructure costs. Logically, the costs have risen, especially in the infrastructure maintenance and renewal, where extra-care on security is the first of all the priorities. The fact that Network Rail has privileged infrastructure renewal rather than infrastructure maintenance shows this. Britain has been in fact re-constructing its network rather than trying to consolidate the outdated British Rail network. Between 2001 and 2005, track renewal has been three times higher in Britain than in France (McNulty, 2011, p32). This has a cost, but it also has positive impacts. On the other side, RFF has strongly criticised the different governments about the lack of financial involvement dedicated to the preservation and maintenance of the French network. A big amount of French tracks is in a critical situation, not to talk about line closures. On the other side, line closures remain out of perspectives in Britain (McNulty, 2011, p8).

These massive investments have had effects on the key issue of train delays. While British Rail had worse results than the SNCF in the early nineties, there have been strong improvements in the British railway system and the figures are now better than in France, where the underinvestment we just discussed strongly heterogenised the quality of the infrastructures, a few areas being particularly impacted by rising delays, especially in rural areas. (Region PACA, 2011) Similarly, the rolling stock in Britain is 23% younger in 2010 than in 1995 (McNulty, 2011, p12) whereas it has not evolved in France, which difficulties for the regions in charge of the regional transport to invest as the State funding they receive does not match the competences and missions they have been given.

The British railway system also had to face a technological backwardness compared to France, which came from the underinvestment under British Rail. The example of the High Speed Line 1 between London Saint-Pancras and the Channel Tunnel is very interesting. The costs of this project have been strongly criticised for being much higher than similar projects in France (Infrastructure

UK, 2010). During both the conception and the realisation of the project, the costs have been higher. But those who criticised probably forgot that it is impossible to compare high speed lines projects in France, where such projects have existed since the eighties (first commercial TGV in 1981) and in Britain where this project was the first of its kind. It will be very interesting to compare the price of this project with the HS2 project of a high speed line between London and Birmingham when it will be developed.

All these examples have to be considered as an investment for the future that had not been made before the privatisation (Pollitt and Smith, 2002). The Railways Act 1993 aimed at developing private investment in the British railway system. It has been reminded that private investors preferred more commercially attractive markets, without State's quality requirements, and these investments had to be realised by the following governments. But these are really more than simple costs. They were necessary to foster the development of the railway system in Britain. Once realised, they do not have to be realised again. Thus, we can have a positive look at the figures of the costs which have not increased since 2004. Since then, the price per passenger.kilometer has decreased, and the investments realised before certainly play a key role in this.

As we have seen, the rising costs have been driven by investment on infrastructure backlog. Furthermore, the expenditures gap have also been fuelled by the contradictions between the statute of French and British train operating companies and their real basis of action. Indeed, we will see that the State-owned SNCF seems more oriented by commercial interests than the British privatised train operating companies, which are very « public-interest oriented ».

Reading a three hundred pages franchise-agreement is very helpful to understand what is franchising in the British railway system really about. These contracts signed between the Rail Strategic Authority and the train operating companies, defining the condition under which a franchise should be operated, show surprisingly a very strong state involvement, far from what we can imagine in a private company. From the minimum number of trains on a line, the quality requirements, the station staffing and opening-hours, everything that matters can be found inside. During an interview I led, one Southeastern manager (Southeastern is the train operating company that operates on the Southeastern section of former British Rail) said before anything else, that « the State has never been as present as today» (Southeastern Manager, 2012).

These franchises agreements have a very strong influence on the quality of service in Britain. Indeed « As reported by Passenger Focus in 2009, most of Britain's passengers seem better served than other European passengers by the number and times of trains available. However, the level of train utilisation has a powerful and direct effect on unit costs. » (McNulty, 2011) This call for better services to the passengers has to be compared with what is happening in France. Even if the SNCF is a public-owned company, it is more and more driven by commercial interests as it is shown by many researchers. The transversal routes, very useful but with a lower demand as they do not transit by Paris, are not developed as they should and the yield policy in the TGV trains is very constraining for the customers.

First, the issue of train frequencies and the gap between the two countries are very interesting. Even if higher frequencies can be partly related to higher densities of population in Britain, one very interesting figure remains. Whereas there are in average 107 passengers per train in Britain, there are 196 passengers per train in France, almost the double (McNulty, 2011, p240). And the only explanation is not an hypothetical higher demand in France (in fact, there are actually 1.3bn passenger journeys in Britain per year, and 1.1bn in France) but a higher frequency of trains in the United Kingdom. Again, this is driven by the franchise agreements signed between the Rail Strategic Authority and the train operating companies. These agreements have fostered the « British Rail spirit » that « people like to find a train whenever they go to the station » (Southeastern Manager, 2012) . On the contrary, when a train is not full in France, voices from the SNCF management and from a few regions, which control the regional transport, raise to suppress this train. Between 1996 and 1999, if we exclude six « experimenting regions » which have a very supportive position towards the regional rail transport, the number of trains have risen by 2.4 percent, while the

passengers journeys have risen by 6.35 percent. If we add the six experimenting regions, the number of trains have risen by 6.6 percent, and the number of passengers journeys have risen by 9.35 percent (Burlando and Guihéry, 2004). It is very interesting to compare the utilisation of similar lines. For example, the route between Nantes and Rennes and the route between Derby and Nottingham. Both routes link two main cities of around 200,000 and 300,000 inhabitants on a short, thirty minutes to one hour) journey, with a high demand. Whereas there are between six and eight SNCF trains per day between Nantes and Rennes (SNCF, 2012), there are four or five trains per hour between Derby and Nottingham (National Rail, 2012). That is almost a ten times higher frequency. Whereas British train operating companies are required to run trains at frequent times, there are almost no SNCF regional trains on off-peak hours. The Department for Transport had a choice between two different paths, and it took a clear decision that can explain the explosion of costs.

The regional rail transport in Britain represents nineteen percent of the passenger.kilometers (fifty percent for London and the South East, and thirty one percent for Intercity franchises) and sixty-one percent of the costs to the government (McNulty, 2011). At the same time, SNCF have progressively replaced many train links by buses, and more than the 1 billion passengers journeys by train on local (Paris included) and regional links, two billions passenger journeys have been realised with « Keolis », the bus operator company of the SNCF, of course because it has a lower cost for the operator. Whether we see these different policies positively or not, they are very strong and coherent explanations of the expenditure gap between the French and the British railway systems.

The bill is the same on the issues of opening hours, CCTV and comfort in the trains. For example, the report identified the fact that staff presence for tickets retailing was still proritised versus retailing machines in Britain. There are six categories of stations in Britain, and most of the fifth category (the sixth one being the very small unstaffed stations) stations have retailing tickets staff during ten hours every day. (McNulty, 2011, p216) Of course, this policy have higher costs. But a machine will never fully replace a human presence, especially in the field of ticketing where the fares and prices are very complicated to fully understand and where it is often hard to find the best deal. Similarly, as said during the interview, « there have been massive improvements in the Intercity services, or in the trains to Scotland, to better compete with the plane, in fields like passenger information, CCTV or train-catering » (Southeastern Manager, 2012).

It is very important to understand that the rising costs in the British railway system are fostered by positive policies, and actually have a very positive impact. The argument used by opponents to the privatisation that on the same level of quality, the British railway system still cannot compete with France, and that higher costs are driven by a lack of efficiency can be proved wrong by two fields of the railway system that « escape » the governmental call for a public-interest oriented system over commercial interests. Indeed, the freight transport and open-access companies have obtained positive financial results. In the freight industry, rather than franchisin, the Department for Transport chose to open free competition on the whole network, with a complete freedom given to the freight operators. Between 1995 and 2010, there has been a fifty percent increase in freight rail transport, and the industry have made profits despite paying very high fares to Network Rail (Network Rail, 2010). This is a proof that when actors of the British railway system are led by commercial interests, they can generate profits. Once again, this supports the idea that the British railway system is more expensive because less driven by commercial-freedom and more by the public-interest. At the same moment, the freight branch of the SNCF is strongly criticised its lack of reliability and its inability to grow and make profits. « La fiabilité des services est mauvaise, les prix sont orientés à la hausse, les grèves décrédibilisent l'ensemble de la chaîne de transport ». (Zembri, 2004, p110) In this case, a fully privatised system, with competing companies given the freedom to operate as they want shows better results than French State-owned system. Similarly, the example of the open access companies is very helpfull. These companies are given the access to the network out of the frame of franchising but very rarely. Indeed, they must not directly compete with the franchised train operating companies and pay very high fares to Network Rail without

receiving State subsidies. But the only current two examples show good economical prospects. First Hull Trains and Grand Central Railways are for the moment still not making profit, but their balance sheets show no losses in the first years of exploitation, and show good chances to make profit in the future, as the demand is rising (First Group, 2011).

As we have seen, the gap in capital expenditures and operating costs finds its roots and its reason in the recent policies followed by the British governments. The Hatfield crash and the following explosion of infrastructure costs reminded that British Rail had suffered from underinvestment, which had to be finally caught back. But if we have a look at the 2004 to 2010 period of time, there is room to be optimistic and have a positive view of the privatisation process. Indeed, once the backlog in infrastructure has been surpassed, the costs have not risen, while the passenger traffic has kept rising. If this trend continues, the British railway system will start filling the individual costs gap with the French railway system. Furthermore, while the quality of service has risen all over the British network, France is touched by more and more heterogeneity in the quality of the rail transport. Regions have been given the duty to manage the regional rail transport, but not the necessary funds to deal with it, and the railway system in the less commercially attractive areas of France is in a critical state.

III) The recent policies adopted by the European Commission show it has been inspired but has also drawn lessons from the British experience.

As we have seen, there is room to draw positive conclusions from the process of privatisation in Britain. The rising costs have had an actual impact on the quality of service, and the magnitude of these costs has to be put into perspective, as an important part of these costs comes from previous underinvestment. On the other side the State-owned system in France has seen a slight diminution of the individual costs, but this cannot hide the rising heterogeneity of the quality of service and frequent problems faced by many passengers in a few areas, such as the systematic delays on a few suburban lines around Paris or in the deep countryside. However, these results could have been even better if the few shortcomings of the reform had been avoided. It was and remains important for the European Commission to avoid the shortcomings that appeared in the British experience when implementing its will of a European scale competition on the European railway system.

Thus, the several European directives on the topic are written to set a system that would highlight the positive aspects of the two systems in defining a particularly efficient coexistence between the two systems. Indeed the directive 2001/12/EC states that "Access right is guaranteed to the licensed railway undertaking meeting the safety conditions and seeking access, whatever the mode of operation." It is very different from the process of franchising, as it gives green light to free competition, and does not threaten the existence of any State-owned company that would be led by "public-interest" oriented policies. Indeed, the real thing we can learn from the British experience of privatisation is that, further than State-owned companies or private train operating companies, there are two different systems, based on two different priorities. The first one is a system based on commercial interests, and the other one aims to deliver an even quality of service for all, without caring about the financial losses it could lead to. Both have different consequences and positive points and the idea of the European Commission is that merging these two different systems in the right way could further the positive impacts of each one. For example, we cannot expect the regional, lower demand links, to attract private investment. But these private investments can be very useful in more commercially valuable routes, where these investments could improve the quality of service and generate efficiency gains through competition. It would be a shame not to get the benefits of the two systems whereas it is possible.

More than trying to identify the better system, the lesson to draw from such a comparison between the two systems, and their state of mind, is that both can deliver good service on a particular mission. Competition on the rail networks have proven to driving efficiency gains, the freight market is a very good example of it, but the private investments only follow the commercial gains perspectives. The key is then to maintain public investment, and public presence where the private investment do not flow. The connexions in low density areas and the off-peak hours for example. A limit to the efficiency of State-owned only systems, or of the opposite is that a particular system has its own state of mind, that we can find in the staff that operates it. It is not surprising to see the difficulties to reduce costs when we know that most of the managers of a private company like Southeastern used to work for British Rail. (Southeastern Manager, 2012) Indeed, these managers do not have the “spirit” that is usually found in the private, profit-oriented companies. Thus, another interest of the coexistence of the two systems over the same network is to use the profit-oriented spirit of the traditional businesses on the commercially profitable parts of the network, to foster the effects of competition, and to use the “public-interest” spirit of the staff of the traditional State-owned companies on the non-commercially profitable parts, where the driver of the railway presence is the need for a public transportation system for all.

Apart from the effects of this “coexistence”, it is of course necessary to think about alternative policies that have been forgotten in the British railway system, and that could be usefull. Sir McNulty evoked a few solutions that could slightly lower the costs of regional railways, like leaving the frame of similar infrastructure and rolling stock over the territory and over the type of route, to really foster lighter infrastructure and trains that would could less in operating and would require less frequent renewals. The low-average speed could also enable “reducing or eliminating the need for lineside signalling equipment” (McNulty, 2011, p257). However, the financial black hole that are the regional non-urban railways probably requires more alternative solutions. The replacement of almost-empty trains by buses like in France would enable impressive cost reductions even if this lacks ambition. The average loading of the trains of a few companies is below the capacity of a regular bus. Arriva train Wales have in average 44 passengers per train, Northern Rail 46 and Scotrail 66. Experimenting the replacement by bus of a few lines could be a very helpful experience (McNulty, 2011).

The European Commission has been known for long for its strong support for policies enabling more competition (Henry, 1996). But as we have seen in the British experience, there are very different ways to foster competition, with very different effects. Competition to obtain franchises agreements enables a strong control from the State which can keep its decisional power, which makes this system in fact quite close to a State-owned railway system. The competition over a fully open network like in the freight system relies more on commercial interests, but it creates a more traditional form of competition, with a decisional power being given to the companies themselves, which can better creates efficiency gains and reduce costs. However, both systems have their weaknesses. The strong control from the State in franchising systems tends to an over-centralisation and a lack of reactivity towards the market and the local needs, and can bring superfluous costs. But, it is necessary as the companies in an open-access only system follow profit perspectives and not social improvements. The European Commission has chosen to create a system where the two traditional systems, franchised-subsidised or State-owned and open-access, could coexist, and share the network. Indeed, even if it is not written in the directives, we can imagine that the open-access train operating companies will not invest and operate on the parts of the network that are not commercially attractive. And we expect the governments to maintain the train presence in these areas, for different reasons like the need for a public transportation system for all, through franchising and subsidies or in maintaining a national State-owned train operator. Thus, competition can have positive effects where it can exist, without undermining the traditional spirit of the railway systems of an “open for all, everywhere” transportation system. Of course, there are very important security requirements to avoid competition to be developed at the expense of safety and undermine such a critical need. In fostering competition while maintaining State presence where it is necessary, the new European train system goes one step further than the airlines market.

Conclusion

As we have seen, and as predictable, the goal of achieving a better quality of service and lower the individual costs have not proven to be a fully realistic project, even with a sharp and constant rise of passenger demand. During the pre-Hatfield crash period, the British railway system was able to diminish the costs, but the Hatfield crash revealed critical security issues and dangerous underinvestment and brought back a political will to prevent such an event to happen again.

Network Rail was re-nationalised and transformed into a non-profit oriented company. Then, the British railway system saw a rising quality of service, and caught back on its infrastructural backwardness with France, but which brought exploding costs. The two goals have been fulfilled on separate periods, following political decisions, but never similarly.

If we compare the two countries on the whole period (1995-2010), both the per passenger.kilometer operating and capital costs have seen a rising gap between the two countries. The operating costs have slightly diminished more in France. The capital expenditures have not evolved much in France, whereas they have risen very sharply in Britain. The cost per passenger.kilometer, the key unit of measurement of the system costs, is 20 pence per passenger.kilometer in Britain, and have slightly diminished in France to reach 12 pence per passenger.kilometer. But it has to be understood that this rising gap is mostly linked to the rising quality of service in Britain, which has to be compared with a quality of service which struggles to keep to its standards. The gap between the average number of passengers per train in France and Britain, having a strong influence on the gap in the price per passenger.kilometer as it increases the gap in operating costs, is due to much higher frequencies in Britain in rural transport and during off-peak hours, where and when there is less commercial interest to maintain high frequencies, and is not related to an hypothetical higher demand in France. Other elements that can be found in the franchise agreements, signed between the Strategic Rail Authority and the train operating companies, such as stations opening-hours, have also seen improvements and are today far above average. This franchise agreements, surprisingly gives less commercial freedom to the British private train operating companies than to the state-owned, but quite independent, SNCF railway company. The incomplete transfer of competences, financial but not decisional, to the train operating companies in Britain is a brake to costs reductions, but is a guarantee of an even quality of service which is oriented towards the largest number.

Similarly, the growth of capital expenditures is clearly linked to the political will of improving the security on the British railways, following the trauma of the Ladbroke Grove and Hatfield crashes, which caused 31 and 4 victims (Evans, 2005). Britain, which had worse figures than France in security, has now bridged the gap. In a broader aspect, the explosion of the infrastructure costs can also be traced back to the underinvestment during the British Rail (Pre-1994) era, while the French rail network is currently in a period of trouble, due to recent underinvestment.

The big shortcoming of the privatisation reform is the choice to make train operating companies compete over time than over space. Indeed, the Strategic Rail Authority allocates every franchise to only one company, for a short period of time, rather than fostering competition in allowing the track access to several companies for a longer time. The consecutive reduced scale economies and lack of competition does not push towards efficiency, and the different temporalities between the rolling-stock lifespan and the length of the franchises make it harder to plan and invest on the very long term when it is necessary. Furthermore, despite the privatisation of the British railway system, it is still dealing with over-centralisation, and choices are not always taken at the right level of command and react too slowly to the evolution of needs on a local scale.

But despite these shortcomings, we can see positively the outcomes of the privatisation of the British railway system. The more critical will see the rising costs, while the supporters of the privatisation will highlight the rising quality of service. The only sure outcome assessment we can make, is that the results of the railway system are at least as good in Britain than in France,

probably even better if we look at the ratio between the evolution of the individual costs and the quality of service. After the investments required have been realised between 2001 and 2005, the quality of service has risen since then while the price per passenger.kilometer has decreased. Furthermore, we now the shortcomings that need to be adressed, and thus that there is a potential to foster this very positive trend. And the European Union has drawn the lessons of the British experience. It has realised than there was not a better system. The privatisation is efficient if it can bring private investment, which is not possible in a a large part of the networks as these many rail routes are not commercially profitable. Thus, the European Union pushes towards an opening of the national networks to different competitors, to generate competition and attract investment where and when it is possible. For example, the recent opening of the network to the competition on the German railway system has generated positive results thanks to a good coexistence between private and public operators. It has shown that it is possible to develop this positive competition on the commercialy valuable routes without undermining the duties and the culture of the old State-owned companies and to perpetuate a public-interest oriented system where there are no profit possibilites but a need for a railway system for all. This German application of the solution fostered by the European Commission seems to be the most accurate to reach this ideal of cheaper and better quality railway transport systems.