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# Financing high speed rail in the United States and France: The evolution of public-private partnerships

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ABSTRACT

Using cross-national comparative analysis, this paper discusses the reasons why France has succeeded in partially privatizing its most recently constructed high speed line, while the U.S. has not reached this stage. The authors argue that France, with an interventionist government, diverged from the U.S. during the Great Depression by nationalizing its private railways and regulating competition with highway-based transport, thereby establishing favorable conditions for the future development of high speed trains. The U.S., because of its strong free market orientation, delayed nationalization until 1971, by which time passenger railways were severely weakened, so the U.S. lagged far behind France. After accruing a large public debt on its high speed rail program in the 1980s and 1990s, the French government recently took steps to privatize construction and operations on its Tours–Bordeaux line. Similarly, in the U.S., the State of California is trying to attract private participation on its planned high speed line between San Francisco and Los Angeles. Based on French high speed rail history, this paper argues that, to succeed, California must commit both a high level of public borrowing as well as public guarantees on private borrowing. Public credit is the sine qua non of financing high speed trains.

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## 1. Introduction

On October 1, 1964, the world's first dedicated high speed passenger train service, called the *Shinkansen*, began operating between Tokyo and Kyoto. The line immediately attracted a large ridership and, by the end of its third year of operations, was earning net profits over and above both its operating costs and the debt incurred for infrastructure construction and purchase of rolling stock (Gourvish, 2009: 9). This was a highly significant achievement since, starting in the 1920s, most privately operated intercity passenger rail services had become unprofitable due to competition from highway-based transportation, causing governments throughout the world, including Japan's, to nationalize passenger services. High speed rail created the possibility that these services could return to profitability, become a significant part of the national transportation systems, and perhaps even attract the private sector to return once again to operating passenger trains.

The commonly accepted definition of "very high speed" trains are those that run at average speeds greater than 150 miles per hour and operate on dedicated, grade separated track. In more than four decades after Japan achieved high speed commercial operations, public railway companies have developed high speed lines in many Asian countries, much of western Europe and Great Britain. In the United States, a joint public–private venture between the federal government and the Pennsylvania Railroad developed *Metroliners*, trains with the potential for very high speed, in the mid-1960s. In order to understand how these countries financed their high speed networks and how and why privatization of passenger rail is now a relevant policy option, three questions must be answered: first, how and why did passenger rail services shift from private to public ownership and operation in the mid-20th century? Second, how did that change affect the development of high speed rail? Third, does high speed rail create opportunities for a return of the private sector to passenger rail transport? To answer these questions, we compare France and the United States, since that comparison reveals much about how the public and private sectors related to each other in financing railway development. Throughout most of the 19th century and early 20th centuries, privately owned passenger railways operated profitably in both countries. But, their situation changed in the 1920s and 1930s due to financial problems caused by competition from highway-based transport which were severely exacerbated during the Great Depression. France then diverged from the U.S. by nationalizing its passenger railways and by using government financing and regulation to strengthen their competitive position. This established favorable conditions for the future development of French high speed trains. Though faced with the same Depression-induced financial crisis, the U.S. chose not to nationalize its railways. Instead, private companies were allowed to continue to operate passenger services, competing in the free market with other modes of transport. Ultimately their efforts failed and they

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were nationalized in 1971. Public takeover rescued American passenger railways, but left them severely weakened. This is one of the major reasons why the U.S. lagged so far behind France in developing high speed trains.

The French–U.S. comparison also elucidates many of the key issues involved with public and private financing of high speed rail, such as privatization. High speed rail lines are very expensive to build. After the French government committed to developing high speed trains in the 1970s, decades of capital investment resulted in the accrual of a large amount of railway debt. As a result, the French state took steps to draw the private sector into helping to construct and operate new lines in order to mitigate the large and increasing deficits that accompanied the first 30 years of high speed rail construction. Recent plans for a high speed line between Tours and Bordeaux involve a public–private partnership never previously attempted on French railways. At the same time, in the U.S., the State of California recently committed significant funding to constructing a high speed line between San Francisco and Los Angeles — the first high speed rail line to get this close to actual construction in the U.S. For financing, California is relying largely on public debt and has only preliminary plans for attracting private participation. Comparisons to the French high speed rail history suggest that California's approach may be viable only if the state is willing, as was France for the first 30 years of its high speed rail construction program, to assume most of the construction debt burden in both the short and long term. Thus, French rail history is directly useful in foreseeing consequences of different approaches to financing high speed trains.

In sum, cross national comparisons reveal that California will require both a high level of public borrowing as well as public guarantees on private borrowing if it is going to attract the private sector into either construction and/or operation of high speed railways. Even after the shift from privately owned and operated passenger railways to public systems in both France and the U.S., history suggests that public funding is the sine qua non of financing passenger railroads, including high speed trains.

## 2. Institutional frameworks

From their beginnings in the 19th century, the U.S. and France have approached railway development differently, in large part due to institutional differences in the laws, regulations and norms that affected their financing. At the broadest level, the institutional structure of the United States has always involved a free competitive market within which private planning was dominant and public regulation was of lesser importance. American laws allowed newly incorporated rail companies to act with relative autonomy and granted them the crucial legal protection of limited liability. Private railroads and their supporters in banking and real estate determined where rail lines would be constructed and which cities and regions would be served, with only minimal government intervention in this development process. The main way the government affected railway development was not through direct intervention, but by providing free grants of land on which rail lines could be constructed.

As in the United States, the central government in France granted land to railway promoters on which they built their lines. By the mid-19th century the French rail system was dominated by six major private companies that made up the so-called *Grand Réseau* ("Great Network"): a system which persisted, with some small modifications, until the late 1930s. However, those private companies were not entirely independent, since they operated under long term leases to the government on publicly owned rights of way, with strict government regulation. In return for their franchise, companies were protected by laws that prohibited any parallel and competing rail lines. This was in sharp contrast to the U.S., where railways owned their rights of way and where competition between companies was carried out within a laissez-faire market context that resulted in parallel and redundant rail lines being built throughout the country (Cohen, 2009; Dobbin, 2001).

Other institutional differences between France and the U.S. also affected railway development. The U.S. evolved a federalist system of political power which gave states and localities much greater control over decisions about where to locate new development. While the interstate commerce clause of the U.S. Constitution gives the federal government regulatory control of transportation projects that cross state lines, most intercity rail lines were built within state boundaries and their development was controlled by state legislatures. In addition, because zoning decisions in the U.S. have always been locally controlled, cities and towns determined whether a rail line would be built in their area. Similar forms of regional or local control were not the case in France, where the national government controlled economic development decisions more directly.

In short, rail development in the U.S. took place within a free market framework whereas, in France, the state intervened directly in structuring and regulating transportation. In addition, state and local control of development was and remains more influential in the U.S., because of its federalist political system, than in France, where the central government was more directly involved in controlling the form that railway development would take and in establishing direct control over the private rail corporations that developed new lines.

## 3. French–U.S. divergence in the mid-20th century

From the mid-19th until the early 20th centuries railways dominated the American and French transportation systems. Then, starting in the 1920s, the passenger rail industry in both countries began to encounter significant problems, partly due to the rapid expansion of highway-based modes of transport and partly for other reasons unique to each country. When the Great Depression occurred, railway finances deteriorated precipitously, placing the industry in both countries on the verge of systemic bankruptcy. In response, the French government nationalized its railways in 1937. The private companies that previously formed the Grand Network were merged into a new entity, the French National Railway Company (Société Nationale des Chemins de Fer, or S.N.C.F.). However, this was not a total public takeover. The private companies were ceded 49% of SNCF stock in return for turning over their physical plant and rolling stock to the government. The state took majority control, with 51% stock ownership, and guaranteed the existing rail bonds. The government also passed legislation to regulate the entire national transportation system, including highways and airlines, to assure that passenger rail was not driven out of business by those other modes (Cohen, 2009: 28–29). In short, SNCF became a public–private partnership, albeit one in which the power relationships between the two sectors changed, giving the government majority control of the arrangement and majority power.

With its more free market orientation, the American government did not take such a radical step. Instead, President Franklin Roosevelt used special financial powers granted him by Congress to socialize much of the railway industry's devalued debt, which rescued the industry from widespread insolvency. But, Roosevelt did not use his considerable executive powers to solve the main problem facing railroads, the overbuilding of lines. From their inception, railroad corporations had built lines that duplicated and ran parallel to competing companies in order to drive them out of business. For example, in the New York–Chicago and Dallas–Houston markets, two or more railways ran trains on tracks paralleling their competitors. Overbuilding contributed to excessive debt as rail corporations borrowed heavily to finance their construction and related development projects. Nor did Roosevelt impose regulations that would make railways more competitive with highway based transportation. In general government policy was to not disturb the marketplace, leaving railroads to compete as best they could within other modes of transport (Cohen, 2010: 25–27).