

The Big Read UK infrastructure**Rail privatisation: the UK looks for secrets of Japan's success**

Unlike in Britain, fares and subsidies have been tightly controlled under private ownership



The bulk of Japan's ultra-reliable railway network operates without a single yen of public subsidy © Bloomberg

Robin Harding in Tokyo JANUARY 28, 2019

Birmingham, Takeshi Omori realised, is not so very far from Tokyo. In 2017 his employer JR East, Japan's biggest railway, took a 15 per cent stake in the West Midlands Railway. The Victorian tracks in Britain's second city that cut through a dense urban landscape felt eerily familiar.

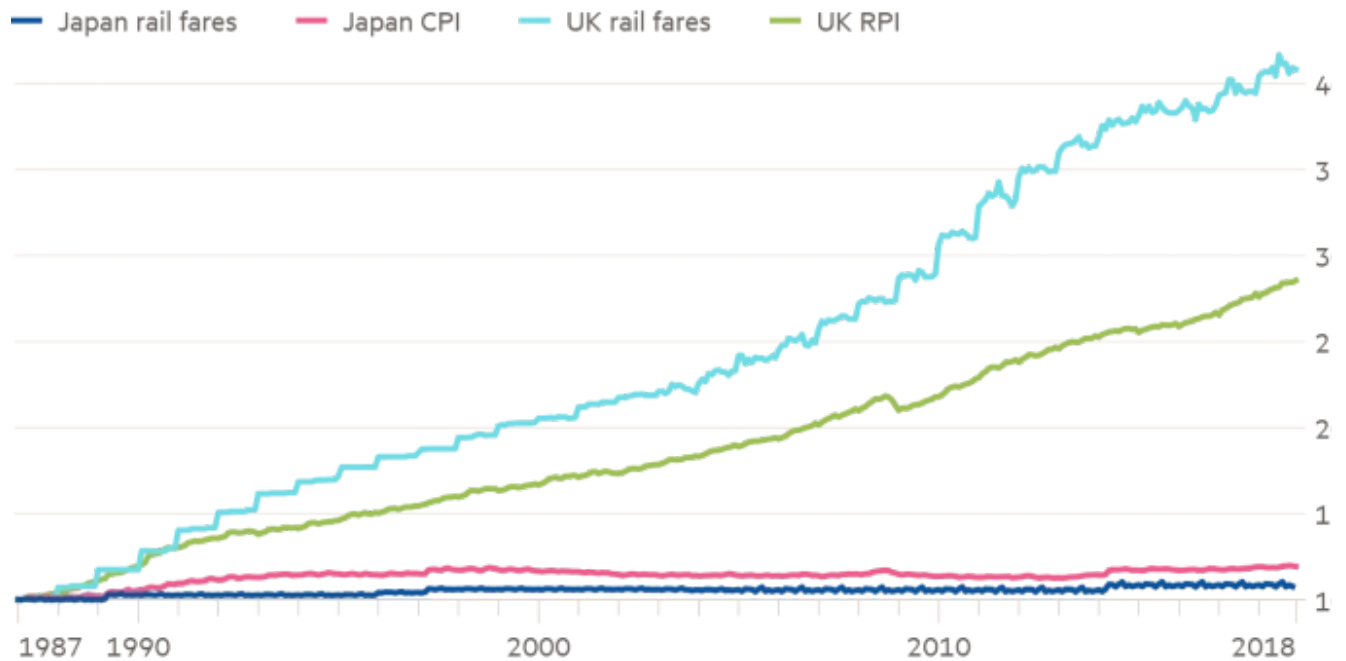
"Railways were first brought to Japan 150 years ago by a British engineer, Edmund Morel. They've been upgraded while in use," Mr Omori explains. The modern [JR East](#) runs the route that Mr Morel built. "I felt a huge sense of familiarity."

The two railways have something else in common: both JR East and the West Midlands were once state-owned, then privatised in 1987 and 1994, respectively. There the similarities end. In Britain, [railway privatisation is deeply controversial](#), bringing high prices for an unreliable service on a chaotic, patchwork system that sucks in public subsidies even as some operators make tidy profits.

Britain's trains are so unpopular that, according to a [YouGov poll](#), the public supports nationalisation by a majority of 56 per cent to 15 per cent. [Nationalisation is a flagship policy](#) for Jeremy Corbyn, the leftwing leader of the UK's opposition Labour party. Anger at the state of the railways, which were sold off under a Conservative government, has come to symbolise broader discontent with privatisation and "neoliberal" economics.

Japan's privatised rail companies have kept fare increases below general inflation - unlike the UK

Indices (Jan 1987 = 100) for rail fares and overall consumer prices



Source: Refinitiv
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Yet in Japan, the sale of JR East and its regional siblings is regarded as a triumph. The bulk of Japan's ultra-reliable railway network operates without a single yen of public subsidy. Pricing is straightforward, and apart from consumption tax hikes, JR East has never raised fares once in 31 years as a private operator. "Of course we regard the privatisation of JR as a success," says Shohei Ishii, deputy director-general in charge of railways at the transport ministry. "I think there's no chance of a return to nationalisation in Japan."

The divergent fortunes of these two systems raises an obvious question: is private ownership really the problem with Britain's railways? If not, can nationalisation cure their ills? For every excellent public railway, such as Switzerland's SBB, there is a shabby and decayed public equivalent, such as Amtrak in the US. Ownership, per se, has little correlation with results.

For transport secretary Chris Grayling, a true believer [in privatisation](#) who even contracted out Britain's probation service when he was justice secretary, Japan's success offers the appealing prospect of fixing the railways in the private sector. He has launched a review that will specifically look at Japan as a model for the UK.

What Mr Grayling will find is not just a triumph of private enterprise, but a robust system of regulation, indirect but ferocious competition and a healthy dose of real estate speculation. It will not be easy to replicate.

“The basis of railway companies in Japan is they think they will contribute forever. They feel they have a responsibility to local societies,” says Hironori Kato, a professor of civil engineering at the University of Tokyo. “This kind of mindset is quite important to make a successful railway business.”



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The most basic, fundamental difference between the British and Japanese railways is how they were privatised. In Britain, the tracks were split from the trains, and the rolling stock was split from railway operations. Today, the tracks are publicly owned by Network Rail. Companies regularly compete for franchise areas such as the West Midlands, leasing their rolling stock from another company.

In Japan, however, the former Japan National Railways was split up along regional lines and then everything was sold together. JR East, centred on the city of Tokyo, owns its tracks, its trains and its stations outright. A private JR Central operates from Nagoya and JR West from Osaka, but the unprofitable JR Hokkaido, which operates many rural lines on Japan’s northernmost island, is still 100 per cent publicly owned.

These contrasting methods of privatisation reflected specific local circumstances but also a difference in philosophy. Japan already had many private railways in 1987, such as the Tokyu, Keio and Odakyu companies in Tokyo, so it had an existing model to follow. Britain, meanwhile, had an ideological goal in mind: competition. The vision of those who privatised the service was not just to introduce a profit motive, but for different companies to run trains on the same tracks, competing for customers. It was hoped that the regular fight for franchises would drive down costs.



Shibuya, Tokyo. Competition between railway areas is linked to another vital part of the business model for Japanese railways: real estate © Bloomberg

The downside of splitting up tracks and trains, as Britain did, is now well understood. Railways are complicated. “One thing I’ve realised is how many things are outside the control of a train operating company [in the UK],” says Mr Omori. “If a signal’s broken, or a train’s late — as a TOC we can’t do anything to make sure the signal doesn’t break. At JR East, if it’s within our operating area, we can change it.”

Perhaps even more important than the difficulty of managing operations, however, are the effects this system has on investment. Network Rail, as a publicly-owned infrastructure company, does not gain directly if passenger revenue goes up. Nor does it face direct commercial pressure to keep down costs. The rail franchises, meanwhile, have a declining incentive to invest as the period of their franchise runs out.

“I do think with a 10-year franchise the incentives don’t work for investment that only pays off in the long term,” says Mr Omori. “The nearer the end of the franchise, the less the incentive becomes. That is one of the big differences between owning your infrastructure and borrowing it.”

Japan’s famous [shinkansen](#) high-speed railways actually operate on something close to the UK system: the tracks are built and owned by a government fund. However, the government hands them over to the JR companies to operate on fixed-price, 30-year leases, so the companies treat them as their own.

However, Britain split up its system for a reason, and that reason was competition. The obvious downside to the Japanese model is creating a local monopoly with all the risks that entails: extortionate fares, bloated costs, lazy service and refusal to co-operate with rivals. How Japan avoids those outcomes is the interesting part.



UK transport secretary Chris Grayling is a true believer in privatisation © Getty

The regulation of Japan's railways starts with Mr Ishii at his desk in the transport ministry. The ministry collects detailed information on costs from all of Japan's private railways. Based on that information, the ministry sets an upper limit on fares. "How do we determine the upper limit? It's set based on an appropriate profit and appropriate costs under efficient management," he says.

If a company can cut costs and run itself more efficiently than rivals it can earn greater profits: this is known as yardstick competition. One important consequence is ruling out the complicated fare structures found in the UK. Since prices cannot go above the cap, even for last minute booking or at the height of the rush hour, companies instead operate a simple, distance-based fare. With no way to ration scarce peak-time capacity by price, however, everybody tries to get the 8am train.

Benchmark competition, which is often applied to utilities around the world, is only part of what makes Japan's system work. "I don't think it's the case that we have no competition," says Mr Ishii. "There is competition with the private railways and also among the JR railways."



Nationalisation is a flagship policy for Jeremy Corbyn, the leftwing leader of the UK's opposition Labour party

Japan's railways may be organised along geographical lines, but they are not a series of regional monopolies. Rather, many companies run lines in the same area, interlaced with each other, which sometimes offers a choice. For example, between Tokyo and Yokohama there are three competing

routes, as there are between Osaka and Kobe. For an individual traveller, one operator is usually more convenient, but higher prices are noticed.

There is a third, more abstract, but still crucial form of competition. Every line radiating out of a city such as Tokyo serves a particular slice of suburbs — and those suburbs compete. Since new construction is much easier in Japan than in the UK, the rivalry is fierce, especially as the population starts to drop. Overprice or underinvest in your railway and passengers will ultimately move elsewhere.

“Our railway has relatively attractive residential areas along it. We want to make sure it’s a good place for young people to keep choosing it as a place to live,” says Fumiaki Shiroishi, director of the railway division at Tokyu, which serves some of Tokyo’s most popular western suburbs. “Even if we can’t expect an increase in overall population there will be winners and losers among the railways. People gather where it’s convenient. There are places where the population will increase 30 per cent and places where it will decline 70 per cent.”

This competition between railway areas is linked to another vital part of the business model for Japanese railways: real estate. “The railway is about one-third of our total sales,” says Mr Shiroishi. “By name we’re a railway company but that’s just one of our functions.” Another one-third of revenues comes from real estate development along the Tokyu lines, especially at its Shibuya terminus. The final third comes from services to passengers such as supermarkets, convenience stores and hotels.



Network Rail are selling off the arches under elevated railway lines in Brixton, London

These other arms allow the railways to capture some of the land value that their passengers create. Every station in Japan is a real estate opportunity and many have a shopping mall built above or below them. “Originally, [building shops and apartments] was a device to get people to use the line,” says Yoichi Takahashi, head of transportation planning at Tokyu’s arch-rival, the Odakyu Electric Railway. “Now when there are so many other supermarkets the real significance is in the location — your supermarket is at the station.”

Integrated rail and property development is standard in Asia, but Britain is going in the other direction, with Network Rail [selling off the arches](https://www.ft.com/content/9f7f044e-1f16-11e9-b2f7-97e4dbd3580d) under elevated railway lines in London.

Another economic strength of Japan's railways, particularly the *shinkansen*, is a level playing field with roads. A one-way *shinkansen* ticket from Tokyo to Osaka costs ¥13,620 (\$124) but the motorway toll is similar. It is unlikely Japan could run profitable high-speed rail if the state provided free roads as an alternative. There are no urban congestion charges but parking is all off-street and formidably expensive. Added to the sheer density of Japan's population, the result is ample demand for railways, letting them run frequent trains and cover their costs at reasonable prices.

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One more feature of Japan's railways is noteworthy: the ability of rivals to co-operate. Touch-and-go payment cards work interchangeably across the country. In Tokyo, suburban trains now run straight into subway tunnels and out the other side of the city; a single journey may use the tracks of five different railway companies. Even then, the companies do not run rival trains, but share rolling stock and run a fully integrated service. The motivation for each company is adding value to its own stretch of railway, helped by some robust pressure from the transport ministry.

Can these conditions be replicated in the UK or indeed anywhere else? Only London has such a large and dense population, while greater property income would need a change in planning laws. But the core of Japan's model is replicable: Britain could sell at least some of its railways line-by-line, either outright or on long-term leases, and then regulate them with benchmark competition. To keep the private companies honest and the regulator well informed on costs, it could keep other lines in the public sector.

Edmund Morel died in Yokohama in 1871, before his railway opened. Fondly remembered in Japan, it is written on his tombstone that "... he was never afraid of offering his frank opinions to the government". No doubt Morel would be surprised to find Britain turning to Japan to learn how to run its railways. He would probably approve.

Switzerland: A long-term view on nationalisation

For those who favour nationalisation, the model is Switzerland, and its magnificent SBB (Swiss Federal Railways). With its "Taktfahrplan" of trains running at set intervals and full integration with the bus network, the SBB offers a model service, like the ticking of a well-made Swiss clock.

"You can live anywhere in Switzerland without a car — every valley, no matter how remote, is accessible by public transport," says Daniel Müller-Jentsch, senior fellow at Avenir Suisse, a Swiss think-tank.

Ticket prices are at flat rates — although there are bookable "saver" tickets available for budget travel — and many Swiss have annual season tickets for the whole network. This boosts SBB revenues when wealthy citizens do not take full advantage of their passes.

The company is owned by the federal government. "Ownership is extremely important — whether your owner has a long-term view. If they do, it is highly likely you have a public owner," says Kathrin Amacker at SBB. "Japanese private owners also take a long-term view — you could say we have the same culture."

In Switzerland there is a debate about liberalising transport — for instance, to allow more competition on long-distance buses. But a change in the ownership of the SBB is “not even debated”, says Mr Müller-Jentsch. “The Swiss love their public transport.”

“In Germany, the restructuring of Deutsche Bahn caused damage to the system, there has been under investment,” says Mr Müller-Jentsch. “The lesson of UK privatisation is that you should not squeeze these complex systems for short-term profits — you will hurt the culture of investment.”

But there is a downside to frequent, comprehensive, flat-rate service: it loses money. “If you do a full cost-accounting exercise, only 40 per cent of costs are covered by tickets — and tickets are quite expensive,” says Mr Müller-Jentsch. “It is a great system for users but from an economic point of view it is very inefficient and costly.” *Ralph Atkins in Zurich*

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