Privatisation without liberalisation?

The strange case of Italian railways, and how adjustments to the government's reforms could achieve gains for rail users and taxpayers

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July 2016

Introduction

The Italian government is proceeding with the privatisation of the Ferrovie dello Stato Italiane group, and is considering a merger with the government-owned highways company. In this article, we argue that changes could be made to the privatisation and reform process, learning from the British experience, which would bring substantial benefits to Italian rail users and taxpayers.

1 The Italian government's proposals

In 2015 the Italian government prepared plans for the restructuring and privatisation of parts of the Gruppo Ferrovie dello Stato Italiane (FSI). Finance Minister Pier Carlo Padoan set out three objectives for the privatisation:[3]

- development of the group, growing its business and improving the service offered;
- creating a popular shareholding spread among employees and savers; and
- obtaining resources for the reduction of public debt.

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We are very grateful for comments and advice from Luisa Affuso and Pietro Infante; and to Bethan Stokes and Ronan Devaney for their help on previous analysis to which we have referred here. Any errors are our own. A full version of this paper was published in Studi Economici, 3/2015, pp15-28.

[3] Parliamentary address of Minister of Finance Prof. Pier Carlo Padoan, 12 January 2016; and interview in La Repubblica, 12 January 2016.

With these objectives in mind, the Italian government has chosen an approach for the privatisation of the railways[4] which separates the provision and management of infrastructure and the provision of train services into separate companies:

- the first, Rete ferroviaria italiana SpA (RFI), will be separated out of the FSI Group and, and will remain state-owned; and
- the second, Gruppo Ferrovie dello Stato Italiane (Holding), (FSI), which will be publicly traded, with the state retaining a minimum of 60 per cent of the equity.

RFI operates under a forty-year concession from the state for the management of the railway network infrastructure, which started in 2000.[5]

FSI will be restructured, and different parts of the business will be privatised. Its Grandi Stazioni subsidiary (GS) owns and manages the 14 major stations on the rail network. GS is being split into retail, operations and development businesses. The first of these, GS Retail SpA, responsible for commercial management of retail and customer facilities at the 14 main stations, will be sold as a separate business through a competitive bidding process.

The rest of the FSI Group, meanwhile, will be vertically integrated in the three phases of train management, maintenance of rolling stock, and train service operation for both passenger and freight services, through its wholly-owned subsidiary Trenitalia SpA. As is currently the case, RFI will provide access to the railway network for Trenitalia and for various private train operators who have rights to use RFI's lines and infrastructure services, at an hourly tariff regulated by the independent economic regulator for transport, the Autorità di regolazione dei trasporti (ART).[6]

A further proposal has been made to merge the FSI Group with Azienda Nazionale Autonoma delle Strade SpA (ANAS), the state-owned company which owns and manages large parts of the national road network: we discuss this below.

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[4] Contained in the Decree of the President of the Council of Ministers, the Government Act 251, December 14, 2015

[5] The railway infrastructure concession came into force under Ministerial decree n.138.7 of 31 October 2000.

[6] Under article 17 of the Decree Law 15 july 2015, n. 112, "Implementation of Directive 2012/34 / EU of the European Parliament and of the Council of 21 November 2012, establishing a single European railway area (Recast)", ART's role is to define the criteria for the determination of access charges and fees for the use of railway and related services which can be charged by the infrastructure manager. In doing so ART has to ensure that the charges and fees set allow the infrastructure manager to remain in 'economic balance'. The railway infrastructure manager (RFI) calculates and collects the fees payable by railway undertakings for the use of the infrastructure.

The government proposes to part-privatise the remaining FSI Group, of which Trenitalia will constitute the largest part, with up to 40 per cent of its shares offered to private investors, and the state retaining a majority interest.

These changes to RFI and FSI represent a significant change in the structure and ownership of Italy's railway industry. They help Italy to achieve the 'vertical separation' of providers of track from businesses which provide train services. Vertical separation is a requirement under European law, designed to prevent the infrastructure owner from excluding competition by running its trains on its own tracks on preferential terms for charges and timetabling. Splitting RFI and Trenitalia into separate groups, and requiring all train companies in the markets for freight and passenger services to be treated equally by RFI with regard to prices and conditions of access, is an essential condition for competition in the provision of train services.

However, the government's structural reform does little to tackle the dominance of Trenitalia in most parts of the market for freight and passenger train services. It is a privatisation without liberalisation. In most parts of the rail network, Trenitalia will change from a state-owned monopoly to a part-private monopoly. This leaves in place a significant obstacle to the growth of competition. It reduces the likelihood that the Italian railway industry will be able to develop to meet the needs of passengers, freight customers and the communities it serves.

2 Why does competition matter?

With competition, train service operators stand to win or lose customers, depending on their competitiveness on price and service quality. As we have seen in Britain, competition between train companies is an important element in the development of the railway market. With real "bottom line" profitability to worry about, and the prospect of gaining or losing customers depending on their performance, competition encourages train companies to improve service punctuality and reliability, to address efficiency, to introduce new services, and to innovate in timetable patterns, in customer service and in ticketing. This is true whether competition is for the right to run networks of services for a certain period ('competition for the market') or where rival operators compete for customers on the same routes ('competition in the market').[7]

[7] Note though that, in the case of 'competition for the market', once an operator has won a competition or auction for a franchise contract, rail users are generally faced with a monopoly for the duration of that contract. This may weaken incentives to improve services and to innovate for customers, unless there is a prospect of winning the contract again at the next auction. The incentives to improve and invest in passenger services during the course of a contract are examined in Luisa Affuso and David M G Newbery: Investment, Reprocurement and Franchise Contract Length in the British Railway Industry; CEPR Discussion Paper 2619; Centre for Economic Policy Research, London; 2000.

In Britain, since privatisation in the mid-1990s, operators have competed for the right to run groups of services – some profit-making, some with state subsidy – in a franchising process. Franchises consist of bundles of services on a particular route on region. Most are re-let every 5-10 years, with rival operators bidding to pay a premium to the state, or where services are not commercially viable, bidding for subsidy. Bidders are encouraged to say how they will improve service standards and frequency, improve efficiency, and reduce subsidy or increase premium payments to the state.[8] Increasingly regional governments have a say in choosing the patterns of services to reflect the needs of local communities and the economy.

Overall – through a shifting balance of subsidised- and premium-paying services, net subsidy has been eliminated. Since 2014-15 the UK state has benefited from positive revenue from train operators – with 'premium payments' to government exceeding subsidies paid to the operators. This shift over time has contributed to reinvestment in the development of the network.[9]

Meanwhile, despite the presence of franchise contracts, 'on-rail competition' has also developed on some long-distance routes. New operators have launched new services to compete with the incumbent franchisees, and to tap into new markets – such as cities with poor direct services to London, or off-peak travellers looking for cheaper travel. Because they tailor their services and fares to specific markets, customer satisfaction is consistently higher,[10] and the existing operators have responded by improving their offer too. The freight market is wholly competitive, with five operators competing intensively with each other and with road freight. So there are real pressures on train operators to perform for their customers.

Because the success of competing train companies depends partly on the performance of the infrastructure provider, the combination of vertical separation and competition also encourages train companies to act as customers of Network Rail (Britain's equivalent of RFI, and also state-owned), using their own expertise to exert pressure on the monopoly rail infrastructure business to operate efficiently; to make the best use of network capacity; and to improve the quality of the network and timetable reliability. This has led to improvements in Network Rail's operation of the infrastructure, as well as improving the focus of maintenance to raise the reliability of the network. It is worth noting that sales or concessions of parts of Network Rail have been proposed - both in order to attract private capital to make the network less dependent on public investment; and also to improve the performance and efficiency of the infrastructure.[11]

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[8] Department for Transport: Passenger Services Franchise Competition Guide, January 2016.

[9] Office of Rail and Road: GB Rail industry 2014-15 financial information, March 2016.

[10] Transport Focus: National Rail Passenger Survey, Autumn 2015 - main report, January 2016.

[11] Nicola Shaw: The Shaw Report: The future shape and financing of Network Rail, March 2016.

Safety has been central to the success of Britain's railways in the 21st century. After a series of accidents in the years following privatisation, the infrastructure provider was required to make major improvements in its capability and management of asset condition and maintenance. Across the industry, infrastructure and train operators, public and private, have come to realise that their provision of a safety-critical service is part of their contract with the public, and fundamental to their success. This is perhaps one of the biggest cultural changes across the industry as a whole. More careful and disciplined management of safety and risk has also contributed to wider improvements in standards of operational management, planning and efficiency. The result has been that Britain's railways currently have the best safety record in Europe – significantly better than in France, Italy or Germany.[12]

These pressures on businesses to improve commercial and operational performance, resulting from the liberalisation of Britain's rail markets, have led to a transformation of Britain's railways for the better over the two decades since privatisation. Passenger usage has more than doubled – the fastest growth in Europe.[13] User satisfaction has risen to record levels, and on many measures - including punctuality - is the best in Europe.[14] Local networks have developed and grown to serve changing local populations and labour markets. Freight is perhaps the most transformed sector of all, with cost and reliability radically improved, and the pattern of services substantially changed to reflect Britain's changing economic geography.[15] Moreover, growing demand and fare revenue has reduced the net subsidy from the state, allowing reinvestment in better services and more capacity. Contrary to expectations at the time of privatisation, Britain's railways have moved from being in long-term 'managed decline' to become a vibrant, innovative and fast-growing industry, regarded as central to both local and national connectivity and to economic growth.[16] The question in Britain is whether and how additional competition can be achieved to bring additional benefits.[17]

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[12] RSSB: Annual Safety Performance Report 2014-15, using Eurostat data; European Railway Agency: Railway Safety Performance in the European Union, 2014.

[13] European Commission: EU14 Rail Market Monitoring Study report, Brussels 2014.

[14] European Commission: Eurobarometer report 382a "Europeans' satisfaction with rail services" p.94, Brussels 2013.

[15] The Economist: Coming round the bend: How Britain developed a truly competitive rail freight market, 22 June 2013.

[16] Richard Price: Regolamentazione delle ferrovie. L'esperienza Britannica, Rivista T_CESIT No 8, 2015.

[17] Britain's Competition and Markets Authority recently concluded that policy reforms should be developed to encourage greater on-rail competition on long-distance routes. Competition and Markets Authority: Competition in passenger rail services in Great Britain, March 2016.

3 Assessing the Italian government's reforms

Could the reforms of the railway system envisaged by the Italian Government achieve similar results? We think not, because the proposed reforms do not do enough to secure the substantial benefits of competition. This is a significant missed opportunity. Italy has seen some limited competition 'for the market', where regional governments have launched competitive tenders for the services they sponsor.[18] NTV's competition with Trenitalia on high-speed lines has brought service innovation and led Trenitalia to respond by offering passengers better fares and services.[19]

But whereas 100 per cent of train services in the UK are competed in some way, in Italy, Trenitalia remains the dominant operator on the bulk of passenger services (see Table 1). Competition for- or in- the market is very weak, and currently covers a small part of all passenger train services, with Trenitalia operating 90 per cent of passenger services by train-km, or 98 per cent of passenger-kilometres.[20] As for the freight sector, in 2015 Trenitalia Cargo had a 61 per cent market share in terms of train-km, while the share held by independent private companies was 39 per cent of the market.[21]

[18] In Italy, in addition to almost 17,000 km of state-owned railway is operated by RFI. There are also almost 3000 km of non-state-owned, mostly publically-owned, belonging to the regions. These companies also operate as a monopoly, and competition for the market is very limited. In 2007 Emilia Romagna became the first region to hold a competition for the management of regional railway services. It was won by a new entrant, the Consorzio Trasporti Integrati; but the subsequent competition in 2013 was by RTI Trenitalia/TEPR, a Trenitalia subsidiary.

[19] In 2013, NTV, the competitor to Trenitalia on high-speed routes, had 12.6 per cent of the market in terms of passengers, 16.6 per cent in terms of Train-km, and at least 13.9 per cent in terms of turnover (ART report, 2015). Competition between NTV and Trenitalia, with lower fares and better customer service, contributed to a modal shift to rail from other modes. Notably, on the Rome-Milan high-speed line, where Trenitalia and NTV compete, train fares are 25-40 per cent lower compared to other high speed lines.

[20] Instituto nazionale di statistica (Istat): Rilevazioni sul trasporto su strada e sul trasporto ferroviario, 2014. http://www.istat.it/it/archivio/178014

[21] Source: FerCargo, the Italian independent freight operators' association. Rail freight in Italy is among the lowest in Europe in terms of its value relative to GDP, and has reduced significantly in recent years. Measures to ensure equitable and non-discriminatory access to railway infrastructure are needed to underpin a growth in competition. However, there is a risk that such liberalisation opens the market to new entrants sponsored by state-owned businesses from neighbouring countries, such as DB from Germany, SNCF from France, RCA in Austria, and the Swiss SBB. On the other hand small Italian railway companies have continued to grow, including by sub-contracting traction services for trains operated by the major European operators.

Table 1: Structure of the Italian rail services industry market

Type of service	Market structure	Trenitalia percentage share, 2014		
		passenger km	train km	revenue
Domestic passenger services	monopoly	98%	90%	
--of which high speed	competition in the market	87.4%	85.4%	86.1%
Rolling stock	monopoly			
Freight services	competition in the market		61%	
Regional passenger transport services	competition for the market (mostly public enterprises)			

Source: Istat monitor on road transport and rail transport in 2014; Report of the Autorità di Regolamentazione dei Trasport (ART), 2015. Freight data for 2015, source: FerCargo.

Trenitalia is therefore the dominant operator on the bulk of passenger services, and on a large part of freight services. A further concern is the dominance of FSI/Trenitalia in the rolling stock market, which can also act as a barrier to new entrants. This problem was addressed in Britain by a further separation of rolling stock owners from train operating companies, along with competition commitments to make surplus freight rolling stock available for purchase or lease by rival companies.

It is worth noting that the structural separation of network infrastructure (track, signals, electricity supply) from train operations requires a complex matrix of contracts. This is because there is a high level of interdependence between the various parts of the system – notably externalities with regard to network congestion and delays, and the technical interdependence between infrastructure and rolling stock. Though the system in Britain has matured – and resembles the system of contracts between multiple specialised businesses in the aviation industry - structural separation requires very elaborate contractual arrangements to ensure that, on the one hand, the externalities are internalised, and on the other that incentives for the proper functioning of the system are not distorted. All of this involves high transaction costs if the efficiency of the system overall is to improve.

Of course there are concerns that privatisation will mean higher fares. This is understandable. Ticket prices in Italy are among the lowest in Europe, so in the absence of competition, a private monopolist may push to increase tariffs, or to worsen service quality.[22] It is clear that for both the quality of service and for prices, the ART will play a crucial role. The greater the drive for efficiency, and the more innovation in service delivery, the less these problems are likely to impact the customers of the railway.

If fares do not increase, how will the privatised FSI group make a profit for its new shareholders? And, indeed, if there is no political willingness nor ability to increase fares, could a privatisation be expected to be successful? The costs of operating train services are high – particularly when the costs of the railway infrastructure are included. Commercial train operations need to be able to sustain themselves financially. Could this be achieved in Italy, where passengers are used to low prices?

There are risks to the profitability of the reconstituted FSI Group: the values of the ROI and ROE of the company that will be created are very low, even compared to other Italian companies which have been recently privatised such as the Italian Post Office, and Enel, the energy company. The FSI Group is highly dependent on continued revenues from service contracts which, in 2014 amounted to €2.267 billion, or 36 per cent of the business's total revenues. The government's proposal addresses this by guaranteeing that the FSI Group will continue to receive revenues from service contracts amounting to more than two billion euros per year.[23] This revenue represents payment for train services specified by the state and the regions – and can be viewed not as a subsidy but as a payment for a public service deemed to be socially or economically desirable.

Competition could be introduced here to help to secure the benefits of efficiency and service innovation outlined above, with contracts from the state bid for by competing operators rather than simply handed to Trenitalia. In theory, liberalisation of the market would allow the entry of new train operators competing with each other for the right to run these services and, as in Britain, this could reduce the cost to the state overall. In Britain the state receives substantial revenues from the sale of the franchises (see table 2). As we saw above, some Italian regions have encouraged new entrants to compete for the market. But, with its objectives to develop the FSI Group and raising sale revenue for debt reduction, the Italian government has not so far taken the opportunity to extend this model nationally.

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[22] According to the ART's 2015 Annual Report, the weight of subsidies to the railway sector in Italy was equal to 0.68% of GDP compared to 0.43% weighted average for the European Union as a whole. The ART attribute part of the difference to the lower price of tickets.

[23] Statement to the Senate by the Minister of Infrastructure and Transport, Graziano Delrio, 12 January 2016: "It is necessary to understand that, even after privatisation, the FSI Group shall in any case ensure the obligations of the universal public service, with particular regard to the quality and efficiency of local public transport".

Table 2 – Commercial revenues and subsidies for the railway industry in the UK and Italy, 2013*

	Network Rail	GB train operators	Gruppo Ferrovie dello Stato Italiane	Other Italian operators
	2013	2013	2013	2013
	£ billion	£ billion	€ billion	€ billion
Capital Contribution	4		4.2	
Government subsidies	-	1.9		
Revenues from franchise	-	-1.9		
From service contract revenues			2.2	1.3
Total revenues	6.6	8.4	6.6	

Source: Consolidated Financial Statements 2013 Gruppo Ferrovie dello Stato; ART's 2015 annual report to parliament; and Richard Price: Regolamentazione delle ferrovie, L'esperienza Britannica, Rivista T_CESIT No 8, 2015. * In 2014-15, franchise revenues in Britain exceeded the value of subsidies, generating a small net surplus of £0.7 million.

4 An alternative approach

Could the state find a way to reconcile these objectives, raising revenue while also achieving the benefits of greater liberalisation through structural reform? Not surprisingly, the state has chosen a model which generates revenue from asset sales quickly to contribute to debt reduction. FSI's balance sheet shows the book value of the company's assets to be slightly over €11 billion. The low value of profitability, with ROI between 1.6 and 2.8 percent for ROE, suggests that the market value on the sale of 40 per cent of the business might yield the state between €4 billion and €5 billion.[24]

However a more strategic and patient approach with a more thorough restructuring of FSI Group could yield greater revenue for the state, recognising the constraints on increasing fares, while also securing the benefits of greater competition for customers and the economy.

[24] Our calculation, based on Bilancio consolidato 2013, Gruppo Ferrovie dello Stato Italiane.

There are numerous ways of achieving this. Trenitalia could be divided geographically into separate regional train operating businesses, each sold separately and focused on how best to serve its regional market. There could be a further vertical separation of the businesses - splitting out rolling stock and facilities from commercial train operation. This would focus rolling stock businesses on the efficiency of asset management, and train operating companies on the commercial development of their services and how to provide added value both for existing services and by offering new ones.

A full sale of FSI Group's individual assets, split into different operating and asset management companies, could yield sales revenue higher than our estimates of €4-5 billion. This is consistent with the approach the government is taking with the demerger and sale of the separate retail, asset management and development components of Grandi Stazioni, with GS Retail SpA, focused specifically on commercial activities at the network's main stations.

The government's choice in the current reforms to preserve the market dominance of Trenitalia has severe limitations. It will make it more difficult for new operators to enter the market, innovate and offer new services to consumers, improve efficiency and the use of the RFI network, and achieve gains for the Italian economy and rail users on the scale seen in Britain. This approach contrasts with the position on the high-speed network, where Italy has led the world in creating genuine competition between train services offered by NTV and Trenitalia – giving consumers real choice and pushing up service standards. Indeed the government could take a positive step by adding to its three existing objectives for the reforms (developing the FSI Group, spreading share ownership and debt reduction) – an additional objective to secure a major improvement in the value of the railway industry for the Italian economy and consumers in particular.

The main result of privatisation as envisaged by the government will be to raise revenue from the sale, contributing to a reduction in public debt. The creation of a part-private monopoly in train services is most unlikely to result in a reduction of subsidies nor in a substantial improvement of the services and efficiency. In this situation the role of the ART as the independent regulator will be critical in protecting both customers and taxpayers from the effects of twin monopolies in train operation (Trenitalia) and in the provision of the railway infrastructure (RFI). Regulators have powerful levers at their disposal when it comes to encouraging good performance and discouraging bad performance, and these are more effective where private businesses are concerned because of the additional scrutiny and pressure from their shareholders. But the job of a regulator in protecting customers is always much harder where there is little or no competition. Although the ART is a strong and effective regulator, the government's proposed reforms entrench powerful monopolies with opportunities to exclude competitors[25], and this will make it more difficult for the regulator to protect and improve benefits for customers and to protect the public interest.

It seems to us that there is a viable alternative approach, in which both debt reduction and the development of the network for the public good can be achieved. A more radical structural reform of FSI Group – separating out its asset management activities from operations, and creating train operating companies along regional lines for sale, would improve the scope for competition and innovation. Such a reform could focus railway businesses – passenger and freight - on serving their customers and the needs of growing local and regional economies; and could yield greater revenue for the state, both in the short term through privatisation, and as a beneficiary of greater efficiency across the industry as a whole. A railway system which is strongly motivated to deliver better services for the public and to contribute to growth is in the interests of all Italians.

5 The proposed merger between ANAS and Ferrovie dello Stato

In addition to the current proposals for the restructuring of the FSI Group, the Italian government recently announced that it has started exploratory work to consider a possible merger of the FSI Group with the Azienda Nazionale Autonoma delle Strade (ANAS).[26] ANAS is an Italian government–owned company which constructs and maintains the Italian state highways and parts of the national motorway network. It collects tolls on some parts of its network, and also holds shares in other motorway companies. ANAS is currently fully owned by the Ministry of Economy and Finance. The company's accounts for 2014 show assets of €40 billion and operating income of €21 billion.[27]

The reasons for proposing a merger have been set out by ANAS President Gianni Vittorio Armani:[28]

The first reason is the existence of synergies between FSI and ANAS, in particular Italferr, an engineering subsidiary of FSI, and with rail infrastructure manager RFI, which at present

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[25] For example, through better access to information on costs and technical aspects of service delivery, through excluding new operators from using existing rolling stock; or by holding on to rights to access the network.

[26] Il governo valuta l'ipotesi di integrazione Fs-Anas, *Il Sole 24 Ore*, 4 May 2016.

[27] ANAS: Budget Economico Annuale – Esercizio 2015, e Budget Economico Pleuiennele 2015-2017.

[28] 'Armani e la fusione Anas-Ferrovie "Tre tappe per arrivare sul mercato"', *La Repubblica Affari e Finanza*, 30 May 2016.

remains within the FSI group. Armani argues that the coordination of infrastructure construction projects between ANAS and RFI could reduce costs. The merger would also have a positive effect on the merged group's access to private capital, with a lower cost of capital. The merged ANAS/FSI group, he argues, could attract private capital and eventually, if privatised, could remunerate shareholders.

The second reason is to reduce budgeting and administrative constraints on ANAS. Because FSI is a business outside the Italian public administration, it is not obliged to follow state accounting rules and other procedures which would slow its management and investment processes. Were ANAS to merge with FSI, it too could follow less complicated rules and adopt more efficient and flexible management processes.

Thirdly, Armani argues that the creation of a larger group, specialized in road and railway infrastructure, would allow FSI/ANAS to compete more easily for infrastructure projects outside Italy, with a better chance of winning.

In addition to these arguments, a fourth reason which has not been clearly articulated that post- merger, any new borrowing to finance road and motorway construction will form part of the debt of FSI, and consequently will not increase the public debt, as the debt of FSI is not part of Italian public debt.

An important problem for ANAS is how to reduce its dependence on the current contribution of the state for infrastructure construction. ANAS's budget revenues in 2015 have two main components. The first is *revenues for institutional activity* of €774 million, representing mainly the concession fees paid by motorway licensees. The other is a *share of contribution for the capital expenditure,* €895 million in 2015 – this is a share paid to ANAS by the state of vehicle license fees based on expected traffic volumes. The total value of ANAS's revenue from all sources in 2015 was €1,794 million.

The ANAS president has proposed that the new merged business could be financed in part by a dedicated share of fuel tax revenues, which in Italy represent a large share of infrastructure costs.[29]

<u>There are a number of reasons to be sceptical about a merger of FSI and ANAS.</u>

First, to comply with European law on vertical separation of infrastructure management and train operation, FSI needs to implement, as a minimum, accounting separation between RFI and the rest of the group. This does not rule out a merger, but it makes it much more difficult to achieve synergies. The government's preferred approach so far has been to favour a full demerger of RFI from the FSI Group to form separate businesses. We believe this is a better

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[29] The 2008 report *Road infrastructure cost and revenue in Europe,* published by CE DELF and commissioned by European Commission DG MOVE found that in Europe total transport related taxes excluding VAT (vehicle purchase and registration taxes, fuel tax, road tolls etc.) broadly cover 100 per cent of total infrastructure costs.

solution from the perspective of promoting efficiency and competition on the railways. But it leaves open the question: if ANAS were to merge with a railway entity, would it be more likely to achieve synergies with the infrastructure manager, RFI, and not with the part-privatised FSI Group? The network infrastructure activities of ANAS are more closely related to those of RFI; but the commercial and accounting advantages for which Armani argues are likely to come from closer collaboration with FSI Group and its engineering consultancy arm, Italfer. There is a very significant risk that in pursuing the best merger for ANAS, the government compromises reforms which will give the best prospect of improving efficiency and service quality on the railways. This would undermine the overall value of reforms for the Italian economy, taxpayers and consumers.

We are also sceptical about the hypothetical synergies from the merger of the two groups. Indeed if cost advantages are not very large the disadvantages could substantially outweigh the advantages. The increased size of the new group is a source of several concerns about its ability to achieve greater efficiency. First, the merger creates a larger monopoly in the Italian infrastructure market. Increased monopoly power generally results in higher prices and reduced output compared with what might have occurred. In the case of ANAS/FSI, the merger is between two near-monopolists in markets for two different transport modes. This means that competition is reduced between transport modes.

Second there is the greater possibility of X-inefficiency. The increase of size and the increase in monopoly power increases the likelihood that innovation will be reduced; that the best technical solutions will not be chosen and hence that costs will be higher than those potentially available without merger. The combination of the two groups may bring greater standardisation of approaches, and correspondingly less variety and innovation on engineering options. Generally the reduction in the number of businesses in a market reduces pressures to innovate and improve value. The merger would also increases the market power of the business, making it easier to exclude new entrants, and further undermining competition. A further problem from a reduction of competition in Italy is the risk of corruption – which is generally more likely to be exposed where there is competition for projects.

Overall, the competition arguments point towards measures to intensify competition between ANAS and RFI, perhaps encouraging each to compete for projects in the other's market, in preference to a merger which reduces competition and innovation in these important infrastructure markets.

In any case it is not clear whether and how the new group could be privatised. A possibility is that railways and road infrastructure will remain in a 100% government owned company, with transport services such as train operators separated out into other businesses which can be privatised following the strategy for the railway industry which we set out above.

In the roads industry, competition for the market already exists in the motorway sector. In Italy there are 27 licences and two large groups: Gruppo Atlantia operates and maintains 2936 km of motorway under five licences; and Gruppo Gavio, which operates and maintains 1293 km and

12 licences. 1790 km of motorway are licenced to public consortia. ANAS itself owns and manages only 218 km of roads under licence, where a toll is paid. However it also owns and manages 937,748 km of state roads and motorways on which no toll is paid. In the motorway sector therefore competition for the market already exists, regulated the ART. A merger between ANAS and FSI will not change this situation.

In the Italian motorway sector, a market for corporate control already exists in which less efficient management can be replaced by more efficient managers. For national roads beyond the motorways, roads are built (or commissioned) and managed by ANAS. In the absence of fees which cover its costs, and there is no reason why, as for RFI, this part of the roads infrastructure should not continue to be wholly owned by the state.

Without a clear compelling logic for either the privatisation of ANAS or its merger with Ferrovie dello Stato, the government should not think of a merger an alternative strategy to the structural reform of the railways and part-privatisation of the FSI Group. Doing so risks undermining the coherence and value of these important reforms to the transport sector, and missing an opportunity to improve radically the performance and efficiency of Italy’s railways.

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