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The Japan-EU Negotiations on Railway

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Introduction

The last four months have witnessed two major purchases of products—aircrafts and railway equipment—which in the EU context are often associated to government procurement. In October 2013, Airbus got its first order of 31 aircrafts (plus 21 options) from Japan Airlines (there was a previous purchase of Airbuses by Japan Air System before this firm merged with Japan Airlines). In January 2014, East Japan Railway Company (JR East) selected Thales (a French multinational) for a train control system in one of the busiest lines in Tokyo Metropolitan Area (Joban Local Line).[1]

These recent deals deserve an important remark. If these products are often associated to government procurement in the context of most—but not all—EU Member States (EUMS), the Japanese purchasing firms are fully private. As a result, both deals are private purchases in the Japanese context.

These recent deals have improved the atmosphere surrounding the negotiations of the Japan-EU Free Trade Agreement (JEUFTA). However, the negotiations remain difficult in the railway sector. These difficulties flow largely from the fact that the Japanese railways are organized on a radically different legal and economic basis than the railway systems in the EUMS. That said, this paper argues that, if these differences have made so far the negotiations more difficult, they also offer more opportunities in the future for the Japanese and EU railway companies in a global world.

[1] Two French firms Thales and Alstom (out of the ten firms that had expressed their interest for this tender in July 2012) were shortlisted at the first selection stage in February 2013.

The paper is organized as follows. Section 1 presents the legal and economic differences between the Japanese and EU railway systems. Section 2 discusses then a few key economic aspects of the JEUFTA in the railway sector. Section 3 suggests options for drafting a JEUFTA "railway chapter". The concluding section stresses the following critical point: as difficult as it may be for a few firms, policy-makers should not forget that, in trade negotiations, "national interest" should ultimately prevail over vested private interests. It is always possible to address the problems of these vested interests (if there is any need) by instruments more efficient for the targeted firms and less costly for the whole economy than trade measures.

Section 1. The negotiations on railway procurement: why is it so difficult?

The main source of the laborious negotiations on railway has been the difficulty in the EU to realize and take into account the huge differences between the basic principles running the EU and the Japanese railway systems. There are legal differences: almost all the Japanese passenger rail companies are private. And there are economic differences: the Japanese companies operate trains and tracks, while the EUMS railway systems are based on the "*unbundling*" principle (track companies don't run trains and vice-versa). In fact, the Japanese railway system is even more different from the EU system than the US railway system.

Legal differences: private firms in Japan, public firms in the EU

The three major Japanese passenger rail companies (JR-East, Central Japan Railway Company (JR-Central) and West Japan Railway Company (JR-West)) which were previously parts of the Japanese National Railway) are totally privatized since 2007. They are listed on the Tokyo Stock Exchange and they do not receive public subsidies for running their domestic operations.[2] The privatization process of the Japanese National Railway took

[2] In its 2013 presentation to the European Parliament INTA Committee, UNIFE (the association of the EU manufacturers of rail equipment) reports that Japanese firms get "significant soft loans" whereas the EU manufacturers get only "punctual support as per-OECD rules". This statement deserves two clarifications. First, the UNIFE' statement is referring only to export subsidies which indeed are under the disciplines of the OECD consensus for Japan as well as for the EU. Second, the UNIFE's statement does not mention the (hundreds of) millions of Euros that the EUMS railway companies receive directly or indirectly for the domestic rail

twenty years (it started in 1987) and required a long series of restructuring and streamlining. It is also very important to know that most of the other 150 or so Japanese passenger rail companies have been private firms since their creation. In fact, it was possible to privatize the Japanese National Railway because of the strong support of the Japanese population which could compare JNR and private companies.

These essential features—still largely unknown in the EU—contrast with the situation in the EU where many passenger rail companies are still public and/or (heavily for some of them) subsidized. Japanese firms are even "more private" than an US railway company such as Amtrak which is a for-profit organization but funded by federal money.

Economic differences: "Unbundling" in the EU, bundling in Japan

These legal differences are amplified by economic differences even less known by EU observers: the Japanese passenger rail companies own trains and tracks. (Of course, there are some tracks which are operated by more than one company: for example, JR-East, JR-Central and JR-West lease their main tracks to freight railway companies.) The Japanese approach is the opposite to the one adopted in the EU railway packages which rely on the "*unbundling*" of trains and tracks (track companies don't run trains, and vice-versa) [Saito 1997].

It is essential to understand why Japan did make such a choice almost three decades ago. When Japan started to privatize the Japanese National Railway in 1987, it was influenced by four factors which were self-reinforcing:

- The old tradition in Japan of "private" passenger rail companies owning tracks and trains has never disappeared. The Japanese wars of the 1930s and World War II were the reason for nationalization which was thus cantoned to tracks of military importance. A substantial part of the Japanese railway system (some 130 companies specialized in passengers transportation) has always been private.
- The pre-World War II passenger rail companies were mostly large trading companies eager to provide to Japanese consumers easy transportation to their large stores in the

operations—for instance, in France the huge rescue package granted to Alstom in the mid-2000s and the heavy subsidies routinely granted to SNCF. Of course, what matters from an economic point of view is the global subsidy packages—for export and domestic operations.

centre of the cities. These companies have not hesitated to invest massively in tracks because they have been “urban developers” since their creation—in sharp contrast with the EUMS passenger rail companies that started to use the train stations as a systematic source of stores and revenues only in the (late) 1990s. These massive investments in tracks have generated an abundant infrastructure which today ensures a substantial degree of competition among the many passenger rail companies. For instance, all the major private JR firms face notable pressures from local private railway competitors.

- In 1987, the main country with “private” passenger rail companies to look at was the US where there was no systematic unbundling.
- In the late 1980s, the economic analysis of introducing competition in network industries by having recourse to unbundling was still in its infancy. Moreover, this analysis was not adapted to the Japanese railway system because it did not take into account the key “urban developer” dimension of the Japanese private passenger rail companies—an essential cause of the fact that they were well run and profitable.

<u>The impact of these differences on the Japan-EU trade in railway equipment</u>

These differences have shaped the railway equipment markets in a very different way in the EUMS and in Japan:

- EUMS public passenger rail firms did not have the freedom to choose the providers of their equipments. They could only buy locally even if that meant paying higher prices. In such cases, they could always count on easy access to public subsidies and (to a much limited extent) on their monopoly for increasing prices in order to afford such costly deals. To sum up, the “balance of power” in the EUMS railway markets was largely in favor of the “national champions” producing railway equipment.
- On the Japanese side, the competition between private passenger rail companies with no easy access to public funds made necessary for these companies to be demanding with respect to the railway equipment companies, both in terms of prices and quality. As a result, the balance of power has been much less favorable to equipment firms—forcing them to become efficient over time and/or to justify higher prices on the basis of advanced technology.

As a result, the magnitude of the Japan-EU trade in railway equipment has been limited until the mid 2000s, as illustrated by Table 1 which allows two interesting observations:

- The trade balance has been in favor of the EUMS, not of Japan. This is not so surprising since, being run as private firms, the Japanese passenger rail companies were free to take into consideration the possibility of buying in the EUMS if they could get better deals and increase the competitive pressures in Japan.
- The only significant trade deficit between Japan and the EU involves Britain which faced very special circumstances during the years covered. The British railway system had to cope with decades of vastly insufficient investments. As a result, when it was nationalized, the Britain railway system of the early 1990s was the exact opposite of the Japanese case: not enough tracks and the "unbundling" principle. Privatization could not remedy such a dire situation which required huge and painful efforts for catching up in terms of infrastructure. In order to keep these huge efforts at an acceptable level in terms of money, quality and time, Britain has had no other solution than to turn to non-EU railway equipment firms—hence the contracts of the late 2000s.

Table 1. Japan-EU trade balance in railway equipment, 2001-2010, millions of Euros

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Austria	11.6	10.4	8.2	5.1	26.5	36.4	28.6	30.2	45.3	42.5	244.7
Britain	5.3	2.4	4.4	2.4	3.7	10.4	-34.4	-98.2	-107.6	0.5	-211.1
France	7.5	4.1	4.0	0.3	2.4	6.1	-0.7	22.3	1.8	1.4	49.3
Germany	19.8	22.4	18.4	6.2	9.6	15.9	14.8	22.7	1.9	2.7	134.2
Italy	14.3	0.2	5.6	18.6	9.4	19.3	3.8	5.9	10.1	18.4	105.5
RestEU27	-6.5	1.7	-13.7	-20.1	4.2	11.0	10.4	3.2	0.9	6.4	-2.7
EU27	51.8	41.2	26.9	12.4	55.7	99.1	22.4	-14.0	-47.6	71.9	319.9

Notes: Positive figures indicate positive trade balances (exports larger than imports) for the EU Member States. Initial figures in yen have been transformed in Euros on the basis of the annual average exchange rates. Source: Japan's Ministry of Finance.

The coming years are likely to witness two evolutions.

- The British "exception" is likely to fade away as and when the catching up process in terms of infrastructure will be satisfied.
- The current (and for some time to come) situation of the EUMS budgets implies that the EUMS public passenger rail companies will loose easy access to subsidies for compensating the higher prices which could be imposed by the national producers of

railway equipments. As EUMS governments are likely to be very reluctant to allow the public passenger rail companies to increase the prices of their services, these companies will be the first to request their respective governments to give them the freedom to buy equipment at the best prices and qualities no matter where.

It is useful to note that a number of British private passenger rail companies has among their shareholders public passenger rail companies from the Continent: for instance Abellio (NS, the Dutch railway public company), ArrivaUK Trains (Deutsche Bahn, the German railway public company) or Eurostar (SNCF and SNCB, the French and Belgian railway public companies).

This evolution would not be surprising. It has happened in the airlines industry. For instance, Air France made massive purchases (60 units) of Boeing aircrafts late 1990s. It is interesting to stress that this change did not trigger the fall of Airbus, quite the contrary.

Section 2. A look at the current Japanese and EU railway markets

These legal and economic differences are important for understanding the relative size and key features of the Japanese and EU rail markets which are presented in Table 2. In turn, such an understanding is essential for suggesting options for the JEUFTA.

Table 2. Passenger kilometers (pk) in Japan and the EU, billions 2009-2011

EU [a]			Japan [b]		
	pk	%		pk	%
France	88064	21.9	JR East	126960	32.4
Germany	82836	20.6	JR Central	51674	13.2
Britain	55831	13.9	JR West	52011	13.3
Italy	43349	10.8	JR-3 others	13592	3.5
Spain	22044	5.5			
Netherlands	16808	4.2	West Japan [c]	29262	7.5
Poland	17485	4.3	Tokyo 9 [d]	62293	15.9
Sweden	11218	2.8			
Belgium	9849	2.4	Tokyo Metro	18520	4.7
Austria	9713	2.4			
19 Others	45158	11.2	158 Others	37800	9.6
Total	402355	100.0	Total	392112	100.0

Notes and Sources: [a] Eurostat and International Railways Statistics (2011). [b] Ministry of Land, Infrastructure, Transport and Tourism for Japan (2009). [c] Major 5 private railway companies in Western Japan [d] Major 8 private railway companies in Tokyo.

Table 2 suggests four interesting observations:

- The Japanese railway market is limited to passengers. The Japanese rail freight market (1 percent of Japanese freight market) is much smaller than the EU freight markets. This feature is largely due to several mutually reinforcing forces: Japan's very mountainous geography; shorter distances in Japan between very few and very populous cities (Tokyo, Nagoya, Osaka); the presence of large trucks (90 percent of Japanese freight) and coastal shipping (8 percent) companies which have been able to develop their activities in a fully integrated market since a century.
- That said, the Japanese market for rail passengers is as big as all the EU27 railway markets.
- The three major Japanese passenger rail companies (JR-East, JR-Central and JR-West) are larger or comparable to the national rail passengers companies operating in the largest EUMS.
- The absence of unbundling in Japan implies that, as illustrated by the map besides Table 1, Japan can be split into several "rail territories" which are *de facto* comparable to the territories in which the various EUMS passenger rail companies operate.

The three last observations are extremely useful for suggesting options for the "railway chapter" of the JEUFTA

That said, in Japan, as well in most EUMS, there is little room for building new economically sound rail tracks, and the Japanese market is as "mature" as those in the EUMS. This feature is used by some EU protectionist voices for arguing that JEUFTA is an unattractive initiative. This argument does not make much sense for two mutually reinforcing reasons: a direct one related to the Japanese market *per se*, and an indirect one related to markets of third countries (non-EU, non Japanese).

A "mature" Japanese market: huge opportunities for high-range equipments

A huge mature market such as the Japanese passengers railway requires by definition a massive amount of money in terms of maintenance, renewal and modernization of the infrastructure (signaling equipment) and of the rolling stock. For instance, every year, about 40-50% of the JR capital expenditure— roughly Euro 1.1-1.2 billion—is spent for safety and renewal in rolling stock and signaling equipment.

Table 3 gives a sense of the size of the Japanese and EU markets for a key type of rolling stocks for passengers—electric railcars—owned by the major railway companies. This segment illustrates very well the fact that, in mature markets, the demand for maintenance, renewal and modernization is concentrated on high-end products. Such sophisticated equipment is much more profitable to produce for firms from developed countries than the segments of basic freight railcars or trailed cars which can be more easily produced by the many emerging economies in the world, in particularly China.

Table 3. Owned electric railcars, selected passenger rail companies, 2011-2013

EU [a]		Japan [b]	
Deutsche Bahn	**10281**	**3 JR firms [e]**	**23210**
SNCF [c]	**3039**		
NS [d]	**2366**		

Notes: [a] Railcars and multiple unit sets. [b] Railcars. [c] French railway company. [d] Dutch railway company. [e] JR-East, JR-Central and JR-West. Sources: International Railway Statistics for the EUMS, Synopsis (2011). JR East Brussels Branch for Japan (2013).

From competition to reputation and cooperation

Entering a “mature” sophisticated and demanding rail equipment market such as the Japanese one is one of the most powerful signals about the reputation of its products and services that a firm can send to third countries. It is a signal stronger than entering “less mature” markets that are often in such dire needs to get necessary equipments that they are plagued by producers of dubious quality. In the railway equipment industry, a good and recent example of such a reputation effect is provided by a German firm, Knorr-Bremse, which entered the Japanese and Chinese braking equipment markets at almost the same time.

That said, selling to Japan provides more than reputation to be used for entering third markets. It is an opportunity for the EU and Japanese firms to know better each other, hence opening the door to possible cooperation to enter "less mature" markets.

A good illustration of these opportunities is the High Speed Trains (HST) markets in the world. Table 4 provides the number (in billions) of passenger kilometers on HST in 2012 in the world. It clearly suggest that the chances for a EU firm to enter the huge Chinese markets depend a lot from the reputation that this firm has been able to gather in the Japanese markets. And that these chances would be amplified if it has had the opportunity to cooperate with Japanese firms—if only because most EUMS firms are small compared to what is needed by the Chinese markets.

Table 4. Passengers kilometers (pk) in High Speed Trains, billions, 2012

EU			Japan			Rest of the World		
	pk[a]	%[b]		pk[a]	%[b]		pk[a]	%[b]
France	51.1	14.7	JR firms	79.5	22.8	China	144.6	41.5
Germany	24.6	7.1				Korea	13.6	3.9
Italy	12.8	3.7						
Spain	11.2	3.2						
Sweden	2.9	0.8						
Others [c]	8.3	2.4						
Total	110.9	31.8	Total	79.5	22.8	Total	158.2	45.4

Notes: [a] billions of passengers kilometers. [b] percent of the world number of passengers kilometers. [c] Eurostar, etc. Source: International Railway Statistics, Synopsis (2012).

All this dimension of reputation and cooperation relies on the well known "centrality" of the Japanese economy in Asia. This centrality is magnified by the fact that Japan has the best web of investment and trade agreements with South-East Asian countries (ASEAN) and Taiwan which will be one of the most powerful growth centers in the world for the next two or three decades. In the railway sector as in other sectors, the JEUFTA will offer the opportunities to EU firms operating in and/or from Japan to use Japan as a "hub" for entering the ASEAN economies and Taiwan without waiting for long negotiations between the EU and these economies.

In such a context, the railway chapter of the JEUFTA should then play a crucial positive role for the EU firms. In particular, it should contribute to the industrial "dialogue and cooperation” among EU and Japanese rail compagnies which is the appropriate answer to the future challenges of the sector.

Section 3. The JEUFTA "railway chapter": options

At the beginning of the JEUFTA negotiations, the EU rail equipment industry argued that the Japanese passenger rail companies should be covered by the principles of government procurement, such as those in the GATT/WTO Government Procurement Agreement (both Japan and the EU are Members) or even shall follow the EU public procurement rules.

The above description of the Japanese rail companies makes obvious that this initial claim is unacceptable for the Japanese side. GATT-related texts (starting with GATT Article III.8a) use the term of "governmental agencies" that clearly excludes private firms from its coverage. Requiring Japan to subject its private passenger rail companies to government procurement would be tantamount to require that, for instance, the EUMS recently privatized telecom firms a decade or two ago should be subjected to government procurement procedures in the JEUFTA—with the risk of making a precedent for the EU-US TTIP. Such a proposal would rightly come as a shocking proposal to everybody in the EU.

That said, if it does not make sense to deal with private Japanese passenger rail companies in a railway section of the JEUFTA government procurement provisions, it does make sense to deal with all the railway issues in one chapter specifically to railway—opening the door to industrial cooperation in a world context.

This chapter should thus be structured in such a way that it takes into account the vast differences between the Japanese and EU railway regimes. What follows suggests a few options for coping with these legal and economic differences and for defining how better market access could be achieved in a progressive way—satisfying the economic interests in Japan and in the EU ready to go forward as quickly as possible, while giving the necessary breathing time to other interests in Japan and in the EU.

Coping with legal differences

The JEUFTA railway chapter could be divided into two sub-chapters—one for the private railway companies and the other one for the railway companies to be subjected to government procurement provisions. Such a division has many potential advantages:

- Its "public" sub-chapter will be perfectly consistent with the GATT/WTO definition of government procurement. According to GATT/WTO (the only legal reference recognized by both Japan and the EU) government procurement agreements deal exclusively with the purchase of goods and services by a government, an administrative entity (province, other institution, etc.) or a public corporation—hence not by private firms.
- Its "private" chapter could list the private firms covered by the JEUFTA, including Japanese but also some EUMS companies. It would reaffirm that private firms are responsible to their shareholders and consumers, hence that their purchase decisions are non-discriminatory. If felt necessary, this sub-chapter could clarify the conditions of transparency, etc., that should be followed by private firms when purchasing goods and services. Finally, it could also clarify the operational safety clause (OSC) introduced in Japan in order to take into account high earthquake risks since European firms claim that the OSC is used in a protectionist way. Indeed, such a clarification may well be welcome in the post-Fukushima Japan.

In this context, the "chapeau" of the JEUFTA railway chapter may have two objectives. First is to explain the reasons for this dual structure—the different legal and economic situations in the rail markets of the two partners. A second objective could be to clarify the conditions at which a railway company could be shifted from one sub-chapter to the other one, once the JEUFTA will be enforced. Such a provision would have a huge advantage from the EU perspective: it would allow the JEUFTA railway chapter to be flexible enough not to hinder the emergence of an EU rail "Internal Market" based on an increasing number of private passenger rail companies.

Defining market access

Agreements on government procurement usually list the "entities" (firms) to be covered by the agreement. The JEUFTA railway chapter could innovate by specifying the date (say year) at which the markets in which a rail company operates would be open to the competition of the trading partner. Such an innovation has two advantages:

- It would allow a progressive scheduling of the market opening in the various EUMS, and therefore to better accommodate the diverse EUMS situations. The EUMS eager to benefit from competition as quickly as possible could choose fast liberalization, while those desiring more time for adjusting to more competitive markets could get some breathing space.

- Nothing prevents to adopt the same approach of specifying dates for the listed private rail companies. This flexibility would also allow to accommodate the different positions among Japanese (and possibly EUMS) private operators with respect to the timing of market opening.

Using a two schedule approach offers the huge advantage of defining balanced concessions over time from Japan and the EUMS. For instance, it could be agreed that improved market access will be available—say—in the year Y for JR East and a set of British or German (private and public) passenger rail companies, while it will be available—say—in the year Y+3 for JR Central and a set of EUMS entities. "Pairing" market access in Japan and in the EU offers thus the possibility to deliver a balanced and progressive increase in market access in these two economies.

Concluding remarks: "National interest" should prevail

This paper shows that there are solutions in the rail sector which could be beneficial to both JEUFTA parties. A "railway chapter" would allow to achieve balanced concessions with a progressive time frame of implementation while respecting the huge legal and economic differences in the rail systems—and indeed contributing to a better integrated EU "Internal Market" in this sector.

These solutions are numerous and flexible enough that delaying the JEUFTA negotiations at the end of the "one year review" exercise because of the rail issue would raise the following, totally different question: who is in charge of the "national interest" in these negotiations between Japan and the EU? Some hard protectionist lobbies or the governments?

The answer to this question requires to turn away from the frequent perception of trade negotiations as opposing two countries—indeed the perspective cherished by the protectionist forces in every trading partner.

It requires to have the more accurate perception of trade negotiations as opposing sectors within each country. If a government takes the side of its domestic protectionist interests, it necessarily hurts the interests of all its domestic sectors which would have expanded their operations by getting better market access in the partner's economy. The details of these domestic conflicts are specific to every country. In the case of France, taking the side of the most protectionist forces in the rail equipment sector would hurt for instance:

- the interests of the French rail equipment firms which have already entered successfully the Japanese rail markets,
- the interests of the French passenger rail company which will not be able to buy all the equipment it needs in the future at the best prices and quality possible at a time of severe cuts in public budgets—hence the interests of the millions of French who are travelling every day by train,
- the interests of the French agribusiness exporters since Japan ranks third in terms of French processed food export markets (and first in Asia) and she is the reference market in Asia in this sector,
- and, more generally, the interests of every French firm eager to enter such a large and crucial market in the region with the highest growth.

After all, it needs to be stressed that the passenger rail equipment sector is far to represent even 1 percent of the French (or EU) GDP.

Governments concerned about national interest should therefore ask themselves two questions:

- If they take the side of their most protectionist interests, how big will the damage made on their exporting and domestic interests? What will be the costs-benefits balance for the whole economy?
- Would taking the side of the most protectionist interests by delaying the JEUFTA negotiations solve the problems of the firms asking for protection?

At least, in one EUMS—France—the past five years or so have given an answer to the second question. There is an emerging consensus in this EUMS that that the major problems in the French rail equipment sector flow from major strategic mistakes made by very few firms in the past and that subsidizing and/or protecting them has only made the problems more severe by delaying the appropriate measures by these firms. Moreover, there are rumors that some French equipment firms could be sold to a foreign firm.

Last but not least, it should be heavily stressed that the costs of delaying the JEUFTA negotiations are magnified by a very specific factor which totally escapes EU reach. While negotiating with the EU, Japan is also negotiating with the US under the Trans Pacific Partnership (TPP). As already documented [Messerlin 2012] a successful TPP without a successful JEUFTA will be extremely costly for the EU—and particularly for the French—firms which will be discriminated against in the Japanese markets, following the better market access to Japan for the US and other TPP goods and services. Indeed, it is not by accident that major US firms are beginning to move rapidly deeper into Japan, particularly in the procurement sector such as building and/or operating airports or highways [International New York Times February 27, 2014].

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