

Institute of Governmental Studies

(University of California, Berkeley)

Year 2009

Paper

Antitrust law and public services performances with reference to the postal industry: a discussion paper

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JEL: L4, L87, N4, R38

Abstract

Scholars and politicians have always fiercely debated on the role of government in the economy. This has shaped the legal frameworks governing the relationship between markets and governments. A key element of these legal frameworks is the antitrust legislation and the focus of this paper is the most remarkable difference between US and EU: State Aid. It is virtually non-existent in the former while explicit policy in the latter. While in Europe it became an important issue in the light of the building of a single European market, it has not been a key issue for US antitrust basically because of historical reasons.

More specifically, this discussion paper analyzes the impact on regulation of network industries played by the European Court of Justice (ECJ) with its *Altmark* decision (July 24th 2003), which defined the conditions so that a compensation for public services is not considered state aid. The analysis addresses specifically the fourth condition which applies whenever the undertaking is not chosen in a public procurement: compensation needs to be determined by benchmarking the operations of the public service provider against market-determined standards. In the last part of this paper we briefly present a case study on the postal sector, where risks for State Aid legislation infringement are likely to arise if universal service cost burdens are to be compensated through public subsidies. We also present a possible way forward that needs to be researched to address this issue.

I. Introduction

This discussion paper addresses one of the most striking differences between Europe and the US in Antitrust Law, State Aid legislation. It analyzes a specific aspect of regulation regarding the compensation for public services, and focuses in the last part of the paper on the postal sector, where risks for State Aid legislation infringement are likely to arise if universal service cost burdens are to be compensated through public subsidies. The first step will be to unveil the important role that compensation for public services plays in EU antitrust legislation compared to the US, and how this has been influenced by different historical backgrounds as well as by the economic role played by the Government. More specifically, it analyzes the impact on regulation of network industries

¹ This paper expresses personal views of the authors that do not necessarily represent the views of University of Tor Vergata or Bristol Business School. We thank Mark Andrew Fardelli for his valuable comments. The authors can be reached as follows: Stefano Gori at goriste2@posteitaliane.it and Vincenzo Visco Comandini at visco.comandini@economia.uniroma2.it.

played by the European Court of Justice (ECJ) with its *Altmark* decision, which defined the conditions so that a compensation for public services is not considered state aid. The analysis address specifically on the fourth condition which applies whenever the undertaking is not chosen in a public procurement: compensation needs to be determined by benchmarking the operations of the public service provider against market determined standards. As shown in the literature on economic weaknesses of franchise bidding as market simulating mechanism (*Williamson, 1985; Sappington & Stiglitz, 1987*), this task is full of hurdles when applied to industries where there is no company operating in a comparable market (*Hansen et. al, 2003*). It highlights the need to discuss the basic requirements for a public service to be efficiently provided. The conceptual framework provided by Le Grand (*2007*) is considered as useful in that regards. This paper concludes by looking at feasible ways to apply this condition to the European postal sector, and identifies for future research an econometric approach which may be tested for its fulfillment.

II. The shaping of antitrust regulation in the US and in the EU

The different historical backgrounds against which the antitrust approaches in the US and in the EU were put into place are vastly different. The earliest US antitrust laws were adopted after the development of a national railway network, which was the foundation for a continent-wide single market (*Chandler, 1977*). With the single market came mass production, national firms and labor movement, aided by the arrival of immigrants from Europe. This extraordinary expansion of the railway system was also indirectly responsible for the debate that led to the Sherman Antitrust Act (1890).

The independent railroad companies that made up the national railroad network were very often monopoly suppliers of transportation services in regional markets, operating feeder lines that led to the national trunk lines, the Atlantic coast, and world markets (*Martin, 2005*). Between 1860, just before the beginning of the American Civil War, and 1890, the year of passage of the Sherman Act, U.S. railroad mileage increased more than fivefold. Westward railroad expansion benefited from huge amounts of state aid, which included extensive grants of land along railroad rights of-way. This period, which was also referred as the “Era of National Subsidy” (*Goodrich, 1960*), began with the Illinois Central Act of 1850 (a federal land grant to support the construction of a railroad system from Mobile, Alabama to northern Illinois) and ended with a 1872 grant of land by the state of Michigan to the Chicago and Northwestern Railroad. This support was justified by the argument that railroad development would bring extensive economic and social benefits that would benefit the country as a whole, above any profit taken by railroad entrepreneurs (*Martin, 2005*).

The stated purpose of the antitrust laws in the US was to prevent collusion and strategic entry-detering behavior and this has evolved into an explicit evaluation of the impact of businesses

practices on consumer welfare, conceived of and measured in an economic sense. Cartel violations, such as price fixing, bid rigging and customer allocation, traditionally have been considered the worst antitrust offenses.

Compared to the US, EU competition policy (Articles 85-86 EC Treaty and Regulation 4064/89) was adopted in prior to, and not post economic integration. With a stated purpose of augmenting economic integration, it aims to create a context where firms compete on a level playing field across all the EU Member States and to achieve this it prohibits practices that are seen as distorting competition and leading to market compartmentalization (*Van Cayseele & Van den Bergh, 2000; Martin, 2005*).

In Europe, in the aftermath of World War II there was a desire for powerful, large and possibly dominant companies and for decades cartels have been tolerated, often even supported (*Delgado, 2007*). The general feeling was a distrust of markets, even though slightly varying from country to country (*Amato, 1997*). In 1951, The European Coal and Steel Community (ECSC) was the first step toward the European Union but at that time competition policy was not high on the agenda. Jean Monnet, aimed at economic integration as an indirect means of reaching his primary objective, which was political integration (*Gerbet, 1956; Milward, 1992*). The ECSC was also the first slip-up on the road to EU competition policy, since it would simply be a cover for the reprise of pre-war cartels (*Gillingham, 1991*). From an economic perspective, the coal and steel industries were not the ideal sectors to start an experiment of freeing trade and prices, as relevant freight costs in both industries tend to create separate markets. Furthermore, the structure of ownership, the long history of concerted practices, and the strong influence of national governments (e.g. since the coal industry was, and still is, labor intensive the political impact was relevant) made these sectors the least suitable candidates (*Lister, 1960*). The decline of coal may be seen as perhaps the first example of the enduring tradition of the granting of massive amounts of state aid, often in violation of state aid rules, for the purpose of delaying as long as possible structural adjustments that are a consequence of market integration and, in fact, a prerequisite for the full benefits of integration to be realized. The decline in steel came later than the decline in coal, after the 1973 oil crisis. The use of crisis cartels to deal with the steel decline (*Heusdens & de Horn, 1980*) was an indication of a fundamental unwillingness to rely on the marketplace as a resource allocation mechanism.

III. State Aid in the EU and in the US

Among the differences between US and EU in Antitrust policies the most remarkable is State Aid, virtually non existent in the former while explicit policy in the latter. Whilst in Europe it became an important issue in the light of the building of a single European market, it has not been a

key issue for US antitrust simply due to historical reasons. In fact in the US, legislation was implemented after the creation of a single country and integrated market with the aim of dismantling cartels, since government owned firms are less important than in Europe. However, the recent aid to many financial institutions in 2008-09 may bring some changes. To understand the US approach on public policy toward business we have to go back in history to pre-Sherman Act public debates and later before the 1914 passage of the Clayton Act and the Federal Trade Commission Act (FTC Act). Two positions emerged in these debates: one believed that it was important to regulate business only where actual competition failed, and leave other sectors of the economy to their own devices. The other was that no government regulation was needed anyhow, since potential competition would yield good market performance. The Clayton Act had the objective to undercut any rationale for proactive government control of firm and market structures (*Martin, 2007*).

In contrast, the EU Services of General Economic Interest (or SGEI) do play a fundamental role in the shared values of the Union. These services are industries of national interest (such as public transportation, telecommunications, postal services, local government services) often holding special obligations in fulfilling public tasks not performed by usual market mechanisms. Although expected to promote social and territorial cohesion, they are fully submitted to Antitrust legislation (while in the US this is not the case for postal services), but the opening up of their markets (liberalization) has raised many political and economic issues. The incumbent companies were previously in monopoly situations and often have enjoyed the legacy of a universal service provision. Furthermore, they were often involved in delivering a mix of commercial and public services. In such circumstances it can get financial support to perform public services where it is also active in commercial markets for which it does not receive support. The focus of the EU antitrust on state aid arises when there is a risk that the compensation such undertakings, either directly or indirectly owned by the state, receive for delivering public services could leak into their commercial markets and distort the level playing field especially creating difficulties for companies from other European Member States (*Boyd & Teal, 2004*).

IV. The Economic role of the Government

Scholars have fiercely debated on the role of government in the economy (*Stiglitz, 2000*). In the ancient Near East state ownership of the means of production, including mills and metal working, was common, while private ownership was more common in trading and money lending (*Sobel, 1999*). In ancient Greece, the government owned the land, forests, and mines, but contracted out the work to individuals and firms, while in the Ch'in dynasty of China, the government had monopolies on salt and iron (*Meggison & Netter, 2001*) and in the Roman Republic the

“publicani” (private individuals and companies) fulfilled virtually all the of the state's economic requirements (*Sobel, 1999*). By the time of the Industrial Revolution in industrialized societies and their colonies, the private sector was the most important producer of commercial goods, but it was also important in providing public goods and services (*Rondinelli & Iacono, 1996*). This pattern, with more government involvement in some countries and less in others, continued into the twentieth century in both Western Europe and its colonies and former colonies.

In the United States, there was less government involvement than many other countries and a hundred years ago some highways and all roads were private (*Stiglitz, 2000*). The Depression, World War II, and the final breakup of colonial empires pushed government into a more active role, including ownership of production and provision of all types of goods and services, in much of the world (*Meggison & Netter, 2001*). After the Great Depression, scholars and politicians have debated how deeply involved the national government should be in regulating the national economy and which sectors should be reserved exclusively for state ownership. In the past thirty years limiting the role of the state has been the dominant idea in the political and economical debate in industrialized countries, but the recent financial crisis has shifted the pendulum toward more state intervention (*Katwala, 2008*).

Contemporary rethinking of the role of government has been reflected in both deregulation and privatization (*Stiglitz, 2000*). The first one, gained momentum in the late 70s, influenced by research at the University of Chicago and by Alfred E. Kahn at Cornell University. Counter to conventional belief, the deregulation wave in the US began with a Democrat President Jimmy Carter (*Friedli et. al., 2008*) with the objective to reduce the role of government in regulating the economy. For instance, the government stopped regulating prices for airlines and long-distance trucking. Key legislation that was passed under the Carter administration included: Airline Deregulation Act (24 October, 1978), Staggers Rail Act (14 October, 1980), and the Motor Carrier Act of 1980 (signed the 1st of July 1980). Reaganism was an economic recipe that added to deregulation two more ingredients: monetarism (the Federal Reserve's tactic to control inflation in the 80's) and low taxes (*Galbraith, 2008*).

Privatization sought to turn over to the private sector activities previously undertaken by the government. The privatization movement was much stronger in Europe, where telecommunications, railroads, airlines and public utilities were privatized. Most people associate modern privatization programs with Margaret Thatcher's Conservative government in 1979. However, the Adenauer government in the Federal Republic of Germany launched the first large-scale, ideologically motivated “denationalization” program of the postwar era. In 1961, the German government sold a majority stake in Volkswagen in a public share offering heavily weighted in favor of small

investors. Using a broader definition of privatization – the Churchill government’s denationalization of the British steel industry during the early 1950s could well be labeled as the first privatization (*Meggison & Netter, 2001*). Margaret Thatcher adopted this word, originally coined by Peter Drucker and which replaced the name denationalization and was based on Friedrich von Hayek’s critiques (*Von Hayek, 1944*) of the welfare state and collectivism (*Yergin and Stanislaw, 1998*).

Meanwhile, in continental Europe in the early 80’s across continental Europe there was a growing perception that the competitive capacity of the European economic system was hampered by the absence of a single market. The European Commission responded by submitting on June 14 1985 the White Paper “Completing the Internal market” (*European Commission, 1985*). Its publication led to the setting of the framework for the creation of a unified European single market. In February 1986, the Single European Act was signed setting out a road map for taking the 270 or so steps necessary the completion of the single market by 1993.

All these trends have been carried out with clear political motivations, but sometimes without questioning the economic rigor of the tools used and avoiding scrutinizing the assumptions behind conventional mainstream economic theory (*Crew & Parker, 2006*). Theoretical arguments for the advantages of private ownership of the means of production are synthesized in the Fundamental Privatization Theorem (here after FPT) (*Sappington & Stiglitz, 1987*). FPT provides theoretical conditions under which government objectives can be obtained by an appropriately designed auction of the rights to produce a given product or service. It is a general theorem which shows under which conditions privatization is optimal and government involvement cannot improve the performance of the private market. The ideal setting is an auction system whereby potential producers bid for the right to provide the good. This result requires three crucial assumptions: 1) the number of bidding firms must be large enough to avoid collusion; 2) firms must be risk neutral and 3) share information on least cost production technology. These ideal conditions are rather strict, hence in practice we are dealing with “privatization failures” similar to market failures (*Bos, 1991*).

Sappington & Stiglitz argue that the main difference between public and private ownership involves the residual rights of intervention. Under public enterprise, the government retains some authority to directly intervene in the production arrangements and implement major policy changes when it is deemed necessary to do so. Under private ownership, special rights of intervention are used for creditors (in the event of bankruptcy) and major financial interests (who can gather the resources necessary to finance a takeover of the private firm). Le Grand (2007) has recently summarized the basic attributes a good public service is expected to hold, pretty similar to government’s objectives in choosing among alternative forms of production: i) the service should be of high quality, ii) efficiently produced and operated, iii) responsive to the needs and

requirements of users, iv) accountable to taxpayers, and v) delivered equitably. Quality has several possible dimensions, ranging from measurement of inputs, outputs, process or outcomes, and is a central feature of any public provision. Efficiency and effectiveness are also important, because stakeholders (users, citizens, taxpayers, voters) require the maximum quality adjusted output at least cost. Their measurement, however, may be problematic in several cases, since the real price of a service is not the money that was spent on providing it, but the cost of the other services that could have been provided had the money not been spent in that way. If an alternative (e.g. a service able to at least partly substitute it) does not exist, the “opportunity cost” of its provision cannot be adopted as a benchmarking criterion.

V. State Aid after the Altmark ruling

Important differences exist between the typical regulated industry and the ideal setting described by the FPT. In many cases there is no auction for the right to provide a particular service, the regulator seldom compensates the firm according to the social valuation of its activities (rather, restrictions are imposed on pricing and cost functions) and the terms of the relationship are reviewed and charged periodically (*Sappington & Stiglitz, 1987*). In other cases, opportunism coped with asset specificity may endanger ex post the contract enforcement, making the franchise bidding an ineffective market incentive replicating tool (*Williamson, 1985*). In Europe, SGEIs regulation is supposed to harmonize antitrust law with public service obligations’ (“PSOs”). However the intervention of the state in the economy has been the subject of legal challenges and debates. The debate has often been heated, and has taken place against the backdrop of market liberalization across the European Union.

On July 24th 2003, the European Court of Justice (ECJ) through the “Altmark ruling” defined the four conditions so that compensation for public services is not considered state aid. The ECJ decision applies directly to urban transport public undertakings, but quickly became a milestone for evaluating whether a public subsidies complies with competition rules on State Aid (*Travers, 2003*). Altmark has ‘decentralised’ the law regarding PSOs. Provided that the four conditions identified in the judgment are met, PSO payments can be considered to fall outside Article 87(1) of the European Treaty, i.e. they do not constitute illegal State Aid. If they do not constitute State aid then they do not have to be notified to the European Commission acting as European Antitrust Authority. This affords local/national decision makers some discretion over whether or not notification is necessary, rather than forcing central decision taking by the European Commission. The conditions are:

- 1- The recipient undertaking must actually have public service obligations to discharge and those obligations must be clearly defined,
- 2- The parameters on the basis of which the compensation is calculated must be established both in advance and in an objective and transparent manner,
- 3- The compensation cannot exceed what is necessary to cover all or part of the costs incurred in the discharge of the public service obligations, taking into account the relevant receipts and a reasonable profit,
- 4- Where the undertaking is not chosen in a public procurement procedure, the level of compensation must be determined by a comparison with an analysis of the costs that a typical undertaking would incur, taking into account the receipts and a reasonable profit from discharging the obligations.

Firstly, the recipient undertaking must actually have PSOs to discharge, and the obligations must be clearly defined. This places a greater emphasis on the need to clearly identify obligations. Altmark suggests that this would be derived from national legislation and/or licenses.

Secondly, parameters for calculating compensation must be established beforehand in an objective and transparent manner, to avoid it conferring an economic advantage which may favor the recipient undertaking over competing undertakings. *“Payment by a Member State of compensation for the loss incurred by an undertaking without the parameters of such compensation having been established beforehand,[...], therefore constitutes a financial measure which falls within the concept of State aid within the meaning of Article [87(1)10] of the Treaty.”* The key word is “parameters”. A parameter can be “a measurable or quantifiable characteristic of a system” and also “a limit or boundary which defines the scope of a particular process or activity”. It is not, in this context, equivalent to an algorithm. It is unclear how much flexibility there may be in any particular case. This means that it is difficult for those who have a broad agreement to assess whether this might be ‘Altmark’ compliant. To what extent can a public authority incorporate mechanisms to adjust the public contribution as necessary? (*Boyd & Teal, 2004*).

Thirdly, the compensation cannot exceed what is necessary to cover all or part of the costs incurred in the discharge of PSOs, taking into account the relevant revenues and a reasonable profit for discharging those obligations. This condition is clearly linked to the second. Without a clearly defined mechanism for assessing the “true” cost of the PSO (such as the net cost for the universal service in telecom or posts), the risk of overcompensation may be high. The issue of what constitutes a “reasonable profit” has been considered in the case-law relating to the market economy investor principle. The approach taken is as follows: the court is asked to consider whether

investment by the state is State aid. The alleged beneficiary seeks to show that the State invested on the same basis as a private investor would i.e. that the State expects to earn an economic return on its investment in the same way a private investor would (*Boyd & Teal, 2004*).

Fourthly, if the undertaking which is to discharge PSOs is not chosen pursuant to a public procurement procedure (franchise bid) which would allow for the selection of the tenderer capable of providing those services at the lowest cost to the community, the level of compensation needed must be determined on the basis of an analysis of the costs which a typical undertaking, well run and adequately provided for would have incurred in discharging those obligations, taking into account the relevant revenues and a reasonable profit for discharging the obligations.

Till now all European regulated industries had to show that they incurred costs necessary in providing the service. After the fourth condition of the Altmark ruling, compensation needs to be determined by benchmarking the operations of the public service provider against specific market standards. A number of questions arise: What is an average, well managed company providing public services? What if in a market there is no company operating in a comparable market, would it be necessary to carry out the benchmark against companies in other EU members? (*Hansen et. al, 2003*).

VI. Case study: the postal sector

The application of the fourth Altmark condition raises several practical issues for industries, such as postal services, where state subsidies may be used for PSO financing (*Fratini & Filpo, 2006*). In the light of Altmark this solution may become incompatible with the European treaty (*Koenig & Haratsch, 2003*) if both the government and the recipient are unable to prove to the European Commission that the grant covers only efficient costs faced for the PSO provision. The fulfillment of this condition is uneasy, for at least three reasons. The first is that efficient costs of a monopoly are by definition the observed costs if no other firms operating under similar conditions can be taken as a benchmark. This is reasonable since PSOs are not a normal good supplied on the market, but rather a mixed good, peculiar for each country, that includes private and merit good characters (*Gori, Visco Comandini et al, 2002*). The public good component of postal PSO exhibits both non rivalness in consumption (the consumption of an additional output does not harm other consumers) and non excludability (its supply is *de jure* generalized to all citizens with a known address), preventing in a competitive bid to ex post fully observe if the winner is really fulfilling or not all obligations defined in the contract. Lets take the example of minimum quality requirements, e.g. the specific postal PSO to deliver daily mail to all national addressees in a predefined time window (one or three days). In this case, opportunistic behavior is likely to arise because the

obligations are difficult and costly to monitor, since final letter recipients are almost unable to check the true quality of delivery. This is the reason why, information asymmetries being relevant, the usual market mechanism fails, and a regulatory Authority is usually asked to perform this task

The second reason is that if there are only few potential providers for a certain service, a tender or even a survey of typical costs would not prove very useful (*Sappington & Stiglitz, 1987; Santamato & Pesaresi, 2004*).

The third reason relates to technology: the postal industry charged with PSO exhibits significant economies of scale, especially in delivery (*Cohen et al, 2002; 2004; PWC, 2006; Campbell et. al 2008; Cohen & McBride, 2008*)². Postal administrations operating at a low scale (low per capita volumes) face higher unit costs than those with high volumes. As a consequence, a simple comparison of the efficiency of a specific postal administration firm with averaged values of other postal administrations – a naïve interpretation of Altmark’s ruling – is very likely to be biased towards those operators enjoying large economies of scale. The postal sector is a peculiarly regulated industry because it is more labor intensive than all other regulated industries (telecommunications, energy, transportation). National postal providers face low fix capital costs but high recurrent fix labor costs. In the postal sector, legal PSO requirements, as maximum allowable time for delivery or minimum opening hours for existing post offices, have the effect of switching at least part of what a market firm would consider as a variable cost into a fixed one. These legal obligations impose the National postal provider to hold a fixed delivery network, designed for fulfilling assigned standards, regardless of postal volumes treated: trucks or planes shall leave mail exchange hubs on time independently from their saturation levels (*Lettieri & Visco Comandini, 2001*). Furthermore, this sector has not experienced a dramatic technological change such as energy and telecommunication and dramatic growth in consumption like telecommunication services in the past decades (e.g. postal volumes in industrialized countries have stagnated in the past year and today are slightly but constantly declining).

Given these peculiarities of the postal industry, a reasonable conclusion would be that any benchmarking exercise between National Postal Administrations is always inappropriate or misleading? We don’t agree: comparisons based on reasonable causal chains with exogenous variables (e.g. factors independent from provider’s responsibility) and modeled by specific econometric techniques allow to build a benchmarking framework able to account for efficiency differences.

² In the US, the Postal Administration USPS, which is the only relevant postal operator in the world charged by the legislation to fully disclose all its data on costs, has recently provided a Report On Universal Postal Service and The Postal Monopoly (*USPS, 2008*).

The way forward might come from the use (with some additional statistical adjustments) of the general cost function in postal services modeled by Cohen et al (2002; 2004; in Campbell et al 2008). The general cost function estimated by Cohen et al is applicable to any postal administration. It shows that, all other things being equal, the national postal market width (measured as annual per capita postal items) is the key unit cost driver. Given this result, it would be possible to address the issues raised by the fourth Altmark requirement by measuring the relative cost efficiency of postal operators compared to their peers. This would be possible by using functional forms of estimated equations allowing for economies of scale³, then fitting Postal Administrations into clusters for similar scale of operations (e.g. per capita volumes), while taking into account exogenous (e.g. urbanization rates) and endogenous variables (e.g. quality performances) affecting the cost structure.

References

- Amato G. (1997):** “Antitrust and the Bounds of Power”, Oxford Hart Publishing.
- Bös D. (1991):** “Privatization: A Theoretical Treatment”, Oxford University Press.
- Boyd A. & Teal J. (2004):** “Interpreting the Altmark decision – the challenges from a private practitioner’s perspective”, McGrigors.com, 31st of May.
- Campbell J. I., Cohen R., Dieke A., Fritschler A., John R., Panzar J., Pommering C., Wolak F. (2008):** “Study on Universal Postal Service and the Postal Monopoly“, George Mason University School of Public Policy, November.
- Chandler A. D. Jr. (1977):** “The Visible Hand: The Managerial Revolution in American Business”. Cambridge, Massachusetts: Harvard University Press, 1977.
- Cohen, R. & McBride C. (2008):** “Estimates of the Current Costs of the PSO in the U.S., Study on Universal Postal Service and the Postal Monopoly“, Appendix F Section 3, George Mason University.
- Cohen R., Pace C., Robinson M., Scarfiglieri G., Scocchera R., Visco Comandini V., Waller J. e Xenakis S., (2002):** “A comparison of the burden of Universal Service in Italy and the United States” in M. Crew e P. Kleindorfer, Postal and delivery services: Pricing, productivity, regulation and Strategy, Boston, Kluwer Academic Publishers.
- Cohen R., Robinson M., Scarfiglieri G, Sheehy R., Visco Comandini V., Waller J. & Xenaxis S. (2004):** “The role of scale economies in the cost behavior of Posts” Wissenschaftliches Institut für Kommunikationsdienste (WIK), 8th Köenigswinter Seminar on “Regulating Postal Markets – Harmonised Versus Country Specific Approaches.” (February): 16-18.
- Crew M. & Parker D. (2006):** “International Handbook on Economic Regulation”, Edward Elgar Publishing.
- Delgado J. (2007):** “EU versus US Antitrust Policies”, Bruegel.org, 10th of October.
- European Commission (1985):** “Completing the Internal market”, White Paper to the European Council, June 14.
- Fratini, A. & Filpo, F. (2006):** “PSO public financing at the cross road between the Monti package and the forthcoming reform of the postal directive”, in M. Crew-P. Kleindorfer (eds) Liberalization of the postal and delivery sector, Edward Elgar.
- Friedli B., Gori S., Pintsov L., Van der Horst M. & Wright H. (2008):** “Mail on Mars – A New Awakening: from Universal Service to Needs Based Service”, presented on May 29 at 16th Conference on Postal and Delivery Economics organized by Rutgers University in Albufeira, Portugal.
- Galbraith J. K. (2008):** “The Predator State”, Free Press.
- Gerbet P. (1956):** “La Genèse du Plan Schuman” Revue Française de Science Politique 6(3), pp. 525–553.
- Gillingham J. (1991):** Coal, Steel, and the Rebirth of Europe 1945-1955. Cambridge: Cambridge University Press.
- Goodrich C. (1960):** “Government Promotion of American Canals and Railroads 1800–1890”, New York: Columbia University Press.
- Gori S., Lettieri C., Marè M. & Visco Comandini V. (2002):** “The myth of the Uniform price”, paper presented at the International Conference on Public Finance, Helsinki, August 29-3.
- Gori S., Piccinin E., Romito S. & Scarfiglieri G. (2005):** “On the Use of Cost Functions in the Assessment of the Impact of Liberalisation on Postal Universal Service Burden Restricted versus Flexible specifications”, in M. Crew, P.

³ For example, future research may use publicly available data set on costs of National Postal Providers, provided by Nera (2004) for its study for European Commission, taking into account also adjustments proposed by Gori et al (2005).

Kleindorfer (eds.), *Progress toward Liberalization of the Postal and Delivery Sector*, Springer Science, Business Media, New York, p. 59.

Hansen M., Zuehlke S., Van Ysendyck A. (2003): “Altmark Trans: European Court of Justice outlines conditions for public service compensation”, *Practical Law Company*, 7 August.

Heusdens J. J. & De Horn R. (1980): “Crisis policy in the European steel industry in the light of the ECSC treaty,” *Common Market Law Review* 17(1), pp. 31–74.

Katwala S. (2008): “How Big Government Never Left”, *Newsweek*, November 24.

Koenig C. & Haratsch A. (2003): "The Licence Fee Based Financing of Public Service Broadcasting in Germany after the Altmark Trans Judgment", *EStAL*, 4, pp. 569-577.

Le Grand, J. (2007) “The Other Invisible Hand”, Princeton University Press.

Lettieri C. & Visco Comandini, V. (2001): “Comparing Postal and Telecommunication Networks: Similarities and Differences”, *Journal of Network Industries*, , vol. 2, no.2, 163-206.

Lister L. (1960): “Europe’s Coal and Steel Community” New York: Twentieth Century Fund.

Martin S. (2005): “US Antitrust and EU Competition Policy: Where has the former been, where is the Latter Going?”, Purdue University, January.

Martin S. (2007): “ The Goals of Antitrust and Competition Policy”, Center for International Business Education and Research, Krannert School of Management, Purdue University, Working Paper 2007-003 and in Wayne Dale Collins, editor, *Issues in Competition Law and Economics*, American Bar Association, July.

Meggison W. L. & Netter J. M. (2001): “From State to Market: A survey of Empirical Studies on Privatization”, *Journal of Economic Literature*.

Milward A. S. (1992): “The European Rescue of the Nation State”, Berkeley and Los Angeles: University of California Press.

NERA Economic Consulting (2004): “Economics of Postal services: Final Report”, a report to the European Commission, July. http://ec.europa.eu/internal_market/post/doc/studies/2004-nerafinal-postal-report_en.pdf.

PriceWaterhouseCoopers (2006): The Impact on Universal Service of the Full Market Accomplishment of the Postal Internal Market in 2009, Final Report http://ec.europa.eu/internal_market/post/doc/studies/2006-impact-report_en.pdf.

Rondinelli D. & Iacono M. (1996): *Policies and Institutions for Managing Privatization*. Turin, Italy: International Training Centre, International Labor Office.

Santamaso, S. & Pesaresi, N. (2004) “Compensation for services of general economic interest: some thoughts on the Altmark ruling”, *Competition Policy Newsletter*, Number 1—Spring 2004, p. 17.

Sappington D. E. M. & Stiglitz J. E. (1987): “Privatization, Information and Incentives”, NBER Working Paper no. 2196.

Sobel R.: (1999): “The Pursuit of Wealth. New York: McGraw Hill.

Stiglitz J. (2000): “Economics of the Public sector”, Third Edition, Norton.

Travers N. (2003): "Public Service Obligations and State Aid: Is all really clear after Altmark?", *EStAL* 3, pp. 387-390.

USPS (2008): “Report On Universal Postal Service and The Postal Monopoly”, October.

Van Cayseele P. & Van den Bergh R. (2000): “Antitrust Law”, *Encyclopedia of Law and Economics*, Edward Elgar, University of Ghent.

Von Hayek F. (1944): “The Road to Serfdom”, Routledge Press.

Williamson O. E. (1985): “The Economic Institutions of Capitalism”, The Free Press, New York.

Yergin D. & Stanislaw J. (1998): “The Commanding Heights: The Battle Between Government and the Marketplace. That is Remaking the Modern World”, Simon & Schuster.