

The role of exclusivity in premium content distribution: economic efficiency and social welfare

Augusto Preta, Laura Zamengo

Abstract

The paper analyses the incentives for media operators to opt for an exclusive distribution agreement (*across platforms*) of premium contents rather than a non-exclusive one: it then compares the effects of both types of dealings on the competitive process and on consumer welfare. Our specific field of inquiry is represented by sport premium rights of the Italian professional league (Serie A).

Firstly, the paper surveys the exclusive distribution theory in general economic literature, recalling the main contributions on this subject; the theoretical framework is then applied to the media industry and, specifically, to content owners' incentive to sell on exclusive basis. Secondly, we focus on the downstream market (the broadcasters' one) and examine whether and under which conditions it is profitable for rights' purchasers to resell contents to their competitors. Finally, the main theoretical findings are applied to the selling procedures of audiovisual football rights, suggesting a potential overhaul of the Italian current model towards the European best practices.

Key words: Vertical restraints, Premium content, Sport rights, Exclusivity, Broadcasting

JEL codes: L 42, L82 and K23

Draft

1. Introduction

Premium contents (i.e. sports events and football in particular, first-release Hollywood movies) are seen as primary means of differentiation among broadcasters in the pay-TV sector, given their ability to attract high audience and, as a consequence, to drive subscriptions and advertising investments. For this reason, the choice of distribution model - whether exclusive or non-exclusive - plays a pivotal role in shaping competition among players, by making residual demand less elastic to price. Moreover, when evaluating premium sports broadcast rights in particular, one has to take into account the highly perishable nature of these goods, which need to be shown live to fully exploit its commercial value.

Applying these insights to the Italian context, it is clear that the acquisition of the Serie A media rights is a key factor of competitiveness from a broadcaster point of view. However, the way sports TV rights are commercialized is different throughout European top divisions and also within the same national context. For instance, in 1999 the Italian Competition Authority stated that the sports broadcasting rights belonged to each club individually. Later on, however, the Commission's 2003 decision exempted the joint selling of media rights from the application of art. 101 (1) TFEU (if the competitive bidding process and offer rights were based on non-discriminatory and transparent terms; exclusivity was limited in the duration and scope; and, for the "Football Association Premier League" case (hereinafter FAPL), if also the so called "no single buyer" obligation applied).

Following such provision, Italy chose to codify the practice of the European Commission by reintroducing the centralized sale of TV rights— with the d.lgs. No. 2008-9 of 9 January 2008. The organizer of the competition (Lega Calcio) and the organizer of the event (home team) are now joint owners of sports audiovisual rights, but the organizer of the competition has now the right to identify the competitive procedures for the offer of TV rights.

Table 1 – Comparison of broadcasting rights sales mechanisms between the major five top divisions

	<i>La Liga</i>	<i>Premier League</i>	<i>Bundesliga</i>	<i>Ligue 1</i>	<i>Serie A</i>
Ownership	Home team	Home team	Home team	Federation, transferred to clubs	Home team and Lega
Commercialization	Individual	Collective (Lega)	Collective (Lega)	Collective (Lega)	Collective (Lega)
Duration (last contract)	3 years (2012-2015)	3 years (2013-2013)	4 years (2013-2017)	4 years (2016-2020)	3 years (2015-2018)
No single buyer rule	No	Yes	No	No	Yes
# free-to-air	1 match per day	No	4 match for season	No	No
Technology-neutrality (for live rights)	No	Yes	Yes (broadcasting platforms)	Yes	No (except limited amount minor matches)
# live matches	380 out of 380	154 out of 380	306 out of 306	380 out of 380	380 out of 380

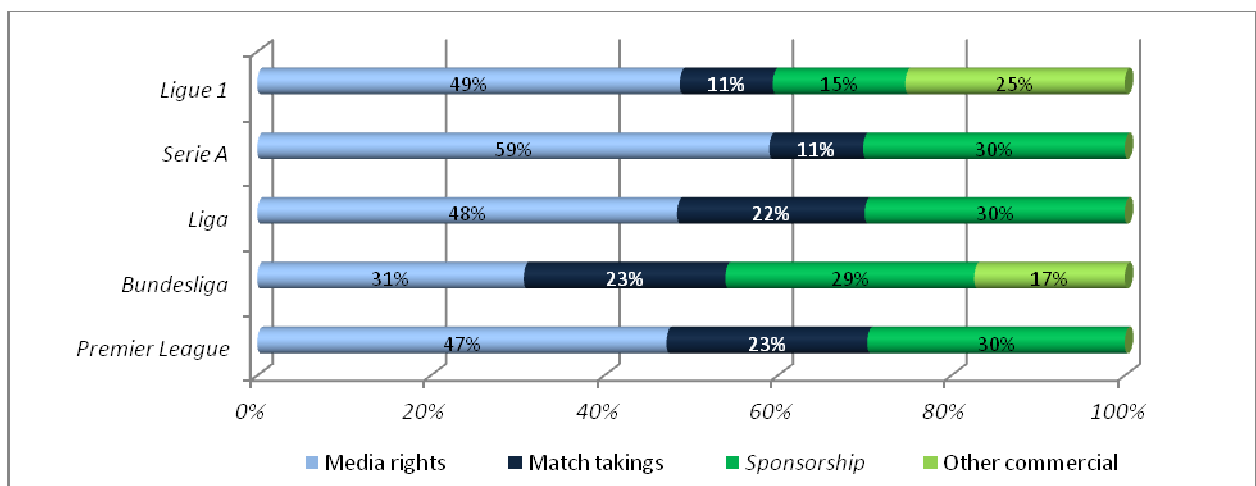
# exclusive packages total	-	11	17	6	8
# exclusive packages live rights	-	7	10	4	4

Source: ITMedia Consulting

Furthermore, over the years, the dependence on TV rights by Italian teams has increased: in 2012, given Serie A clubs' overall revenues of 1,71 bn euros, 57% of the revenue mix was associated to the sale of sports broadcasting rights.

Italy has the highest share compared to the European top divisions: in the same year, the French Ligue1 share was less than 52%, the English Premier League 51%, while Spain and Germany accounted only for 43% and 29% respectively. The Italian peculiarity is the result of the inability to exploit complementary financial resources, such as commercial revenues due to sponsorship and advertising (which, for instance, in 2012 accounted just for 33% of the revenue mix, against Germany's 65%).

Figure 1 – Revenue mix for top divisions (season 2012/2013)



Source: ITMedia Consulting elaboration from DELOITTE, *Annual Review of Football Finance*, 2014. Other commercial revenues include licensed merchandise, conference and catering services (available for Bundesliga and Ligue 1).

In addition, Italy has experienced a deep crisis in the last decade that led to a progressive deterioration of the financial sector, undermining its competitiveness in Europe. While keeping in mind this overall perspective, our study will focus on a single segment (i.e. the sale of broadcasting rights) with the aim to find the best solutions in terms of consumer welfare and efficiency of the industry as a whole.

Table 2 – Number of top division clubs that fall within the top-10 UEFA club ranking

	<i>England</i>	<i>Germany</i>	<i>Spain</i>	<i>Italy</i>	<i>France</i>	<i>Portugal</i>
04/05	3	1	4	2	0	0
05/06	3	0	3	3	1	0
06/07	4	0	3	2	1	0
07/08	4	0	3	2	1	0
08/09	4	2	2	1	1	0
09/10	4	1	2	2	1	0
10/11	4	1	2	2	0	1
11/12	3	1	3	1	1	1
12/13	3	1	3	1	0	2
13/14	3	1	4	0	0	2

Source: <http://www.uefa.com/memberassociations/uefarankings/index.html>

1.1 Broadcasting rights of top division football sales models

We will now focus the analysis on countries which adopt a similar model of joint selling of sports media rights, highlighting some important aspects.

While the commercialization of sports media rights in Italy is based on “single platform exclusivity” with the aim to stimulate *intra-platform* competition, in England, France, and partially in German, commercialization is “per product” and it is inspired to a platform neutrality principle based on “multi-platform exclusivity”, with the aim of fostering *inter-platform* competition.

In particular, unlike the “product” model, within the Italian ‘platform’ model, the same matches are available on different platforms. As a consequence, no exclusivity characterizes the framework since, as the Italian Competition Authority stated “such a model allowed the assignment of rights to different operators on a substantial number of broadcasting platforms: Satellite, Terrestrial, and Mobile Tv”.

It must be noticed that the absence of exclusivity in premium rights has the effect of reducing the content value for broadcasters. By lessening the differentiation of the offer among competitors, the absence of exclusivity reduces a new players’ incentives to enter the downstream market, with negative effects on social welfare.

Since the ‘Gentiloni-Melandri’ Law, which regulates the commercialization of such rights in Italy, allows Lega Calcio Serie A to choose the competitive procedure (whether *intra-platform* or *inter-platform*), one wonders if the model actually used (i.e. *single platform exclusivity*) is the most efficient and which implications on competition would have the transition to a model based on *multi-platform exclusivity* (i.e. *exclusivity across multiple platforms*), widely adopted elsewhere.

For this purpose, it is important in our view to analyze first the theoretical framework from a strictly economic point of view.

Regulatory and Competition Authorities often supervise premium content acquisition and reselling: their aim is to monitor the effects of these vertical arrangements on downstream competition, on rent sharing between content owners and buyers, on consumer surplus (in terms of quality and price) and, ultimately, on total welfare.

As mentioned above, from a competitive point of view, retaining exclusive control on premium content (i.e. soccer events, first-release Hollywood movies, etc.) provides broadcasters with a strong strategic leverage, that becomes even stronger in a Pay-TV framework: indeed, exclusivity represents a primary tool for differentiating their offer from the competitors' one, for driving new subscriptions and, in the end, for improving their profitability.

However, exclusive control on premium rights may induce their owners either to foreclose the market to rivals or to limit their growth. With regards to this issue, Nicita and Ramello (2005) point out that the European Pay-TV industry followed a sort of "monopolistic path", where one or two operators played a "winner-takes-all" game. This evolution is mainly due to two factors: on the one hand, there exists a "traditional" network effect due to the presence of a platform; on the other hand, this is enhanced by the specific network effect of exclusive dealing.

This outcome raises anticompetitive concerns in terms of:

- (i) monopolistic or duopolistic market structure coupled with vertical integration;
- (ii) increase in the acquiring cost of premium rights;
- (iii) network of exclusive vertical agreements between broadcasters and content owners;
- (iv) constrained development of alternative platform, slowing down the pace of technological convergence.

The paper analyses the incentives for media operators to opt for an exclusive distribution agreement (*across platforms*) on premium contents rather than a non-exclusive one: it then compares the effects of both types of dealings on the competitive process and on consumer welfare.

The study is structured as follows: Section 2 focuses on vertical restraints in the general economic literature, recalling the main contributions on the subject; the theoretical framework is then applied to the media industry and, specifically, to content owners' incentive to sell on exclusive basis in the upstream market. Section 3 focuses on the downstream market (the broadcasters' one) and examines whether and under which conditions it is profitable for rights' purchasers to resell contents to their competitors. Finally, theoretical results are compared to the empirical evidence.

2. Vertical restraints in the economic literature and premium content distribution in the upstream market.

The effects that premium content exclusive distribution yields on total welfare might be better understood after reviewing the general theoretical framework on exclusive vertical agreements.

On the one hand, there exists an extensive literature that focuses on exclusive buyer-seller dealings, pointing out the efficiency gains they encourage: the so-called Chicago School actually opened the way to

this argument (see, for instance, Posner, 1976 and Bork, 1978). From their perspective, vertical restraints among agents of contiguous markets have to be seen as a mere dealing tool, acceptable on the ground of the efficiency results: indeed, even if the upstream or downstream markets are monopolistic, this kind of arrangements strengthens the competitive pressure on players and improves total welfare; hence, the ultimate outcome will be a benefit for consumers, who enjoy a lower price or a better quality.

According to Nicita and Ramello (2005), exclusive distribution agreements may result in six different forms of efficiencies, i.e.: *i)* minimizing transaction costs connected to asymmetric information; *ii)* preventing free-riding and hold-up when specific, sunk, non-contractible investments are involved; *iii)* protecting brands and reputation in the presence of selective distribution agreements; *iv)* self-restraining in a bilateral negotiation; *v)* protecting intellectual property and not patentable know-how from free-riders; *vi)* enhancing (instead of reducing) *inter-brand* competition if *intra-brand* restrictions are settled.

On the other hand, opposed to the arguments supporting exclusivity for efficiency reasons, we find an extensive literature against it, emphasizing instead the conditions under which a dominant firm exploits its exclusive control of an input to foreclose the market to its rivals and to inhibit competition: *inter alia*, Hart and Tirole (1990), Segal (1999), Fumagalli and Motta (2005), Rey and Tirole (2007), all belonging to the so-called Post-Chicago literature. The main conclusion of these studies is the following: the potential benefit generated by exclusivity (thus, by a weaker *intra-brand* competition) is not denied, but the positive outcome is limited or nullified by the existence of a dominant position (lack of inter-brand competition); in industries with high switching costs (Kempelerer, 1987) or relevant network economies (Shapiro, 1999) – such as the ones working through platforms – these restrictive effects seem to be even stronger.

Hovenkamp (1994) shows that exclusive vertical agreements constrain inefficiently the competitive game, when there is a dominant player in the upstream market (weak inter-brand competition) and entry barriers in the downstream one (impossibility of increasing intra-brand competition); in this setting, also a new firm, who is willing to enter the upstream market, is hold back. According to Salinger (1998), for this deterrence strategy to be successful, it is not even necessary that *all* downstream distributors are involved in exclusive arrangements; it is enough to keep “disengaged” a number of retailers such that a potential new entrant would not be able to reach his “minimum efficiency scale”. Irmén (1998) moreover points out that exclusive dealing works as a credible threat, made by the upstream seller to its downstream distributors in order to constrain its output to the monopolistic level.

For audiovisual rights, the possible competition risks of a vertical restraint that result in “territorial exclusivity across platforms” are mainly reduced to intra-brand competition, for the reasons set out below.

Figure 1 – Intra-brand competition

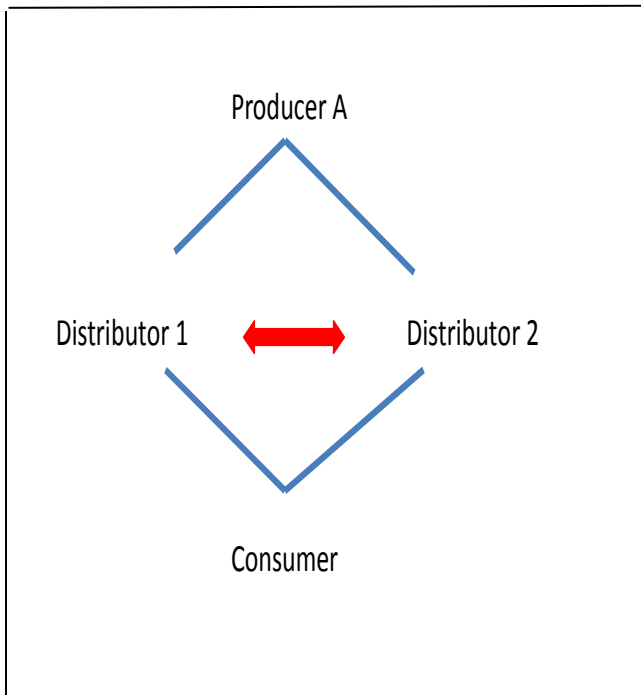
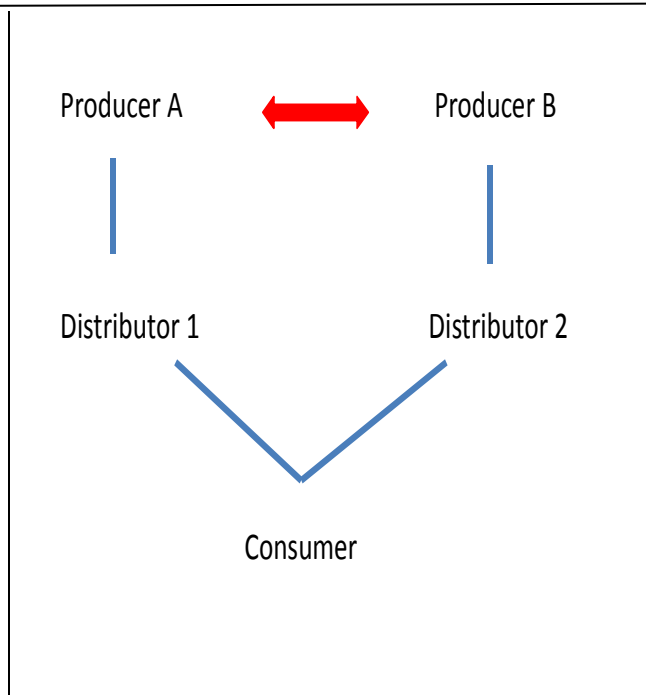


Figure 2 – Interbrand competition



On the one hand, following the transition in 1998 to the joint selling of sports media rights, the introduction of a ‘multi-platform exclusivity’ would have no adverse effects on *inter*-brand competition since the League acts *de facto* as a monopolist in the upstream market for Serie A rights. The assumption here is that no sporting or football competitions are perceived as Serie A’s substitutes by consumers. The Commission itself has identified a single relevant market for broadcasting rights of football events played by national teams, compared to other premium contents¹. Although we are well aware of the existence of competitive constraints on *interbrand* competition (*i.e.* different types of premium sporting events such as the World Cup or Formula 1 Motorcycling and, even more, the UEFA Champions League and Europa League); we consider appropriate to maintain the focus of the analysis on *intra*brand competition, so as to emphasize the uniqueness of the national football Serie A in relation to other sporting events.

On the other hand, this assumption does not seem to affect the results of our analysis, since the outcome would be even more strengthened by including an *interbrand* competitive dimension: indeed, a fierce competition between brands mitigates the competition concerns arising from *intra*-brand restrictions, therefore the evaluation of the effects generated by the introduction of a “multi-platform exclusivity” would potentially be less problematic in this context.

Generally speaking, the principle whereby a sufficient degree of *inter-brand* competition would compensate for the reduction of *intra-brand* competition due to the exclusivity, holds: the degree of concentration in the upstream market becomes a very important factor for the assessment of the overall effect of the restraint. The competitive harm resulting from the exclusivity will then depend on the relative market power of the parties.

¹ In this regard, see EUROPEAN COMMISSION, COMP/C.2-37.398, COMP/C-2-37214 and AGCM, I362.

The arguments, we presented thus far, have now to be analyzed taking also into account the peculiarities of the TV industry, exploring the circumstances under which exclusive provision arises as optimal strategy for both the upstream content owner and downstream acquiring broadcaster.

According to Armstrong (1999), if a content owner provides the broadcaster with *non-exclusive* rights, the latter will not be able to differentiate himself from the competitors, hence the content acquisition will deliver no actual benefits; this implies that broadcasters' willingness-to-pay for premium rights will result to be higher if they are offered on exclusive basis. Consequently, also the content provider's profit will increase; yet, consumer surplus will decrease.

Among the pro-efficiency effects generated by exclusivity in the broadcasting industry, Stennek (2007) realizes that content owners' investments in product quality are effectively increased with these arrangements i.e., when non-exclusively provided, contents will present lower quality standards. The reasons behind this outcome are the following: since competitors lack exclusive premium rights (which are indeed a differentiation tool for their owner), the acquiring broadcaster is able to leverage the increase in the demand of her programming (generated by the new content), hence to extract the more and more consumer surplus; the better the premium right in qualitative terms, the higher the surplus extracted, the greater broadcaster's willingness-to-pay. Hence, also the content owner (its producer) will have all the incentives to deliver the finest quality. According to the author, this positive impact should countervail the negative effects generated by the vertical restraint on consumer surplus.

The relationship between exclusivity and content quality has been studied in depth also by Hagiu and Lee (2007). They found that the final outcome depends on whether the control on consumers' price is left to the broadcaster or to the right owner: this feature determines also the degree of competitive pressure, hence the market structure. If control is given to the downstream broadcaster, the owner will opt for an exclusive distribution to a unique platform; if it is not and content is a high-quality one, a non-exclusive arrangement will be settled. For medium quality contents, exclusive dealing will be still profitable since the lower competitive pressure will balance profit losses (because of the exclusion of some agents).

Lastly, D'Annunzio (2013) examined the effects of vertical integration and exclusivity on provision of quality content. From her prospective, a content provider will always produce better quality content if covered by exclusive distribution: in this case, consumer surplus and total welfare would be higher, especially if the degree of differentiation between broadcasters is low.

3. Reselling of premium rights: the incentives in the downstream market.

We now focus on the downstream market – the broadcasters' one – assuming that one player has acquired the exclusive control of a content owner's premium rights: our aim is to examine the incentives and the way to resell these rights to one or more competitors.

Exclusive control of premium contents raises competition concerns in the downstream market in terms of input foreclosure: indeed, access to premium contents is a serious bottleneck and a source of market power in the audiovisual sector - besides being a strategic key of differentiation for broadcasters, and thus a necessary condition to compete on the downstream market.

In this regard, a useful tool to restore competition in the downstream market could be the reselling of rights, which allows multiple broadcasters to offer premium contents at the same time, thereby increasing consumer surplus (*i.e.* the number of consumers who would have access to that content). Nevertheless, the

economic literature does not reach a unique conclusion of benefits on social welfare; therefore authorities should be cautious before intervening in the market in order to remove the feasible bottlenecks using the *Wholesale Must Offer* (WMO) obligations.

Economic literature has recently formalized the competitive relationships among broadcasters through a model of spatial differentiation *à la Hotelling*, which is able to capture most of the essential features of the Pay-TV sector, i.e.: *i)* downstream price competition between horizontally-differentiated players; *ii)* more attractive programming when it includes premium contents; *iii)* profit losses when lacking premium rights.

Using this theoretical framework, Armstrong (1999) identifies the outcome “upstream exclusivity, downstream no reselling” as the optimal strategy: indeed, on the one hand, premium content reselling results in lower profits for the broadcaster that owns them (the lump sum fee it would receive from its competitor, could not countervail the profit losses suffered because of a weaker horizontal differentiation); on the other hand, the upstream content owner would find more profitable to provide premium rights on exclusive basis in order to extract the highest surplus from her potential acquirers (to this end, see also Wachtmeister, 1998). However, content reselling would be positive in terms of consumers surplus since it maximizes the number of its potential viewers. The final effect on total welfare of exclusive distribution with no reselling would then be ambiguous.

Harbord and Ottaviani (2001) extend Armstrong’s analysis, achieving opposite results in the downstream market: indeed, the optimal strategy for a broadcaster (who exclusively controls a premium content) is reselling the rights to her competitor using a *per subscriber* (not lump sum) fee; in this way, the incumbent will maximize the joint profits, weakening downstream competitive pressure and hurting final consumers. More specifically, its competitor will suffer an increase in marginal costs (as it happens in a *raising rivals’ costs* conduct) and, at the same time, the reselling broadcaster will face a rise in its opportunity cost of attracting new customers. The equilibrium price will be higher, even if both player will reach the same profit level they would have obtained with no premium content. Consumer surplus is reduced to the point that they would prefer an intervention from a Competition or Regulation Authority or, alternatively, the implementation of Armstrong’s outcome.

Thus far, our analysis has been built as a static model: according to Weeds (2012), however, the competitive setting cannot ignore the dynamic perspective of the game. Assuming exclusivity in the upstream market, Weeds supposes that the acquiring broadcaster’s future profits depends more than proportionally on his market share: controlling premium rights becomes then a primary driver for creating an initial asymmetry in market shares, which will then spur the firm’s profits. In this framework, content reselling can never arise as the optimal strategy for any broadcasters, not even under a *per subscriber* fee - regime: exclusivity – also in the downstream market – will be by far the most profitable solution. Strict requirements have to be met for this outcome to dominate, i.e.: strong dynamic competition among platforms, valuable premium contents, little horizontal differentiation among players, relevant economies of scale. Despite the loss of allocative efficiency, exclusive distribution will increase consumer surplus with respect to a “Harbord-Ottaviani” ’s setting (upstream exclusivity – downstream reselling under *per subscriber* fee).

Finally, also Nicita and Rossi (2008) focuses on incentives to let a new competitor enter the downstream markets: from their point of view, reselling premium rights to alternative platforms could result in a disciplinary pressure on the incumbent’s market power, encouraging innovation and efficiency of these new operators.

For this purpose, the European Commission has recently introduced limits to the joint selling of premium sports rights on the downstream market, in particular:

- (i) Limitation of duration of exclusive contracts (maximum 3 years);
- (ii) Limitation of the scope of exclusive contracts, to limit the risk of market foreclosure in the audiovisual sector by obliging the collective selling entity to unbundle the media rights in separate packages;
- (iii) The introduction of a “no single buyer” obligation on the collective selling entity (peculiar feature of the FAPL decision). The aim of such obligation is to prevent that all packages of valuable live rights are sold to a single buyer (no buyer can be the owner of all packages / live rights) and to foster both participation in the auction process and the entry of new operators.

The second pillar (*i.e.* limitation of the scope of exclusive contracts) implies a more rigorous selling partitioning by the content owner and the emergence of a greater number of packages. By doing so, the scope of the exclusivity would be reduced (with respect to the case of a single package) together with the “territorial extension” of the market power assigned to the acquirer.

In this way, neither the distributors’ (broadcasters) incentives to invest in content quality, nor the ability to obtain a remuneration for the *content owner* (Lega Calcio) are deleted: the amounts obtained from the auction will be used to maintain high the level of competition (acquiring the best talents, investing in stadiums, etc), ultimately improving the quality of the content itself.

4. Conclusions

Overall, the effects of exclusivity (both in the upstream and downstream market) depend on a number of variables, whose net impact on total welfare seems actually to be uncertain.

Economic literature highlights the importance of both price and quality of contents, emphasizing that exclusivity without reselling increases the incentives to invest in the improvement of both the content and the distribution of the platform and the related technology.

The transition to inter-platform commercialization in first place would allow the ‘competition organizer’ to maximize revenues deriving from the sale of rights: the potential buyer’s reserve price would necessarily be higher since the premium sports content increases the attractiveness of his offer. The higher income would also raise the level of football competition, offering a more attractive show.

At the same time, the broadcaster itself would be encouraged to invest in the production of valuable contents and in new broadcasting technologies in order to gain competitive advantage on future competitors, during the limited period in which he is not subject to competition (due to the exclusivity). If we compare different types of commercialization of tv rights in terms of efficiency, such virtuous circle can not be ignored: not surprisingly, the British model results as European best practice for its ability to adequately enhance the ‘football product’, by maximizing all sources of revenue.

So far, the main findings in the economic literature may be summarized as follows:

1. in the upstream market, the exclusive provision of premium rights to a unique broadcaster arises as a content owner's most profitable strategy;
2. for a broadcaster – who has previously acquired exclusive premium rights – reselling under *lump sum* fee-regime will never be profitable (the amount received is lower than the profit loss);
3. the opposite conclusion is achieved when reselling implies a *per subscriber* fee, which results in a weaker price competition in the downstream market, hence in a hurt to consumers surplus;
4. focusing on dynamic aspects, exclusivity with no reselling encourages investments in content quality and innovation in platform technologies.

In conclusion, upstream and downstream exclusive distribution seems to have opposite effects on consumer surplus: on the one hand, it reduces welfare because of traditional monopolistic leverages (allocative inefficiency); on the other hand, it benefits consumers increasing the monopolist's incentives to innovate (dynamic efficiency).

Moreover, we showed that limitations of the scope (vertical sale with large unbundling of packages) and duration (maximum 3-4 years) represent, in the monopoly situation that characterizes the upstream market, the most effective way to enhance both the competitiveness of the downstream market and broadcaster's incentives to innovate, with positive effects on consumer welfare.

Any further remedies with the aim to foster competition and to stimulate efficiency, need to be adapted to the specific peculiarities of each national market before being implemented.

References

- Armstrong, M. (1999), Competition in the Pay-TV Market, *Journal of the Japanese and International Economies*, 13(4), 257-280.
- Doganoglu, T. & Wright, J. (2010), Exclusive dealing with network effects, *International Journal of Industrial Organization*, 28(2), 145-154.
- Fumagalli, C. & Motta, M. (2005), Exclusive dealing and entry, when buyers compete, *The American Economic Review*, 96(3), 785-795
- Hagiu, A. (2007), Merchant or two-sided platform, *Review of Network Economics*, 6(2), 115-133.
- Hagiu, A. & Lee, R.S. (2011), Exclusivity and control, *Journal of Economics & Management Strategy*, 20(3), 679-708
- Harbord, D. & Ottaviani, M. (2001), Contracts and competition in the pay-TV market, *London Business School, Department of Economics, Working Paper.No. DP 2001/5*
- Hart, O. & Tirole J. (1990), Vertical integration and market foreclosure, *Brookings Paper on Economic Activity (Microeconomics)*, 205-285
- Jehiel, P. & Benny, M. (2000), Auctions with downstream interactions among buyers, *Rand Journal of Economics*, 31, 768-791.
- Katz, M.L. & Shapiro, C. (1986), How to license intangible property, *Quarterly Journal of Economics*, 101(3), 567-590.
- Klemperer, P. (1987), Markets with consumers' switching costs, *Quarterly Journal of Economics*, 102(2), 375-394.
- Mansell, R. (1999), New media competition and access. The scarcity-abundance dialectic, *New Media & Society*, 1(2), 155-182.
- Nicita, A. & Ramello, G.B. (2005), Exclusivity and antitrust in media markets: the case of pay-TV in Europe, *International Journal of the Economics of Business*, 12(3), 371-387.
- Nicita, A. & Rossi, M.A. (2008), Access to audio-visual contents, exclusivity and anticommons in new media markets, *Communications & Strategies*, 71(3), 79-101.
- Ofcom (2010), *Pay TV statement*, London, Office of Communications.
- Rey, P. & Tirole, J. (2007), A Primer on Foreclosure, chapter 33 in Armstrong, Mark and Robert Porter (eds.), *Handbook of Industrial Organization*, Volume 3 (Elsevier North-Holland, Amsterdam)
- Segal, I. (1999), Contracting with Externalities, *Quarterly Journal of Economics*, 114, 337-388
- Stennek, J. (2007), Exclusive quality why exclusive distribution may benefit the TV-viewers., CEPR Discussion paper no. 6072.

Wachtmeister, A. M. (1998), Broadcasting of sports events and competition law, *Competition Policy Newsletter*,5(2), 18-28.

Weeds, H. (2012), TV Wars: Exclusive Content and Platform Competition in Pay TV, CEPR Discussion Paper 8781, January 2012.