

Preface

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Well before undertaking the venture of inviting several colleagues to shape their ideas on antitrust, regulation and competition policies, and eventually translate such ideas into a collection of papers ranging from pure theory to a wide range of applied matters, one should first try and figure out what outcome is to be (at least broadly) expected, and how this collection of contributions would ultimately be put together to produce a perspective on the economic issues at stake. That is, one may desire to adopt a particular angle. One such example is given by the volume edited by Martin [10], where the standpoint is that of the building up of EU's Single Market. Alternatively, one could (i) aim at covering, systematically and rather ambitiously, any possible topic in this broad field — but then, the reader would better redirect himself or herself to Laffont and Tirole [9], Viscusi et Al. [14] and Joskow [5]; (ii) limit the scope to either of the two main areas, or (iii) grant the maximum degree of freedom to contributors, expecting that they will produce their best efforts in dealing with topics which are most familiar to them.

I decided to take the latter route, and the volume you are starting to read will tell you whether this was a good idea or not. In my view, a desirable illustrative feature of the contributions gathered in this volume consists precisely in making it self-evident that the manifold sources of inefficiency make the life of a regulator very harsh.

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N.B., the numbers in square brackets refer to the Bibliography at the end of the paper.

The volume sets out with a survey on market transparency and collusion, by Peter Møllgaard and Per Baltzer Overgaard. Their analysis points to the conclusion that, on the one hand, improved information flows among firms tend to facilitate collusion and therefore decrease the intensity of price competition (or eliminate it, if firms are able to collude along the frontier of monopoly profits) in a repeated game. On the other hand, improved information flowing to consumers exhibits ambiguous effects. If the market behaves myopically, then higher transparency is likely to entail a tougher price competition. However if firms are forward-looking, then increased consumer sensitivity to prices may or may not facilitate collusion.

During their analysis, Møllgaard and Overgaard refer to Klemperer's [7] discussion of price transparency in the context of auction theory applied to Internet-sales by auction versus traditional dealer-sales. He argues that Internet-sales are like collusion-prone second-price auctions, while dealer-sales are more like non-transparent first-price auctions not allowing dealers to infer rivals' secret price cuts. This connection between transparency and auctions leads us to the second paper, by Andrea Prat and Tommaso Valletti.

Prat and Valletti offer an enjoyable informal overview of auction theory¹, and then proceed to assess the European experiences in the use of spectrum assignments, focussing upon auctions for third generations mobile communication services.

In the near future, auction theory is most likely bound to gain more and more importance in many branches of our discipline. To illustrate this possibility, I will slightly abuse of your patience and take a brief detour. Together with many colleagues, I attended the plenary lecture given by Paul Klemperer at the 2000 EARIE Conference in Lausanne, where Paul convinced the audience (including me, of course) that «every economist should learn some auction theory». Indeed, a very simple example suffices to show that this is the case. The so-called Vickrey auction, or second-price auction, is one where all the buyers simultaneously submit their bids, and the object (e.g., a licence) is allocated to the buyer who has submitted the highest bid. However, the winner pays a price equal to the second-

¹ For more formal and exhaustive treatments, see KLEMPERER P. [6], [8].

highest bid. As an alternative, consider the so-called English auction, where each buyer may submit a bid as long as this is higher than the current bid. If there are no more bids, the object is allocated to the buyer who has made the current bid. So, in summary, the Vickrey auction is a one-shot simultaneous bid mechanism, while the English auction is an ascending bid mechanism. Now, observe that it is relatively immediate to fit a Bertrand market game into either of the two auction models I have just mentioned. Suppose the market is supplied by n firms producing the same good, with constant unit production costs $c_1 < c_2 < \dots < c_i \dots < c_n$. The object to be allocated is the monopoly power over this market, and each firm must «offer a price». In the Vickrey auction, firm 1 is allocated the full market demand at $p_1 = c_2 - \varepsilon$, where ε is positive and arbitrarily small. In the English auction, there would be decreasing bids (what matters is indeed the monotone behaviour of bids) that would ultimately lead to the same outcome.

The papers by Massimo Motta and Michele Polo and Francesca Lotti, Enrico Santarelli and Marco Vivarelli tackle the issue of entry and industry evolution/concentration. Although both papers are obviously policy-oriented, Motta and Polo propose a theoretical approach to the description of the broadcasting industry while Lotti, Santarelli and Vivarelli take an empirical route and ask whether there is a case for a subsidy policy supporting the formation of new firms, and answer provocatively in the negative, as there emerges from the data that subsidies introduce an undesirable bias in the process of selection among the population of newborn firms, and also hamper the post-entry scale adjustment process.

Motta and Polo develop an oligopoly model of the broadcasting industry based on vertical (quality) differentiation², suggesting that the persistence of a high degree of concentration might arise even in the absence of the spectrum constraint or any other factor which prevents entry.

Product quality is the focus of the paper by Giulio Ecchia, Carlo Scarpa and myself on the use of minimum quality standard to

² Which captures the idea that broadcasters rely on the perceived quality of the programs, i.e. on their ability, to capture a high audience.

regulate the behaviour of firms in vertically differentiated markets. Although relatively little, the existing literature on the use of MQSs is now ranging over a number of interlaced topics, from collusion to innovation and international trade. Profit incentives lead firm to distort their product quality in order to soften price competition (when the market is supplied by more than one firm) and extract as much consumer surplus as they can (independently of the number of firms)³, and the regulator may introduce a quality standard as a partial remedy to both evils. Ecchia, Scarpa and I review the pros and cons of MQSs, taking into account the implications of (i) the shape of the cost functions; (ii) market structure; and (iii) the timing of moves, on the optimal MQS policy.

Another, and more direct, tool for regulation is the public firm, an idea which dates back to Cremer, Marchand and Thisse [3] and De Fraja and Delbono [4]. Related to this, is the issue of optimal privatisation, whose discussion can be found in Vickers and Yarrow [13] and Bös [2]⁴. These topics are dealt with by Dan Sasaki and Mei Wen, in a theoretical model where the optimal degree of privatisation of an industry is characterised as the outcome of a repeated game, and by Francesca Barigozzi in a survey of the existing literature on the optimal co-existence of private and public supply of health insurance.

Sasaki and Wen propose a two-stage game where, in the first stage, the public sector decide how much of its production facilities are to be transferred to the private sector, and in the second stage a mixed duopoly game takes place. They comparatively assess two different versions of the model: (i) a two-stage game where the second stage is a one-shot non-cooperative duopoly; and (ii) an alternative version where the second stage is an infinitely long supergame. Sasaki and Wen establish conditions such that partial privatisation may entail higher social surplus than total privatisation does, even when

³ From SPENCE A.M. [12], we know that quality may be over or undersupplied, depending upon the feature of the distribution of consumers' income. However, for both theoretical and empirical reasons, the literature usually treats the case of downward distortion.

⁴ An exhaustive perspective on regulation and privatisation in network utilities is in NEWBERY D. [11].

the private sector's costs are lower than the public sector's. Moreover, such conditions are milder in the supergame than in the one-shot framework, because in the repeated game the public sector can use excess capacity to attain a higher welfare level. The implication of this result is that the common wisdom maintaining that excess capacity held by the public sector represents evidence of inefficiency with undesirable welfare consequences may not be correct in a repeated game perspective.

Barigozzi offers a survey of the literature on the relationship between insurers and consumers when the supply side is a mix of private and public agents. She considers the bearings of ex-post moral hazard on the demand for care when consumers are covered by a mixed insurance scheme. The mixed system is the topping-up scheme (as opposed to the opting-out) which is widespread among developed countries, and is characterised by the public insurance covering a package of essentials, and a voluntary private policy topping up the remaining services.

Last but not least, the papers by Vincenzo Denicolò, and Giacomo Calzolari and Gyongyi Loranth deal with two issues which, for several reasons, are becoming even more relevant than they have been in the past, i.e., optimal patent policy⁵ and the regulation of multinational firms, respectively.

Denicolò considers a model where R&D is carried out towards two independent innovations that can be separately patented, and shows that there emerge an incentive to overinvest in inferior technologies (or products: the distortion of quality pops up again). When innovations are asymmetric, the antitrust policy influences the form of inefficiency at equilibrium. Yet, the regulator cannot eliminate the inefficiency. If patent holders are allowed to collude firms invest in both innovations, while if collusion is prohibited there are two stable equilibria, one of which has positive investment in the inferior innovation only. When the innovations are symmetric, this inefficiency disappears and antitrust policy is neutral. That is, permitting or prohibiting collusion influences whether one or both innovations

⁵ For an overview of optimal regulation and competition policy for the creation and diffusion of technological knowledge, see ANDERSON R. and GALLINI N. [1].

are targeted, but aggregate R&D investment, and therefore the associated expected innovation date are both independent of the specific antitrust policy adopted by the regulator.

The integration of markets goes along with the globalisation of financial services. In fact, in the case of EU, the integration is about to be completed on the monetary side. In a global economy, banks, as well as many other types of firms, are multinational corporations. Potential benefits can be expected to materialise through increased competition and efficiency. However, such benefits may not realize in the lack of adequate regulation, which can happen because, unlike banks, the regulators have remained separated national agencies. Calzolari and Loranth characterise the regulatory issues associated with multinational banks, stressing the relevance of limited information national regulators may have on banks' behaviour, and the need for information sharing. They also tackle the issue of conflicting national regulatory objectives.

This set of contributions is by no means exhaustive. In any case, this would have been too ambitious an aim. Rather, one can hope that the present collection of surveys, theoretical papers, and applied ones, may shed some new light on the links between two kinds of craftsmanship that, so far, have remained disconnected to an undesirably high degree, namely those of the industrial economist (also known as the IO guy) and the regulator, or the policy maker.

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