Symposium on The Structure of Modern Markets

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Abstract. We look at modern markets and discuss their current treatment by policy makers, analyzing policy recommendations regarding the treatment of such markets in the future. These include recommendations regarding the taxation treatment of informal markets; the presence of market power and anti-competitive strategies in health markets and platform two-sided markets; investment and arbitrage functions in foreign exchange markets; regulation and competition in the Canadian banking sector; asymmetric regulation in mobile termination charges and technological diffusion; incentive regulation in telecoms and its impact on productive efficiency; welfare enhancing government intervention recommendations in broadcasting. Finally, we give an overview of the overall success of the UK Competition Commission as a second stage enforcer of regulatory policy and competition law.

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1. Introduction to the Symposium
The tension between the assignation of property rights (mainly of the intellectual variety), the regulation of such rights, and antitrust policy in modern markets is highlighted in Vickers (2009). While it is argued that the assignation of intellectual property rights (IPRs) is justified, (despite the non-rivalrous nature of these type of goods and services), because it is essential to provide a profit incentive for innovations to occur (dynamic efficiency arguments), this is by no means generally accepted as Segal and Whinston (2007) argue.

Dynamic rivalry and the need for a sequence of innovations to occur implies that, in some circumstances, if things are to move forward, innovation must be licensed to rivals because it constitutes an essential facility without which competition cannot develop. Negative effects on rivals will eventually lead to the detriment of the consumers who are deprived of the emergence of a truly competitive

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dynamic market. This is particularly true in markets with a fast technological pace and/or network/platform access characteristics, as IPRs may assist in entrenching a dominant position.

Therefore it seems that the incentive to innovate is greater when access is granted more freely. If the profits from new inventions are lower because the market leaders are forced to licence their know-how on easy terms, this will be compensated by the fact that smaller firms will be able to catch up more quickly as diffusion increases and hence competition will become more aggressive.

Moreover antitrust principles should be applied more stringently when a dominant firm uses its property rights to stifle “follow-on” innovations, as happened in the case of Microsoft. The company tried to push Netscape out of the market as it believed that the latter would use the success of its browser as a platform to compete against Microsoft's Windows.

We take the view that analysis of real economic problems requires skills derived from a variety of experiences. As a consequence, the papers in this issue of the journal include submissions from both academics and practitioners in the field of competition, regulation and macroeconomic policy enforcement. This covers both theoretical and technical papers addressing issues in regulation, competition policy, and competition law in many different markets. The papers are briefly discussed below in the same alphabetical order as they appear in the issue.

2. An Overview of the Symposium
The Arbex and Villamil paper examines the structure of a modern market from the side of the informal economy. In an economy where agents can evade taxes and it is costly to enforce the tax code, a positive interest rate and inflation can be used as a second best to tax. The authors show that irrespective of whether there is tax evasion (e.g., informal economy) or not, the Friedman rule is not the optimal monetary policy. The alternative of the imposition of a positive interest rate is optimal.

While such problems can be alleviated by the presence of high tax-evasion penalties (as these imply deterring evasion at minimal costs and restoring the validity of the Friedman rule), the government policy recipe of severely punishing tax evasion is electorally unappetizing. Social norms are against “cruel and unusual” punishments. However, the paper argues that the conclusion that the government is effectively forced to pursue the more acceptable alternative of higher interest rates instead can also be avoided. By considering the possibility of tax enforcement whereby the informal sector is also taxed, a more original avenue appears where the government collects taxes from the informal sector and sets those taxes high to compensate for the tax enforcement costs.

Taxation, this time in combination with regulation in the banking sector, makes a second appearance in the Brox paper on Canadian banks. The paper discusses the economic resilience of these banks following the North American financial crisis. The combination of stringent capital requirements, low risk tolerance, and a conservative approach in both residential mortgages and balance
sheet structures has meant that none of the Canadian banks needed a bailout as a result of the recent economic crisis. This is despite the existence of NAFTA which has increased financial integration with the U.S. economy. In order to analyse the impact of the current financial crisis, Brox applies a financial flow model.

The database employed is over the entire period from 1961-2008, covering a number of changes in loosening the financial regulation rules governing Canadian banks, especially in residential mortgage lending, foreign activities and competition, and phasing out reserve requirements. Despite the deregulation changes, the ratio of total liabilities held in the form of equity has remained stable at 7.5 percent.

More recently, the proportion of long-term assets, mortgages and foreign assets has increased and this has happened at the expense of conventional lending by Canadian banks. However, unlike American mortgages, Canadian mortgages are relatively secure mortgages; they are not tax deductible, their loan-to-value ratios tend to be lower than in the United States, while only 5 percent of them are nonprime and only 25 percent securitised.

The article by Dassiou, Glycopantis, and Stavropoulou provides an overview of the different forms of transactions that constitute bundling, explaining that it can emanate from the selling side, the buying side, or from both sides in the form of countertrade. They then proceed to use a linear programming model in the case of health-care provision to analyse how prices, i.e., weights, for the different items in a bundle of medical resources are formed, and the possible tension between a hospital and an insurance company. In the third part, the article looks at the specific case of the practice of bundling by Medicare, the social insurance system for health care in the United States. It considers its advantages, disadvantages, and various recommendations.

We next move to an article that looks at foreign-exchange markets and specifically at the dynamic behaviour of the American dollar/British pound exchange rate during the 1971-2008 period. The Galvao, Montes-Rojas, and Olmo paper examines the existence of predictability in the evolution of exchange rates as this is essential for the existence of investment opportunities.

The ability to forecast movements in the exchange rate implies that there are arbitrage opportunities which allow international investors to exploit them by carrying trade strategies. The paper finds that, at unusually high and low exchange values, the predictability of the exchange rate and hence the ability to forecast its value and exploit arbitrage opportunities is limited. On the other hand, for values with a high probability of occurring, the market is predictable and hence supports the profitability of investment strategies.

The symposium contains three telecoms and media-related papers. The first of these papers by Lüftl and Cardona looks at the heavily contentious issue of mobile termination charges within a static versus dynamic efficiency framework, where the latter objective provides a justification for asymmetric regulation of termination charges as suggested by various authors (Gruber, 2000; Peitz, 2005; and Vallletti, 2006). It eases entry, encourages competition, and through the increase in price
competition, leads to widespread adoption of new technology diffusion.

The authors look at three European countries (the UK, Austria, and Germany) and Australia and reflect on their experiences of introducing regulation on mobile termination charges and its resulting effects on diffusion. Austria and UK, both of which started with dynamic regulation and then later turned to a more static oriented (symmetric) price regulation, experienced a much faster penetration of 2G mobile services than Germany or Austria. However, the experience of Australia suggests that the establishment of a link between dynamic regulation and diffusion requires further research.

Federica Maiorano looks at the estimation of technical efficiency by U.S. telecommunication operators using a distance function approach. This is applied to evidence from 27 such operators over the period 1990-2003, a period characterized by major changes in the industry. These include a surge in investment, as well as a move from rate-of-return regulation to price-cap regulation from 1990. The econometric specification employed by Maiorano allows inefficiency to vary over time. The results suggest that panel studies that constrain such variation (time invariant inefficiency) may underestimate the gain in technical efficiency resulting from the introduction of incentive regulation.

The last paper in telecoms and media is by Hui Pan. He investigates the advertising intensity and channel content in a mixed duopoly paper where a state channel co-exists with a private one. While the private channel simply maximises profit on content and advertising revenue, the state channel maximizes viewers’ welfare with a break-even constraint. Obviously the private channel is worse off as a result of facing a state competitor. But such a market is socially preferable to a private duopoly as the latter is relatively less efficient than the former. While in a private channel duopoly market there is overdifferentiation, in the mixed duopoly market there is underdifferentiation. The interesting policy-related point made here is that the government, if it wishes to intervene, cannot reach a social optimum by using only a state channel. However, the paper does provide support for the existence of a public-sector broadcaster if the counterfactual is a private-channel duopoly market.

Rufus Pollock examines another increasingly prevalent form of modern market structure, that of two-sided platform markets, and evaluates the control of porting costs, porting being the conversion of software or services developed for one platform to run on another. Porting essentially constitutes technological tying, which in this paper focuses on tying on the seller's rather than on the buyer's side. Such porting is not necessarily profit-enhancing; it may even lead to a reduction in profits by reducing platform competition.

Behind an increase in porting costs lies the strategic motive of preserving an upstream monopoly by restricting downstream competition. Hence the activity of higher prices, combined with higher porting costs, can magnify consumer welfare losses accruing from monopoly up to nine times relative to that accruing from higher prices alone. The important antitrust policy implication of this finding is that in a
two-sided environment anti-competitive behaviour may manifest itself indirectly though actions taken to control porting, rather than directly through price-abusive behaviour or direct (buyer-side) tying.

The last paper is a review from a legal perspective by Suzanne Rab on the role of the UK Competition Commission (CC) at the interface between sectoral regulation and competition law in modern markets. CC has a regulatory inquiry role as well as a market investigation reference and merger control role. In all three roles the CC is a second-stage authority. Since the Competition Act in 1998, the UK has operated concurrent competition law and sector regulation to deal with interface issues. Similarly, since the Enterprise Act in 2002 the CC’s role is determinative in market investigations and mergers.

The paper looks at examples of all three types and then discusses the implications that stems from the experience in these examples. It seems that the CC enhances transparency when it carries a pure regulatory action as well as it makes regulation more facts-based and dynamic as both deregulatory as well as regulatory decisions can be taken; the CC may even ask for an overhaul of existing regulation. It also assists in establishing the need for infrastructure investment and makes explicit natural monopolies trade-offs. It may even tailor regulation to the national market by imposing behavioural remedies where necessary. Also, CC can play an indirect role by first-instance sector regulators accepting undertakings from parties in return for which the latter will avoid the need for a CC reference.

3. Conclusions
We believe that the above articles consider a number of issues unfolding the working of markets and suggest the way forward in terms of policy recommendations and treatment of the research and evaluation covering such markets.

4. References