Competition and competitiveness in a new economy

Handler, Heinz and Burger, Christina

Austrian Ministry for Economic Affairs and Labour

July 2002

AUSTRIAN MINISTRY FOR
ECONOMIC AFFAIRS AND LABOUR

ECONOMIC POLICY CENTER

Competition and Competitiveness in a New Economy

EDITED BY
HEINZ HANDLER AND CHRISTINA BURGER

Vienna, July 2002

IMPRESSUM:

ISBN 3-901676-33-3

Owned and published by the
Austrian Federal Ministry for Economic Affairs and Labour
Economic Policy Center
A-1010 Vienna, Stubenring 1, Phone ++43-1-71100-0

Layout: Waltraud Schuster
Cover: Claudia Goll

Printed by the Austrian Federal Ministry
for Economic Affairs and Labour

CONTENTS

Discussion Forum **1**

Preface **3**

1. The Trade-Offs and Inter-linkages Between Competitiveness and Competition 3
2. Effective Competition in a New Economy 4

Introduction
Martin Bartenstein **7**

Competition and Competitiveness in a New Economy
Joseph E. Stiglitz **11**

1. Competition and the New Economy 12
2. Competition and Globalisation 15
3. Administration of Antitrust Laws 18
4. Concluding remarks 20

Competition Policy in the New Economy
Wolfgang Franz **23**

Competition Policy and Competitiveness: The Perspective from a Small Open EU Member State
John Fingleton **27**

1. Competition and Competitiveness 27
2. Effect of Technological Change 30
3. Competitiveness and Competition Policy 31

Economic Policy Issues in the 21st Century
Dennis C. Mueller ***37***

EU Policies ***41***

New Developments in European Competition Policy
Mario Monti ***43***

1. The Challenges of Our Times 43
2. A Profound Modernisation of Our Competition Rules 44
   2.1. The Reform of Regulation No. 17 44
   2.2. The Review of the Merger Regulation 45
3. Other Provisions in Order to Refine European Competition Policy 47
   3.1. The Review of the Substantive Antitrust Rules Applicable to both Horizontal and Vertical Agreements 47
   3.2. The Fight against Cartels 49
4. The Development of International Co-operation 49
5. Conclusion 50

The Future of Austrian Competition Policy
Michael Böheim ***51***

Abstract 51

1. What is the Raison d'être of Competition Policy? 52
2. Reforming Competition Policy in Austria 54
   2.1. Exogeneous Pressure to Reform 54
   2.2. Endogenous Pressure to Reform 55
3. The European School on Competition Law 58
   3.1. Towards a New Paradigm in European Competition Policy 58
   3.2. The Competition Concept of the European School 59
4. Consequences for Austrian Competition Policy 60
5. Literature 62

The Cardiff Reform Process of Goods and Capital Markets – What is to be Learned From Other EU Countries?
Verena Steyer ***65***

1. Network Industries 66
2. Competition Policies 73

A New Internal Market Strategy to Remove Barriers to Services
Othmar Horvath, Eva Pfandl ***79***

1. Economies in Motion 79
2. The Basis for the New Strategy 80
3. Basic Principles 81
4. A two Stages Approach 82
5. Existing Barriers 83
6. National Results – Existing Barriers for Austrian Companies 84
7. Conclusion 85
8. Literature 86

Sectoral Regulation ***87***

Competition in the Electricity Industry
Johannes Mayer ***89***

1. Introduction 89
2. Importance of Electricity for the Austrian Economy 89
3. The Market for Power 90
4. Security and Quality of Supply 92
5. The Austrian Regulatory System 93
   5.1. Federal Minister of Economic Affairs and Labour 93
   5.2. Electricity Control Commission 93
   5.3. Electricity Control Ltd 94

5.4. Electricity Advisory Board 95
6. The Regulatory Agenda 95
7. Implementation of Competition in the Power Industry 96
8. Concluding Remarks 97

The Californian Experience with Energy Liberalisation
Renate Reichert ***99***

1. Situation Before De-Regulation 99
2. The Main Aspects of the 1996 Legislation 103
3. Results of Deregulation 106
4. Some Conclusions to be Drawn 109
5. Literature 111

Regulation of Telecommunication Services: The Austrian Approach – A Flashback, a Regulatory Model, and a brief Outlook
Heinrich Otruba, Stefan Bernhardt ***113***

1. Introduction 113
2. The Institutional Setting of Telecommunications Regulation in Austria 116
3. The Regulatory Approach, A Simplified Model of Opening Up a Monopolistic Network Industry 118
4. Operation and Self-Perception of RTR-GmbH, Telecommunications Division 126
5. Outlook on Regulatory Issues in the Future 130
6. Literature 133

Railway Infrastructure Charges in the Context of the Liberalisation of the Rail Market
Gerhard H. Gürtlich ***137***

1. Background 137
2. The Fundamental Principles of EU Rail Transport Policy 138
   2.1. Preliminary Remarks 138
   2.2. Directive 2001/12/EC on the Development of the Community's Railways 139
   2.3. Directive 2001/13/EC on the Licencing of Railway Undertakings 140
   2.4. Directive 2001/14/EC on the Allocation of Railway Infrastructure Capacity 141
3. Directive 2001/14/EC and its Provisions on the Level of Infrastructure Charges 142
   3.1. Preliminary Remarks 142
   3.2. Observations on the Cost Concepts Used 142
   3.3. Observations on the Charging of Costs and the Allocation of Productive Factors 144
   3.4. Observations on the Exceptions 145
4. Outlook 146

Liberalisation of Postal Services: Some First and Preliminary Economic Considerations
Friedrich Schneider ***147***

1. Introduction 147
2. Cross Subsidisation in the Postal Service 148
3. Expected Economic Consequences of a Liberalisation of the Postal System: The Case of Germany 150
4. The Liberalisation of the Postal System in New Zealand 151
5. Some Concluding Remarks on the Telecommunication Sector in Comparison to the Postal Sector 153
6. Literature 155

Competitiveness and Competition in a New Economy: The Role of the New Financial Market Authority
Patrick Darlap, Andreas Grünbichler, Kurt Pribil ***159***

1. The Financial Services Sector as a Primary User of ICT 159
2. Financing the New Economy 162
3. Financial Stability Issues related to New Economy Financing 163
4. Implications for Prudential and Supervisory Policy 164
5. Literature 166

Market Barriers and Competition – The Example of Shop Opening Hours
Gerhard Clemenz ***169***

1. Introduction 169
2. Markets May Fail 170
3. Governments May Fail Too 171
4. Unregulated Shopping Hours – Too Many, Too Few? 172
5. Remedies – For What? 176
6. Who Benefits? 177
7. What Happens if Restrictions are Lifted? 179
8. Summary and Conclusions 180
9. Literature 180

Summary ***183***

Competition Policy – Challenges for Authorities and Business
Christina Burger, Heinz Handler ***185***

1. Why Competition? Why Competition Policy? 185

2. Trade-offs between Competition and Other Economic Goals 188
2.1. Do Profit Opportunities Rise or Fall with Competition? 188
2.2. Does Competition Further or Hinder Innovation? 189
2.3. Competition Policy Versus Industrial Policy 190
2.4. Can Prices be Too Low? 190

3. New Challenges in the New Economy 191
3.1. Globalisation and the "Relevant Market" 191
3.2. The Internet as Challenge for Competition Policy 194

4. Towards More Efficient Competition Policies 195
4.1. Liberalisation of Network Industries 196
4.2. Globalisation Requires Reform of Competition Policies 199

5. Conclusions 201

6. Literature 203

Appendix ***205***

Authors ***207***

Index ***209***

Publications by the Economic Policy Center ***213***

DISCUSSION FORUM

PREFACE

The Austrian Federal Minister for Economic Affairs and Labour, Martin Bartenstein, invited to a Discussion Forum on 24 January 2002, devoted to the interlinked issues of "Competition and Competitiveness in a New Economy". The discussion results were envisaged to feed into the policy strategies of the Austrian Government as well as into the Minister's interventions on EU level. As a member of several Council formations of the EU (Industry, Tourism, Internal Market, Employment and Social Policy, Foreign Trade, Energy), the host makes use of the discussion and the results in his interventions in the Council meetings. Moreover, the efforts to draft a new Austrian competition law, which did establish an independent competition authority by mid-2002, were greatly enhanced by the results of the Forum.

The current volume brings together the statements delivered during the Forum. In addition, a number of articles deal with competition policies in a rather broad sense, on EU and national level. They include a summary view from the EU Competition Commissioner on new developments of Community competition policies, a general view of how to reform Austrian competition policies as well as internal market related issues concerning the Cardiff process and barriers to services. Furthermore, a number of articles are devoted to sectoral regulation in the electricity, railway, postal services and financial services sector as well as on the regulation of shop-opening hours. In a final contribution, the essence of the various articles and the results of the discussion during the Forum are summarised.

The following few pages contain the programme of the discussion forum as distributed to the participants.

1. THE TRADE-OFFS AND INTER-LINKAGES BETWEEN COMPETITIVENESS AND COMPETITION

Do competition and competitiveness reinforce each other? Or is there a trade-off between increasing competitive markets and the profitability of a firm? Since only competitive firms and locations can succeed in the global environment, the two aspects of business life do not seem to be grossly contradictory. Nevertheless, a case can be made of large firms

which may be competitive in the world economy but may at the same time enjoy a dominant market position at the national level.
Moreover, a trade-off between competition and employment can be argued to exist at least in the short run: Liberalisation and privatisation, as well as unwinding a merger, could lead to immediate employment losses in the sector concerned. Such losses due to the failure of a company are directly visible and perceived by the general public, the media and politicians. In contrast, the achievements of competition policies are much less obvious in the short run: an effective competition policy usually cannot do more than prevent price hikes and set the stage against decreases in the quality and diversity of goods. However, in the long run an effective competition policy which ensures a competition-friendly environment is seen indispensible for sustained competitiveness of companies in a certain location. This per se would also have positive employment effects.

Another trade-off might exist between the prevailing degree of competition and horizontal aid. Such aid may be viewed inevitable for establishing the competitiveness of a firm in the first place. Policy-assisted cluster formation and the protection of intellectual property rights will in the short to medium run underpin competitiveness of products, but may not be desirable from the competition point of view.

Questions:

- Is there an optimal competition intensity which leads to the maximum degree of competitiveness?
- Is there an optimal degree of liberalisation which minimises the differences between short-term and long-term effects on employment?
- How should horizontal aid (R&D, cluster formation, protecting intellectual property rights) be judged in the light of competition policy?
- What role does asymmetric information play in the context of competition and competitiveness?

2. *Effective Competition in a New Economy*

The New Economy, defined as productivity-driven non-inflationary long run growth of output and employment, is largely based on (a) fast dispersion of new technologies, in particular in the information and communication branches, (b) salient macro-economic fundamentals and (c) well functioning markets. The latter may depend on the general competitive climate in the society as well as on the quality of competition policy and regulation. Although the myth has lately been taken out of the New Economy, new technologies still impinge on product innovation and new production methods, which in turn may have an important impact on the effectiveness of competition policies.

This leads to questions about how the New Economy does affect competition:

- In what way and to what extent does the globalisation of markets impinge on the definition of the "relevant market"? Do regulations of market entry and exit become obsolete in a globalised market?
- Does increased transparency (resulting from new methods of providing and transmitting information) reduce the need for strigent competition policies?
- To what extent have the new technologies contributed to more competition in former monopolistic network industries such as energy, telecommunications or postal services? How are the remaining monopolistic fields (predominantly the network per se) to be dealt with by the competition authorities?
- Is there a new network monopoly emerging from the world wide web? How should it be treated by competition policy?

The reform discussion regarding competition policies at the European level aims at a larger degree of harmonisation as far as the law is concerned, but at the same time at increased decentralisation when individual cases are pursued (getting national authorities more involved than before). At national level, the degree of competition will – among other factors – also depend on the quality of institutions. The newly-designed competition authority for Austria would be an independent administrative body with the possibility to investigate cases and bring them before the cartel court. The historic involvement of the social partners in investigating competition cases is envisaged to be reduced.

If it is agreed that competition control must be strong in order to harvest the full positive effects of the New Economy, further questions arise as to the concrete implementation of competition control:

- What would be a meaningful division of labour between national, EU and international competition bodies? E.g.:

  - National level: improving market access, cooperation between competition authorities and sectoral regulators, establishing a network between national competition authorities.
  - EU level: harmonisation of the legal system, concentration on core cases, decentralisation of procedures, cooperation with national authorities.
  - International level: WTO negotiations on trade and competition, dispute settlement mechanism
- What should be the general design of the relationship between sectoral regulators and competition authorities?
- Will competition between competition authorities (forum shopping) be advantagous or detrimental to the single market?

INTRODUCTION
MARTIN BARTENSTEIN

It is a great pleasure for me to welcome you all here in the Palais Ferstel. I am particularly honored that Nobel Laureate Prof. Joseph Stiglitz has accepted my invitation to be the main speaker this evening, and I am of course well aware that, apart from this event, his presence in Austria is extensively used in order to profit from his great knowledge and his many ideas.

This evening we would like to discuss the interlinked topics of "Competition and Competitiveness in a New Economy". Globalisation and the Single Market have visibly increased competition, which makes it necessary for companies to constantly review their competitive position on international markets.

Competition and competitiveness are highly influenced by the New Economy, especially by new ways of production and the transmission of information. These developments also pose new challenges to competition policy and competition control.

At the extraordinary summit of EU heads of state and government in Lisbon in March 2000, a new strategic goal for the European Union was set for the next decade, namely *"...to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion."*

Full employment and a real growth rate of 3% per year were judged as essential to reach this goal. At this occasion, the shortcomings of the European labour market were identified.

The reform discussion regarding competition policies on the European level aims at a larger degree on harmonisation as far as the law is concerned, but at the same time it aims at increased decentralisation when individual cases are pursued (getting national authorities more involved than before).

On national level, the degree of competition will – among other factors – also depend on the quality of institutions. The newly-designed competition authority for Austria will be an independent administrative body to which in the recent days also our social partners have signalled their acceptance. The competition authority will have the possibility to investigate cases and bring them before the cartel court.

At the same time, the traditional involvement of the social partners in investigating competition cases will be redesigned. However, their expertise and input will also be appreciated in the future.

Since only competitive firms and locations can succeed in the global environment, competition and competitiveness do not seem to be contradictory.

But do competition and competitiveness reenforce each other? Or is there – on the other hand – a trade-off between increasing competitive markets and the profitability of a firm? In this context, a case can certainly be made of large firms that may be competitive in the world economy but at the same time enjoy a dominant market position at the national level.

Moreover, a trade-off between competition and employment can be argued to exist at least in the short run: Liberalisation and privatisation, as well as a merger, can lead to short term employment losses in the sector concerned. Such losses are directly visible and perceived by the general public, the media and politicians.

In contrast, the achievements of competition policies are much less obvious in the short run: an effective competition policy usually cannot do more than prevent price hikes and set the stage against decreases in the quality and diversity of goods.

However, in the medium and long run an effective competition policy which ensures a competition-friendly environment is seen indispensible for sustained competitiveness of companies in a certain location. This per se would also have positive employment effects.

Another trade-off might exist between the prevailing degree of competition and horizontal subsidies which may be viewed inevitable for establishing the competitiveness of a firm in the first place.

Policy-assisted cluster formation and the protection of intellectual property rights will in the short to medium run underpin competitiveness of products, but may not be desirable from the competition point of view.

Questions arise:

- Is there an optimal competition intensity which leads to the maximum degree of competitiveness?
- Is there an optimal degree of liberalisation which minimises the differences between short-term and long-term effects of employment?
- How should horizontal aid (R&D, protection intellectual property rights) be judged in the light of competition policy?
- What role does asymmetric information play in the context of competition and competitiveness?

Let me also address the third block in our headline – the New Economy – defined as productivity-driven non-inflationary long run growth of output and employment, is largely based on three factors:

1. fast dispersion of new technologies, in particular of information technologies,
2. stable macroeconomic fundamentals and
3. well functioning markets.

The latter may depend on the general competitive climate in the society as well as on the quality of competition policy and regulation. Although the myth has lately been taken out of the New Economy, new technologies still impinge on product innovation and new production methods, which in turn may have an important impact on the effectiveness of competition policies.

Again questions arise as to the concrete implementation of competition control, especially to harvest the positive effects of the New Economy:

- What would be a meaningful division of labour between national, EU and international competition bodies?
- What should be the general design of relationship between sectoral regulators and competition authorities?

Although time seems limited this evening, we are eager to cover a range of aspects concerning the topic raised – a fact which is mirrored by the experts on the podium coming from different fields of work and institutions:

- Of course I need not introduce Prof. Joseph Stiglitz. By the economics profession he has long been regarded an outstanding figure, as is demonstrated by his former posts as Chairman of the US President's Council of Economic Advisors, as Chairman of the OECD's prestigious Economic Policy Committee, as Vice President and Chief Economist of the World Bank, as Professor at Yale, Princeton, and now at Columbia University, and we applaude him very much for winning the 2001 Nobel Prize in Economics! Prof. Stiglitz also accumulated quite some practical experience in dealing with competition cases while serving the US President Clinton.
- Prof. Wolfgang Franz is Professor at the University of Mannheim and president of the "Zentrum für Europäische Wirtschaftsforschung (ZEW)" – an outstanding German economic research institute. His work is concentrating on employment issues and can perhaps address the trade-offs between competition and competitiveness and their likely effects on employment.
- Dr. Paul Gorecki is Director of the Monopolies Division and Acting Director of the Cartels Division at the Competition Authority. He joined the Authority in June 2000. After working for the Canadian competition authorities for several years, he joined the Economic Council of Canada in 1978, before becoming Director of the Northern Ireland Economic Council in 1992, from which he joined the Authority in 2000.
- Prof. Dennis Mueller from the University of Vienna is an internationally well known expert on regulation and regulatory reform.

Thank you all again for joining us here on the podium, and thank you for your attention!

May I now invite Prof. Stiglitz to take the floor.

Competition and Competitiveness in a New Economy

Joseph E. Stiglitz

I welcome this opportunity to talk about competition policy, because there is perhaps no topic that is more important for the functioning of a market economy. The theorems and analyses stating that market economies deliver benefits in the form of higher living standards and lower prices are all based on the assumption that there is effective competition in the market.

At the same time when Adam Smith emphasised that competitive markets deliver enormous benefits, he also emphasised the tendency of firms to suppress competition. Enterprises can generate far more profits by suppressing competition than by innovating and producing better products. It has thus become an important role of government to insure the maintenance of competition.

One of the experiences I had when I was at the White House was the recognition that all people seemed to adhere to certain principles. One of them was the strong belief that there should be no subsidies – for everyone except themselves. Another principle that was universally agreed upon was the value of competition in every sector of the economy except their own. And of course a third one was the importance of transparency and information, except the need for secrecy in their own room.

It has been an important issue of public policy to analyze the appropriate extent of competition and the mechanisms by which the government can promote competition. The subject is vast, and in the limited amount of time I will only touch upon three specific aspects of this issue:
1. competition and the New Economy,
2. competition and globalisation and
3. certain issues associated with the administration of antitrust laws.

1. COMPETITION AND THE NEW ECONOMY

As Mr. Bartenstein said, while the myth has been taken out of the New Economy, a lot of ideas associated with the New Economy have remained. In the United States we estimate that, as a result of the changes associated with the New Economy, productivity has dramatically increased from the 1.1 percent that prevailed from 1987 to 1993 to around 2.5 to 3 percent. One way of thinking about the New Economy is that it is an innovation in the process of innovation. In a way, it has brought to the floor an approach to the economy that was pioneered almost a century ago by the Austrian economist Joseph Schumpeter. He emphasised the importance of innovation in a market economy, and his work, I think, is now beginning to come into its own.

For very long periods of time, the focus in market analysis was on static models in which innovation was ignored, and clearly, this is an inappropriate way of approaching the virtues of a market economy. One has to focus not on the static analysis which is underlying much of traditional economic analysis, but on the dynamic aspects that were at the heart of Schumpeterian analysis. Schumpeter's view was that markets would be characterised by a sequence of short term monopolies. Competition would not be static. There would be a monopoly for a while, which would be succeeded by another monopoly, so that competition would be dynamic. In that sense he provided strong criticism to traditional antitrust policy. He seemed to argue, although he never formulized the idea, that, through this process of dynamic competition, the market economy would achieve some form of what economists would call in templating jargon "intertemporal efficiency".

Schumpeter, I think, was asking the right question, unlike Arrow and Debreu and many of the neoclassical economists who have ignored the **importance of innovation**. But Schumpeter got the wrong answer. Unlike the picture that Schumpeter envisaged, the analyses of Schumpeterian models over the past two decades have shown that there is a real possibility that a firm that established a temporary monopoly position had a variety of mechanisms by which it could perpetuate that temporary monopoly. As a result, the overall level of innovation would be suppressed.

This was an argument I put forward with my co-author P.S. Dasgupta in a series of papers in the early 1980s. The points that we raised at that time have amply surfaced in the New Economy. Take the Microsoft case. The findings clearly demonstrated that this firm was able to engage in a number of practices that suppressed competition and thereby suppressed the overall level of innovation. Very early in the so-called "wave of New Economy", in the early 1990s, when I was Chairman of the Council of Economic Advisors, the practices of Microsoft came to our attention and became immediately a source of great concern. It was not just the Council of Economic Advisors that was concerned about this issue, but also the Office of Science and Technology Policy, the Office within the White House that is responsible for maintaining an overall environment in which innovation is encouraged. They believed, and we concurred, that the anti-competitive practices posed a real threat to the level of innovation in the United States and around the world. So both institutions urged the Department of Justice to look at this issue more closely.

One of the issues that had been raised was that many of the proposed resolutions to anti-competitive behaviors would in effect curtail in one way or the other **intellectual property rights (IPR).** It is very important to recognise that IPR are not a matter of natural law, but they are man-made law. And they reflect the balance between the users and the producers of knowledge. The Uruguay-Round tried to incorporate and internationalize IPR by the TRIPS Agreement. In the judgment of the Office of Science and Technology Policy and the Council of Economic Advisors, and also in my judgement, that agreement did not get the balance right. It was basically dictated by commercial interest. The worst aspects of that have already come to light. The poorest people in the world, in Sub-Saharan Africa, would not have access to aid and drugs at prices they could afford. This meant that when the Uruguay-Round was signed, it was effectively condemning to death thousands of people. Fortunately the outcry that came in the last couple of years about the TRIPS Agreement has served to redress the imbalance, but the issue remains.

When we opposed that imbalance, our view was that it was not just an imbalance of social welfare or protecting the rights of some of the poorest people in the world, but also one of innovation, as the major input into research is our given knowledge. Excessive intellectual protection can increase the costs of this vital input and this slows down the pace of innovation. In order to maximize the pace of innovation, and thereby increase competition, one needs to balance IPR.

There is now a vast literature supporting the perspective that the New Economy entails huge **network externalities**, related to the fact that there are benefits from using common languages. If one was using a telephone for instance, and nobody was at the other side of the line, this would not help anybody. You have to be able to talk to somebody. The value of the telephone increases the more people are linked together in a network. The same analysis applies to computer software, including operating systems and word processing. On the other hand, having a single "language" and communicating with it makes it rather easy to establish a dominant technology, not because it is the most efficient one, but because it is used by many people. There are lots of examples of networks which are inefficient but used because it is difficult to move from one system to another one. So the network externalities have created an enormous potential for monopoly power and for the abuse of that monopoly power.

There is a certain irony in the fact that the New Economy has in some respect increased competition and the potential for competition, while at the same time these network externalities and the way they have been abused have actually reduced competition. To give you one example: The internet makes it possible for you to easily compare the prices that firms are charging. Increased information is essential for making markets work well and the absence of information is an impediment to the effectiveness of competition.

However, the new technologies have also increased the scope for suppressing competition. We have seen symptomatic examples of that within the United States. For instance, the airline reservation network was abused for communication with each other in ways intended to limit competition. The practice was discovered and has now been stopped. But it shows you how the new technologies have enhanced the scope for suppressing competition.

A great deal of emphasis has recently been placed on **the New Economy**. And I believe rightly so, because of the concentrations of economic power that have occurred in some key parts of the economy. I should emphasise, however, that the old economy is still alive and represents an important part of our economy, and also that anti-competitive practices remain a deficiency of the whole economy. Let me just mention two examples in the old economy sector. First, the largest set of price fixing cases ever discovered have occurred within the last five years. So the notion that the old-fashioned antitrust behavior is a relic of the past is clearly not true.

Second, there are a whole variety of other practices which in some ways have been facilitated by the new information technologies. The most dramatic example is predatory pricing in the airline industry to prevent the entrance of competitors into a particular market. This is a problem more in the United States than in Europe. Normally when a new competitor enters a market, thereby splitting it up, the aggregate demand curve facing the incumbent firm shifts to the left and its supply goes down. In the predation case the response of the incumbent firm was not only to lower the price but at the same time to increase the supply. It lost money with the additional airplanes but continued its policy until the new entrant, who typically had only shallow pockets to finance the new entry, was wiped out. Miraculously thereafter, prices went up to very high levels. So when talking about the New Economy one should not forget the continuation of the old economy and the threats to competition in that arena.

2. COMPETITION AND GLOBALISATION

I now want to come to the second topic, competition and globalisation. There are four issues I want to talk about in that context. The first, and in some ways the most important, is that in an **international arena** we have competition policies that are completely incongruent with the policies that we have within our domestic economies. For instance, we have embedded a set of anti-dumping provisions within the WTO in order to stop the very kinds of activities that I just described, predation among others. Yet the standards used are by no means comparable with the standards employed in national competition policies. Europe should be familiar with this, as the United States are currently charging Europe under the anti-dumping laws with uncompetitive practices in the area of steel. Analyses have shown that if the WTO standards were used within the United States, some 80 to 90 percent of American firms would be judged to be dumping. The standards are completely unreasonable and do not compare with any competition standards. Thus we have a double standard, one for trade within an economy and another one for trade between economies. The anti-dumping standards of the WTO are basically anti-competitive principles designed for the protection of domestic industries. One of the objectives of the next round, the development round of trade negotiations that just begun in Dohar should be to eliminate these anti-dumping provisions. The problem is that they represent the interest of the US export industries in Europe and vice versa. As time goes by, other countries are learning from the United States and Europe. Because the American and the European economies are more competitive than any other economy in the world, they would be subject to more anti-dumping actions than other countries in the long run. Thus it is even in the self-interest of Europe and the United States to get rid of these anti-dumping provisions.

The second issue within globalisation I want to touch on very briefly is the view that you need to create large firms and reduce competition in order **to be competitive in the international arena**. It is my strong belief that this is wrong. There is a lot of evidence that the most effective way of attaining competitiveness is to have strong competition. The force of competition is indispensable to achieve a dynamic path of innovation. And it is innovation and increases of productivity, and not economies of scale, that are going to be most important in attaining competitiveness in the long run. Moreover, one of the greatest advantages of globalisation is that it has reduced transport cost. And although the size of firms tends to increase, there can be many large firms competing in any market. Thus the degree of competition should in fact be increasing not decreasing.

The third issue has to do with **agglomerations and de-agglomerations**. I want to emphasise the distinction between horizontal and vertical agglomerations. Many of the conglomerates, particularly the conglomerates in the 50s and 60s, did not really restrict competition. They bought, say, one firm in the furniture industry, one firm in the computer industry, and these had nothing to do with each other. These agglomerations did not result in economies of scope; they just aimed at an eclectic assortment of profit-making enterprises. They did therefore not attain market dominance in any of the areas they covered. That is very different from a strategy of mergers intended to reduce competition and obtain market dominance, which is exactly what competition authorities ought to prevent from happening.

One should also keep in mind that the size of an agglomeration alone does not necessarily cause limitations of competition, except when it becomes large within a given society. In countries like Korea, where the concentration of conglomerates is so high that any of the firms is too big to fail, competition can be severely damaged. But that is a slightly different issue. The point was raised that in the last fifteen years, the restructuring of sectors like electricity and communication has enhanced the ability of the market to have competition by itself, and has therefore decreased the role of regulation and government oversight. I agree, except that there remain areas in most of these industries in which there is still a large degree of market power that can be abused and leveraged. In the case of the telephone industry, for instance, the last mile remains a monopoly. It has been undermined only by the cable network and by mobile phones.

I was very much involved in the 1996 Communications Act in the United States. At the time we had a big debate about the necessity for Justice Department oversight. Some people believed that competition was about to surface and that we could abandon any oversight. Others, and I was among those, argued that we still needed oversight, as we did not know how fast competition would develop. I think we proved to be correct.

Competition has been growing very slowly and monopoly practices have remained very strong. In California one has seen a lot of evidence of abuses of market power in the electricity market. Among firms, it has long been a standing issue whether competition should be confined by using trade secrets or patents. Coca Cola is still protected by a trade secret. The main issue here that any patent policy has to keep in mind is "getting the balance right". If this is not attained, there would be an incentive to move out of the patent system. And the patent system has certainly the advantage of disclosure, as you have to write down what you want to be patented. Most firms continue to rely heavily on patents. At least in the United States there has been a massive expansion of the scope of patents in business practices.

The fourth issue in the context of competition and globalisation concerns the **co-ordination of antitrust policies** among various authorities. Some people believe that there should only be one antitrust authority per country and that having more than one results in unnecessary duplication. I find that view peculiar, because as market economists we think that duplication is good, because it causes competition: we are in favor of many firms producing goods and services and argue that their overlap is in fact of positive benefit. To be sure, there needs to be some degree of harmonisation and there has to be a high degree of co-operation. But the big advantage of having more than one antitrust authority is that there can be a race to the top. The antitrust authorities that are most stringent, most efficient, most effective in promoting competition among firms will be the most important in determining the structure of markets.

For that reason I welcomed the role that European competition authorities exercised in the Honeywell-GE merger. The American authorities basically caved in to corporate pressure from American firms. The European antitrust authority was not under a similar pressure, it recognised the dangers, and it spelled out ways in which they could arrange the merger which would mitigate the anti-competitive effects. And when Honeywell-GE refused to comply, the merger was blocked. That kind of check and balance between different competition authorities, I believe, is a very positive development.

3. Administration of Antitrust Laws

The third broad issue I want to talk about is the administration of antitrust policies. I want to address two sub-topics within that field. The first is that antitrust is an extremely complex subject, and one of the problems is how to administer this complex area, how to generate the appropriate level of expertise. I believe that it is important to develop independent traditious systems focusing around antitrust. In the United States we have developed an independent traditious system focusing on another complex area, bankruptcy, but we have not done that in the area of antitrust. If you read some of the court decisions, you realize the adverse consequence of this: judges who have never studied economics try to make decisions that are extremely difficult – with disastrous results.

The second point I want to raise is the **importance of independence**. In the United States we have more than two overlapping approaches to antitrust. Within the public arena, we have the Federal Trade Commission and the Antitrust Division of the Department of Justice. But apart from that we have the civil court system: the parties can directly go to court and ask for a redress of the damages they have incurred as a result of anti-competitive practices. This provision was put in at the very early stage of antitrust laws, at the end of the 19th century. The reason was concern that government may not be strong enough to sustain corporate interest. Antitrust law in the United States was not so much influenced by Adam Smith and the theories of market economies that I alluded earlier, but a broader political movement that was concerned with the power of large corporations in our society and the monopoly practices which adversely affected consumers. There was a worry that those same powers would have been able to suppress the role of the government in suppressing anti-competitive practices. In the United States we saw that actually happen in the context of the Microsoft case. Microsoft, through the Senator in the State of Washington, tried to persuade Congress to withdraw all funding for the prosecution of Microsoft. He did not succeed, but he tried very hard. It is important to have another check, and I think that this check is provided by civil action. Even though there are large costs and the system is imperfect, it is an important check.

The final issue raised was the relationship between **competition policy and trade policy**. Those of us who have been involved with anti-dumping cases had to deal at the same time with competition policy. This resulted in ongoing disputes in some cases. Every year, a few pages in the report of the Council of Economic Advisers (which is actually seen as the economic report of the President) have been about the issue of trying to harmonise competition policy and trade policy, including anti-dumping policy. The latter is at times called the "fair trade laws", but actually the laws on dumping are "unfair trade laws", as they undermine competition. We always had long negotiations with our US Trade Representative who simply didn’t understand our position on competition. He always won the negotiations in the WTO, but we won what went into the president’s report. However, there has been enormous progress in the last five years, as many trade ministers are beginning to realise that official trade barriers, government barriers to getting into another country, may turn against themselves when they try to get into another country and face a monopoly there that refuses to buy their goods. As a result, the whole area of competition policy is becoming recognised as an important part of trade policy.

4. CONCLUDING REMARKS

I want to conclude by trying to put into perspective some of the issues that I have raised. I have emphasised that competition is an important vehicle for increasing competitiveness and that I do not subscribe to the view that one ought to tolerate anti-competitive practices or dominant firms because it was necessary to attain competitiveness – quite the contrary.

I also want to reecho what the Minister said about the **importance of macroeconomic policies**. As a consequence of large macroeconomic disturbances, even well-functioning firms can bust. In that context the case of Korea comes to my mind, where a great mass of macroeconomic problems were exacerbated by the policies pushed on that country by one of the international financial institutions. We did a study attempting to ascertain whether the firms that went bankrupt were on average more or less productive than the firms that survived. The answer was that the firms that went bankrupt tended to have slightly higher debt-equity ratios, but in terms of efficiency and profitability over the preceding decade, they could fully stand up with the other firms. When you have large macroeconomic disturbances, bankruptcy does not serve as a good sorting device between good and bad firms. This is one of the important reasons for maintaining sound macroeconomic policies; they are absolutely essential for maintaining competitiveness.

There is a third related point that I want to emphasise. In American competition policies we stress the **difference between protecting competition and protecting competitors**. We want to protect the competitive process but not particular competitors. There is another important distinction and that is between protecting individuals and protecting firms. When firms go bankrupt the workers in those firms suffer. However, the Schumpeterian competition that I alluded to earlier, inefficient firms being replaced by firms that are more efficient, is an important part of the dynamics of the economy. In that process, some individuals are adversely affected, and it is an important responsibility of government to provide social protection as well as training to facilitate those individuals moving into other enterprises. Having a sound macroeconomic policy with low unemployment is absolutely vital, because it enables individuals to move from one job to another. It means that when you loose a job there is another job available. If unemployment rates are ten percent or more, net mobility is impaired.

These are issues not only of social justice, but they actually relate to the issue of competitiveness that is primarily of concern today. Success and competitiveness entail **risk taking** which in the end is borne by individuals. Let me deal with two concrete examples of downside risks. The first one is **unemployment**. In the United States over the last decade, we have created an enormous number of firms. In the first two years of the Clinton Administration two million new firms were created. But successful economies have lots of failures. In the United States, the social consequences were minimized both through a retraining program and, most importantly, because of a very low unemployment rate. That macroeconomic environment served as a safety net which enabled individuals to take risks that they otherwise would not undertake. It is not an accident that one of the most successful economies in the New Economy besides the United States is Sweden. This country has an active labor market policy which facilitates the ability of individuals who loose their jobs to move into other jobs. In the last eight years Sweden has been able to maintain relatively low levels of unemployment. The United States and Sweden have been among the most successful economies in creating new firms and a whole variety of new technologies.

The second example concerns the relationship between **pension reform** and competition policy, namely the higher risk for firms to go bankrupt because of stronger competition. In the United States right now, everybody has seen the consequences of one big bankruptcy, Enron. Many people who thought they had a private pension program have just discovered that they don’t have one. As a matter of standard advice, individuals are told that you shouldn’t have a lot of your wealth in the company for which you work, because if the company goes bankrupt you lose not only your job, but you lose everything else. Enron represented an abuse of that basic principle.

We have seen in country after country that this volatility is very high and that individuals are not well equipped to make decisions that provide them effective protection for their old age. In country after country, including the model country Chile, we have seen the adverse consequences of that. Around the world there is a re-examination of the balance in the three-pillar-approach for pensions and the recognition that there are some real limitations in the form in which it has often been applied, particularly for developing countries.

Let me conclude and reiterate what I said in the beginning. I think the debated issues are among the most important facing any society. In the long run, designing a competition policy that works will be the most important part of the strategy for maintaining the competitiveness of the market economy.

COMPETITION POLICY IN THE NEW ECONOMY [1]

WOLFGANG FRANZ

Given the topic of this discussion forum I am in the favourable position that the Scientific Council of the German Federal Ministery of Economic Affairs and Technology has recently published a report on "Competition Policy for the Cyperspace".[2] As a member of this council I may or must, as you like, rely on this report, although it goes without saying that I speak here for myself and not for the council. Moreover, the Center for European Economic Research (ZEW), which I am directing, has established a research group on new information and communication technologies in global networks and, of course, among other topics competition policy has taken center stage in our research agenda.[3]

The basic message of my statement can be summarised as follows: The New Economy creates new challenges also for competition policy. This can be illustrated by the internet which is at the heart of the new economy and will remain important even after the collapse of its glorification. However, the challenge is not so obvious for governmental competition policy, provided the country has an independent and effective competition authority, but more demanding for the competition authority itself. The rationale behind this thesis is the high degree of abstraction which governs most of the legal framework of competition policy. If this law is applied adequately – and this constitutes the challenge for the competition authority –, most developments in market structures enforced by the internet can be coped with. Put differently, to adjust in practice the application of the legal framework to the specific features of the new economy constitutes the challenge for competition authorities.

The obvious question then is: What are the peculiarities which characterise the new economy, and the internet in particular, and make it different from traditional markets in the old economy? At the risk of

---

1 Statement for the Discussion Forum on "Competition and Competitiveness in a New Economy" organized by the Austrian Federal Ministery for Economic Affairs and Labour", Vienna 24th January 2002.

2 See www.bmwi.de for downloading ths report.

3 For more information see our web-site: www.zew.de.

repeating what has been said already, let me very briefly mention the following outstanding pecularities with an emphasis on the consequences for competition policy.

(i) Reduction of transaction costs, especially the costs of overcoming spatial distances: This means that the process of globalisation of markets will be more rapid and intensive. This has consequences for regulation policy. Issues such as supervising stock markets, rules of accounting or crediting, licences for medicaments, access for youths to pornographical internet pages and the like become international issues and require closer government cooperation. Customers enjoy greater price transparency, firms are faced with reduced possibilities of price differentation.

(ii) Network character, i.e., a single product or service has little or no value in isolation, but generates value when combined with other goods.[4] While this phenomenon is not entirely new (e.g. telephones), the degree to which networks shape business strategies today has changed dramatically. An example is the hardware/software paradigm: By buying a particular hardware component, the customer takes into account that, the larger the network of users of a particular software format, the higher the value consumers attach to the hardware that uses this format. Moreover, emails, bulletin boards, chat-groups, mailing lists were of minor importance, if at all, ten years ago. This network character has two consequences for competion policy.

Firstly, suppliers of complementary products have to coordinate on a particular standard and to overcome the critical mass problem when introducing the standard in the market which often requires considerable upfront investment. On the other hand, users of an established standard, the installed base, are reluctant to incur the costs of switching to the new technology. Hence, the market success of a competitor's product will depend not only on its inherent attributes (price and quality), but also on its ability to connect his product with the others by means of a seamless interface. Such co-ordination problems and installed base effects pose questions as to how to handle mergers and strategic alliances.

Secondly, the difference between the market and the firm becomes blurred. Typical examples are internet auctioneers such as eBay or,

[4] See e.g. Röller and Wey (2001), International Competition Policy in the New Economy, WZB-Jahrbuch 2001, Berlin (edition sigma).

already in the old economy, Nike which nearly entirely concentrates on management issues rather than to produce any sports article (these are produced by other firms). Competition policy is then confronted with the need to properly define a relevant market.

(iii) Maintaining property rights is a final issue to be addressed. Digital products can be copied at very low costs. A prominent example is Napster, a virtual market where people "exchanged" music, for which only one customer has paid sometime.

Taken these and other issues together, the challenges for competition policy stemming from the new economy should be obvious. As a final point let me therefore point out these traditional areas where competition authorities have to adjust to these developments.

(i) Assessment of market structures, i.e. the appropriate application of rules concerning mergers. This is even more difficult than so far for the following reasons. How to define the threshold from which on we speak of "mergers"? One solution could be to use the outline agreement of all firms involved in the network to decide upon a possible merger. Moreover, how to define the relevant market? Will cross price elasticities still do the job? Or should the competition authority take into account the extent to which a particular supplier has to anticipate actions from other firms within a reasonable time period? What is the importance of innovations in light of short product cycles where the pressure of competition often does not stem from the same market but from more attractive substitutes from other markets, that means potential competitors concentrate already on the next generation of products?

(ii) Control of improper behavior: This control has been traditionally a difficult job because the competition authority had always to balance the negative effect due to behavior which aims at restricting competition against a possible welfare gain. The new economy increases difficulties at least for the following reasons. In markets which are characterised by network effects firms have to achieve a critical level of production. This has to be accepted by the competition authorities even if this increases the market power of those firms. More problematic is the judgement upon strategies of the same firms to conquer related markets such as has been disputed in the Microsoft case. A second point is price differentation. This is important in the internet economy due to a possible large difference between marginal and average costs. Frequently, the marginal costs of digital products approach zero. Full competition is then impossible, the number of suppliers remains limited. Suppliers can, under certain conditions, react with price discrimination for several groups of customers. This stragegy does not necessarly represent an improper behavior as long as the firm does not exclusively reduce prices in that particular partial market where a new firm tries to enter.

(iii) Cooperation in research and development: Cooperation in this field among firms which have already a dominant market power is extremely dangerous for competition and will not be tolerated by competition authorities. But sometimes a cooperation can be justified. For example, if a single firm does not have the manpower and/or financial means to develop a new product, it may cooperate with other firms being in the same situation, and form a working group.

Be that all as it may, competition policy in the new economy is an international issue. Experience tells us that in most cases national or supranational competition authorities have cooperated. As long as these competition authorities come to similar conclusions about market definitions the internationalization of economies should tend to reduce the potential for conflict.[5] But this agreement may not cover assessments of market power or over how to remedy. Hence, there may arise a new potential for conflicts between competition authorities.

[5] See Röller and Wey (2001).

COMPETITION POLICY AND COMPETITIVENESS: THE PERSPECTIVE FROM A SMALL OPEN EU MEMBER STATE[1]

JOHN FINGLETON

I intend here today to touch on a number of related topics:

- The economics of competition and what it contributes to productivity and competitiveness;
- The effect that technological change, new economy issues and globalisation have on competition enforcement; and
- The nature of relationship between competitiveness and competition policy.

1. COMPETITION AND COMPETITIVENESS

I want to start my remarks here today on the subject of the **economics of competition**. First let me concentrate on the strides forward that have been made:

- Developments in industrial organisation theory in the late 1970's and 80's have largely been incorporated in textbooks such as that of Jean Tirole and the work of many competition agencies. In general, competition authorities are increasingly sophisticated and much less likely to rely on outmoded structuralist views, but instead prefer to examine each issue on its merits. So, for example, high market shares are less of a concern and in a very small number of cases small market shares perhaps could be more of a concern. In particular, there is recognition that intense price rivalry may drive high concentration.
- Empirical industrial organisation methods associated with names such as Bresnahan, Porter, Sutton and Pakes have coincided with the increased availability of retail scanner data and other rich data sources, giving us many new practical tools to measure substitutability and indicate the presence or absence of market power. In countries where such data are available, competition

[1] This is the written version of remarks prepared for a seminar in Vienna on January 24th 2002. The speech was delivered by Dr. Paul Gorecki. I am grateful both to Paul Gorecki and to Dr. Francis O'Toole of Trinity College Dublin for comments.

authorities use such techniques. The Staples-Office Depot case is usually mentioned in the US context, and recently the European Commission did similar analysis in the Volvo Scania case. Of course, many economists argue that they made wrong decisions using these sophisticated analysis, but it is early days and what is important is that such techniques come from academia into practice within a short time span. Indeed, it is often practice that is leading as opposed to following academia.

- At the political economy level, there is increasing convergence between the laissez-faire Chicago and more interventionist Harvard schools of thought. On the one hand, the Chicago school, exemplified by Posner's JPE article in 1975, has successfully persuaded others and competition authorities that state restriction on competition and regulation is at least as important in welfare terms as private restrictions on competition. On the other, the Chicago school critique on issues such as vertical restraints, tying, efficiency defences and monopolisation led to a theoretical re-examination of these theories in a way that made more precise the conditions under which private markets can be inefficient and be improved upon. I would say that, as a result, there is much greater consensus now among economists that anti-competitive harm can result from private actions, but that the set is narrower than many would have argued in the 1960s. This consensus is well illustrated in Posner's 2001 edition of **Antitrust Law**.

All of these improvements mean that the competition policy that is practiced today is more soundly based and enjoys broader political consensus, notwithstanding various short-run ebbs and flows in the political wind. I would say that this has been somewhat of a paradigm shift. It is worth noting that one of the strongest investigative and enforcement regimes exists in the United States, a country that places great emphasis on free markets.

However, there is one area in which I feel economics still has some way to go, and that is in understanding better the longer term and macroeconomic welfare effects of competition. Perhaps this reflects my own position as head of a competition agency sometimes asking myself "why are we here" rather than always just "how do we do this". Most of the strides forward in recent decades have informed the "how" rather than the "why".

The early welfare analysis of Harberger, who found only small gains from competition policy, followed by Posner's 1975 paper[2], which found large losses but attributed them to government regulation, and then the work of Cowling and Mueller and others who found larger losses is not particularly helpful in this regard (i.e. in terms of long-run or macro welfare effects) for two reasons.

First, this analysis is typically very static in the sense that it looks at the welfare gains arising in the change between two equilibria. This results from the fact that we use a simple diagram on which we compare monopoly and competition as two equilibrium outcomes. Other than the literature on X-inefficiency, there is little attention to the question of whether competition, by driving firms to cut costs, actually changes the equilibrium. Nor do we understand whether the existence of a competition policy stops bad things happening in the sense that, for example, explicit price cartels would exist but for such policy. In some sense this is dynamic as the path of the economy is altered by the existence of the authority. The positive dynamic effects that competition exerts on productivity may be much greater than the static ones, but we still know very little about it. Recent research suggests, however, that strong competition is associated with higher rates of productivity growth.[3]

Understanding the relationship between competition and productivity growth is of vital importance to the question under discussion here today. If competition policy can drive higher long-term productivity growth, then it can improve competitiveness and contribute to real increases in GDP per person.

Second, the range of estimates given for welfare gains varies between half of one percent and 15 percent of the output in markets in question, hardly a useful figure to guide policy priorities. Simply establishing a clear lower bound on the long-term macroeconomic benefits of competition would be useful in guiding public policy.

---

2 Richard Posner, "The Social Costs of Monopoly", Journal of Political Economy, 1975.

3 For a summary of relevant research, see "A World Class Competition Regime", White Paper from the UK Department of Trade and Industry, July 2001, at page 2.

While there has always been in varying degrees strong support for free enterprise and competition policy in the US, this has been much less the case in the EU. What has changed in recent times is the embracing of and support for stronger competition policy in many more countries. Economic arguments have played a vital role in this development.

2. *EFFECT OF TECHNOLOGICAL CHANGE*

Understanding the dynamic effects of competition is also central to several of the other questions raised today relating to **technology, new economy, globalisation, and competitiveness**. I do not believe competition policy is dead in the face of such issues, but rather that technology, globalisation and new economy changes raise new challenges and need for focus in competition policy design and enforcement. Let me give a few examples.

- Globalisation of markets, whether driven by technology or reducing trade barriers or both, means that our view of what is a relevant market becomes broader. This raises important questions about the efficacy of competition enforcement by single countries when the market environment spans many. Recent high profile international cartels in lysine and vitamins point out how much we, in Europe and the international community, rely on the strong investigative and enforcement regime that exists in the United States. Such incidents not only raising concerns about whether our European investigative and enforcement regime is adequate, they also point us in the direction of greater internationalisation in competition policy. Foremost in my view is the ability to share information and conduct joint investigations, and not international talking shops. But international talking shops do not require solemn treaties, whereas sharing information usually does. In mergers it is often in the parties interest to facilitate sharing. Perhaps parties should be offered the chance to allow sharing of information – perhaps it could act as a signalling mechanism? I also strongly believe that Europe will, perhaps as a result of a bottom up learning experience by Member States, be obliged to introduce criminal sanctions. I realise that this is contrary to the current view in Austria, but I understand and appreciate that different countries and cultures in Europe will have very different experiences and perspectives on this question for the present.

- My second example relates to technology and the regulation of natural monopoly. In many areas, technology has improved the possibility of having service competition over a fixed network. In some areas, and here telecommunications comes to mind, it has also augured greater competition between networks. However, these developments do not reduce the need for stringent competition policies. First, these markets put even greater burdens on competition policy in the short run while they are being liberalised. The process of generating entry into formerly monopolised markets is slow, not least because governments have frequently been loathe to restructure and to give regulators the powers to liberalise quickly. Second, even once they are fully liberalised, these markets will still have all the usual competition issues such as mergers, the possibility of cartels, and exclusionary vertical restraints. Finally, I do not believe that these markets will need less regulation in future. Monopoly networks will remain, and regulation will be needed to deal with one-way and two-way access problems. The involvement of new private firms and, if it occurs, privatisation, will mean that regulation will become more explicit and transparent, as has begun to happen. For this reason, it may seem as though we have even more regulation.
- Thirdly, it is not clear what effect new economy issues will have on competition enforcement. In the short run, new technologies increase the burden on competition authorities for two reasons. For example, markets in which technology feeds network effects demand that competition authorities develop new expertise and analysis. Second, platforms such as the Internet that increase competition in markets such as ticket sales may raise concerns about the natural monopolyelement inherent in the platform. The very ability of the platform to contribute to competition in downstream markets where it is an input may be the factor that leads it to require closer competition scrutiny.

3. Competitiveness and Competition Policy

Let me turn now to the third aspect of my talk, namely the **relationship between competitiveness and competition policy**. Competition policy drives productivity growth. Higher productivity leads to a direct increase in domestic welfare, but it also leads to increased competitiveness as exported goods and essential inputs for the production of exported goods are produced more efficiently. Many other policies such as those towards industry, education, research and development, legal process, infrastructure, etc. also affect the efficiency of the domestic economy and competitiveness.

In principle, there should be no conflict between these policies and competition policy. Rather, they should tend to complement each other. Putting large infrastructure projects out to public tender is an example of such complementarity. However, one area where it is often thought that conflicts may arise is in the area of industrial policy. Specifically, for a small open economy, there is an argument that competition policy may prevent domestic players from attaining the scale necessary to compete internationally.

In my view, the national champion argument results from a mis-comprehension of what competition policy is about.

- If the market is truly international, then the relevant market is international and the domestic market share irrelevant. A good example of this is Nokia in Finland, where the fact that it dominates domestic production does not mean that it must dominate consumption. There is the question as to who polices these international markets, which I alluded to above, but this is for another day. There is also the problem that the domestic stock market may be heavily dependent on the stock of one company. But there is no conflict with competition policy.
- If national markets are domestic, then there are several reasons to doubt the merit of a policy to develop a national monopoly to grow large abroad. First, efficient capital markets, and not monopoly profits, are the best judge of investment at home or abroad. Investments funded from monopoly profits are more likely to give a lower return, so it is not a good use of capital, especially if the fundamental problem is that capital is scarce in the national economy. Second, Michael Porter's insight that rivalry in the domestic market is the best stimulus to foreign success is highly relevant. Too often, the domestic monopoly becomes lazy and is not so successful abroad. Third, it seems to be based on a false mercantilist doctrine that exports are good no matter what the cost. The cost is not just the tax on domestic consumers but also the deadweight loss.

Irish economic policy has, until recently, appeared to prioritise national champion concerns over competition and efficiency arguments. Irish experience offers several lessons.

- Rents have been created in many industries that are dissipated in high wages to workers, overstaffing, strategic error, and prices that bear little relation to efficient costs, thus making the introduction of competition more difficult to achieve. Where privatisation has occurred, the employees typically have been given a block of 15% of the shares, and there are reasons to believe that this may subsequently retard the efficient working of capital markets.
- The best example of the flawed "national champion" argument is the Irish whiskey industry. Before it was monopolised in the 1930s, it has a near monopoly of whiskey/whisky sales in the United States. Nowadays its share of this market is in low single figures.
- Some of the industries in which monopoly was created or encouraged have grown, but it is difficult to know whether even the best of them has performed well relative to the counterfactual.
- The companies involved, even if not state owned, became heavily politicised and politically influential, which created barriers to entry and regulation in many other markets.
- It is interesting that one of the most successful Irish business to be exported, the Ryanair model, resulted from a new entrant that had first to learn how to win and please customers in the domestic market. Ultimately, capital constraints were not a problem, and the legacy of domestic competition was great success.

The other argument that we sometimes here advanced in smaller countries is that foreign companies can all too easily take over domestic firms, resulting in a loss of domestic control.[4] This argument is blatantly protectionist and perhaps inappropriate within an EU Member State. Proponents of this view sometimes argue that mergers should be controlled on the basis of a "public interest" test, and not just a competition test, normally characterised incorrectly as narrow or

4 Additional arguments are made that central functions such as advertising, R&D and higher level strategic decisions will be taken abroad. While it is clear that the previous management suffers, it is not clear that this has an adverse effect on consumers or shareholders. Indeed, Ireland has been successful in encouraging foreign firms to establish such central controls in Ireland.

technocratic. But because this creates legal uncertainty and makes takeovers more difficult, it simply reduces the stock market value of national firms. This is not desirable, and especially not if capital scarcity is greater in small economies. Ireland has recently passed new competition law that replaces its public interest test with the US "substantial lessening of competition" standard.

In summary, I think that the national champion argument never arises in many cases because the market is international, and that where the market is domestic, then allowing domestic monopoly is not supported either in theory or via empirical evidence.

On the other hand, domestic competition has a hugely important positive effect on competitiveness via a number of mechanisms.

First, the one I just mentioned is Michael Porter's argument that rivalry in the domestic market is the best stimulus to foreign success. Many believe that spoiled children find it difficult to cope with life's later difficulties, whereas those that are exposed to the realties learn lessons earlier and cope better. Similarly, we can find examples of companies like Ryanair.

Second, increased competition in individual markets tends to reduce both prices and costs. Where these products are directly or indirectly non-traded inputs of exporting companies, they reduce the costs and make the economy more competitive. This argument is well understood with regard to infrastructure and education.

Despite trade liberalisation, many markets will remain non-traded and it will become increasingly important to foster competition in these markets via domestic competition policy. In Ireland, we see consistently higher inflation in many of these non-traded sectors, suggesting that a lack of domestic competition is one of the factors damaging competitiveness. As the Irish economy grew rapidly, serious bottlenecks emerged. Many of these were in markets in which the state was the main supplier and could not respond to the increased demand and, because it protected its monopoly rights, would not allow new entrants to pick up the excess.

Recognising the role of non-traded inputs also allows us to understand why competitiveness is not driven solely by cheap labour. Economic efficiency, across all markets, is ultimately a better stimulus to competitiveness.

The increased globalisation of commerce in recent years means that mergers and cartels and restrictive practices are increasingly international in scope, amply illustrated by high profile cases such as Microsoft, Vitamins, and GE-Honeywell. It is important that there is increasing world wide acceptance of the important role that competition policy can play, and an increasing international understanding of the proper nature of that role in encouraging enterprise by eliminating entry barriers and supporting rivalry. Greater co-ordination of national competition policies, and increasing joint work and co-ordination by national agencies needs to work towards establishing these standards. It is vitally important that the proliferation of national competition authorities works with the grain of the market, and does not retard the development of world markets.

ECONOMIC POLICY ISSUES IN THE 21ST CENTURY

DENNIS C. MUELLER

The institutions enforcing competition policy should ideally be arranged in a federalist structure. Some potentially anti-competitive actions by Austrian companies impact solely or almost solely Austrian consumers, and should be addressed by the new Austrian competition policy authority. Some potentially anti-competitive actions by Austrian companies affect consumers in other parts of the European Union and should be investigated and challenged, if need be, by the EU competition policy authority.

In addition to these two rather obvious levels of competition policy authority, we need to also think about having a world competition policy authority, probably in some way linked to the World Trade Organization. National competition authorities face a serious conflict of interest when enforcing the laws against anti-competitive behavior, when the anti-competitive actions are directed not only at the consumers in the nation where a company is primarily located, but also at consumers in other countries. If Microsoft exploits a monopoly position in Europe or in other parts of the world, this can only benefit both the company and its owners and workers in the United States. Consumers outside of the United States cannot count on the U.S. Department of Justice (hereafter DoJ) or the Federal Trade Commission to protect their interests.

As an illustration of the problem, consider the recent merger between Boeing and McDonald-Douglas. It is of course quite possible that the DoJ was correct in its assessment that the merger would not have substantial anti-competitive effects in the United States. But it is also possible that the merger would have anti-competitive effects in both the United States and at the world level, and yet the JoD decided to allow it to go ahead reasoning that the gains to the United States from Boeing's enhanced market power across the world would more than offset the losses to consumers in the United States from the merger. Such reasoning would be perfectly rational from the point of view of an agency of the US government, which is responsible only to its elected representatives. If the Boeing and McDonald-Douglas merger could be expected to have anti-competitive consequences harming EU consumers then, of course, the EU Commission was certainly justified in raising objections against it.

As a second illustration of the problem, consider last year's proposed merger between General Electric and Honeywell. The EU blocked the merger and again its motivation for doing so may have been to protect European consumers from potentially anti-competitive effects of the merger. But there were also rumors circulating at the time that it was European competitors of General Electric and Honeywell, which sought and obtained protection. My point here is not to second guess the European Commission on either of these decisions, but to point out that when it comes to potential anti-competitive effects of actions by firms not based in the EU, its motivation may be different, and less defensible than when it confines itself to purely internal, EU matters – and the same is true of the JoD, the US Federal Trade Commission, the Japanese Fair Trade Commission and all other competition authorities around the world. Thus, unfortunately, I do not believe that we can rely solely upon competition among national competition authorities to protect the competitive process in a world of multinational corporations and great international interdependence.

Less this conclusion about the actions of government sound too cynical, let me point out another illustration. For many years the US government has required cigarette manufacturers to print on every package of cigarettes sold in the United States that they are potentially hazardous to one's health. Cigarette manufacturers were not required to print such a statement on packages of cigarettes sold outside of the United States. The motives of government officials regarding the welfare of citizens from outside of their country cannot be relied upon to promote the general welfare.

Professor Stiglitz mentioned the problem of anti-dumping rules, which are almost inevitably impediments to competition, and which harm the consumers in any country applying them. One important advantage of having a world competition authority would be that it would then be possible to ban all anti-dumping rules. The only reason why a country should be concerned about the low prices charged by foreign exporters is that it expects that the foreign exporters are charging low prices with the intention of driving domestic producers from the market, creating a monopoly and subsequently charging much higher prices. Any world competition authority would view such predatory actions as anti-competitive, however, and thus would step in and prevent them. With a world competition authority making sure that no firms engage in predatory actions on a world basis, no country would have to fear adverse consequences from foreign firms charging prices that are "too low," and all anti-dumping laws could be repealed.

It is important when thinking about international competitiveness that we not confine our attention to the private sector. The public sector in Austria accounts for roughly half of all economic activity, and the Austrian economy cannot be truly competitive unless both its private and its public sectors are efficient.

Imagine a group of managers of, say, pharmaceutical firms emerging from a smoke-filled room and being confronted by representatives of a competition policy authority who accuse the managers of meeting to rig prices. The managers respond that they were not fixing prices but only "harmonising them." As professor Stiglitz pointed out, everyone is in favor of competition for the other fellow, but at the same time wants an exemption from competition for his or herself. This is nowhere more true than for the governments of Europe. There has been much discussion of tax harmonisation in Europe in recent years. Tax harmonisation is not what European governments need. They need more competitive pressure to make them more efficient not less pressure. We need more competition in the public sector, not less.

Consider higher education as an example. I think that it is widely agreed among academicians and other observers of higher education systems around the world that the United States has the best higher education system in the world. Why? In my opinion an important part of the answer lies in the fact that it is a highly competitive system. Universities compete for faculty, universities compete for students, students compete to get into universities. When one bumps into a dean or department head at any of the top American universities, he or she will soon be pulling the latest ranking of universities out and bragging about the fact that his or her university has just moved up a couple of notches in the rankings, or bemoaning the fact that it has slipped a couple of notches. Every university is competing with every other university, and the results are evident in the quality of the "products" that they offer. In Continental Europe we have organized our higher education systems as a series of cartels and state monopolies with the inevitable consequence that our universities by and large offer low quality products. To improve on this situation more competition among universities is needed.

The benefits from improving the quality of our universities would extend far beyond the public sector. As one looks across Continental Europe one sees very few silicon valleys. Why? An important part of the answer, I believe, is that one also sees very few Stanford Universities in Europe. It is impossible to conceive of a silicon valley without a Stanford University. If our private sectors in Europe are going to be competitive with that of the United States and other countries in the 21st century, our public sectors must become more competitive, and there is no place where this is more true than in higher education.

EU POLICIES

NEW DEVELOPMENTS IN EUROPEAN COMPETITION POLICY

MARIO MONTI

1. THE CHALLENGES OF OUR TIMES

For more than ten years now, the Commission has launched a series of important reform initiatives in order to respond to the challenges of the fast changing and increasingly complex environment. The Commission must make sure that it continues to maintain a properly functioning framework for the protection of competition in the internal market: a key-factor in ensuring competitiveness of European industry, in creating the single market and in producing benefits for the consumers.

A first challenge is that, in a world of "global players", competition is going global as well. One of the Commission's major duties must therefore be to swiftly identify the changes occurring in the markets and to react properly. Second, the Union is currently preparing for the biggest enlargement in its history. It is therefore of highest importance to prepare workable solutions for a European Union consisting of more than 20 Member States.
Finally, with the Euro in the pockets of the European citizens, a properly functioning framework for the protection of competition in the internal market is as vital as ever as the basis of consumer benefit and prosperity in Europe.

In order to meet these challenges, the Commission has undertaken a regular review of the applicable competition law. The purpose of this continual process of reform is to make the substantive as well as the procedural law more simple, transparent and user friendly, to empower the national authorities to apply European competition law and finally to enable the Commission to better combat serious infringements wherever they occur in the internal market. Only this approach will in my view allow the Commission to fulfil its mission to adapt the law, to foster further integration, to free potential initiatives, whilst ensuring that consumers will win, not only in terms of price, but also in terms of choice, service and security. Moreover, the ongoing globalisation demands not only an enforcement of our bilateral co-operation with our main partners but also an intensification of international multilateral co-operation.

2. *A Profound Modernisation of Our Competition Rules*

The main item of our endeavour in the European competition policy reform has been the revision of the rules concerning the antitrust procedure and the review of the Merger Regulation.

2.1. The Reform of Regulation No. 17

Probably one of the best and most far-reaching examples of our determination to adapt ourselves to the change of time is the radically new system of procedural rules concerning Articles 81 and 82 of the Treaty, presently governed by Council Regulation No. 17 of 1962[1]. In this regard, the Commission has launched a major initiative to modernise the implementation of these rules which was first set out in its White Paper on Modernisation of April 1999[2].

The new system will abolish the current notification and authorisation system governed by Art. 81 (3) EC. Instead, Article 81 (3) EC will become a directly applicable provision. In other words, agreements between undertakings will be legal and fully enforceable without prior intervention of an authority once the conditions set out in this provision are met[3]. The saving of bureaucratic procedures will enable the Commission to do more meaningful enforcement work by focusing on serious infringements[4]. At the same time, it will strengthen companies' responsibility, as they have to decide on their own whether they are in compliance with the conditions of Art. 81 (3) EC or not.

---

[1] Regulation No 17: First Regulation implementing Articles 85 and 86 of the Treaty, **Official Journal P 013, 21/02/1962, p. 0204-0211**.

[2] White Paper on modernisation of the rules implementing Articles 85 and 86 of the EC Treaty – Corrigendum, **Official Journal C, 12/05/1999, p. 1.**

[3] Under the current legislation, agreements that may meet the conditions set out in Art. 81 (3) have to be notified under Art. 4 and 5 of Regulation No. 17, and the Commission has to take a decision in order to exempt those, which are in line with Art. 81 (3) EC.

[4] At this place I would like to point out that we have always expressed our determination to effectively deter incumbents from the most inadmissible practices, especially hard core cartels. As an example in this context may serve our last ten cartel decisions adopted last year, imposing over 1.8 billion Euro of fines.

Of even greater importance is that national competition authorities will be able to apply EC antitrust rules (i. e. Articles 81 and 82) in their entirety. With regard to the increasing integration of the European market and the enlargement that will take place in the near future, European competition law must be decentralised without, on the other hand, running the risk of a renationalisation of Community competition law. Procedural rules should therefore allow decentralised application of Community law by removing the obstacles posed at present, especially the Commission's sole power to apply Article 81(3)[5]. Community law could then be implemented by the body that is able to do so most effectively. As a rule, competition authorities of the Member States will be well placed to deal with cases that have major effects on the territory of their Member State, while cases with a larger geographic scope will continue to be best placed under the Commission's authority.

Furthermore, and completing this part of our reform initiatives, only Community competition law will apply in case that agreements or abusive practices affect trade between Member States. As a result, businesses will no longer have to comply with a full range of different legal systems. This satisfies our permanent concern to streamline and simplify the law, so as to minimise the compliance costs borne by companies. Seen in a more abstract perspective, in an integrating internal market, it makes sense to fundamentally shift from the current separate spheres to a common sphere in which Member States as well as the Commission apply the same law in close co-operation.

Taking into account the significant progress we have made in developing those new rules, we expect that the new system will come into force at the beginning of 2004.

2.2. THE REVIEW OF THE MERGER REGULATION

Our striving to respond to the signs of the time also concerns the review of our Merger Regulation that has been in force for over twelve years now[6]. Fur this purpose, the Commission has launched a Green Paper in

[5] See Art. 9 (1) of Regulation No 17.

[6] Council Regulation (EEC) No 4064/89 of 21. December 1989 on the control of concentrations between undertakings, **Official Journal L 395, 30.12.1989, p. 1.**

December 2001[7], seeking to improve merger case handling in procedure as well as in substance.

One of the most important points within the current discussion is the simplification of the thresholds dealing with the necessary Community dimension of a concentration. While the turnover thresholds laid down in Art. 1 (2) of the Merger Regulation are to be maintained, it is proposed that Art. 1 (3) will no longer be directly based on reaching certain specified levels of turnover. Instead, the fact that a merger gives rise to at least three national notification requirements would satisfy to trigger an automatic Commission competence[8]. Of course, this would call for a concept of pre-notification between the Member States and the Commission in order to make the system operational. We therefore foresee the need to elaborate flanking guidelines on the modalities of the outlined new referral procedure.

Another chapter in the Green Paper that is of high interest is the debate on the substantive test for the assessment of concentrations set out in Art. 2 of the Merger Regulation. Both procedural and substantive reasons have been advanced for a re-evaluation of the appropriateness of this test[9].

Seen from a procedural point of view, an alignment of the Merger Regulation's appraisal criteria with those applied in other jurisdictions outside the European Union, especially the United States, could facilitate merging parties' global assessment of possible competition issues arising from contemplated transactions. The adoption of a concept similar to this of the "substantial lessening of competition-test" (the "SLC-test") adopted in the US, Canada and Australia could at the same time lead to a better basis for multilateral co-operation where mergers are notified under several jurisdictions. On the other hand, it must be borne in mind that almost all the Member States have built up their merger control provisions on the basis of the current Regulation's dominance test. Strengthening of transparency and co-operation in cases

[7] Green Paper on the review of the Merger Regulation, COM (2001) 74/6 – 11.12.2001.

[8] Green Paper on the review of the Merger Regulation at II. A. 3. d..

[9] Green Paper on the review of the Merger Regulation at III. A..

where non-EU States are involved could therefore in exchange lead to disparity within the Community.

Another concern in this context is whether European competition law should be in favour of a merger test that expressly calls for the evaluation of merger specific efficiencies, as it is for example the case in the United States[10]. For instance, some of the parties are in favour of such an approach, allowing transactions where especially benefits in form of price decreases are likely to be passed on to consumers, despite a situation of dominance or substantial lessening of competition.

Although it is our ‘working target’ to have a proposal for amending the Merger Regulation adopted by the Commission by the end of this year, it is unlikely to reach conclusions concerning the latter discussion within this time frame, touching on principles of fundamental importance to competition law.

3. Other Provisions in Order to Refine European Competition Policy

Other recent legislative and procedural reforms of the Commission have focused on facilitating the application of European competition rules, creating more transparency, addressing hardcore restrictions and contributing to the completion of the single market. In this context, I would like to concentrate on two areas where significant progress has been made: the review of substantive antitrust rules and the fight against cartels.

3.1. The Review of the Substantive Antitrust Rules Applicable to both Horizontal and Vertical Agreements

In the last few years, the Commission has been completing a systematic and thorough review of the substantive antitrust rules applicable to agreements between companies. This process aimed at making them more simple, basing them on a more economic approach and reducing or even removing the regulatory burden for companies lacking market power.

[10] See the US Horizental Merger Guidelines.

At the beginning of this process, the Commission adopted in December 1999 a new block exemption applicable to all vertical agreements[11]. In the absence of hardcore restrictions, it provides a 'save haven' for agreements between companies with a market share of less than 30%. This regulation was accompanied by guidelines on vertical agreements, set out in May 2000[12]. In November 2000, the Commission also adopted two new Block Exemption Regulations, regarding specialisation and R&D agreements, as well as guidelines on horizontal co-operation[13].
The recently adopted draft of a new Block Exemption Regulation on car distribution[14] is one of the best known examples of our aim to foster the integration of the internal market. The car industry has always been a vital element of our economy. We therefore see an urgent need to achieve a real single market for cars, the basis for competitiveness in the car industry, which is in turn the primary condition to satisfy the consumer needs.

This vast overhaul of substantive antitrust rules is currently being completed with the review of our Technology Transfer Block Exemption[15], a work that requires the alignment of our rules on intellectual property licensing with the recent market evolutions.

---

[11] Commission Regulation No 2790/1999 of 22.12.1999 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices, **Official Journal L 336, 29/12/1999 p. 21.**

[12] Commission notice - Guidelines on Vertical Restraints, **Official Journal C 291, 13/10/2000 p.1.**

[13] Commission Regulation No 2658/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of specialisation agreements, **Official Journal L 304, 05/12/2000, p.3;** Commission Regulation No 2659/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of research and development agreements, **Official Journal L 304, 05/12/2000** *p.7;* Commission Notice Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements**, Official Journal C 003, 06/01/200, p.2. p.7;** Commission Notice Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements, **Official Journal C 003, 06/01/200, p. 2.**

[14] Draft new Block Exemption on car distribution, Official Journal C 67, 16/03/2002, p.2.

[15] Commission Regulation (EC) No 240/96 of 31 January 1996 on the application of Article 85 (3) of the Treaty to certain categories of technology transfer agreements, **Official Journal L 031, 09/02/1996 p.2.**

3.2. THE FIGHT AGAINST CARTELS

One of the Commission competition policy's highest priorities is the battle against cartels. Over the past few years, we have witnessed an acceleration in the uncovering and prosecution of price-fixing, market-sharing and bid-rigging cartels. The first Commission Leniency Note of 1996[16] has lead to a substantial increase in the number of cartels that have been uncovered and punished.

Experience has shown that the effectiveness of the Notice could be improved by an increase in transparency and certainty as to the conditions on which any reduction of fines is granted. That is why we have released a New Leniency Notice[17]. The novelty of this notice is that the first companies that enable the Commission to make a major step towards the successful prosecution of a cartel will be granted an immunity from fines, so long as the submission of evidence takes place at a very early stage of the investigation[18]. I am convinced that the new policy will create even greater incentives to denounce this scourge of the economy which has companies making illicit profits at the consumer's expense.

4. THE DEVELOPMENT OF INTERNATIONAL CO-OPERATION

So far I have focused on the developments in our 'internal' policies. However, I believe that the challenges of the globalisation process can only be successfully tackled if we also develop our 'external' policy. The increasing interdependence of economies world-wide requires that we develop new instruments of co-operation. Thus, the intensification of international co-operation, not only within the European Market, but also with our main partners on the other side of the Atlantic as well as with our future members, has become one of the most urgent needs. The Commission therefore pursues the negotiations on the accession of new Member States, with a particular view to the implementation of competition policy. Furthermore, the successful co-operation with our Northern American colleagues has become almost a daily practice.

---

[16] Commission Notice on the non-imposition or reduction of fines in cartel cases, **Official Journal C 207 , 18/07/1996 p. 4.**

[17] Notice on immunity from fines and reduction of fines in cartel cases, **Official Journal C 45, 19/02/2002, p. 3.**

[18] See point 8 of the Notice on immunity from fines.

Yet, given the growing number of national authorities we must not limit ourselves to bilateral contacts. The fast progressing globalisation both in economic and political areas is resulting in a compelling need for new co-operation instruments and more multilateral communication. This is why the Commission has, for more than six years now, strongly supported the adoption of a multilateral agreement on competition, initiated by the WTO. This is also why the Commission launched, together with the United States and others, in October 2001 the International Competition Network (ICN), an informal network that will, on a regular basis, bring together antitrust agencies from all over the world. I am looking forward to the first meeting of the ICN in September 2002 in Italy.

5. Conclusion

Globalisation, integration of the internal market, enlargement, these are the challenges we are faced with. In the light of recent developments in the field of competition policy, I think that it is fair to say that a lot of the necessary work has already been done by the Commission, and we will pursue these objectives with the utmost determination. The co-operation with and the support by the competition authorities of the Member States has always been an essential element for the success of this work, and I am looking forward to continue this common effort.

THE FUTURE OF AUSTRIAN COMPETITION POLICY

MICHAEL BÖHEIM

ABSTRACT

Competition policy in Austria faces an exciting future. After long years of lethargy, and their detrimental effect of having key segments of the Austrian economy labouring under high market concentration rates, competition policy is at last making a serious attempt to shake off its undeserved "wallflower" status, challenged by external as well as internal pressure to reform.

With its legal and institutional framework conditions recently updated, Austrian competition policy is now faced with the need to adapt to European standards governing handling and assessment of restraints on competition, further aggravated by the requirement to thoroughly revise its own policy objectives.

The prospect of an institutional reform of Austrian competition laws should be seen as an opportunity to put Austrian competition policy on an entirely new methodological and contentual footing. Exemplary models for this purpose are offered by the European Commission's Competition Directorate-General, as well as by other national competition authorities governed by a modern and more economics-based approach to competition.

In view of past deficiencies and failings in the field, it appears advisable in general to step up the pace of combating anti-competitive practices (cartels, anticompetive mergers and abuse of a dominat position within a market). Even though the political will and practical capacity to repair past failures of competition policy appear to be limited in spite of the existence of legal tools, measures nevertheless need to be taken to ensure that an extremely stringent yardstick, based on a detailed economic market analysis, is applied in future assessments of restrictive practices.

1. What is the Raison d’Être of Competition Policy?

The economic model predicts that more competition will lead to greater allocation efficiency through the effect that the price of a good will converge towards the marginal costs of its production. If competition is **perfect**, a no-profit state will ensue according to this model, because prices will be identical with the marginal costs (cf. Bormann – Finsinger 1999).

Producers thus have an incentive to raise their profits at the expense of consumers by taking measures to restrain competition. A **laissez faire** government would not be able to counter this strategic option. But what is a strategy to maximise profits at the individual (producer’s) level, results in serious consequences that are detrimental to the economy as a whole – concentration of power in just a few hands, risk of collusion and welfare losses (cf. Tichy 2000).

Empirical analyses confirm that **market concentration** will have the general effect of raising prices and profits, even though the link is certainly not linear (cf. Bain 1951; Collins – Preston 1969; Geroski 1981; Utton 1986; Scott 1989). But the real threat to competitive markets is not so much market concentration per se (which is actually just an indicator of market power), but the danger of collusion which grows with the rate of concentration. The incentive for a few market participants to collude is as big as it is real, especially since it offers them a chance to boost their profits (at the expense of consumers or suppliers).

The **danger of collusion** is the greater the fewer participants there are in a given market. Selten (1973) showed in his game theory model that the incidence of collusion will decline markedly only when there are more than five competitors, because an outsider can exploit the situation to increase his own market share (and thus his own profit) by behaving contrary to the cartel (i.e. by charging lower prices): In Selten’s model, the probability of collusion is 100 percent for a clutch of four or fewer competitors; for five competitors it drops to 22 percent, and for more than five competitors it is down to 1 percent. Several empirical studies have confirmed his theoretical findings (cf. Hay – Kelley 1974; Bresnahan – Reiss 1991).

Concentrated markets have another effect that is frequently underestimated: they concentrate power in private hands, which, through lobbying, can exert their influence beyond the purely economic sphere right into the political sphere[1]. The fact that major companies can bring their power to bear on politics is as democratically dubious a practice as it is widespread. "Big firms represent a concentration of power in private hands rather than democratically chosen governments. Such private power can cross economic boundaries and poses the threat of an extra-market power which can change the rules of the game in favour of the dominant corporations" (Jacquemin – de Jong 1977, 198).

Restrictions on competition may have a wide range of effects: higher prices, limited choice of products, displacement of competitors, creation of market entry barriers, price pressure on suppliers, wage pressure on workers, loss of jobs – these are just a few of the potential effects that may occur if powerful companies were to abuse their market-dominating position. Yet for all the diversity of potential effects, they are identical in causing welfare losses owing to the misallocation of resources.

Studies in the US (Harberger 1954; Leibenstein 1966), show that static resource misallocation (i.e. resources are not efficiently utilised in the production process) due to inadequate competition is not very grave (it is estimated at 1% of GDP at most). Yet, according to current OECD studies (Ahn 2002), **dynamic efficiency gains** obtained in the long term by competition-fostering measures should be markedly higher, in spite of their being difficult to quantify overall.

Dynamic efficiency gains come in the form of productivity increases, welfare gains and higher economic growth. These are triggered by a burst in innovation activities on the part of companies (actuated by the motto "competition drives innovation"): when market participants can no longer improve their market position by anti-competitive practices, they will have to make efforts to become more innovative and more productive than their competitors. Empirically, the premise that greater competition leads to more (economically desirable) innovation and

[1] This applies particularly to the media sector, which, like no other sector, combines and interlinks economic and political interests. Cf. the discussion below in 2.2.

economic growth can be evidenced by the robust positive connex between competition intensity and productivity growth (cf. Nickell – Nicolitsas – Dryden 1997; Aghion – Howitt 1998; Grosfeld – Tressel 2001; Januszewski – Köke – Winter 2001).

2. *Reforming Competition Policy in Austria*

Recently, developments at the European level have conspired with domestic discussions to press for reform of competition policy in Austria.

2.1. Exogeneous Pressure to Reform

Competition has always been one of the key policies used by the European Union to define itself. Consequently, developments at the European level are of eminent importance for its Member States when it comes to designing their own policies on competition.

Currently, European competition policy is undergoing large-scale change[2]. In presenting its white paper on modernising the rules to apply Articles 81 and 82 of the EC Treaty (reform of Council Regulation 17/1962), the European Commission opted for a fundamentally different approval system for competition-restraining arrangements. This system of legal exemptions is based on the direct applicability of the exemption clause in Article 81 (3), and it is conditional upon the Commission, the national competition authorities and the courts applying this provision directly in all proceedings. Upon passage of the white paper, and following an in-depth consultation process, a draft has now been submitted for a Council regulation to implement the competition rules set forth in Articles 81 and 82 of the EC Treaty.

In its Article 5, this draft regulation refers responsibility for applying Articles 81 and 82 of the EC Treaty to the national competition authorities. According to Article 36 of the regulation, the Member States must identify the responsible competition authorities and comprehensively authorise them to apply the said articles directly and without qualifications.

[2] For details about new developments in European competition policy cf. the contribution by Commissioner Monti in this book.

Even though the regulation expressly leaves it to the Member States to "identify the responsible competition authorities", these need to be **independent competition authorities** in order to comply with the Commission's intentions, which co-operate in a network involving the Member States and the Commission, and which are primarily charged with relieving the Commission of cases concerning domestic markets.

The reform of the Austrian law on competition reflects developments at the European level with regard to institutional restructuring, by the establishment of an independent federal competition authority (**Bundeswettbewerbsbehörde**) which does not take instructions from the government and which is granted comprehensive competences to investigate and prosecute cases of restrictive competitive practices[3].

In addition to setting its institutional framework, the Austrian federal competition authority will have to base its work on European best practices. Here again, the direction is determined by the European Commission which prefers a "more economics based approach" in handling competition cases[4].

2.2. ENDOGENOUS PRESSURE TO REFORM

Without going too much into the details of the critique of the former cartel regime, it can still be noted that, in spite of widely including the economic and social partners in the cartel court system, the legal and institutional framework was inadequate in preventing large-scale market concentrations in key sectors of the Austrian economy (Table 1).

---

3 Establishment of a federal competition authoritiy is only one part of the large-scale reform of the Austrian law on competition. The amendments were only recently adopted by Parliament (20 March 2002). For details about the new legal framework cf. the contribution by Burger - Handler in this book.

4 Cf. Chapter 3 below.

Table 1: Sectors showing high market concentration in Austria

	Concentration rates (in %)				No. of market participants with market shares		
Sector	**Market leader**	**CR2**	**CR3**	**CR4**	**m ≥ 30%**	**30% > m ≥ 20%**	**20% > m ≥ 10%**
Political news magazines	100	—	—	—	1	0	0
Private health insurance	50	71	84	94	1	1	2
Drugstores	28	52	76	82	0	3	0
Food retailing	32	59	72	83	1	1	2
Furniture retailing	38	61	70	78	1	1	1
Sports articles retailing	38	55	67	73	1	1	1
DIY stores	32	48	60	72	1	0	3

Source: Regioplan, own calculations.

What the industries listed in Table 1 have in common is not just the high concentration rates but also that they operate in markets shared among fewer than five major competitors. As already outlined above, game theory deduces a considerable risk of collusion from such closed oligopolistic markets (cf. Selten 1973), which potentially impairs the functioning of competition.

Market concentration in Austria is particularly noticeable in the field of political news magazines, with a single group controlling the entire market, enjoying, in fact, a monopoly position. Developments in the media market are exemplary for the failure of competition policy, and they impressively demonstrate that the former cartel law regime was an unsuitable tool to ensure that competition would work.

The concentration of political news magazines started off with the (in)famous "Formil" ruling of the cartel court[5], which accepted the merger of the KURIER group (**Profil**) and the NEWS group (**News, Format**). This was, without doubt, the most important competition case to be decided by the cartel court since merger supervision was introduced in 1993. From a cartel law point of view, the case was, on the one hand, an issue of competition: whether assembling all Austrian political news magazines (**Profil, News and Format**) under a single roof would lead to a dominant position on the Austrian market for political weeklies; and on the other hand, it involved a democratic issue: whether this merger would reduce media variety.

5 File nos 26 Kt 342, 369, 380, 381, 382, 383/00.

If politicians and the social and economic partners[6] had had their way, the merger would have been approved without even asking the cartel court to review the case. Contrary to government announcements, neither the Republic of Austria nor the social partners had filed an application for the court to review the case[7].

Based on an **ex officio** review, a procedure which was introduced in 1999 and which can be initiated by the cartel court itself if public interests are at stake, the Formil merger had its day in court. Even though the cartel court reasoned for much of its argument that the merger should be prohibited, in the end it gave its permission[8], although tying it to conditions[9]. No appeal was filed against the ruling of the first instance[10], so that the merger of **Profil, News and Format** became final.

The Formil case produced such an amassment of "sins" concerning competition policy[11] that a veritable avalanche of a public discussion was launched on the defects and inadequacies of Austrian competition law which went far beyond the case in dispute. Intense negotiations

---

6 Under the old legal status the Chambers of Labour, of Commerce and of Agriculture acted as official lobbyists (Amtsparteien) in cartel court procedures which gave them the right to take competition cases to court.

7 The ruling of the cartel court was preceded by agitated political discussion of the project – the dailies (without so much as a shred of evidence) even reported of interventions and attempts at intimidation among the highest political ranks. While it appears futile today to speculate on why no such application was filed, it is at least remarkable to consider the hesitancy evinced by public officeholders in their conduct.

8 According to unconfirmed rumours, the regular judge acting as the chairwoman at the decisive session was overruled by the two lay judges appointed by the social partners. This would no longer be possible under the 2002 amendment to the cartel law which provides for two regular judges and two lay judges.

9 Conditions are a widespread practice also used in EU competition policy. Nevertheless, they are rarely the result of strict rules but are usually negotiated in advance. Yet they are rarely more than an alibi (Neven et al. 1993; Sleuwaegen 1998).

10 In this connection it is remarkable to look at the reasoning given by the minister of justice for foregoing an appeal ("no prospect of success”).

11 ... which were, moreover, highly profiled in public due to the media having a field day in reporting on the case.

have since produced a new competition regime which certainly is more suitable as a legal foundation to ensure functioning competition than was the previous one[12].

While there is a positive outlook for the future, the competitive burdens accumulated in the past will continue to press upon us. The past failure to prevent market concentrations cannot realistically be made good again in the future[13]. Accordingly, what is needed is ongoing monitoring of sectors that run the risk of or are already in the throes of high concentration, in order to uncover and prevent future abuse of dominat positions within markets.

3. The European School on Competition Law

3.1. Towards a New Paradigm in European Competition Policy

The pace of technological development and globalisation, together with the rapid convergence of whole sectors of the economy have rendered obsolete the traditional way of analysing markets with regard to the aspects of competition law.

In contrast to the American Antitrust Law, which has always been based on the joint application of legal and economic analysis[14], European competition policy has traditionally been more focused on the law and has, through the change of its framework, arrived at the limits of its analytical powers.

Starting in the 1990s with initiatives taken by Commissioner **van Miert** and developing the modernisation process further through efforts by Commissioner **Monti**, the European Commission has moved towards awarding a greater role to the economic analysis of competition issues in order to cope with these new developments (cf. Hildebrand 2000).

12 Cf. Böheim (2002A).

13 The reformed cartel law certainly makes ultimate ratio provision for tools to deglomerate powerful corporate groups. Yet the option as such does not yet say anything about whether such a drastic tool will be actually used.

14 The US Sherman Act of 1890 is generally viewed as the first competition law which requires both a legal and an economic aspect in analysing cases of competitive restraint.

As a result, the drive to modernise European competition policy has made for an increased use of economic analysis methods in both designing and interpreting competition standards and in judging actual cases.

3.2. THE COMPETITION CONCEPT OF THE EUROPEAN SCHOOL

Modern approaches to competition theory are increasingly gaining ground in Europe, not least due to the shift from law to economics in competition policy. The European Commission developed its own "more economics based approach" as a theoretical underpinning of its economic analysis, which has since become known as **"European School"** (cf. Hildebrand, 1998).

Generally the view prevails that the more widespread use of economic methods in competition policy is not just highly desirable but actually indispensable (van Miert 1998). This approach is most clearly expressed in current documents which explicitly outline the European Commission's ideas on approaching and evaluating facts of relevance for competition policy. Examples would be the "de minimis" notice[15], the notice on the definition of the relevant market[16], various regulations to reform group exemption regulations[17] and the guidelines for vertical agreements[18].

Even though the greater emphasis on economic analysis will certainly make for greater complexity in the decision-making process, the approach pursued by the European Commission is guided by a pragmatic view. In order to obtain as wide as possible a view of the problem, both qualitative and quantitative methods are used, as is evidenced from the definition of the relevant market in practical and geographic terms. It is only the overall view, furnished by a qualitative as well as quantitative analysis, which ensures that the facts can be comprehensibly evaluated. The Commission intends that complex econometric models and methods are used only when simpler analytical

[15] Commission notice on aggrements of minor importance, OJ C 368, 22 December 2001.

[16] OJ C 372, 9 December 1997.

[17] Currently the Commission draft to reform group exemption regulations for the automotive sector.

[18] Guidelines on vertical restraints, OJ C 291, 13 October 2000.

tools do not produce the desired effect. The priority is on predictability and legal certainty, especially since the Commission's decisions have to hold up to the scrutiny of the European Court of Justice.

4. Consequences for Austrian Competition Policy

Traditionally, Austria has emphasised a legal approach to cases of competitive abuse. But recent developments at the European level have subjected Austrian competition policy to pressure to adjust, applied from outside on the institutional and methodological side.

As regards the institutional framework, the reform takes a major step in the right direction. Establishment of an independent federal competition authority, which is not bound by government instructions and which is provided with the authority to investigate and prosecute, not only takes account of concepts concerning decentralisation of the EU competition law, but also closes a substantial institutional gap of the previous system which was unable to prevent significant market concentrations in Austria.

Methodologically, and viewed against the background of harmonisation and decentralisation of the EU competition law, the new federal competition authority will have no choice but to adopt the "more economics based approach" stipulated by the European Commission. In the future, a better understanding of competition economics and its methods will be the **conditio sine qua non** for successfully analysing the facts in cases of restrictive competitive practices. What this means for the rulings of the cartel court cannot yet be foreseen, but it is certainly expected that the enhanced use of economic tools for analysis will breathe new life into case assessments – which will doubtlessly be beneficial for competition in Austria.

Apart from the methodological shift towards a "more economics based approach", there are some further conclusions to be drawn on the content of Austrian competition policy (cf. Tichy 2000).

Austrian competition policy was either unable or unwilling to prevent the extreme market concentration in some sectors (media, food retailing, etc.). In view of these past failures, it appears both necessary and useful to take a stricter line against anti-competitive practices (cartels, mergers and abuse of a market-dominating position). Although the political will and practical feasibility to repair past failures of competition policy appears to be limited in spite of legal tools being available, measures still need to be taken to ensure that an extremely stringent yardstick is applied to future cases. Thus, practices such as mergers would need to be prohibited in sectors already characterised by high market concentrations[19].

Apart from market concentration as such, more attention should be focused on the **number of competitors** in a given market. Mergers should be generally rejected if the number of key market participants in any given market is down to five (minimum market share). As is convincingly demonstrated by the theoretical literature and by empirical studies, the danger of collusion intensifies when that number is lower. It is important to pre-emptively prevent market structures that encourage collusion, because collusion is extremely difficult to uncover and even more difficult to prove.

Markets of fewer than five independent competitors should be watched even more closely. Market segments characterised by network externalities (media, telecoms, utilities, etc.) in particular require a minimum number of competitors. In extreme cases, the authorities should not shrink from divesting market structures that obstruct competition.

In order to preventively rein in sectors prone to concentration, but also as a tool of competition advocacy, constant **monitoring** of such sectors is recommended. Based on a standardised evaluation method, it should be possible to perform both dynamic **intra-sectoral** comparisons as well as static **inter-sectoral** comparisons of the competitive situation. Serious deviations (both within a sector over time and between sectors) would be a signal for economic policy to take competition-strengthening measures in the affected market.

Ultimately, competition policy will be effective only to the extent of its credibility with those affected. In this connection it may be a problem that consumers seem to be not sufficiently aware of the implications of

---

[19] It would be a serious mistake to continue to "muddle along" by issuing a permit subject to conditions, as had been established practice in the past.

competition policy on their welfare. The important role of information and involvement of the public in competition matters has also been emphasised recently by the European Commission (cf. Monti 2001). Provided that the Austrian federal competition authority regularly updates and publishes the findings of its monitoring activities, a true picture of the competitive situation could emerge for major sectors of the Austrian economy. Armed with a transparent view of the competitive position, the interest public could then step up its demand for measures to make competition work. Public pressure on corporate offenders and competition authorities would be able to achieve much: no company can afford to be pilloried for anti-competitive business practices. Such indirect pressure, which acts preventively and which is exerted by fully informing the public, might in many cases be more effective than direct pressure exerted through endless legal rounds at the cartel court.

5. LITERATURE

Aghion, P., Howitt, P., "Endogenous Growth Theory", Cambridge/Mass., London, 1998.

Ahn, S., "Competition, innovation and productivity growth: A review of theory and evidence", OECD Economics department working paper no. 317, Paris, 2002.

Böheim, M., "Kartellrecht: Besser der Spatz in der Hand ...", Der Standard, 2nd/3rd February, 43, 2002A.

Böheim, M., "Quantitative Methoden in der Wettbewerbspolitik", WIFO, Vienna, mimeo, 2002B.

Bain. J.S., "Relation of the profit rate to industry concentration: American manufacturing 1936–1940", Quarterly Journal of Economics 65, pp. 93–324, 1951.

Bormann, J., Finsinger, J., "Markt und Regulierung", Munich, 1999.

Bresnahan, T.F., Reiss, P.C., "Entry and competition in concentrated markets", Journal of Political Economy 99(5), pp. 977–1009, 1991.

Collins, N., Preston, L., "Price cost margins and industry structure", Review of Economics and Statistics 51, pp. 271–286, 1969.

European Commission, "XXXth Report on Competition Policy 2000", Luxembourg, 2001.

Geroski, P.A., "Specification and testing of the profit-concentration, price and critical concentration ratios", Economica 48, pp. 279–288, 1981.

Grosfeld, I., Tressel, T., "Competition and corporate governance: substitutes or compliments? Evidence from Warsaw Stock Exchange", Davidson Institute Working Paper Series no. 369, The University of Michigan Business School, 2001.

Harberger, A.C., "Monopoly and resource allocation", American Economic Review 44(2), pp. 77–87, 1954.

Hay, G.A., Kelley, D., "An empirical survey of price fixing conspiracies", Journal of Law and Economics 17, pp. 13–38, 1974.

Hildebrand, D., "The Role of Economic Analysis in the EC Competition Rules", 2nd edition, The Hague – London – Boston, 1998.

Hildebrand, D., "The European School", in: "The European Antitrust Review 2000", pp. 11–14, 2000.

Jacquemin, A., de Jong, H.W., "European industrial organization", London, 1977.

Januszewski, S.I., Köke, J., Winter, J.K., "Product market competition, corporate governance and firm performance: An empirical analysis for Germany", mimeo, 2001.

Leibenstein, H., "Allocative efficiency versus X-efficiency", American Economic Review 56, pp. 392–415, 1966.

Monti, M., "Foreword", in: European Commission (2001), pp. 8-14, 2001.

Neven, D., et al., "Mergers in daylight – The economics and politics of merger control", London, 1993.

Nickell, S., Nicolitsas, D., Dryden, N., "What makes firms perform well?", European Economic Review 41, pp. 783–796, 1997.

Scott, J.T., "Purposive diversification as a motive for merger", International Journal of Industrial Organization 7, pp. 35–47, 1989.

Selten, R., "A simple model of imperfect competition where four are few and six are many", International Journal of Game Theory 2, pp. 141–201, 1973.

Sleuwaegen, L., "Cross-border mergers and EC competition policy", The World Economy 21(8), pp. 1077–1094, 1998.

Tichy, G., "Fusionen und Übernahmen: Erfolgsaussichten von Fusionen", Vienna, 2000.

Utton, M.A., "Profits and the stability of monopoly", Cambridge, 1986.

Van Miert, K., "Foreword", in: Hildebrand (1998), V–VI, 1998.

THE CARDIFF REFORM PROCESS OF GOODS AND CAPITAL MARKETS – WHAT IS TO BE LEARNED FROM OTHER EU COUNTRIES?

VERENA STEYER

Up to the present, a high level of economic integration has already been reached in the European Union, and especially the Internal Market is currently reaching a stage of maturity which requires not just the legal enforcement of existing regulation, but also the constant monitoring of market developments and permanent contacts with citizens and businesses. The emphasis has, therefore, turned now to improving efficiency in the operation of the Internal Market. To this end, the Council launched the "Cardiff process" in 1998[1]. The objective of the process is to monitor economic reform in Member States in order to improve the functioning of product and capital markets in the Community and to enable the Internal Market to make its full contribution to competitiveness, growth and employment.[2]

The latest (= fourth) national reports on structural reforms and the latest (=fourth) Commission's Cardiff report[3] take a comprehensive look at the whole ongoing reform processes: the previous ones outline the measures taken, they assess how well each Member State is carrying out its reforms, and they highlight the economic consequences of the reforms; the latter integrates the relevant developments in goods and capital markets at the European level in the light of the long term objectives defined at the March 2000 Lisbon European Council, the

---

1 The Council decided to *"establish a light procedure under which Member States and the Commission will produce short year-end reports within their areas of competence on product and capital markets. This procedure will (...) help exchange best practice (...)."* The European Council also welcomed the Commission's proposal to *"produce a report on structural issues and policies."* (See Presidency conclusions of the June 1998 Cardiff European Council: URL: http://www.europarl.eu.int/summits/car1_en.htm).

2 The Cardiff process is euphemistically paraphrased as "an engine for continued progress towards efficient product and capital markets" in the Swedish national report 2001.

3 The national reports and the Commission Cardiff report can be found on the website of the Economic Policy Committee.
URL: http://europa.eu.int/comm/economy_finance/epc/index_en.htm.

March 2001 Stockholm European Council and the June 2001 Gothenburg European Council.[4] In the course of giving operational content to its ambitious target[5], it was emphatically accentuated at the March 2002 Barcelona European Council that *"real, effective competition in markets is a cornerstone of the economic reform process."* Notwithstanding the already achieved progress of the EU economic reforms, it was in addition emphasised that measures *"to liberalise, open up, integrate and build competition in European goods markets (...to) boost production, employment, income and welfare" are still needed "to secure greater economic efficiency and strengthen the competitiveness of the European Union".*[6]

Due to the prime importance of liberalisation and competition policies to reinforce effective competition, the recent liberalisation trends in network industries[7] which have been undertaken within the framework of the "Cardiff reform process" in the Member States are outlined in the following. Subsequently, attention is drawn to the steps taken by several Member States to increase powers and the operating capacity of their competition authorities.

1. Network Industries

In the late 1980s, the creation of the Internal Market and the subsequent removal of trade and competition barriers shifted the attention of European and national policy-makers on the need to liberalise the European network industries. This "need to reform" results from the dual nature of these industries: First, these sectors are economically important. Network industries currently account for about 6% of EU

[4] The Presidency conclusions from the Lisbon, Stockholm and Gothenburg European Councils can be found on URL: http://ue.eu.int/en/Info/eurocouncil/index.htm.

[5] That is *"making the European Union the most competitive and dynamic knowledge-based economy in the world."* (See Presidency conclusions from the March 2000 Lisbon European Council; URL: http://ue.eu.int/Newsroom/LoadDoc.asp?BID=76&DID=60917&LANG=1.)

[6] See Presidency conclusions from the March 2002 Barcelona European Council: URL: http://ue.eu.int/newsroom/makeFrame.asp?MAX=&BID=76&DID=69871&LANG=1&File=/pressData/en/ec/69871.pdf&Picture=0

[7] In particular it will be focused on the telecommunication and energy sectors.

GDP and employment.[8] Furthermore, prices in these industries impact directly and indirectly on prices in the economy as a whole and hence on the economy's competitiveness. Secondly, ensuring access to high quality services of general interest to citizens at affordable prices is a public policy objective[9], since the services of general interest provided by these industries impact directly on citizens' welfare. The liberalisation of EU utilities, notably telecommunications and to a lesser extent energy accelerated in the late 1990s and has succeeded in creating new markets, delivering higher-quality services and lowering costs for the benefit of European consumers.

On January 1st 1998, the **telecommunication sector** – after a decade of liberalisation and harmonisation efforts – was fully liberalised in most Member States. In July 2000, the Commission issued six legal proposals known as the "telecom package" to enhance fair competition, transparency and consumer protection. Amongst these measures, the regulation 2887/2000 on unbundling of the local loop was adopted in December 2000 and became mandatory from January 2001. Thus competition in telecommunications is today well-established, mainly in those countries who liberalised earliest, in long-distance and international calls and in particularly in the mobile-phone sector. Even though the market share of incumbent operators has fallen in all Member States, incumbents still keep high market shares in most segments of the market, especially in the local calls segment[10]. The relatively small number of competitors in the telecom sector is mainly due to the fact, that the number of players is limited by spectrum and

---

8 Solely the European energy market is worth 350 billion Euro a year. (See: The Economist, 23rd March 2002, p 29.)

9 In the course of carrying out reforms, this fact is sometimes used as an excuse for safeguarding a monopoly position in network industries. For instance France in its national report argues in an ambiguous way that it is *"committed to maintaining the quality and performance of its public services and to ensure that they cover as much as possible of national territory. The part played by competition must therefore be compatible with these objectives (...)."*

10 But with the notable exception of UK and Germany, where the incumbent's market share has fallen to 70%.

that operators have to bid for a limited number of licenses.[11] An important issue to ensure competition is to open domestic markets to international competition. But in the telecom sector such access may be limited – as already mentioned above – by the availability of licences offered by the regulator, by the number of interconnection agreements between operators, by the availability of lines and possibly by technology. The prices for the EU-15 in telecommunications equipment and services have declined by around 16,5% in nominal terms between January 1996 and August 2001. The decline has been more pronounced in Ireland, Germany and the UK. In general, the price reductions have made telecommunication services more affordable to Europeans of different income levels. Telecom regulators were reformed and strengthened in Finland and Greece, reforms are underway in Belgium, Ireland and Portugal.

In **electricity**, a Community directive (96/92/EC) sets out the basic rules for opening up markets to competition. A major objective is to increase efficiency in order to provide lower prices. The directive is based on two important principles: freedom of choice for eligible consumers and free third party access (TPA) to the transmission network. Market opening occurs in three steps. In February 1999, large consumers were permitted to choose their suppliers. A second step in February 2000 increased the percentage of liberalised national electricity demand from 26% to 28%. A third step is set for February 2003 pushing the ratio to 33%. But remarkably many countries (Austria, Germany, Finland, Sweden and the UK) have decided to go further and to fully liberalise the demand side of these markets. They will be followed by Denmark and Spain in 2003, by the Netherlands in 2004, by Ireland in 2005 and by Belgium in 2007. Currently, about 65% of the electricity demand in the EU is open to competition. The market shares of the incumbent in generation and of the three largest distributors are lower in those countries that are most advanced on the path of liberalisation – the UK, Finland, Germany, Sweden and Austria. But nevertheless distribution in some countries is still in the hands of local monopolies with market share of 100% in the area(s) where they are active. In Greece, France and Ireland the market share of the

[11] The market seems to evolve *"from a situation of monopoly to a situation of oligopoly"*, as remarked in the Annex to the 2001 Commissions Cardiff Report.

incumbents remains in general rather high. In the UK, stronger unbundling was introduced in electricity: Now the same legal person can no longer hold licences for both electricity supply and electricity distribution. In addition the UK established a new wholesale trading arrangement in 2001, which is based on bilateral contracts and which thus introduces genuine competition. In Belgium unbundling is also taking place at the regional level, implying that the management of the distribution grid and production and sales activities will be legally separated. Luxembourg has the highest degree of openness[12] in the electricity market. Austria and Denmark are quite open relative to their domestic demand. France is the only large exporter in the EU.

Since the electricity-sector is still at the dawn of liberalisation in most countries, the effect on prices has been fairly limited for the EU as a whole. Prices declined by only 2% between January 1995 and January 2001 and recently returned to their 1996 level. But it should be mentioned in this context, that this decline is still a positive achievement compared to the evolution of prices in the economy as a whole. Furthermore it should be alluded to the striking correlation between liberalisation and downward prices in those sectors and countries where liberalisation occurred earliest.[13] Electricity is now more affordable for low and average income consumers, even though households have not gained as much as large (commercial) consumers. Significant price differences exist across European countries[14], which highlights the need for integration in the Internal Market for energy.[15] This was lately accentuated at the March 2002 Barcelona European Council: *"Liberalisation advances have not progressed in parallel in Member States, the possibilities for intra-community trade are limited."* Therefore the European Council *"agrees the target for Member States of a level of electricity interconnections equivalent to at least 10% of*

[12] The degree of openness is defined as the ratio of the sum of imports and exports to twice the domestic demand.

[13] Of course also other determinants affect the price, like the demand and supply of electricity, the structure of costs of electricity production and the intensity of competition.

[14] Prices especially remain relatively high in Belgium, Germany, Italy and Portugal whereas prices in Sweden, Denmark, Finland and the UK are far below EU-average.

[15] See also "Energy and lethargy", in: The Economist, 23rd March 2002, p.29.

their installed production capacity by 2005."[16] For saturated infrastructures, auction systems have already been introduced on the France – UK and the France – Italy connections to encourage international trade in energy. The interconnection capacity will also be increased between Greece and Italy, thanks to a new connection between those two countries.

In the **gas sector**, a Community directive (98/30/EC) was adopted in 1998 requiring a 20% absolute minimum market opening from August 2000. This ratio must be increased to 33% by 2008. Today, already most countries have gone further and about 80% of EU gas demand is open to competition. Only the UK and Germany have officially fully liberalised the demand for gas, although there are some delays in the full transposition of the directive in Germany. They will be followed by Austria in 2002, by Spain and Italy in 2003, by the Netherlands in 2004, by Ireland in 2005, by Belgium in 2006 and by Sweden in 2008. Regulated access to transmission and legal unbundling were introduced in 2001 into Denmark's revised gas legislation and in Italy a new company was formed for the gas infrastructure, but is still related to the incumbent. Greece amended its gas market legislation, implying unbundling and a proposal for a new tariff structure. Since most of the gas consumed in Europe is imported from third countries it is not surprising that – with the exception of the UK – countries display a relatively large degree of openness of their gas-markets. The evolution of prices in the gas-sector has followed a pattern determined by oil prices, origin of supply and domestic demand conditions. In the UK and the Netherlands, the two largest EU gas producers, prices have been the lowest between 1992 and 2001. Then come Germany and Italy, with medium-range prices. France, a fairly small producer, follows, and marginal or non-producer countries face the highest prices.

In liberalised sectors, **regulatory authorities** play an important role to ensure that consumers have a genuine choice of supplier, that competition between suppliers is effective and that universal services are being provided. The introduction of competition meant that incumbent firms found themselves dominant in liberalised markets and that thus the full benefits of liberalisation have not necessarily been

[16] See Presidency conclusions from the March 2002 Barcelona European Council.

passed on to consumers. To protect consumers against possible monopoly abuse and to undermine the incentives of firms to implicitly collude, European and national policy-makers have therefore established sector-specific regulatory regimes in network-industries, even if it may seem paradoxical that regulation is required because of competition. Anyway, the sector specific regulation has to be designed in a way to oversee the conduct of the incumbent operators, even though the argument of "economies of scale and scope"[17] is often cited in this regard as a counter-argument for liberalisation. The regulatory authorities are therefore – when considering measures to reduce dominant market share of the incumbent – invoked to weight the benefits of increased competition against the potential loss of economies of scale and scope.

Regulatory authorities face several utmost important – besides the above mentioned – tasks: Since effective competition in network industries depends on the access to the non-liberalised segments of the sector, regulatory authorities should ensure non-discriminatory practices in this respect.[18] Allowing, legally and technically, foreign competitors to enter the domestic market, is another difficult job of regulators. But as well as pursuing efficiency, regulators need to address fairness considerations too. Social goals such as "universal service", whereby services should be universal and affordable, play a critical role in regulation. Because of these widespread tasks, the regulatory authorities are gradually being adopted to the challenges of the liberalised markets in all Member States: The responsibilities of

[17] Economies of scale mean that the average costs of supplying services tend to decline as output expands. Under competition, when potentially many firms share total industry output, economies of scale are necessarily sacrificed. Economies of scope imply that the costs of supplying services may benefit from "joint production”. As firms in the network industries may supply many different services and products over a common network, there may be advantages from having large multi-output firms. But since the conditions in the network industries have changed considerably and since the significance of natural monopoly elements has been diminished in recent times, it is increasingly feasible for competition to take place, particularly in areas lying outside of the main network infrastructures (e.g. in downstream service provision).

[18] In Portugal for instance the energy regulator has taken measures to guarantee third parties‘ non-discriminatory access to the infrastructure for electricity transmission and distribution.

regulators are being expanded and clarified, the powers to enforce legislation are being strengthened, more resources are allocated to regulators and the existing regulators are often merged into fewer regulatory bodies to correspond with market development.[19] Most Member States have opted for **sector-specific and independent regulators**. In contrast to this, Germany has not established an energy regulator. Instead regulation of network access is governed by Association Agreements[20], while public interests are to be handled under the general competition laws. In Luxembourg one independent regulatory authority, the Institut Luxembourgeois de Régulation (ILR), is responsible for ensuring regulation in all three sectors – the telecommunications, the electricity and the gas sector. The pictures are quite similar in the Netherlands[21], in Ireland[22], in the UK[23] and in Italy[24], where the regulatory authorities for both, the electricity and gas sector, are integrated in one single regulation body. In Austria new regulatory authorities have been entrusted with the accomplishment of the internal market in electricity: the Electricity Control Ltd and the Electricity Control Commission.[25] The supreme supervisory authority is the Federal Minister for Economics and Labour. Together with the opening up of the gas market it is planned to establish an independent regulatory authority for natural gas as well.[26] In Sweden conflicts may

---

[19] For instance regulators are being established for the entire communications and energy markets, respectively.

[20] In this regard concerns have been expressed, if the reliance on Association Agreements and negotiated access to energy networks will de facto allow new entries and effective competition.

[21] The Energy Implementing and Supervisory Board forms part of the general competition authority.

[22] The newly established Commission for Energy Regulation;

[23] Besides the establishment of the Gas and Electricity Markets Authority, a new single consumer body for gas and electricity, the Gas and Electricity Consumer Council (GECC), known as the "Energywatch", was set up.

[24] The scope of the Italian Electricity and Gas Authority's regulatory powers embraces besides pricing, fixing the levels of service quality and the setting of technical and economic conditions of network access and interconnection also administrative unbundling of the various stages in the production and supply of electricity and gas.

[25] See URL: http://www.e-control.at for further details.

[26] As regards the use of synergies, it is planned to add the natural gas sector to the scope of responsibilities of the Austrian electricity regulatory authorities. (See: Austrian Cardiff Report 2001, p 8.)

arise because of the government's role as shareholder and regulator in the electricity, gas and telecommunication sector. But independently of the regulatory set-up, some elements seem to be essential to ensure effectively competition: Continuous monitoring and supervision of access tariffs and conditions, extended powers to interfere fast and effectively in response to non-competitive practices and the avoidance of lengthy procedures to settle claims of non-competitive practices.

2. Competition Policies

The application of both Community and national competition policy is faced with more new challenges, in part exacerbated by globalisation, the single currency, company networking and e-commerce. This places high demands on competition authorities in their work in practice and notably in becoming familiar with new market phenomena. A number of Member States, including Greece, France, Ireland and the UK, therefore took steps to increase the powers and the operating capacity of their competition authorities and to foster the co-operation between competition and regulatory authorities.

The role of the independent Competition Committee (CC) in Greece[27] has been significantly enhanced through the upward revision of the merger thresholds, the authorisation of the CC to issue opinions on competition matters on its own initiative, and the reassurance of its financial independence. This major changes, accompanied with the increase of its personnel and the improvement of its infrastructure contributed to the upgrading of the CC and the strengthening of its prestige.

The New Economic Regulations Law of May 2001[28] in France contains a series of provisions on competition which should help to improve the operation of the markets: Mergers now need to be reported to the Minister of Economy when total world turnover at the new entity reaches 150 million Euro. If a merger poses a threat to competition, the Ministry of Economy may prohibit the operation, after notifying the

[27] Enactment Law 2837/2000, full implementation of the CC in October 2000.
[28] Passed on 15 May 2001, supplements Order No 86-1243 of 1 December 1986.

Competition Council[29]. The limit of fines that may be imposed by the Competition Council for anti-competitive practices has been increased from 5% to 10% of companies' world turnover.[30] The new law also increases transparency[31] and includes a number of measures to simplify procedures.[32] To encourage operators to do more themselves to create sound markets and to discourage secret cartels, a leniency clause has been introduced for companies that inform the authorities of an agreement to which they had been a party. Certain markets which require specific expertise are subject to sector-based regulation[33], which is carried out by specialised independent authorities. Their activities supplement the action taken under ordinary law by the Competition Council or the Minister of Economy.

To ensure that competition law can be more effectively enforced in Ireland, the authorised staffing complement of the Competition Authority has been increased substantially. The new competition legislation in Ireland[34] will consolidate existing competition with merger control law. The responsibility for deciding upon mergers, other than media mergers[35], will be transferred from the Minister for Enterprise, Trade and Employment to the Competition Authority, which, in its enforcement role, is now empowered to initiate legal actions on its own initiative as well as acting on foot of complaints. In addition tough penalties for competition offences have been introduced.

The UK legislation is based on taking a tough prohibitory approach to anti-competitive activity whilst avoiding placing undue compliance

---

[29] In general the Competition Council (Conseil de la Concurrence), an independent authority with general powers, and the Minister of Economy are responsible for ensuring that the rules on competition are complied with rests.

[30] This will help stamp out the practice whereby a legal entity against which action is being taken may be tempted to substantially reduce its turnover.

[31] As soon as a merger is reported, a notice summarising the operation will be put online on the Ministry's website.

[32] E.g.: Regarding the criteria used to identify the authority responsible for monitoring mergers.

[33] For instance financial services, stock markets, telecom networks and electricity.

[34] It will be enacted in 2002.

[35] Decisions on non-media mergers will be based solely on competition criteria, while additional public interest criteria will be introduced for media mergers.

costs on business. The Office of Fair Trading (OFT)[36] and the sectoral regulators who share concurrent powers, are responsible for applying the prohibition regime and are provided with enhanced powers of investigation and enforcement. Firms in breach of the Competition Act 1998[37] may be fined up to 10% of their turnover for the period of infringement subject to a maximum of three years.

In Spain approval was given to increasing the resources available to competition law enforcement bodies resulting in a 20% rise in the Competition Tribunal budget and an organisationally reinforcement of the Competition Service by the creation of a new administrative section. The Competition Tribunal has been transformed into an independent agency enjoying greater flexibility, freedom of action and management autonomy. The aim of the new Draft Royal Decree pursuant to Competition Law provisions on control of economic concentrations is to incorporate recent legal novelties on the control of economic concentrations into the Spanish regulatory framework.

In the Netherlands a new competition authority, the Dutch Competition Authority, was established in 1998 together with a new Competition Act. This largely independent and unaffected by political influences authority, next to the general competition authority, is increasingly responsible for implementing sector-specific laws.

In Finland the financial resources of the Finnish Competition Authority have been boosted and the authority has enhanced its activities. A Government bill was submitted to Parliament in June 2001 to establish a new special court – the Market Court. In the bill it is proposed that market law matters and competition matters be brought together in one and the same court.

The Austrian system of cartel law enforcement has often been criticised, especially because of its shortfalls in respect to its law enforcement powers and because of the fact, that the law and enforcement in competition policy has not been applied to EU law. An amendment recently passed can be regarded as a response to that

[36] The OFT is currently receiving extra-financial resources from the Government.

[37] Implemented in March 2000.

criticism: It provides for the establishment of an independent Federal Competition Authority as an initiative and investigating authority as well as for the installation of a Cartel Prosecutor, who will be directly responsible to the Minister of Justice. The Federal Competition Authority will co-operate with the European Commission, thus ensuring the coherence between national and European competition law.

Summing up it may be said that several remarkable steps have been taken towards strengthening national competition authorities, including moving towards more independent regulatory bodies and the consolidation of sector-oriented into horizontal agencies. The reforms undertaken in Austria are completely in line with this European trend: By being vested with appropriate investigative powers the Federal Competition Authority is able to act and operate in an effective way. The reduction of the influence of the "social partners"[38] guarantees more independence of the Competition Authority. However, several countries need to pursue further reforms along these lines[39] in order to make the competition and regulatory framework more effective in the future.[40]

In the opening paragraphe effective competition was circumscribed as the *"cornerstone of the economic reform process."* Taking the above illustrated latest developments in network industries and the already undertaken reforms in the area of competition policy into account, results in the "indirect" recommendations which have been formulated at the March 2002 Barcelona European Council: *"Further market opening, appropriate regulation, improved use of existing networks and completion of missing links will increase (...) competition (...). Competition provides the discipline and the incentive to secure greater*

[38] The influence of the "social partners" is limited to assigning lay judges to the Cartel Court, on the one hand, and to a purely advisory function, on the other.

[39] Especially more effective independence should be given to competition authorities, in order to avoid the risk that decisions may be based on criteria other than competition criteria.

[40] But – as the Danish emphasise in their national report 2001 – *"it is important to note that the competitive situation will rarely change overnight: it takes time to change the competitive structure of a sector (...)."*

economic efficiency (...)."[41] Therefore continued structural reforms – interacting with growth- and stability-oriented macro-economic policies – are a key element of sustained growth, high employment and the long-term competitiveness of the European Union. This "interaction-strategy" will allow policies to respond flexibly to changing economic conditions in the short run whilst strengthening the productive capacity of the economy over the medium run.

[41] See Presidency conclusions from the March 2002 Barcelona European Council.

A NEW INTERNAL MARKET STRATEGY TO REMOVE BARRIERS TO SERVICES

OTHMAR HORVATH, EVA PFANDL

1. ECONOMIES IN MOTION

Over the last decades, we have seen a fundamental shift in the composition of the EU market form a manufacturing to a service-driven economy. In all EU Member States the services sector accounts for approximately 50 percent of the of GDP and experts still see further potential to grow, to enhance the competitiveness and thus to create new jobs.

The fundamental change has been reinforced by the rapid technology-development seen in the last years which brought about the Information Society, leading to new business dynamics, lower barriers of entry (even for companies from non-Member States) and as a result of this to more competition, especially in the services sector. The cost of acquiring and transmitting information has been cut immensely, the innovation-cycle has been reduced and new technologies now diffuse more rapidly. The disappearing need for proximity has opened the European Market to small and medium sized enterprises (SMEs) by providing more consumers. All in all the cost and revenue structure has been altered.

Today the EU is the world's biggest exporter of services – 26 percent of world exports excluding intra-Community export, compared to 24 percent from the United States – and the biggest importer of services. The failure to reduce and eventually eliminate the failings in the Internal Market for services can lead to an enormous setback for Europe's economy, as virtually all companies depend on the use of services of other businesses as inputs.[1]

[1] URL: http://europa.eu.int/comm/internal_market/en/services/services/servicesfaq.htm, 02.04.02.

2. The Basis for the New Strategy

At its Lisbon summit in March 2000 the European Council asked the European Commission to develop an new comprehensive Internal Market strategy to remove barriers to services in order to contribute to the goal of making the EU the most competitive and dynamic knowledge-based economy of the world by 2010. The strategy elaborated by the European Commission aims to eliminate all barriers that negatively affect the European services sector by the end of 2002 and to give service providers the chance to operate throughout the EU without regulatory constraints that lead to a distortion of competition.

It has also been realised that SMEs need to be taken into account, which now are reluctant to look for opportunities in other EU markets. The benefits from the Internal Market must not only be accessible to multinational companies, which can afford to pay extensive legal and administration bills but also to these firms, which are very essential for the future growth of the European economy. Furthermore surveys conducted on behalf of the EU have shown that consumers of services also constraint themselves to national borders. Therefore the EU has to develop the recognition of the Internal Market on the supply and on the demand side.

Other than before the new strategy takes the classic sectoral approach and adds a more comprehensive, across the board approach to reflect the current trends in business practice. Nowadays it has widely been accepted, that service activities do not stop at the border of the services sector (i.e. retail, logistics, accounting, consulting, a.s.o.) but are carried out by manufacturers as well (e.g. promotion, distribution, marketing, after-sales care). Additionally, we see the forming of new services. It is therefore essential to generate a new framework that is sufficiently flexible to allow these innovative services to develop and still provide common rules where necessary.[2]

The implementation of the new Internal Market strategy to remove barriers to services will contribute to the four key strategic objectives of the Strategy for Europe's Internal Market – namely improving the

[2] URL: http://europa.eu.int/comm/internal_market/en/services/services/services.htm, 02.04.02.

quality of life of citizens, enhancing the efficiency of Community product and capital markets, improving the business environment and exploiting the achievements of the Internal Market in a changing world. The facilitation of cross-border services will give EU-citizens and enterprises a greater variety regarding quality, choice and prices. This will induce more pressure from the demand side so that service providers are permanently forced to improve the competitiveness, to increase efficiency and to be innovative.

If the barriers that now interrupt this process are removed, the service providers will have the chance to fully contribute to the growth and prosperity of the European market. The services strategy will consider to balance out legislative and non-legislative activity as well as harmonisation and mutual recognition. It can lead to a process that adapts the Internal Market to the fundamental changes that have occurred and it can help to arm the EU and its companies for future developments and competition.

3. BASIC PRINCIPLES

The European Commission has defined five basic principles, the process to remove all barriers to services has to consider:

1. It should be comprehensive: The new strategy should encompass all services sectors and their inter-linkage and it should go beyond addressing specific problems in specific services sectors. The sectoral initiatives currently under way have to be completed as urgently as possible whilst maintaining their coherence and ensuring their consistency with the overall strategy towards services.
2. It should make cross-border activities as easy as acting within a Member State: There should be no need for service provider to adapt their business plans to unjustifiably different legal and administrative requirements.
3. It should ensure business and consumers secure benefit from the new opportunities open to them: High levels of health and consumer protection have to be assured throughout the Internal Market and effective systems to treat cross-border complaint, dispute resolution, redress and enforcement have to be in place.
4. It should keep pace with change: It has to be ensured that Governments keep their laws and regulations up to date, but not at the expense of establishing new Internal Market barriers.

5. It should be coherent with other policies.

4. A TWO STAGES APPROACH

In order to finally implement the free market for services, the European Commission has developed a timetable with specific actions, divided into two stages. The first stage, which was originally scheduled to be completed by the end of 2001 but which is still in progress, concentrates on accelerating initiatives in a number of specific problem areas and on identifying and analysing the existing barriers. In the second stage the European Commission will suggest a further package of initiative, including a timetable for Member States to dismantle the barriers identified.

Stage one actions:
1. Launch of a first wave of legislative and non-legislative initiatives for specific problem areas (e.g. commercial communications, regulated professions, financial services, electronic commerce, counterfeiting and piracy).
2. Review of the existing directives that relate to the free movement of services in order to increase their efficiency.
3. Initiation of a number of non-legislative flanking measures to improve statistical information on services, raising the skill levels of ICT in service industries and enhancing the innovative capacities in companies that provide services to other businesses.
4. Launch of a survey of barriers to services in the Internal Market to recognise specific problem areas, to identify key areas where infringement procedures have to be accelerated, to improve the European Commission's "Dialogue with Business and Citizens" Internet site, to be presented, discussed and – if possible – solved by experts, to be complied in a report, to be presented to the Council and the European Parliament and to be used as a basis for the actions in stage two.

Stage two actions:
1. Identification of barriers that can be eliminated by the direct application of Treaty principles and where there are no infringement cases underway. The Member states will be requested to remove this barriers according to a given timetable.

2. Implementation of a package of non-legislative measures such as Community codes of conduct, alternative dispute settlement mechanisms and awareness actions designed to improve the flow of information.
3. Development of harmonised measures to remove horizontal barriers which include a targeted harmonisation of requirements affecting several sectors, a mechanism to ensure that the Internal Market can be used by all European service providers as their domestic market and procedures to cope with new market and legislative developments.

5. EXISTING BARRIERS

Studies and surveys which were used by the European Commission to develop the new strategy have already brought forward a number of barriers. Of the six stages of the business process that are common to all service companies across all economic sectors – setting up the business (establishment), use of inputs (labour, business and funding services), promotional activities, distributional activities, sales activities and after-sales support activities – each bears different obstacles that may be encountered.

Examples for barriers in stage 1 – Establishment of the service provider
Differences in practices and requirements for establishing a company, requirements for authorisation to provide services within a national territory, requirements concerning a physical outlet for service provision and requirements regarding professional qualifications.

Examples for barriers in stage 2 – Use of inputs
Differences in practices and requirements for labour services recruitment, cross-border information on local skills availability, use of financial services by companies, provision of funding services, differences in access to business and professional services and purchasing of inputs by public authorities of services across borders.

Examples for barriers in stage 3 – Promotion of services
Differences in how companies can use services to raise awareness of their output (e.g. commercial communications – advertising, sales promotion, PR, sponsorship), differences in the provision of

independent comparative information on goods and services and mandatory disclosures requirements.

Examples for barriers in stage 4 – Distribution
Differences in logistics, warehousing, conditions for the retail trade, postal services, home delivery, differences governing creation of and access to infrastructure allowing the reception of services and barriers arising from lack of confidence in delivery systems.

Examples for barriers in stage 5 – Selling of output
Differences in practices and requirements for national pricing regimes, indirect taxation regimes, payment systems, contracting and invoicing systems and health, safety as well as security concerns.

Examples for barriers in stage 6 – After-sales support
Differences in in-house customer services and customer complaint handling, extra-judicial redress mechanisms outside the firm and cross-border judicial redress systems, liability issues and enforcement by public authorities

6. National Results – Existing Barriers for Austrian Companies

In Austria the Federal Ministry of economics and labour together with the Federal Economic chamber and the Federal Committee of Austrian Liberal Professionals conducted a survey by a detailed questionnaire on behalf of the European Commission. The questionnaires were sent out to companies, information events were organised and the data gathered was summarised and analysed by February 2002. The survey has shown that especially service providers in regions close to national borders are affected by barriers and that the obstacles are more common in some specific branches such as construction, trade, tax-consulting, auditing, architecture, engineering and health.

The survey has shown, that in fact there exist a number of barriers in the cross-border trade of services, which can be split up as follows:

1. Differences in business and trading law (bureaucracy in the context of the establishment of companies and the recognition of professional education, constraints regarding company structure).

2. Differences in labour and social law (compulsory registration of employees, bureaucracy in the context of registration of employees, papers that have to be carried by employees, differences in minimum wages and their calculation, different social-insurance systems).
3. Differences in tax law (different tax-rates, compulsory application for a tax-number, various special taxes, different law-systems and different application of law).
4. Barriers and bureaucracy concerning licenses and certificates.
5. Bureaucratic and vague regulations for invitation of tenders.

7. CONCLUSION

Within the EU the importance of the services sector to the overall economy has been realised and the governing bodies now are taking action to back up this industry. The process of removing all barriers to services is going to take some time as governments have to open up national markets for services which so far were protected and mainly open to national companies.

The analysis has shown that companies in different industries and regions are not equally affected. For some interest-groups it might be harder to raise the awareness and develop a clear understanding of their problems from national- and EU-authorities, which in turn is essential to cope with present and new problems related to the Internal Market for services. The analysis on the way services business is conducted must not stop at this point – more detailed data and more examples for existing and potential barriers has to be gathered and identified to make the new strategy even more efficient.

It seems to be clear that it will be very difficult to balance out all the different interests, as different nations, regions and even businesses and single companies are affected in various ways. The delays seen in the two stages process seem to support this concern. However the European Commission has carefully developed its Strategy and considered all essential arguments. It has taken into account businesses and consumers, the changing business environment and the technological innovations, the global business environment, the particular characteristics of the different businesses, safety, health and security considerations as well as environmental liability. It will be essential to the success of the new strategy to continue on in this meticulous way to solve the existing and potential problems. The work has to continue in a quick way to avoid any further delays. It is still a long way to go, but the progress is on the way.

8. LITERATURE

Communication from the Commission to the Council and the European Parliament – An Internal Market Strategy for Services, COM (2000) 888 final.

Communication from the Commission to the European Parliament and the Council – The Strategy for Europe's Internal Market, COM (1999) 624 final/2.

Opinion of the Economic and Social Committee on the Communication from the Commission to the Council and the European Parliament – An Internal Market Strategy for Services, 2001.

Opinion of the Committee on Industry, External Trade, Research and Energy for the Committee on Legal Affairs and the Internal Market on the Communication from the Commission to the Council and the European Parliament, 2001.

Internal Paper of the Austrian Federal Ministry of Economics and Labour in preparation for the expert meeting on the 11th of march 2002 in Brussels.

SECTORAL REGULATION

COMPETITION IN THE ELECTRICITY INDUSTRY

JOHANNES MAYER

1. INTRODUCTION

The scientific discussion about the relationship between competition, competition policy and competitiveness is still going on. I will not add another contribution to this discussion, but I will assume that:

- competition is the most effective selection mechanism in a market based economy,
- competition policy may contribute to a more competitive environment in the economy,
- competition leads to a better competitiveness of an economy in the long run.

These principles have to be broken down to the specificities of the power industry. It seems that there are major trade-offs between goals of regulation policy (such as strict separation of natural monopoly) and relations within the industry leading to vertical integration, industry wide planning and co-ordination structures or other phenomena which are at least suspect to competition watch-dogs.

Electricity therefore is even less suitably subjected to structural analysis of the market than other industries. Nowadays practice of EU Competition authorities is only very roughly examining the specific issues of the industry. Their conclusions are dominated by the fact of a still very imperfectly functioning market and essentially national regulation systems. Conditions for issuing waivers in case of mergers are therefore regularly instrumental in achieving improvements of national regulations and broadening the market.

2. IMPORTANCE OF ELECTRICITY FOR THE AUSTRIAN ECONOMY

The electricity sector contributes about 2.5 percent to GDP and employs approximately 25.000 people. But the importance of the sector is understated by these figures. The sector produces one of the most if not the most important intermediate product for the Austrian economy. All other infrastructures depend on the quality and security of the electricity supply.

Dependence on electricity is even aggravated by the fact that it is hardly possible to be substituted. Possible market power would therefore have detrimental effects on final customers (inverse elasticity rule).

3. THE MARKET FOR POWER

Non-storability of power, a very low price elasticity of demand and the fact that demand and supply have to be matched exactly at all times are frequently re-iterated as the most important determinants of the power market. These properties lead to very volatile wholesale prices, high market risks and a differentiation of the up-stream market (generation). Interestingly these aspects seem to be of minor interest to economic analysis of the market. Some comments on the most relevant competitive factors might therefore be useful.

- Supply: As supply has to follow demand within seconds, there has to be oversupply at most times. This oversupply has to be sufficient to cover technical problems of single power stations but also climatic parameters such as less rain (reducing production of hydro-power stations), cold temperatures (increasing demand), etc. The supply curve does not consist of the short run marginal cost of one optimal technology but of production technologies with very different marginal costs. Therefore an increase of demand may drastically increase supply prices.
- Demand: Empirical evidence on price elasticity shows that demand only slightly reacts to price changes ($\varepsilon<1$). One explanation might be an informational problem. Customers have no adequate information about actual prices. Prices for big customers are in certain cases linked to wholesale prices, which reduces risk management costs and allows lower contracted prices. But they have no possibility to change their demand according to short run price changes. Small customers normally are even supplied at fixed tariffs revealing no price information. The only very static way to reveal at least some price information is to implement tariffs that vary according to the time of consumption. Price information then reveals price forecasts of the supplier but not actual prices. A second explanation might be the low degree of substitutability of power for common uses at least in the short run. Substitution is mainly done by shifting demand from high to low price periods, by reducing peaks, etc. – consumption is not reduced but distributed over time.

- Balance: Supply and demand via market mechanisms cannot match perfectly. This would require full real-time information of actual demand for every customer. The technical solution is a statistical match of demand and supply (via ex-ante programs) and install a common balancing mechanism that increases or reduces supply in order to cover the error (control energy). "Balancing energy" serves as additional energy supply if control energy is not sufficient to balance the market. If in certain cases demand for control energy can partly be predicted it is substituted by balancing energy. Technically the difference between these to kinds of supply is time. Control energy reacts automatically whereas balance energy has to be called off by the grid operator. Time or reactivity of power stations constitute fundamental sources of value within the power market. Normally control energy is the most expensive energy in the system, followed by balancing energy. The balancing energy is provided by a market mechanism via a bidding system. Arbitrage is possible between balancing energy and the normal wholesale products (esp. peak load energy, i.e. constant delivery over 12 daily hours), which insures in the long run that the power market responsible for predictable programs provides the cheapest energy. Within the wholesale market base load energy is the cheapest product. This is a constant delivery over 24 hours a day, which refers to those power stations that are not able without substantial additional cost to change production (nuclear power, big hydro-power and coal).
- Suppliers and customers have an economic incentive to optimise their ex-ante programs (matching of supply and demand reduces the need for expensive control and/or balancing energy). One pre-requisite for this is a high degree of transparency or public information about the actual situation of the system.
- Network: The physical network constitutes and determines the market. Bottlenecks split the market; sufficient capacities of inter-connectors constitute a necessary (but not sufficient) condition for the development of a market place. Networks have historically been constructed to connect local demand with local supply. Inter-connectors with other national systems essentially served to allow for eventual unintended physical exchange that balances the whole power system internationally. The philosophy behind international co-operation has been that of independent self-sufficient national systems, where the international network only provides additional

stability. In some cases actual inter-connectors are not sufficient to allow market based power flows caused by different production technologies within the national systems. Further steps forward in the course of liberalisation within the EU will aggravate this problem.

- Trade: Traditional wholesale products dominate the analysis of the competitive situation in the up-stream power market. A much more in depth analysis of more differentiated products and strategic behaviour has to be undertaken. Even relatively small shares in the production market may be sufficient to change energy flows whereby causing capacity problems in the network. This might lead to a separation of regional markets. So even small shares in the up-stream market can lead to a dominant regional position.

4. Security and Quality of Supply

Even in liberalised electricity markets, security and quality of electricity supply are major issues. Efficient allocation of resources and investment is of great importance, particularly in view of the cost pressures in the area of grid operation, which have arisen through liberalisation and incentive regulation implemented by many regulators.

Security of supply is one of the main arguments raised by incumbents in favour of protection from market pressure or an increase of the rate of return in the network business. Nevertheless no direct relation between liberalisation and a decrease of security of supply has been revealed in practice. Actually in some cases the contrary was true. Liberalisation increased security of supply and decreased the amount of lost energy. One of the regulators responsibilities is to guarantee that cash flows dedicated to security and quality of supply are actually used in the right way. Especially in vertically integrated companies this leads to a severe control problem as these cash flows are "invested" into competitive activities of the own company. It therefore seems reasonable to include the treasury's success of the transportation or distribution business in benchmarking procedures. Investing into the company's own supply business has to match possible gains from other investment possibilities.

5. THE AUSTRIAN REGULATORY SYSTEM[1]

The Austrian regulatory system tries to implement an independent regulator within the Austrian legal system. At the same time "old" institutions like the Advisory Board have been assigned new competences. A special task of the Advisory Board concerns the problem of "regulatory capture". The Board gets very detailed information about network costs and relevant tariffs in order to be able to reveal any case of unequal treatment of regulated network companies.

5.1. FEDERAL MINISTER OF ECONOMIC AFFAIRS AND LABOUR

The highest regulatory authority is the Federal Minister of Economic Affairs and Labour, who has three main areas of responsibility:

- Supervising the activities of E-Control;
- Supervising the Federal Government’s shareholding in E-Control; and
- Establishing E-Control's terms of reference.

5.2. ELECTRICITY CONTROL COMMISSION

The E-control Commission is a collegial body with a judicial element in the meaning of art. 20[2] and art. 133[4] Federal Constitution. Its members are not bound by ministerial instructions in the exercise of their office. The E-control Commission consists of three members. One must be a judge, and the other members must have a relevant technical, legal or economic background.

The principal duties of the E-control Commission are:

- Approving the general terms and conditions of grid operators for access to transmission and distribution systems;
- Determining system access charges;
- Prohibiting the application to final customers of terms and conditions that are contrary to the public interest;
- Ruling on certain disputes between market participants;
- Arbitrating on disputes concerning the settlement of balancing power;

[1] For further details see: E-Control "Annual Report 2001"

- Hearing appeals against decisions by E-Control.

5.3. ELECTRICITY CONTROL LTD

E-Control is a "company vested with sovereign authority" which carries out the duties assigned to it by law using the resources of the State. The competence of E-Control extends to all duties assigned to it by law as regulator, unless the E-control Commission is expressly entrusted with such duties. E-Control's duties comprise five areas.

5.3.1. Monitoring and supervisory function

The monitoring and supervisory function encompasses the supervision of competition, the preparation and publication of electricity price comparisons, and the monitoring of unbundling and of the importation of electrical energy from third countries. If E-Control identifies an abuse in the course of its supervisory duties, it must take corrective action without delay.

5.3.2. Regulatory function

The most important regulatory tasks are the formulation of proposals for market rules and Technical and Organisational Rules (TOR), as well as determining the conditions for reciprocity.

5.3.3. "Green" power and mini hydro plant certificates

E-Control is charged with monitoring compliance with the obligation to purchase "green" and mini hydro-power. The regulator must determine the extent to which electricity is being sourced from "green" generation plant. If the uptake of "green" power is below the level stipulated by the respective implementing acts, E-Control must inform the relevant provincial government and publish the names of the distribution system operators failing to comply with the statutory minimum percentage. In the interests of the promotion of Austrian mini hydropower, EIWOG[1] requires all final customers to meet 8% of their consumption from mini-

[1] ElWOG=Federal Act Providing New Rules on the Organisation of the Electricity Sector (Electricity Act).

hydro plants (maximum electrical capacity <= 10 MW). Proof of compliance takes the form of mini-hydro plant certificates.

5.3.4. Settlement of equalisation payments between grid operators

E-Control has a duty to settle the balancing payments that arise as a result of the consolidation of networks with different owners. E-Control must issue an order governing the related formalities.

5.3.5. Other duties

E-Control's additional duties include the administration and collection of contributions for stranded costs, performance of statistical work, and balancing group supervision. Finally, E-Control is also the secretariat of the E-control Commission.

5.4. ELECTRICITY ADVISORY BOARD

An Electricity Advisory Board has been set up at the Ministry of Economic Affairs and Labour to advise the Minister and the regulator on matters of general electricity policy. The Board includes representatives of the Ministries of Economic Affairs and Labour; Agriculture and Forestry, Environment and Water Management; Finance; and Justice; and of the provinces and the social partners.

6. THE REGULATORY AGENDA

The main tasks the regulator has to fulfil is the design of efficient and competitive markets and simulating competition in the network in order to avoid monopoly profits by the network owner and bring about efficient investments. The set up of the market rules is the core of the competitive market. Technically efficient systematic solutions sometimes do not promote competition. The Austrian set of market rules is being revised in order to eliminate asymmetric information.

Austrian all inclusive prices have been subject to rate of return regulation until 1999. The effect has been the in theory well known effect of over-investment and sharing of monopoly profits between management, employees, suppliers and owners. In order to increase the incentives for network companies for a more efficient management of their business some kind of "RPI-X" regulation will be implemented. International experience suggests that this type of regulation is very successful in reducing costs in the companies. Actual discussion focuses on the question if there might be the danger of under-investment in the long run. There seems to be a trade-off between regulatory discretion (one possible way to reduce strategic behaviour of the regulated companies thereby increasing regulatory efficiency) and perceived risk in the industry (which increases the minimum interest rate for investments).

7. Implementation of Competition in the Power Industry

Competition in the power industry does not evolve naturally it has to be constructed. Self-organization of the industry would eliminate competition. Market rules have do be defined by a regulator to enable competition between different producers and suppliers. The main objectives the regulator has to achieve are:

- Limiting the monopoly power of the grid operator by assuring non-discriminatory third party access and setting prices for grid utilisation. This enables generators and traders to supply electricity to their customers over the grid at all times. If the network operator belongs to an enterprise that also generates, trades and distributes electricity (vertically integrated company) action must be taken to prevent it from cross-subsidising these activities. This is achieved by separating (unbundling) the grid operation function from the other parts of the business, at least in accounting terms.
- Monitoring price trends and the ownership of market participants (generators, suppliers and retailers). Information on prices and ownership structures is the key to assessing the intensity of competition. It may also be the starting point for monopoly and market abuse proceedings aimed at combating competitive distortions if the regulator identifies malpractice.
- Disseminating comprehensive information, especially to final customers, so as to ensure that the latter have an adequate understanding of the market and its mechanisms, and of the structure of the electricity industry, thus reducing information imbalances between market participants. This makes it easier for consumers to select the right supplier, and cuts the related transaction costs.

8. *CONCLUDING REMARKS*

Introduction of competition in the electricity industry is only partly achieved. The market mechanism has to be designed by the relevant regulatory authorities. Experience in the different countries (UK, California) shows that good market design is essential to the successful liberalisation. Therefore continuous improvements of the market system have to be undertaken.

Austria took over many elements of the Scandinavian market model, which is to date the most successful attempt to liberalise the market. The next review of the system has necessarily to look at the question how sensitive information for the market is made public.

Internationally one of the most urgent questions that are raised concerns the relation of incentive regulation and investment. Predictability of regulatory actions concerning network tariffs seems to be essential. Incentive regulation needs public support in this respect. High profits of network companies have to be seen as intermediate and instrumental to long term increases of well fare. The British example showed that erratic changes of the regulatory regime because of public pressure did not contribute to the confidence of investors and implicitly increased risk perception whereby raising the necessary interest rate for the network business.

THE CALIFORNIAN EXPERIENCE WITH ENERGY LIBERALISATION

RENATE REICHERT

The electricity industry now is world-wide facing the wide-ranging consequences of deregulation and liberalisation measures accompanied by the erosion of international barriers, the globalisation of the world economy and the impact of new technologies. California's electricity restructuring and competition programme, however, attracted by far most attention due to its unprecedented performance.

The public opinion about the reasons behind this disastrous outcome of the Californian liberalisation efforts is rather divergent. While most of the experts accuse the poorly planned market design and regulatory decisions[1], there are also voices that argue that the success of an electricity restructuring programme largely depends on the degree of liberalisation[2] as well as that liberalisation cannot be blamed to be the source of the Californian crisis at all[3]. Nevertheless, the Californian crisis seems to be the result of a complex web of events originated not exclusively by the state's restructuring programme but also accompanied by a large number of incidents that were actually not intended to be part of the liberalisation process.

1. SITUATION BEFORE DE-REGULATION

With about 34 million inhabitants, the state of Californian is the most populous state within the United States followed by Texas with about 20 million people[4]. As the fifth largest economy in the world[5] and

---

1 Joskow, June 2001.

2 Wright, 2001. The author sets up the hypothesis that the more liberalised an electricity market and consequently the more competitive the market, the greater the likelihood of failure.

3 Callum McCarthy, Chief Executive of Ofgem, stated in October 2001: *"California is not the inevitable result of liberalising energy markets. The British experience, as well as that in the Nordic Countries of Europe and individual states in Australia, show that privatisation and liberalisation can bring very real customer benefits."*

4 Population Division, 2001.

5 Corporation for Education Network Initiatives in California. 2001.

largely dominated by technologies, California used to be extremely dependent on electricity.

The pre-liberalisation circumstances in California, however, largely differ from international experience. Before the restructuring of the industry in spring of 1998 started, electricity in California was generated and distributed by private, investor owned, vertically integrated utilities which were subject to state regulation in the retail market. Approximately 80 percent of the state's power is delivered by three big privately owned monopolies which owned and operated generation, transmission and distribution facilities: **Pacific Gas and Electric** (PG&E), **Southern California Edison** (SCE) and **San Diego Gas and Electric** (SDGE)[6]. In the United Kingdom, in contrast, the electricity industry was being liberalised and privatised at the same time[7].

These private utilities were regulated by an independent state regulatory agency, the **California Public Utilities Commission** (PUC), responsible for setting tariffs and standards for performance as well as for the regulation of investment in new generation and transmission, the control of the mix of fuels and the promotion of conservation programmes. The regulation for transmission rates and power transactions was left to the **Federal Energy Regulatory Commission** (FERC). The role of FERC initially was both, rather limited – since most generation was owned and operated by the utilities themselves – and critical, since the tariff setting within the FERC was lacking transparency and pursued national rather than local orientation.[8]

---

6 There are several municipally owned electric utilities which, however, had not been liberalised. The Legislation of 1996 actually gave the municipal utilities the option of opting in to the system or remaining outside. Almost without exception they decided to opt out. Among them the city of Los Angeles.

7 This difference led to a essential consequence: Once the incumbent utilities heard about liberalisation, they started a totally rational behaviour from their perspective, namely to protect their markets and eliminate competition, which later contributed to capacity shortfalls because private utilities were refusing cheap energy from competitors.

8 The other Federal agency concerned was the Security and Exchange Commission (SEC) guaranteeing that in exchange for an special service

Both agencies traditionally regulated wholesale power and transmission prices on the basis of cost-of-services-principles, but in the late 1980s they switched to granting power producers the authority to sell at market-based rates.

The rapid growing economy of the **early 1990s** had the important consequence that overall energy demand was rising and subsequently more capacity was claimed to be needed. By the **mid-1990s** California turned out to supply some of the highest priced electricity in the nation which was not only the product of the high residential nuclear power station construction costs. The natural geographic conditions of the major urban areas in California proved to be easily susceptible to air pollution and therefore stringent pollution control rules were issued which restricted the choice of fuels and the conditions under which energy generation can be carried out[9]. The Public Utility Regulatory Policy Act of 1978, for instance, was designed to promote both privatisation and conservation by forcing electricity utilities[10] to

---

territorial utilities were required to offer reliable electricity to all customers at a certain regulated rate.

9 *"...environmental regulation was under reform pressures as well. California legislation that had up to the mid-1990s required selective catalytic reduction devices (SCR) as the best available technology for reducing NOx emissions from fossil power plants was drastically modified in the south coast air quality management district (SCAQMD) of California. The Edison Company argued that SCR was too expensive and that instead SCAQMD should adopt a credit trading system to control NOx emissions. That alternative was adopted with the underlying assumption that the electricity sector would continue to function as it had in the past. Immediately a number of things went wrong. First, too many credits were issued and most of them were issued to the private utility – the Edison Company. As a result, Edison didn't need to clean up its power plants with all the credits issued to them directly and the credits that could be purchased very cheaply in the marketplace".* See: Marcus/Harmrin, page 6.

10 A utility is a regulated entity which exhibits the characteristics of a natural monopoly. For the purposes of electric industry restructuring, "utility" refers to the regulated, vertically-integrated electric company. "Transmission utility" refers to the regulated owner/operator of the transmission system only. "Distribution utility" refers to the regulated owner/operator of the distribution system which serves retail customers. See: http://www.energy.ca.gov/glossary/glossary-u.html#u

purchase power from non-utilities generators[11] called Qualified Facilities aiming at furthering cogeneration and the use of renewable energy. This bill made utilities to purchase specified amounts of their electricity at the estimated avoided cost of replacing that power with the cost of power from new construction.

In **1994** – due to a changing political attitude towards reducing overall government intervention in the economy and supported by the Federal Power Act of 1992 which gave FERC the authority to deregulate the wholesale electricity market as well as motivated by both rising electricity prices[12] and by growing energy demand and the imminent danger of possible generation shortages – the first step towards liberalisation was set by PUC in ordering new construction to be put out for private bid[13]. Not to a lesser degree influenced by the reforms undertaken in Britain in 1990[14] that reduced costs for both production and distribution of power and led to substantial investments in environment-friendly new power stations, all the proposals for a fundamental reforming of the electricity industry were laid down in the so-called "Blue Book". This report included as well the proposition for a new industry structure in which the production from the generators and the entry of new plants would be deregulated and their power sold in a competitive wholesale market.

Based on the PUC's deregulation efforts, who recommended the utilities to unbundle their integrated systems so that the costs of transmission, generation and distribution would be transparent and could be sectioned off and if necessary sold, in **1996** a restructuring law (Assembly Bill 1890) passed legislation, which introduced overall

[11] A non-utility generator is defined as a generation facility owned and operated by an entity who is not defined as a utility in that jurisdictional area. See: http://www.energy.ca.gov/glossary/glossary-n.html#n

[12] Comparing energy prices with other neighbouring states it was commonly argued that the reason behind the high Californian electricity prices can be found in the existing system of regulated vertically integrated monopolies, the high investments in nuclear power plants, high-priced long-term contracts with independent power producers, the generation of excess capacity and in the expensive and unproductive regulatory institutions.

[13] However, right before its implementation, PUC and the State moved quickly towards complete deregulation of generation and transmission.

[14] See: Reichert, 2001

liberalisation of the wholesale and retail market in California by March 1998[15].

2. THE MAIN ASPECTS OF THE 1996 LEGISLATION

The Assembly Bill was predominantly enacted to restructure California's electricity industry and implement retail access on the whole. The electricity industry was, however, unlike international practice not gradually opened but instead exposed both wholesale and retail markets to competition escorted by a complex set regulatory framework.

The restructuring programme mandated the creation of two separate wholesale electricity market institutions, the **California Power Exchange** (CalPX), a spot market for wholesale energy, and the **Independent System Operator** (ISO), the market for real-time energy. Even within the United States the separation of the ISO and CalPX is an exclusive feature of California's restructuring programme. The proposal required the state's three large investor-owned utilities to put part of their generating capacity on the market and at the same time discouraged them from entering into long-term supply contracts with independent power producers. As a result, the utilities had to rely on the newly created spot wholesale market for about half of the electricity that their customers demanded. Hence from this time forth the three largest utilities were required to turn the operation of their transmission networks over to ISO and procure their electricity through the CalPX whereas the CalPX and ISO in turn operated public markets with transparent hourly market clearing prices for electricity as well as

[15] *"As it turned out, the computers required for the transition were not ready – the first glitch – and opening day was postponed to April 1, 1998 – by tradition, April Fools day."* See: Hall/Weinstein, page 8.
Even when the market was finally opened on April the first, several important software functionalities were still not working properly, the co-ordination between the new market institutions was imperfectly organised, the congestion management, the protocols for planning and investment in transmission and the interconnection of new generating plants, the real time balancing markets, the ancillary services markets and other services started to work insufficiently designed which evidently made wholesale prices increase.

operating reserves and managed congestion by using market mechanisms.

The CalPX was set up as a non-profit public trading exchange to conduct auctions for wholesale electrical energy which then is being dispatched in each hour of the next day. The market clearing price for a megawatt-hour of electricity is set by an interaction between buyers, primarily the investor-owned utilities, and sellers, the power generating entities. When there is an excess of supply, prices can be established by the assets of the investor-owned utilities, and will be very low. However, when there is a shortage of supply, the price is set almost totally by the buyers as they compete against each other. If there are a number of buyers, the ultimate price will be established by the highest bidder.

More specifically, this day-ahead market establishes price and quantity of electricity for delivery during each hour of the following day. This means, that each day 24 hourly auctions are conducted to produce unconstrained market clearing prices and quantities. After congestion management is performed, the CalPX issues therefore final day-ahead schedules and calculates hourly zonal market-clearing prices, which is determined by the intersection of the aggregated demand and supply curves formed out of the incoming bids. The winning supply bidders in each hour made up the CalPX's preferred day ahead schedule which was then put forward to the ISO. The electricity price, charged to consumers who did not choose their own electricity service provider (ESP)[16], was set equal to this wholesale spot market price determined on the this short-term forward market. Price regulation, as a consequence of such transactions which are wholesale in nature, now became subject to FERC regulation.

All the three Independent Operating Utilities are requested by legislation to place all of the day-ahead demand from their default service customers through the CalPX on an hourly basis and must also bid all of the energy supplied from the remaining own generating units or power supplied to them under pre-reform long-term contracts into the

---

[16] *"no more than 12% of retail demand migrated to ESP".* Joskow/September 2001, page 13.

CalPX as well. Other generators and demand serving entities may voluntarily trade in the CalPX.

Operational control was – as already mentioned – transferred out of the hands of the utilities to the Independent System Operator (ISO), the second private non-profit market institution which is intended to manage about 80 percent of the transmission system and – similar to the CalPX – operates as well an hourly auction market for operations such as energy balancing, ancillary service and congestion management. All supply from generators selling into the ISO and all demand of the load serving entities must be physically scheduled with or dispatched by ISO[17]. Scheduled by ISO protocols generators now transmit their power to serve demand over ISO's network through intermediaries called Scheduling Co-ordinators (SC), any wholesale entity that has been licensed to schedule power on the ISO network. The CalPX as well was required to interact as an SC with ISO. ISO accepts hourly schedules form SCs on a day-ahead basis and an hour-ahead basis to operate the system and balances out variations in demand and supply in real time. This new market structure actually meant that the three investor-owned utilities sold power from their remaining assets into the wholesale market operated by CalPX and ISO and then bought it back to meat their default service demand. However, since this type of operation is as well subject to regulation by FERC, the responsibility about repairing old and building new transmission had been removed from local control too.

Strong incentives were put in place to encourage utilities to sell their fossil fuel generation to unregulated power companies located within the state of California. The legislation mandated to divest half of their fossil fuel generation, and gave incentives to get rid of the rest in order to moderate horizontal power problems.

The utilities were as well required to provide open access to their transmission and distribution systems at prices determined by the FERC and PUC but actually retained ownership and control of the distribution

[17] "Load" is the technical term for total demand for electricity. It is the amount of electricity that customers are pulling out of the grid at any given moment. This amount is monitored in real time by the ISO, and published every ten minutes. The ISO load accounts for about 80% of total electricity use in California. See: Coughlin/Meier/Van Buskirk.

system as well as of nuclear and hydro assets and their existing long-term contracts. As a consequence distribution systems remained regulated under the so-called incentive regulation mechanism.

Since the primary motivation for reforming the electricity industry was getting cheaper power for consumers, legislation also planned to reduce rates by a minimum of ten percent within a four year period. Based on the assumption that wholesale prices would be lower than the regulated retail price of generation service, a charge was added on to consumers' bills (amounting to about one third of consumers bills) for reimbursement of stranded investments, which mainly resulted from long-term uneconomic contracts and construction costs for nuclear plants. The net result of the rate was frozen until 2002 or until the utilities recouped their stranded investments. In view of the fact that wholesale but not retail prices had been deregulated the customers had no incentive to conserve energy or to switch the supplier.

3. RESULTS OF DEREGULATION

A number of new private companies started to enter the market, which bought the generating plants from the utilities. While generation was owned before deregulation by Utilities (55 percent), Public Agencies (23 percent) and Qualified Facilities and Others (22 percent), the ownership structure changed in a way such that Utilities had to cede 40 percent of their ownership to Non-Utility Owners, USA-owned energy and international active companies.

Large industrial consumers were able to make their own bilateral contracts or to buy on the CalPX, and so were able to take advantages of their market power to get cheaper electricity at first. Residential and small business users technically had the same right, but the ten percent rate cut in addition to the costs added to every bill cover stranded costs made undercutting the utilities themselves virtually impossible. That is the reason why most non-state companies abandoned the residential market. Consequently, residential and small business consumers saw no real benefit from deregulation, since there was no competition nor decrease in their bills[18]. A tremendous transfer of wealth from the consumers and utilities to the generators was the consequence.

From the utilities point of view, the system seemed to work during 1998 and 1999, since wholesale prices declined and, with consumer rates frozen, vast sums of their stranded costs could be reimbursed. However, price spikes did occur, but residential and small business consumers were protected from the market instability by the price freeze. With the year 2000 wholesale prices started to rise dramatically with ten times higher peak prices and four to five times higher off-peak prices compared to the same period a year ago[19]. Hence SCE and PG&E were paying far more for wholesale power than they were able to resell it for retail and therefore soon faced huge losses. Both subsequently were demanding to remove the price freeze in order to pass the costs on to consumers, while creditors became increasingly concerned about their financial conditions[20].

California was the first state in the United States to restructure its power markets followed by Pennsylvania, New Jersey and Maryland, York, and the New England States. Generally, due to its different market structures these other markets the utilities have depended upon spot markets for much less of their retail loads, so they naturally have not had the same price volatility problems as California.

Since California was dependent on purchasing significant amounts of power form outside of its state, it is member of a voluntary organisation called the Western Systems Coordinating Council that oversees the interconnected transmission systems in the 14 western states of United

---

[18] The only exception was San Diego, where SDG&E had a relatively small amount of stranded investments to reimburse. What is more, a small percentage of customers who were interested in "green" energy benefited, since they were offered the opportunity to purchase such at a premium.

[19] In June prices were routinely hitting the maximum price allowed by the FERC on the CalPX of $750 for a megawatt hour as compared with $25 to $35 per MWh a year before. See: Hall/Weinstein.

[20] SDG&E's retail prices, however, were allowed to adjust to changes in wholesale market prices beginning in January 2000, and passed the costs on to their customers, which ended up in an unignorable public outcry. In September 2000 a new law passed limiting the price cap to 6.4 cents per KWh, which was still higher than the cap for the other both.

States and parts of Canada. California traditionally exported power during the cold winter months, and therefor the crisis quickly spread to other states. Since private unregulated generators were no longer required to sell power to California utilities, they sold power to the highest bidder whether or not that bidder was in California. In the view of the fact that FERC allowed the ISO to lower the price cap on CalPX from $750 down to $250 per MWh and other states were not part of the Californian ISO, generators were quite willing to export to states at much higher prices.

FERC took two rather decisive actions during the last four months of 2000. The first was lowering the price cap on wholesale energy without forcing the generators to give back any of the excessive profits they had already made as requested by regulation and legislation. They also allowed the utilities to purchase electricity outside the CalPX, which the utilities denied fearing to get caught in long-term bilateral contracts at excessively high prices. Subsequently, disregarding all request to lower the caps even further, FERC removed them all and replaced them with a "soft cap" of $150 per MWH. To circumvent this order, all the generators had to do was filling in some paperwork with some reasonable arguments why their asking price was higher than that cap.

Some industries such as aluminium even shot down their operations in order to sell the power which they had already bought on long-term contracts, at prices which were fixed well before the price rise in 2000. Other industries like Montana's largest manufactures, on the other hand, suffered from the rising energy costs and had to scale back production. Since selling energy to other states increased the potential shortage in California, the federal government was forced to use emergency powers and issued emergency orders forcing generators in the whole western region to sell power to California and to cash-strapped PG&E and SCE. They both became insolvent in January 2001 and PG&E finally had to declare bankruptcy in April 2001. In order to avoid blackouts the state of California used state funds of about $8 billion during the first five months of 2001 to buy electricity from unregulated wholesale suppliers and negotiated long-term contracts with suppliers which makes retail prices likely to remain high for a period of twenty years to come[21].

In spite of this the Municipal Utilities, like the Los Angeles Department of Water and Power (DPW), seemed to be the only real winner by refusing to take part in the deregulation process. They were able to keep prices down and sell excess power on the CalPX and to other private utilities which resulted in surplus in their accounting and by passing on the benefits in lowered retail prices for their consumers[22].

4. SOME CONCLUSIONS TO BE DRAWN

In the ongoing debate about the causes of and solutions to California's energy problems several arguments had been tried to find in order to analyse and explain the reasons behind the Californian liberalisation crisis but most of them proved to be mistaken.

Firstly, the argument of a dramatic increase in demand. Unusual warm spring weather made demand for air conditioning increase and due to the fact that several generators were down for routine maintenance reserves for electricity decreased below five percent. As an immediate consequence and in order to avoid the whole transmission system collapsing the ISO issued the order for utilities to reduce service to several large customers in Northern California, a specific group which used to pay lower rates for electricity and in turn agreed to curtail consumption in emergency supply situations. In spite of these measures, first blackouts occurred in mid-June in Northern California. Despite several developments which may lead to draw the conclusion of a similar strong increase in electricity demand, average demand for electricity was only marginally higher and peak demand was actually lower in 2000 than in 1999, thanks in part to the effective co-ordination of utility investments in energy efficiency and the state's minimum efficiency standards for buildings and equipment.

21 An unexpected reduction in interest rates, however, was put in place by the United States Federal Reserve Bank in December 2000, right after California’s Governor and Allan Greenspan met to discuss ways out of the energy crisis which seemed to have an overall effect on the US economy.

22 The success of DPW even made California’s Governor to hire DWP’s general manger for assistance and generated demands for muncipalisation of electricity in other cities as well.

Secondly, fuel shortages. While natural gas prices grew three-fold in the United States and have risen eight-fold in California, there is definitely no fuel shortage identifiable in California. The increase in the price of natural gas was the consequence of the first significant cold winter after several mild winters and less than average amounts of natural gas available from storage. As one of the major inputs used for electricity generation, it is commonly argued that gas prices contributed significantly to the development of electricity prices. While some exerts claim that this price augmentation cannot explain a seven-fold increase in the price of wholesale electricity, others even affirm that gas prices had been stimulated by the rise of electricity prices. However, only *"15% of California generation is gas-fired. In any event, the electricity price spike did not follow gas prices"*.[23]

Thirdly, claiming environmental regulations to have prevented power plant construction. Environmental restrictions have definitely not been preventing the construction of new power plants. While in the early 1990s, the California Energy Commission certified eleven power plants for construction, eight of which were ultimately completed, not one power plant application reached the Commission from 1994-1997. This seemed to signal electricity surpluses as well as uncertainties about the future of electric-industry restructuring. In 1998, however, filing application set in again and by October 2001 31 large gas-fired plants with a capacity of 12,000 MW started to operate while more than 9,000 megawatts were under construction by then and financial guarantees had been approved for 78 smaller renewable-energy systems. The process by which a power plant site is approved was often criticised to take longer than construction of the plant itself, which in turn discourages private capital from locating a plant in California. However, even before recent legislation streamlined the application process still further, licensing a plant required twelve months or less[24].

Finally, ill-conceived deregulation policy. If deregulation is defined as less political control over an industry, then deregulation cannot be blamed to be a reason for the Californian energy crisis. California's liberalisation efforts have only partially deregulated the energy market and the energy market is in a state of transition, with many market

[23] See: Oppenheim 2001. Page 11.
[24] See: Natural Resources Defense Council. 2002.

elements still heavily regulated by the Public Utilities Commission. California in fact did not really deregulate the market and allow private companies to compete with each other to provide consumers with electricity. Instead of deregulating the industry, the state embraced an alternative re-regulation scenario. Utilities were forced to sell off their power generating plants and to buy their power at the highest going rate on the spot market.

The main lesson from the unfortunate experiments in California is that the liberalisation of former monopolies leaves a monopoly that must be regulated. The Californian dilemma with liberalisation is not an inherent problem with deregulation. Liberalisation requires transparent and reliable regulation.

5. LITERATURE

Corporation for Education Network Initiatives in California, Volume 4, Issue 6, July 2001.
URL: http://www.cenic.org/C_today/v4_6.html

Coughlin, K., Meier, A., Van Buskirk, R., "Today's Supply of and Demand for Electricity in California", Environmental Energy Technologies Division, Lawrence Berkeley, May 2001.
URL: http://energycrisis.lbl.gov

Hall, D., Weinstein, S., "The California Electricity Crisis – Overview and International Lessons", Public Services International Research Unit, University of Greenwich, 2001.
URL: http://www.psiru.org/reportsindex.htm

Joskow, P., "California's Electricity Market Meltdown", Published in: New York Times, January 2001.
URL: http://econ-www.mit.edu/faculty/pjoskow/files/CAMarketMeltdown.pdf

Joskow, P., "The Right Answer to The Energy Crunch", Published in: Boston Globe Newspaper Company, June 2001.
URL: http://econ-www.mit.edu/faculty/pjoskow/files/bgopdef.PDF

Joskow, P., "California's Electricity Crisis", MIT, September 2001.
URL: http://web.mit.edu/ceepr/www/2001-006.pdf

Marcus, W., Hamrin, J., "How we got into the Californian Energy Crisis", 2001.
URL: http://www.green-e.org/pdf/crisispaper.pdf

Natural Resources Defense Council, "California Overcomes an Electricity Crisis", 2002.
URL: http://www.nrdc.org/air/energy/acrisis.asp

Oppenheim, J., "US Electric Utilities: A Century of Successful Democratic Regulation of Private Monopolies; A Half-Decade of Failure of Experiments in Competition", Prepared for: European Federation of Public Service Unions – Future of the European Union and Public Services, Massachusetts, December 2001.
URL: http://www.psiru.org/reportsindex.htm

Population Division, U.S. Census Bureau, "Time Series of State Population Estimates: April 1, 2000 to July 1, 2001", December 2001.
URL: http://eire.census.gov/popest/data/states/populartables/table01.php

Reichert, R., "Privatising, Regulating and Restructuring the Electricity and Gas Market – Lessons from the United Kingdom", 2000.
URL: http://www.wifo.at/Stefan.Schleicher/down/da/DA_Reichert.pdf

Wright, P., "Less Electricity Liberalisation is better for You? Lessons From California and the UK", Energy Studies Programme, University of Sheffield, 2001.
URL: http://fce.unal.edu.co/oce/articulophilipwright.doc

REGULATION OF TELECOMMUNICATION SERVICES: THE AUSTRIAN APPROACH – A FLASHBACK, A REGULATORY MODEL, AND A BRIEF OUTLOOK

HEINRICH OTRUBA, STEFAN BERNHARDT

1. INTRODUCTION

More than four years after the final liberalisation, Austria's telecommunications markets can hardly be recognised anymore. Austrians can now choose from a diversity of attractive, high-quality and reasonably priced offers for a vast number of interesting telecommunications services. Mobile communications and the Internet are booming to a completely unexpected extent, new services like GPRS, broadband access to the Internet, etc. are the talk of the day. The UMTS/IMT-2000 technology, which is the new generation for mobile communications, is already on the horizon. New access technologies in the fixed network as well as the more efficient use of local loops (TASL) have the (technological) potential to offer customers many more options for selecting their telecom operator in the near future, turning the access market into a competitive market.

There is hardly any doubt in Austria that the EU programme for the liberalisation of the telecommunications markets has been highly successful. Recently, the ground has been prepared at the European level for a further development of the market order of the electronic communications markets. It is against this background and more or less as a closing point to the regulatory activities conducted under the "old regulatory framework" on the national and European level that a flashback is to be provided what – in regulatory terms – has been accomplished since November 1997. The objective of this paper is to describe the regulatory efforts on the telecommunications markets in Austria.

The liberalisation of a market, which was previously supplied by a state-owned company as a statutory monopoly requires some drastic steps. Since the central product is a service that is provided by means of a network technology, liberalisation differs significantly from that of a normal consumer goods' market. Network industries are characterised by the fact that they require the shared use of the competitors' production facilities, i.e. the networks. If a customer of provider A wants to make a call to a customer of provider B, both telecommunications networks will be involved in providing this service.

The core of this paper is directed at presenting a simplified model/approach for opening up a monopolistic network industry. The model to be discussed here comprises the following individual steps towards liberalisation: liberalising market access, determining which companies have a market dominant position, ensuring open network access, and preventing any abuse of market power. In addition, there are other regulatory tasks, such as the national administrative control of limited resources (numbers and frequencies), but also the settling of disputes on behalf of (end) users.

However, in order to put relevance to such a model, a sort of reality check should be added. Moreover, since this was not an academic exercise, a report on the activities of the regulatory authority would be incomplete without reference to the regulated markets. For this reason, even this short paper should include a chapter, which deals in great detail with a description and analysis of the development of the telecommunications markets in Austria since market liberalisation, and how these changes compare on an international level. Unfortunately we simply do not have the space here to provide this comprehensive picture of what has happened on the Austrian telecommunications markets since 1998. Still, to the interested reader, reference can be given to a substantial publication, released by the Regulatory Authority, containing such a market description, the telecommunications report 2000. Here we have to limit ourselves to giving hints, how markets have developed since 1998.

To put it in a nutshell: the telecommunications markets in Austria have experienced a positive development, characterised by vigorous growth and falling prices. The value added of the telecommunications markets in the stricter sense of the word grew by approximately 11% in the year 2000. Although this growth began to flatten out towards the end of the period under review (first quarter of 2001), it can nevertheless be said that the telecommunications industry in Austria experienced an extremely positive development between 1998 and 2000 (unfortunately the figures of the year 2001 have not been available before the deadline of this publication).

As in the years before, the main pillars of the market growth in 2000 were mobile telephony and leased lines. In the course of the year, Austria joined the top league of mobile communications countries (measured by means of market penetration, namely more than 80%). Fixed network telephony (voice telephony and Internet access) grew faster than during the (monopolist) past. At the same time, prices dropped significantly in all areas.

The telecommunications sector has come to be of decisive strategic significance for the transition from an information- to a communications society and the associated new orientation of the national economy. Technical progress in the field of telecommunications makes it possible to accelerate data transmission, as well as to render the following more efficient and faster: material flows, manufacturing processes, the supply of goods and services, and work and management processes. Since information and knowledge are input factors and output components, telecommunications have therefore become a basic element of almost all economic areas, making them a supply market for the entire national economy.

Modern telecommunications facilitate new forms of information and communication, which may have considerable repercussions on the entire economy, and may dramatically affect the international competitiveness of a country's economy. A highly developed telecommunications infrastructure is therefore also of central importance when it comes to locational decisions. This means an extension of network access, the construction and expansion of modern communication routes (xDSL, WLL, point-to-multipoint directed radio relay, UMTS), but also to translate the technical options into an offer of new innovative services, for example on the basis of the Internet. The scope and growth of investments in the field of telecommunications can be interpreted as an approximated indication for the speed and intensity of the infrastructure expansion. On the basis of data contained in different publications (VAT web site, the business reports of Telekom Austria for 1999 and 2000), investments have taken a very positive course between 1998 and 2000. They went up from approximately EUR 1.5 billion in 1998 to approximately. EUR 1.78 billion in 1999, and to EUR 2.07 billion in 2000, which means double-digit growth figures for every year.

The growth of the telecommunications sector is also reflected in a significant increase in the number of jobs in recent years. Although there are no official statistics on the development of employment in the telecommunications sector, economic researchers have concluded that a significant rise in employment figures can be expected, or has already been realised, in Austria. According to a study, which the Federal Ministry of Economic Affairs commissioned with the consultancy firm of Arthur D. Little (supplemented by own calculations), the total number of jobs in the telecommunications sector – comprising infrastructure suppliers, mobile communications, fixed network, other suppliers of telecommunications services – amounted to about 45,000 persons in 2000. It also shows that the increase in staff levels with alternative operators compensated the jobs lost at the former monopoly enterprise, so that employment in the fixed-network sector has remained more or less the same. However, the balance is truly enhanced by the dynamic development of mobile communications and the data services. Last but not least, the telecommunications equipment industry, which benefits from the continuous network construction of all operators, has also reported expanding employment figures.

Telecommunications have developed in such a dynamic fashion in recent years that the question as to whether or not this trend will continue unabated, seems justified. It is not really surprising that no final answer can be given to this question. As a rule, after every boom phase there is a period of consolidation. This will also apply to the telecommunications markets in Austria. Clear indications in this respect are the slower growth of the mobile sector, as well as the stagnation of the volume of calls in the fixed telephone networks. However, the market for Internet services continues to grow vigorously, both with regard to the access market and the Internet services in the narrower sense. It must be stated, however, that telecommunications and – in the future – digital communication will assume an even more important position than is currently the case already.

2. *The Institutional Setting of Telecommunications Regulation in Austria*

On 01 November 1997, Telekom-Control-GmbH (TKC) began its activities according to the provisions of the 1997 Telecommunications Act (TKG). The Telekom-Control-Commission (TKK) was constituted almost at the same time, on 24 November 1997, and was based at TKC, which is now RTR (Telecommunications Division). With the entry into force of the KOG 2001 on 01 April 2001, Telekom-Control GmbH was transferred into the newly founded "Rundfunk- und Telekomregulierungsgesellschaft mbH", briefly referred to as RTR-GmbH.

In Austria three major bodies are in charge of preparing the telecommunications policy and its implementation in Austria. These institutions are: the Federal Minister of Transport, Innovation and Technology (BMVIT), and two regulatory authorities – the TKK and TKC (now RTR-GmbH, Telecommunications Division), which are responsible for implementing the TKG.

In this connection, there is a clear distinction between the competences of the BMVIT and Telekom-Control GmbH (now RTR-GmbH) on the one hand and between RTR-GmbH (Telecommunications Division) and the TKK on the other. The TKK has comprehensive competences, which are fully enumerated in the Telecommunications Act (e.g. granting, withdrawal and revocation of licences, determination of telecommunications operators to be classified as having significant market power, approval of the general terms and conditions and tariffs of companies with significant market power, determination of the interconnection conditions in case of disputes, etc.). § 109 of the TKG assigned the general responsibility for all tasks given to regulatory authorities to TKC (now RTR-GmbH, Telecommunications Division), unless these were reserved for the TKK.

In keeping with its competences, the TKK is a collegial body with quasi-judicial functions, conceived in accordance with Article 133, Item 4, of the Federal Constitutional Act (B-VG), it decides independently and unanimously.

No standard legal remedy is admissible against decisions of the TKK. Originally, a complaint against the Constitutional Court was the only possible appeal against decisions of the TKK. On account of an amendment of the TKG (June 2000) it has become possible to appeal decisions of the regulatory authorities to the Administrative Court. The TKK is based with TKC / RTR-GmbH, which is also responsible for managing the administrative chores of the TKK. In this connection, the

TKC / RTR-GmbH staff is bound by the instructions given by the chairperson of the TKK (or the TKK member so designated in the rules of procedure). A complaint may be launched with the Constitutional and the Administrative Courts against decisions of TKC / RTR-GmbH.

3. The Regulatory Approach, A Simplified Model of Opening Up a Monopolistic Network Industry

The role of the regulatory authorities in the process of liberalising the telecommunications markets in Austria can best be understood by considering the basic issues involved in opening the market of the telecommunications sector. In many Member States of the European Union, just like in Austria, the provision of telecommunications services and the operation of the telecommunications networks were reserved for state-owned telecommunications organisations (PTTs). With the 1987 Green Paper (COM(87)290) the EU embarked upon a very ambitious programme which stated that the express goal would be full liberalisation of the telecommunications sector in all Member States and the creation of a common European telecommunications market. In addition, telecommunications are a so-called network industry. This means that all providers need parts or the entire network of other competitors in order to be able to provide their telecommunications service. If a customer of network A wishes to make a call to a customer of another network B, then both networks, possibly also other networks, are involved in providing this service. This fact is of particular importance, at least in fixed network telephony, since at the time of market liberalisation the former monopoly enterprises had access to all customers and thus a tremendous market power.

The predominantly state-owned monopolies of the telecommunications markets were given an expiry date (01 January 1998). Individual sectors, like the terminal equipment market (end of the eighties) and the mobile telecommunications market (middle of the nineties) had already been transformed into competitive markets earlier. A chronological sequence of the market-liberalisation events is presented in the Telecommunications Report 1998 – 1999 (2000). The last step was the liberalisation of the fixed telecommunications networks and of fixed network voice telephony, which were "reserved services" that the state-owned PTTs of many countries, including Austria, dominated as monopolists to the end.

The technological background for the liberalisation of the markets and for stepping up competition was the rapid development of switching and transmitting methods (digitisation and fibre optics), as well as the resulting conviction that there was no longer a natural monopoly situation for fixed network telephony. The positive practical experience of other countries, primarily the USA and the UK with the liberalisation of the telecommunications sector were equally important. Last but not least, the practical experience with state-owned monopolies and their clear deficits regarding innovation and customer-orientation, as well as the resulting inefficiencies also played an important role. Also, the view gained acceptance that, in the future, telecommunications as a cross-section technology would be of decisive, strategic significance for the long-term development of the economies in the EU area.

The decision of the EU in favour of full liberalisation, and thus to give up previously prevailing monopolised control, was and is radical, and required complete rethinking by the institutions which were to be entrusted with opening up the telecommunications markets. This change in approach manifested itself in the total renunciation of traditional monopoly supervision authorities, usually based at "postal ministries", in favour of regulatory authorities for the telecommunications sector, which had to be newly established and were meant to be largely independent. Independence was to be guaranteed vis-a-vis both, the (former) monopolist and the owner. These regulatory authorities were originally not conceived as competition authorities in the classical sense, but rather as institutions, vested with the necessary legal powers, which were to actively pursue the opening of the market. Only later, after having achieved a sufficient degree of intensity of competition, was there to be more focus on their character as sectoral competition authorities.

For many EU Member States it was an absolute novelty, and a great legislative challenge, to establish an independent regulatory authority, having the clear mandate to open up the markets and to provide, by way of intensified competition, an improved range of services, higher quality and, last but not least, significantly lower prices for the benefit of the people and the economy.

This new quality of the regulatory authorities, to be newly established, is also reflected in the European regulatory framework, which is designed to support these regulatory authorities in pursuing and promoting the opening of the market. Essentially, this regulatory framework is based on the idea that specific restrictions and obligations are imposed ex ante on enterprises with significant market power (SMP operators, which are market dominant enterprises within the meaning of the Austrian Telecommunications Act). Contrary to EU competition law, it is not required that market power be abused so that these obligations and restrictions apply. In a number of EU Directives, i.e. the so-called ONP Directives (Open Network Provision), the Interconnection Directive and the Voice Telephony Directive, as well as the Licensing Directive and the Harmonisation Directive, Member States were requested to transpose this regulatory framework into national law. In addition, there are a number of Recommendations of the European Commission and some important documents of the ONP Committee which explain the contents of the Directives in closer detail without being directly part of the existing legislation. In Austria, this European regulatory framework was implemented in the Telecommunications Act (TKG).

With regard to the issues to be dealt with, several major sub-areas may be singled out: regulation of market access (licensing), opening of the networks of the former monopolist, prevention of the abuse of market power, ensuring universal service, an economically meaningful management of the limited resources, such as radio frequencies, and the administration of the numbering plan, as well as tasks in connection with consumer protection.

From the liberalisation perspective, a first step is to open the market to new providers. The TKG provides that non-discriminatory procedures are followed to grant licences for the public provision of mobile and fixed network voice telephony or other public mobile services, as well as for the public provision of leased lines (always by means of self-operated networks). It should be mentioned that specific services only need to be notified in advance (e.g. in Austria, the provision of Internet services) or are completely free anyway (e.g. in Austria, the resale of telecommunications services). On the whole, the licensing procedures for fixed network licences are very reasonably priced and fast and do not make high demands on existing or planned infrastructures, which has also found favour with the EU. In the meantime, a large number of licences have been granted, but it has to be stated that not all of the licence holders have actually begun to operate, and some of them have already left the market.

Licences for mobile radio communication services are granted by a different procedure. Since the frequencies required for the provision of mobile radio communication services constitute a scarce public resource, the number of possible licences is limited from the beginning. It is therefore necessary to assign these frequencies to companies, which are likely to use the frequencies efficiently. The TKG stipulates that an auction process be used for the allocation of frequencies. During the period under review, the licences for the third generation of mobile radio communication (UMTS/IMT-2000) were granted by way of auctions. This creates the prerequisites for a timely introduction of broadband mobile telecommunications services. In addition, frequencies were auctioned off for the construction of radio distribution systems (Wireless Local Loop) and the remaining GSM frequencies in the GSM 1800 frequency range, as well as frequencies for TETRA-applications.

The second major area of tasks is to provide the new market entrants with the conditions they require to actually be able to offer their services on the market. In this connection, the fact that telecommunications is a network industry must again be taken into account. Starting out from a de facto monopoly situation in the fixed network, it must be ensured that the new providers can use the parts of the network of the former monopolists that they need to provide the planned services. As it is unlikely that the former monopolist will allow the shared use of the required network components on a voluntary basis and at reasonable economic conditions, this is made possible first and foremost by imposing ex ante obligations, in other words by asymmetric regulation. In the European regulatory framework such obligations are related to significant market power (SMP). Since these obligations (and the associated rights of new providers) have far-reaching implications, significant market power (SMP) must be determined in lengthy proceedings. The current status of these proceedings carried out in Austria established that Telekom Austria has a market dominant position in the fixed network (voice telephony, leased lines) and in the interconnection market.

The most important obligation of fixed network operators with a market dominant position is the obligation to provide open network access

(Open Network Provisions - ONP) at cost-oriented tariffs. This includes the interconnection of networks and other forms of network access, e.g. unbundled access to local loops.

The interconnection of networks is a highly complex subject, comprising physical and logical interconnection, the services to be enabled by interconnection, as well as the charges for interconnection services. The European regulatory framework imposes an extensive interconnection obligation on operators with significant market power, the final formulation of which is left to the national legislator of the Member States. The stipulation that interconnection services shall be offered according to the principle of cost orientation is of particular importance, with the "forward looking long run average incremental costs" (FL-LRAIC) approach having emerged as the best-suited costing model. According to this approach, a new provider need not pay for the full distributed costs, based on the historic costs of the SMP operator, but only for the services directly attributable to interconnection, in addition to the costs for the provision of efficient services. Apart from the scope of the interconnection services, calculation of the charges for the interconnection services is the main point under dispute in the proceedings. The TKK continued its practice, applied since spring 1998, which has accounted for a stable regulatory framework on this central issue. The interconnection charges fixed by the TKK, currently applicable can be found on RTR's website www.rtr.at. Generally speaking , they are well situated in the European medium range with a tendency to move to the higher priced countries within the EU Member Countries. Also resulting from a first landmark decision taken in 1999, relating to the termination of calls in mobile networks, another clear lowering of these interconnection services was imposed each year from autumn 1999 onwards. As a result, the Austrian charges for terminating calls in mobile networks continue to be at the lower end of the price band in Europe.

The decisions of the TKK on interconnection have paved the way for the market entry of new telecom providers, especially the so-called carrier network operators. As in 1998 and 1999, the intensity of competition also continued to rise in 2000 and 2001, which was reflected in rapidly dropping prices and a decrease of Telekom Austria's market share, with telecom sales as a whole being on the rise. The strategy of the TKK, i.e. to quickly open up the markets by pursuing a liberal licensing policy and by issuing speedy decisions, as well as to encourage competition by determining interconnection charges according to the FL-LRAIC, has up until now been crowned by success. The new competitors especially targeted the markets for international and national long-distance calls.

With regard to local competition, the situation needs to be seen in a somewhat different perspective. The issue here is to have customers who are linked up to the operators' own networks. Contrary to carrier network operators whose customers are connected to the Telekom Austria network, access network operators connect their customers to their own networks. In this respect, several approaches are possible. The network operator might invest in his own infrastructure and establish an access network. As a rule, this will lead to a possibly inefficient duplication of infrastructure, and this approach is only used for large-account customers. It is also possible to adapt other, already existing, infrastructure for telecommunications purposes. This applies mainly to cable TV networks, which are gradually being refitted, at least in the major towns. Last but not least, Wireless Local Loops (WLL) and possibly the power supply network may be used with the help of Powerline technology. In addition, a highly interesting option is the unbundling of local loops (TASL). For this purpose, a new telecom or Internet provider leases the copper wire pair, connecting the subscriber's premises ("network outlet") to the main distribution frame of Telekom Austria, to provide his services. Pursuant to the TKG, the market dominant operator must also apply the FL-LRAIC costing model. The TKK took a decision in this respect which did not restrict the use of the local loop (TASL). As a result, a new operator may also provide his broadband services via the TASL. To date, the number of unbundled TASLs is still relatively small. However, there seems to be potential for a more widespread use of this option, as the use of the Internet is spreading and as consumers increasingly wish to have faster Internet access. With Regulation (EC) No. 2887/2000 of the European Parliament and of the Council of 18 December 2000, which entered into force on 01 January 2001, the obligation to unbundle TASLs became directly applicable law. The Regulation requires market dominant companies to make the local loop (TASL), parts of it, as well as parts of the frequency spectrum of the local loop accessible for use by other telecom operators. It therefore broadens the unbundling obligation which originally existed in Austria.

The area of safeguards against abuse of market power, i.e. regulation of competition, is equally vast. Here, too, the concept of market players with significant market power (SMP operator) is used as a basis. Fixed network operators with significant market power, in particular, are affected by a number of stipulations. One should mention especially the obligation to offer cost-oriented end-user tariffs. This is intended to protect end-users against SMP operators exercising their monopoly powers, but also other competitors, against predatory competition. Fierce competition by means of "predatory pricing", in particular, on the part of the SMP operator is to be prevented.

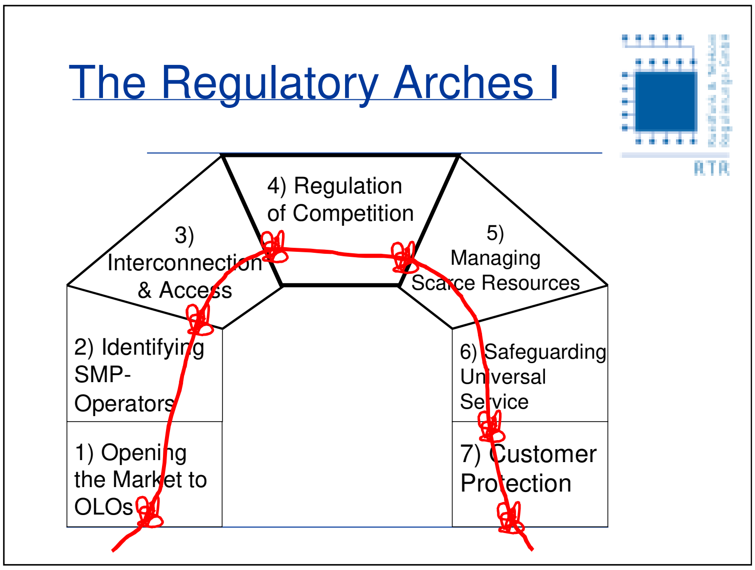
Non-discrimination belongs to the same area of tasks. SMP operators are obliged to act in a non-discriminatory way, which means that they must treat all market players as equals. This obligation also extends to services that they provide for themselves or for affiliated companies under their control. If an SMP operator provides an intra-company service at a specific transfer price, which should be cost-oriented, he is also obliged to provide the same service to all competitors at the same conditions. SMP operators have regular, comprehensive reporting obligations, which serve to implement this regulation. In addition, the regulatory authorities have far-reaching rights of inspection.

To ensure that new operators have equal and future-proof access to the bottleneck resources of subscriber numbers, on the one hand, and to create also clear and transparent rules for consumers concerning the services and costs associated with calling specific numbers, on the other, many countries are in the process of re-structuring their numbering plans in the process of liberalisation. In Austria, the Numbering Ordinance was issued for this purpose, on the basis of which TKC (since 01 April 2001 RTR-GmbH) has to ensure an efficient administration of the numbers range.

Universal service represents a special complex of problems. The European regulatory framework stipulates the provision of universal service, i.e. the provision of a minimum of telecommunications services for everybody, complying with certain quality standards, at affordable prices and without any geographic or social discrimination. As a rule, the former monopolist must provide universal service. It is clear that this may impose a financial burden on the former monopolist. The regulatory authorities must ensure that universal service is provided, but must also see to it that the company, required to provide universal service, is compensated for any possible additional financial burden.

Finally, the review and – in case of SMP operators – the approval of the general terms and conditions serve to protect consumers. The most important step, in this connection, was the approval of the tariff scheme of Telekom Austria, which has been in force since 01 September 1999. With this approval, the basic network access charges were raised to the level of the costs of the local loop (TASL) and the call charges were, in part, massively reduced. This helped to create cost-oriented tariffs and to eliminate any market distortion. Settling disputes between customers and suppliers of telecommunications services is another important activity of the regulatory authority.

These seven elements, these seven regulatory steps described before can be visualised as follows:



What kind of and how many decisions have been taken by the regulatory bodies in Austria since November 1997? A list of regulatory actions (broken down by the seven elements of regulatory work identified before) may provide a first idea of what regulating actually is made up of. In the following areas, regulatory proceedings have been launched:

Elements of Regulatory Work	**Number of Proceedings**
Regulating Market Access (Opening the market to “other licensed operators” (OLOs), licensing procedures)	186
Designating Operators with SMP-Status (Identifying SMP-Operators)	5
Network Access (Interconnection and Access)	109
Regulation of Competition (Safeguarding against the Abuse of Market Power)	46
Managing Scarce Resources (Efficient Administration of Numbering and Addressing Elements, frequency allocation procedures included in „Regulating Market Access“)	3,687
Safeguarding Universal Service	1
Consumer Interests – Approval of General Terms and Conditions – Dispute Settlement between Operators and Customers (Arbitration Centre)	 131 3,999

An exclusively quantitative approach bears the risk to draw premature conclusions. The number of proceedings launched does not give any indication of how complex regulatory decisions can be. Proceedings in the area of interconnection or identifying SMP operators are by far more complex than proceedings with a fairly high degree of standardisation, such as customer dispute settlements or number allocation. A look at the actual decisions published at RTR’s website (www.rtr.at) may illustrate how comprehensive regulatory decisions can be. As a rule, interconnection decisions are documents of sometimes hundreds of pages. These documents are made available for download on RTR’s website.

4. Operation and Self-Perception of RTR-GmbH, Telecommunications Division

At no point should regulation become an end in itself. The legislator therefore determined in § 1 of the TKG the general objectives for the liberalisation of the telecommunications markets, and in § 32 of the TKG the special objectives for regulating competition. These are the direct targets set for the activities of the regulatory authority in Austria:

§ 1 (1) of the TKG: It is the purpose of this federal law to ensure that the public and business circles are provided with reliable, cost-effective, high-quality and innovative telecommunications services by way of promoting competition in the area of telecommunications.

§ 1 (2) of the TKG: The regulatory measures are intended to serve the following goals:
1. to create a modern telecommunications infrastructure in order to promote high-level locational quality;
2. to ensure equal opportunities and operative competition on telecommunications markets;
3. to ensure universal service throughout Austria;
4. to protect users against abuse of a market dominant position; and
5. to ensure an efficient and smooth use of the frequencies.

§ 32 (1): By taking the measures listed below, the regulatory authority must:
1. ensure equal opportunities and operative competition on the telecommunications market;
2. promote the market entry of new providers;
3. stop the abuse of a market dominant position and prevent abuses;
4. ensure compliance with the principles of an open network access in accordance with ONP;
5. implement the sector-specific rules of the European Communities; and
6. resolve disputes between market players as well as between market players and users.

These objectives guide the institution in its activities. The targets set by the legislator and the resulting guiding principles form the framework, within which the staff members of the regulatory authority perform the tasks assigned to them. In addition, there is the self-perception that a service provider must provide the public with high-quality services and do so with expediency.

In keeping with its self-perception, the regulatory authority considers itself to be an active and transparent organisation that looks for contacts with the players on the Austrian telecommunications market, and that puts its task on a broad information basis, against the background of the government objectives. In this respect, the decisions, inter alia, are made available to an interested public on the web site of RTR-GmbH (http://www.rtr.at), observing all data-protection requirements, in order to facilitate a more detailed insight into the regulatory activities regarding telecommunications.

In order to meet the demand for a high level of transparency, the regulatory authority has used the instrument of consultations from the very beginning, whenever important issues need to be discussed. A consultation can generally be defined as an invitation to a group of addressees, which is usually not specified in any further detail, to comment on certain questions. Consultations, which are always based on a consultation document, the contents of which is to be discussed and commented, are meant to provide an overview of the different positions and interests of the market players, and thus to provide a better basis for decision-making. From 1998 until recently, the regulatory authority conducted consultations on the following topics, among others:

- licensing obligation for voice telephony services;
- carrier pre-selection;
- number portability;
- two consultation procedures for unbundling access to the local loop;
- a tender for mobile telephony licences (4th mobile radio communication licence and licences for networks not having full national coverage);
- licences issued for digital trunked radio communication;
- call for participation in the development of a bottom-up costing model for the fixed network;
- UMTS/IMT-2000 awarding procedure;
- allocation of Wireless-Local-Loop frequencies;
- requirements of the SigG for user equipment;
- customer complaints regarding value added services;
- numbers for on-net services;
- ENUM (tElephone NUmber Mapping).

The regulatory authority is convinced that the World Wide Web is the best-suited medium for conducting such consultations. In addition to any consultation documents that may be made available, the results of the consultations are always made accessible to the public on the web site of RTR-GmbH (http://www.rtr.at).

Every regulator should make an effort to act close to the market. The approach in telecommunications is to promote the direct contact with the licensed companies by means of so-called jours fixes for operators, in addition to conducting consultations. Such forums, to which invitations to the premises of the regulatory authority are extended every second month, offer an opportunity to discuss specific topics or to comment on key decisions. The objective is to ensure the best-possible level of information among the operators.

Press conferences on decisions taken by the TKK, background discussions with the press, individual interviews with representatives of the press, but also broad-based participation in specific telecommunications events round off the supply of information.

When trying to understand the operating mechanisms, the activities and the alleged "omissions" of the regulatory authority, one should not lose sight of the interaction existing between the different levels of standardisation in the Austrian legal system with regard to telecommunications.

The TKG is the basis for all regulatory activities. It contains a number of authorisations to issue ordinances, which are intended to bring about more detailed arrangements for selected areas. The statutory provisions and the stipulations laid down in laws are formulated by the policy-makers, the most important representative of which in the Government, is the Federal Ministry of Transport, Innovation and Technology. The regulatory authority is responsible for the specific implementation and design of the TKG provisions, which can be implemented directly (in particular, the sector-specific competition-law elements) and the provisions that are determined by ordinance. RTR-GmbH and the TKK implement whatever the legal framework provides.

The "liberalisation areas" of the TKG are gradually provided with specific stipulations by means of regulatory decisions, in order to make it possible for the market players to do business on the emerging competitive telecommunications markets, or - to put into other words: the TKG and the ordinances derived from it provide the necessary leeway for liberalisation. The operators are called upon to make the appropriate use of these "voids", on the basis of private-law agreements.

Only if market solutions cannot be found, regulation, as defined by the TKG, commences.

In telecommunations the "primacy of the private-law agreement" is the guiding principle. Should it not be possible to reach private-law agreements in the field of interconnecting telecommunications networks, such a dispute may be submitted to the TKK for decision, as part of its competences under § 111, Item 6, of the TKG. The members of the TKK reach such a decision unanimously. The decision is an instruction, issued in the form of a notice, which replaces the private-law agreement that the parties to the proceedings were unable to reach.

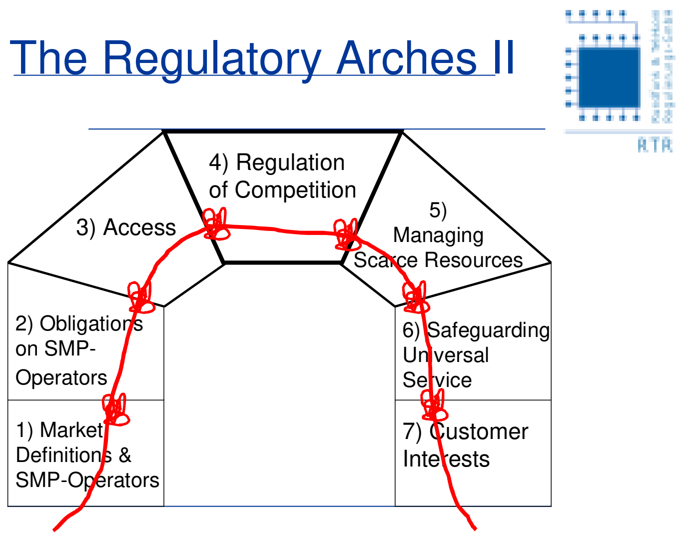
Concerning issues of sector-specific competition law, the TKC had responsibility pursuant to the blanket clause of § 109 of the TKG, which applied until 31 March 2001. Since 01 April 2001, the TKK has been primarily responsible for such matters (§ 34 proceedings). It relies on the services of the Telecommunications Department of RTR-GmbH. The following principle applies: neither the TKK, nor RTR-GmbH can bring about progress concerning the design and materialisation of the liberalisation steps taken on the Austrian telecommunications markets without the necessary submissions or information.

The General Administrative Procedures Act (AVG) provides the comprehensive basis for the procedure applied to the activities undertaken by the Austrian authorities. This also applies to all proceedings pending before the regulatory authority. In addition to the solid foundations of the AVG, the telecommunications regulator is trying to establish and to develop further a mode of operation that aims at comprehensive transparency in the work of the regulatory authority in the framework of the legal possibilities.

5. Outlook on Regulatory Issues in the Future

The big challenge of regulatory work in telecommunications in the near future is to further develop and elaborate oncoming decisions based on the generic regulatory intervention of the past 4 to 5 years. Those key decisions have to be refined in a way that helps to accomplish the status of sustainable competition on – and this has to be the ultimate goal – all (tele-)communications service markets. In such a scenario the ex-ante approach of regulatory intervention will have to be gradually transformed into a sector specific supervision of competition in line with rules employed by general competition law as outlined by the EU. Assuming that the (former) telecommunications markets have been opened up successfully, the new regulatory approach will result in much more specific regulatory interventions based on refined market definition and a clearly defined "tool box" of regulatory measures. The basic idea of asymmetric regulation is still valid and will be employed in the future – the difference will be in the degree and the extent of applying asymmetric regulatory measures.

The newly composed seven elements, or seven regulatory steps – as derived from the recently adopted regulatory framework of the European for communications networks and services – may be described as follows:



Technological innovations pave the way for phenomena such as convergence requiring new approaches for regulatory action. This need has been recognised by the European Commission (Services), which triggered a (political) process of establishing a completely new regulatory package directed at providing a regulatory framework for platform (i.e. technologically neutral) regulation for digital communications. This package now consists of five recently adopted

directives and (in the near future) a number of recommendations and guidelines derived from these (generic) stipulations.
The regulatory package – as it looks today – consists of five directives, i.e.:

1. Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive)
2. Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive);
3. Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive);
4. Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive);
5. Directive 2002/__/EC of the European Parliament and of the Council concerning the processing of personal data and the protection of privacy in the electronic communications sector (Data Protection Directive – expected to be adopted in the near future);

As outlined before this package is directed at providing the legal base on a European level to gradually transform the national telecommunications markets – in Austria exposed to competition roughly five years ago for the first time – away from enforced to self-sustaining competition on the relevant markets in the (tele-) communications industry on a European level. The policy objectives and the regulatory principles of this new regulatory framework are laid down in Chapter III, Article 8 of Framework Directive (Directive 2002/21/EC). This regulatory package has to be transposed into national law before 25 July 2002.

Regulatory frameworks, almost by nature, lack behind breathtaking innovations and shortened product lifecycles – both on the technical but also on the service side of the telecommunications industry. Still, the recently adopted regulatory package offers the opportunity to continue regulatory work – based on detailed analysis – wherever it appears to be necessary in order to be in line with the objective of paving Europe its way to the information society in the age of (digital) information.

Fostering full-coverage broadband access of Austria to the digital world of global communication networks – which undoubtedly is a prerequisite in all developed economies and societies today – is a topic of outstanding importance high up the agenda of Austrian telecommunications- and economic policy. The regulatory authorities are prepared – within the scope of their respective responsibilities and capabilities – to support this objective to the maximum possible extent. In each and every regulatory decision to be taken, it will have to be considered, how this challenging goal can be accomplished. Austria should not only be a country of Internet users in the heart of Europe but also a location of high economic value added in the world of Internet.

6. LITERATURE

Austrian Telecommunications Act, "Österreichisches Telekommunikationsgesetz (TKG)", BGBl. I 1997/100, Vienna, 1997.

COM (87)290, Commission Communication, "Towards a dynamic European economy: Green Paper on the development of the common market for telecommunications services and equipment", Brussels, 1987.

Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive), Brussels.

Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive), Brussels.

Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), Brussels.

Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), Brussels.

Directive 2002/__/EC of the European Parliament and of the Council concerning the processing of personal data and the protection of privacy in the electronic communications sector (Data Protection Directive – expected to be adopted in the near future), Brussels.

Interconnection Directive (97/33/EC as amended by 98/61/EC) Directive 97/33/EC of the European Parliament and of the Council of 30 June 1997 on Interconnection in Telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP) (OJ L199/32, 26 July 1997, p. 32), as amended by Directive 98/61/EC of the European Parliament and of the Council of 24 September 1998 amending Directive 97/33/EC with regard to number portability and carrier pre-selection (OJ L268, 03 October 1998, p. 37), Brussels, 1998.

Licensing Directive (97/13/EEC), Directive 97/13/EC of the European Parliament and of the Council of 10 April 1997 on a common framework for general authorisations and individual licences in the field of telecommunications services (OJ L117, 07 May 1997, p. 15), Brussels, 1997.

Little, Arthur D., Study commissioned by the Federal Ministry of Economic Affairs, Vienna, 2001.

ONP Framework Directive (90/387/EEC, as amended by 97/51/EC), Council Directive 90/387/EEC of 28 June 1990 on the establishment of the internal market for telecommunications services through the implementation of an open network provision (ONP) (OJ L192, 24 July 1990, p. 1), as amended by Directive 97/51/EC of the European Parliament and of the Council of 06 October 1997 amending Council Directives 90/387/EEC and 92/44/EEC for the purpose of adaptation to a competitive environment in telecommunications (OJ L295, 29 October 1997, p.23), Brussels, 1997.

Numbering Ordinance (NVO), (Nummerierungsverordnung), Ordinance of the Federal Minister of Science and Transport concerning numbering, BGBl. II No. 416/1997, as amended by BGBl. II No. 89/2001 and BGBl. II No. 100/2001, Vienna.

Regulation (EC) No. 2887/2000 of the European Parliament and of the Council of 18 December 2000, Brussels.

Rundfunk und Telekom Regulierungs-GmbH (RTR-GmbH), "Telekommunikationsbericht 2000 (Telecommunications Report 2000)", Report of the Austrian Regulatory Authority for Broadcasting and Telecommunications, Vienna, February 2002.

Telekom Austria AG "Geschäftsbericht 1999" (Annual Report 1999), Vienna, 2000.

Telekom Austria AG "Geschäftsbericht 2000" (Annual Report 1999), Vienna, 2001.

Telekom-Control GmbH (TKC) (2000), "Telekommunikationsbericht 1998-1999 (Telecommunications Report 1998-1999)", Report of the Austrian Regulatory Authority for Telecommunications Regulation, November 2000, Vienna.

Verband Alternativer Telekom-Netzbetreiber (VAT) (2001), Website of VAT: www.vat.at

Voice Telephony Directive (98/10/EC) Directive 98/10/EC of the European Parliament and of the Council of 26 February 1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment (OJ L101/41, 01 April 1998, p. 24), replacing the European Parliament and Council Directive 95/62/EC on the application of open network provision (ONP) to voice telephony (OJ L321, 30 December 1995, p. 6), Brussels, 1998.

RAILWAY INFRASTRUCTURE CHARGES IN THE CONTEXT OF THE LIBERALISATION OF THE RAIL MARKET

GERHARD H. GÜRTLICH

1. BACKGROUND

It all began on 22 May 1985 with a judgement passed by the European Court of Justice on the Council's obvious failure to act: *"The Court must find that in breach of the Treaty the Council has failed to ensure freedom to provide services in the sphere of international transport and to lay down the conditions under which non-resident carriers may operate transport services in a Member State"* (ECJ, Case 13/83, European Parliament vs. Council of the EC, 1985). The reason for using this rather unusual instrument of legal action was that the six EU founding members obviously showed only little interest in taking action towards common transport policy.

- Until then, transport policy was mainly rail transport policy. There would have been no grounds to object to this fact, if the focus had not been on the protection of state railways vis-a-vis other (state) railways, giving preference to national over foreign rail industries. This can be illustrated by a number of examples (interoperability of railway systems was rather a chance result and was not encouraged, railway markets were identical with state territories, domestic railway products, even in smallest series, were preferred, etc.).
- In contrast to this, road transport policy was more or less understood as the unrestricted implementation of the "laissez faire" principle, which was liberally applied focussing on the postulate of freedom of circulation and unrestricted availability.

Today, this period in transport policy development is merely of historical interest as the ECJ judgement "enforced" a fundamental change in Community transport policy and regulations, in particular in the rail sector. The detailed changes and new approaches in the EU's transport policy were set forth in a number of different coloured "Papers":

- A Community Strategy for sustainable mobility (COM (92) 494 final),

- Growth, competition, and employment – The challenges and ways forward into the 21st century (COM (93) 700 final),
- The Common Transport Policy Action Program 1995-2000 (COM (95) 302 final),
- The Citizens' Network: Fulfilling the potential of public passenger transport in Europe (COM (95) 601 final),
- Towards Fair and Efficient Pricing in Transport: Policy options for internalising the external costs of transport in the European Union (COM (95) 691 final),
- Fair Payment for Infrastructure Use: A phased approach to a common infrastructure charging framework in the EU (COM (98) 466 final),
- The Common Transport Policy – Sustainable Mobility: Perspectives for the Future (COM (98) 716 final),
- European Transport Policy for 2010: Time to decide (COM (2001) 370 final).

The main objectives common to all these "Papers" can be summarised by a few keywords and there is no indication as to whether they will be fundamentally changed in the near future or whether rail will obtain a special position by the introduction of derogations for the rail sector: liberalisation and harmonisation, no state intervention in the transport market, independent management, clear rules for public aid and payments, opening the market for competitors, granting access to transport networks for all those who are entitled to access, interoperability of systems, level playing field for all service providers, market segmentation, no monopolistic service providers, opening up network monopolies, etc.

2. *THE FUNDAMENTAL PRINCIPLES OF EU RAIL TRANSPORT POLICY*

2.1. PRELIMINARY REMARKS

In the rail sector, the EU Directive 91/440 of 29 June 1991 on the development of the railway undertakings of the Community was the first tangible step towards the implementation of the ECJ judgement referred to above. Liberalisation brought about a rather paradoxical situation, and this is true not only for Austria:

- It was a long-standing tradition that railway traffic was almost exclusively dominated by national (protective) regulations for the state railways, and
- specific "legal instruments" of the railway authorities were necessary to assist in transforming the state railways' operating rules and service regulations into generally valid railway regulations.

To implement the Directive 91/440, it is therefore necessary,

- prior to the liberalisation or deregulation of the railway market, to introduce regulatory measures to supplement the state railways' internal operating rules and service regulations by generally valid laws and regulations,
- before it is possible to introduce deregulation in place in a second step.

Thus, it is only logical that the Austrian act on the liberalisation of the rail market, the Rail Market Regulation Act (Federal Law Gazette No. 166/1999) includes a section IVa on the "Regulation of the rail transport market" although it is to pave the way for deregulation at least in the field of railway infrastructure.

Recent efforts of the EU Commission to continue to develop railway transport policy include the Rail Infrastructure Package, which includes three Directives:

- Directive 2001/12/EC (amending Directive 91/440 /EEC)
- Directive 2001/13/EC (amending Directive 95/18/EEC)
- Directive 2001/14/EC (amending Directive 95/19/EEC).

2.2. DIRECTIVE 2001/12/EC ON THE DEVELOPMENT OF THE COMMUNITY'S RAILWAYS

The EU Directive 91/440 was the first Community legislation for the railway sector setting forth the requirements of keeping separate accounts for the business relating to the management of rail infrastructure on the one hand and the business relating to the provision of transport services on the other hand, state-independent management, financial rehabilitation of the railways, granting access to the network to international groupings and for the purpose of operating international combined transport services.

The "amended" Directive included more detailed requirements on the separation of the businesses relating to infrastructure management and provision of transport services, setting forth that separate profit and loss accounts and balance sheets shall be kept and providing for the option to separate these two sectors in terms of organisation. In integrated railway companies (Transport Operations and Infrastructure managed by one single undertaking) at least the following functions shall be entrusted to independent organisational entities: granting of licences, allocation of paths, infrastructure charging, technical standardisation and certification of rolling stock, monitoring observance of obligations required in the provision of certain services.

As for the setting of infrastructure charges, Article 4 of the amended Directive sets forth: *"While respecting the framework and specific charging and allocation rules established by the Member States, the infrastructure manager shall have responsibilities for its own management, administration and internal control"*.

As meritorious as these provision may be, they also suggest some sort of market failure since in markets without state intervention managers of corporations do not need Directives to remind them that they are responsible for their activities and decisions and the resulting consequences.

2.3. DIRECTIVE 2001/13/EC ON THE LICENCING OF RAILWAY UNDERTAKINGS

This Directive sets forth the conditions of access to the market (licences) applicable to railway undertakings and the conditions to be fulfilled by undertakings applying for access (e.g. requirements applying to staff and rolling stock, conclusion of an insurance), as well as the mutual recognition of the bodies responsible for network access (previously, network access had been restricted to the extent defined in Directive 91/440/EC). Now, the right of access to the market is expanded and applies to all major railway undertakings (exception: railway undertakings which only operate urban or suburban services, undertakings which carry out freight operations on "company-owned" railway infrastructure).

2.4. DIRECTIVE 2001/14/EC ON THE ALLOCATION OF RAILWAY INFRASTRUCTURE CAPACITY

This Directive replaces Directive 95/19/EC, which previously set forth the principles applicable in this field, and shall enable infrastructure managers to market and make optimum use of the infrastructure available. The infrastructure manager shall develop and publish a "network statement", which shall contain all the information relevant to the nature of the infrastructure which is available and serve as a basis for any contract on the usage of infrastructure. The States have to ensure that the infrastructure managers can achieve balanced accounts in respect of their income and State funding.

In this Directive, too, there is reference to the fact that the development of an efficient rail infrastructure market has not yet been finalised, as can be seen from two provisions contained in the Directive:

- The State may require the infrastructure manager to balance his accounts without State funding.
- The infrastructure manager shall be given incentives to cut infrastructure costs.

The first provision is obviously meant to remind the bodies responsible for infrastructure management to achieve cost coverage not only by maximisation of State funding but to increase income also by taking initiatives of their own. The second provision reinforces the first provision as it is not necessary to dictate forwarding agents or hauliers to make use of cost-cutting incentives but also to provide them (rather the contrary would be necessary).

Taking into account its underlying principles the Directive represents the laudable effort to achieve EU-wide harmonisation of infrastructure charging schemes while at the same time revealing the strengths and weaknesses of the EU:

- In spite of all its weaknesses that are reflected in specific details, the Directives is aviable compromise (criticised by many to be "the least common multiple") with a great many options for implementation, and
- expresses the opinion and potential of the individual directorates of the Directorate, General for Transport, the Directorates General of the EU Commission, the Council and the European Parliament, and

the fifteen Member States. Insofar what has been achieved to date is considerable.

3. *Directive 2001/14/EC and its Provisions on the Level of Infrastructure Charges*

3.1. Preliminary Remarks

What is striking about the Directive is the many different cost concepts used all of which have completley different meanings. One could dismiss this fact as being indicative of the "typical incapability" of the EU Commission to come up with clear and binding rules. The timeframe in which the discussions between the EU Commission and the Member States were held, however, is evidence of the EU Commission's effort to

- develop a Directive with a balanced relationship between perseverance and liberalisation while at the same time having sufficient substance, and which
- provides the Member States with a very differentiated instrument for the setting of infrastructure charges and the pricing of additional and ancillary services for infrastructure access.
- It is now up to the Member States to make use of the great variety of possibilities, that are contained in the Directive to liberalise rail traffic, in respect of the level of infrastructure charges and possible calculation methods, if need be, also against opposition from the state railways

3.2. Observations on the Cost Concepts Used

The following examples illustrate the many different ways in which the cost concept is used in the Directive, thus leading to a plethora of different possibilities for determining the infrastructure charges:

- Taking into account and making allowance for competition on the railway network, infrastructure charges shall, as a rule, be set at the cost that is directly incurred as a result of operating the train service (principle of marginal costs).
- Under specific conditions the cost of the environmental effects caused by the operation of the train may also be taken into account (the EU calls this the principle of social marginal costs).

- In some paragraphs, there is implicit reference to the principle of recovery of full cost.
- The infrastructure charge may include a charge which reflects the scarcity of capacity of specific segments of the infrastructure during periods of congestion (principle of scarcity cost).
- In order to obtain full recovery of the costs the infrastructure manager may, if the market can bear this, levy a higher than usual infrastructure charge, based for example on individual contracts, using mark-ups or a system of fixed charges and variable charges (principle of cost bearing capacity or willingness-to-pay).
- Higher charges may be levied for the funding of new lines which could not otherwise be or have been built (principle of levying mark-ups).
- The Directive explicitely allows discounts on the charges while at the same time limiting them by qualifying that the level of actual cost savings (permanent) as well as the (time-limited) development of new rail services and the use of considerably underutilised lines shall be the reference standard for discounts on the charges (mix of premium system and market penetration system). This provision can be interpreted as yet another reference to the fact that a functioning rail infrastructure market is not yet existing. Why else should explicit reference be made to the fact that discounts are permitted while at the same time significantly limiting the bodies responsible in their possibilities of granting discounts?
- To avoid undesirable disproportionate fluctuations, the infrastructure charges may be averaged over a reasonable spread of time (introduction of principle of average cost).
- Article 6 (1) explicitely sets forth that obtaining full recovery of costs is the long-term objective.
- Charges lost as a result of rail infrastructure maintenance work may also be levied (principle of opportunity cost).
- Cost recovery applies in the pricing of additional and ancillary services for rail infrastructure access, without, however, specifying the costs (principle of "non-specified costs" (!?).

3.3. Observations on the Charging of Costs and the Allocation of Productive Factors

Meritorious as the efforts may be, two provisions reflect that the EU obviously has a strange understanding as to full recovery of costs and an optimum allocation of productive factors.

- Article 7 (5): Charging of environmental (external) costs via the infrastructure charges, which results in an increase in the overall revenue accruing to the infrastructure manager, shall be allowed only if such charging is applied at a comparable level to competing modes of transport. In the absence of any comparable level of charging of environmental costs in other competing modes of transport, such charge shall not result in the overall change in revenue to the infrastructure manager.
- Article 10: Time-limited compensation schemes [note: this obviously also refers to State aid to the railway operator(!)] may be put in place *"... for the use of railway infrastructure for the demonstrably unpaid environmental, accident and infrastructure costs of competing modes in so far as these costs exceed the equivalent costs of rail."*

With regard to both provisions the question arises as to why the environmental costs caused by rail traffic shall be charged to the railway mode only if environmental costs caused by a competing mode (this obviously refers to road) are also charged to that competing mode.

Was this meant to protect road against too high infrastructure charges (road pricing) under the pretext of holding rail infrastructure charges low and to provide for the States to take over payment in the field of railway transport?

These provisions do not, however, represent a significant barrier to the liberalisation of the railway market and the access to rail infrastructure, but they do give way to fundamental criticism as to the EU Commission's economic understanding.

3.4. OBSERVATIONS ON THE EXCEPTIONS

Article 8 of the Directive on "Exceptions to the charging principles" does not, strictly speaking, specify an exception but sets forth a fundamental economic principle, laying down of which, however, would not have been necessary had a viable railway infrastructure market not depending on State aid existed for a longer period of time. In essence, Article 8 provides: *"Should the infrastructure manager not be able to obtain full recovery of the costs incurred by him or his revenue target, mark-ups on infrastructure charges may be levied, if the market can bear this, on the basis of efficient, transparent and non-discriminatory principles, while guaranteeing the competitiveness of international freight. The mark-ups must, however, be structured in such a way as to ensure that no market segment is excluded from the use of infrastructure due to the level of the infrastructure charge."*

Prior to transposal into national law the following two provisions under Article 8 also need to be clarified. Specifying the obligation to pass on productivity increases while at the same time setting forth the principle of marginal cost charging with markups taking into account the cost bearing possibility of the railway operator under a single Article seems contradictory if detailed explanations are lacking (implementing rules):

Article 8 (1): *"... The charging system shall respect the productivity increases achieved by railway undertakings. The level of charges must not, however, exclude the use of infrastructure by market segments which can pay at least the cost that is directly incurred as as result of operating the railway service, plus a rate of return which the market can bear."*

In spite of these contradictions, or because of them, this provision also provides sufficient scope for flexibility when setting infrastructure charges in agreement with the criteria on easing access for third parties and liberalising the railway networks. The precondition being, however, that the Member States are willing to make use of this scope of action when transposing the Directive.

4. *OUTLOOK*

From an economic point of view, the principles laid down for the calculation of infrastructure charges could be more or less heavily criticised as they do not provide for a unified procedure and are often contradictory. They do, however, represent a political compromise:

- They take into account that the conditions concerning railway infrastructure undertakings differ from Member State to Member State
- The provisions take into account and make allowance for quite diverging revenue targets of infrastructure managers – ranging from marginal cost charging aimed at a level playing field for all modes of transport to recovery of full costs.

Nonetheless, they represent a first-time successful effort to define a framework within which the Member States can determine their infrastructure charging schemes. This represents a major advance over previous regulations. However, further clarification and harmonisation will be necessary. In particular, the EU Commission will not get around to develop binding directives on infrastructure charging in the road sector, too.

LIBERALISATION OF POSTAL SERVICES: SOME FIRST AND PRELIMINARY ECONOMIC CONSIDERATIONS

FRIEDRICH SCHNEIDER

1. INTRODUCTION

Liberalisation of former public utilities which had quite often (in former times) a (natural) monopoly, is an actual topic for most state/public authorities. In this paper some preliminary considerations about the liberalisation of postal services are undertaken.[1] In table 1 an overview about the liberalisation of postal services in the 15 EU countries is given.

The table clearly shows that in Belgium, France, Greece, Ireland, Luxemburg and Portugal in the postal system so far almost no liberalisation has been undertaken and that on the other side only in Sweden and Finland a full liberalisation of the postal system has been achieved, followed by a partly liberalisation in Denmark, Great Britain, Italy, Netherlands and Austria. After nine years since the full liberalisation of the Swedish postal system one still observes that the former public monopolic supplier, the Swedish post, has a dominant position with over 90% share of the letter mail market. In Finland, which has a total liberalised postal system, too, potential (competitive) suppliers have to pay a very high licence fee so that so far no competition has been taken place. In all other countries, as table 1 clearly shows, the liberalisation of the postal system is in the beginning (i.e. an early stage) and the major steps to fully liberalise the postal system have to come in the next years. If one compares these results with the one of the telecom sector, there is a vast difference with the

[1] Due to the short notice/invitation to write this paper only first thoughts can be elaborated. Important aspects as pricing, competition rules, the role of the regulator/operator are only touched or not treated at all. Moreover, a careful empirical and/or theoretical analysis of important questions (like pricing, operators tasks, privatisation, competition rules, vertical and/or horizontal splitting up of the public utilities, etc.) is missing, too. In general, there are much more studies in the area of (de-)regulation of the telecom sector compared to the postal sector at least in the European Union. Compare e.g. European Commission (1998) and Elsenbast and Smit (2000).

achievements of the liberalisation in the telecom sector, which is much more advanced in all 15 EU countries.

Table 1: Overview of the liberalisation of Postal Services in EU-Countries, 2001.

Country	Letter/Mail Services up to 250g (reserved Delivery)	Liberalisation of Advertising, Deliveries/ Mailings	Liberalisation in the international Postal Deliveries	Liberalisation in the local Area of Postal Deliveries (Letter Mail Market)
Austria	No	Yes	No	No
Belgium	No	No	No	No
Denmark	Yes	No	Yes	No
Finland	Yes	Yes	Yes	Yes
France	No	No	No	No
Germany	Yes	No	No	No
Great Britain	Yes	No	No	No
Greece	No	No	No	No
Ireland	No	No	No	No
Italy	No	No	No	Yes
Luxemburg	No	No	No	No
Netherlands	Yes	Yes	No	No
Portugal	No	No	No	No
Spain	No	Yes	No	Yes
Sweden	Yes	Yes	Yes	Yes

Source: Elsenbast and Smit (2000, p.11) and own investigations.

In this short paper some actual topics of the first steps of liberalisation process of postal system are elaborated. In chapter 2 the problem of cross subsidisation in the postal services is shortly presented. Chapter 3 deals with the German liberalisation process of the postal system and in chapter 4 the experience of a liberalisation in New Zealand is shown. Finally in chapter 5 a comparison between the telecom and postal system is undertaken and some conclusions are drawn.

2. *CROSS SUBSIDISATION IN THE POSTAL SERVICE*

Cross subsidisation in the postal service is an often observed fact as due to political reasons an uniform tariff structure is demanded. A fundamental requirement for an anti-competitive cross-subsidisation is the fact that an operator/regulator is active on markets with different degrees of competition.[2] If operators/regulators on a monopolised market are able to gain profits which are above the stand-alone costs of services or products, the operators have the possibility to finance loss-making services on markets open to competition. If – on top of this – these products are offered with the aim to drive competitors out of the market or to prevent potential competitors from entering the market, the operator is applying in a predatory pricing-strategy financed by cross-subsidisation.[3]

The possibility to proof cross-subsidisation exists within the bounds of the so called "incremental cost-test”. According to that a multi-product operator earning zero profits is free of cross-subsidisation as far as she/he is fulfilling the requirements that each product has to bear its incremental costs and that the returns of each product do not exceed its stand-alone costs. For the statement of costs of an operator/regulator normally is not lined out to calculate the incremental costs of a service, it is the question which kind of statement of costs is suitable for the appropriate determination of incremental costs. In this case the statement of activity based costing (ABC) is particular suitable; it is a modern way of showing the fully distributed costs, which follows the principle of cost causation.

The European Directive combined with the notice on the application of competition rules to the postal sector provides the necessary requirements for an effective control of anti-competitive cross-subsidisation by laying down an activity based costing method. In Germany and in Austria legal feasibilities for relevant rules do exist, for example the necessity of accounting separation, which has to be done concerning the determination of incremental costs. In the United States of America the Postal Rate Commission is basing its rate case decisions on cost data derived out of activity based costing. Actually, the Postal Rate Commission is determining the incremental costs of each service, which include the variable costs as well as the capacity costs of each service.[4]

---

2 Compare Brennan (1990), Schmidt and Schmidt (1997) and Niederblum (2001).

3 Compare Niederblum (2001).

4 Compare Kay (2000).

3. *Expected Economic Consequences of a Liberalisation of the Postal System: The Case of Germany*

Since the beginning of the year 1998 with the enforcement of the new German Postal law a new regulatory framework was created which offers market entry possibilities to potential competitors of the Deutsche Post AG. From 2003 on it is intended to fully open the market to competition. With this intention Germany in comparison to other European countries is among the leading and first countries with respect to postal market liberalisation. Against this background of an asymmetry in market entry possibilities among different EU Member States a political discussion is to be expected whether to prolong the exclusive licence for the Deutsche Post AG until a symmetric European liberalisation process will be possible.

In anticipation of this discussion among the EU-countries first studies have been undertaken to analyse which consequences are to be expected on the German economy from the granting of a full market access to potential competitors.[5] Potential developments under different regulatory frameworks were analysed in these studies using two alternative scenarios:

1. Full liberalisation of the letter market from the year 2003 onwards: Due to the opening of the letter mail market there will be a bigger market potential for alternative postal operators. Thus, it is to be expected that the market share of the alternative postal operators will increase. Nevertheless, the market position of the Deutsche Post AG is characterised by a first mover advantage due to the economies of scale within her postal network and the qualitative reputation which has been build up over years. The expected reactions of the Deutsche Post AG to the entry of alternative postal operators will be a variation in price and quality policy. The competitive development will lead to a falling overall price level and a changing price structure. Tariffs will be rebalanced between different user groups. Furthermore, the product variety will increase. This will lead to a better satisfaction of users' needs.
2. Prolongation of the exclusive licence (current status): A maintenance of the current market access conditions for alternative postal operators implies that the biggest share – at least two third – of the

[5] Compare e.g. Elsenbast and Smit (2000) and the there mentioned studies.

letter mail market will remain under the exclusive licence of the Deutsche Post AG and therefore will be excepted from competition. Against this background it seems to be unlikely that competitors will overcome their current "niche existence". Due to the limited scale of competition it is to be expected that only bigger business customers will profit from the selective market entry of some few competitors. Furthermore, it can not be excluded that the Deutsche Post AG might use its monopoly position to prevent potential competitors from entering the market.

To summarise: Only a full market access will lead to lower prices for the customers and more competitive and efficient communication and logistic systems which are of utmost importance to the competitive position of the German economy. As a conclusion it can be stated that from an economic perspective a full opening of the market is to be preferred against a prolongation of the exclusive licence.

4. *THE LIBERALISATION OF THE POSTAL SYSTEM IN NEW ZEALAND*

In New Zealand the reform of the postal sector started already in the 80ies.[6] The postal sector reform then formed apart of a wider reform process of the whole economic system in order to increase the efficiency and performance of the economy. The underlying principle of this reform process was the replacement of the interventionist and protectionist attitude of the state by a more liberal and market oriented economic system. The reform of the postal sector during these times was twofold:

Firstly, the Post Office was transformed into a state owned enterprise and as such had to undergo a major restructuring process in order to become competitive.

Secondly, the creation of a competitive framework for the postal market was one of the major tasks of the reform process. After an eleven year period of gradually reducing the monopoly area of New Zealand Post in 1998 remaining privileges and monopoly areas for New Zealand post were abolished. Since then there have been no restrictions for

[6] Compare Smit (2000), Campell (1998, 2000) and Knorr (1997).

competitors to enter the postal market even in the letter mail segment. Moreover, an agreement was negotiated with New Zealand Post that obliges New Zealand Post to offer network access. This network access obligation enables competitors to compensate for their insufficiently large own network at the time of their market entry. Thus, competition is not only possible on a local scale but also increasingly on a national scale. The market development that is triggered by this competitive framework is accompanied by a light handed regulatory system which in accordance with the liberal ideas of the reform process resigns to implement a sector specific regulatory authority and tries to minimise as far as possible state intervention into the market process.

The central aim of the New Zealand reform process of the postal system was to increase market performance with respect to the satisfaction of customer needs and thus to quality and price. An evaluation of these central parameters of customer satisfaction shows that the reform process has been fairly successful. The situation in the postal market today is determined by low prices, high service standards and an increased efficiency. Even the common fear that a universal service and a unitary tariff will not be guaranteed in a liberalised market proofed to be groundless. Although the state does not pay any compensation for the universal service, New Zealand Post more than fulfils the agreed universal service standards and maintains a uniform national letter mail tariff.

Although the reform process and market liberalisation proof to be successful after two years of competition, it is uncertain whether this development will be sustainable in the future. It has to be assumed that most of the pressure especially on New Zealand Post to improve customer satisfaction has to be attributed to the fear of market entry of potential competitors as the actual competition still remains weak. Whether this will change in the future highly depends on the functioning of the regulatory framework and the behaviour of New Zealand Post. Anyhow, there is the danger that the pressure attributed to potential competition might decrease as New Zealand Post makes the experience that a market entry that really affects New Zealand Post is not easy and takes quite a long time during which the company can adjust to the new situation. The conclusion is that a market liberalisation can be quite successful but one should consider that New

Zealand is an island compared to a quite different situation in Europe with much more possible competition (especially in small countries!).

5. Some Concluding Remarks on the Telecommunication Sector in Comparison to the Postal Sector

Since the fixed link of telecommunication market (e.g. voice telephoning and internet services) was opened up completely at the beginning of 1998, substantial progress in the appropriateness of the regulatory environment to enable competition can be observed in most of the countries. Yet, there are still remarkable differences across European countries. With regard to the degree of liberalisation Denmark and the United Kingdom have top positions at the end of 2002. Germany and Austria have made considerable progress in establishing regulatory conditions promoting competition, however, it is still lagging behind the top countries. Generally it can be stated that in Europe the liberalisation of the core network has made much more progress than the liberalisation of the subscriber access network.

The analysis of the actual competition situation in the fixed link market segment shows that the intensity of competition has increased considerably in almost all European countries. Sweden holds the top position at the end of 2001 followed by Denmark. Germany and Austria rank only in a medium position. The intensity of competition is in principle much stronger in the long distance segment of a country than in the local segment in old European countries. The market concentration in the long distance segment usually decreases in Europe. In contrast, the market concentration in the local segment is still relatively high, but is decreasing since 2001. In almost all European countries price competition in the long distance segment is already very intensive.

There are substantial differences of the growth dynamics across the countries. In particular, a positive growth rate of minutes frequently goes along with a decline of the growth rate in the market volume of the telephony segment. At the end of 2001, Germany belongs to the countries with the highest growth. Yet, Denmark ranks at the top position at this point in time.

The fixed link telecommunication markets (e.g. voice telephoning and internet service providers) of Telecom markets of European Member countries (Austria, Denmark, Germany. France, Italy, Sweden, United Kingdom) have been opened up completely since at least three years. One can observe substantial progress in the appropriateness of the regulatory environment to enable competition in most of the countries. Yet, there are still remarkable differences across European countries in particular with regard to the treatment of still existing bottlenecks. This heterogenity rests in particular on the differences as regards interconnection and access to the local loop. With regard to the degree of liberalisation, Denmark has a top position at the beginning of 2001. Although considerably behind Denmark, the United Kingdom, Germany, and Sweden have also made considerable progress in establishing regulatory conditions promoting competition.

An analysis of the actual competition situation in the fixed link market segment shows that competition is most intensive in Denmark and Sweden. Germany and Austria[7] ranks only in a medium position. In almost all countries voice telephony price competition is very intensive and prices have fallen considerably. The concentration in the long distance segment is low. In contrast, the market concentration in the local segment is still relatively high. According to the penetration of broadband access as well as prices of internet usage and leased lines, there are strong differences among the European countries.

At the beginning of 2002, Austria and Italy belong to the countries with the highest growth. Across all countries the growth rates in the internet segment are higher than in the voice segment. Italy has the highest growth rates in the internet segment, France is ranking at the second position.

If one compares the development of the telecom sector with the postal one, one immediately realises that the telecom sector more or less has been transformed from a state monopoly situation to a competitive market situation for almost all EU countries. Prices have fallen considerably, new products and services have been offered, hence,

---

7 Compare Elixmann, Schimmel and Schwab (2001), Elixmann, Kuhlenkampff, Schimmel and Schwab (2001), and Immenga, Kirchner, Knieps and Kruse (2001).

enterprises and consumers using telecom products and services have considerably profited from the deregulation and the introduction of competition markets in the telecom sectors. The development of the liberalisation of the postal sector is much behind the telecom sector and major steps have to be implemented in most of the single EU-countries. Whether we well observe a similar development of the postal sector is likely but when and to what extend is an open question.[8]

First results point to a similar direction like in the telecom sector but the spirit now (2002) and the political altitudes towards this sector may not be the same as in the beginning of the nineties. As we also realize now some negative developments (due to political interventions) in the whole deregulation/privatisation business (compare e.g. the sluggish liberalisation process of the Austrian public energy/power utilities!) one should first develop an economic policy frame ("ordnungspolitischer Rahmen") before considering further deregulation/privatisation of the Austrian postal system.[9]

6. LITERATURE

Brennan, T.J., "Gross Subsidisation and Cost Miss-Allocation by regulated Monopolists", Journal of Regulatory Economics 2/1, pp. 37-51, 1990.

Campbell, J.I.jr., "Overview of the international postal reform movement", Washington D.C.: Cato-Institute, 1998.

Campbell, J.I.jr., "Reforming the universal postal union", in: Cruw, M.A., Kleindorfer P.R. (eds.), "Future directions of postal reform", Boston, Cambridge University Press, 2000.

Cruw, M.A., Kleindorfer, P.R., "Regulation and the nature of postal and delivery services", Boston (MA), Cambridge University Press, 1993.

Elixmann, D., Kuhlenkampff, G., Schimmel, U., Schwab, R., "Internationaler Vergleich der TK-Märkte in ausgewählten Ländern – ein Liberalisierungs-, Wettbewerbs- und Wachstumsindex", Diskussionsbeitrag Nr. 216, Wissenschaftliches Institut für Kommunikationsdienste, Bad Honnef (Germany), February 2001.

[8] Compare Knieps (1997, 1999, 2001), Schmidt and Schmidt (1997).

[9] Compare e.g. Schneider (2002).

Elixmann, D., Schimmel, U., Schwab, R., "Liberalisierung, Wettbewerb und Wachstum auf Europäischen Märkten", Diskussionsbeitrag Nr. 227, Wissenschaftliches Institut für Kommunikationsdienste, Bad Honnef (Germany), October 2001.

Elsenbast, W., "Universaldienst unter Wettbewerb", Baden-Baden: Nomos-Verlag, 1999.

Elsenbast, W., Smit, H., "Gesamtwirtschaftliche Auswirkungen der Marktöffnung auf dem deutschen Postmarkt", Studie im Auftrag des Bundesministeriums für Wirtschaft und Technologie, Wissenschaftliches Institut für Kommunikationsdienste, Diskussionsbeitrag Nr. 204, Bad Honnef, 2000.

European Commission, "Studies on the Impacts of the Liberalisation in the Postal Sector: Liberalisation of Incoming and Outgoing Intra-Community Cross Border Mail", Brussels, Prizewaterhouse-coopers, 1998.

Immenga, O., Kirchner, C., Knieps, G., Kruse, J., "Telekommunikation im Wettbewerb – eine ordnungspolitische Konzeption nach erfolgreicher Marktöffnung", München (Germany): Verlag C. H. Beck, 2001.

Kay, N.R., "Direct Testemony of Nancy R. Kay on behalf of the United States Postal Service", Washington: Document Number: R2000-1-USPS-T-23, 2000.

Knieps, G., "Phasing out sector-specific regulation in competitive telecommunications", Kyklos 50/3, pp. 325-339, 1997.

Knieps, G., "Zur Regulierung monopolistischer Bottlenecks", Zeitschrift für Wirtschaftspolitik 48/3, pp. 297-304, 1999.

Knieps, G., "Wettbewerbsökonomie – Regulierungstheorie, Industrieökonomie – Wettbewerbspolitik", Berlin: Springer Verlag, 2001.

Knorr, A., "Das ordnungspolitische Modell Neuseelands: Ein Vorbild für Deutschland?", Tübingen: Verlag Mohr-Siebeck, 1997.

Niederbulm, A., "Quersubventionierung und Wettbewerb im Postmarkt", Diskussionsbeitrag Nr. 225, Wissenschaftliches Institut für Kommunikationsdienste, Bad Honnef, July 2001.

Schmidt, I., Schmidt, A., "Europäische Wettbewerbspolitik", München, Verlag Vahlen, 1997.

Schneider, F., "Privatisierung und Deregulierung in Österreich in den 90er Jahren: Einige Anmerkungen aus Sicht der neuen politischen Ökonomie", in: Berg H. (ed.), "Deregulierung und Privatisierung: Gewolltes – Erreichtes – Versäumtes", Schriften des Vereins für Socialpolitik Vol. 287, Berlin, Duncker&Humblot, pp. 89-120, 2002.

Smit, H., "Regulierungs- und Wettbewerbsentwicklung auf dem neuseeländischen Postmarkt", Wissenschaftliches Institut für Kommunikationsdienste, Diskussionsbeitrag Nr. 212, Bad Honnef, December 2000.

COMPETITIVENESS AND COMPETITION IN A NEW ECONOMY: THE ROLE OF THE NEW FINANCIAL MARKET AUTHORITY

PATRICK DARLAP, ANDREAS GRÜNBICHLER, KURT PRIBIL

The financial services sector was probably one of those "old" sectors most destined for the implementation of the technical means of the "new economy". The growth of the number of internet users and the development of successful online business has certainly been way above average especially in the banking sector. This is in particular due to the specific fit between financial services and the possibilities offered by the new media: Banks and insurance firms have been on the forefront of implementing electronic data processing decades ago and still are the businesses most prone to efficiency gains from automatisation.

But the use of web technologies in its various forms is not the only point of contact between "new economy"-tools and the financial sector. Generally speaking we can see the sector concerned as a user, as a financial provider, as a possible business partner or even in competition with new technology businesses.

This article will in short line out the areas concerned by these developments, it will touch upon the various problems entailed for prudential supervision in the sector and it will finally try to sketch the role the new Austrian Financial Market Authority will play in this context, having special regard to the specificities of the integrated approach to supervision we have in Austria.

1. THE FINANCIAL SERVICES SECTOR AS A PRIMARY USER OF ICT

Regarding the use of information and communication technology (ICT) products, probably the most prominent result of the technical advances is their contribution to the accelerated pace of globalisation. Transfer of services and communication among market participants are the main components of networking amongst service providers and of an unprecedented scope of competition as well. The tremendous reduction in transaction costs supports cooperation and market entry alike and the impressive growth of internet access has allowed globalisation to go beyond the ownership structure of financial conglomerates and to reach the retail markets. In fact, many banks are using their online operations to expand into new markets.

Besides these rather geographical aspects, convergence within financial services is another main issue, leading to the development of integrated financial service providers, which may combine banking, insurance and other services under one chapeau (phenomenon known as "bancassurance") either through in-house product development or through mergers and acquisitions. The force of this development can be assessed in hindsight by the confirmation of this trend of universalisation through the abolition of the long-standing separation of the US banking industry through the Gramm-Leach-Bliley Act in 1999.

In contrast, the dramatically lowered transaction costs may lead to a marked contraction of the value-added chain. Intermediation as a primary function of banks in the financial market may be replaced by direct transactions between investors and enterprises seeking credit or equity, both of course being primarily characterised by and highly dependant on their credibility in the market.

Certain parts of a previously homogenously offered product may now be supplied by a third party, without the customer even noticing this fact, like customer service via call centres. Other parts of the value added chain may be supplied by highly specialised enterprises in cooperation with and for the financial service providers (like data management) or in direct competition with the market incumbents for retail customers, forcing them to follow suit in terms of technology and pricing policy. Mergers and acquisitions may also render previously separate systems in each entity obsolete, thus leading to an increase in systemic efficiency. But of course the failure of one such increased chunk of the financial system is a much bigger problem for the stability of the payment system at large than before.

One of the most interesting forms of competition between two extremes within each the old and the new paradigm in the financial services industry will certainly be the one between universal banks and internet portals. The specific formation of hybrid forms somewhere in between the two extremes of the spectrum will, of course, depend on the market environment. Nevertheless, there seems to be no generic superiority of any one of these two, and the necessities of the respective regulatory regimes will determine the specific outcome of this struggle to a large extent.

The decentralized structure of certain financial services (customer service points in the insurance business or investment advice for example) is supported by remote access to central enterprise databases (and may be seen as a special form of teleworking). These connections are an important issue in the security provisions of such companies, forming part of the operational risks in the provision of financial services which are a core aspect of prudential supervision and will be addressed later in this text. This risk, lying in the individual and separate connection of each user, may in part be avoided by a centre-based access policy, but the intrinsic potential of ICTs for the creation of entirely new dimensions of customer satisfaction has to render such solutions only second-best.

Pretty good technologies of granting secure access have already been widely implemented, such as passwords, smart cards or biometrical methods. This expertise is, of course, often provided externally and may lead to the establishment of standards – a typical effect in the 'new economy' branches – possibly leading to temporary monopolies or – which may be worse – 'trapping' of the whole sector in certain technologies.

Most importantly, the connection between individual participants in the markets has to be secure in order to attract widespread use. The techniques have to be reliable, integrity and confidentiality of information have to be granted and liabilities well defined.

Of course, there is a whole host of new products based on the technical feasibilities of ICT regarding large-scale-data-management and information-processing capabilities, giving financial markets much more instruments of stabilisation and destabilisation as well. It is needless to mention the trend of securitisation on the one hand and the abuse of derivatives in constructing synthetic income on the other.

2. *Financing the New Economy*

This leads to a second kind of developments associated to the specificities of the "new economy" which are affecting the sector: These are financing issues, relating to the role of financial intermediation.

Financing is an inevitable and most important precondition to the evolvement of any enterprise, but specifically of those belonging to the ICT sector. Depending on the stage of development of an ICT start-up, different kinds of financing are better suited than others. This not only has an impact on the development of different finance-providers, but in reverse is often cited as one of the reasons for a slower pace of growth in regions with a less flexible and more bank-centred financial system, as we find it in continental Europe.

The financial structure of an enterprise may vary depending on many different factors, which can in general be traced back to the agency costs[1] incurred during different stages of a businesses life. The underlying asymmetries of information between the entrepreneur and the investor make the typical source of finance for an ICT-start-up insider finance or a "business angel". Only after the provision of a certain minimal track record, documenting its growth potential, external finance will become available to the firm. Venture capital or a bank loan go hand in hand with the screening and monitoring of the business activities to address the agency problem, leading to a mitigation of moral hazard through the development of control mechanisms which will eventually become apt to also satisfy the needs of the stock market for the final stage of development, the IPO.

From a financing perspective, the dominant characteristics of "new economy" firms are[2]:

- The considerable uncertainty of investment due to the "high risk – high return"-profile of the typical "new-economy" market characterised by network effects and standard-setting.
- The extreme dominance of fixed over variable costs, rendering the cash flow significantly negative during the initial phases.

---

1 "Principal-Agent Theory". See Jensen, Meckling 1976.

2 See Houben, Kakes (2001).

- The rapid ageing of ideas and thus obsolescence of products in combination with the intangibility of a firms assets (patents, networks or goodwill for instance) making them ill-suited to serve as collateral.
- The over proportionate asymmetry of information between entrepreneurs and investors.
- The heavy reliance of a firm's performance on human capital and its implication for incentive mechanisms as e.g. stock option schemes.

Furthermore, the payoff-scheme related to the performance of the investment is, of course, not at all beneficial to the creditor. The creditor's return is strictly limited and does not give him a stake in the upside potential of the firm, while exposing him to the full downside risks. In contrast, the return on equity is fully related to profitability without an upper limit. Any attempt to internalise this risk profile through a higher interest rate may delete the credit demand or lead to adverse selection.

Due to these facts equity is superior to credit as an instrument of financing in the ICT sector and the financing role of banks is of minor importance. Nevertheless, banks do have an important supporting role by directly providing other bank services (from payments to IPO consulting) and indirectly by funding venture capitalists.

3. Financial Stability Issues related to New Economy Financing

Apart from their role in channelling funds to "new economy" investments, financial markets have an important role to play in the absorption of market and credit risks.

They react to these potential cost factors through credit ratings, stock prices and interest rate spreads. But even though it can be shown[3] that the stock market volatility in the 'new economy' sectors (IT; Telecom, Media, Technology) has been way above average in all major economic areas over the past six years (1995-2001), they will not threaten financial stability, as long as contagion is limited through respective

[3] Houben, Kakes (2001).

provisions. Especially banks involved in ICT investment might be prone to transmit problems in the sector to the whole economy through credit conditions or altered risk taking behaviour. However, the direct exposure of banks to "new economy" firms is generally small due to the already mentioned general inappropriateness of credit financing in the sector. Nevertheless, there are some areas, where this does not hold true: This is the case in particular in old economy sectors having invested heavily in new economy business, like the telecom sector in UMTS or media tsars in TV transmission rights. This confronts banks with an asymmetric downside risk: loans and credit lines tend to be only extended when a firm's performance does not convince any other investor, furthermore the delay of real investments might render the investor's anxiousness a self-fulfilling prophecy.

The already mentioned indirect involvement of banks in the 'new economy' sectors through the funding of venture capital (especially in our still bank-centred financial markets in central Europe) might also lead to concerns for prudential supervision. But even though banks are the major funding source of venture capital in Europe (27,5%)[4], their exposures are generally very limited and below one percent of total assets. Furthermore, venture capitalists professionally diversify their risks, thus reducing the potential losses further.

Looking into the near future it is worth mentioning, that the new Basle Accord provides a special category for risk capital, requiring higher solvency margins for venture capital (150% weighting).

4. Implications for Prudential and Supervisory Policy

All the implications of the described aspects of the "new economy" have to be addressed by those responsible for financial market supervision correctly. The treatment of risk is currently undergoing considerable changes: The growing use of derivates and off-balance-sheet operations, coupled with the diversification of activities across countries and sectors has made traditional risk-management-techniques obsolete.

4 EVCA (2001).

One major approach of financial market supervisors to respond to these challenges is a strong focus on increased transparency and the explicit accounting for specific risks. While the Basel Committee's 1988 quite rigid recommendations on capital adequacy were relativised by the evolving new markets for credit derivatives and an unprecedented growth in loan sales and securitisation, bank managers could actively manage their risk and engage in 'regulatory capital arbitraging', thus reducing the capital required under the Basel I recommendations without a commensurate reduction of the effective risks for the bank. The new proposal addresses this problem in its first pillar, providing for individual risk management, but is far from being satisfactory at this stage due to the difficulties connected with both the external and the internal credit rating approaches. The current debate about the calibration of the model can only touch upon one aspect of the whole three pillar approach[5] to improving the supervisory process according to the new needs.

In addition to this, there is an ongoing discussion at which level certain problems should be tackled, given the international or even global scale of certain players in the market. Current EU and international conventions provide for supervision of the international operations of a bank to be under the responsibility of the supervisory authorities of the bank's home country. To enhance transparency, discussion is under way how best to consolidate financial statements and how to achieve a certain level of harmonisation in accounting, auditing and reporting standards. The closure of gaps in order to avoid regulatory arbitrage is a related topic.

It has to be noted that the increasing access to information by retail clients along with widening the scope of market participation has increased the benefits of distorting information, not least within the securities sector. Safeguarding market integrity and protecting unsophisticated investors is at least partly a further task for supervisors. The universalisation in financial services and the growing sophistication of finance closely linking financial institutions of

[5] Pillar one of the New Basel Capital Accord relates to minimal capital requirements and the consideration of operational risk, whereas the second and third pillars are centred on an enhanced supervisory review process and market discipline through effective disclosure, respectively. See Basel Committee (2001).

different types have made a comprehensive approach to risk assessment necessary. The establishment of an independent supervisory body for the capital markets in Austria is thus a major step forwards in the development of a state-of-the-art institutional framework for financial business. As of 1 April 2002 the new Austrian Financial Market Authority (FMA) is responsible for prudential supervision in the banking, insurance, pension funds, securities and stock exchange areas. These supervisory tasks were transferred to the FMA from the Federal Ministry of Finance and the Austrian Securities Agency.

FMA's independence is a strong asset for the credibility of the Austrian government's plans to provide the Austrian financial markets with a transparent, effective and efficient supervisory framework. It is safeguarded by constitutional provision, which was unanimously supported by all parties represented in the Austrian Parliament early this year.

The Austrian approach to financial system supervision is concentrating on the core functions performed within the financial system, rather than on institutions or sectors and is thus in line with a functional approach to supervision. The new, single financial supervisory system overcomes the old institutional segmentation and has considerable potential for increased cost efficiency. In addition, the new system is sector neutral and ensures a level playing field for all financial institutions doing business in Austria. To enhance the enforceability of supervisory measures, the FMA is vested with administrative penal power and the power to enforce its supervisory rulings. In order to keep FMA's legal framework flexible enough, FMA may issue ordinances specifying the general obligations stated by law.

With the formation of the FMA, there is an independent, efficient Austrian supervisory regime in line with the international developments described. It is actively searching to improve its supervisory instruments to meet the requirements of the modern national and international financial markets.

5. LITERATURE

Balino, T., Ubide, A., "The New World of Banking", In: Finance & Development, Vol.37, No. 2. Washington, 2000.

Basel Committee on Banking Supervision, "The New Basel Capital Accord", Consultative Document, January 2001.

Carse, D., "Recreating the Financial Services Industry for the New Economy: A regulator's Perspective", In: Hong Kong Monetary Authority Quarterly Bulletin 2, 2001.

Cecchetti, St.G., "The Future of Financial Intermediation and Regulation: An Overview", New York, 1999.

Christiansen, H., "Electronic Finance: Economics and Institutional Factors", Paris, 2001.

Cocca, T., et al, "Virtuelle Finanzportale vs. Universalbanken", Working Paper of the Institut für schweizerisches Bankwesen der Universität Zürich, Zürich, 2000.

Duisenberg, W.F., "E-economy: Will We Still Need Banks in the Future?", Speech at the XVII German Banking Congress, Berlin, 2001.

European Private Equity and Venture Capital Association, "EVCA Yearbook 2001– Annual Survey 2000", Brussels, 2001.

Greenspan, A., "Technology and Financial Services", Remarks before the Journal of Financial Services Research and the American Enterprise Institute Conference, Washington, 2000.

Houben, A., Kakes, J., "Fostering the 'New Economy': the role of financial intermediation", Amsterdam, 2001.

Jensen, M.C., Meckling, W.H., "Theory of the firm: Managerial Behavior, Agency Costs and Ownership Structure", Journal of Financial Economics, Vol. 3: pp. 303-360, 1976.

Koenig, E., Siems, T., Wynne, M., "New Economy, New Recession?", Dallas, 2002.

Olson, M.W., "Risk Management in a Changing Economic Environment", Remarks before the Bank Administration Institute, Phoenix, Arizona, 2002.

Santomero, A.M., "The Causes and Effects of Financial Modernisation", Remarks before the Pennsylvania Bankers Association, Charleston, S.C., 2001.

Santomero, A.M., Eckles, D.L., "The Determinants of Success in the New Financial Services Environment: Now That Firms Can Do Everything, What Should They Do and Why Should Regulators Care?", New York, 2000.

MARKET BARRIERS AND COMPETITION – THE EXAMPLE OF SHOP OPENING HOURS

GERHARD CLEMENZ

1. INTRODUCTION

In 1958 in a small European country a law was passed which forced chocolate producers to reduce the number of chocolate varieties to the following four: milk, bitter, hazelnut and coconut. In a semi-official comment the following justification for this remarkable piece of legislation was given: *"The law is based on the idea that competition should not force chocolate producers to increase the number of varieties in excess of what would be economically justified"*. Since then several attempts have been made to abandon the law or at least to soften it, with limited success. Trade unions opposed any liberalisation because they feared that the stress for workers would be unbearable if they had to produce more than four types of chocolate. In addition, and somewhat surprisingly, most chocolate producers were also against a change because they claimed that consumers didn't want more than four varieties anyway, and small producers would be at a disadvantage because they would be hard-pressed to create additional varieties and to produce more types of chocolate than the four permitted by the law. Opponents of the "Chocolate-law" maintained that it should be up to the market to find out whether there was a demand for additional varieties, and that small producers would benefit from developing their own specialities such finding a market niche for themselves. The advocates of the law, however, remained unimpressed. At the end, all they conceded was that in areas with a lot of tourists and before Christmas a fifth variety may be admitted by the local governor. Today, this country enjoys some fame as the only one in Europe with a strict chocolate law, though it is not exactly a favorite spot for chocolate puffs.

In case you are still wondering which country this may be I should admit that this tale is partly fictitious: To the best of my knowledge there is no country which has ever introduced such a chocolate law, let alone maintained it until today. However, the story is partly true: replace "number of chocolate varieties" by "number of shopping hours", and there you have your law: It is called "Ladenschlußgesetz vom 9.7.1958" ("store closing law"), and the country is Austria.

I may be wrong, but I suspect that most readers – even Austrian ones – found it rather strange that a law should protect producers from being forced to offer more varieties of chocolate than would be economically justified. At the same time I suspect that quite a few readers – even non-Austrian ones – would not be surprised that a law should restrict the number of shopping hours in order to protect entrepreneurs from being forced to keep their stores open in excess of what would be economically justified. If my conjecture is correct then the question is, why is there a tendency to make a difference between those two regulations? Why does it look quite outlandish to restrict the number of chocolate varieties, but at least not unusual and may be even reasonable to restrict the number of shopping hours? Economic theory is not of great help in solving this puzzle: It is quite easy to make a case in favor of restricting the number of variants of chocolate – or of any other differentiated product for that matter – since many theoretical models show that competition yields a proliferation of varieties in excess of a social optimum under a large variety of circumstances (see below). It is not at all easy to make such a case with respect to shopping hours. On the contrary: under reasonable assumptions competition is extremely unlikely to lead to longer shopping hours than would be socially desirable. In addition, by depriving shops of one strategic variable – opening hours – competition tends to be weakened, thereby protecting less efficient shops and, in turn, harming consumers. So why do we rely on markets in a case where market failure is not unlikely whereas we resort to regulation in a case in which the market can be expected to be doing quite well?

I do not attempt here to give an answer to this question. I shall only try to summarise the theoretical arguments against shopping hours regulations hoping that some day they will look as strange to everybody as a chocolate law would look today (and I hope nobody gets ideas about introducing a chocolate law in addition to existing shopping hours laws).

2. Markets May Fail

One of the virtues of perfect competition is that inefficient firms are driven out of business, and that the remaining ones are forced to produce at socially optimal levels. In reality, unfortunately, competition is usually less than perfect. More often than not, firms have some form of market power which allows them to enjoy monopoly rents at the expense of consumers[1]. If goods are standardised and homogenous they can do so by reducing the output, thereby raising prices above competitive levels. If goods are differentiated with respect to their quality it is less obvious what the profit maximising strategy is. The quality offered by a monopolist may be better or worse than the social optimum, depending on which segment of the market is more profitable. The number of varieties may be smaller or larger than would be socially desirable, and it can easily happen that private firms decide to produce varieties which from a social point of view are inferior to others which are not produced because they are less profitable. In other words, in reality so called "market failures" are the rule rather than the exception.

So, should markets not be trusted after all, and government interventions be the rule, even when they are as numerous as in Austria? Well, let us not jump to conclusions. While it is true that markets rarely conform to the ideals set out in our textbook models, the same can be said with respect to the regulatory activities of governments. Ideally, governments, having detected the sources of a market failure, identify the appropriate instruments, apply them with great care and monitor the success of their interventions, with social welfare as the sole criterion guiding all their decisions. How often do we see this ideal in reality?

3. Governments May Fail Too

Market failures are a necessary, but by no means a sufficient condition for government interventions and regulations. The reason is that governments rarely are the benevolent and omniscient maximisers of social welfare they are assumed to be in the benchmark models of textbooks. In reality regulations may be governed not by the common good, but by the interest of lobbies, quite often of those who are supposed to be the subject of regulation. But this phenomenon, referred to as "regulatory capture" is not the only problem. Very often the task of a regulator is extremely complicated and requires the collection and processing of huge volumes of information. In addition, the subject of

[1] The rapidly increasing field "Industrial Economics" is dealing extensively with markets with imperfect competition. The most comprehensive source where many of the following arguments can be followed up in detail is Tirole (1988).

regulation may be rather complex, and the regulation would have to be very intricate and detailed in order to account for all contingencies and special cases. A frequently encountered dilemma therefore is that either the regulation is too simple to be appropriate for a complex matter, or it becomes so complicated that it is costly to administrate and insufficiently transparent to be effective.

Consequently, a serious discussion of market regulations should take into account at least the following aspects:

1. Is there convincing theoretical and empirical support for the existence of a market failure?
2. Is there an effective and cost efficient remedy for this market failure?
3. Is the existing regulation really in the interest of society as a whole, or is it in the interest of specific groups?
4. What would the consequences of abandoning the regulation be?

In what follows, I shall briefly take up each of these points in turn. My conclusion is that the case for shopping hours regulations is very weak with respect to all four aspects.

4. Unregulated Shopping Hours – Too Many, Too Few?

The market failure, shopping hours regulation is apparently supposed to mitigate, is that free competition would lead to longer hours than are socially optimal. Unfortunately, the law-makers have never really bothered to substantiate this claim, so it is difficult to discuss its merits.

Now as mentioned above, there is some theoretical support for the claim that competition tends to lead to a proliferation of brands, or – which is formally analogous – to an excessively high number of locations if there is spatial competition. In a nutshell, the theoretical reasoning goes as follows[2]: Suppose there is a large number of potential producers, and each can decide whether to produce one variety of a differentiated product (or to open a shop at a particular location) or to stay out of the market. When a firm considers entering the market it compares its additional private revenues to its additional private costs, and it will go ahead if the former exceed the latter. Part of the additional

[2] For a rigorous formal model see Salop (1979).

private revenues does not, however, reflect additional social utility but is simply taken away from existing varieties (or outlets). Put differently, an individual firm compares marginal costs to average industry profit and not to marginal industry profit (which is smaller). This "business stealing" effect induces more firms to enter the market than would be socially efficient.

This line of reasoning, however, is not immediately applicable to the decision of existing firms concerning the length of their shopping hours. There are crucial differences between competition via shopping hours on the one hand and competition via shop locations or product varieties on the other hand. In the latter case a firm choosing a particular variety or location can be quite sure that it will retain a "monopoly", however small, either because it is physically impossible to replicate its choice or because it is economically better for competitors to maintain some difference, though varieties and locations can be very close to each other. This is obviously not the case with shopping hours. Furthermore, and even more important, shopping hours are an interval on the time line and not a point in geographical space or in the space of all possible varieties.

To see the importance of these differences recall where the brand proliferation (e.g. of different types of chocolate) comes from: A firm decides to occupy an empty spot in the space of varieties or locations if there is a sufficiently large number of potential customers and the nearest competitors are far enough away. It does not care what happens to the profits of other varieties or locations because those belong to other firms. That is why competition may yield brand proliferation. If we allow firms to produce several varieties of a differentiated product or to run outlets at several locations, results are far less clear cut. It is still conceivable that a dominant firm attempts to preempt the market and essentially mimics the competitive outcome with respect to the number of varieties. It seems more plausible, however, that the number of varieties becomes smaller if the number of firms is reduced because now they internalise the business stealing effect that occurs when a new variety is introduced. In any case, one cannot expect a unique equilibrium as in the benchmark models, but a rich menu of possible outcomes.

Now a firm that increases the length of its shopping hours usually continues to stay open at the same hours as before and simply adds some additional time. It cannot ignore the effects of this move on its profits during the previous shopping hours. In addition, in contrast to models of spatial competition or of product differentiation, a separation between the different instruments of competition is not easily possible. In spatial competition it makes sense to separate the decision concerning the location from price competition for given locations, especially if relocation is costly. In contrast, shopping hours can easily be varied (without regulation, that is) and are in a sense substitutes for other strategic variables like prices, qualities, service, etc. For example, a shop may decide to stay open for a short time and to charge low prices in order to attract customers whose preferred shopping time is outside the opening hours, or it may stay open for longer and charge a higher price. One deplorable consequence for economists is that a theoretical analysis of shopping hours competition is much harder than that of spatial competition, and it is not surprising that so far only a very few models exist.

One of those (Clemenz 1994) assumes that in a market for a homogenous product consumers are completely indifferent between individual shops, they only care for the price. They differ, however, with respect to their preferred shopping times. This is captured by a willingness to pay a higher price if the offered shopping time is closer to their most preferred one.

Now consider, at one extreme, a pure monopolist without any actual or potential competition. What is his incentive to increase his opening hours beyond any arbitrary given level? By increasing the shopping hours he could increase the price without loosing any customers because those with preferred shopping times outside the previous opening hours are willing to pay for their increased convenience, whereas those who remain within the old opening hours have no reason to stop shopping even at higher prices. The monopolist will compare the additional costs of staying open longer with the increased returns, and he will continue increasing the shopping time as long as the latter are greater than the former. It is easy to see that this leads to shopping hours which are longer than the social optimum because only those who would have preferred a shopping time outside the previous one benefit, but all consumers have to pay the higher price. So there are excessive shopping hours, but the problem is not competition, but rather the lack of it. Forcing the monopolist to reduce the shopping hours is at most a second best remedy. What should be done, if one decides in favor of regulation, is to prevent the monopolist from extracting a monopoly rent.

Consider next the other extreme, merciless price competition between identical firms. Since keeping a shop open causes quasi-fixed costs, the equilibrium is that of a contestable market. There will be only one active firm in the (local) market who chooses a combination of price and shopping hours which makes profitable entry of a competitor impossible. This equilibrium is not unique, but it does not in general imply shopping hours longer than the social optimum. Furthermore, it can be shown that lifting existing regulations is either without any effect – if the legal shopping hours already corresponded to some equilibrium – or there is an increase in social welfare if shopping hours were shorter than the social optimum. In any case, even very stiff competition does not imply excessively long shopping hours.

Clearly, in reality neither of these two cases is likely to be encountered. Most markets have some competition, though its intensity varies considerably. Consequently, there are no general results concerning the social efficiency of shopping hours in unregulated markets. The above reasoning suggests, however, that ceteris paribus overlong shopping hours are more likely the weaker the competition is. The argument is the following: Increasing the shopping time can be profitable for a firm because of two effects: It can attract some consumers who did their shopping at another shop, but at an inconvenient time, and it can charge a higher price because some consumers are willing to pay for more convenient shopping times. But the profitability of attracting additional consumers is increasing in the markup on each product, which in turn is increasing in market power, and a price increase for longer shopping hours will be greater the weaker the competition is. Consequently, the closer we get to the pure monopoly case discussed above, the more likely it is that shopping hours are too long. But then there is the problem that several inefficiencies occur simultaneously, and it is far from clear that concentrating on shopping hours is the best solution.

My conclusion is that so far no convincing theoretical foundation has been provided for the claim that competition leads to shopping hours which are longer than a social optimum.

5. REMEDIES – FOR WHAT?

Now if one is convinced – as I am inclined to – that regulations should only be considered if there is a strong reason to believe that a market failure is likely to occur, the discussion could stop here. However, even though there is no presumption that shops would open for too long without regulation it remains true that competition does not necessarily lead to the socially optimal length of the shopping day. The problem with regulation is that it is extremely difficult to determine this optimal length, since it depends on the individual market conditions, including the type of good and the intensity of competition. Somehow the lawmakers and/or the regulators seem to have realized this as one can tell from the various exceptions and special regulations made in the current version of the "Öffnungszeitengesetz 1991" ("law for shop opening times"; presumably the lawmakers thought this sounds better than "store closing law", the original title). For example, shops at railway stations are allowed to keep open longer than other shops, but they are not allowed to sell all items at all times. Similar provisions hold for convenience shops at gas stations. In addition there is a host of special regulations for flower shops, chocolate shops (here we are again) etc.

Another curiosity might ring a bell for everyone who ever took an introductory course in macroeconomics. There one learns that gross domestic product is reduced if the lord marries his housekeeper and she continues to do all the housework as before, but without official payment. There is a similar provision in §6 of the shop opening law: if the shop owner marries her employee then apparently the efficient shopping time is increased as family enterprises are allowed to keep open longer than others.

Adding to the rather complex and differentiated framework of shopping hours regulations in Austria the fact that other countries, as long as they had any, came up with quite different regulations, and that the patterns of opening hours in countries without regulation are quite different from each other, I conclude that it is not only hard to detect any market failure with respect to shopping times at all, but it is almost impossible to come up with regulations which are both, simple to implement and superior to the free market outcome.

6. WHO BENEFITS?

If the case for shopping hours regulations is so weak, why do we still have them? The exception for family enterprises mentioned above suggests a likely answer: This regulation is not in the interest of society as a whole, but in the (supposed) interest of specific groups. One such group are small scale retail shops who are threatened by big chain stores. Are they really helped by shopping hours regulations?

In one sense the answer is yes. Several authors have shown that longer shopping hours would harm inefficient shops and benefit efficient ones. The reason given by Clemenz (1990) is that shopping hours restrictions limit the search time at least of a large fraction of consumers, so they have to accept inferior offers, though better ones could be found if there were enough time. Morrison and Newman (1983) and Tanguay et al. (1995) argue that large stores are more efficient, but they have a high access time. This becomes less important for consumers if shopping hours are longer, and demand would shift from less efficient small local shops to efficient large shops. This in turn may induce market exit of the least efficient shops.

While this may explain the reluctance of many store owners and their representatives to accept a liberalisation, it is a rather weak argument in favor of regulations. First of all, it is not at all clear that small shops are really less efficient when it comes to opening hours. They are more flexible, in a sense closer to their customers and better equipped to serve special individual needs. In fact, the experience in countries with free shopping hours shows that many small shops benefited from this liberalisation. The above mentioned provision for family enterprises in the Austrian shop opening law indicates that this has already been recognised.

Secondly, it is questionable how effective shopping hours regulations really are in protecting inefficient shops. On the one hand there are new developments in the retail business, like e-commerce, which diminish the importance of shopping hours anyway. On the other hand, society is changing fast, and pressure to soften regulations by creating exceptions and loopholes is enormous and quite successful, even in Austria. The only way to save small scale shops is to help them increasing their efficiency and competitiveness, otherwise one can at best slow down their exit, but not avoid it in the long run.

The third, and in my view most important argument is, however, that regulation should mitigate and not create market failures. If one of the main virtues of market competition is to eliminate inefficiencies it is ridiculous to impose regulations which prevent markets from doing what they are good for.

Now one argument in favor of protecting small scale local shops is that many elderly and immobile consumers would suffer if those local shops would disappear. But again, this is a very contrived argument. I am all in support for helping the needy, but this should be done as efficiently as possible, which usually means, one should deal with the problem as directly as possible. If immobility of some groups of consumers, and their lack of access to shops are the problem, organise home delivery, shopping tours, etc. Why using the very indirect and indiscriminate method of supporting inefficient shops?

Finally, it is often claimed that employees must be protected from unacceptable hardship which would be caused by longer shopping hours. There are two points to be made in response. First, in many occupations, also in parts of the retailing business, this hardship already exists. If it s really unacceptable, why protect only one part of the society, at the expense of others? Presumably, employees haven chosen jobs with "unusual" working times because they feel they are appropriately compensated, which they should be if labor markets function. Secondly, if employees in the retail sector are really in a much weaker position than employees in other industries, then this is a general problem for their trade unions. Why concentrate on shopping hours? Make the labor market function better.

To sum up, shopping hours regulation are not in the interest of society as a whole, but at best in the interest of special groups. But it is doubtful that these regulations are really an efficient way to further even their interests.

7. *WHAT HAPPENS IF RESTRICTIONS ARE LIFTED?*

The surprising answer to this question is: In many instances – nothing. There are only a few models in the literature which attempt to explain the length of the shopping time as a result of competition, but in all of them it is a possible equilibrium that no firm has an incentive to deviate from the given shopping time, even if it is allowed to do so (Clemenz 1990, 1994, Clemenz and Inderst 1989, Inderst and Irmen 2001). To illustrate one of the reasons for this consider a market in which consumer search is important. If only one shop stays open longer consumers have little incentive to go shopping since searching in just one shop is not worthwhile (Clemenz 1990). As an example recall an experiment conducted in Vienna some years ago. Antiquity shops are typically clustered in a relatively small area, because they offer highly non-standardised goods, and searching is a major part of the fun for customers. Now in Vienna antiquity shops were allowed to keep open on Saturday afternoons. Since there was no co-ordination of their opening hours many of them kept closed, which reduced the incentive of shoppers to visit the area, and the experiment flopped.

In many other instances shops will stay open longer. Usually this will result in lower prices since competition becomes more intensive. From a purely theoretical point of view, however, price increases cannot be ruled out. Inderst and Irmen (2001) show that in a duopoly an equilibrium may exist in which one shop is open only at night, and the other one 24 hours a day. This means that competition is softened during the day as compared to a situation in which both firms were forced to stay open only during the day, and prices would go up. Since by assumption longer opening hours do not increase costs it is hard to address the problem of optimal shopping hours in a meaningful way, and the result just mentioned is mainly interesting as a – surprising – logical possibility and not as a prediction about reality. Similarly, in the above mentioned model of Morrison and Newman (1983) the shift from inefficient to efficient shops leads to increased prices of the latter, but nevertheless consumers are better off without than with shopping hours restrictions.

On the whole it is hard to see why it could be dangerous to eliminate shopping hours restrictions altogether. In particular, experiences with relaxing the restrictions in the past have been quite encouraging. Why not take the final step?

8. *Summary and Conclusions*

I have argued that a market failure justifying a restriction of shopping hours is quite unlikely, and it is less likely the more competitive a market is. Even though it is true that markets do not necessarily yield the optimal length of the shopping day, the task of calculating and implementing this optimal length for each individual market is certainly beyond the capability of any regulatory agency. Current regulations are not in the interest of society as a whole but at best in the interest of specific groups, but it is doubtful that even these groups really benefit in the long run. Theoretical reasoning as well as experience in many countries suggests that no harm is to be expected if restrictions are lifted. So let us go ahead.

9. *Literature*

Clemenz, G., "Non-Sequential Consumer Search and the Consequences of a Deregulation of Trading Hours", European Economic Review 34, pp. 1323-1337, 1990.

Clemenz, G., "Competition Via Shopping Hours: A Case for Regulation?", Journal of Institutional and Theoretical Economics 150, pp. 625-641, 1994.

Clemenz, G., Inderst, G., "Ökonomische Analyse der Ladenöffnungszeiten", Manz, Wien, 1989.

De Meza, D., "The Fourth Commandment: Is it Pareto Efficient?", Economic Journal 94, pp. 379-383, 1984.

Dixit, A., Stiglitz, J.E., "Monopolistic Competition and Optimal Product Diversity", American Economic Review 67, pp. 297-303, 1977.

Inderst, R., Irmen, A., "Shopping Hours and Price Competition", UCL, mimeo, 2001.

Kay, J.A., Morris, C.M., "The Economic Efficiency of Sunday Trading Restrictions", Journal of Industrial Economics 36, pp. 113-129, 1987.

Morrison, S.A., Newman, R.J., "Hours of Operation Restrictions and Competition Among Retail Firms", Economic Inquiry 21, pp. 107-114.

Salop, S.C., "Monopolistic Competition With Outside Goods", Bell Journal of Economics 10, pp. 141.156, 1979.

Tanguay, G.A., Vallée, L., Lanoie, P., "Shopping Hours and Price Levels in the Retailing Industry: A Theoretical and Empirical Analysis", Economic Inquiry 33, 1995.

Tirole, J., "The Theory of Industrial Organization", The MIT-Press, Cambridge, Mass, 1988.

SUMMARY

COMPETITION POLICY – CHALLENGES FOR AUTHORITIES AND BUSINESS

CHRISTINA BURGER, HEINZ HANDLER

The following remarks are intended to provide an overview of current issues in competition policy, incorporating in particular the results of the Competition Discussion Forum and the other papers contained in this volume.[1]

1. WHY COMPETITION? WHY COMPETITION POLICY?

Market economies make use of search processes which are supposed to achieve an efficient allocation of resources. In an ideal neo-classical world, competition between a (large) number of fully-informed producers and consumers would end up in a price system which conveys information about the relative scarcity of goods. The speed of adjustment is assumed high, if not infinite. This secures *equilibrium* at virtually all times with prices equalling marginal costs and profits vanishing. In such a world, disequilibria and processes towards equilibrium are not deemed to be of great relevance. In the *real world*, however, information is not perfect and market power is not distributed evenly to the effect that monopoly situations often exist at least for some time. Dynamic processes may thus occur which are protractedly aloof from equilibrium paths.

As already observed by Adam Smith, the behaviour of economic agents is guided by self-interest. Although this is a central assumption in neo-classical economics, it may, under asymmetric distribution of market power, prevent markets from functioning orderly. E.g., if profit maximising suppliers and their lobbying organisations face weak consumer interest groups, this may result in rather high prices, suboptimal quality, limited choice and even pressure on other suppliers and on employees. Under certain circumstances, consumers may not be inclined to engage in enforcing competition, in particular when they, as employees or self-employed persons, expect to profit more from individual income security then from general price reductions or quality improvements.

[1] In the following text, these papers are quoted by the name of the author, without reference to the year of publication.

Competition, alongside with the quality of production factors and demand conditions, is seen to contribute significantly to *long-term economic growth* (Porter 1990). A big threat to the growth potential is inherent in permanent monopolies or oligopolies which, apart from price distortions, also tend to neglect the search for innovative products and new markets (Farhauer 2001).

In securing market conditions, the **state** plays an outstanding role (Lösch 2000). Governments and parliaments establish and maintain the legal framework which guarantees free market entry, precludes individual suppliers or demanders from accumulating excessive market power, deals with external economies in research and education, and prevents other market failures. There is, however, also a substantial literature elaborating on the reasons for and effects of state failures. Some even hold that the sheer existence of markets depends on regulatory intervention by the state (Rauchway 2002).

However, state regulation can also have the effect to *weaken competition*. Governments can not in any case be considered the benevolent and omniscient maximisers of social welfare. Quite in contrast, they may at times be governed by their own interest to be reelected, or the interests of lobbies and be subject to regulatory capture. Competition may be weakened, e.g., by restrictions to the market entry of new competitors or by the regulation of shop opening hours (Clemenz). What has been said above concerning the advantages of competition can of course also be held against state monopolies. A more competitive environment, e.g. in the education sector or the tax system, should increase efficiency and is therefore of crucial importance for the quality of publicly provided services (Mueller).

Knieps (2001) lists a number of **aims of competition policy**: (1) economic freedom, which he sees as indispensable for achieving the maximum of potential transactions; (2) distributional justice, to be attained by confining income differentials to those created by differences in performance, but not by monopoly rents; (3) the optimal allocation of scarce resources; and (4) the realisation of technical progress. Day-to-day competition policy is particularly concerned with the *efficient allocation of resources* which is achieved through a shift of resources away from inefficient production processes to more efficient ones, in particular form inefficient firms to more productive and innovative competitors, and especially to new entrants. While the latter, in the first phase of operating a new business, are generally less productive than the incumbents, those able to survive are likely to improve their performance quickly.

An important **operational target** of competition policy is to prevent the accumulation, and in particular the abuse, of market power. Therefore measures to enforce competition include the opening of markets to potential new competitors and an efficient control of mergers and cartels. However, anti-competitive behaviour can take forms which are less blunt than open cartels or the visible abuse of a dominant position. One may think of recommended prices as a soft version of price-fixing agreements, or of non-competition clauses in employment contracts which restrict market entry. More obvious forms of anti-competitive behaviour are market-sharing agreements restricting the choice of suppliers or limiting the range of products on offer. The accumulation of market power tends to re-enforce itself: If market pressure can be exerted, it can also be used, via the takeover of competitors, to further accumulate market power. In order to avoid such market failure, policy intervention should take place as soon as the accumulation of market power becomes apparent.

Competition may be reinforced by **other policies**. Within the European Union, efforts to complete the *internal market* currently concentrate on the removal of barriers to the trade in services between Member States (Horvath/Pfandl). Stiglitz points at the importance of pursuing competition policies with proper regard to *trade policies*. Imports often substitute for new firms entering a market, as they put pressure on rents and prices to be reduced. Consequently, in an open market with imports the degree of competition need not be linked to the number of firms in the market. The number of market entrances and exits is more relevant, as with a constant number of firms existing market shares tend to become petrified (Aiginger 1995). However, in spite of comprehensive trade liberalisation, many goods remain non-traded. Therefore, competition must anyway be secured at the *national level* (Fingleton).

In **Europe** a lot has been done in recent years to increase the degree of competition, but studies still indicate that competitive intensity remains considerably below that of the USA. As a result, prices are consistently higher, and show an increasing divergence, in the EU than in the US.

Empirical evidence underscores that in the sectors sheltered from international competition (such as the housing market and public services), prices tend to be higher than in exposed sectors.

As a small economy, **Austria** has perceived herself as rather open to international competition, although she has repeatedly (e.g. in the EU Broad Economic Policy Guidelines) been classified as rather sheltered compared with other small open economies. In fact, until recently significant parts of the economy remained subject to market rules, price regulation and public ownership of large companies. Internal failures in the nationalised industries and international developments rendered it unavoidable to make up for a certain loss of competitiveness by adjusting to the globalisation philosophy. Fostered by EU membership, most of the previously sheltered markets have in recent years been opened with surprising speed. It is now generally recognised that open markets and competition enhance the growth potential and thus serve the interest of the society at large.

2. Trade-offs between Competition and Other Economic Goals

Competition drives productivity growth, and in turn also competitiveness and overall domestic welfare. Provided companies are induced and willing to expose themselves to competition, they will thereby increase production efficiency and be more competitive on international markets. Competition also ensures that the benefits of cost reduction and innovation are passed on to consumers in form of lower prices, increased quality and greater choice of products. However, in cases of market failure (e.g. in sectors which constitute "natural" monopolies) and to achieve additional policy goals (e.g. health, security), **state regulation** may be required. This also holds for the liberalisation of network sectors in order to reduce the size of remaining monopoly activities.

2.1. Do Profit Opportunities Rise or Fall with Competition?

Competitors in a market environment will be eager to increase their profit, either by bargaining for a better deal, or by innovating new products. Stiglitz argues, however, that enterprises can generate **more**

profit by suppressing competition than by innovating and producing better products. Therefore it is the core task of competition policy to set the right incentives.

Schumpeter characterised the development of markets by a sequence of short term monopolies – one temporary monopoly would over time be replaced by another one and thereby result in **dynamic competition**. Stiglitz complements the argument by considering that a firm, being able to establish a temporary monopoly position, would often also find opportunities to perpetuate that monopoly. One should moreover distinguish between *competition in the market* and *competition for the market*. In the former case firms compete with each other by offering lower prices or better services, the latter case suggests that firms compete through innovation to eventually dominate the market. Competition *in the market* leads to minimal costs and assures that prices equal the marginal cost of production. Competition *for the market* results in scale economies which, together with network effects, produce a single firm with lowest cost and a large share of the market. Successful innovators charge (temporarily) more than marginal costs to be compensated for their fixed costs and the high risk inherent in research investment. Winners in this case can expect huge profits that counterbalance the forfeitures incurred by the losers (Ahlborn et al. 2001).

2.2. Does Competition Further or Hinder Innovation?

The intensity of competition is supposed to influence the innovation efforts. The relationship could take the shape of an inverted U: When many firms compete on equal terms, the rents derived from innovation are soon competed away, and there is thus little incentive for R&D investment. On the other hand, low competition may also reduce investment incentives: Since R&D is risky, a dominant firm might be content with earning its established monopoly rent and not invest in R&D (Ilzkovitz/Meiklejohn 2001, Röller et al. 2001).

R&D policies should provide incentives to prevent market failures through external economies. Without such incentives, many firms would ex ante not engage in innovation and R&D, because they would ex post, due to the public-good characteristics of R&D, be unable to retrieve appropriate rents from their efforts. In other words, even if firms earn excessive profits ex post, from an ex ante perspective they can only expect average profits. *R&D cooperation* may reduce competition, but this may be justified in cases when a firm, because of lack of manpower or financial resources to develop a new product, would otherwise not engage in R&D (Franz).

The expectation of some form of (temporary) monopoly, e.g. via the protection of **intellectual property rights** (IPRs), is a necessary condition for firms to invest in R&D. IPRs do not create overproportional market power in the antitrust sense, as long as the market remains open to substitutes outside the protected patent. IPR protection can be viewed as a precondition for introducing innovations. Although temporary allocational distortions are created, they can be justified by the long-term welfare increases for consumers. The rents created by patents should not be treated like other monopoly rents, because in the long run, in a competitive environment for innovations, the expected gains from the R&D activities are zero (Knieps 2001).

2.3. Competition Policy Versus Industrial Policy

There is a potential conflict of interest between competition policy and industrial policy (Sasi 2002). **State aid** is a particularly important instrument of industrial policy and should thus be included in the considerations of competition policy. Due to political failure (e.g. the excessive influence of vested interests) or institutional failure (e.g. inadequate enforcement mechanisms), state aid may be directed inappropriately. This undermines competition, fairness and efficiency. There is, on the other hand, a clear role for well-targeted state aid in alleviating market failures and promoting structural reform. This pertains with the EU state aid regime, which, for the aid to traditional industries, is governed by strict rules, and by more permissive rules for addressing market insufficiencies (e.g. R&D and environmental protection). This distinction takes care of a fair distribution or other social considerations which the market does usually not account for and which may be achieved by state aid.

2.4. Can Prices be Too Low?

Although a competitive environment is conducive to low (market) prices, it may happen that, from the point of view of competition policy, prices become too low. In the case of **predatory pricing** firms temporarily charge under-cost prices in order to drive out competitors from the market and to increase their own market shares. To recover costs, prices are then raised above the competitive level, where they remain as long as competition is lacking. However, under-cost prices can be efficient for a limited time – without resorting to a strategy of destructive competition. A case would be when a new product is introduced (when a critical mass of consumers must be approached early on). Producers facing severe negative demand shocks and with given capacities which cannot be adjusted quickly, may temporarily be forced to cut prices below marginal costs. One could also think of selling off outdated stocks of goods to clear storage facilities. In all these examples consumers profit from low prices without destructive competition (Kruse/Haucap 2002).

3. *NEW CHALLENGES IN THE NEW ECONOMY*

3.1. GLOBALISATION AND THE "RELEVANT MARKET"

Just as there is no competition without a market, there is no competition policy without a **"relevant market"**. This term is used by competition enforcers to provide a frame for the microeconomic examination of demand and supply factors that determine, in the event, whether or not a potentially anti-competitive behaviour results in damages to other market participants. Such damages are unlikely to occur to consumers when, in the wake of an anti-competitive behaviour, price-elastic demand and the availability of substitutes prevents prices from rising. The possibility of competitors to quickly enter the market would also put a lid on price hikes. Thus, for a specific (antitrust or merger) case, the relevant market (in terms of products and/or in geographical terms) is determined by sufficiently homogenous competition conditions, in particular by the possibilities of demand substitution, of supply substitution and by the contestability of the market (European Commission 1997, Monti 2002). High price elasticities or high substitution elasticities vis-à-vis competing products or locations contribute to a relatively large market and thus to reducing the market dominance of any single firm. When it comes to specific cases, this general assessment of a relevant market can lead to different results depending on, e.g., whether the examination is prospective (as in the case of mergers) or rather retrospective (as in antitrust cases). The ambiguous element in the market definition has led some authors to question the usefulness of the concept at all.[2]

Since business activities have become more and more **international**, the question comes up how this would impinge on the definition of the relevant market. In an open economy, a supplier who dominates domestic production does not necessarily dominate domestic consumption. Therefore, just to look at the *domestic market share* would in many cases be insufficient (Fingleton), all the more, as market shares can in general only provide a first indication of the competitive situation. One needs complementary information on *concentration*, *ease of market entry* and the possible *existence of substitutes* to determine whether a firm dominates a market or not: If a firm has a market share of 100%, but faces easy entry to the market for new suppliers (especially for firms producing similar products which can easily be adapted to this market), such a firm has only little market power (Fisher 2002). The *elasticity of demand* is often seen as an indicator for the degree of competition, although a high elasticity may not only reflect vigorous competition; it can also be an expression of monopolistic power, when the monopoly has already raised the price above the competitive level (Kuoppamäki 2002).

Concerning the **relevant geographic market**, Monti (2002) holds that the definition depends on national preferences, preferences for national brands, language, culture,life style. Other arguments for distinguishing a location or region from another one are the existence or absence of regulatory barriers and the need for a local presence; therefore retail markets tend to be of local or at best of national dimension. In the EU as a union of sovereign states, the definition of the relevant geographic market is far more complex than in the US where cultural and linguistic differences, regulatory barriers and diverging preferences play a much lesser role. Nevertheless, in the US domestic mergers are usually approved even when they lead to large national market shares, provided the market is open enough for imports to constitute a significant component of competition.

[2] For a summary of the discussion on the usefulness of market definitions see Fisher (2002) and Kuoppamäki (2002).

In the wake of regional integration and globalisation, there is a clear tendency for previously local or national markets to cross their traditional borders towards EU or even world markets. As the range of supply and demand expands, and market conditions become more similar, markets are defined to cover an increasingly broader area or product scope. Simultaneously, market power of existing firms is reduced.

In recent years international business has increasingly been characterised by large mergers and co-operation arrangements between companies. This has largely been the consequence of globalisation and the creation of the single European market which have revealed the necessity of corporate restructuring. According to Sasi (2002), it makes a differences whether a merger occurs in a small or in a large market. In a small market, particularly in a small country, large mergers easily lead to a dominant market position and to interventions by the authorities. In larger countries it is more likely that an international competitive position is achieved without approaching the level of dominance in the national market. The EU Commission has been criticised for applying the same criteria across all Member States when defining geographic markets, and not allowing for country size. Monti (2002) counters that companies do have other ways to grow and become internationally competitive than by merging with another leading company at home. He specifically points (a) at internal growth of a firm which may eventually result in a dominant position, though gained by offering lower prices and better products than competitors, and (b) at mergers with companies abroad which in general are less harmful for domestic competition.

Mergers are targeted to increase the market power, but this may be offset by higher production efficiency and lower prices (Ilzkovits/Meiklejohn 2002). There are various channels to increase the efficiency, inter alia through rationalisation, reaping economies of scale or scope, reducing managerial inefficiency or diminishing factor costs (Röller et al. 2001). **Trade-offs between efficiency and competition** should hence be expected. A large market share, especially in network industries, does not necessarily signal deficient competition, but can also mirror significant economies of scale. Policies to decrease the dominant market share have to weigh the benefits of increased competition against the potential loss of economies of scale (ECOFIN 2002).

The merger of firms tends to foster the internalisation of innovations and may thus stimulate **R&D investments**. The scope of technological capabilities increases when the firms involved dispose of complementary skills, and synergies can be gained if they previously conducted overlapping research. By eliminating duplications and sharing knowledge, they should be able to slash costs and raise innovations. Counterbalancing effects are of course also possible, when, e.g., the merger of research units decreases research trajectories which in turn diminish the probability of successful innovation (Ilzkovits/Meiklejohn 2002).

3.2. THE INTERNET AS CHALLENGE FOR COMPETITION POLICY

Whenever major **new technologies** are introduced, competition authorities have to be alert of the potential consequences for the competitive environment. The production of new technologies is characterised by high fixed costs and low marginal costs. This produces increasing returns to scale and puts pressure on industries to concentrate (Ahlborn et al. 2001). New technologies force companies to restructure their production processes. Computers and the Internet offer ways and means to reorganise activities, in particular to decentralise by outsourcing some tasks and moving others on-line.

The **Internet** has raised concerns about its natural monopoly element, although it certainly also has the potential to enhance competition by decreasing transaction costs and facilitating price comparison. With the Internet established definitions of the relevant geographic market become blurred (Stiglitz, Franz). New markets are created and technical developments come up at a speed which often renders competitive advantages of suppliers irrelevant within a very short time span (Kuoppamäki 2002). The main competitive pressure for producers of existing goods and services comes from new superior products. Potential competitors not currently in the market represent the major competitive force upon firms enjoying large economies of scale. Such firms may be able to retain their position only by continuously investing in innovation (Ahlborn et al. 2001).

The value of many **networks** increases in line with the number of people linked together. Suppliers of complementary products may also seek co-ordination to achieve a critical mass (Franz). In such networks, it may easily happen that only a single technology survives – although not necessarily the most efficient technology (Stiglitz). Users of an established norm are reluctant to incur the costs of switching to another technology. The market success of a competitor will hence depend heavily on its ability to connect with complementary products (Franz). As a result, monopoly or oligopoly are the standard market form in network industries, and prices often depend on network sizes (Ahlborn et al.).

A similar problem, although not bearing any network effects, occurs in software and hardware industries serving PCs: Software applications produce large economies of scale, but can often only be used on a specific operating system. Therefore, software writers are heavily induced to concentrate on the operating system with the highest number of users. Similarly, users prefer the operating system for which many applications exist. As a result, an operating system that has already acquired a large share of users and software writers will tend to become ever more attractive (Fisher 2002).

4. TOWARDS MORE EFFICIENT COMPETITION POLICIES

So far we have elaborated on the relevance of markets, market power and competition in general as well as on some of the influences of the New Economy on competitive behaviour and the consequences for the instruments of competition policy, such as the market definition. We now turn to the discussion how to improve competition policies to cope efficiently with the New Economy and other recent developments.

One of the more significant adjustments in the European Community has been the increased emphasis on an **"economic approach to competition policy"** (Monti 2002), also labelled the "European School in EC Competition Law" by Hildebrand (2002a,b). It is an outgrowth of the modernisation efforts in the European Community which have also stimulated a debate on the analytical model and the tools to detect and pursue competition deficiencies. Purely *judicial considerations* have now been replaced by a mixture of legal and economic reasoning. Hildebrand (2002b) classifies competition law as economic law which "is meaningless if the actual economic circumstances are neglected". In this respect, competition authorities around the world have become rather sophisticated by using a variety of tools and concepts, such as market shares, concentration measures, price elasticities and elasticities of substitution, to examine the presence or absence of market power (Fingleton). Analyses of prices and ownership data provide key information to assess the intensity of competition. Such data are a regular starting point for proceedings to combat anti-competitive behaviour. As regards concrete measurement, competition enforcers also use different concepts as demonstrated in merger cases where the EU relies on the *dominance test* (Article 2 of the Merger Regulation), while the United States, Canada and Australia employ the concept of *substantial lessening of competition (SLC test)*. The latter addresses competition deficiencies not just by the notion of dominance or monopoly, but more broadly also by other forms of reducing competition. Some of the EU Member States (United Kingdom, Ireland) have for national purposes switched to the SLC test, others keep an eye on it, and the European Commission (2001c) has initiated a discussion with the aim of possibly introducing this test also on Community level. Others are not convinced that, when applied to individual cases, the outcomes will significantly deviate from the dominance test.[3]

The competition authorities have to undertake an ongoing monitoring of sectors characterised by high *concentration* in order to prevent (further or future) abuse. In international discussions it is generally accepted that competition policy can only be effective if managers are dissuaded from engaging in collusive behaviour. To achieve this goal, a promising way is the threat of painful *punishment*. Average expected profits from participating in a cartel must be negative, divestments are an important instrument at hand (European Commission 2001b).

4.1. Liberalisation of Network Industries

Economic theory and policy have long regarded **natural monopolies** as untouchable and exempted from competition. It has only gradually been recognised that some *liberalisation* is feasible and can serve consumer interests. In the case of network industries which in the past enjoyed the natural monopoly status, liberalisation has helped to separate the production, distribution and sale of the real product (which can be achieved under market conditions) from the network itself (which may

[3] These issues are discussed, e.g., in Hildebrand (2002b), Wish (2002) and Böheim.

remain a natural monopoly). For the monopoly part, efficient *regulation* must replace competition (Fingleton). The owner of the grid, usually also the incumbent producer of the goods and services, must concede access to the grid for competitors in order to maintain cost-efficiency and must charge fees for the use of the grid which are transparent if not regulated. Providers of services in network industries are often admitted to the market only if they agree to care for *"universal services"* which take into account various policy goals. E.g., in the telecommunications industry, it is thereby secured that dislocated customers receive service even if the fees to be paid do not cover costs. With the liberalisation of entry conditions it is intended to create *"contestable markets"*: Monopolists or oligopolists who exploit their market position by charging high prices must be aware to attract new competitors (Burger/Handler 2001).

In practice the process of generating entry into formerly monopolised industries is slow and proceeds on **different speeds**. The success of liberalisation is considerable in the *telecommunications sector*, where prices have been slashed and product ranges increased (not just because of the advent of the mobile phone). In contrast, there has not yet been any visible movement in the EU *postal market* (Schneider). The situation is quite different in the *financial sector* for which regulatory systems, nationally and internationally, have been in place for a rather long time. The 2002 reform of the supervisory system in Austria takes care of globalisation effects and the increased substitutability between different financial assets. A single independent supervisory body is now responsible for the prudential supervision of the capital market as well as for banks, insurance companies, pension funds and the securities and stock exchange (Darlap et al.).

Liberalisation has not been a straightforward process, but has experienced **flaws and opposition**. One of the main counter-arguments raised by incumbents, notably in the *energy sector*, was that consumers would not any more enjoy the security of supply. However, according to Mayer, no direct relation between liberalisation and a decrease of security of supply has so far been identified. Stiglitz maintains that market power remains concentrated in these sectors and can thus easily be leveraged or abused, and he therefore calls for regulation. As the "Californian case" shows, liberalisation can fire back if the market design is poor and regulatory decisions are suboptimal (Reichert). As regards the ongoing liberalisation of *railway infrastructures*, problems have occurred in terms of not providing for a unified and consistent charging system. Within the EU it is already considered a success that for the first time a framework has been defined within which the Member States can determine their infrastructure charging schemes (Gürtlich).

Successful deregulation in the network industries is supposed to result in lower prices (as experienced e.g. in the energy market), it is moreover also expected to increase the range of goods and services supplied. Looking at the experience of the Austrian telecommunication sector, consumers were able to profit from both effects of liberalisation: increased diversity of high-quality, but reasonably-priced services (Otruba/Bernhardt). The benefits of liberalisation are, however, not in any case fully passed on to consumers (Steyer).

In the context of **regulation policy**, several trends can be observed in the EU: the responsibilities of regulators are extended and clarified; the powers to enforce legislation are strengthened and more resources are allocated to regulators; and existing regulators are often merged into fewer regulatory bodies to correspond to market developments. In principle the prohibition of cartels and of the abuse of a dominant position as stated in antitrust law should suffice for an ex-post enforcement of competition. In the case of natural monopolies, however, ex ante monitoring and supervision of market entry, of access tariffs and other customer conditions are essential to ensure effective competition (ECOFIN 2002). With liberalisation progressing, regulation policy should in future be characterised by a gradual transformation from the ex-ante approach of regulatory intervention to a sector specific supervision of competition in line with the rules stipulated by general competition law (Otruba/Bernhardt).

According to a **first assessment** of market performance in the network industries by the European Commission (2001a), low and medium income households did on average not suffer a loss in the affordability of services. As regards employment, job losses in incumbent telecommunication companies were more than fully offset by employment in new firms. In the postal and energy sectors, such effects could not be proven. In contrast to the telecommunications sector, where new products (in particular the mobile phone segment) have opened the market rapidly, in other sectors consumers are hesitant to change suppliers. This can also be explained by bundling strategies of incumbent firms and a lack of price transparency. The importance of network industries is not only demonstrated by their share in GDP (about 6%), but also by the fact that their output often serves as an important factor of production in other sectors which influences the price level there as well. Especially in the modern knowledge economy, a highly developed telecommunications infrastructure is moreover of central importance when it comes to location decisions (Otruba/Bernhardt).

There has been some debate on the *relationship between sectoral regulators and the national competition enforcement authorities*. Although either has core competencies which do not overlap with the other, legislations do not in all countries clearly separate the two areas. In any case, it seems advisable to find work agreements and coordination between the various authorities to ensure an overall consistent decision practice (Burger/Handler 2001). Stiglitz would perhaps not subscribe to such collusive behaviour, but rather favour competition between the various authorities. In EU Member States there is, however, a tendency towards horizontally-organised agencies (Steyer).

4.2. Globalisation Requires Reform of Competition Policies

In the wake of globalisation markets have become interconnected over the world, thereby enhancing competition. To some degree, however, the interconnections have encouraged co-operations which limit the degree of competition. That is why on a **international level** (e.g. in the World Trade Organisation or the newly-founded International Competition Network) measures are discussed to link national competition policies together and set international standards for the substance, organisation and proceedings of such policies. Among these standards could be the independence of prosecution and decision of individual cases, leniency policies, adequate sanctions (which should have a strong deterrent effect and adequate redress for the parties harmed), and activities to increase the public profile of competition policy. Public pressure seems indispensible for the success of competition policy and a competition-prone climate in which no enterprise could afford to be denounced for anti-competitive business practices.

At the **European level**, competition law and policy are vital instruments for securing free market conditions and completing the internal market. A major reform is currently negotiated with Member States to keep up efficiency of the system on Community level. The reaction of Member States on the original Commission proposals on modernisation, containing the primacy of EU law and the decentralisation of enforcement, was rather mixed. Decentralisation, although putting new burden on national courts and competition authorities, was rather welcomed as it is consistent with the principle of subsidiarity. The proposals should reduce EU bureaucracy by the abolition of the traditional notification system. This will allow the Commission to concentrate on more serious distortions, especially the investigation of hard-core (i.e. secret) cartels[4]. Enterprises have complained about this because they will no longer receive comfort letters which in the past have provided a great deal of legal security. The draft regulation refers responsibility for applying the EU competition rules to the national authorities and courts which have to apply the relevant articles directly and without qualifications.

The decentralisation move will only be successful if complemented by some institutionalised horizontal **co-operation between national competition authorities**. Because of the increasing importance of cross-border markets, they should at least share information and find mutually acceptable procedures to conduct joint investigations (Fingleton). In a world of multinational corporations and international interdependence, competition policies should not fall back on competition among national authorities. In an international setting, freedom of competition can be seen as a public good. It is created thanks to those countries which give up part of their national sovereignty in favour of an international competition policy. Countries which do not contribute to this freedom benefit from it as free riders (Hep 2000). The advantage of co-operation between authorities or even having a world competition authority would be the possible fight against international cartels and predatory pricing (Mueller).

[4] See OECD (2002) for an in-depth analysis on the nature and impact of hard-core cartels and their treatment in national legislations.

In **Austria** a major change in competition law has come into effect by mid-2002, adopting much of the EU modernisation principles and diminishing the hitherto overwhelming role of the social partners. According to the new law, two independent authorities will be involved in competition cases: (a) the traditional decision-making cartel court which is not endowed with investigation capacities, and (b) a newly-created administrative body, the Federal Competition Authority. The latter is also independent (not subject to political influence) and vested with the power to investigate cases (in particular, to request information from parties, including inspection of business documents and home searches, and to negotiate remedies in merger cases) and to file motions with the court. Previously, investigations were mainly conducted by the Joint Committee on Cartel Matters, consisting of nominees by the social partners; applications could also be filed by the government. A Federal Cartel Prosecutor, reporting to the Minister of Justice, can take up merger cases should the Competition Authority refrain from acting. The Authority will co-operate with the European Commission, thus ensuring the coherence between national and European competition law. The role of the social partners is now reduced to assigning lay judges to the cartel court and to participate in the new Competition Commission which has but an advisory function. Thereby conflicts of interest will virtually be ruled out. In contrast to the international discussion, most of the criminal sanctions have been abolished and substituted by fines of up to 10% of annual turnover. While on the one hand the new Austrian construction is criticised because of double-track inefficiencies (independent competition authority, dependent cartel prosecutor, cartel commission with advisory function), this is a compromise model to accommodate the political factions in Parliament. In practice, this system promises to work efficiently, and, by the way, it stands for competition in every respect, even competition among several competition authorities within one country, as advocated by Stiglitz.

5. Conclusions

The creation of markets which permit competition between many producers and many consumers helps to efficiently allocate resources, keep monopoly rents close to zero and stimulate innovations. In the real world, where market power is distributed quite unevenly, these effects are by no means guaranteed. State intervention is usually required to secure market conditions, although in many instances the state also complies with opposing interests. Regulation and surveillance by authorities is often associated with restrictions. Competition policy, however, should remove restrictions from free and well functioning competition (Sasi 2002).

The main target of competition policy, to put it in a nutshell, is to protect competition, not competitors (Stiglitz). This is not as self-evident as one may think, at least not in the European system of market economies augmented by social and environmental considerations. Although during the second half of the 20th century, the degree of competition has substantially increased in Europe, it still remains significantly below that of the USA. The effects of the New Economy and the liberalisation of network industries have contributed to general globalisation and to an increase in competition, and have also increased the pressure to reform competition policies all over the world. The EU Commission aims at a decentralisation of enforcement activities which should enable the Community level to concentrate more on the severest violations of free competition. The tendency of companies to co-operate across national borders also increases the challenges for competition policies on an international scale. Therefore national competition policies will in future more and more have to rely on international co-operation. In Austria a new competition law provides, as from 1 July 2002, for an improvement in institutions to better link to other national authorities and thus serve competition.

Competition may not always seem consistent with other policy goals, although most of the inconsistencies vanish when observed over a longer time horizon. The state should not abandon competitive structures in favour of short-term industrial policy goals, although state intervention may be justified in cases of external economies or infant industry aid, but not to prevent badly-managed companies from breaking down. One can infer from a number of studies that a higher degree of competition not only reduces short-term monopoly rents, but also creates a potential for strengthening the long-term competitiveness of companies supplying to an international market, thereby enhancing growth and employment in the locations concerned.

6. LITERATURE

Ahlborn, C., Evans, D. S. – Padilla (2001), A. J., "Competition Policy in the New Economy: Is European Competition Law Up to the Challenge": 156-167.

Aiginger, K. (1995), "Gibt es ein theoretisches Referenzmodell als Leitbild für die Wettbewerbspolitik?", Wirtschaftspolitische Blätter, Heft 6: 470-481.

Burger, C., Handler, H. (2001), "Vom Leistungserbringer zum Regulator – ein Paradigmenwechsel", in: Bundesministerium für Wirtschaft und Arbeit, Österreichs Außenwirtschaft 2000/01, Wien, März: 260-276.

ECOFIN (2002), "Annual report on structural reforms", Brussels.

European Commission (1997), "Commission Notice on the definition of the relevant market for the purposes of Community competition law", Official Journal, OJ C 372 of 9 December.

European Commission (2001a), "Report on functioning of the goods and capital markets", Annex to the report on the functioning of product and capital markets, Market performance of network industries providing services of general interest: a first horizontal assessment, working document, December.

European Commission (2001b), "European Union Competition Policy, XXXIst Report on competition policy", Brussels.

European Commission (2001c), "Green Paper on the Review of Council Regulation (EEC) No. 4064/89", COM(2001)745/6 final, 11 December.

Farhauer, O. (2001), "Folgt aus der Theorie des engogenen Wachstums eine neue Wirtschaftspolitik? Wirtschaftspolitische Relevanz und empirische Bedeutung", Konjunkturpolitik 47(3): 214-250.

Fisher, F. M. (2002), "Market Definition: a User's Guide", in: Finnish Competition Authority, Workshop on Market Definition: Compilation of Papers, Helsinki: 38-54.

Hildebrand, D. (2002a), "The Role of Economic Analysis in the EC Competition Rules", The Hague (Kluwer Law International), 2nd ed.: The European School.

Hildebrand, D. (2002b), "The European School in EC Competition Law", World Competition 25(1): 3-23.

Ilzkovits, F., Meiklejohn, R. (2001), "European merger control: do we need an efficiency defence?", European Commission – DG for Economic and Financial Affairs, European Economy, No. 5: 3-30.

Hep (2000), "Ursachen und Folgen von Megafusionen", Finanznachrichten Heft 13, 30. März.

Knieps, G. (2001), "Wettbewerbsökonomie: Regulierungstheorie, Industrieökonomie, Wettbewerbspolitik", Springer Verlag, Berlin – Heidelberg – New York.

Kruse, J., Haucap, J. (2002), "Zuviel Wettbewerb in der Telekommunikation?", Wirtschaftsdienst, Nr. 2: 92-98.

Kuoppamäki, P. (2002), "Market Definition: User's Reflection", in: Finnish Competition Authority, Workshop on Market Definition: Compilation of Papers, Helsinki: 55-61.

Lösch, D. (2000), "Das Dilemma mit der Rolle des Staates in der Wettbewerbsordnung – Zum 50. Todestag von Walter Eucken", Wirtschaftsdienst, Nr. 3: 185-192.

Monti, M. (2002), "Market Definition as a Cornerstone of EU Competition Policy", in: Finnish Competition Authority, Workshop on Market Definition: Compilation of Papers, Helsinki: 16-31.

OECD, "Fighting Hard-Core Cartels: Harm, Effective Sanctions and Leniency Programmes", Paris 2002.

Rauchway, E. (2002), "Bring back the visible hand", Financial Times, August 30: 13.

Röller, L.-H., Stennek, J., Verboven, F. (2001), "Efficiency gains from mergers", European Commission – DG for Economic and Financial Affairs, European Economy, No. 5: 31-127.

Sasi, K. (2002), "Opening Remarks"; in: Finnish Competition Authority, Workshop on Market Definition: Compilation of Papers, Helsinki: 10-15.

Wish, R. (2002), "Substantive analysis under the EC Merger Regulation: Should the dominance test be replaced by 'substantial lessening of competition'?", paper presented to the Conference on EU Competition Law and Policy – Developments and Priorities, Athens, 19 April.

APPENDIX

AUTHORS

Martin BARTENSTEIN, Austrian Federal Minister for Economic Affairs and Labour

Stefan BERNHARDT, Austrian Regulatory Authority for Telecommunications and Broadcasting

Michael BÖHEIM, Austrian Institute of Economic Research

Christina BURGER, Head of Unit, Economic Policy Center, Federal Ministry for Economic Affairs and Labour

Gerhard CLEMENZ, Professor, University of Vienna

Patrick DARLAP, Assistant to Executive Director, Austrian Financial Market Authority

Wolfgang FRANZ, Professor, ZEW, University of Mannheim

John FINGLETON, Chairman, Irish Competition Authority

Andreas GRÜNBICHLER, Executive Director, Austrian Financial Market Authority

Gerhard H. GÜRTLICH, Director, Financing and Controlling, Federal Ministry for Transport, Innovation and Technology

Heinz HANDLER, Director General, Economic Policy Center, Federal Ministry for Economic Affairs and Labour

Othmar HORVATH, Head of Unit, Economic Policy Center, Federal Ministry for Economic Affairs and Labour

Johannes MAYER, Director Regulation & Competition, Austrian Electricity Regulation Authority

Mario MONTI, Commissioner for Competition, European Commission

Dennis C. MUELLER, Professor, University of Vienna

Heinrich OTRUBA, Managing Director for Telecommunication, Austrian Regulatory Authority for Telecommunications and Broadcasting

Eva PFANDL, Trainee, Economic Policy Center, Federal Ministry for Economic Affairs and Labour

Kurt PRIBIL, Executive Director, Austrian Financial Market Authority

Renate REICHERT, Economic Policy Center, Federal Ministry for Economic Affairs and Labour

Friedrich SCHNEIDER, Professor, Johannes Kepler University Linz

Verena STEYER, Economic Policy Center, Federal Ministry for Economic Affairs and Labour

Joseph E. STIGLITZ, Professor, Nobel Laureate 2001, Columbia University, New York

INDEX

A

abuse of a dominant position 187, 198
access tariffs 73, 198
acquisition 160
activity based costing 149
airline industry 14, 15
allocation 52, 63, 92, 121, 126, 128, 140, 144, 185, 186
anti-competitive behaviour 28, 51, 53, 60, 62, 148
anti-dumping 15, 19, 38
antitrust 11, 12, 15, 18, 19, 44, 45, 47, 48, 50, 191, 198
arbitrage 91
Article 81 44, 45, 48, 54
asymmetric information 4, 9, 95
asymmetric regulation 121, 131
auction 70, 105, 121

B

bankruptcy 18, 20, 21, 108
Basle Accord 164
block exemption 48
bottleneck 34, 91, 124, 154
broadband access 113, 133, 154

C

cable network 17
California 17, 97, 99, 100, 101, 103, 105, 107, 108, 109, 110, 111, 112
capital 32, 33, 34, 65, 81, 110, 162, 163, 164, 165, 166, 167, 197, 203
cartel 5, 8, 44, 49, 52, 55, 56, 57, 58, 60, 62, 75, 196, 201
cartel court 55, 56, 57, 201
Chicago school 28
choice 43, 53, 60, 68, 70, 81, 101, 173, 185, 187, 188
cluster 4, 9
collusion 52, 56, 61, 71
competition authority 10, 74, 75, 76, 200, 201, 203, 204
competitiveness 3, 4, 7, 8, 9, 10, 16, 20, 21, 22, 27, 29, 30, 31, 34, 35, 39, 43, 48, 65, 66, 67, 77, 79, 81, 89, 115, 145, 178, 188, 202
compliance 44, 45, 74, 94, 127
concentration 6, 17, 27, 46, 51, 52, 53, 56, 58, 60, 61, 62, 63, 153, 154, 192, 196
congestion 103, 104, 105, 143
consultation 54, 128
consumer protection 67, 81, 120
contestable market 175
cost
  average 26, 143
  capacity 149
  fixed 175, 189, 194
  incremental 149
  marginal 90, 145, 146, 189
  opportunity 143
  stranded 95, 106, 107
  transaction 24, 96, 159, 160, 194
  variable 149, 162
critical mass 24, 191, 194

D

de minimis 59
decentralisation 5, 6, 7, 45, 60, 200, 202
demand 15, 31, 34, 62, 68, 69, 70, 80, 81, 90, 91, 101, 102, 104, 105, 109, 128, 163, 169, 177, 186, 191, 192, 193
digital communication 116
digital product 25, 26
dispute settlement 6, 83
distribution 48, 68, 71, 80, 92, 93, 94, 100, 101, 102, 105, 121, 123, 185, 190, 196
dominance test 46, 196, 204
dominant market position 4, 8, 26, 53, 61, 193
dynamic effects 7, 12, 16, 29, 30, 53, 61, 66, 80, 116, 133, 189

E

e-commerce 73, 82, 177
economic growth 4, 7, 9, 29, 31, 53, 54, 62, 65, 77, 80, 81, 114, 115, 116, 153, 154, 159, 162, 165, 186, 188, 193, 202
economies of scale 16, 71, 150, 193, 194, 195
economies of scope 16
education 32, 34, 39, 40, 84, 186
efficiency 12, 20, 28, 32, 33, 35, 52, 53, 63, 65, 66, 68, 71, 77, 81, 82, 96, 109, 151, 152, 159, 160, 166, 175, 178, 186, 188, 190, 193, 197, 200, 204
elasticity 25, 90, 191, 192, 196
employment 4, 7, 8, 9, 10, 65, 66, 67, 77, 116, 138, 187, 198, 202
energy 5, 66, 67, 69, 71, 72, 91, 92, 94, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 112, 155, 197, 198
enforcement 27, 28, 30, 31, 43, 44, 65, 72, 74, 75, 81, 84, 150, 166, 187, 190, 198, 199, 200, 202
enlargement 43, 45, 50, 214
entry barriers 35, 53
equilibrium 29, 173, 175, 179, 185
EU directive 138, 139
EU Treaty 44, 54, 82, 137
European Commission 28, 38, 51, 54, 55, 58, 59, 60, 62, 63, 76, 80, 81, 82, 83, 84, 85, 120, 131, 147, 156, 191, 196, 198, 201, 203, 204
European School II, 58, 59, 63, 195, 203
export 16, 79, 108

F

financial market VI, 3, 20, 26, 73, 74, 75, 82, 83, 107, 110, 124, 125, 139, 159, 160, 161, 162, 163, 164, 165, 166, 167, 190, 197
freight 140, 145

G

game theory 52, 56
globalisation 5, 11, 15, 16, 18, 24, 27, 30, 35, 43, 49, 50, 58, 73, 99, 159, 188, 193, 197, 199, 202
Green Paper 45, 46, 118, 133, 203
group exemption 59

H

harmonisation 5, 6, 7, 18, 39, 60, 67, 81, 83, 138, 141, 146, 165
Harvard school 28
homogenous product 174
horizontal subsidies 8

I

incumbent 15, 67, 68, 70, 100, 197, 198
independence 3, 5, 18, 19, 23, 55, 60, 61, 72, 73, 74, 75, 76, 84, 91, 93, 100, 103, 104, 105, 119, 138, 140, 166, 197, 199, 201
Industrial Economics 171, 180
industrial organisation theory 27
industrial policy 32, 190, 202
information and communication technology 82, 159, 161, 162, 163
Information Society 79
infrastructure charge 137, 143, 145
infrastructure manager 140, 141, 143, 144, 145
infringement 75, 82
innovation 5, 9, 12, 13, 16, 53, 62, 79, 119, 188, 189, 194
intellectual property rights 4, 9, 13, 190
interconnection 68, 70, 72, 103, 117, 121, 122, 126, 132, 133, 154
intermediation 160, 167
internal market 3, 43, 45, 48, 50, 72, 134, 187, 200
internet 14, 23, 24, 25, 153, 154, 159, 160
investigation 8, 28, 30, 37, 49, 55, 60, 75, 76, 200, 201

L

laissez faire 52, 137
last mile 17
lay judge 57, 201
leniency 74, 199
liberalisation 4, 9, 34, 66, 67, 68, 69, 70, 92, 97, 99, 100, 102, 103, 109, 110, 111, 113, 114, 118, 119, 120, 124, 126, 129, 130, 138, 139, 142, 144, 147, 148, 150, 152, 153, 154, 155, 169, 177, 187, 188, 196, 197, 198, 202
licence 121, 128, 147, 150, 151
lobbying 53, 185
local loop 67, 123, 125, 128, 154

M

market definition 131, 192, 195
market entry 5, 53, 122, 127, 150, 151, 152, 159, 186, 187, 192, 198
market risk 90
mark-up 143, 145
merger 4, 8, 16, 18, 25, 37, 38, 46, 47, 56, 57, 63, 73, 74, 191, 193, 194, 196, 201, 204
Microsoft 13, 19, 25, 35, 37
mobile phone 197, 198
monopoly 5, 12, 14, 17, 19, 20, 29, 32, 33, 34, 37, 38, 56, 63, 67, 68, 71, 95, 96, 101, 111, 113, 116, 118, 119, 121, 124, 147, 151, 154, 171, 173, 175, 185, 186, 188, 189, 190, 192, 195, 196, 201, 202
monopoly rent 190
monopoly, natural 31, 89, 119, 194, 196
moral hazard 162
multinational companies 80
mutual recognition 81, 140

N

network externalities 14, 24, 61
notification 44, 46, 73, 120, 200

O

oligopoly 56, 68, 195
ONP Committee 120
oversupply 90

P

patent 17, 190
perfect competition 52, 170
postal market 150, 151, 152, 197
predatory pricing 15, 39, 124, 149, 191, 200
pre-notification 46
pre-selection 128, 134
price differences 69
price discrimination 26
price elasticity 90
price transparency 24, 199
privatisation 4, 8, 31, 33, 99, 101, 147, 155
product differentiation 174
productivity 4, 9, 12, 16, 27, 29, 31, 53, 62, 145, 188
profitability 3, 8, 20, 163, 175
proliferation 35, 170, 172, 173
prosecution 19, 49, 55, 199
prudential supervision 159, 161, 164, 166, 197

R

railway 3, 137, 138, 139, 140, 142, 144, 145, 146, 176, 198
rate of return 92, 95, 145
regulatory authority 6, 9, 31, 68, 70, 71, 72, 73, 75, 92, 93, 94, 95, 96, 97, 114, 119, 125, 126, 127, 128, 129, 130, 149, 152, 171, 199, 203
regulatory capture 93, 171, 186
relevant market 5, 25, 30, 32, 59, 191, 192, 203
research and development 4, 9, 26, 32, 48, 189, 190, 194
reserved services 118
retail price 106, 109

S

Schumpeter 12, 189
separation 45, 89, 92, 103, 139, 140, 149, 160, 174, 196, 199
Sherman Act 58
single market 6, 43, 47, 48
SLC test 196
Smith 11, 19, 185
social partners 5, 8, 55, 57, 76, 95, 201
spatial competition 172, 174
State aid 144, 145, 190
static 12, 29, 53, 61, 90
strategic alliances 24
substantial lessening of competition 34, 46, 47, 196, 204
substitution 27, 90, 197
supervision 56, 73, 94, 95, 119, 131, 159, 164, 165, 166, 198
supply 15, 69, 70, 71, 72, 80, 89, 90, 91, 92, 96, 101, 103, 104, 105, 109, 115, 123, 129, 191, 193, 197

T

takeover 187
tax 32, 39, 84, 85, 186
technology 13, 23, 48, 117, 129, 163, 167
telecommunication 66, 67, 73, 153, 154, 198
telecommunications act 116, 117, 120, 133
third party access 68, 96
trade 3, 4, 6, 8, 10, 16, 17, 19, 30, 34, 45, 66, 69, 84, 89, 96, 105, 178, 187
transmission 7, 68, 70, 71, 93, 100, 101, 102, 103, 105, 107, 109, 115, 164
transparency 5, 11, 31, 43, 46, 47, 49, 62, 67, 74, 91, 100, 102, 103, 111, 124, 127, 128, 130, 145, 165, 166, 197
transport 117, 129, 134, 138, 140, 141

U

unbundling 67, 69, 70, 72, 94, 96, 123, 128
universal services 70, 197
universalisation 160, 165
USA 10, 12, 13, 14, 15, 16, 17, 18, 19, 21, 28, 30, 33, 34, 37, 38, 39, 40, 46, 47, 50, 53, 58, 79, 99, 103, 107, 108, 109, 110, 112, 149, 156, 160, 187, 192, 196
utilities 61, 67, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 147, 155

V

vertical agreement 48, 59

W

welfare effects 28, 29, 53
White Paper 29, 44
wholesale price 106
willing to pay 174, 175
wireless local loop 121, 128
WTO 6, 15, 19, 50, 199

X

X-inefficiency 29

PUBLICATIONS BY THE ECONOMIC POLICY CENTER

Wirtschaftsstandort Österreich – Wettbewerbsstrategien für das 21. Jahrhundert (Handler [Hrsg.]); Februar 1996; 2. Aufl. Februar 1998

Wettbewerbsbericht; März 1996

Deregulierung im Wirtschaftsrecht (Winner); Oktober 1996

Reform des Betriebsanlagenrechts (Schwarzer); März 1997

Vom Schilling zum Euro – Wirtschaftspolitische Aspekte des Überganges (Handler [Hrsg.]); März 1997

Ansätze zur Sicherung der Nahversorgung; Juli 1997

Der Euro – Aspekte der Umsetzung in den Unternehmen (Handler, Takacs [Hrsg.]); August 1997

Der österreichische Außenhandel 1997; Dezember 1997

Holz als Standortfaktor – Bauen mit Holz; Jänner 1998

Wirtschaftsstandort Österreich – Rahmenbedingungen im Umbruch (Handler [Hrsg.]); Februar 1998

Wirtschaftsstandort Österreich – Globalisierung – Tourismus – Beschäftigung (Handler [Hrsg.]); Juli 1998

Anreize zur Beschleunigung von Genehmigungsverfahren und zur Aufdeckung freier Kapazitäten im öffentlichen Sektor (Wieser); September 1998

Auswirkungen der Liberalisierung der Ladenöffnungszeiten (Burger); Oktober 1998

Better Regulation Serves Employment (Handler [Ed.]); October 1998

Das österreichische Gründungsgeschehen (Wanzenböck); Oktober 1998

Future Competitiveness of Europe (Darlap, Handler [Ed.]); December 1998

Freie Berufe – Regulierungssysteme (Buchinger); Mai 1999

Wirtschaftsstandort Österreich – Ernährungswirtschaft (Buchinger, Handler [Hrsg.]); August 1999

Der Euro – Aspekte der Umsetzung für den Verbraucher (Frauwallner, Handler [Hrsg.]); Oktober 1999

Der Unternehmer und die Banken – Neue Herausforderungen auf Finanzmärkten (Frauwallner, Handler [Hrsg.]); November 1999

Zahlungsbilanz – Einst und Jetzt (Burger, Handler [Hrsg.]), Februar 2000

Wohnbauforum – Mehr Markt oder mehr Staat für Gemeinnützige? (Handler, Sommer [Hrsg.]), April 2000

Eastern Enlargement: The Sooner, the Better? (Arndt, Salvatore, Handler [Hrsg.]); Juli 2000

Bürgernahes Wirtschaftsrecht – Eine Utopie? (Fuchs, Handler [Hrsg.]; November 2000

Festschrift Heinz Handler – Wirtschaftsstandort Österreich, Von der Theorie zur Praxis (Fuchs, Horvath [Hrsg.]; Jänner 2001

Gründerland Österreich (Buchinger [Hrsg.]; April 2002

The above mentioned publications may be ordered, as far as still available, from the Federal Ministry for Economic Affairs and Labour (Fax: 01-714 27 22; Tel.: 01-71100-5653).