# The Economics and Policies of Integration – a Finnish Perspective

Edited by Kari Alho, Mika Erkkilä and Markku Kotilainen



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Address	ETLA, Lönnrotinkatu 4 B, FIN-00120 Helsinki, Finland
Telephone	358-0-609 900
Telefax	358-0-601 753

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# KARI ALHO MIKA ERKKILÄ

and

MARKKU KOTILAINEN

ETLA, The Research Institute of the Finnish Economy, Helsinki, Finland



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# TABLE OF CONTENTS

Introdu	Introduction			
The Overall Economic Effects of Integration and EU Membership				
1	Finland and European Integration Kari Alho	1		
1.1	How the Benefits from Integration are Derived			
1.2	Estimated Magnitude of the Gains from the EEA			
1.3	The EEA Negotiations from a Game Theoretic View			
1.4	A Change in the Competitive Situation			
2	Finland in the European Community - the Economic Impacts Kari Alho, Markku Kotilainen and Mika Widgrén	9		
2.1	Overall Impact of EC Membership			
2.2	Foreign Trade			
2.3	Direct Investment			
2.4	Agriculture			
2.5	EMU Membership			
2.6	Improved Efficiency of Sheltered Sector			
2.7	Indirect Taxation			
2.8	Multiplier Effects via Capital Formation			
2.9	Overall Assessment			
2.10	Decision-making			
2.11	Adjustment to EC Membership			
Integration and Foreign Trade				
3	New Developments in the Study of Economic Integration	21		
	Anthony Venables			
3.1	Introduction			
3.2	Theory			
3.2.1	Trade Creation and Trade Diversion			
3.2.2	Further Distortions			
3.2.3	A Model of Trade under Imperfect Competition			
3.2.4	Integration or Segmentation ?			
3.2.5	Entry and Exit of Firms			
3.2.6 3.2.7	The Location of Industry			
3.3	External Trade Considerations			
3.3.1	Empirical Studies			
3.4	Completing the Internal Market in the EC			
	Concluding Comments			

#### vi

1				
(4)	The Identification of Barriers to International Trade	37		
$\bigcirc$	under Imperfect Competition			
	Kari Alho			
4.1	Introduction			
4.2	The Export Market Shares in the Case of a Homogenous Good			
4.3	Identification of Trade Barriers from Data on Export Market Shares			
4.4	The Case of an Industry Producing Imperfect Substitutes			
4.5	Analysis of Production Costs on the Basis of Export Market Shares			
4.6	Numerical Illustrations			
4.7	Conclusions			
5	An Imperfect Competition Model in an Industry with Differentiated Domestic and Foreign Products	55		
	Markku Lammi			
5.1	Introduction			
5.2	The Model			
5.3	Demand Functions			
5.4	Price Function			
5.5	Data			
5.6	Estimation Results			
5.7	Conclusions			
6	Foreign Trade in Denmark and Finland	67		
$\left( \right)$	Kari Alho and Mika Widgrén			
6.1	Introduction			
6.2	Structure and Development of Exports			
6.3	Structure and Development of Imports			
6.4	On the Effects of EC Membership on Foreign Trade			
6.5	Trade in Services			
7	Finnish Participation in the Internal Market	89		
7.1	Mika Erkkilä			
7.1	Introduction			
7.2 7.3	Trade Flows and Trade Patterns between Finland and the EU			
7.3	Inter- vs. Intra-industry Trade and Market Integration Factor Content of Trade			
7.4	Conclusions			
1.5	Conclusions			
EMU and Economic Policies				

- Is the EU an Optimal Currency Area and is Finland a Part of it? Markku Kotilainen 117 8
- 8.1 Introduction
- 8.2
- Industry Structure Country Composition of Exports 8.3

vi

8.4 8.4.1 8.4.2 8.5 8.6	Output Variations in Manufacturing Magnitude of Variations Symmetry of Variations The Effects of Integration on Production Structures and Output Variations Conclusions	
0.0	· · ·	
9)	The Functioning of Labour Markets in EMU	149
0.1	Kari Alho and Mika Erkkilä Introduction	
9.1	Inherent Change of Labour Markets in EMU	
9.2 9.3	Labour Markets in EMU and Outside	
9.5 9.4	Wage Flexibility at the Firm Level	
7.4		
10	Macroeconomic Policy and EMU	161
	Kari Alho and Mika Widgrén	
10.1	The Plan for EMU	
10.2	Finland's Relation to EMU	
10.3	Options Available to Finland	
10.4	Employment in the EU and Outside	
Analysi	s of EU Institutions and Voting Mechanisms	
11	Voting Rule Reforms in the EU Council:	175
11	Needs, Means and Consequences	175
	Mika Widgrén	
11.1	Introduction	
11.2	About the Concept of Influence	
11.3	On the Relation between Voting Power and Control in the EC	
11.4	The Impact of Changing the Decision Making Rules	
11.4.1	From Qualified to a Simple Majority	
11.4.2	Changing the Voting Weights	
11.4.3	The Effects of the Double Majority	
11.5	Conclusions and Policy Implications	

List of Publications on European Integration by ETLA

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#### PREFACE

European integration has come a long way since the first steps in the aftermath of the Second World War. At that time, the neutral European countries chose to stay outside the European Economic Community. Those countries that wanted less ambitious cooperation formed the European Free Trade Association. Increasing trade dependence between the two groupings was institutionalised when they signed free-trade agreements with each other, creating thus a wider European free-trade area in manufactures. The strong push towards deepening integration among EC countries, manifested in the Single European Act in 1985, and the dismantling of non-tariff barriers to trade and factor flows in the EC by 1993, made it necessary for EFTA countries to secure access on equal conditions to their most important export market and thus prevent trade diversion.

The ensuing agreement on the European Economic Area responded to these demands, but did not resolve the apparent asymmetry in EEA decision-making. This emanated from the supremacy of EC legislation over EEA rules, thus making EFTA countries passively adjust to EC norms. Consequently, Finland applied for membership in the EC in March 1992, with effect from 1995. The latest phase in the integration process, the Treaty on European Union, has an aim to further deepening, e.g. the formation of the economic and monetary union by 1999.

Closer cooperation and increasing dependence between Finland and the EU has a profound influence on the economic order, with implications for the aggregate economy as well as its individual sectors and policies. When it became increasingly clear in late 1980's that Finland would enter into some kind of agreement with the EC to secure its own interests, it also raised demand for in-depth analysis of the different options available. The Research Institute of the Finnish Economy, ETLA, was one of the first in Finland to deal with questions related to the integration process. The internal market, the EEA, membership in the EU and the single most important event in the near future, EMU, which is bound to drastically change the economic and political landscape, all form part of the research programme on European integration by ETLA. We have tried to achieve a balance between theoretical and applied research.

This collection of papers is a sample of research at ETLA on integration and integration policies during the past six years. The selection of papers has been made with an attempt at illustrating the different phases of integration from a Finnish point of view. It spans over time from the EEA to the future EMU and over the different sectors of the economy from market integration through foreign trade and factor flows to coordination and harmonisation of macro policies, institutional questions and decision-making.

Finally, the editors wish to thank the Yrjö Jahnsson Foundation for its generous financial support, which made the publication of this book possible. Similarly, the Finnish Ministry of Trade and Industry has also financed many of the original studies that now appear in this volume.

Kari Alho Mika Erkkilä Markku Kotilainen

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#### INTRODUCTION

In the beginning of 1995 Finland joined the European Union. This was preceded by intense negotiations on the European Economic Area (EEA) to dismantle the barriers remaining in the trade of goods and factor flows. Through the EEA the EFTA countries participated in the EC's Internal Market Programme, which was launched in 1985 and completed in 1992. The economic rationale for the EFTA countries to participate in the new deepening integration phase was the fear of trade diversion caused by the Internal Market Programme and the improved competitiveness of EC firms relative to EFTA based firms.

The EEA was a solution to the threat of being left out of the Internal Market but, at the same time, it meant that new legislation would be unilaterally decided by the EC. Finland, along with the other EFTA countries, would have simply had to adopt the new rules without having virtually any possibility to influence. One can well speak of an influence deficit prevailing under the EEA.

The solution was the option of applying for full membership in the European Union. The Finnish application was left in March 1992. The country also pursued neutral foreign policies in the East-West confrontation during the Cold War period. The collapse of the Soviet Union and German reunification changed all this and neutrality was no longer a barrier to political integration of EFTA in Western Europe.

The traditional way to analyse foreign trade in Finland was to emphasise its role in macroeconomic fluctuations. The resource allocation, trade barriers and the welfare aspects of trade were adopted in a broad perspective but were largely omitted from detailed economic analyses.

Membership in the EU has caused a number of economic, political and institutional changes in Finland. All this has raised the demand for research inputs in these areas. Already in the late 1980's ETLA, the Research Institute of the Finnish Economy, started to analyse the economic and institutional consequences of participation in the rapidly proceeding European integration process. First, the focus was on the Internal Market and the Finnish participation in it through the negotiations on the EEA agreement. This was also an early stage of knowledge and skill accumulation for the Institute. The next policy step was the application for full membership in the European Community. At this stage, the focus of research also switched to the consequences of the membership on Finland in economic and institutional terms, one important aspect being the analysis of influence in the decision-making of the Union. After the Finnish accession the emphasis of research is being shifted towards Finnish adjustment in the European Union and, at present, the future developments of the Union and the role of Finland in that process.

ETLA has published over 50 research documents on European integration both from a general perspective and from the Finnish point of view. Thereby the Institute has reached a leading role in the national integration research, and has been able in some fields also to contribute to the international research on the EU and European integration.

This book is a sample of papers done or published on European integration at ETLA by research fellows of the Institute or by researchers who have visited the Institute from 1990 onwards. The articles are both theoretical and empirical. Some are academic and others aimed at the wider national audience and policy makers.

The first two chapters are general evaluations of the consequences of participation in the European integration and EU membership.

The first chapter by Kari Alho is a general introduction to the consequences of participating in EEA process and to the outcome of the negotiation process to Finland. Finland should benefit from participation in the European integration more than the EC countries on two accounts: first, the share of trade with the EEA area makes up a larger share in the Finnish GDP (and in the other EFTA countries as well) than in the EC countries. The second reason is that it is more difficult to achieve a good balance between efficiency and competition in a small country than in a larger country. Therefore import penetration is more beneficial to consumer welfare and resource allocation in a small country than in a large one. Accordingly, the paper presents that the international integration research has reached the result that the EFTA countries benefit more from participation in the Internal Market programme than the EC countries. This calls for a sharing of the benefits through income transfers, as the EC was the leader in the EEA process, i.e. the Internal Market would have been realized the same within the EC countries irrespective of the EFTA countries. A token of this sharing of the benefits was the cohesion fund through which the EFTA countries channelled funds totalling some ECU 500 million over a period of five years to the poorer EC member countries.

In chapter 2 Kari Alho, Markku Kotilainen and Mika Widgrén present the basic analysis of the impacts of the EU membership on the Finnish economy. The chapter summarises the benefits and costs, but does not include a closer review of the methods and details adopted in the study which were included in an extensive appendix of the original study. The study concludes that Finland could reach a welfare increase measured by a permanent rise in real income of some 4 per cent in relation to aggregate GDP. This, however, assumes that society and the economy are ready to take advantage of the new possibilities opened up by the membership. As some of the changes are going to be of the inter-industry type, especially those in the highly protected sectors like agriculture and the rest of the sheltered sector, it is uncertain whether the full benefits will be reached by means of internal adjustment. Should only a limited adjustment take place, the net gains of the membership will be clearly smaller, of the order of one per cent in relation to GDP. The study also evaluates the influence of Finland in the EU decision making and concludes that Finland would be in a much better position as a full member in the EU than staying outside the Union, despite having had to comply with decisions she opposes on a number of occasions.

The three next articles are mostly theoretical presentations on the theme of integration under imperfect competition. professor **Anthony J. Venables**, presently with the London School of Economics, evaluates in chapter 3 the gains and losses from integration, when two countries reduce the cost creating trade barriers or tariffs between them. He shows in a fundamental way how the various components of the welfare of the customs union are formed from changes in the participant countries. Then he turns to the distortions created by imperfect competition and market segmentation vs. market integration and shows that, under segmentation, the welfare change from integration can also be negative if there are real trade costs, and the internal tariff is small and the domestic and foreign products are close to perfect substitutes. The intuition behind this result is that imperfect competition with market segmentation causes "reciprocal dumping" and generates an excessive amount of trade, more so, if the internal tariff is **reduced**. So both the magnitude and whether there is a welfare gain or loss depend crucially on the market structure.

Venables also analyses the case of firm entry and exit, and the location of industries under imperfect competition. He concludes that if there are costs related to market entry, then under increasing returns to scale, the large market tends to attract more investments than the peripheral countries. Venables also shows with the aid of his concise framework, how approximations to the computations made by large scale foreign trade models can be achieved related to the various welfare changes caused by the 1992 project on the EU.

In chapter 4 Kari Alho tackles the problem of how to identify trade barriers from data on market shares and price elasticities without taking recourse to assumptions on the marginal costs in the two countries. The model is based on the notion that the relative decision to supply two markets is independent of the marginal cost in production, and comparing the relative market shares in home and foreign countries gives a way to estimate, from the market share data, the existing barriers supporting the actual pattern of trade between the two countries. However, in the more advanced case of imperfect competition, estimation of barriers requires knowledge of the conjectural variation parameter and the relative price levels between the home and the export market, which may be hard to achieve from public information sources. As an empirical test of the developed method Alho solves using aggregate data the barriers in trade between EFTA and the EC and finds that, depending on the assumption of the game between the firms, the barriers were slightly smaller or the same in EFTA exports to the EC than vice versa.

In chapter 5 Markku Lammi presents a simplified model of the demand for and prices of clothing and footwear which is also empirically estimated. The model is based on imperfect competition in a small open economy with free entry, symmetric firms and differentiated domestic and foreign products. The industry mark up of price over the marginal costs depends on the conjectural variation's elasticity, which reflects the degree of competition, and on the demand elasticities. The conjectural variation's elasticity is assumed to vary over time.

The next two chapters are empirical evaluations of structure and performance of Finnish foreign trade with the EU.

In chapter 6 Kari Alho and Mika Widgrén analyse the Danish and Finnish economies from the point of view of Danish experiences in the EU and what Finland could learn from them as a new member in the Union. The chapter is an extract from the book on this subject. Denmark has had a fairly favourable export performance during the 1980's, which has alleviated the effects of the harsh measures to balance the domestic economy. Denmark also differs from the other EU countries in the sense that the share of the former EFTA countries in exports is double that of the rest of the EU. In this sense Denmark and Finland resemble each other. The commodity specialization in exports, however, deviates strongly between Finland and Denmark. Denmark is heavily specialized in the agricultural and processed food products and also in furniture, i.e. light industry, while Finland is specialized in wood and paper products on a world-wide scale.

The chapter also analyses the commodity-host country breakdown of the exports in Denmark and Finland. The secret behind the success of the Danish exports is that it was able to shift its traditional exports from the UK markets to the EC markets after joining the CAP in 1973. There has been a strong trade creation effect between Denmark and the original EC6 during the Danish membership period. On the other hand, Finland has also experienced a trade creation effect of similar magnitude with the EC6 countries. In imports, the situation is of a similar kind, the EC6 having grown in importance for both the countries under study. The liberal Finnish import policy during the EFTA period towards third countries is reflected in the fact that the shares of USA and Japan have risen quite considerably in Finnish imports, while the reverse holds for Denmark.

The article also analyses the surplus/deficit in the trade balance vis-à-vis the third countries using a similar commodity and country breakdown. Large changes have happened in the trade balance of Denmark vis-à-vis the EC6 countries which has turned from a deficit of almost 15 per cent of gross trade to a near balance. The Finnish trade balance did not show similar radical individual changes to the Danish one. The greatest changes have taken place in manufactures trade with EC6, where the surplus has grown. In services, Denmark is very efficient, partly due to its favourable position in logistics of land, air and sea travel. The services exports in relation to GDP is in Denmark almost double that in Finland.

In chapter 7, **Mika Erkkilä** studies the evolution of the Finnish trade pattern with 9 EU countries and the likely adjustment pressures in the context of the Single Market. One of the principal reasons behind economic integration is that it gives access to larger markets for the country's own exporters, while at the same time opening up domestic markets to imports and foreign competition, leading ultimately to specialisation and higher incomes. Integration and specialisation can lead to either inter- or intra-industry trade.

The study gives a twofold picture. Finland's trade partners can be divided into two groups, the first consisting of Sweden and the second of the rest. Finland's trade with Sweden is oriented towards intra-industry trade, i.e. the exchange of close substitutes of the same industries either in consumption, production or both. Furthermore, intra-industry trade is more prevalent in manufactures than non-manufactures in trade with all countries. The share of intra-industry trade is smallest with Spain and Italy. One can arguably speak about

an "extended home market" between Finland and Sweden measured as the great extent of intra-industry trade and the small importance of net trade or revealed comparative advantage in their bilateral trade. Trade is not based on sizeable cost differences, not even in the human and physical capital-intensive category of products, which is the dividing line with respect to the other countries, i.e. inter-industry trade is important, particularly with Spain, and to a smaller degree, with France.

Finnish net exports in physical and human capital-intensive products are to a large extent due to the exports of forest-based goods, i.e. paper, paperboard and pulp. Another interesting sector in the context of the internal market is the food products industry. It turns out that Finland is a net importer of food products from Spain and that the trade deficit has grown between 1990 and 1993. On the contrary, Finnish net exports of the forest-related products have decreased, although they are still at a high level, particularly with Spain and France.

The results show a potential sensitiveness of Finnish foreign trade and output to changes in demand conditions on some export markets, given the high net exports of given industries and their relatively great share of Finnish total exports.

In the next three chapters the attention turns to EMU, its consequences on Finland and how to adjust the economy in a monetary union.

In chapter 8 Markku Kotilainen studies some indicators for optimum currency areas to find whether the EU countries form an optimal currency area, and whether Finland is a part of it. He analyses the similarity in production structures, country compositions of foreign trade as well as variations and symmetry in output changes. It is found that on the basis of these criteria Germany, France, the Benelux countries and Austria are the most obvious candidates for EMU membership. Finland's production structure and variations in manufacturing output differ essentially from those of the EU average. The joint monetary policy and a common exchange rate are thus not always optimal from the Finnish point of view. In Finland output has also varied somewhat more than in the most of the EU countries. Finland accordingly requires more flexibility in the rest of the economy than the core EU countries in adjustment to shocks. From the Finnish point of view, it is desirable that the other Nordic countries should also be members of EMU, because these countries, especially Sweden, resemble Finland most closely.

In chapter 9 Kari Alho and Mika Erkkilä consider the functioning of the labour markets if Finland enters EMU. Labour markets are in a key position from the point of view of the adjustment capacity of the Finnish economy as a member of the Economic and Monetary Union. An important point in analysing the effects of EMU is the possible endogenous change in the behaviour of the trade unions with respect to an unemployment shock in the system of discretionary movements in the exchange rate, as contrasted to a monetary union. It turns out that the rational wage setting behaviour of the monopolistic trade union will shift towards more flexible nominal wage reactions with respect to a shock in unemployment, as the union has a bigger responsibility of its own of employment under EMU. This is important in analysing the need for structural reform in the labour market. The second part of the paper discusses the wage flexibility at the firm level, i.e. various bonus and profit sharing systems, which could increase the required nominal wage flexibility of the labour market.

Chapter 10 by Kari Alho and Mika Widgrén is a general introduction to the economic policy problems related to EMU. The article reviews the major microeconomic and macroeconomic gains and losses related to EMU. The position of Finland vis-à-vis EMU depends on how membership in the EMU will affect the nominal and real interest rates, to what extent EMU reduces transaction costs between the national currency and other EMU currencies, how EMU imposes discipline and stability on the public sector or if it constrains it too much, and finally, how to counteract shocks which are specific to Finland and which the other countries do not face. These questions are dealt with in the chapter. The paper also briefly discusses employment effects of EU membership.

The last chapter is a sample of the intensive research carried out at the Institute on the decision making of the European Union.

Chapter 11 by **Mika Widgrén** deals with the national distribution of power in the EU Council of Ministers. It applies standard measures of voting power and control to evaluate member states' influence on EU decisions under different voting rules. It also assesses different rules in terms of concentration of power and relates this to EU's operating effectiveness.

The main argument of the chapter is that to gain effectiveness the Union should use a simple or double majority rule instead of qualified majority or unanimity. The status quo bias can be avoided with lower majority requirements, not by shifting votes from the smallest countries to the largest ones in the EU organs. Interestingly, the analysis shows that a simple majority rule does not reallocate power among member states and the double majority rule gives additional power to small countries with less than 7 million citizens. Redistribution of votes does not seem to improve effectiveness. An often heard argument of small countries' overrepresentation in EU decision-making thus does not create inefficiency. In this sense the chapter is consistent with the complementary results showing that there is no reason to reallocate national representation in the EU organs on the basis of fairness arguments either.

#### 1 FINLAND AND EUROPEAN INTEGRATION

# Kari Alho

The negotiations on forming the Western European Economic Area are in their final and most difficult phase, the aim of which is the completion of the Treaty on the European Economic Area between the countries of the EC and EFTA.

The impact of the EEA on the economic development and on society in general, has been analysed relatively little. Identifying and quantifying the relevant variables is by no means an easy task, given the multitude of factors and their complicated interaction with each other. Finland has also to formulate a position with respect to the evolving Economic and Monetary Union (EMU) in future, irrespective of staying outside or joining the EC. Given the importance of the forthcoming choice at the national level, a research project on their likely effects ought to be initiated by the public authorities.

This is not to deny the significance of ongoing research in this area, but we still lack a survey which tries to evaluate the integration process in a comprehensive way from the Finnish point of view. Partly this is due, I presume, to the fact that international issues have never been given the weight they deserve among Finnish researchers.

The focal point in the politics of integration is what Finland gains by taking part in the EEA process as opposed to the situation where it is never realised. Likewise, one can compare the pros and cons of staying outside this process. This gives an estimate of the utility from joining.

#### 1.1 How the Benefits from Integration are Derived

The incorporation of imperfect competition into the theory of international trade has enabled economists to model and explain intra-industry trade based on the exchange of similar goods. Several studies that use this approach assume that the gains from trade based on classical comparative advantage have been exhausted in Europe and that the production cost functions are similar across countries (see Norman 1990 for differences among the approaches). International trade effects are felt through the suppression of cost creating barriers and changes in the (un)competitive environment: an increase in competition, the better exploitation of economies of scale and the disappearance of segmented national markets, leading to "one common competitive price in Europe". Empirical evidence has shown the latter effect to be decisive from the point of view of improved welfare (Smith and Venables 1988). It is, however, hard to realise in practice.

Actual trade barriers, i.e. border controls and differing technical standards, amount to 1 - 3, at most 5 per cent, of the value of foreign trade under the prevailing conditions of free

Published previously in the Finnish Economic Journal 1990:4. This article is based on a speech made at a symposium on the EEA, arranged by the Institute for European Studies in Turku on May 23rd, 1990.

trade in Europe. According to Alho (1990), the effective barriers to trade, i.e. transportation costs, border formalities and standards, amount to 10 per cent of the value of EC exports to EFTA and 5 per cent of EFTA exports to the EC.

Imperfect competition and segmented markets usually allow domestic producers to capture a large share of the domestic market and consequently goods are priced higher at home than on export markets. Notice, however, that decreased segmentation leads *ceteris paribus* to decreased foreign trade since firms increase their supply to the domestic market. This might at first sight seem surprising, since integration works in this case in the opposite direction it is generally thought to do: normally integration is believed to lead to an increased exchange of goods. Segmented markets lead to more trade than under conditions of perfectly integrated markets, when firms are able to price their domestic sales higher than their exports. The disappearance of trade barriers properly understood always leads to increased international trade.

In addition, the freer movement of production factors and a stricter implementation of competition rules ought to contribute to the increased efficiency of the European economy.

Since no evaluations of the above-mentioned methods have been made, we have to rely on estimates made elsewhere for the whole EFTA or the Nordic countries. These form the basis for an appraisal of the effects of the integration policy. The EEA process is also about the distribution of the overall gains between the EC and EFTA derived from an integrating Europe. This has led to the occurrence of certain elements which are a direct consequence of the asymmetric negotiation constellations between the two parties. We shall return to the issue below.

#### 1.2 Estimated Magnitude of the Gains from the EEA

The quantitative estimates of the well-known Norwegian researcher on foreign trade, Victor D. Norman (1989), result in a gain to EFTA amounting to 2 - 4 per cent of the total demand of the industry concerned compared to staying outside the EEA. The additional gain accruing to EFTA would typically be 2 - 3 times the gain to the EC countries. This can be attributed to two factors. Firstly, foreign trade is more important to EFTA than to EC countries (18 per cent and 12 per cent of GDP, respectively). Secondly, the deregulation of domestic markets and their "complete" opening up to foreign competition means a much bigger change for the EFTA than the EC countries. Staying out would on the other hand not constitute an economic catastrophe for EFTA. Related to this is the fact that some dynamic facts, e.g. firms' decisions about where to locate, have only partially been taken into account, which could substantially increase the costs of staying outside. Norman estimated the costs of staying outside to be a 1 percentage point welfare'loss in relation to actual consumer expenditure.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Pertti Haaparanta noted at the symposium that the effects are after all relatively minor and will grow substantially only if the growth rate of output increases permanently as a consequence of market integration. Baldwin (1989) has put forward the same interpretation. The argument rests heavily on economies of scale in production and a

EFTA countries always like to point out the importance of the EC, since the latter is EFTA's most important trade partner (27 per cent of EFTAns' external exports go to the EC and 23 per cent of external imports originate there). Notwithstanding, the importance of the EC - EFTA trade (measured as exports/GDP) is some 15 per cent for EFTA countries, whereas it some 2 per cent for the EC.

This has important consequences for the distribution of the additional gains from the EEA, given that the Single Market programme will be implemented in any case. The removal of trade barriers and the harmonisation of standards therefore ought to have significant effects on the EFTA countries, which permits them access to large markets, whereas the benefits to EC countries from additional, smaller markets will not be of the same magnitude. One may thus conclude that the EEA does not affect, by and large, the expected gains of the EC countries from the Single Market programme. The impact will, of course, differ in individual industries, but the overall situation is likely to be as described above. Calculations for individual industries in Finland have been made by Kajaste (1990).

Norman (1989), regarding the EC, ends up with the above-mentioned conclusion. However, his model includes only two industries (cars and pharmaceuticals). In addition, he makes use of a general equilibrium model with three aggregate goods: forest and base metal industries, other manufacturing and non-tradeable services. EFTA is split into five identical countries, including Finland. The difference to the EC between letting the EFTAns in or not, i.e. whether the EEA comes into force or not, is negligible.

Another well known researcher in foreign trade, Prof. Paul Krugman of MIT, has compared the inclusion of the EFTAns to the Single Market as being equivalent to a country of the size of France joining the Community, which is a very significant change (Krugman 1988).

The theory of free-trade areas show that enlarging the number of members can have either positive or negative effects on the incumbents. However, the EC would benefit from the EFTAns' membership and particularly so in those industries where the EFTA-based firms produce at a lower cost than the EC-based companies. On the other hand, trade liberalisation does not lead to improved overall welfare both at home and abroad if domestic producers are much more efficient than the foreign ones. In this case the profits of the domestic producers would be redistributed to the less efficient foreign firms (see Norman 1989, p. 433). Mutual trade liberalisation eliminates this loss and overall utility increases.

Theoretically it is also beneficial for an outside country to join the free-trade area. These calculations typically disregard the so-called total effects, in particular that economic

positive reaction concerning investment decisions, both of which play a central role in the dynamics of integration. Nevertheless, a permanent jump in the level of GDP is not without importance. Discounted to present value it would correspond to, at least, GDP over one year.

activity inside the trading bloc increases, which enables the outsiders to export more. If Finland were to stay outside, we should benefit from larger export markets, but at the same time we should experience lower real incomes through a lowering of export prices to keep market shares (see Lahti 1990 for a closer description).

#### **1.3** The EEA Negotiations from a Game Theoretic View

Consider the birth of the EEA as a bargaining process between the EC and EFTA. We have illustrated this in figure 1, with changes in EC and EFTA countries' relative welfare compared to the starting point, i.e. a comparison to the *anti-monde*. The arrows describe the different options, according to which the EEA is particularly beneficial for the EFTA countries. The non-EEA option means that the EC realises its Single Market as planned and that the EFTAns do not participate in the integration process. This is an inferior outcome for the EFTAns than joining the EEA. What is at stake in the EEA, however, is much more than choosing between membership or staying out, which has become obvious during the negotiations.

The starting point in the EEA process is not a pre-integration world, but the Single Market programme, which will be implemented irrespective of the EEA. The take-off in game theoretic terms, i.e. the threat point, is labelled "non-EEA" in figure 1. The additional gain to the EC from the EEA is modest compared to the Single Market programme. The EFTAns would thus have to transfer part of the gains to the EC, i.e. a side payment in game theoretic terms, in exchange for a co-operative outcome in the bargaining process. The EFTAns would thus have to move along the trade-off curve up and to the left. <sup>3</sup>

How much then would the loss be for the EFTAns, i.e. how much do they have to relocate themselves up and to the left ? It is dependent on the parties' relative bargaining power. We have depicted a symmetric position, meaning that the parties gain equally much in absolute terms in comparison to the non-EEA. This is, however, only one of several outcomes. A greater bargaining power on part of the EC would shift the outcome up and to the left and vice versa. The situation described by the figure corresponds to a simplified requirement that obligations and rights be balanced in the EEA.

It can further be noted that a situation as described above is more beneficial for both the EC and EFTA than the failure of the EEA. This, of course, follows from the fact that the

<sup>&</sup>lt;sup>3</sup> The utilities of the respective negotiators are represented by the so-called indifference curve. This is a rectangular hyperbola in a Nash game, derived by replacing the threat point by the origin. The optimum is depicted by the mark on the trade-off line, where the respective parties evenly share the absolute, total utility. The slope of the trade-off line representing additional gains in utility is -45 degrees in the initial situation, but will be altered according to the relative size of the additional utility accruing to both the EC and EFTA, e.g. a tenth. If the difference between the EEA and non-EEA is, say, 3 per cent with respect to EFTA, it will grow by 1.5 per cent in comparison to the threat point, given the co-operative outcome. The corresponding increase for the EC is 0.15 per cent.





EFTAns gain more from the EEA than they would lose if they stay outside the Single Market. The reciprocity requirement implies that EFTA give up half of the difference of the gains between the EEA and non-EEA in favour of the EC, which, however, is still superior to the initial position.<sup>4</sup>

Is the above-described constellation realistic ? One may object, since there has not been made use of any side payments, although the EC's southern member states have insisted on the EFTAns contributing to the Structural Funds. Compensation schemes can take many shapes and the incumbents have been sceptical towards the EFTAns' reservations. The EC has clearly signalled that it wants to retain a dominant position in the decision-making

<sup>&</sup>lt;sup>4</sup> This outcome for EFTA is 0.5 per cent better than in the situation "development without integration".

mechanism of the EEA, all of which can be taken as evidence of the prevailing asymmetries in the bargaining process.

#### 1.4 A Change in the Competitive Situation

Integration thus promises advantages from better resource allocation, guided by the principle of comparative advantage, increased competition, a better utilisation of economies of scale and genuinely integrating markets. The gains from better resource allocation will probably not be very important, given that manufactures have been subject to free-trade in Western Europe for quite some time. The remaining barriers to trade in manufactures are relatively minor, which promises that the gains from integration will come about from the other factors mentioned. Given that factors of production become increasingly mobile, absolute costs will also increase in importance from the point of view of trade, economic policy decision-making, social security systems and decisions about the location of production.

The discrepancy between competition and efficiency is greater in smaller than bigger countries. Finland will encounter changes and adjustment pressures in this respect, but also net increases in welfare as long as we can cope with the increasing imports.

The gains from integration should accrue to consumers at the same time as profits decrease as a consequence of keener competition. Some firms leave the market, implying a restructuring of industries, which softens, but does not eliminate the impact of harder competition.

The integration process has hardly been thought of as a situation of "consumers' fiest and producers' headache". A decreasing number of incumbent firms means that scale economies at the European level will be reaped. When trade barriers eventually disappear, the degree of competition, e.g. concentration, ought to be evaluated from the angle of the whole EEA area, instead of national markets.

#### References

Alho, K. (1990): Identification of Barriers in International Trade under Imperfect Competition, ETLA Discussion Paper No. 342 (revised version is chapter 4 of this volume).

Baldwin, R. (1989): The Growth Effects of 1992, Economic Policy, 9, November, 247-270.

Kajaste, I. (1990): What happens to Industry when Europe integrates? (in Finnish), The Finnish Economic Journal, 86, 424-437.

Krugman, P. (1988): EFTA and 1992, EFTA Occasional Paper No. 23, June.

Lahti, A. (1990): The Aggregate Economic Effects of European Integration on the Finnish Economy (in Finnish), The Finnish Economic Journal, 86, 415-423.

Norman, V. (1989): EFTA and the Internal Market Process, Economic Policy, 9, November, 423-465.

Norman, V. (1990): Assessing Trade and Welfare Effects of Trade Liberalization. A Comparison of Alternative Approaches to CGE Modelling with Imperfect Competition, European Economic Review, Vol. 34, No. 4, June, 725-751.

Smith, A. and Venables, A.J. (1988): Completing the Internal Market in the European Community, Some Industry Simulations, European Economic Review, Vol. 31, Nos. 1/2, February/March, 1501-1525.

Venables, A.J. (1987): Customs Unions and Tariff Reform under Imperfect Competition, European Economic Review, Vol. 31, Nos. 1/2, February/March, 103-110.

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#### 2 FINLAND IN THE EUROPEAN COMMUNITY - THE ECONOMIC IMPACTS

#### Kari Alho, Markku Kotilainen and Mika Widgrén

The co-operation between the EC and EFTA began to increase appreciably in 1984, when the so-called the Luxembourg process was proclaimed by them. Its aim was to form a Western European economic area which would fulfil the objectives regarding free mobility of goods as set out by the Single European Act of the EC. The Luxembourg proclamation was the broad starting point for the European Economic Area (EEA) negotiations. It was felt that as a united negotiator the EFTA countries, which constitute a significant trading companion for the EC, would be better able to influence the course of the process.

Finland's economic integration into Western Europe accelerated in the late 1980s. This was evidenced in the institutional changes whereby the financial markets were liberalized and foreign exchange restrictions discontinued. Toward the end of the decade the tighter integration led to lively debate on Finnish integration policies.

In the late 1980s the share of the EC countries within Finland's exports grew to be over half, after being under 40 per cent ten years previously. When the scope is broadened to cover the overall EEA including the EFTA countries, this area accounted for 70 per cent of Finnish exports and about two thirds of imports by the beginning of the 1990s. In the late 1980s the growth in the exports to the EC offset the declining trade with the East.

The internationalization of Finnish firms was rather modest until the late 1970s, but accelerated rapidly in the 1980s. Most of the direct investments abroad were initially made in the EFTA countries, of which Sweden was the main target. Toward the end of the decade the influence of the single market process of the EC gradually shifted the focus of investment to the EC countries. In 1991 over half of the direct investments of Finnish firms were made in the EC area.

In January 1989 the President of the European Commission Jacques Delors presented his views on EC-EFTA cooperation. Two possibilities were delineated: continuing the status quo of the institutionally loose approach of the Luxembourg process or adoption of an institutionalized cooperation model based on administrative bodies. Delors supported the latter alternative, which established a basis for a later model of the European Economic Area.

The negotiations on forming the EEA started in 1990 and were concluded in 1992. The agreement was supposed to go into force at the beginning of 1993, but this was postponed by the no-vote in the Swiss referendum. The agreement went into force in 1994.

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Figure 1 Gross Domestic Product in Finland, Sweden, Norway and the EC (1960=100)

Figure 2 GDP per capita in Finland, Sweden, Denmark, the EC and USA (OECD=100, using PPP's)



In 1991 it became evident that there was wide support in Finland for joining the EC. In January 1992 the government gave the Parliament a report describing the ramifications of EC membership for Finland. After considerable public debate in Finland, President Koivisto set the final tone by coming out in favour of EC membership in his speech at the opening session of Parliament on February 7, 1992. The government gave its recommendation regarding EC membership to the Parliament on March 5, 1992. Two weeks later the government gained backing in a vote of confidence on initiating the membership process and on March 18, 1992 sent its application to the EC's Council of Ministers regarding full membership in the European Community.

After the Edinburgh summit meeting the EC decided to begin negotiations on EC membership with Finland, Sweden and Austria in January 1993.

The goals of this study for the Finnish economy are to determine the consequences of EC membership. The aim is to present an evaluation of these effects on an aggregate level while the discussion on the industrial branch level is limited. EC membership would have its greatest impacts in four main areas: agriculture, participation in the EMU, restructuring of the sheltered sector and participation in EC decision making. It is precisely upon these impacts that the study concentrates. Furthermore, some other areas where the effects of membership are felt are also inspected.

#### 2.1 Overall Impact of EC Membership

In the following, we seek to draw together the main issues dealt with in the book in order to give quantitative estimates of the impact that EC membership would have on the Finnish economy.

The economic impact of membership can be divided into six parts:

(1) impact of initial impulses in different segments, (2) their multiplier effects on various sectors of the economy, (3) their multiplier effects via investment and growth in the capital stock, (4) factors depending upon the future policies of the EC, (5) effects depending on Finland's ability to adjust, (6) and uncertain shocks and their control.

In the following the attention is focused on points (1) and (3). The aim is to measure the consequent changes in the total real income and consumption possibilities of the economy. As regards the adjustment process, it is assumed that adjustment to the membership can be made as efficiently as possible. If this is not true over the long run, the appraisal presented below would have to be adjusted downwards. No attempt has been made to quantify the multiplier effects on different industrial branches, but rather the analysis sticks to the changes on the level of aggregate real income. These multiplier effects have not been needed in the assessment of overall utility. In contrast, the cumulative effect of the initial impulses on the economy are estimated via the increase in capital formation.

In recent years the interest in integration research has partially focused upon the permanent growth effects of integration as delineated by the so-called new growth theory. It is

ordinarily thought that as a result of integration real income climbs to a new level, which of course takes a certain period of lime. The initial impulses gradually dissipate in the segment where they began and in other sectors since capital is faced with decreasing marginal returns. In this case the dissipating impulse is always smaller than the arriving one and therefore the economy rises only to a new level.

Integration can spur permanent acceleration of the growth rate if capital faces constant marginal returns and if there are increasing returns to scale in the economy. In this case the initial impulses spread through the entire economy in a chain reaction so that the pace of growth accelerates. This rather interesting idea has not yet received persuading empirical support especially in Finland's case, where no integration study has been made from this angle. Therefore in the appraisal that follows the traditional approach is used and scale returns are kept constant. In this approach the analysis still captures the main dynamic impacts. These dynamic effects are incorporated in so far as the rise in national income in the first stage is followed by multiplicative growth in income when the productivity of capital increases. This comes about via an improvement in the profitability of firms spurring expansion of capital formation and the capital stock increases to a new higher level.

The real income of an economy can grow in two ways. First, the allocation of already available resources can become more efficient. In this case the economy can with the same amount of resources permanently increase its level of consumption without reducing the capital stock or increasing the foreign debt. Second, the economy can grow if the resources are expanded by investment, improvement in the education of the labour force or immigration. This study has focused primarily upon the reactions of investment. In this manner the level of consumption can rise less than real income since some of the income must be used to maintain the larger capital stock.

A distinction must be made between the long-term net benefits of EC membership and the adjustments that membership will bring and the associated costs. When estimating the long-term benefits, it is easy to overlook the costs that it takes to arrive at such a situation. The economic policy and public debate, in contrast, tends to focus upon just these adjustment pressures and the associated costs.

In principle, it is still worthwhile to differentiate the effects according to whether they can be obtained by purely domestic measures and what would occur only through joining the EC. Thus it could be claimed that even without EC membership Finland could reform its agricultural policy and get the same increase in utility. In theory this is true. It can nonetheless be assumed that if Finland has not made any cuts in a segment that is also efficiently organized to look after its interests, it is not likely that this would be done in the future either without outside pressure. The argument goes like this: others can in this respect make a better economic policy than Finns can for themselves. The Nordic countries are also pinning their hopes on the EC in relation, for example to the down-scaling of the public sector. Furthermore, as a member of the Community provision of Finland's food supplies is likely to be more secure than with a solely domestic base. Another factor that this domestic adjustment can, in theory, achieve is the convergence of the level of interest rates to that prevailing in the main EC countries. This is investigated more closely below in connection with the impact of the EMU.

Membership in the EC will change the distribution of income between export firms, domestically oriented firms and wage income. Ordinarily an improvement in the efficiency of the economy is channelled eventually into wage income and capital is left with the minimal return determined by competition in the capital market. It is not the intention to address these types of income distribution questions in the following, but rather the focus will remain upon the changes at the aggregate macroeconomic level.

#### 2.2 Foreign Trade

As a member of the EC, barriers to Finland's exports will be reduced by the removal of the EC's country-of-origin stipulations and the relaxing of border formalities. Also importing from the EC area will be eased, and the barriers will be slightly raised in imports from third countries.

## % 100 Others **USA** 🖾 Japan Eastern Europe 80 EC EC EFTA 60 40 20 0 1976 80 85 90 91

#### Figure 3 Distribution of Finnish exports

All in all the net trade benefits from EC membership compared to those gained within the EEA regime is estimated at slightly more than a FIM 1 billion per annum, i.e. 0.25 % relative to GDP.

The possible complications that may arise in trade with third countries belongs to category (4) mentioned above. Imagine a rise in trade barriers in Finnish imports from third countries equivalent to a few percentage points. This would mean a loss of about FIM 250 million per annum or about 0.05 % relative to GDP. Since this type of development does not appear likely at the moment, it has not been considered explicitly below. On the other hand, the joint trade policy of the EC may raise Finland's real income, which has also not been taken into consideration.

#### 2.3 Direct Investment

The change in firms' strategies in line with EC membership is of key importance, but rather difficult to quantify. It is nevertheless estimated that the net improvement in the balance on foreign direct investment in Finland and Finnish direct investment abroad would be about FIM 1-2 billion per annum.

The national income is domestic output less net foreign factor incomes, a part of which are interest expenditures on foreign credits. From a narrow perspective, the inflow of foreign capital does not raise Finland's real income since the resulting capital income flows abroad again. If a Finnish firm invests in Finland instead of abroad, the net benefit is the difference between domestic and foreign rates of returns (real interest rate differential) times the amount of the investment. This estimate holds when the resources of the economy are being used to their utmost. If the foreign capital creates jobs in Finland that would not have been created otherwise, the benefits are substantially greater. The approach followed in this study, however, has been one where the focus is on the long-term full-employment equilibrium and its changes. The change in the balance of foreign direct investment can be so sizeable that the wage income of the economy grows since the capital stock per worker rises. The improvement in the balance on direct investment of FIM 1-2 billion per annum will though this effect spur an incremental in income, estimated at FIM 2-3 billion per annum, i.e. 0.5 % relative to GDP.

#### 2.4 Agriculture

A reduction in agricultural prices to the level prevailing in the EC will bring an improvement in the allocation of resources and benefits from a reduction in consumer prices, which together amount to more than 1.5 % per annum relative to GDP. This would come about as Finland reduces its inefficient production and begins to produce goods priced the same as those on the EC markets. This benefit could come by taking advantage of scale returns in connection with a shift from agriculture based on small farms to mass production, while at the same time reducing inputs by a wide margin. We assume that a quarter of the present labour force in agriculture released from the sector after the EC membership will find new jobs which are as productive as elsewhere in the economy. It is

to be noted that quite a number of the present farmers will retire during the adjustment period after the EC membership. The more this type of preemptive rationalization is carried out the less total agricultural output will fall.

If an attempt is made to maintain agricultural output largely at its former level, i.e. shifting from one form of subsidies to another, the benefits from resource allocation are lost; only the decline in prices constitutes a benefit for the consumers.

#### 2.5 EMU Membership

Since the financial markets were liberalized in the late 1980s, Finland's interest rates have normally been at least one percentage point above international rates for currencies against which the markka has been pegged. The three-month differential averaged 2.5 percentage points during 1987-1992. During this period the domestic interest rate has never been lower than the international rate. The long-term interest rate differential has also been considerable.

Thus it can be assumed that, if Finland remains outside the EC and therefore does not participate in the EMS or EMU, Finnish economic policy makers would be hard pressed to achieve such credibility in a stable currency regime that the interest rate differential would vanish altogether. Finland's track record with respect to its exchange rate policy and the large foreign debt easily lead to outflows of capital when the economy is faced with disturbances. This would quickly lead to a rise in interest rates. The possibilities for the central bank to maintain a fixed, credible exchange rate is not very good under these circumstances. Furthermore, as recent events have made clear, the maintenance of employment and also the profitability of firms in the open sector via a depreciation of the currency is still the number one tool of economic policy compared to internal adjustments, for instance, by wage cuts.

This is one weakness of the EEA arrangement. If Finland were a member of the EMU under conditions of a common currency, the interest rate differential associated with the currency risk for Finland vis-à-vis the EC countries would vanish. The distinction between real and nominal interest rates is of importance to keep in mind here. In the EEA arrangement, Finland would have to devalue its currency from time to time so that the high nominal interest rate would not induce a high real rate of interest thereby hindering investment activity. This way in theory there would be no interest rate differential vis-à-vis foreign rates. In addition to the above-mentioned factors, the disequilibrium in the public sector would be greater and the restructuring of the economy and streamlining of agriculture would remain much less than under EC membership. Economic policy would enjoy less credibility. Just the knowledge that there could be a devaluation every now and then would lead to speculative currency movements and an differential in real interest rates.

In the following the interest rate differential between the EEA arrangement and EC membership is assumed to be 1.5 percentage points. In order to evaluate the significance of this gap, an estimate of the interest rate elasticity of capital formation is needed. The

magnitude of the increase in capital formation in light of the reduction in the interest rate differential owing to EC membership is rather uncertain. The growth in the capital stock caused by the permanent rise in consumption is estimated at 0.8 % relative to GDP.

The elimination of transaction costs for foreign exchange vis-à-vis the EMU currencies would generate benefits for firms and households of about FIM 1 billion, but the revenue loss for banks would be of the same magnitude. This would, however, benefit the economy since from a resource allocation point of view the existence of national money creates no inherent benefits. The banks should be able to compensate for this loss eventually by expanding in other business areas.

The benefit from the elimination or reduction of exchange rate uncertainty is estimated at 0.1 % relative to GDP.

#### 2.6 Improved Efficiency of Sheltered Sector

Membership in the EC can lead to greater efficiency in the non-agriculture segments of the sheltered sector in many ways which will raise the productivity and real income of the economy. This change may affect a considerable portion of GDP. Quantifying the change is rather complicated. The benefits of EC membership would pertain to how the increased mobility of capital and labour would increase the adjustment pressures within the sheltered sector. Furthermore, a benefit of EC membership would be that part of the sheltered sector would shift into the open sector subject to foreign trade. The resulting rise in labour productivity is estimated at 2%. The benefit derived from the increases in real income would be about 1 % relative to GDP.

#### 2.7 Indirect Taxation

The harmonization of indirect taxation has certain significant ramifications for the changes in the economy. If the EC shifts to levying taxes according to the source principle, this may pose a significant problem for Finnish exports due to its higher average tax rates as well as lead to a loss of tax revenues. Thus it is likely that indirect taxes will be lowered in Finland and income taxes raised. The resulting loss in efficiency is estimated at 0.1 % relative to GDP.

#### 2.8 Multiplier Effects via Capital Formation

If EC membership leads to an increase in national income via a rise in the marginal return on capital, it will become profitable for firms to increase investment. The total effect is thus greater than the initial impact. This effect does not pertain to all of the above-mentioned factors. It holds for changes in foreign trade, the reduction in foreign exchange transaction and uncertainty costs in the EMU. On the other hand, the other factors do not cause any increase in the marginal efficiency of capital or it is already taken into consideration. The multiplier effects on consumption are estimated to be 0.5 % relative to GDP.

# 2.9 Overall Assessment

The costs and benefits of EC membership compared to the EEA arrangement in a long-term equilibrium situation are summarized in the adjacent table. Altogether EC membership will permanently increase welfare measured in terms of national real income by some 4 % and consumption by some 5 %. It should be remarked that the means in this assessment and the estimates of the initial impact effects are fairly crude and, therefore, due caution should apply to the figures in the table.

# 2.10 Decision-making

One of the most significant differences between the EEA arrangement and membership in the EC is the opportunity to participate in the EC's decision making process. A major drawback of the EEA arrangement is that the EFTA countries cannot choose between accepting new proposals and sticking with the status quo in questions that apply to the EEA. EC membership puts the EFTA countries' potential influence on a par with the other members.

The decision-making system of the EC favours small countries by a considerable margin. The sway of small countries relative to their size is safeguarded in the decision making bodies and the decision making power in the EC cannot be considered concentrated.

The decision making system favouring small countries is relatively conservative and it is rather difficult to reach agreement on significant matters. The other side of the coin is that it is easy to prevent decisions. The Council of Ministers indeed requires considerable compromise by individual nations in order to get significant decisions passed.

# 2.11 Adjustment to EC Membership

The adjacent table also presents certain costs which have not been estimated quantitatively. It is clear that especially in agriculture and elsewhere in the sheltered sector the adjustment pressures will be great and problems will arise.

If the means or will to make these adjustments are lacking, the total benefits from EC membership will be much smaller. At the extreme, if domestic adjustment does not take place at all, the only tangible benefits from membership will be from the rise in export revenues, the improvement in consumers' welfare derived from lower agricultural prices and the benefits of EMU. According to the adjacent table the overall impact of these benefits, after netting out the costs of membership, are only about one percent relative to GDP.

It is evident that membership in the EC will not automatically bring great benefits to Finland, but it gives the possibility for rather considerable returns if there is a willingness to take the bull by the horns.