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FINLAND AS
A MEMBER OF
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EXPERIENCES

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Abstract: In 1992 we published estimations about the probable effects of the EU membership on the Finnish economy. The profound economic shock of the early 1990s has made the assessment of the economic impact of Finland's EU membership a difficult task. Nonetheless, the basic trends in relative prices, changes in foreign trade distribution, and developments in the production structure were estimated rather accurately. The structure of relative prices in Finland no longer deviates from that in the EU as much as it had in the early 1990s. Developments particularly in agriculture have proven to be less severe than forecasted. Instead, the major challenges currently facing both Finland and the EU are adjustment to the EMU and eastern enlargement.

Key words: European integration, Finland's membership in EU, production structure, relative prices, regional distribution of foreign trade

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Tiivistelmä: Vuonna 1992 Valtion taloudellinen tutkimuskeskus julkaisi arvioita Euroopan unionin jäsenyyden todennäköisistä vaikutuksista Suomen talouteen. 1990-luvun alun syvä talouslama on vaikeuttanut Suomen EU-jäsenyyden taloudellisten vaikutusten arviointia. Kuitenkin suhteellisten hintojen muutosten perussuunnat, muutokset ulkomaankaupan jakautumassa ja tuotantorakenteen kehitys arvioitiin varsin tarkasti. Suomen suhteellisten hintojen rakenne ei enää poikkea EU:n hintarakenteesta niin paljon kuin 1990-luvun alussa. Maatalouden kehitys ei ole ollut niin ongelmallinen kuin arvioitiin. Sen sijaan tällä hetkellä keskeiset Suomea ja EU:ta kohtaavat haasteet ovat sopeutuminen EMUun ja EU:n itälaajentuminen.

Asiasanat: Euroopan integraatio, Suomen jäsenyys Euroopan unionissa, tuotantorakenne, suhteelliset hinnat, ulkomaankaupan alueellinen jakauma

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1. General

There is no doubt that in principle it is important to analyse Finland's success in making the adjustments necessary for European integration. In this paper we examine the adjustments of the Finnish economy toward European integration during the 1990s, paying specific attention to the questions that arose during the debate of Finland's accession to the EU.¹ Especially we can ask whether something of the past experience can be already used to evaluate the problems of the adjustment to EMU and eastern enlargement. Although we think that integration produces far-reaching effects politically, economically, socially and culturally, such a comprehensive review of all the aspects of integration is a task beyond the scope of this paper. Furthermore, it should be stressed that this study remains in many respects introductory, more thorough examination of the effects of integration has hardly begun in Finland.

The potential complexity of our analysis is demonstrated by the political landscape. Finland, unlike Sweden, enjoys a general degree of satisfaction with her new political role assumed with EU integration. The EU system grants greater relative voting power to Member States with small populations. To illustrate this fact, we can compare the voting power of several Member States of different sizes. Finland, with its population of 1.7 million, receives one vote in the EU Council, whereas Germany needs 8.1 million inhabitants to gain one additional vote. Calculated in these terms, Luxembourg clearly has the greatest weight of all the Member States. Power relations could be better shown by the fact that there is a strong positive correlation between each country's net receipts in the EU budget and the per capita votes (Baldwin, Haaparanta and Kiander, 1995). Instead, very little correlation is to be found between the absolute number of votes in the Council and net EU budget receipts. Germany's recent dissatisfaction in her share of contributions is perhaps a reflection of this: Despite maximum votes in the Council, Germany remains the biggest net contributor in the EU. In addition to absorbing political power and policy instruments into Finland, it would also appear that cultural influences are more readily and naturally adopted from Europe – after all, they do exhibit a degree of charm from its novelty.²

We have chosen to take a more focused approach for this paper. One of the first analyses on the effects of EU membership in Finland was a study by the Government Institute of Economic Research entitled 'Should Finland join the

¹ We wish to thank Matti Virén for his comments, Anita Niskanen, Sari Virtanen and Nina Intonen for their help in the collection and compilation of the material, and Helinä Silén for the word processing.

² An interesting difference exists between the experiences in Finland and Sweden: The Finns are mostly satisfied (esp. in the fall in the price of food), while prices in agriculture in Sweden have actually risen. The Finns are also content with their powers to influence decision-making, while in Sweden it would seem that there is more dissatisfaction in this respect too.

European Community? Economic impact' (1992).³ This study provides a starting point of our analysis in this paper in which we have studied the effects of integration by performing 'impact evaluations.' The impact evaluations made both pre- and post-membership are based on estimates that give no conclusive answer to the exact nature of their effects. Looking back on the conditions under which the first impact evaluations of EU membership were made, at least three major, unpredictable exogenous factors can be discerned to have steered the course of events in the 1990s in an unforeseen direction. These are: 1) The banking crisis in Finland; 2) German reunification and the ensuing rise in interest rates in Europe; and 3) Faster than expected economic growth in the South-east Asian economies in the early 1990s. Taking into account of these exogenous factors, the outcome of our analysis in this paper is that the economic effects of EU membership were actually forecast surprisingly well.

EU membership is not linked to the recession

As said, the fact that the Finnish economy fell into a deep recession in the early 1990s complicates the analysis of the impact of EU accession. The extent to which the recession is the result of integration is ultimately difficult to evaluate. An argument could be made that the general developments toward integration and globalisation in the 1980s led to the liberalisation of the financial markets and capital movements in Finland. However, Finland did not enter any new formal integration agreements during that time (Finland did become a full member of the EFTA in the 1980s, but this lacks any practical relevance, and EEA⁴ negotiations had also been initiated but not concluded yet).

It could also be argued that as capital markets became liberalised at the end of the 1980s, their participants lacked proper familiarity with the new operating environment. This resulted in numerous types of economic miscalculations. The role of exchange rate policy has also been held responsible for creating problems. Market participants were perhaps too easily lulled into the belief that the fixed exchange rate would prevail and underestimated the exchange rate risks inherent in the system.⁵ Be that as it may, EU membership in itself did not cause the recession because the decisions leading to the economic downturn had already

³ ETLA later also published a comprehensive analysis of the economic impact of EU membership (1992). Impact analyses of more limited coverage include for example Karhu, V., Karppinen, A., Saikkonen, J., (1994). Strictly speaking, the effects of integration should not be confused with the impact of EU membership. In this study we mainly focus on the effects of EU membership.

⁴ EEA = European Economic Agreement. A treaty between EU and EFTA countries to implement a single European market concept in their trade relations.

⁵ The Finnish recession is to be thoroughly examined once more in a project financed by the Academy of Finland.

been made long before EU accession was even discussed. The impact analysis and evaluations of EU membership in our earlier study were made before the full severity of the banking crisis had been discovered.

As a result of the recession, and probably also in part owing to the German interest rate policy, employment trends proved to be much weaker than anticipated. Chapter 3 deals with the underlying reasons in employment developments. When evaluating EU membership, it was observed that greater competition would, at least in the beginning, generate losses in both production and manpower in numerous sectors of the economy.

Another complication relates to the conventional notion that the economy automatically returns to a previous path of potential growth after cyclical troughs. Recent time series analysis indicates that, after suffering economic shocks, the economy does not invariably return to the earlier growth pattern. These are the conclusions reached a recent study by, inter alia, Matti Virén of the Government Institute of Economic Research and Vesa Vihriälä. If no return to the earlier pattern of growth occurs, the question arises as to the sort of structural adjustment measures that are called for in order to regain full employment as expediently as possible.⁶

Analysis of economic effects

The economic impacts of EU membership can in principle be classified into three main categories: Increased competition, effects on foreign trade, and long-term economic growth.

Along with EU membership, certain fields were subjected to *increased competition*, believed to result in lower production costs and prices. This formed a major challenge for Finnish agriculture, particularly. The agricultural sector in Finland faced a new situation: national trade barriers were to be removed, and a joint agricultural policy with the EU was adopted. Other sectors were also expected to face greater competition following EU membership. This increased competition also gives rise to pressure for change in production structures, and can result in a fall in employment in poorly competitive sectors. One impact of competition should be manifested in closer price convergence towards average EU prices.

Effects on foreign trade. A decrease in trade barriers can increase trade in the countries participating in greater integration. This can open opportunities for

⁶ As indicated by Vihriälä and Virén, disturbances in GDP appear to result in permanent changes in levels and earlier growth patterns are perhaps impossible to regain (Vihriälä and Virén, 1997).

trade creation through economies of scale in production, lead to broader diversification of end products, for example. These effects are examined more closely in Chapter 5.

Lowering of trade barriers can also lead to trade diversion from the third countries towards the integrating area.

The first two elements described above are characterised by the more effective utilisation of resources that can bring about growth in welfare. In addition, deeper integration can affect investment and *long-term economic growth*. In the case of Finland, particularly, EU accession was presumed to cause greater economic stability, which in turn would reduce the interest rate differential with Europe-- and notably with Germany. Moreover, it was believed that the possibility of eventually participating in the EMU would generate a fall in the risk premium on interest. A fall in the risks in principle reduces interest rates, which in turn can result in greater long-term economic growth through increased investment. Increased trade can, in principle, also draw direct investment. From the point of view of employment, the extent of investment is vital to what occurs domestically.

In evaluating the overall economic impact of EU membership, the effects were grouped into four main categories: 1) Adjustment in agriculture and the food industry to a common agricultural policy; 2) The effects of enhanced competition; 3) The effects of harmonised taxation, especially involving indirect taxes (e.g., VAT and excise duties); and 4) The impact of reduced interest rates on growth.

We will address these effects in regard to features that were much discussed in the public debate of accession: Finnish price levels, relative price levels, and developments in foreign trade. We will also highlight Finnish GDP convergence relative to the other Member States, as well as adjustment in the production and regional structures. Moreover, the differences in GDP and GNI⁷ developments in the 1990s arising from foreign direct investment and foreign debts will be examined. These differences arise from net factor incomes payable abroad, which are affected by both direct investments and foreign debt.

Exchange rate stability and risk premiums on interest rates are not examined in this study because they have already been extensively covered by the EMU discussions. Although, this paper does in part focus on the EMU, the effects of accession to membership on the budgets of Finland and the EU will not be addressed in this paper.

⁷ GDP = gross domestic product, product generated in Finland, GNI = gross national product, incomes received by the Finnish nationals. The difference between the two concepts is net factor incomes and transfers from Finland to foreign countries.

2. Finnish Price Levels in Relation to the EU Price Levels

The average price level in one country as compared to other countries can be used as a rough estimate in evaluating the price competitiveness of the country in the world market. Thus, the price level in Finland relative to the average level in the EU determines the price competitiveness of the Finnish economy. Price levels have historically played a major role in determining a country's economic fate, especially in cyclical fluctuations. The material used in this analysis is derived from purchasing power parity comparisons, from data on price levels in the EU Member States collected by Eurostat and from OECD statistics.⁸

While the average price level in Finland relative to that in the EU was on a rising course between 1970 and 1990, as illustrated in Figure 1, the ratio has also fluctuated very widely compared annually to the EU. Just prior to the accession negotiations, the Finnish price level reached a record high of approximately 40 per cent above the EU level. In a study on the effects of EU membership by the Government Institute for Economic Research, it was estimated that even in the year 2005 the price level in Finland might be one quarter above that of the EU. However, by 1993 the price level declined to below the EU level.⁹ This was, for the most part, due to the 1992 devaluation. At that time, it was commonly believed that Finland would need phenomenal competitive ability to recover from the deep slump which was then at its worst phase.

The historical deviation of Finnish price levels from those in the EU can be attributed to Finland's propensity toward inflation. When the Finnish price level exceeded the EU average by 40 per cent in 1990, Finland similarly surpassed the OECD average by a full 47 per cent.¹⁰ This position was not sustainable in the long term. The devaluation and floating of the markka in 1992 led to a fall in the Finnish price level below the EU average for the first time during the review period. Since then the Finnish price level has rebounded above the EU average again at levels recorded at 13 and 9 per cent above the EU average in 1995 and 1997, respectively.

⁸ The GDP price level cannot be used as a direct gauge in price competitiveness. Commonly used indicators in competitiveness comparisons are for example unit labour costs in different countries as expressed in the same currency.

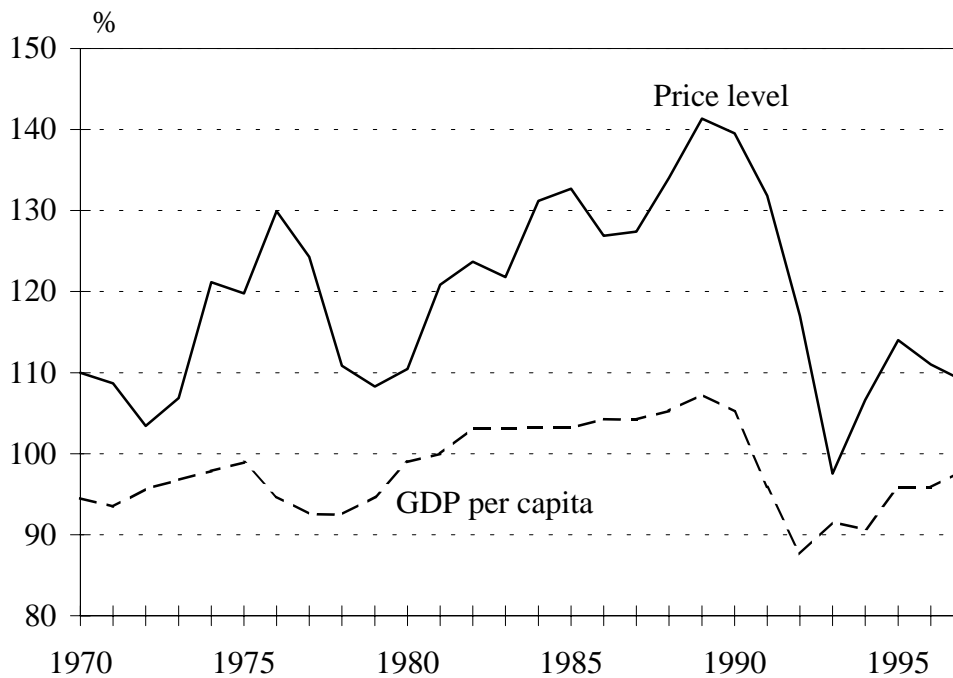
⁹ It was evidently impossible to anticipate the devaluation in the EU study, so the adjustment of the Finnish price level was simply assumed to occur, without reference to the means.

¹⁰ The difference in the OECD average compared to the EU is due to the fact that the United States, Canada and New Zealand constitute countries with low price levels. The fact that Japan has for long been a country of high price levels has a counterbalancing effect. It is worth noting that in the early 1970s Finnish price levels were below the OECD average as an after-effect of the major devaluation of 1967.

The question that remains unanswered is how Finland managed to maintain a growing price level differential for so long without the economy, and particularly the balance of payments, running into difficulties.¹¹ If a country's real competitiveness is strong, the price levels can be maintained at a relatively high level. Because the Finnish price level has been about 25 per cent above the EU average during fairly good conditions of economic growth, the underlying reasons must lie in elements within real-term competitiveness.

One plausible explanation might be the faster than average growth of productivity in Finland in the 1970s and 1980s. Indeed, real-term economic growth in Finland was very favourable during those two decades. In the early 1970s, Finnish GDP per capita remained around 5 per cent below the EU average, but by the year 1990 it was already above the EU average by about 5 per cent. Subsequently, the recession in the early 1990s dropped Finnish GDP per capita figures below the EU average. Today Finland is near the EU average.

Figure 1. Price level in Finland compared to EU15 (GDP or all goods and services), and GDP per capita compared to EU average in 1970-1997



Source: OECD.

¹¹ It is of course possible to argue that the difficulties arose partly only in the wake of the recession of the 1990s. The strong Finnish currency in the late 1980s, for example, may have in part encouraged investment in low-yielding foreign investment.

Underlying the development in productivity is the fact that the open sector has remained competitive. It has increased productivity so fast that the 'excess' domestic price level has been compensated. Indeed, the figures in Table 1 indicate that labour productivity in the export industry substantially grew at an average of 5.4 per cent annually between 1973 and 1992. The labour productivity in the domestic markets industry was recorded at 3.9 per cent per annum over the same period of time.

Another possible explanation for the good real-term economic developments could be that trade with eastern neighbours was exceptionally favourable for Finland. Scenarios presented elsewhere in this paper suggest that there is a strong link between the annual change in eastern trade and the difference in annual fluctuations in GDP in Finland compared with the EU countries.

Together with the deviation in Finnish general price level from that in the EU, the fluctuations in Finnish commodity prices relative to the EU have been wide. However, in the future EMU conditions it will become essential to be able to maintain price competitiveness without devaluation. This, in a historical context, is not only a new but also a serious challenge in light of developments in Finnish inflation. It is for this reason that knowledge of the mechanisms determining Finnish price levels and an awareness of potential changes in these mechanisms become ever more important.

To what extent has the stronger growth rate of the Finnish economy relative to the EU had an impact on the rise in the price level differential? In answering, we will evaluate the dynamics in the price level differential by means of a simple econometric model.¹² The equation below and its coefficients appear to operate rather well in this example:

$$DLPL = 0.01 + 1.22 DLBKTC(-1) + 0.50 DLBKTC(-2) - 0.007 DU,^{13}$$

$$(0.95) \quad (2.71) \qquad (1.63) \qquad (-0.785)$$

where "DLPL" denotes the percentage change in the difference between the price level in Finland and the EU countries. DLBKTC(-1) and DLBKTC(-2) represent the growth differences between the per capita real-term GDP in Finland and the EU with a lag of one and two years respectively. "DU" denotes the change in the Finnish unemployment rate in composition to the EU, indicating the relative capacity utilisation rate. The coefficient t-values are given in brackets. The model

¹² Our calculations are based on evaluations on the relationship between the changes in the GDP price level and the change in GDP using the Granger causal test. On the basis of the tests, the change in GDP sheds more light on inflation developments, and the change in price levels reveals more about GDP developments.

¹³ R² = 0.66, Durbin-Watson coefficient = 2.14.

indicates that the differences in growth in the previous year give rise to a fairly strong price difference effect. The capacity utilisation rate as calculated (DU) does not appear to be statistically significant.¹⁴

The changes in the inflation mechanism generated by globalisation and increased competition have been widely discussed recently, which ought to be seen as a decrease in the DLBKTC(-1) coefficient. Likewise, greater labour flexibility should be reflected in a lower coefficient. Because the magnitude of the coefficient also depends on the nature of monetary policy, no far-reaching conclusions can be drawn. However, a more detailed examination of this matter is beyond the scope of this paper. Nonetheless, it is worth observing that from the viewpoint of Finland's participation in the EMU, a wider gap in GDP growth differential relative to the EU may in fact give rise to substantial inflationary pressure due to the dangerously high coefficient.

Inflation has remained low in Finland in the 1990s. This may be explained in part by increased competition, which leaves little room for price rises. On the other hand, it could be argued that mass unemployment has curbed inflationary pressures. However, the impact of unemployment may well prove to be a passing phenomenon.¹⁵

Interaction between price levels, relative prices and productivity

If we adopt the fairly accepted view that the economy consists of both open and sheltered sectors, we can show that there is a link between a high price level and price dispersion. The more expensive the country, the higher the price level in the sheltered sector as there is less scope for prices in the open sector to deviate significantly from world market prices. Here the high price level of the country is a function of the ratio between the prices in the open and sheltered sectors, or in other words, the dispersion of relative prices.

As the price level of the country approaches the international average, the structure of relative prices also levels off. A rapid improvement in productivity in the export sector has made it possible to attain economic equilibrium in Finland. Labour productivity in the export sector grew at a fast rate between 1973 and

¹⁴ We also carried out a recession dummy test in the early 1990s, but the effect of the dummy did not rise much above the change in the unemployment rate. The difference in unemployment relative to the EU countries was not significant either.

¹⁵ Calculations made by the Government Institute for Economic Research using the NAIRU method suggest that structural unemployment (the disparity between demand and supply) rose sharply in the beginning of the 1990s. If this is true, inflation pressure can occur even in conditions of high unemployment, even at an unemployment rate as high as 10 per cent (Holm - Tossavainen, 1997).

1992. Thus, despite excessive rises in wages in the economy as a whole due to growth in productivity, it was possible to maintain price competitiveness in the open sector.

That notwithstanding, the overall price competitiveness of industry on the western markets in terms of unit labour costs deteriorated by about one sixth between 1978 and 1990. This was a result of the economic crisis of the early 1990s. Rapid growth in productivity in the manufacturing industry, which still continues, has been significant especially from the viewpoint of real competitiveness. Rapid changes in production methods, products and working methods having continued in the 1990s.

Table 1. Annual labour productivity changes in percentages in different sectors of the economy, and decomposition of productivity, in percentages, between 1973 and 1992

Sector	Labour productivity % per annum	Proportion of total output	Proportion of capitalisation
Primary production	4.1	63	37
Forestry	4.5	47	53
Metal industry	5.6	68	32
Other exports industries	5.4	35	65
Domestic markets industry	3.9	46	54
Energy services	3.4	41	59
Other service sectors	2.7	44	56
Community services	1.5	73	27
Whole economy, excl. house ownership	3.3	55	45

Source: Avautuva Suomi (1993).

Labour productivity throughout the whole of the economy still continued to grow fast in the decade from 1986 to 1996 by a full 7½ per cent annually. This meant that while production grew by only 3½ per cent per annum, labour input fell by almost 4 per cent a year. In the years to come, growth in labour productivity will have to be derived more from growth in total factor productivity than from the replacement of labour with capital. Growth in productivity in the whole of industry needs to be based as much on growth in total factor productivity as is the case in the metal industry, where two thirds of the growth in labour productivity is derived from growth in total productivity. In fact, 45 per cent of overall growth in labour productivity over a period of two decades (1973-1992) is accounted for by increased capital formation. In the future, the Finnish economy needs to adjust

to less capital investment. This is partly due to the rise in the real rate of interest compared to the previous decades.

Differences in productivity still exist when compared to the highest-achieving EU countries, which in principle opens an avenue for further rapid growth through a reduction in the productivity differentials. However, as we approach productivity peaks, such options diminish. Moreover, there are signs that, in the wake of the recession, growth in productivity is now clearly slackening.

3. GDP Covariance

Finnish per capita GDP relative to the average for the 15 EU Member States between 1970 and 1990 is illustrated in Figure 1, which shows that clear convergence has occurred. The Finnish per capita GDP came closer to the EU average, and exceeded the EU average by the early 1980s. The slump of the 1990s then pushed the Finnish per capita GDP level well below the EU average. Some edging up has occurred, and Finland has regained the EU average again.¹⁶

As pointed out earlier, the slump in Finland occurred as a result of a number of factors unrelated to Finnish EU membership, but making a distinction between the effects of the recession and EU accession is a demanding task. The Finnish banking crisis is not examined in this paper. Instead, we study one factor, which has received little attention elsewhere, namely the possible impact of the German reunification on the crisis in the early 1990s. Our evaluations suggest that in fact the effects were significant.

The trough of the recession in Finland occurred in 1992, when interest rates in Europe were also at the highest level of this decade. This condition is illustrated in Figure 2 by the short interest rate differential between Germany and the United States.

When examining the period from early 1985 to early 1998, it can be seen that interest rates in the United States were about 2 percentage points higher than those found in Germany. This gap reflects the difference in inflation between the two countries: long-term inflation in the United States has generally been roughly 2 percentage points higher than in Germany.¹⁷ However, the period from early 1989 to mid-1994 marked an exception, as German interest rates were clearly higher than those in the US. Why should this be construed as exceptional? As we understand it, German reunification occurred during this period, which consequently generated a substantial increase in German public expenditures. The public sector deficit rose to approximately 3.3-3.4 per cent of GDP between 1991 and 1992 (European Economy, 1997). The higher budget deficit resulted in tighter fiscal policy, which in turn, raised interest rates.

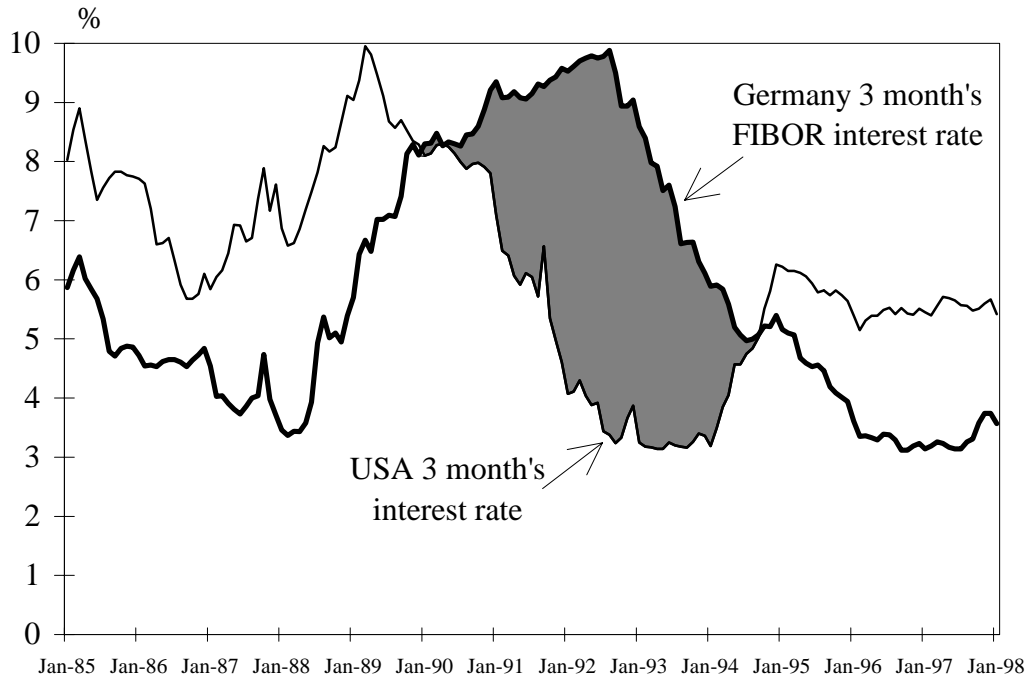
This rise in interest rates occurred at a difficult time from the viewpoint of the whole of Europe. Economies in the EU were following a downward course. The situation was particularly difficult in Finland, due to exceptional problems in other areas. In our evaluation, the hike in interest rates arising from German

¹⁶ Cf. footnote 6.

¹⁷ The price index in private consumption in the United States rose between 1981 and 1990 by an annual average of 4.7 per cent, while in Germany the equivalent rise was only 2.6 per cent (European Economy, 1997, pp. 240-241).

reunification slowed down economic growth in Europe in the early 1990s, and consequently also had a detrimental effect on unemployment in the EU.

Figure 2. Interest rates in USA and Germany

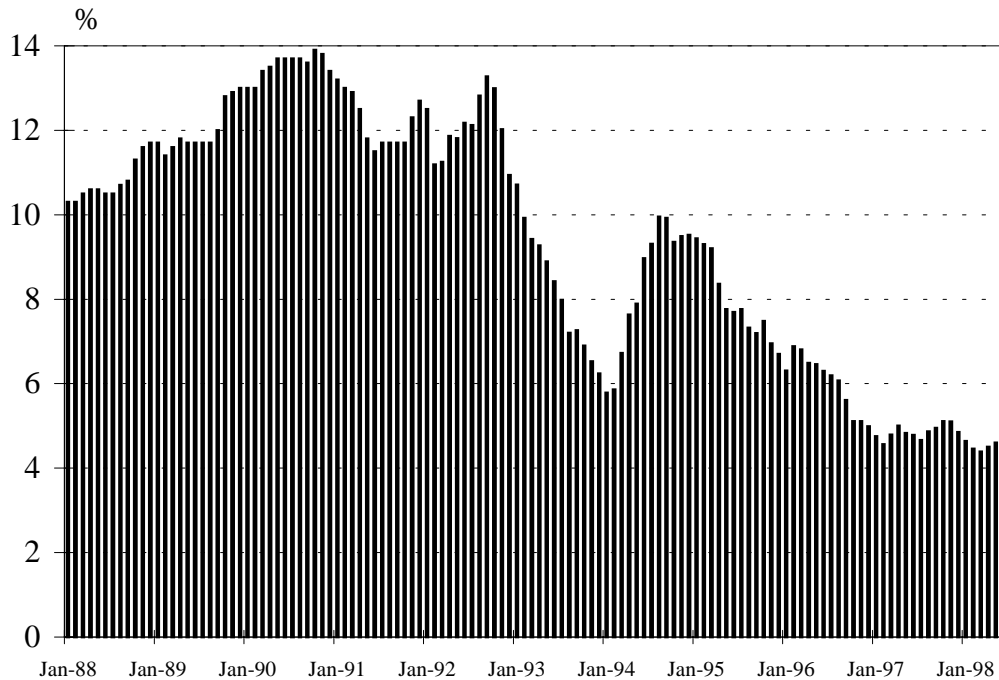


Source: OECD.

Interest rates on bonds and notes in Finland are presented in Figure 3, indicating that interest rates peaked during 1991-1992, the worst period of the recession. The highest interest rates in Germany also occurred within this time span. Interest rates were not high in Finland because of both the lack of cash flow, and, as pointed out earlier, the interest rates reflected exceptionally high rates in Europe.¹⁸

¹⁸ The unusually wide difference in the interest rates in Germany and USA can also be explained by the fact that while fiscal policy in Germany was tightened that in the USA was loosened.

Figure 3. *The interest rate of 5-year bonds in Finland*



Source: Ministry of Finance.

In light of historical data it would appear that the changes in Finland's trade with her eastern neighbours plays a part in explaining the convergence that occurred. Our calculations indicate that as the share of Finnish trade with the East increases, the effect on Finnish GDP relative to the EU is a positive one.¹⁹

Trade with our eastern neighbours no longer holds as unique a position as it did in the past. Instead, new areas for development of domestic trade have been introduced in the 1990s (cf. Chapter 5). The degree to which new trading expands plays a significant role in GDP growth for Finland relative to the rest of the EU. Another key question is the course that the production structure will take in the years to come: Can evolving sectors with prospects for high productivity be

¹⁹ On the basis of tests we obtain the following equation:

$$DLBKTC = 0.000311 + 0.075 DLPL(-1) - 0.172 DLPL(-2) + 0.060 DLSUTR, R^2 = 0.46$$

(0.5) (0.88) (-1.86) (2.65)

where DLBKTC denotes the annual change in the GDP per capita differential between Finland and the EU countries, DLPL(-1) and DLPL(-2) denote the change in the price level differential, and DLSUTR denotes the annual change in Finland's trade with the East. A change in the price level differential in the previous year supports growth in the GDP differential slightly, but the effect becomes negative the following year; it could be argued that initially the rise in export prices supports real growth, but along with cost inflation, the domestic price level gradually rises, reflecting a deterioration in price competitiveness. The t-values are given in the brackets.

found in Finland, reversing the per capita GDP level to above the EU average? Chapter 6 briefly deals with the problems related to the evolution of the Finnish production structure.

4. Relative Prices

We now consider two important factors widely believed to have influenced the period when Finland joined the EU, they are: First, the structure of relative prices, and second, the distribution of trade among trading partners. Let us first examine relative prices.

The differential between Finnish relative prices and equivalent EU prices were widely debated in the discussions on EU membership before accession. Relative price differentials between countries can be explained by a number of factors. First, consumer habits and demand structures may differ. Secondly, insufficient competitiveness may also give rise to price differences, because the wider the difference in competition, the greater the differences in prices. Third, taxes, customs duties and other protectionist barriers to trade may also explain price differentials. And finally, transport costs in different countries may likewise affect price differences on the markets.

A major issue in the debate on Finnish EU membership involved relative prices. A particularly common theme was the future of food and alcohol prices; prior to EU accession the degree of protectionism in these products was exceptionally high.

The opening of markets and increased competition that results from market cohesion can be expected to eventually lead to a realisation of the 'law of one price' principle, which means that relative prices in a common market area converge. The more imperfect the competition, the greater the change due to the integration. Thus the question is whether such an effect can be detected here at all?²⁰

Let us look at the position of relative prices in Finland prior to accession, presented in Table 2. In certain product categories, Finnish prices deviate from those in the EU very substantially, with books, alcoholic drinks and tobacco being particularly high in 1990.

Not a single household consumption expenditure in 1990 was cheaper in Finland than in the EU average, according to the rough scale calculated in Table 2. In 1985, the Finnish price level was 30 per cent above the EU average, and only three items out of 55 commodity categories were below the EU average in

²⁰ Domestic prices can deviate from international prices owing to transport costs or product differentiation, among others. Pasanen (1992) has estimated, for example, that as the food markets become exposed to foreign competition along with EU membership, domestic food production gains protection from different eating habits, freshness, strong domestic brands, and transport costs. Domestic products could be said to have a home market advantage in transport costs averaging around 9 - 10 per cent.

absolute terms. These were housing energy and investments in land and water construction.

The price level of household consumption expenditures was 47 per cent above the EU average in 1990. The prices of books were as much as 155 per cent higher than the EU average, or two and a half times above the average price in the EU.

Table 2. Absolute and relative prices of Finnish household consumption expenditure relative to the EU average in 1990, EU = 100

Commodity group	Absolute prices EU = 100	Relative prices EU = 100 Household consumption expenditure = 100
Books	255	174
Soft drinks and tobacco	229	156
Meat	194	132
Grain	191	130
Hotels	155	105
Cars and petrol	152	103
Public transport	147	100
Milk	141	96
Fruit	139	95
Garments	132	90
Household furnishings	129	88
Recreational equipment	123	84
Recreational use	122	83
Housing	118	81
Telecommunications	102	70
Household consumption	147	100

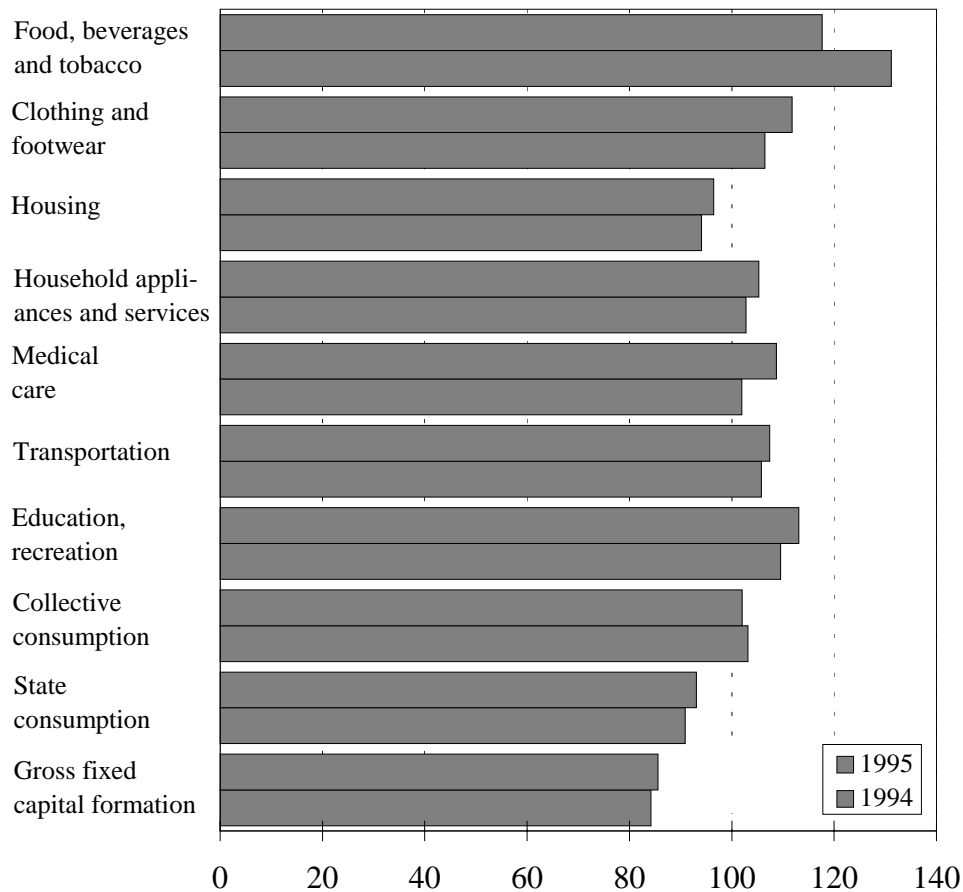
Source: R. Hjerpe (1992).

Relative prices after accession

The structure of relative prices in Finland in 1994 and 1995 are presented in Figures 4 and 5. The overall price level (GDP, i.e. all goods and services) is scaled to 100 per cent relative to the EU. By 1995 the price level of a number of commodities was already lower than the EU average, such as dairy products, housing energy, telecommunications, and both housing and other building construction. The price level of land and water construction activities stood at only 72 per cent of the EU average in light of these statistics.

Energy and investment in construction still remain economical in Finland, but a new distinctive feature that has appeared in the Finnish price structure compared to the EU average is a levelling of the prices. In Finland, relative prices, for example the price of a litre of milk relative to a kilo of steel, no longer differ substantially from the average in the EU. The most pronounced differences are the high price of food and the low price of housing and investment in relative terms. EU membership has brought about rapid change in the price structure in Finland, as anticipated, with the relative (and absolute) prices of food falling in the course of the first year of accession. The relative price of collective consumption decreased due to the moderate collective wage agreements of the mid-1990s.

Figure 4. *Relative prices in Finland, EU15 = 100, GDP = 100*



Source: EUROSTAT.

A distinctive feature in the relative price structure in Finland compared to the EU is the high price of private consumption and the low price of investment. The latter together with the prolonged negative real interest rates may explain in part the relatively high investment rate in Finland.

A more detailed analysis of relative prices (Figure 5) reveals that the prices of fish and dairy products are relatively low despite a fairly high overall price level in the whole of the foodstuffs category. The low relative price of housing is explained not by the low price of accommodation or rents but by cheap energy prices, while it is common knowledge that the relatively high price of private transport is caused by taxes levied on vehicles. The low relative price of energy means that the costs of running a vehicle only exceeds the EU average by a slight margin in relative terms. However, it should be kept in mind that, in terms of absolute prices, the costs running of a car in Finland rated 17 per cent above the EU average in 1995.

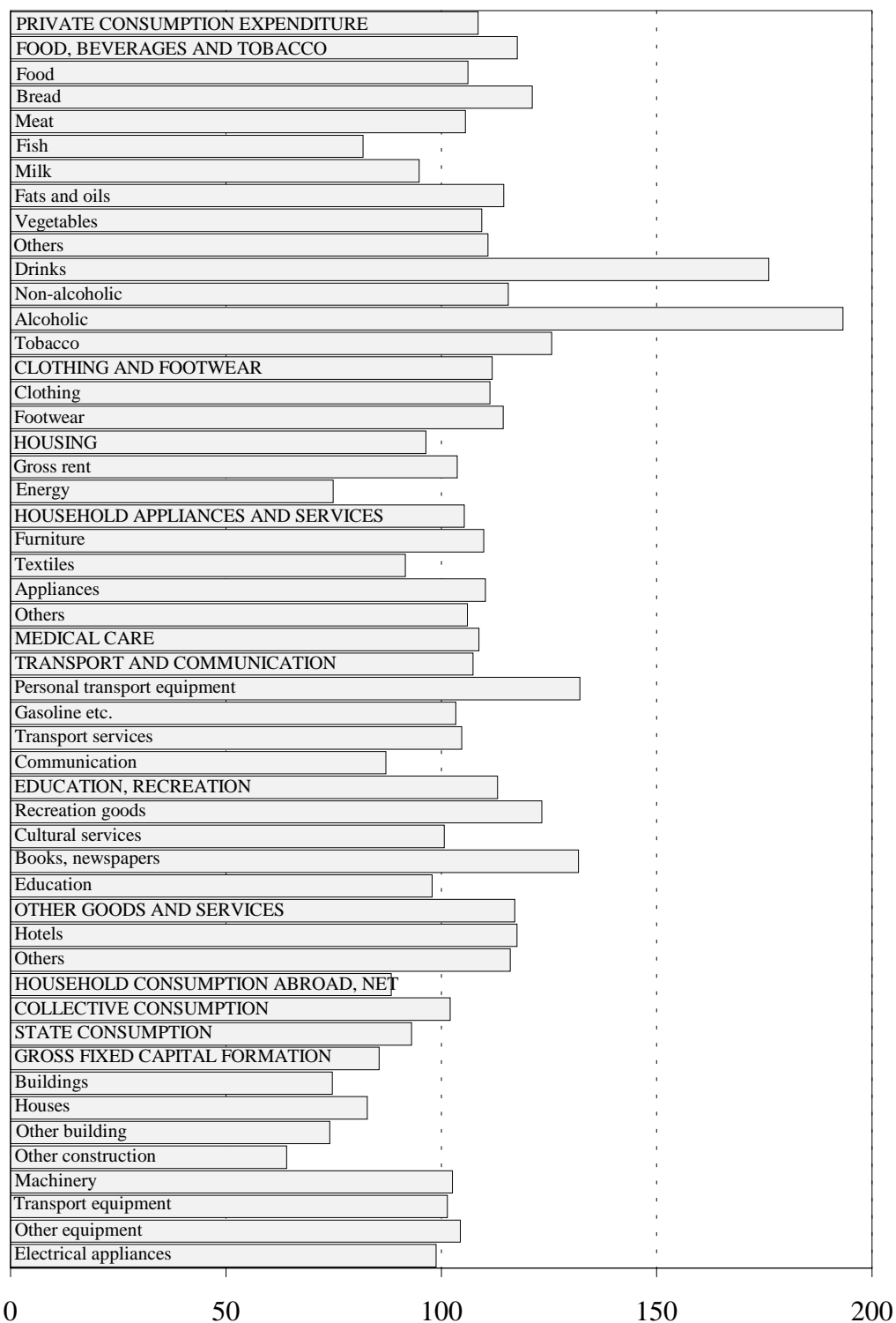
The difference in food prices has narrowed appreciably, although prices in 1995 were still 18 per cent higher than in the EU in absolute terms. The breakdown of different food types can be examined according to product groups. Figure 5 reveals that prices in Finland are particularly high for drinks, and more specifically in the case of alcoholic drinks. By contrast, fish for example is clearly cheaper in relative terms than in the EU. Milk prices also appear to have fallen below the EU average, and meat and meat products are roughly within the range of the EU levels. Prior to EU accession it was estimated that domestic foods enjoyed a competitive advantage averaging around 9-10 per cent in transport costs compared to the Single Market products (Pasanen, 1997). By taking this into account, a price gap of only 7-8 per cent remains in relative to the European average. It therefore seems that major pressure for adjustment is no longer called for in this sector.

Housing and transport appear to be, as indicated earlier, surprisingly economical in Finland. It should be remembered, however, that these prices were still in a trough as late as 1995, with prices having risen since then so that they are now near the EU average.

The low price of investment would therefore appear to stem mainly from the low cost of construction activities.²¹ The relative prices of equipment and machinery investments are slightly higher than in the EU on average, and their absolute price also exceeds the EU average. Compiling internationally comparable price indices for machinery and equipment is a fairly problematic task, so comparisons in this

²¹ International comparisons on construction costs should be examined with a certain degree of reservation, however.

Figure 5. Relative prices in Finland in 1995, EU15 = 100, GDP = 100



Source: EUROSTAT.

commodity group should be examined with some reservation. It is possible that the higher Finnish prices in this category are partly explained by the high quality of housing in Finland.

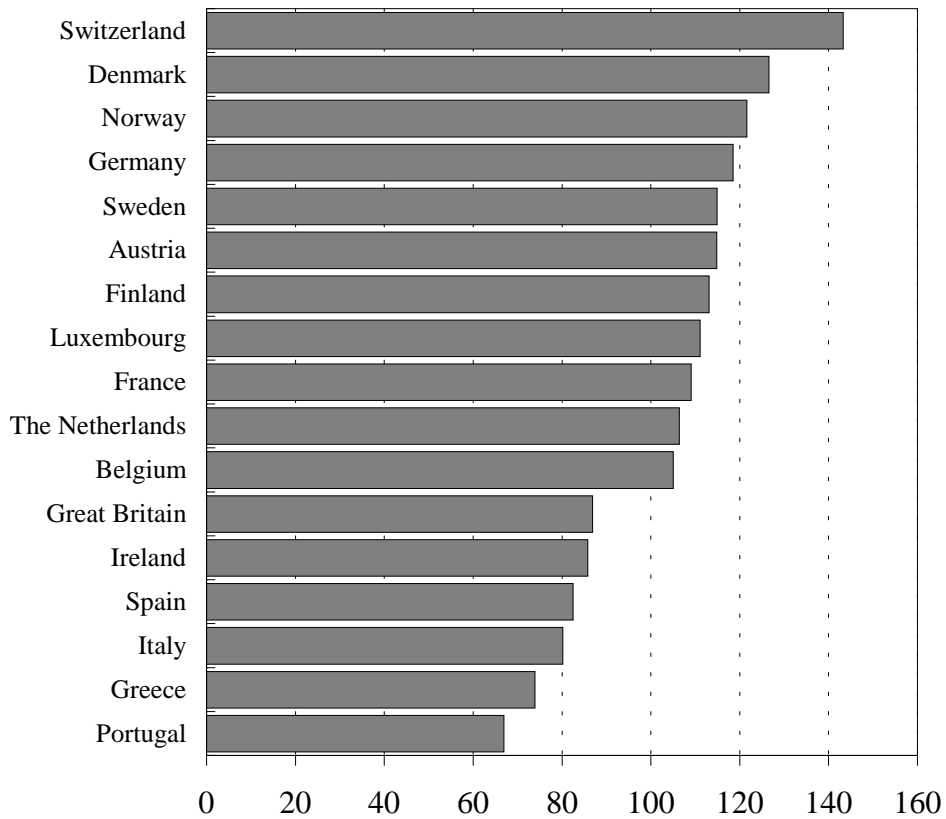
Telecommunications pricing in Finland is also low, as indicated in Figure 5. In light of this fact, some research indicates that the structure of the relative prices in Finland promotes the development of real-term competitive factors in this small open economy. The low relative price of telecommunications and investments are factors that can be said to enhance production technology and product innovations, promoting rapid structural changes dictated by the global economy.

Martin and Rogers examined the role of public infrastructure in the EU (Martin, Rogers 1995). In their view, telecommunications services and education are closely linked to industrial ranking. In fact, these factors would appear to be even more important than infrastructure services in energy and transport. This is an interesting conclusion, as similar studies carried out earlier in Finland indicated that access to telecommunications services was a significant factor.

Finland is currently a moderately costly country

A cross-sectional study of different countries in 1995 (Figure 6) indicates that Finland rated as a 'moderately costly' country, with the price level exceeding the EU average by 13 per cent. Switzerland, Denmark and Norway rank as expensive countries, as they have been historically. Sweden and Finland, instead, have become more "humble," meaning that high prices have fallen substantially. The German-speaking lands have long been costly. Looking further south, the price levels are increasingly cheaper. Greece and Portugal being the poorest of the EU countries, are also the ones with the lowest price levels in the European Union.

Figure 6. *Price level in different countries in 1995, EU = 100 (GDP or all goods and services)*



Source: EUROSTAT.

In conclusion, it can be said that as Finland became less costly on average in the early 1990s compared to the EU average, so the structure of relative prices in Finland converged towards those in the EU. By comparing Table 2 with the structure of relative prices in 1995 illustrated in Figure 4, it can be seen that the structure of relative prices levelled considerably in the course of five years. Prices both at the top and bottom ranges balanced out, both coming closer to the average.

5. Foreign Trade

It is generally believed that while integration promotes trade, it also steers trade flows. An increase in trade (in other words, trade creation) is commonly associated with growth in economic welfare. A key question with regard to welfare effects is whether higher priced EU trade will replace less costly trade flows from the world markets. The question of which course Finnish foreign trade has taken since EU accession is an interesting one.

Based on the traditional view, integration creates more trade between the participant countries (the trade creation effect), while also transferring trade from the rest of the world towards the integrating area (the trade diversion effect). The former effect increases trade when trade barriers (traditionally tariff barriers) are lowered, thus increasing imports within the region from countries of lower cost levels to the countries lowering the tariffs. This consequently promotes economic welfare.

Trade may also flow from the rest of the world toward the integrating area, if the lowering of tariff barriers makes importing within the region more cost-effective than earlier imports from the rest of the world. In such cases, less costly products are replaced by more expensive products. This diminishes welfare world-wide. The overall effect on economic welfare depends on which one of the two effects is more dominant. In light of empirical research, it is commonly acknowledged that the trade creation effect has been the predominant one in EU integration.

No customs barriers have existed within the EU for many years now, and trade barriers outwards are also either zero (for the former EFTA) or fairly low. Hence a third factor affecting trade is generated by the elimination of non-tariff barriers aimed at the creation of single markets.²² If these barriers were lowered, there would be a rise of efficiency in allocation and improved economic welfare. This is indeed one of the main goals of the Single Market Programme²³.

However, newer schools of thought believe that the trade effects of integration depend more on competitive factors. Where the integrating countries already operate under conditions of perfect competition, the impact of the factors of trade creation and diversion actually remains marginal. But where competition is imperfect, new effects can be observed (Krugman 1979).

²² These barriers are classified in the Single Market programme into physical, technical and fiscal trade barriers.

²³ It was estimated in the Cecchini report that the Single Market Programme would raise GDP in the EU by about 5 to 7 per cent.

Firstly, if the volume of profit-yielding activities grows with integration, this allows an increase in pure profits (in imperfect, for example, monopolistic competition, prices will exceed average costs even in the long term).

Secondly, the advantages from economies of scale become feasible. Increasing the scale of production can result in a fall in average costs, generating in turn greater efficiency and growth in economic welfare. This can also be expressed in terms of returns on the economies of scale.

A third effect brought about by imperfect competition arises when product variety becomes broader. In an environment of imperfect competition, product differentiation is a typical feature, and the consumer stands to gain if, as a result of integration, the variety of products available becomes more diversified. A good example of this in Finland is the expansion in the product range of wines provided by ALKO (the monopoly retail seller of the alcoholic beverages) as competition grew fiercer.

The allocation gains derived from integration are estimated to be greater if the markets are originally imperfectly competitive. In Finland the wide dispersion in relative prices can be construed as an indication of imperfect competition. Reduced dispersion thus indicates increased competition and consequently more effective allocation.

The gains brought about by more effective allocation are static, arising when resources in less profitable sectors switch to sectors of better profitability. If the position is from the outset close to being perfectly competitive, then the allocation gains remain by definition minimal. It is for this reason that numerous empirical studies have shown allocation gains to be minimal. Thus, the degree of imperfect competition potentially increases allocation gains²⁴.

Dynamic gains in growth brought about by capital formation (growth in wealth) can be construed as considerably more significant than static allocation gains. Based on empirical simulation models, such gains may in fact be many times greater than static gains (Baldwin, Francois & Portes, 1997).

Growth advantages arise, for example, when risk premiums on interest rates are reduced by integration. This was deemed a significant factor in Finland, as statistical data indicates that historically Finnish interest rates are higher than German ones. But the extent to which high Finnish interest rates depend on inflation and to what degree they depend on the risk premium is naturally difficult to evaluate accurately. However, even minor adjustments in interest rates can

²⁴ On the basis of the broad price dispersion before EU accession it was possible to estimate that the potential allocation gains from integration would be greater than in other countries.

generate major changes in capital stock. Without these accumulation differences it becomes difficult to explain, for example, the existing wide and growing difference in living standards between the developed and developing countries. Thus, the crucial question is to what extent a lower interest rate risk premium can generate future investment in Finland.²⁵

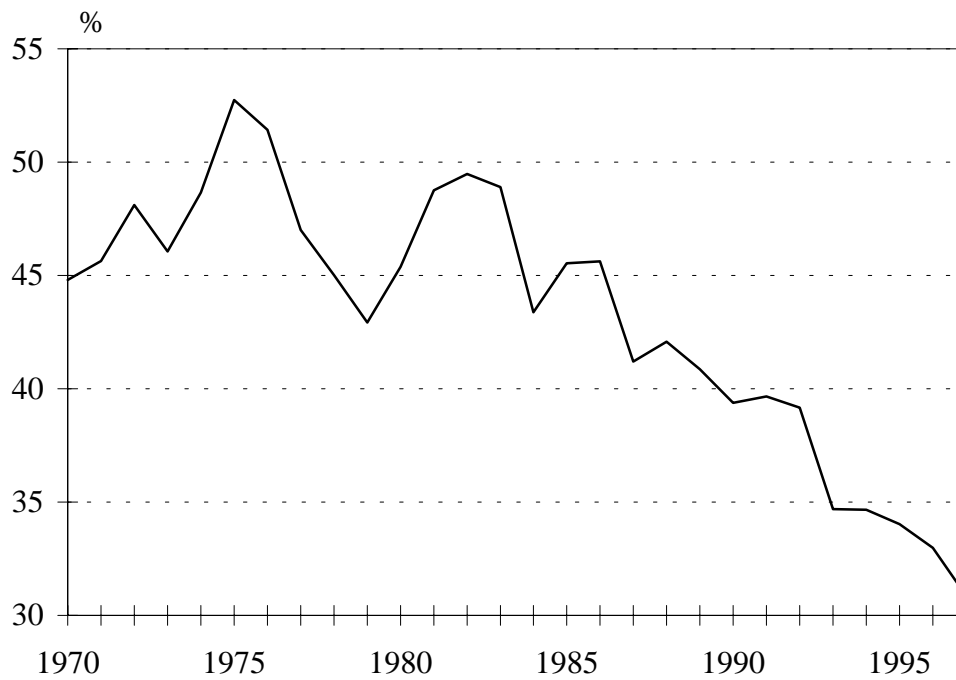
To counterbalance the growth advantages, globalisation results in increasingly more mobile production capital. Quick shifts in production capital from one country to another can cause disruption in local employment environments, and the risk of greater concentration of capital in certain regions also rises (cf. Chapter 6 for more details).

Greater regional diversion in Finnish exports

Finnish export trade between 1970 and 1995 was focussed on a certain number of partner countries, with the share of the three main partners of Finnish exports (Figure 7) having fallen dramatically. At its highest level (in 1975) over the period examined, the share was over 50 per cent of total exports. At the time, the main export partners were the Soviet Union, Sweden and Britain. By 1997, exports diversified to such an extent that the three main export partners only accounted for a little over 30 per cent of total Finnish exports. Germany, Sweden and Britain were now the main export partners, but the share of the most important trading partner, Germany, was a mere 12 per cent. This marks a substantial change compared to the early 1980s, when the share of the then major export partner, the Soviet Union, in overall Finnish exports, was a full 25 per cent.

²⁵ A recent Swedish study (M. Henrekson, J. Torstensson and R. Torstensson, 1997) concludes that the impact increase in the EU growth rate is as much as 0.6 to 0.8 percentage points, which has a very strong effect indeed.

Figure 7. *Share of three main export partners in Finnish exports in 1970-1995*

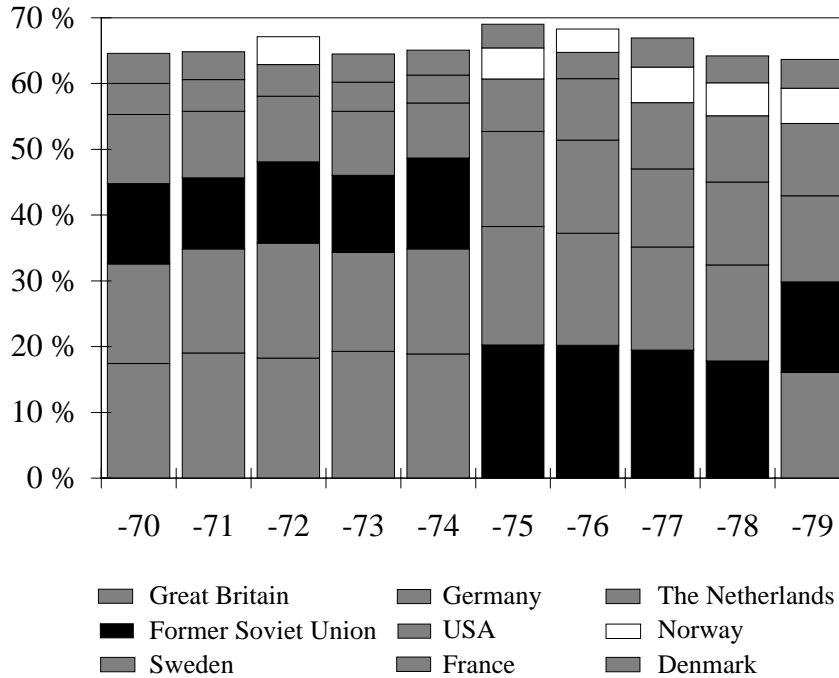


Source: ULTIKA.

From a British era to a German period

During the past 25 years altogether 10 countries have been among the six main export partners in Finnish exports (Figure 8). The early 1970s saw the end of a long period of trade with Britain. In 1975 the Soviet Union took over as the main export partner, and the 1980s can well be termed the era of Soviet trade, with the oil crises and bilateral trade playing key roles. Geographically, with the sole exception of the United States, all main trading partners have been located close to Finland.

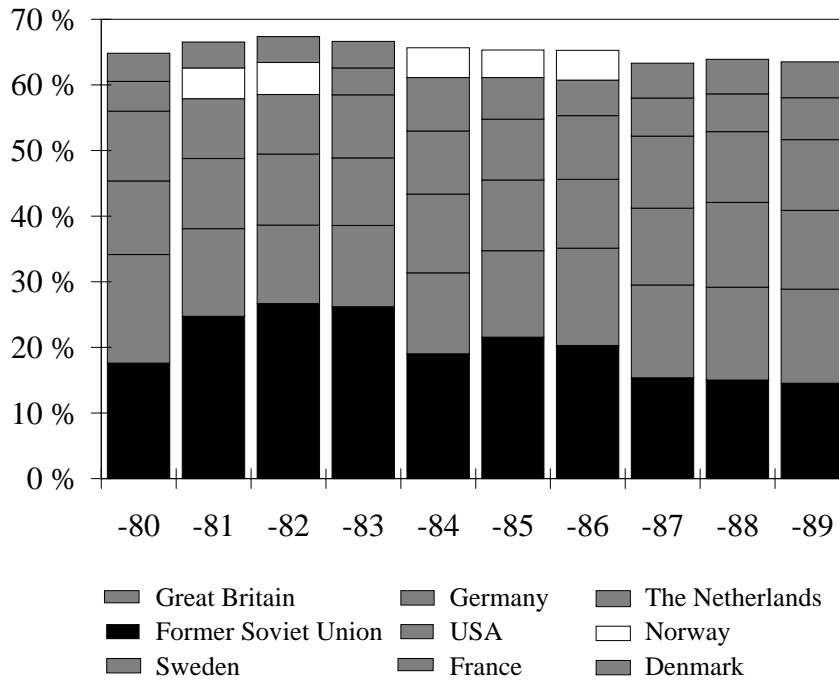
Figure 8a. Six most important export countries in 1970-1979, share of Finnish exports



Source: ULTIKA.

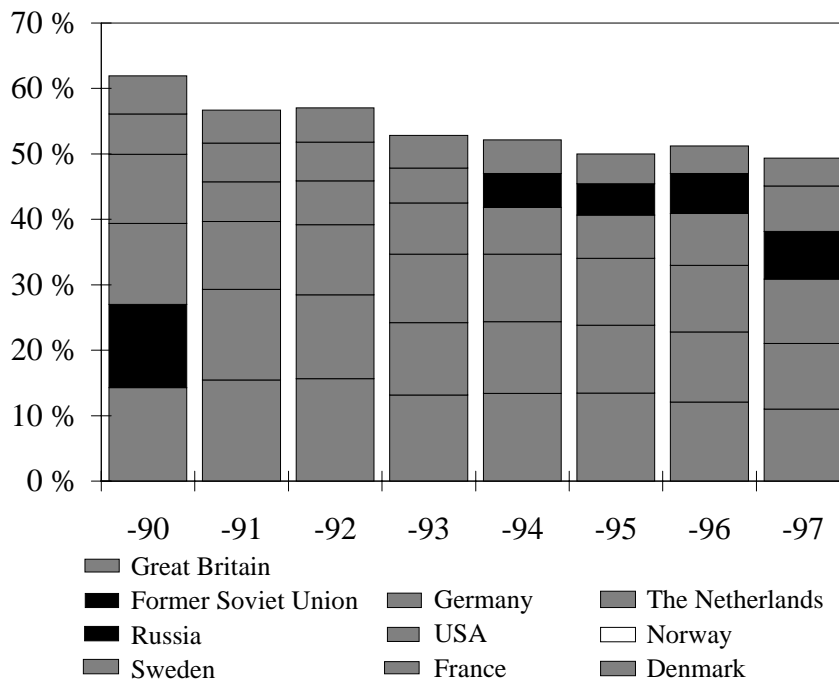
In 1991 Germany became the main trading partner for Finland, but Germany's share never rose above 15 per cent of total exports, having even decreased slightly since. The six main trading partners' share in total Finnish exports has dropped from 70 per cent down to a little over 50 per cent, reflecting also the geographical diversification of Finnish exports. The only major non-European trading partner is the United States.

Figure 8b. Six most important export countries in 1980-1989, share of Finnish exports



Source: ULTIKA.

Figure 8c. Six most important export countries in 1990-1997, share of Finnish exports



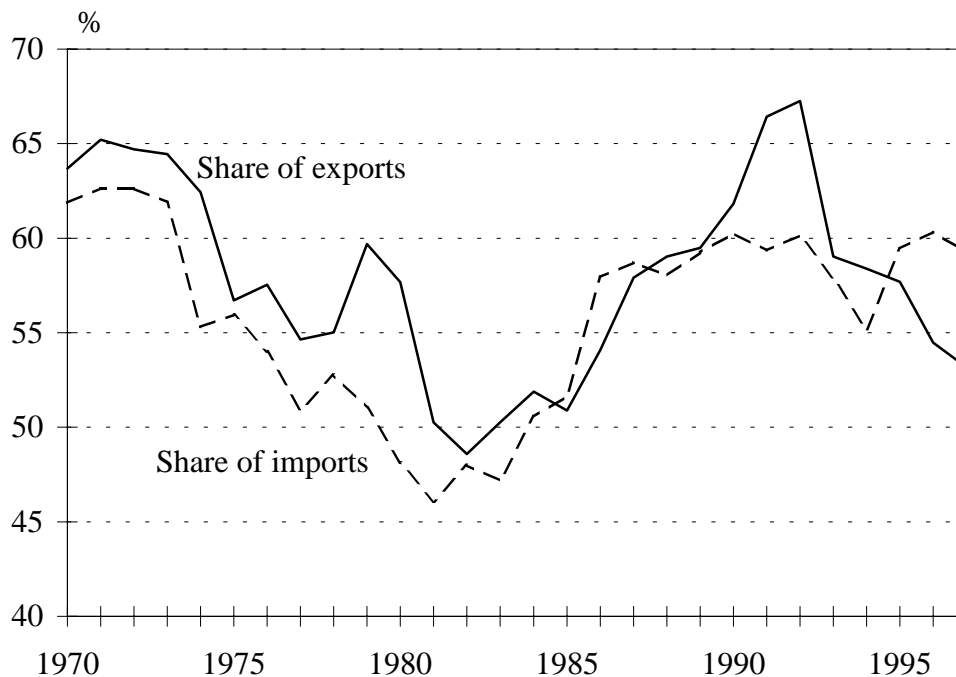
Source: ULTIKA.

EU share in Finnish exports down in the 1990s

The share of the EU countries in Finnish exports accounted for about two thirds of overall exports both in the 1970s and in the early 1990s (Figure 9). The EU's share decreased between 1973 and 1982 as the share of the Soviet Union increased owing to the oil crises. In the 1980s, as eastern trade contracted, exports to the EU picked up again. But, perhaps somewhat surprisingly, in the first half of the 1990s the EU's share in Finnish exports decreased. The share of Finnish imports from the EU, instead, remained almost unchanged between 1986 and 1997. Did EU membership thus fail to increase (contrary to expectations) trade with the EU?

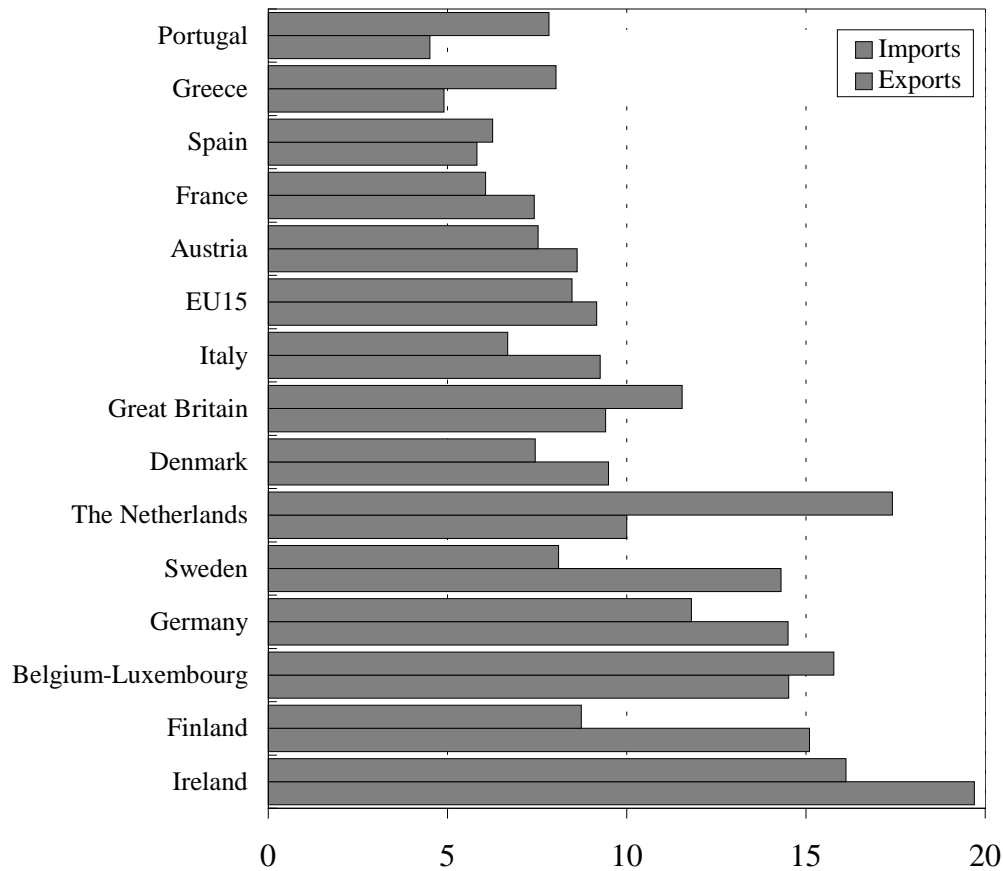
The below elasticity study gives some of the reasons for the decrease in the share of the EU in Finnish exports in the recent past. Economic growth in Europe has been slow and imports from the EU have increased slower than world trade growth, while simultaneously growth in Finland's overall exports has been very robust. But with economic developments in Europe recovering, the effects of the Single Market Programme accumulating, and integration advancing, it can be assumed that the share of the EU in Finnish exports will start rising again. The creation of EMU will undoubtedly also convert trade within the internal market into a more appealing alternative.

Figure 9. *EU15's share in Finland's foreign trade in 1970-1997*



Source: ULTIKA.

Figure 10. Exports and imports to third countries in 1996, share of GDP



Source: EUROSTAT.

Among the current EU countries, a distinctive characteristic in Finland's foreign trade is the high proportion of trade with third countries, as illustrated in Figure 10. Finland ranks second after Ireland when examining the volumes of exports to third countries.

The strong economic growth in Asia influenced the course taken in Finnish foreign trade in the 1990s, directing Finnish exports to the Asian markets to a greater degree than before. A number of those opposed to EU membership during the debate on accession in fact advocated that Finland should specialise in the Asian markets as an alternative strategy to accession to the EU.

The degree of openness on the world markets has increased since the 1980s. While elasticity in exports relative to world GDP amounted to 1.24 between 1970 - 1975, it was 1.10 between 1976 - 1982. It increased to 1.55 between 1983 - 1991, and then up to 2.12 between 1992 - 1995 (European Economy No. 63, 1997). This change is the result of greater world trade liberalisation.

As openness in world trade increases, world trade grows faster than GDP. The following table draws a comparison in elasticity between EU and world imports relative to GDP.

Table 3. Import elasticity relative to GDP

	1970-1982	1980-1990	1990-1995
EU	1.6	1.91	2.57
World	1.17	1.58	2.9

Source: OECD National Accounts, European Economy No. 63, 1997.

Table 4. Volume growth in imports and GDP, annual percentage

	Imports		GDP	
	1980-1990	1990-1995	1980-1990	1990-1995
China	10.0	24.8	10.2	12.8
Japan	6.5	4.0	4.0	1.0
Taiwan	12.8	14.1	-	-
Thailand	12.1	12.7	7.6	8.4
Malaysia	6.0	15.7	5.2	8.7
Republic of Korea	11.2	7.7	9.4	7.2
Hong Kong	6.9	5.6	11.0	15.8
Singapore	6.4	8.7	8.6	12.1
Total of above	7.9	9.3	7.6	7.8
EU	4.4	3.6	2.3	1.4
World	4.9	5.8	3.1	2.0

Source: World Bank, World Development Report 1997, OECD National Accounts.

Strengthened trade with EU in the 1990s despite lower exports share

Altogether 67 per cent of total Finnish exports went to the EU in 1992, which was in fact the peak year during the period under review. Since then the EU share has been falling. In the 1980s, a certain type of introversion took place in the Finnish economy, as illustrated in Table 5, when foreign trade grew slower than GDP. During the 1990s, exports to south east Asia have increased four-fold compared to Finnish exports to the EU, and even exports to the EU have grown at almost the same rate as overall Finnish exports. In the 1980s exports to the EU grew faster than total Finnish exports.

Table 5. Growth percentages in Finnish foreign trade volumes, annual percentages

	1980-1990	1990-1995
Finland's total exports	2.2	8.0
Finland's total imports	3.9	1.5
GDP in Finland	3.1	-0.7
Finland's exports to south-east Asia	10.7	24.3
Finland's exports to the EU	2.9	6.6

In the late 1970s, the share of Finland's exports to south east Asia amounted to a mere 1 per cent, growing to 4 per cent in 1987 and to 8 per cent by 1994. Between 1994 and 1997 (January to June) the share remained at 8 per cent, suggesting a deceleration in growth. Exports to south-east Asia thus reached the same level as exports to the United States, the United States being the fourth most important export partner for Finland in the 1990s. Correspondingly, by 1997 exports to Russia amounted to 7 per cent.

In order to study the impact of EU membership on Finnish foreign trade, Finnish export flows are analysed below in light of a simple elasticity study.

Table 6. Elasticity in Finnish exports

Finnish export elasticity	1980-1990	1990-1995
Relative to GDP		
Finland	0.71	..
EU	1.26	4.71
South-east Asia	1.41	3.11
World wide	0.71	4.00
Relative to import markets		
EU	0.66	1.83
South-east Asia	1.35	2.61
World wide	0.45	1.38

In the 1980s Finnish export elasticity relative to GDP was only 0.71, thus export growth was slower than GDP. Finnish export elasticity both in ratio to GDP (0.71) and in ratio to Finland's export markets, in other words relative to world wide imports (0.45), was below one (Table 6). Openness in the Finnish economy clearly decreased in the 1980s. The 1990s saw a change in course, with Finnish exports growing faster than world GDP, but also faster than world trade (elasticity at 1.38).

Elasticity in Finland's exports has been greater in the 1990s with respect to the Southeast Asian import markets than EU imports (2.61 and 1.83 respectively). In these terms, the growth in market shares has been stronger for Asia than for Europe. Forty per cent of the growth in Finnish exports to Asia was an increase in import markets while 60 per cent was growth in the Finnish market share in Asia. Indeed, imports from Southeast Asian countries have risen at an annual rate of about 10 per cent throughout the 1990s.

The slow economic growth in the EU in the early 1990s is also reflected in a fall in the share of Finnish exports. Adjusted for the slow growth effect, however, Finnish trade has grown strongly in the direction of the EU region. Export elasticity relative to the EU markets has increased almost three-fold (from 0.66 to 1.83). Exports to Southeast Asia cannot, therefore, be said to have displaced exports to the EU. Finland's recovery in exports after the collapse of the early 1990s has been very rapid, not to say exceptional, in other respects too, as markets around the world have been conquered. In the long term, however, the matters that are of consequence are the economic developments in the EU and neighbouring countries. The strong growth in exports to Russia will become unsustainable if economic developments in Russia fail to proceed more favourably. Likewise, the economic outlook in the EU, our main export area, is crucial in the long range for Finnish exports as well as for economic prospects in Finland.

Significance of intra-industrial trade increases

A recent study on intra-EU foreign trade developments clearly indicates that between 1980 and 1994 intra-sector trade was the strongest growing area of trade in the EU²⁶, whereas trade across sectors based on sectoral specialisation continues to lose weight in intra-EU trade.

It was already concluded in Finland at the time when EU membership was being considered that intra-sectoral trade, in other words intra-industrial trade from Finland to other European countries, is fairly minimal (source: Government Institute for Economic Research 1992, p.41). It was thus assumed that a good potential for specialisation and expansion awaited Finland. This potential can be realised if Finnish producers manage to become a part of the expanding European network of subcontracting--despite the geographical handicap of Finland's distance from the rest of Europe. However, it would appear that this element of distance has not completely removed the potential that exists in developing intra-industrial trade.

²⁶ Fontagné, Freudenberg and Péridy, 1997.

6. Direct Investment, Adjustment of Production Structures and Regional Centralisation

Income flows to and from a country have a substantial impact on the nation's living standards in the long term. One major concern in the Nordic countries related to integration, as perhaps also in other peripheral EU countries, is whether integration will result in a greater degree of capital outflow and increased centralisation on the European scale.

Thus far no conclusive answer to this question has been offered. If we examine Ireland's experience, for example, we see that it was not until after EU accession that the continuous downward spiral of the economy and migration outflow in Ireland ceased. In fact, Ireland is a recipient of both large EU income transfers and individual direct investments. But there has been a price to pay; as illustrated in Figure 11, GDP in Ireland currently exceeds GNI by 10 per cent. In other words, the country produces 10 per cent more income than the residents receive in the form of income revenue. This is largely explained by direct investments made in Ireland, in which part of the GDP shifts abroad in the form of income along with profits.

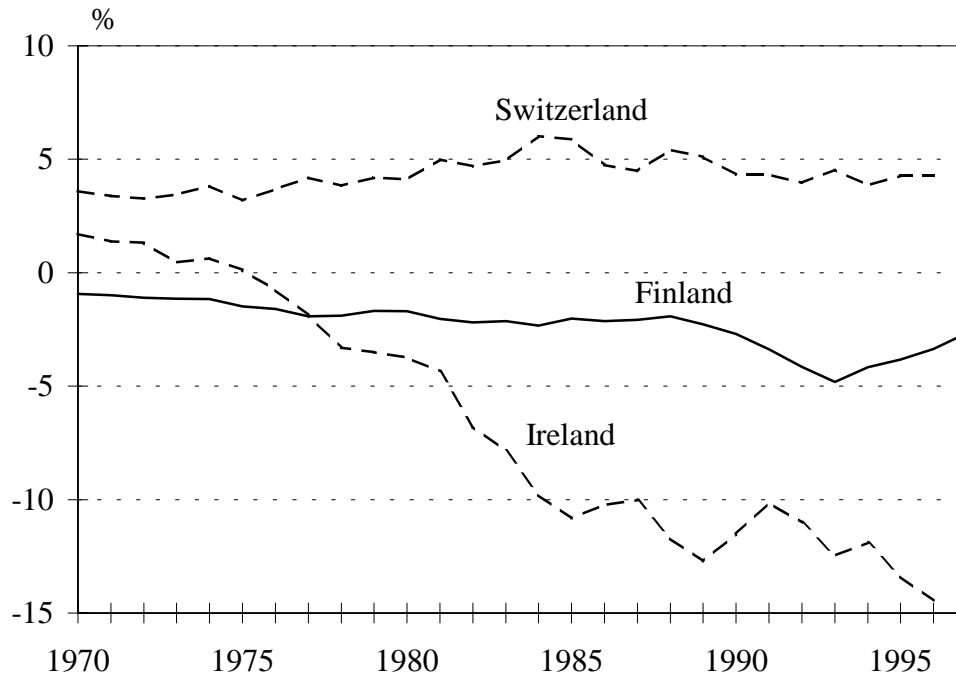
For comparison, it is worth noting that the exact opposite holds true for Switzerland, where GNI is about 4 per cent higher than GDP. This is naturally the fruit of long standing economic policy, through which Switzerland has attracted profitable foreign investment and now enjoys considerable profits.

Conversely, Finland is taking a course that looks grim (see figure 11); GDP already exceeds GNI, meaning more incomes are disbursed abroad than are received from abroad. This is partly explained by the recent increases in foreign debt, whose servicing is likely to burden the Finnish economy for years to come. Unfortunately, Finland has not succeeded in investing abroad in a way that the investments yield greater consumer gains on the domestic front. This flow of direct foreign investment also remains an undeniably major challenge in the Finnish economy.

The direction of net flows of direct investments is leaving Finland. The influence of the EU is clearly visible in this context: in the 1980s the net flow of investments from Finland went primarily beyond the EU, whereas in the 1990s a distinct change occurred – the share of the EU countries in the net flow of investments clearly increased.²⁷ In 1996, however, the share of non-EU countries rose above that of the EU again.

²⁷ This is partly influenced by the fact that Sweden, where a substantial amount of Finnish investment occurs, became an EU country instead of a third country.

Figure 11. *Factor incomes from abroad, net, % of GDP*



Source: OECD.

Developments in the production structure and future comparative advantages

According to analyses by Victor Norman and Jan Haaland in Norway, it would appear that the future comparative advantages of the Nordic countries are related to the production of high-tech products. Economies of scale are not necessarily the crucial factor in the production of such goods (Haaland, Norman 1995).

Table 7. *Production structure: distribution of value added in the manufacturing industry, per cent*

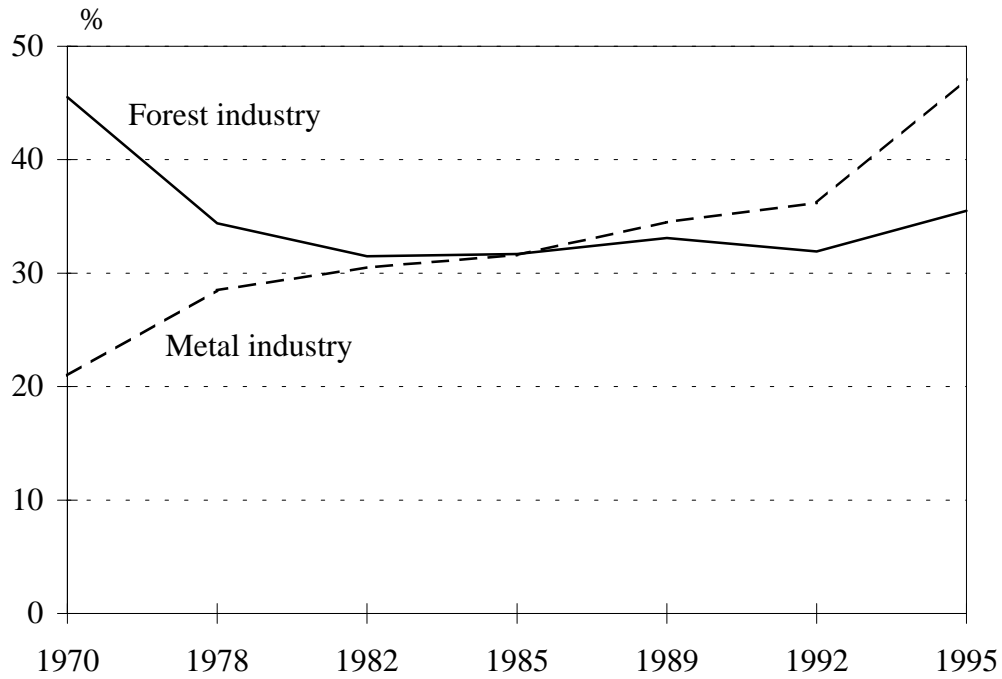
	1960	1980	1990	1995
Forest industry	31	31	27	31
Metal industry	29	31	38	41
- electrical industry	4	6	9	13
other manufacturing industry	40	39	38	28
Manufacturing industry, total	100	100	100	100

Indeed, the Finnish economy seems to have adopted this viewpoint. The production structure of the Finnish manufacturing industry has undergone rapid changes in the 1990s; between 1986 and 1996 the electronics and electricity industry grew by an annual rate of 14 per cent, while the textile industry fell by an annual average of 7 per cent.

The metal industry superseded the forest industry both as a source of gross export revenue in the mid-1980s and then as a source of net export revenue only in the early 1990s (see Figures 12a and 12b, Alajääskö, 1996). One company has made the greatest contribution to these developments, namely Nokia. With the significance of natural resource-intensive sectors declining, Finland is now on the same competitive playing field as the rest of Europe. This leads us to conclude that it will no longer be capable of maintaining as high a price level as before relative to competing countries.

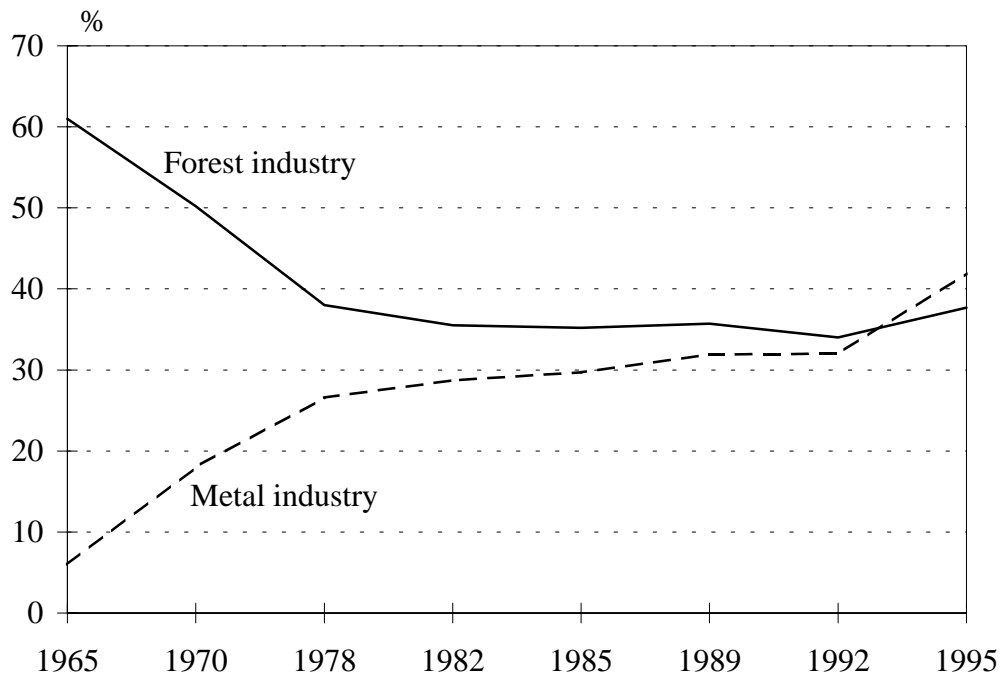
The construction materials industry is also a member of the contracting sector category. The share of GDP for the electricity and electronics industry, instead, is nearly the same as in the pulp and paper industry. A decreasing share of domestic demand in consumer and investment goods is satisfied by domestic supply, and the share of the added value made by the home market has decreased. The share of the forest industry in value added industry has remained unchanged. This is more an indication of strong specialisation in export production than a sign of slow structural changes. The share of the metal industry in both valued added manufacturing and in exports has increased rapidly, especially over the past 10 years, and growth in the electricity industry has been exceptionally fast.

Figure 12a. *Share of forest and metal industry in total exports*



Source: Alajääskö (1996).

Figure 12b. *Share of forest and metal industry in net exports*



Source: Alajääskö (1996).

It would appear at present that, in the case of Finland, the above evaluation by Norman and Haaland is at least a fair one: the share of high-tech exports in overall Finnish exports has grown fast in the 1990s. For the moment it appears that Finland is specialising according to the basic principles of labour distribution outlined by Norman and Haaland. Finland has proceeded hand in hand with advanced high technology by necessarily depending on both a sound infrastructure and institutions that are reliable and efficient. Therefore, is Finland attractive to investment in high-tech components? Answers to this question have been sought in a joint project by the Ministry of Finance and the Government Institute for Economic Research, where individual competitive factors and strengths in the Finnish economy were analysed.

Changing regional developments

As part of the process of economic development, the movement of population and production activities to the same locations, as well as urbanisation, have become permanent structural features not only in Finland but also in other highly industrialised countries. The regional concentration of the population and production activities in Finland actually gained momentum at a later date than in most other European countries, and it has not evolved as far as elsewhere. The centre of gravity in population and production activities has shifted from the rest of Finland to the Province of Uusimaa, notably to the capital city region. The growth pattern is such that, in times of robust economic growth, production in the capital city region grows much faster than in the rest of the country, whereas in times of poor economic growth no marked differences are observed in regional growth patterns. Changes in prices and wages, by contrast, have developed continuously along the same lines throughout the country.

The share of the Province of Uusimaa in total value added grew from the 25.0 per cent recorded in 1960 to 32.8 per cent in 1994. The only other province in Finland with a higher share in value added in 1994 compared to 1960 was the Province of Oulu. The share of the population in the Province of Uusimaa rose from 18.7 per cent in 1960 to 25.7 per cent in 1994. The size of the population in the Provinces of Turku, Pori and Häme also exceeded the 1960 level in 1994, whereas elsewhere the percentages were lower.

A number of studies have been published on the differences in regional growth in Finland. Kangasharju, using taxable income per capita in each municipality, concluded that differences between the regions (88 in all) diminished during 1938-1993 (Kangasharju 1996). He observed that the lower the initial level of income, the faster the narrowing of the difference with the richest municipality (Helsinki in this case). The narrowing of this gap became especially apparent

after the mid-1960s. Using material on individual provinces, Okko analysed the growth differential in value added per capita between 1970 and 1990, indicating that notably the growth differentials between Uusimaa and the rest of the provinces had narrowed (Okko 1995).

According to comparisons internationally between Finland and other EU countries, internal regional differences and regional developments between 1983 and 1993 are apparent in the first cohesion report of the EU Commission (EU Commission 1996). The report indicated that regional differences in Finland on the NUTS2 level (6 regions in Finland, 206 regions in the whole of the EU) saw a slight increase after 1983, but these differences took a downward turn during the recession in 1990. In the 1990s, regional differences were greater in Finland than in Sweden, the Netherlands, Greece and Spain, but smaller than in many other countries. The results show that while differences across the 15 EU countries have diminished, regional differences in the whole of the EU area remained roughly unchanged between 1983 and 1993. The number and size of regions in the whole of the EU and within individual Member States naturally affect these differences so that the larger the regional units, the smaller the differences.

Regional developments are structurally characterised by urbanisation. Various studies indicate that there is a clear link between urbanisation and economic growth. Metropolitan environments highlight a number of aggregated advantages in production (e.g., outsourcing, networking, economies of scale, etc.). Thus urbanised areas are becoming more appealing despite the negative outsourcing effects. In Finland, as elsewhere, both production activities and the population are increasingly located in urban centres, especially in the capital city region. The share of urban population in Finland nonetheless remains one of the lowest in the EU, being for example considerably lower than in Sweden.

Population movements into regional centres have been consistently higher than outward migration. In other words, net migration into regional centres has been positive. This population growth from the mid-1950s to the early 1970s amounted to an annual average of about 20,000 people, but it generally fell in the mid-1970s to well below 10,000 people on average. In the past few years this inward migration into regional centres has picked up again.

Company location decisions, active migration, and wages have not completely eliminated regional unemployment differentials, although migration particularly made the greatest contribution to eliminate the regional differences. These regional unemployment differentials in Finland appear to prevail year after year.

The income level per capita is highest in the capital city region, while elsewhere in southern Finland the income level is close to the national average. The income level in central and northern Finland, instead, is considerably lower than in the

south. However, taxation and income transfers strongly offset regional differences. Thus, the per capita income differences across regions in terms of household disposable income are substantially less pronounced than in terms of factor incomes.

Regional per capita income differentials from the 1970s to the 1990s as calculated in terms of both incomes and household disposable income have decreased. Regional income differentials saw a substantial fall in the 1970s, especially in the early years of the decade, while in the 1980s the differentials remained virtually unchanged. The early 1990s brought about changes again; regional differences in factor incomes have increased somewhat, whereas differences in disposable income have continued to narrow even further due to more stringent taxation among other things.

Thus, when examined on a rough regional scale, it can be seen that Finland exhibits clear regional cohesion in terms of per capita income levels, while both production activities and the population are concentrated in the capital city area and other regional centres in the country. Yet in the final analysis, the demographic structures of the different regions and the tax and income transfer policies practised by the public sector have mitigated regional differences (Loikkanen, Laakso and Sullström 1997).

7. Taxation

Tax harmonisation

Tax harmonisation issues in the EU can be classified into 6 categories:

1. Indirect tax harmonisation (VAT, excise duties)
2. Tax harmonisation of interest income
3. Harmonisation of corporate income taxation
4. Harmonisation of transport taxes
5. Harmonisation of environmental taxes
6. Harmonisation of stamp duties.²⁸

Personal income taxation and social security contributions do not fall within the scope of tax harmonisation. Regulations on personal income taxes need to be harmonised only to the extent to which there is labour mobility across national borders when decisions are needed in selecting which country's tax regulations are applied in each case. The budgets of different Member States also include a number of miscellaneous taxes and duties that do not fall within the scope of harmonisation.

The Treaty of Rome supplies an important tax principle for EU Member States: no Member State may impose on citizens and companies of other Member States internal taxation of any kind in excess of that imposed on their own citizens and companies. Tax discrimination is not permissible.

²⁸ The harmonisation involves the following main objectives:

- The main goal in the harmonisation of indirect taxation is to abolish customs control on all frontiers of the EU countries in accordance with the Single Market Programme on 1 January 1993. Indirect taxation comprises both VAT and excise duties. Excises duties to be harmonised consist of alcohol, tobacco and oil products.
- Harmonisation of taxes collected on interest rates aims to minimise distortions in capital movements once total liberalisation becomes effective on 1 July 1990. Tax harmonisation of capital income the EU has listed the harmonisation of interest rate taxation a top priority because differences are in this case substantial between Member States. The taxation of dividend income is more uniform and it is deemed that this issue is best resolved in the context of the harmonisation of corporate taxation.
- The harmonisation of corporate taxation aims on the one hand to tax the income of multinational companies only once and on the other hand to place company rearrangements occurring across national borders (mergers, spin-offs, etc.) on an equal footing with similar rearrangements within one country. By this means taxation would not be an obstacle to the formation of efficient businesses.
- The harmonisation of transport aims to abolish distortions caused by taxation on the transport markets and to finance the construction of traffic networks.
- Environmental taxation forms the most recent form of tax harmonisation, where a joint energy carbon dioxide duty aims to curb growth in carbon dioxide emissions.
- The harmonisation of stamp duty is limited to the abolition of the transfer duty on securities.

Tax harmonisation becomes necessary where differences in the tax levels, tax legislation, and tax practices in the Member States become too pronounced from the viewpoint of the internal market. Currently, tax competition is considered an alternative to tax harmonisation.

In evaluating the financial impact of EU membership on Finland, it was assumed that the most substantial effects would occur in excise duties. Tax receipts from excise duties would, as a result of tax harmonisation, fall by over FIM 10 billion. However, if accession generated sufficient economic growth in Finland, it was believed that these tax losses could be recovered in the long term.

Changes in taxation in Finland following accession

Although VAT legislation in Finland (as revised in early 1994) was largely harmonised already with EU practices, it did not fully comply with EU directives. Amendments have since made Finnish VAT legislation compatible with EU directives. The major changes involved adjustment to the Community Trade Acts as well as to the tax treatment of foodstuffs and primary producers. The changes in taxes levied on foodstuffs and primary producers as well as the tax system for the Single Market all entered into force upon accession to the EU.

The system of foodstuff tax deductions for primary products was abolished so that primary producers became subject to VAT. The sale of self-picked wild berries and mushrooms was made tax-exempt. The tax rate for foodstuffs was originally imposed at 12 per cent, with the exception of the years 1995, 1996 and 1997, when a tax rate of 17 per cent was levied. It has since been proposed in a proposal in parliament (HE 111/1997) that the 17 per cent tax rate for foodstuffs be made permanent. A 22 per cent tax rate was applied to canteen and restaurant meals. Owing to the fall in the prices of agricultural products, the effects of a 17 per cent tax rate on VAT receipts is difficult to estimate. Although compared to a tax rate of 22 per cent, the 17 per cent tax rate was estimated to reduce VAT receipts by FIM 2.1 billion.

Taxes on corporate trade between companies were changed to taxes levied in the country of domicile (the 'temporary system'). VAT levies on corporate sales to consumers were based on the country-of-origin principle, under which private persons purchasing goods in other Member States paid VAT in the country of the vendor according to the VAT rates of that country--without having to pay taxes in the country of residence. In the case of mail orders and other distance sales as well as trade by means of transport and purchases through tax-exempt businesses and legal entities, special procedures based on the country-of-destination were adopted.

The introduction of the temporary tax system had an impact on the financial position of government and businesses alike. Costs incurred by businesses became lighter because the funding needed for duties on imports was no longer necessary. By contrast, the financial position of the government deteriorated as VAT levied on imports accrued with a lag of 45 days on average. Switching from tax levies at the point of import to the time of tax declaration was estimated to cost the government about FIM 150 million in lost annual interest. The shift of the settlement period by an average of one and a half months reduced the annual accrual in the year the reform was introduced, with the a one time impact of the reform on public finances in 1995 amounting to a decrease of approximately FIM 1.8 billion.

In the same connection, the settlement period of all taxpayers was cut by 20 days, estimated to compensate for the FIM 150 million losses to the State caused by the delay in taxes withheld on imports. The interest gain to the State from the shorter settlement period was evaluated at roughly FIM 180 million annually.

Along with EU accession, VAT was also harmonised together with the tax treatment of foods and primary products by introducing numerous legislative changes in the substantive provisions of law, of which a number had a major impact on state tax revenue. Indigenous fuels and natural gas were no longer subsidised through VAT, and transferable installation fees of corporations supplying electricity, water and district heating became subject to tax. Other substantive changes were made related to VAT and adjustments in reduced tax rates whose significance to government finances was marginal. All these changes broadened the VAT base but had an impact on state tax revenue only after some delay.

An easing in the transition period to the value added tax system also lowered VAT revenue. A retroactive deduction allowance on turnover tax was granted to some service sectors on investments made in 1993-1994. Tax rebates on these were paid in two installments, the latter in early 1995 when it affected the VAT accrual gradually over the span of the first six months with the overall impact being estimated at FIM 2.4 billion.

Legislation on excise duties underwent a comprehensive reform to correspond to the harmonised excise duty regulations of the EU. Alcohol and alcoholic drinks, tobacco and mineral oils with common tax bases and minimum tax levels all fall within the sphere of the harmonised excise duty system of the EU. However, Member States have the right to levy, in addition to the harmonised excise duties, national excise duties under certain conditions.

Excise duties levied on sweets and soft drinks and disposable packs of several types of beverages were extended after minor alterations. In the case of energy

sources, the taxation of coal, peat, natural gas, import electricity and electricity generated by nuclear as well as hydraulic power also remained effective.

With regard to adjustments in the excise duty system, taxes levied on cigarettes were raised slightly. The tax structure of alcoholic drinks was modified so that taxes on so-called intermediate products (e.g., strong wines) were collected on the basis of quantity instead of the alcohol content of the drinks, as was done earlier. In the membership negotiations, Finland was granted a separate transition period on the quota restrictions on alcohol brought by tourists. This derogation was initially effective until the end of 1996, but has since been extended until the end of 2003. As a result, it has not yet been necessary to lower the tax rates on alcohol to the anticipated level.

Following Finland's accession to the EU, the collection of customs duties was transferred to the EU. In practice Finland collects customs duties directly for the EU and receives a collection fee which is then entered into state revenue. During the transition period of 1995-1997, Finland received a gradually declining sum based on the differential between the national and EU customs tariffs. Import charges are also levied by the EU.

Regulations on fuel duties were divided into two separate acts: harmonised legislation on the tax base of excise duties on liquid fuels, and legislation on other fuels pertaining to excise duties imposed on certain energy sources. The tax base in liquid fuels became slightly broader, but has little impact on the national economy.

Together with the non-recurring tax losses, tax revenue has, as a result of the transition to VAT, fallen in foods by a full FIM 2 billion compared to the imputed full tax rate. With taxes on alcohol not having been eased yet, the majority of the anticipated reductions in the excise duty receipts have been postponed.

Development outlook

Harmonisation has become essential because the alternative, tax competition, might impose a risk to the accrual in tax revenue. On the other hand, the tax restraining effect of tax competition is generally construed as a positive factor for economic growth.

The decisions by the EU nations to pursue tight fiscal sovereignty and slow progress in tax harmonisation are gradually leading to a transfer of power from national budgets to the markets through tax competition. By initiative of the European Commission (1996a), the goals now being endorsed for closer tax policy co-operation between the Member States are (1) stabilisation of tax

receipts, (2) the securing of the Single Market Programme, and (3) the promotion of employment. The principal concept is to improve tax competitiveness, particularly for the operating conditions of small and medium-sized enterprises (SMEs), which hold a key role in employment on these markets of 350 million consumers. The aim is to achieve this by means of a comprehensive reform of the value-added tax system. It remains to be seen whether the new code of conduct in tax policy has some effect in the future on tax competition.

Free movement of capital also remains one of the fundamental principles in the EU. By introducing a single currency in the EU, greater free movement of capital can be achieved because this eliminates the exchange rate risk. SMEs, for whom protection against exchange rate fluctuations is more costly in relative terms than for large companies, would no longer face the same degree of risk. Thus, SMEs stand to gain the most from the reduction in the exchange rate risk.

Interest rates on free capital markets are dictated by international monetary markets. Liberalisation has placed the EU nations in unequal positions, however, as both the country-specific risks and decreased liquidity of capital markets raise the interest rates in small, border states of the EU above the international average. This is one reason for keeping the level of capital taxes in these countries lower than in the stronger core Member States of the EU. Conversely, this development trend has accelerated tax competition in capital and corporate income.

Competition in corporate income taxes has also been favoured by business interests. According to a survey by the European Commission, a low nominal corporate tax rate is, from the viewpoint of companies, still a more attractive tax incentive than many company support systems (European Report No. 2148). Owing to the diverse interests of the Member States, the harmonisation of corporate and capital income taxation has not progressed, despite numerous initiatives by the EU. These include the harmonisation of the taxation of interest income and the establishment of minimum thresholds for corporate income tax rates (Myhrman et al., 1995).

Due to the free movement of capital, labour has been considered a more reliable source of tax revenue than capital and corporate incomes. Indeed, the tax structure in the EU has undergone a clear change. Between 1980 and 1993, taxes levied on labour increased in the whole of the EU by 18 per cent, while capital and corporate income taxes were reduced by 14 per cent. Because of these high tax rates, taxes levied on labour can no longer be increased without risk of erosion in the tax base and a rise in unemployment. Flexibility in indirect taxes also can only take a downward course because value-added taxes and excise duties have already given rise to marked tax evasion and tax speculation in the EU.

Despite greater tax harmonisation in indirect taxes than in the rest of taxation, the tax base in indirect taxes has by no means been immune to erosion. The existing value-added tax system has also created an illusion of independent national taxation because the system ensures the direct accrual of tax receipts in the country of final consumption. In reality the tax authorities of the Member States are unable to supervise VAT where acquisitions and deliveries take place across the country's frontiers.

VAT remains, at present, the area of greatest harmonisation. Let us examine the problems in the current VAT system and present a proposal by the Commission for a system previously known as a 'final' VAT system, but now termed as a 'common' VAT system.

The position in Finland is such that legislation on VAT, effective since June 1994, imposes tax levies on services that were previously tax-exempt, and the tax rate in construction activities is levied at 22 per cent. In accordance with this legislation, the lower tax rate of 12 per cent applies to cinema performances, sports activities, medicines and books. A 6 per cent tax rate is imposed on passenger transport, accommodation services, and on entry fees to cultural and amusement events. Those product groups with a lower tax rate were negotiated in the Finnish EU accession agreement. The VAT rate on foodstuff currently stands at 17 per cent.

The implementation of a common VAT system in the EU has so far failed to proceed according to the design of the Commission. It appears that the reform can only gain momentum once a decision has been reached on which countries are to participate in stage three of the Economic and Monetary Union and in the single currency area. A common system would most likely improve efficiency in the internal market and promote competitiveness in the Member States, as well as remove a number of major loopholes for misappropriation. By this means at least two of the three targets set by the Commission in 1996 would be met, i.e. the stabilisation of tax receipts and the securing of the Single Market Programme. The extent to which the third objective, that of improved employment, can be realised by changes in the system remains difficult to evaluate.

Common environmental taxes within the EU have so far met with little success. The new environmental taxation strategy adopted in Finland, where taxes on raw materials used to generate electricity and heating were abolished, is poorly met by the objectives of ecological tax reforms and the 'double dividend principle'. Nonetheless, the Commission has kept the matter under consideration, processing the earlier draft in spring 1997 into a proposal for a directive. The aim is to proceed by first enacting modest minimum tax thresholds in energy use. While it is inadvisable to raise the total tax burden of businesses and households, by the same token taxes on labour ought to be eased (Rauhanen 1997, Sinko 1997).

8. Eastern Enlargement an Important Issue after EMU

EU enlargement is one issue that is becoming more important as Finland's Presidency approaches. What position should Finland take in this matter? Is enlargement advantageous for Finland?

Although evaluations of Agenda 2000 are no doubt in progress in different parts of the EU, it is still too early to express any strong views on the advantages and disadvantages of eastern enlargement. Studies in Finland on the effects of enlargement are, so far, almost completely lacking, although a number of international estimates on the effects of enlargement have already been made.

Eastern enlargement involves a series of complex questions, with the realisation of EMU only accentuating the complexity of the problems. Countries in central and Eastern Europe may well be ready for membership in the internal market, but the adoption of a single currency currently appears rather unrealistic.

Countries in Eastern Europe are still lacking in many institutional arrangements that are routine in the EU. Democracy is beginning to gain a foothold only in parts of Eastern Europe, as is the implementation of institutions and legislation required by market economies. The European welfare state is still a fairly unfamiliar notion, but enlargement discussions have so far focussed above all on agricultural policy – generally estimated to become very costly for the existing EU Member States.

Richard Baldwin, Joseph Francois and Richard Portes (1997) recently evaluated the costs and benefits of eastern enlargement. Their analysis rested on the assumption that there is a strong correlation between the costs and benefits of enlargement relative to the per capita votes of the present Member States in the Council of Ministers. This analysis suggests that the net costs of 10 East European countries (including Estonia, Latvia and Lithuania) in the EU budget would amount to around ECU 15 billion in 2002. Finland's share would amount to approximately ECU 0.3 billion (Baldwin, Francois, Portes 1997).²⁹

The researchers' view is that enlargement would nonetheless be a very favourable deal to the current EU Member States. Bearing in mind the benefits of membership, overall net costs would be somewhere in the range of zero to ECU 8 billion, below FIM 50 billion in any case. Researchers believe this to be an exceptionally low cost given the historic nature of the challenge of enlargement. After all, the economy is only of instrumental value in the EU, with the ultimate

²⁹ These figures are in many respects still preliminary and subject to numerous revisions.

gains derived in the form of sustained peace and stability in Europe. In the light of this goal, the researchers view it that the costs are minimal.

The estimates indicate that EU membership would be enormously beneficial for the eastern European countries. Even in the most conservative estimates, real GDP in these economies would rise by ECU 2.5 billion. Membership may nevertheless have a substantial impact in lowering the country risks of these economies. Bearing this in mind, the size of the gain would amount to approximately ECU 30 billion. With farm and structural funds transfers included, the size of the gains to these economies falls within a range of ECU 23 billion and ECU 50 billion. Thus, given the fairly low GDP in these countries, the gain at the current level is substantial.

The importance of EU membership to central and eastern European economies could, however, be greater than these figures imply. Adjustment to EU legislation and the EU's *acquis communautaire* may in fact have already accelerated economic growth in these economies, and those countries that have expressed the clearest interest in accession have already acquired significant gains in growth.

Even if we were to consider these researchers optimistic in their estimates of costs and benefits of EU membership, it should be remembered that cutting off central and eastern European countries from European economic co-operation could give rise to new and unpredictable political tension in Europe. Hence there are also strong political reasons for favouring eastern enlargement to ensure peace and stability in Europe.

Thorough and conclusive analysis of eastern enlargement is necessary for Finland. Further discussion and research in this area is still required, and independent judgement by Finland is advocated instead of reliance on analyses carried out abroad, especially since it now seems that Finland would become a net payer if enlargement were to take place.

One of the key issues in Finnish foreign policy could become the support of eastern enlargement of the EU.

9. Summary and Conclusions

This analysis proves that, on the whole, the estimates made thus far on the impact of EU membership have actually been very close to the mark. The overall evaluation of the situation is perhaps obscured by the very serious economic shock--possibly the most serious in our history--experienced in Finland in the early 1990s. That economic crisis in Finland was in no way directly linked to EU membership.

We have also observed that along with interest rates rising in Europe in the wake of German reunification, the effects to the Finnish economy were at the worst possible time, as the European economies were falling into recession in the early 1990s. Such unpredictable changes invariably occur which in some cases can send the economy off its set course. However, if the development pattern is adjusted by these factors, our analysis does indicate that the economic effects of EU accession were in fact forecast well.

The fundamental patterns in the price structure, foreign trade structure and production structure developments alike were estimated quite accurately. These structures have converged considerably towards the average EU prices.

Although foreign trade has to some extent shifted to Asia as a result of robust economic growth in that region, our study illustrates that the pull of EU trade has also clearly improved. Trade orientation thus seems to be evolving as anticipated. A closer analysis of the structure of foreign trade is now required to ask whether Finnish trade switched through subcontracting toward increased trade within individual sectors (i.e. intra-industrial trade), as is the case in other countries. This question remains open in this study.

Developments in agriculture have proven to be considerably better than anticipated in the worst scenarios, but a major challenge is still to be faced once the transition period comes to an end. Nonetheless, our overall estimate remains preliminary and should be expanded. It should also be borne in mind that the Single Market Programme is still incomplete, and the final impact will occur only after the internal markets are fully implemented.

The analysis in this paper on Finnish prices and changes in price levels is of particular relevance within the context of EMU adjustment. In the light historical data, the growth differential of Finland relative to the EU places substantial pressure on Finnish price competitiveness. The historical sensitivity to inflation in Finland involves a risk even in EMU conditions, but this sensitivity could be reduced by structural changes, such as increased competition and probably also greater labour market flexibility.

The timing of European monetary policy with respect to Finnish cyclical fluctuations will also acquire major significance in the future. The timing can hardly be ideal for Finland every time, but conversely, sectors that are not affected by fluctuations in the wood processing industry have more scope for development in EMU conditions. This clearly is a challenge for Finland's production structure.

EMU is a major challenge not only for Finland but also for the whole of the EU. But in the wake of the EMU we are already facing a new issue of major importance, namely the question of eastern enlargement. There are costs to be incurred from eastern enlargement, but the gains would be of both political and economic benefits. The analysis of these gains and benefits becomes the next challenge.

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