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Comments on Macroeconomic Stabilization
Policies in a Small Open Economy

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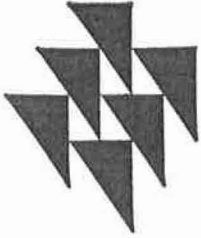
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Comments on Macroeconomic Stabilization Policies in a Small
Open Economy.

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1. Introduction ^{*)}

Extensive participation in the international division of labor is an essential prerequisite for the present standards of living in most small economies. The natural and necessary openness, however, makes small countries more sensitive than larger countries to international fluctuations and to variations in their international competitive position. During the 70's external conditions for all countries became considerably less favorable than they were during the more or less steady expansion and price stability of the 50's and 60's. As a starting point for discussion we will summarize, in the light of Finnish experience, some difficulties encountered when trying to protect a small open economy by traditional demand management and exchange rate policies from international price and growth disturbances while at the same time trying to safeguard the competitive position of the country. We will discuss here only macro policies and leave aside other questions (such as structural problems of the present situation) even if these questions cannot completely be separated from each other.

*) I am grateful to Kari Alho for comments on the contents of this note.

2. Course of output, inflation and competitiveness in Finland

Owing to her population of less than five million and to her relatively narrow resource base Finland has become a relatively open economy. The share of exports in GDP was 32 % in 1981. Though there has been rapid changes in the structure of exports since the second world war (see fig.1) the share of various forest products (e.g. timber, paper, pulp) in exports is still large. World trade in these products has typically experienced larger volume and price changes than other industrial products and this has made the economy particularly sensitive to fluctuations in world trade. The country breakdown of trade (see fig. 2) has varied considerably in the 70's. Finland imports most of her crude oil from the Soviet Union and owing to the bilateral nature of this trade changes in oil prices have been reflected not only in imports from, but also in exports to that country. Because this trade is conducted at world market prices, changes in oil prices have mainly been compensated for by changes in the volume of exports. As increases in oil prices have typically been followed by low export demand by western countries and by high export possibilities to eastern countries, this has created a built-in stabilizer against unexpected oil price changes (see fig. 3).

Variations in the growth rate, in the inflation rate and in the competitive position have in Finland been larger than in most other European countries (see fig. 4, 5 and 6). The average growth rate has been slightly and the average inflation rate clearly higher than in the OECD area on average. The typical 5 year business cycles have in timing closely followed developments in the western export markets. The inflation differential has been due to domestic demand management, exchange rate and incomes

policies. Against this record, it seems, the Finnish stabilization policies have not been very successful.

3. Comments on demand management policies

In a small economy external equilibrium limits essentially the possibilities of compensating for foreign growth disturbances by demand management policies. If domestic demand is increased, the attainment of a better employment situation will happen at the cost of the current account equilibrium. In figure 7 the trade-off lines corresponding to the expansion of public demand have been drawn.¹⁾ In figure 8 the observed points are presented in relation to the employment situation of the trade partners. Point 86 A corresponds to a position where Finland would be in 1986 on certain assumptions concerning international developments and economic policies.²⁾ With 1 % p.a. extra public demand growth the economy would be moved to point 86B. Points 64-82 correspond to those actually observed in 1964-1982. The steepness of the trade-off lines, of course, also depends on the time span during which the effects of the policy measures are observed. If, e.g., one believes in a vertical Phillips curve, then also these trade-off lines would in the long run be vertical.

Figure 7 shows how radically the position of the choice loci associated with ordinary demand management policies has changed since the beginning

1) The trade-off lines have been calculated with a revised version of an econometric model presented in Vartia (1974).

2) See Medium term prospects (1982) of the Research Institute of the Finnish Economy.

of the seventies. Starting from the present position, current account would already show an unbearable deficit long before the attainment of full employment.

The position of the demand management trade-off lines varies in principle with changes in all predetermined variables, and its slope depends on all the parameters of the simultaneous equation model. Two important exogenous shifts are considered in the figure: a faster domestic wage-price inflation, which with fixed exchange rates leads to a deteriorating competitive position. If industrial production in the OECD area grew 1 % a year faster than in the basic alternative, the demand management line of 1986 would be shifted upwards to the right to pass through point 86C. If domestic wages and prices increased by 2 % a year more than in the basic alternative, the demand management line would pass through point 86D.

The possibilities of overcoming the present difficulties by only stimulating domestic demand thus seem very small indeed.¹⁾ As can be seen from figure 7, this line of action was followed in 1974-75, when the recession was also expected to be shorter. With persistently low external demand and growing current account deficits, the policy stance had to be changed.

The Finnish expansionary policies of the late 70's (after a very deflationary period in 1975-77) aimed at easing the external constraint by stimulating investments in the open sector of the economy rather than private consumption or public demand. The short-run macro-effects of increases in various demand components are similar. Stimulation of

1) We do not discuss here the internal constraint of public deficit.

investment, however, not only raises the short-run demand (the Keynesian investment multiplier) but also increases productivity and the potential long-run output of the open sector and thus helps to solve some of the structural problems when investment projects mature. The measures were thus designed to serve simultaneously the improvement of employment and the maintenance of external balance. Stimulation of investment is an important link between short run demand management and structural issues.

Because in small countries changes in the competitive position lead to considerable shifts in the trade-off line presented above, the possibility of influencing the cost and price movements relative to other countries either by reducing the inflation rate or by devaluing the currency is often suggested. According to this view the small share of a small country in world trade can even under unfavorable demand conditions be increased by changing its competitive position sufficiently.

Finland has on some occasions been able to reduce the inflation rate rapidly by incomes policies. These successful experiences (moderate wage increases in centralized wage negotiations, or even postponement of already agreed wage increases) are from situations where the unemployment rate has been high.¹⁾ On the other hand, it is not possible to

1) Developments of this kind may make room for, e.g., an almost simultaneous slower growth of monetary aggregated, but the fact that monetary aggregates can later be used to "explain" reduction in the inflation rate does not mean that incomes policies have not had any effect.

manage the inflation rate by incomes policies alone. In "overheated" situations the negotiated wages and at least wage drift will increase rapidly. Incomes policies have thus to be supported by other economic policies, e.g. the demand management and exchange rate policies.

However, since it has often proved very time consuming to improve the deteriorated competitive position by lowering the domestic inflation rate, devaluations have often been resorted to, in order to solve the problems of (price) competitiveness and profitability. These experiences are discussed in next chapter.

4. Comments on exchange rate policies

Until 1973 Finland was part of the Bretton Woods system with a fixed exchange rate and since then, the Finnish mark has been fixed against a basket of fourteen currencies, except for short periods in the early 70's. The average inflation rate of the country has clearly exceeded that in the competing countries and there were large devaluations during the second half of the 40's, in 1957, 1967, 1977-78 and 1982. As shown by fig. 8, the Finnish mark was revalued slightly in 1980-81.

Figure 8 shows that, except during the Korean boom early in the fifties, export and import prices in foreign currencies (i.e., export and import prices deflated by the exchange rate index) stayed more or less constant during the 50's and the 60's. During the 70's they almost tripled, but Finland was not able to follow the "inflation norm",

i.e., the standard macroeconomic wisdom which advises to use exchange rate (and monetary) policy to reduce imported inflation. One reason for this has been that the inflation norm has often been contrasted with the so-called "competitiveness norm", which advises to use the exchange rate to safeguard the country's competitive position.¹⁾

Effects of a policy of fixed exchange rates in a situation where world market prices rise more rapidly than domestic prices are often said to produce the same results as an "unplanned" devaluation. In some respects, however, the results differ. For example, effects on the relative profitability and thus on the competitive position of domestic vis-à-vis foreign producers are not the same. This problem is generally not dealt with in the standard models for open economies. Particularly for small countries with a one-sided export structure, it may be a relevant question.

When the competitive position is considered to be good (and perhaps also improving) the inflation norm and competitiveness norm are not in serious contradiction with each other. In situations where a revaluation is seen to lead to lower than normal levels of competitiveness and to a profit squeeze the social costs of the revaluation in the short and medium run may be considered too high. An important question is, of course, how fast and to which extent the exchange rate changes are reflected in domestic wage and price movements and what are the effects on the real side of the economy. Considerable differences of opinions exist in this respect.²⁾

1) For a discussion of these norms, see Korkman (1980).

2) It would seem natural to assume that the effects of exchange rate changes on the existing domestic price level are different depending on whether one starts from an equilibrium or disequilibrium position (e.g. in the purchasing power parity sense).

A particular difficulty experienced with exchange rate policies in Finland has been the sometimes very divergent price movements in various sectors (see Pekkarinen (1981)). Fig. 10 demonstrates the course of export prices in paper industry and in metal product industry. Had exchange rate policy been used to deal with rapid increases and decreases in the volatile forest product prices, this would have meant serious problems in other sectors.

Most of Finland's foreign trade is denominated in foreign currencies.¹⁾ That is why the export prices in agreements negotiated before exchange rate changes hold in foreign currencies during the so-called "currency contract period" immediately following the exchange rate change (see e.g. Magee (1973)). Thus in the very short run, domestic-currency export prices change almost by the full amount of the exchange rate change. According to Vartia & Salmi (1981) renegotiated export prices in marks have been adjusted upwards by about 75-80 % of the amount of the devaluation. In other words, there has been only little pass-through into lower foreign currency prices, and devaluations have been used as an opportunity to restore profit margins, which before the devaluations have usually reached lower than "normal" levels.²⁾

Large exchange rate changes have thus meant large changes in the income shares between the firms and households and between the firms in the open

1) In 1981 the contract share of the mark was about 10 % both in imports and exports.

2) The effects that changes in export prices in foreign currency have on the volume of exports are not discussed here. It should be noted, however, that exchange rate changes may affect the volume of exports even if there is not pass-through. These effects come from the supply side: in the short run, some export capacity which has not been profitable may again become so and, in the longer run, improved profitability may lead to increases in, e.g., export capacity and marketing efforts.

sector and those in the sheltered sector. Between devaluations the inflation rate has most of the time been higher than in competing countries and income shares have slowly returned to the pre-devaluation levels. This has been the case regardless of the fact that, at the moment of the devaluation, there has been some a kind of consensus on the necessity to alter income shares in favor of the open sector.

The crucial role played in the Finnish post-war business cycles by changes in the "competitive position", i.e., by the large and often persistent shifts in relative prices, in income shares and in the profitability of firms can shortly be summarized as follows.¹⁾ The exchange rates have in most cases been changed toward the end of an international recession, in a situation characterized by a seriously deteriorated employment situation in Finland. The devaluation, combined with a recovery of international demand, has led to a strong upswing, typified by very brisk investment activity due to the improved profitability.²⁾ Of course, devaluations have at least in the short run

1) In most countries, changes in competitive position are determined in terms of movements in relative unit labour costs (fig. 6) (or some other price or cost series), income shares, profitability and market shares. Fortunately the measures of changes in the competitive position often lead to similar conclusions. More difficult is, of course, the problem of determining the suitable level of competitiveness.

2) Inclusion of profitability in the investment function has been a much discussed topic. It is often regarded as a proxy for liquidity future expectations, capital costs, etc. Recently profitability as a disequilibrium concept has also received theoretical attention; see e.g. Malinvaud (1980, 1981). More analytical and empirical work is required to settle this important question, which is in many countries closely related to the structural aspects (decreasing trend of the share of profits and a low level of investments) of the present difficulties. It is also worth noting that if exchange rates cause large changes in relative prices and in profitability and if this in turn affects investment, then exchange rates become an important instrument for controlling domestic demand (investment) directly.

had a deflationary effect on private consumption, but because of higher exports and investment, the overall effect on production has during the first year already been positive. By the first international downswing following a notable change in exchange rates, competitiveness has generally not yet deteriorated. The investment ratio has stayed rather high, the recession has remained mild, and the recovery of international demand has saved the economy before the situation had substantially worsened. But by the time the next recession after the devaluation has set in, the profitability of firms has already decisively deteriorated, investment has been low and unemployment has strongly increasee. When the efforts made to improve competitiveness through deflationary policies and incomes have proved unsuccessful, changing the exchange rate has been finally resorted to. In this caricature of a sequence of trade cycle then, a strong upswing, a mild recession, a moderate upswing and a severe recession have followed one another (see fig. 4).

In this process devaluations have led to inflationary impulses and domestic wage and price movements have led to so greatly worsened competitive position that devaluations have again been regarded as necessary. When seeking "causes" for the devaluation cycles, even "fixed" exchange rates must be considered endogenous. An explanation must rather be sought in the difficulties encountered in the general demand management policies or in the institutional or structural features which have made the Finnish economy so inflation prone. Econometric models where exchange rates are considered exogenous, and thus their changes are regarded as "causes" of changes in endogenous variables, do not give an accurate description of the process. Rather, models which combine properties of the existing fixed and flexible exchange rate models would be more appropriate.

Introduction of temporarily rigid but jumping (in response to some perhaps changing and politically determined threshold values) exchange rates offer difficult problems for research.

5. Conclusion

In the 70's the international environment of small countries became much less favorable than it was during the 50's and 60's. The possibilities of coping with the present situation by traditional-type demand management policies are strongly limited by such constraints as the resulting current account deficits, public deficits and persistent inflationary tendencies.

For various reasons it has also proved difficult for many countries to use exchange rate policies to stabilize foreign trade prices in domestic currency. Among the wellknown reasons for these difficulties we have already mentioned the lack of coordination of exchange rate, demand management (particularly monetary) and incomes policies, contradiction of the "inflation norm" with the "competitiveness norm", fluctuations in relative export prices of different sectors and disagreement on the "right" income distribution.

Another important reason for the difficulties has certainly been the big forecasting errors of the 70's, not only on the volume but also on the price side. Thus, e.g., the rapid rise in Finnish export prices in 1974 was not expected and left little time for active exchange rate policies. Because of the close connection of the exchange rate policies

with incomes policy and income shares the problem has often been not the lack of expedients but the absence of political agreement on their use until the situation has developed into an emergency or until it is too late to start preventive action.

An important issue related to the above problems concerns the extent to which we have been witnessing a long-term trend in the thinking of economists and politicians towards questioning the effectiveness of discretionary macro policies, towards growing concern about the expansion of the public sector and towards emphasizing price stability at the cost of employment. Regardless of the position taken by individual economists on these issues, we all are likely to agree that these kinds of shifts of emphasis could have a considerable effect on the economic policies of the 1980's. Just as political business cycles are caused by short-run changes in the policy stance (motivated a desire to by attain e.g. a suitable employment-inflation mix before elections), so long-run growth and inflation cycles may be affected by the emphasis that different generations of decision makers give to various economic targets and by long-run changes in ideas concerning the applicability of various policy instruments.

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Fig. 1. Finnish commodity exports by branches of production, % shares in the current values of commodity exports

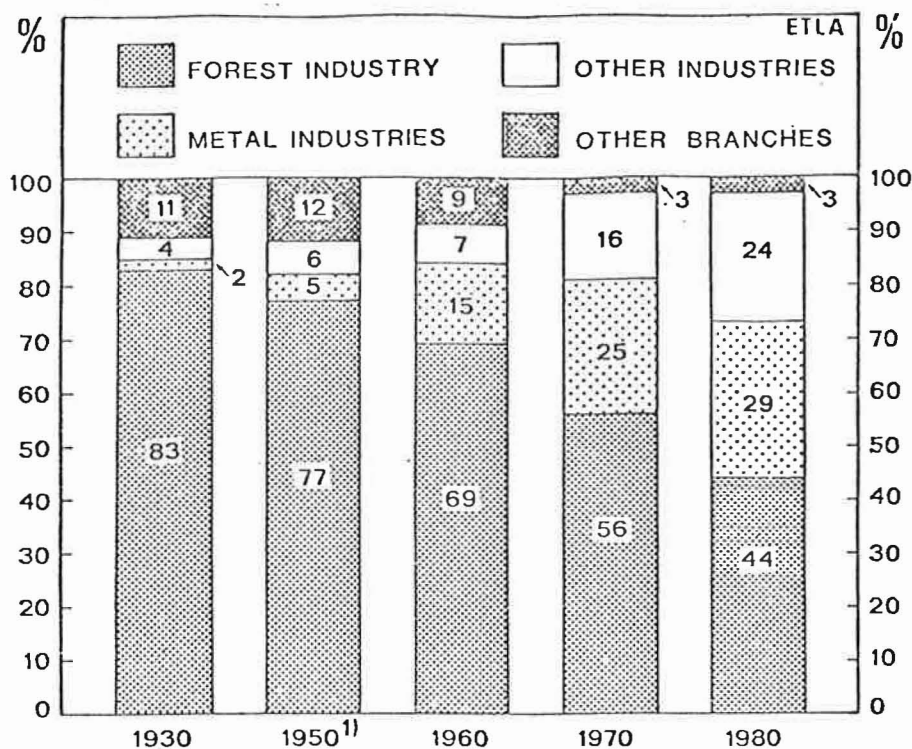


Fig. 2. Finnish foreign trade by countries (v = exports, t = imports)

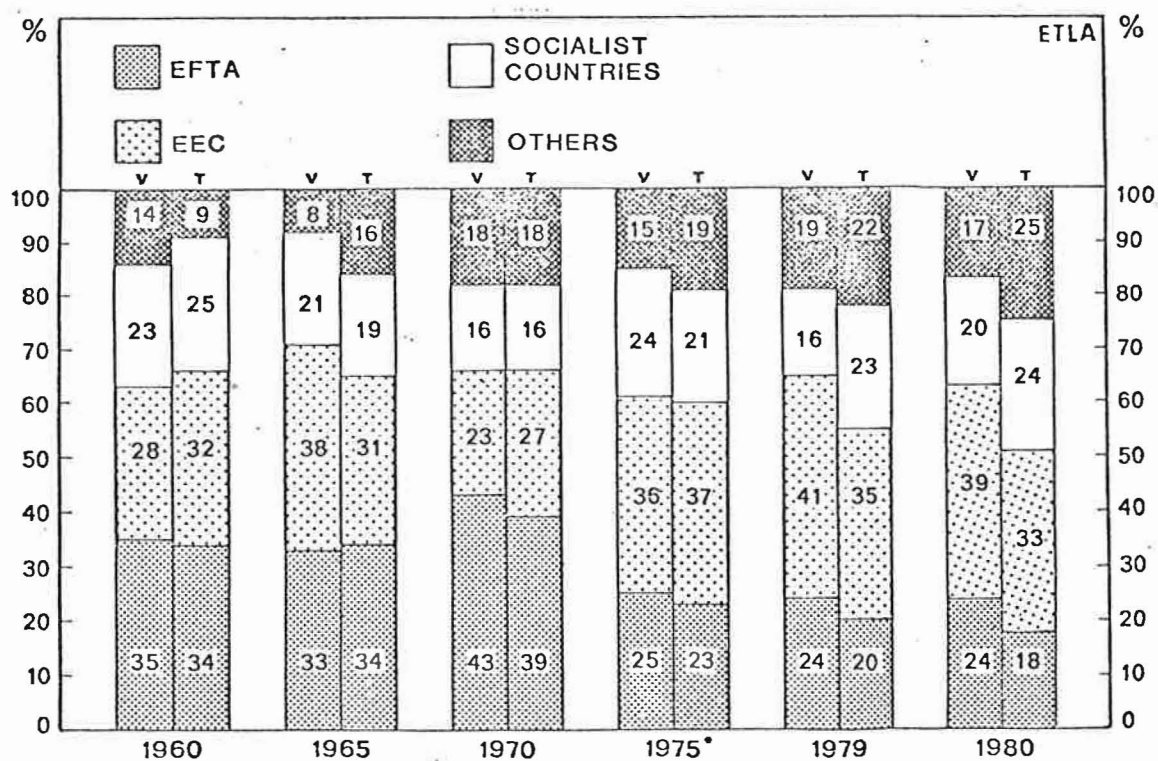
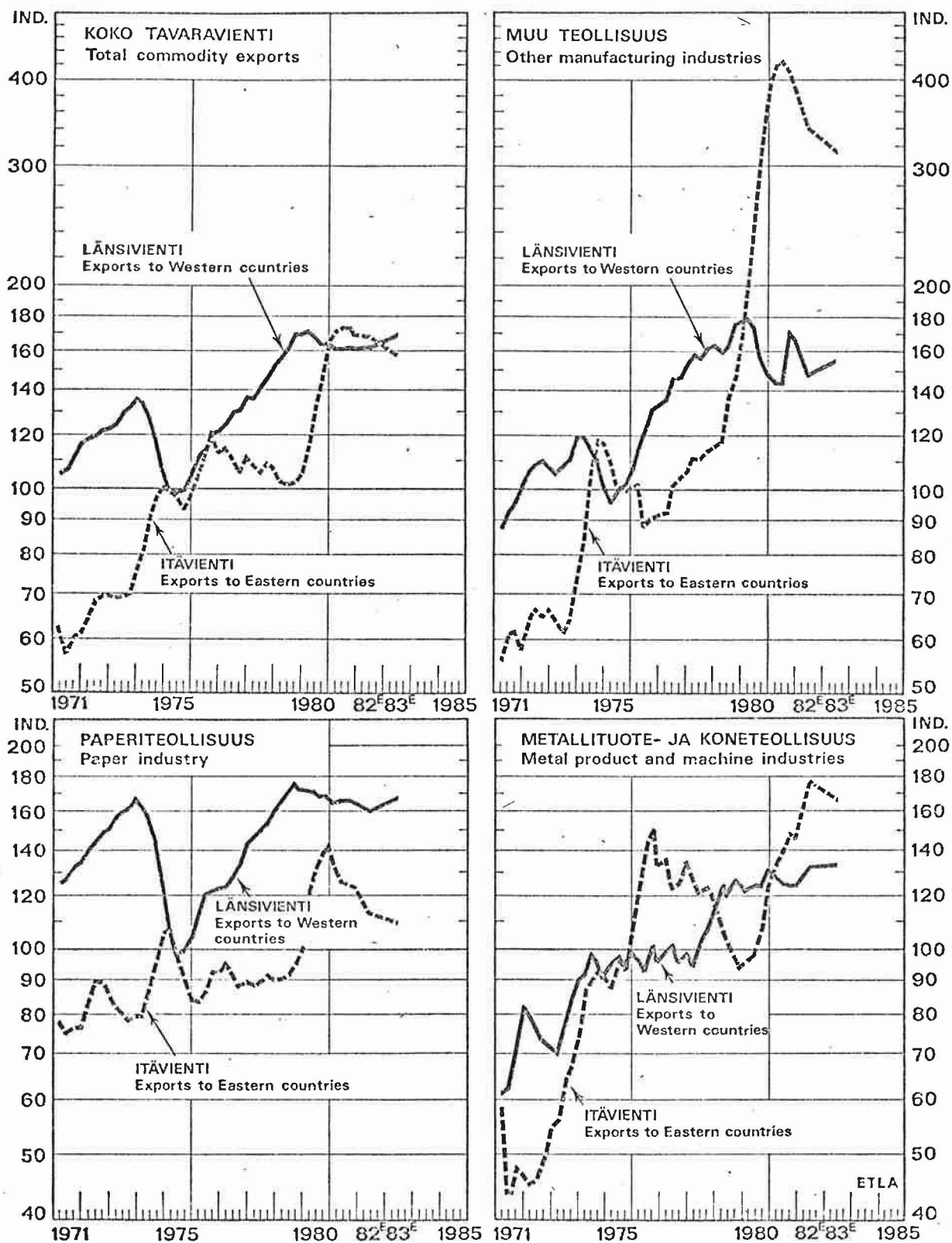


Fig. 3. Volume indices of commodity exports to Eastern and Western countries, 1971-83, (1975 = 100)¹⁾



1) Four-quarter moving averages.

Fig. 4. GDP at constant prices, capacity utilization and changes in GDP

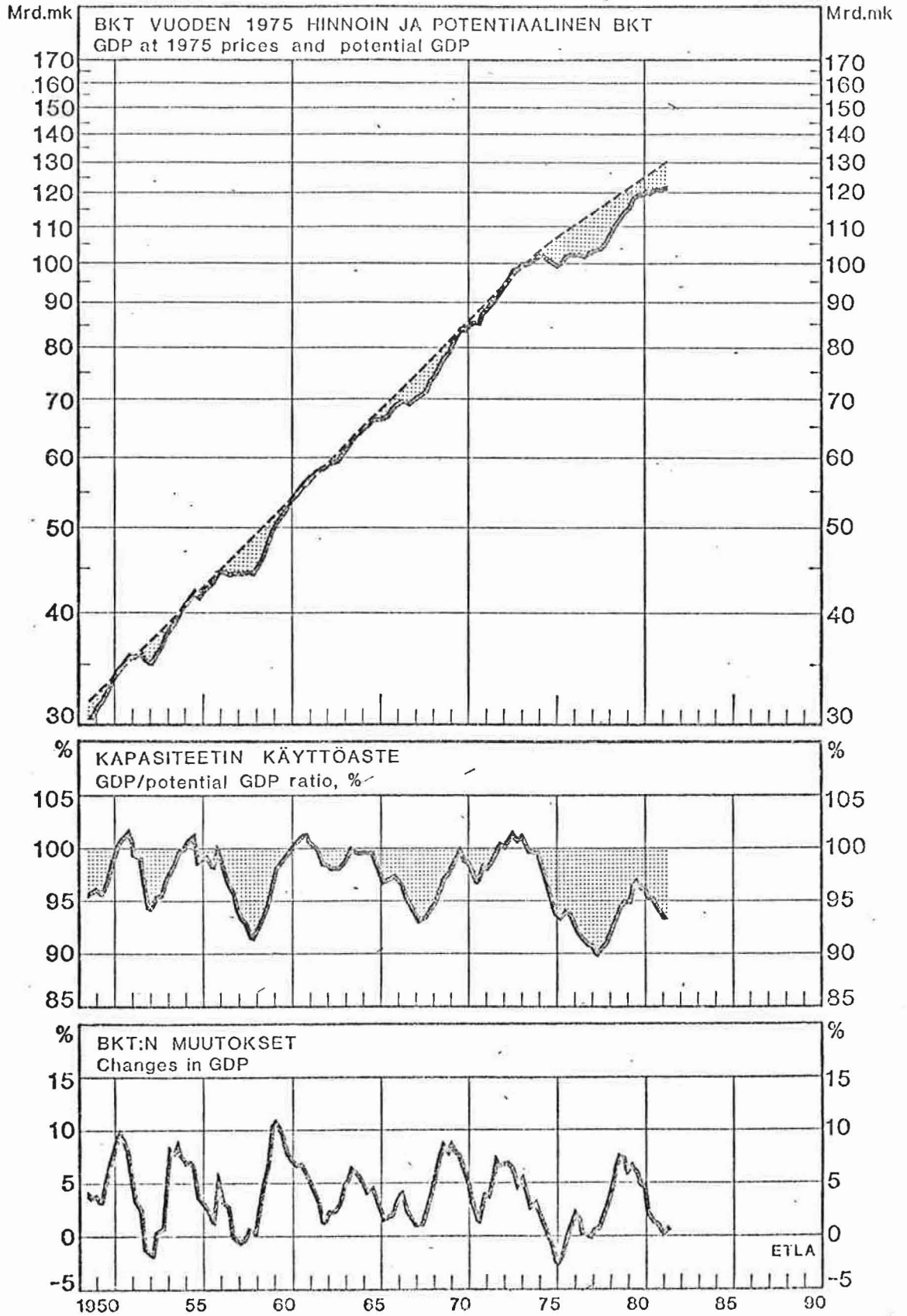


Fig. 5. Changes in consumption prices in Finland and in OECD area, 1951-82, %

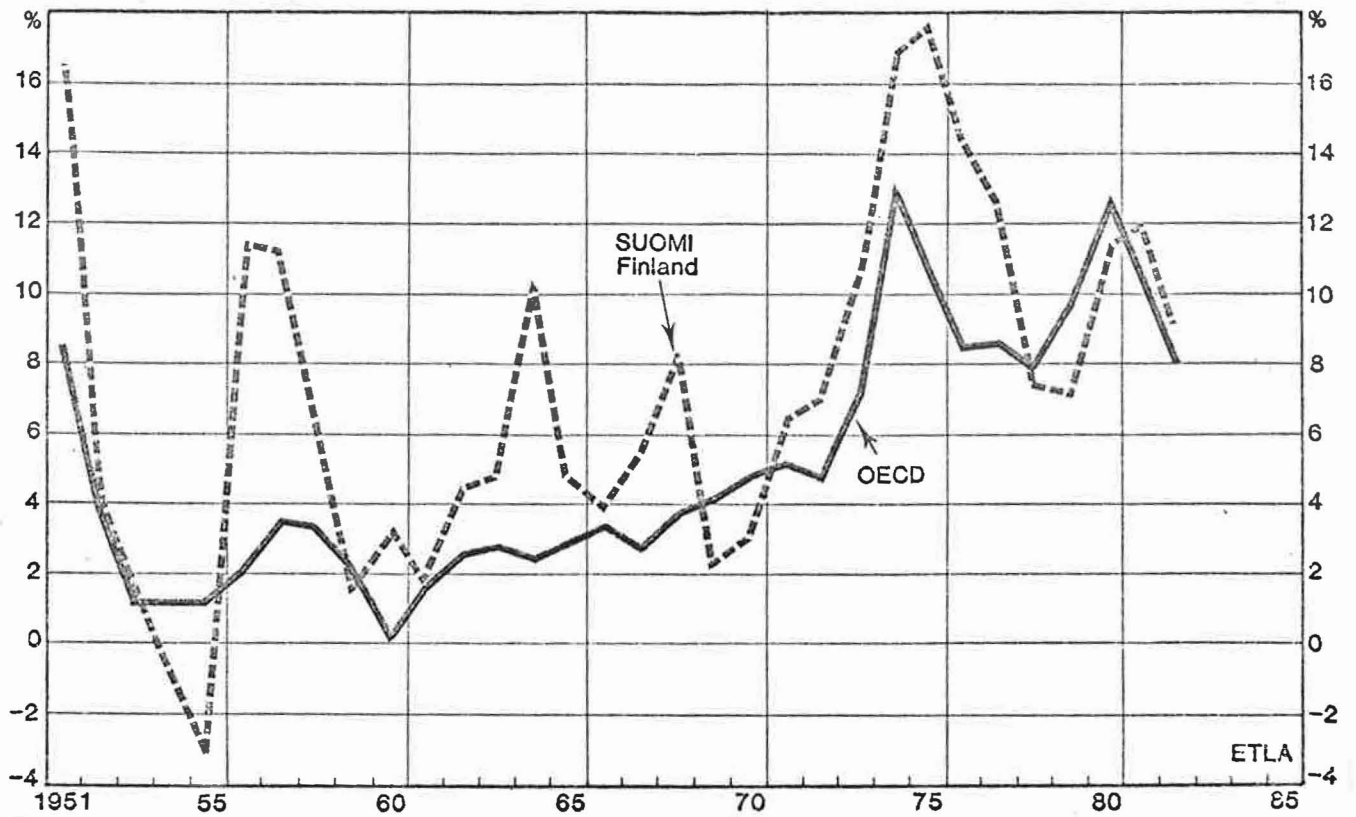


Fig. 6. Finland's unit labour costs in relation to those in her most important competitor countries, 1963-82 (1963 = 100)

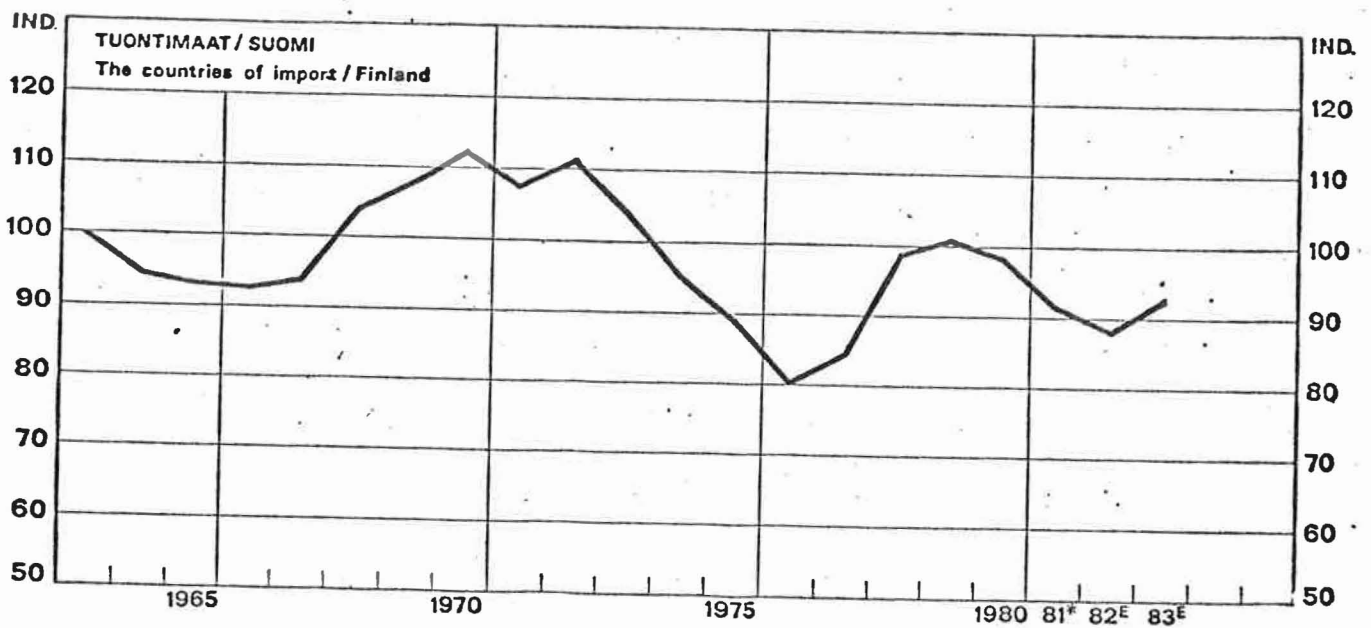


Fig. 7. The trade-off between external and internal equilibrium

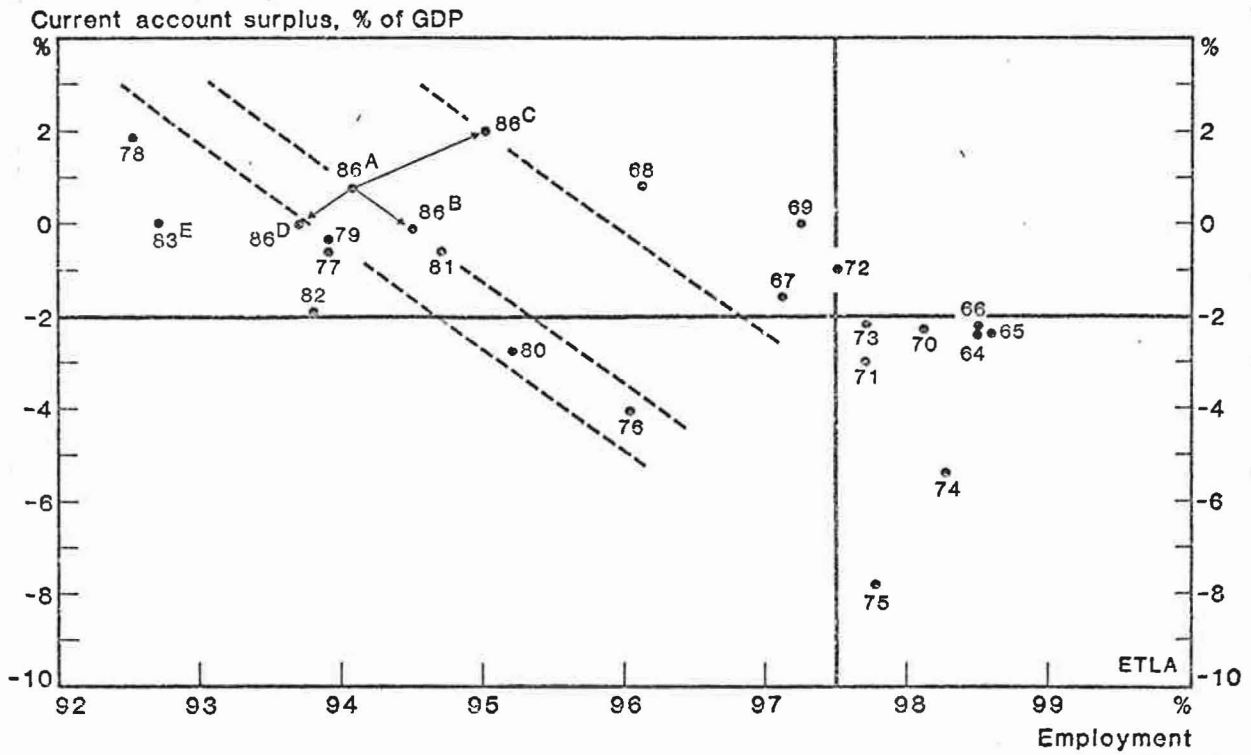


Fig. 8. The trade-off between internal and relative external equilibrium

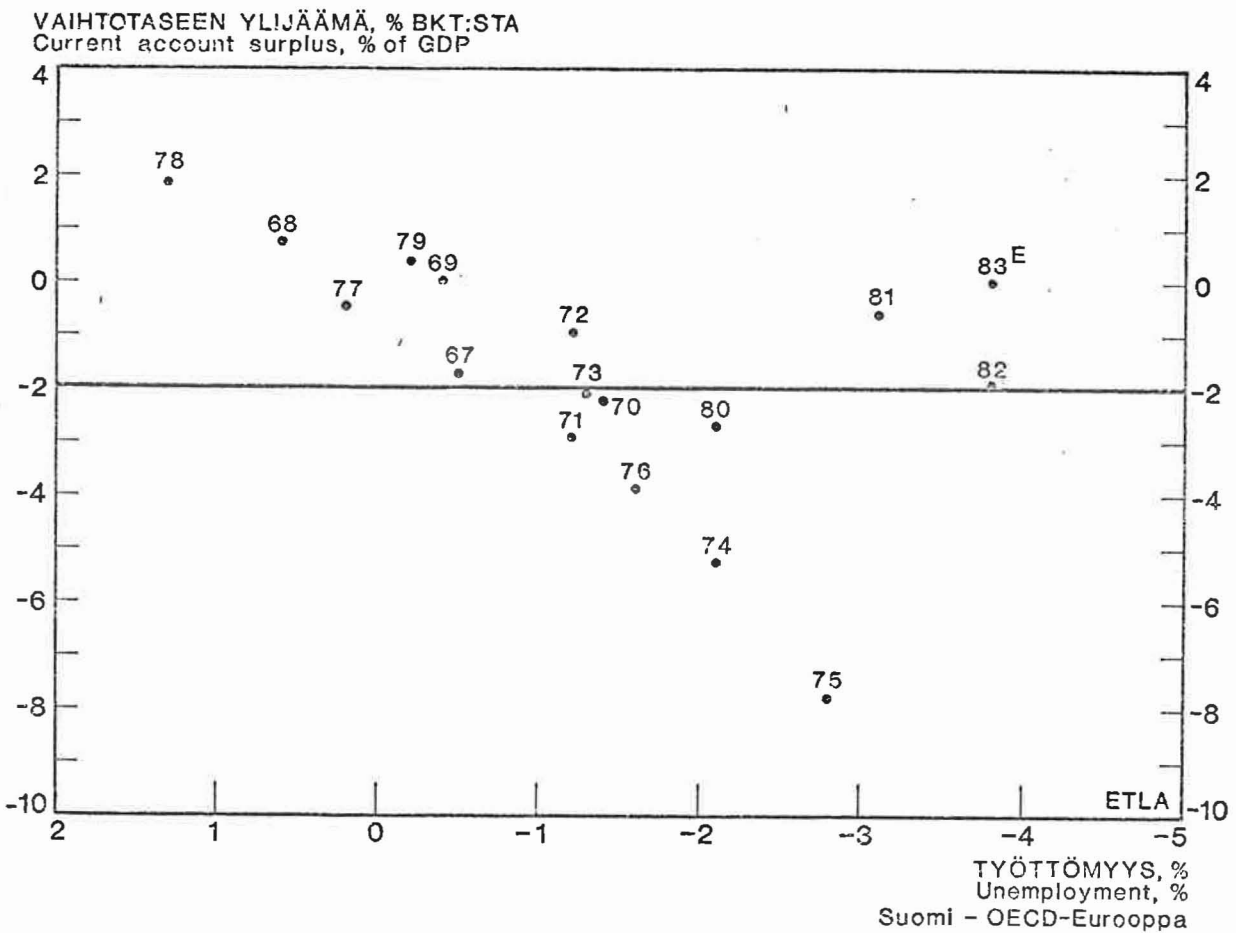


Fig. 9. Quarterly development of export and import prices in domestic currency and annual average effective exchange rate 1949 = 100

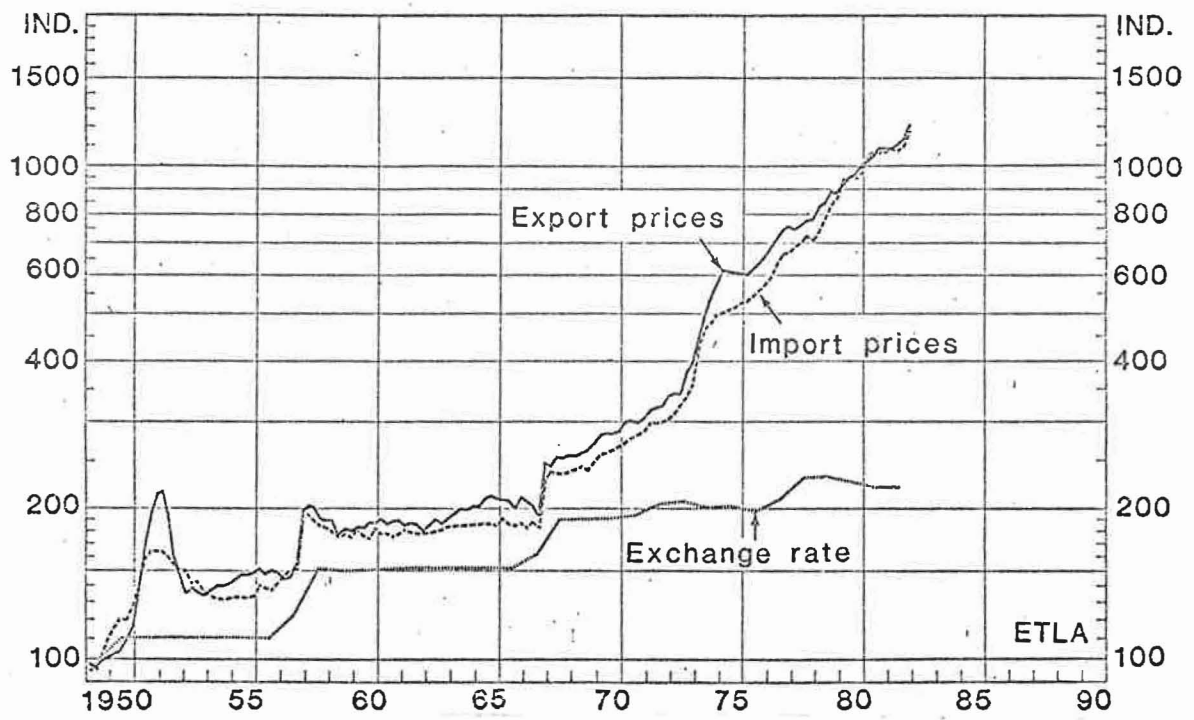


Fig. 10. Export prices of paper and metal products in 1950-82

