

**TYÖVÄEN  
TALOUDELLINEN  
TUTKIMUSLAITOS**

**TUTKIMUSSELOSTEITA 14. 1981**

**SIXTEN KORKMAN**

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339.7

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Helsinki 19.1.1981

ISBN 951-9281-21-5

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### 1. Introduction

The problem of economic instability is particularly pronounced in the case of Finland.<sup>1</sup> A major and well-recognized cause of the instability is the heavy weight in Finnish exports of a few commodity groups exhibiting strong cyclical fluctuations (like pulp and paper products). There are, however, other reasons for the instability experienced as well. These have to do with, i.e., the "automatic instability" effects of certain deficiencies in the tax system, the generally poor performance of discretionary monetary and fiscal policy and the frequent use of large devaluations to stimulate economic expansion.

This paper focuses on the consequences of exchange rate policy for macroeconomic stability. The structure of the paper is as follows. First we present some factual evidence for the case of Finland which illuminate the effects of exchange rate changes on inflation and competitiveness as well as on output and employment. Then we briefly summarize the history of the Finnish devaluations as well as the discussion of the so called "devaluation cycle", which has led to a critical reappraisal of the devaluationist strategy. Finally, we set out some of the arguments which are now being used to support the proposition that the primary use of exchange rate policy in a small and open economy like Finland should be to offset foreign inflationary disturbances.

## 2. Effects of Exchange Rate Changes

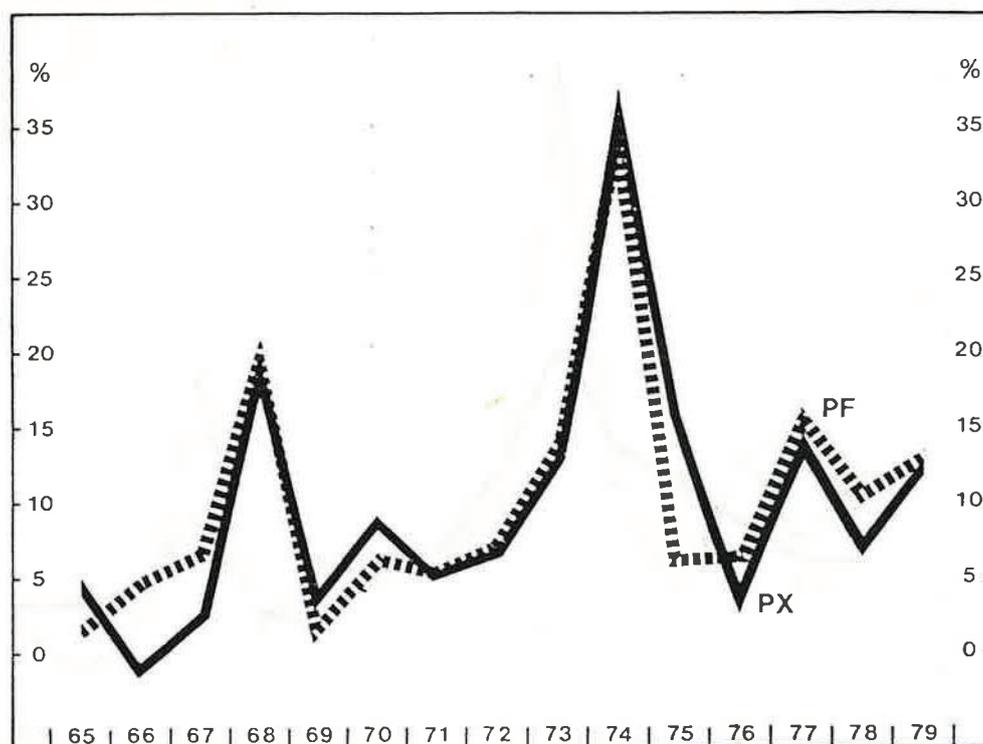
Analysis of the effects of changes in the exchange rate is rendered difficult by the multitude of their effects. A de- or revaluation typically effects not only relative prices and international competitiveness but also profitability of investment and the distribution of income as well as the rate of inflation and the level of demand and activity. Furthermore, the effects of a change in the exchange rate emerge as a dynamic sequence of events such that the short run, medium term and long run consequences are quite different and may even work in opposite directions. For these reasons, the aim of the present section is not to present a comprehensive analysis of the effects of a change in the exchange rate, but rather to inquire into the existence and order of magnitude of some of the crucial links in the chain of effects set off by a de- or revaluation.

### 2.1 Effects on Inflation and Competitiveness

Exchange rate policy may affect domestic inflation through direct and indirect price and cost effects as well as by influencing the demand for commodities and factors of production. A first fact to be observed is that prices of Finnish exports are highly correlated with prices of competitors' exports (in Fmk). This is demonstrated by fig.1 which shows the annual rate of increase of Finnish export prices in 1965-79 and the corresponding rate of increase of a weighted average of the import prices of the countries most important for Finnish exports. The period considered contains a large devaluation at the end of 1967, some depreciation in 1971-73, an exceptionally strong increase in export and import prices (in foreign currency) in 1974 as well as two devaluations in 1977-78 and a small revaluation in 1979.

Figure 1.

Finnish export prices and competitors' export prices



PX = Finnish export prices, %

PF = Weighted av. of import prices in Fmk in Finnish export markets, %

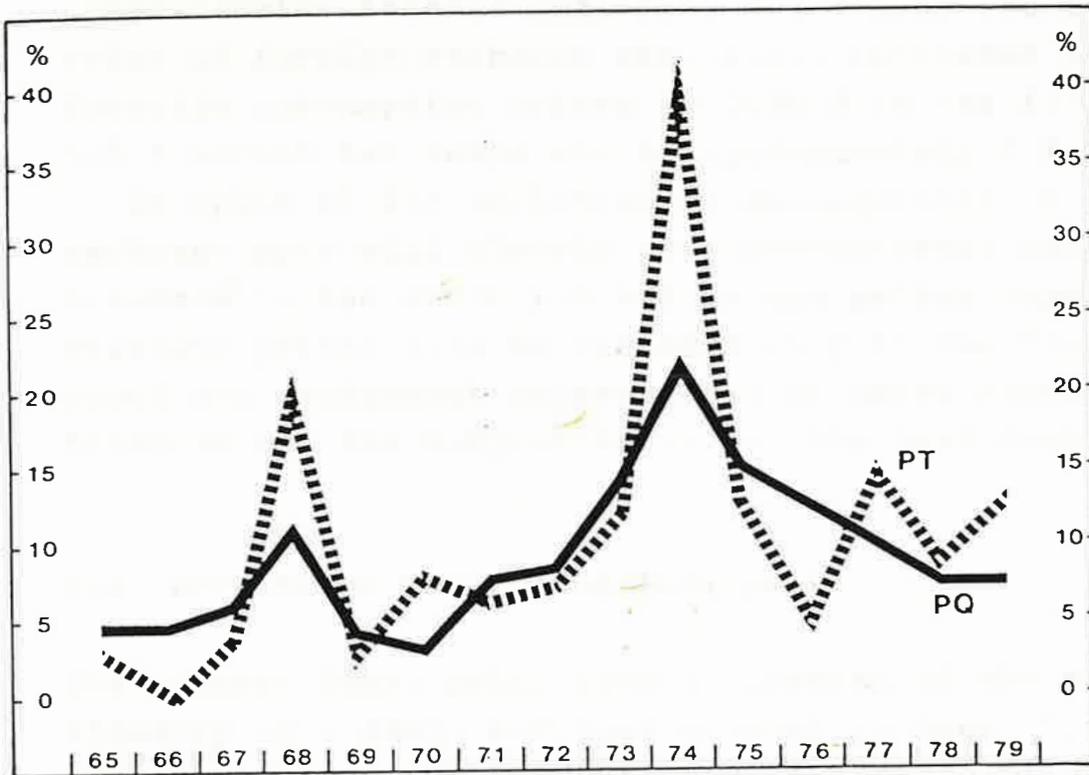
Since foreign prices may reasonably be assumed to be independent of Finnish price developments, we may conclude that Finnish foreign trade prices are largely determined by the exchange rate and by external price developments.<sup>3</sup> This does not, of course, preclude the existence of adjustment lags and temporary deviations and of substantial differences between individual sectors and commodities.

The next link to be discussed is the effect of foreign trade prices on domestic inflation. This dependence is illustrated in fig.2, which shows the rate of increase of foreign trade prices (an unweighted average of export and import prices) and the rate of increase of domestic prices (in fig.2 measured by the implicit GDP deflator).

As is seen, the large devaluation undertaken at the end of 1967 and the extraordinary increase in foreign trade prices in 1974 were immediately (though less than fully) reflected in corresponding peaks in domestic price developments. The covariation between foreign trade prices and domestic inflation

Figure 2.

Foreign trade prices and inflation in Finland



PQ = GDP deflator, %

PT = av. of export and import prices, %

is, however, far from perfect. Domestic inflation thus surpassed the rate of increase of foreign trade prices before the 1967 devaluation, and then remained below it for several years (due to adjustment lags and comprehensive incomes policy measures in 1968-70). In the years 1971-76, by contrast, domestic inflation was greater than the rate of increase of foreign trade prices, the only exception being the year 1974 when both export and import prices increase by approximately 40 %. Since 1977, finally domestic inflation has again been below the rate of increase of foreign trade prices due both to the devaluations in 1977-78 and a high (and until 1978 increasing) rate of unemployment.

The visual impression of fig.2 may be confirmed by regression analysis of the effects on domestic price developments of increases in foreign prices and in the exchange rate. In a recent study devoted to this issue, it was concluded that there is empirical evidence to support the view that inflation is basically determined by the rate of increase of foreign trade prices (i.e. by foreign inflation and exchange rate changes), though

there is scope for temporary deviations due to gradual adjustment, changes in labor market conditions and in connection with comprehensive incomes policies. A 1 % increase in the price of foreign exchange was, e.g., estimated to increase domestic consumption prices by 0.36 % in the first year, by 0.6 % within two years and by approximately 1 % in the long run.

In spite of its inflationary consequences, a change in the exchange rate will clearly have considerable effects on competitiveness<sup>5</sup> in the short run and in the medium term (since original relative prices will be restored only in the "long run"). The output and employment consequences of these changes in competitiveness are the subject matter of the next section.

## 2.2 Effects on Output and Employment

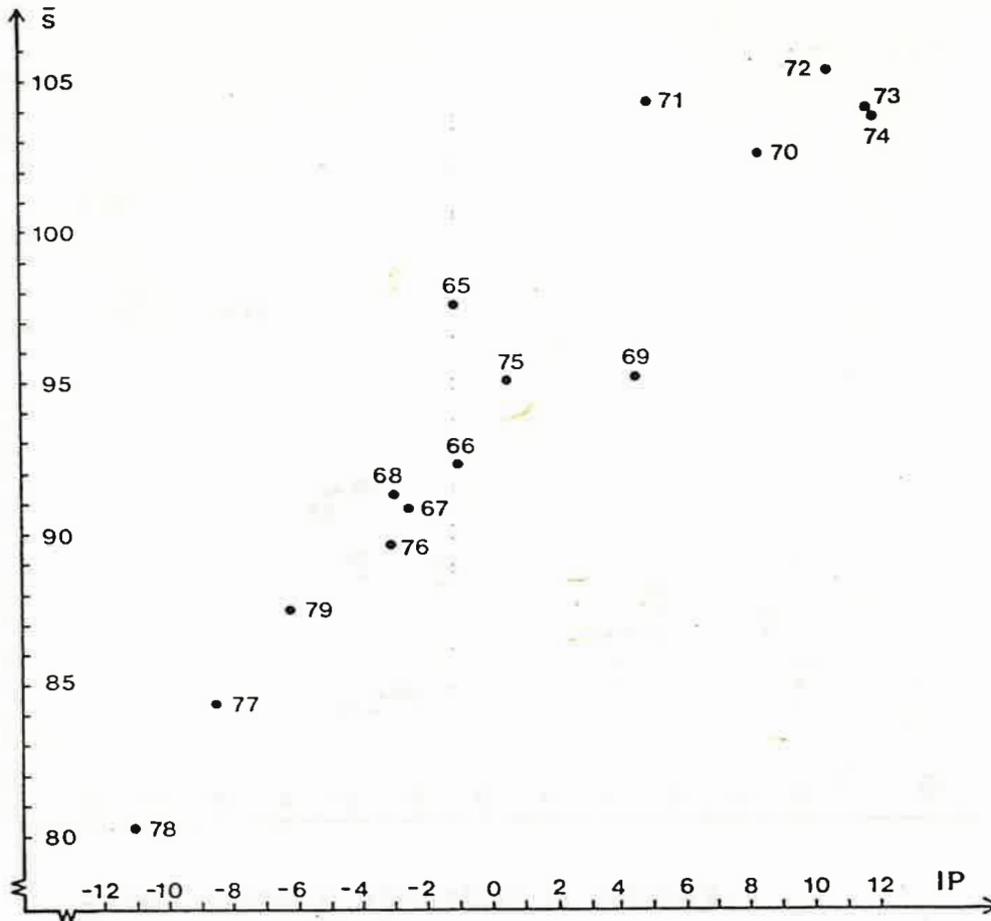
The international price competitiveness of the manufacturing industry of a small and open economy is generally thought of as one of the decisive determinants of its macroeconomic performance. The main arguments underlying such a conception relate to the likely size of foreign trade elasticities as well as to the effects of competitiveness and profitability on investment and on the "balance-of-payments constraint".<sup>6</sup>

We turn to some empirical observations that illuminate the effects of competitiveness on industrial production on one hand and on total employment on the other. In fig. 3 is plotted an indicator of the rate of capacity utilization in Finnish manufacturing industry (the logarithmic trend deviation of industrial production) on the horizontal axis, and a lagged measure of its international competitiveness (relative unit labour costs) on the vertical axis.<sup>7</sup>

The covariation between lagged competitiveness and the rate of capacity utilization in industry is obviously quite high. Indeed, the diagram may reasonably be argued to convey a too strong and simplified impression of the role played by competitiveness.<sup>8</sup> Nevertheless, it seems reasonable to conclude that variations in competitiveness have affected exports and investment and therefore - though primarily only after a time lag of more than one year - the rate of capacity utilization in industry.

Figure 3.

Competitiveness and capacity utilization in Finnish industry



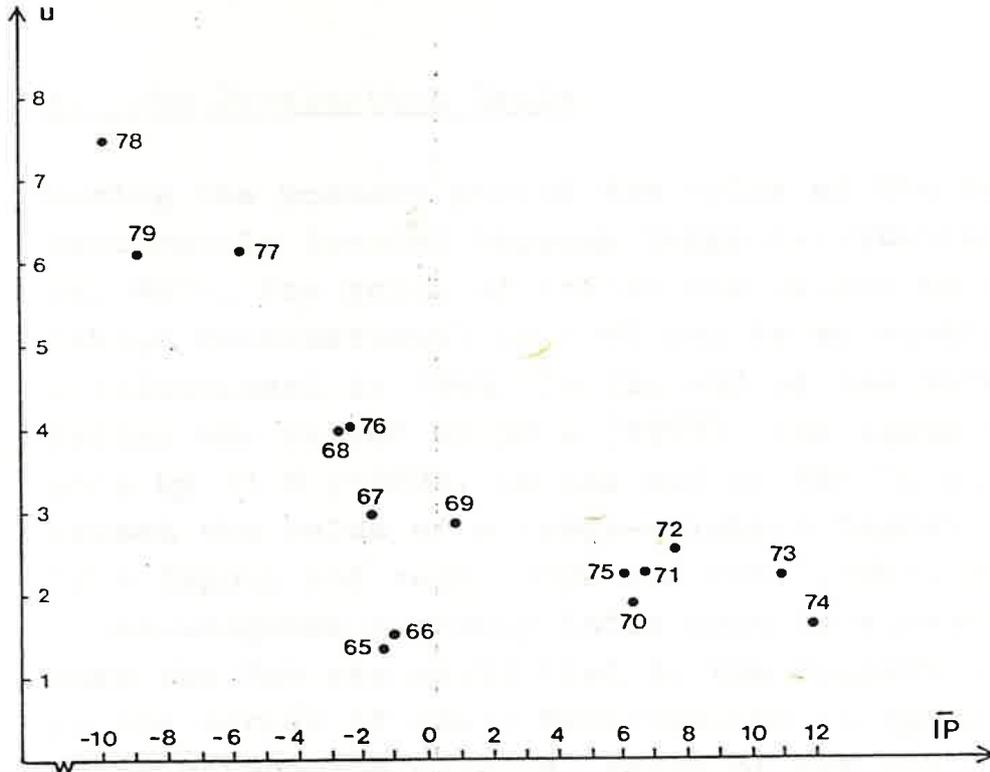
IP = log. trend deviation of industrial production  
 $\bar{s} = (1/3)s_{-1} + (2/3)s_{-2}$  = lagged competitiveness  
s = relative unit labour costs in industry

Consider next the link from production to employment. In fig. 5 is plotted the rate of unemployment of the whole economy on the vertical axis and the rate of capacity utilization in industry (somewhat lagged) on the horizontal axis.

Given the clear negative correlation, this diagram states that variations in the degree of capacity utilization in Finnish industry have affected the rate of unemployment of the whole economy. This agrees with "Okun's law" which relates unemployment to capacity utilization, but the strength of the covariation is perhaps surprising in view of the fact that industry only accounts for approximately a fourth of the economy's total employment. Obviously, the performance of industry has in Finland been highly important for the other sectors of the

Figure 4.

Capacity utilization in industry and total unemployment in Finland



$\bar{IP}$  = lagged capacity utilization in industry;  
 $\bar{IP} = (1/2)IP + (1/2)IP_{-1}$   
u = unemployment rate in the whole economy

economy as well. This is probably due both to the existence of backward linkages and to the influence of developments in industry (exports) on economic policy.

Our interpretation of the empirical facts may be summarized as follows: First, foreign trade prices in Finland are largely externally given, i.e. they follow a path determined by foreign price developments and exchange rate policy. Second, domestic inflation gradually adjusts to the rate of increase of foreign trade prices, but may temporarily deviate from it not only because of adjustment lags but also in connection with changing labor market conditions or incomes policies. Third, the devaluations undertaken have been reflected in improvements of competitiveness which have lasted for a time period measured in years. Fourth, competitiveness seems to have had important effects on the degree of capacity utilization of Finnish

industry with a one to two year lag. Fifth, variations in industrial production have caused (or been allowed to cause) corresponding fluctuations in overall activity and employment.

### 3. The Devaluation Cycle

During the postwar period the value of the Fmk has been recurrently lowered through large devaluations. In the end of the 40's, the price of dollar was raised by altogether 176 % (three devaluations) in 1945 and by an additional 70 % (two devaluations) in 1949. In the end of the 50's, the price of dollar was raised by 39 % (1957), and again in the end of the 60's by 31 % (1967). In the end of the 70's, three devaluations raised the value of a trade-weighted basket of currencies<sup>9</sup> by 17 % (april and sept. 1977 and feb. 1978). In addition, the trade-weighted currency index rose by almost 10 % in 1971-73 when the Fmk was still tied to the dollar. An exceptional event is the series of small revaluations in april 1979-april 1980 which raised the external value of the Fmk by almost 5 %.

The immediate postwar devaluations were of course undertaken to re-establish viable price and cost ratios and were based on purchasing-power-parity calculations.

The devaluation in 1957, however, was not motivated only by concern about price competitiveness, but also by the argument that rapid expansion of the wood-processing industry was needed to meet increasing export requirements associated with the then ongoing process of trade liberalization. The large devaluation was intended to strengthen expansion of the wood-processing industry by increasing profitability of investment in this sector as well as by shifting the income distribution in a direction facilitating its financing.

The 1967 devaluation was even more clearly based on the belief that a devaluation promotes growth and structural change. Now it was considered necessary not only to enlarge overall exports but also to broaden its basis since resource constraints were seen as limiting the scope for expansion within the traditional wood-processing industry. The devaluation was therefore not only backed up by comprehensive incomes policies to safeguard its competitiveness effect, but also by a temporary

export levy on traditional exports.<sup>10</sup> By broadening the base of industrial production, the devaluation was argued to have the additional merit of increasing the "structural stability" of the economy.<sup>11</sup>

The 1977-78 devaluations, finally, were not claimed to have any profound structural consequences, but were rather seen as a prerequisite for improving firms' profitability (which had suffered from rapid domestic inflation as well as the slump). They were meant to create conditions for overcoming the depression of production and employment and were part of the government's strategy for securing "steady and sustainable" growth.

The significance and usefulness of the large and recurrent devaluations has been relatively much debated by Finnish economists. The debate may be briefly summarized as follows.<sup>12</sup>

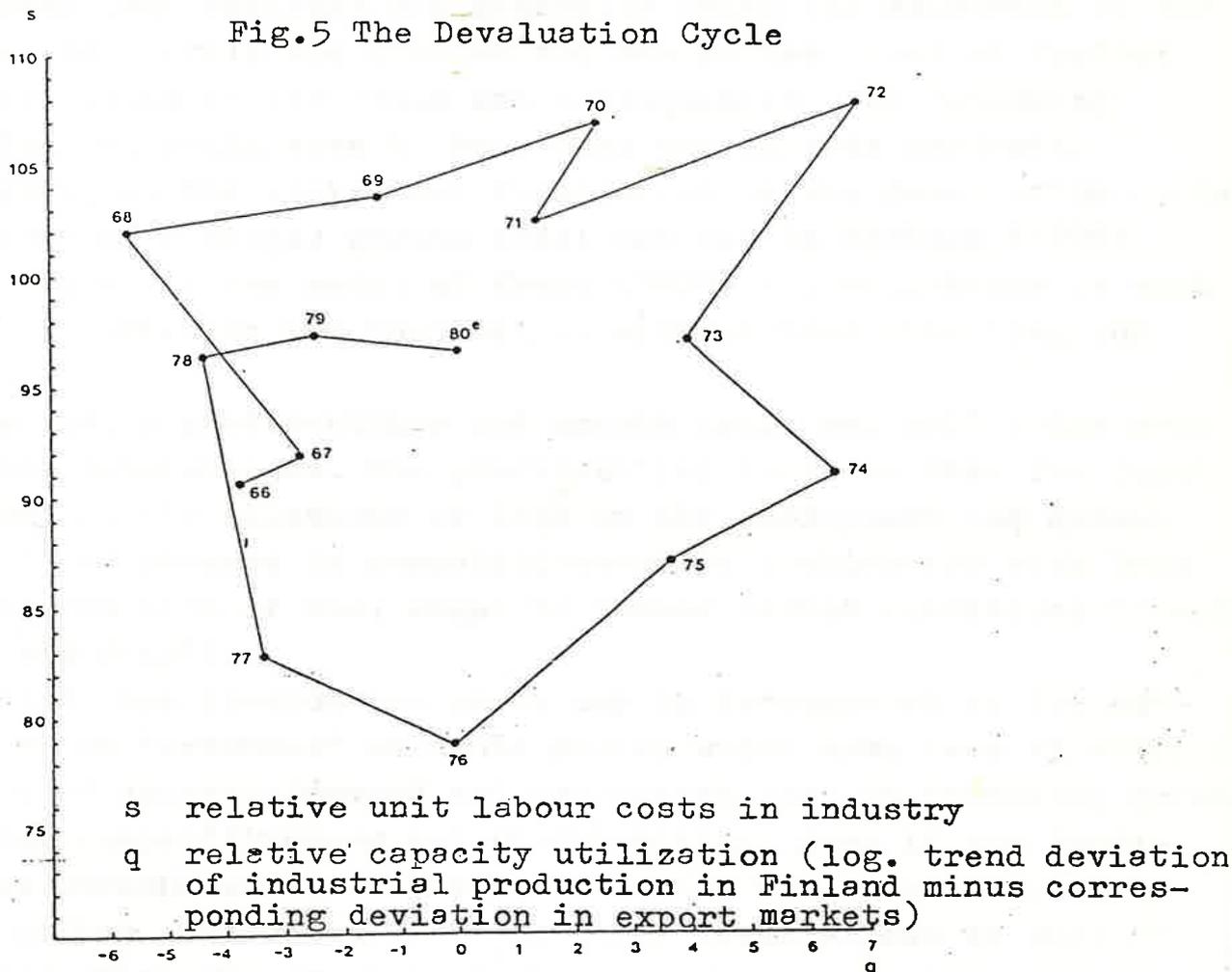
In an early paper Paunio (1969) drew attention to the fact that the devaluations seemed to have become part of a stop-go policy with phases of inflation triggering restrictive demand policies followed by large devaluations and expansion (amounting to a cycle of approximately ten years length). Paunio argued that the relatively infrequent and large devaluations should be replaced by more frequent but smaller devaluations.<sup>13</sup>

The phenomenon of relatively long employment and profitability cycles was emphasized also by Korpinen and Kykkänen (1974). Their characterization of the devaluation cycle is readily interpreted by drawing on the empirical regularities discussed in section 2 above and may be set out as follows.

The major immediate impact of a devaluation is that incomes are redistributed from wage earners to firms.<sup>14</sup> This effect is in itself likely to be contractionary: consumption is curbed while lags in profitability and competitiveness effects imply that exports and investment increase only with a delay. Output may even fall in the short run (in the first year) and the positive output and employment effects are felt mainly after a lag of perhaps two or three years (fig.3 and 4). The increase in profits and competitiveness as well as the acceleration of exports and investment has often been enhanced also by moderate wage increases associated with incomes policy agreements. The consequence is that it takes something like three to five years before the increased competitiveness is eroded through domestic inflation (cf. 2.1 above and Häkkinen and Korkman (1980)). At the time

when this happens, moreover, the level of economic activity is still relatively high and domestic inflation may still accelerate, or decelerates at best slowly.

The joint outcome of the real and inflationary effects is the relatively long cycle: during the first years after the devaluation the relative price of tradeable goods rises, the relative share of profits increases at the expense of wage income, investment and growth accelerates and unemployment gradually falls; during the latter years, however, the above process is reversed (until a new devaluation is undertaken). Some aspects of the devaluation cycle are empirically illustrated in fig.5.<sup>15</sup>



Korpinen and Kykkänen emphasized the inflationary consequences of devaluations. They questioned the positive growth effects of temporary improvements of competitiveness on the grounds that the increased instability would lower the allocational efficiency of investment (by promoting speculative investments) as well as the average rate of capacity utilization. With respect to the structural effects Korpinen and Kykkänen also pointed out that the main benefits of devaluations accrue to the traditional export industries which, in the wake of the devaluations, have invested heavily (partly due to tax push effects of the system of profit taxation). The main structural effect of the strategy may therefore have been the defensive one of protecting profitability of traditional exports rather than the desired effect of promoting new exports.<sup>16</sup>

Subsequent analysis has generally taken the existence of the devaluation cycle for granted and has rather aimed at further clarification of its basis and consequences. The following conclusions would seem to have come out of this analysis.

First, in the analytical formulation of the devaluation cycle in terms of a simple growth model set out in Korkman (1978) - as well as in the model of Kouri (1979) - devaluations as such produce inflation and instability without promoting long run growth.

Second, a profitability and growth cycle may well arise even without devaluations. The profitability cycle is then the joint outcome of the existence of lags in the employment and growth effects of changes in competitiveness in combination with lags in the reaction of real wages to labour market conditions ("real wage rigidity").

Third, the devaluation cycle may be interpreted as the outcome of an "orthodox" economic policy which aims less at stabilization of domestic demand and employment than at promoting growth through competitiveness and profitability. Even if the fundamental reasons were elsewhere, the cycle would be enhanced by such policy. The occasional and large devaluations as well as the preceding phases of deflationary policies in this view constitute a basically political business cycle, a mechanism intended to maintain high profits and rapid capital accumulation.<sup>17</sup> (Whether the devaluations undertaken have, in fact, increased average growth is, of course, a different matter.)

Even if the long run significance of the large devaluations must ultimately remain to some extent an open issue, the existence of the devaluation or profitability cycle seems well established and is in itself quite significant: it points to the fact that an important part of the macroeconomic instability experienced in Finland must be considered as being internally generated. This drawback of the devaluationist strategy is now generally recognized. It is also admitted that the instability of relative prices and the price level in many ways must be expected to have harmful consequences for allocational efficiency.

For these reasons the outcome of the debate has definitely been a more critical attitude to the use of devaluations as a means of employment and growth policy. This does not, of course, mean that it is argued that devaluations should never be undertaken.<sup>18</sup> The conclusion is rather that a one-sided reliance of economic policy on the mechanism of competitiveness will aggravate macroeconomic instability. If and when unemployment is considered a central problem, a devaluation is no substitute for actions which more directly and rapidly affect domestic demand and output. Neither will a devaluation in itself restore long-term competitiveness.

#### 4. Exchange Rate Policy and Inflation Control

The increasingly critical attitude to devaluations has been paralleled by a greater receptiveness to the idea that appropriate exchange rate policy might usefully contribute to price stability. This shift of emphasis is no coincidence: if devaluations basically produce inflation, then revaluations should be an effective means of dampening inflation. The use of exchange rate policy to contain inflation is of course particularly appealing in the case of foreign price shocks. Such shocks are an important source of macroeconomic disturbances in economies in which raw materials occupy an important position both in exports and imports. On this ground economists in the Nordic countries have repeatedly suggested that occasional revaluations be used to offset foreign inflationary disturbances, and that exchange rate policy could systematically be used to control and stabilize inflation.<sup>19</sup>

Observe that there are in this context two different issues that should be separated. First, more or less continuous revaluations might be used to bring down the trend rate of inflation. During the transition period such a policy may have undesirable real effects, but in the longer run the only sustainable effect is likely to be a reduced average rate of inflation. Second, exchange rate changes might be used to even out fluctuations in the domestic currency developments of foreign prices and thus to help stabilize the rate of inflation for any given trend rate. This may well be considered advantageous since it is probably unexpected changes in the rate of inflation which account for much of its costs.

As observed above, the most clear-cut case is when there occur rapid and widespread increases in foreign prices. Then a revaluation is an effective means of (and the only practical means of) avoiding the intensification of domestic inflation which otherwise takes place. If a spurt of foreign inflation is offset through a revaluation, it will simultaneously be prevented from "improving" competitiveness and thus from having effects on, i.e., trade flows, output and employment.

The above argument can readily be generalized into the proposition that exchange rate policy should normally not aim at stabilizing the (average) price of foreign exchange (which is what the central bank presently does), but instead aim at stabilizing the behaviour of the (average of) domestic currency prices of traded goods (focusing on a commodity basket instead of a currency basket). Such a "guideline" for exchange rate policy would imply that the effects of accelerations in foreign inflation would automatically be offset by revaluations of the exchange rate, while falling foreign trade prices or decelerations in foreign inflation correspondingly would induce devaluations. This would have the advantage of stabilizing inflation, which is important not only for its own sake but also for conferring increased stability on the real side of the economy.<sup>20</sup>

While looking like the "natural" choice in a small and open economy, inflation oriented exchange rate policy would not, however, diminish the difficulties caused by phenomena like shifts in the pattern of comparative advantages, foreign demand fluctuations, money wage inflation or deteriorations in the terms of trade. A revaluation may also have a temporary negative

effect on competitiveness. Conceivably, the conditions for a revaluation to dampen inflation could be further enhanced by incomes policies (coordinated price and cost reductions) or a well-designed system of wage indexation.

As a matter of fact, an exchange rate policy which aims at inflation control may justifiably be considered neutral with respect to competitiveness and the income distribution: it does not guarantee "strong" competitiveness, but neither does such a policy prevent it if conditions for a strong competitiveness (and the corresponding income distribution) are otherwise favourable. An exchange rate policy promoting price stability may thus be defended on grounds analogous to the traditional case for demand management policies aiming at stabilization of the real side of the economy.<sup>21</sup>

#### 5. Concluding Comment

The appropriateness of alternative strategies of exchange rate policy is a highly controversial issue.<sup>22</sup> The traditional view is that exchange rate policy should be geared to the maintenance of competitiveness and external balance.<sup>23</sup> In Finland, however, major emphasis has been laid on the domestic consequences of exchange rate changes for growth and structure as well as (but only more recently) for the rate of inflation.

Even if disagreement about the usefulness of disinflationary revaluations remains, there is no doubt that Finland's history of many and large devaluations against one minor revaluation episode is out of line with present thinking on exchange rate policy. The revaluation reflects a significant change in attitudes. The severe problems associated with large devaluations, even if backed up by effective incomes policies, are now widely recognized, and emphasis on price stability as a central consideration in the conduct of exchange rate policy is gaining ground.

Nevertheless, it is obviously too early to bury the concept of the devaluation or profitability and growth cycle. The devaluation cycle is, after all, closely associated with the broader issue concerning the failure of demand management policies to stabilize the growth path of the Finnish economy.

## Notes

1. For instance, when comparing the stability of growth in 19 OECD countries in 1950-73, Bingham (1978) found Finland to have the greatest standard deviation of the growth rate. Finland's relative economic stability has certainly not increased since 1973.

2. Concentrating for convenience on the case of a devaluation, the various "transmission channels" may be outlined as follows:

First, the domestic currency prices of import goods (and largely also the prices of competitors' export goods) will immediately increase by the full amount of the devaluation given the insignificance of Finnish shares in world trade of most commodities. This will then give rise to direct price effects following the fact that part of the goods consumed and invested are imported from abroad. Additionally, substitutability (or direct links due to "price leadership" phenomena) between imports and domestic production as well as between exports and foreign goods means that prices in the sector of the economy facing foreign competition are likely to rise in sympathy with the (domestic currency) prices of foreign goods.

Second, domestic costs will increase since intermediate imports and imported raw materials (including imported sources of energy) are directly or indirectly used in almost all domestic production. In addition, increases in foreign trade prices will put upward pressure on money wages through their effects on the functional distribution of income and the real wage.

Third, a devaluation may cause demand inflation by raising the overall level of output and employment through the direct and indirect (multiplier) effects of an increase in net exports or through the monetary and credit market consequences of an improvement in the balance of payments. Finally, foreign trade price increases are likely to have direct effects on inflation expectations.

3. The exogeneity of import prices is here taken for granted. The extent of the external determination of Finnish foreign trade prices is analyzed (and found to be fairly high) in Vartia (1974), Hämäläinen (1975) and Blomqvist (1979). Evidence on Sweden (not supporting an unqualified exogeneity assumption) is contained in Calmfors-Herlin (1977).

4. Cf. Korkman (1980).

5. Competitiveness may be measured in various ways, e.g. as relative export prices, relative unit labour costs in industry or relative profitability of the "open" as compared to the "sheltered" sector. All measures agree in showing competitiveness to have improved after the large devaluations in 1967 and in 1977-78.

6. First, in the case of a small economy it seems reasonable to expect the price elasticity of export demand to be fairly high. This would imply that relatively small price changes have significant effects on export volumes provided that additional supply is readily forthcoming. In addition to the export effect, an improvement of competitiveness would also strengthen the situation of producers competing with imports. Through conventional multiplier effects changes in exports and imports then affect aggregate demand, production and employment in the whole economy. Important qualifications to the above argument are that demand may be relatively inelastic on the import side and that market

shares may react only with a long lag to changes in competitiveness on the export side due to factors like long term export contracts and other characteristics of "customer relationships".

Second, improved competitiveness as well as the higher rate of capacity utilization achieved through increased exports will raise the return on capital and therefore stimulate investment. This will be favourable to employment through demand effects in the short run and possibly through capacity effects in the long run. A counteracting short run effect will, however, arise to the extent that the shift in incomes from wages towards profits increases financial saving (if profitability does not affect investment or does so only with a long lag) or the aggregate import propensity (if, on the margin, the share of imports out of investment expenditure is considerably higher than the corresponding share of consumption expenditure).

Third, low profitability may in the longer run slow down capacity expansion and productivity growth in the manufacturing industry. Insufficient export capacity then leads to a "balance-of-payments" constraint on employment and growth. More generally, the great economic and political importance attached to balance of payments considerations may have the consequence that developments in the minor (but strategically important) part of the economy represented by industry (the main exporter) strongly influences general economic policy and thereby the whole economy.

7. The lag pattern was determined by regression analysis. Observe that we do not correlate production and competitiveness in the same period, in which case the direction of causality would be an entirely open question (since an increase in capacity utilization increases productivity and therefore competitiveness as well as the other way around). The competitiveness indicator is due to Peura (197).

8. The fall in capacity utilization in 1975, for instance, was certainly not the outcome of the reduction in competitiveness in 1973-74 as measured by relative unit labour costs. As was already observed above, price developments in those years were very favourable for Finnish exporters (and profitability in industry therefore reached record levels). The fall in industrial production in 1975 was, of course, instead a direct consequence of the drastic reduction in export demand caused by the exceptionally strong international recession. Similarly, the high utilization rates achieved in the early 70's as well as the corresponding low utilization rates during the latter half of the decade have certainly been affected by the foreign business cycle as well as by the competitive position.

9. The Fmk was tied to the dollar until 1973 (until 1971 within the par rate system and in 1971-73 within the central rate system). Since then the Bank of Finland has normally aimed at keeping the value of the Fmk stable in terms of a trade-weighted basket of currencies.

10. The export levy, which was intended to ensure that the devaluation would have the desired effect of diversifying exports and production, was, however, for political reasons fairly rapidly dismantled.

11. The structural arguments were used by the governor of the Bank of Finland to explain why the devaluation was made "larger than would otherwise been needed"; Waris (1968). Occasionally a "big push" view of market penetration has also been used to

motivate large rather than small devaluations (large profit incentives are argued to be needed to overcome firms' "inertia" in seeking new markets and products); c.f. Mickwitz (1968).

12. A representative but far from exhaustive list of references is Waris (1968), Mickwitz (1968), Paunio (1969), Korpinen and Lundgren (1971), Korpinen and Kykkänen (1974), Leppänen (1975), Reinikainen (1976), Pekkarinen (1976), Suvanto (1977), Korkman (1978), Oksanen (1978), Kouri (1979), Tuomainen (1979) and Korpinen (1980).

13. This position is obviously open to the criticism that it is hard to see how, in the longer run, anything could be gained by continuous devaluations. Certainly domestic inflation would adjust to the chosen rate of devaluation? One may also ask how the rate of devaluation should be chosen. The answer might be that it should be chosen so as to guarantee a certain level of competitiveness. But unless there is "money illusion" in the long run, the economy might easily end up in an unstable inflationary spiral. In short, continuous devaluations would arguably be likely to increase average inflation (as compared to fixed exchange rates though not necessarily as compared to a policy of large but infrequent devaluations) without yielding any gains on the real side.

14. Another consequence may be that previously held expectations of the devaluation are fulfilled. This would lower the expected cost of foreign borrowing and thus contribute towards a more easy money market.

15. For alternative diagrams also covering longer time spans see Korkman (1978) and Oksanen (1978).

16. This argument is strengthened by the consideration that investment into new areas of production and exports probably are related more to expected long run profitability than to the kind of short run windfalls caused by large devaluations.

17. In substance this view is not very different from Tuomainen's restatement of the traditional case for the devaluation strategy, according to which intensified macroeconomic instability is a (reasonable) price that has had to be paid for the rapid growth and structural change achieved through the devaluations. (Needless to say, the alternative view is that Finland has achieved relatively rapid growth in spite of de-stabilizing policies rather than because of them.)

18. Assume, for instance, that the economy is in the midst of an internationally caused recession, that its price competitiveness is deemed unsatisfactory and that substantial current account deficits are considered intolerable. Taking the rules of free trade for granted, are there any alternatives to a devaluation? Certainly a devaluation restoring export competitiveness and profitability is more preferable than a slow and painful process of domestic deflation associated with large unemployment and a slump in investment?

To pose the question in this way is to answer it, i.e., accepting the assumptions and restrictions makes it hard to avoid the conclusion. In reality, the problem will be complicated by the fact that it is difficult to assess the state and sufficiency of competitiveness in an unambiguous way, that views will differ as to the size of "tolerable" deficits and the desirability of upholding the rules of free trade etc.

19. See, e.g., Lundberg, Lundgren, Matthiesson and Ohlin (1974).
20. For obvious reasons the foreign trade price index stabilized through exchange rate policy should include only tradeable goods the prices of which reflect world market conditions rather than domestic costs. Similarly, price rises associated with term-of-trade losses might be treated differently.
21. Most economists in Finland now agree that the exchange rate should have been revalued in 1973-74 in order to avoid the externally caused acceleration in inflation and the "overheating" of the economy which then took place. Similarly, agreement seems fairly widespread that the small revaluations in 1979-80 have been steps in the right direction. Nevertheless, agreement on these issues was reached ex post rather than before the events and is more general among economists than, e.g., among representatives of pressure groups (or within the Board of Management of the Bank of Finland).
22. Even the question of whether it is reasonable to regard the exchange rate as an instrument of policy in the first place - rather than as being inexorably determined by the market and therefore out of government and central bank control - is at issue in countries with large and mainly unregulated capital flows.
23. For a forceful restatement of this view against the background of the problems created or intensified in Britain by the recently high value of the pound see Blackaby (1979).

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