Travelling Along the Third Way. A Swedish Model of Stabilisation, Equity and Growth*

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Abstract

The Swedish economic policy to combine full employment and equity with price stability and economic growth was developed by two trade union economists shortly after World War II. Through the use of extensive employment policy measures, a tight fiscal policy and a wage policy of solidarity, the Rehn-Meidner model represents a unique third way between Keynesianism and monetarism. This essay analyses the application and performance of the Rehn-Meidner model in Sweden. Although never consistently applied, it is possible to distinguish a golden age for the model from the late 1950s to the early 1970s. In the 1970s and the 1980s, governments abandoned the restrictive macroeconomic means of the model and were thus unable to combine low rates of unemployment with low inflation and high economic growth. Since the early 1990s, Sweden has not met the requirement of full employment in the Rehn-Meidner model. Recent declarations by the EU to prioritise full employment once again but without giving up the objectives of price stability and growth legitimise a renewed interest in the model.

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1. Introduction

In the early post-war period, two Swedish trade-union economists presented a unique economic and wage policy program, the so-called Rehn-Meidner model, aimed at combining full employment and fair wages with low inflation and high economic growth. In a report to the 1951 Congress of the LO (The Swedish Confederation of Trade Unions, the Swedish TUC), Gösta Rehn and Rudolf Meidner recommended a restrained general economic policy - principally indirect taxation - in combination with a wage policy of solidarity and an active labour market policy (Meidner and Rehn et al., 1953). Meidner was then the head of the LO Economics Research Department and Rehn the department’s most prominent economist. In the LO report Rehn and Meidner focused on appropriate means to achieve full employment, price stability and wage equality, not on collective saving and economic growth. Other works by Rehn and Meidner must be accounted for to provide a full picture of their model.¹

Rehn and Meidner were not the inventors of an active labour market policy or a wage policy of solidarity. But it was easier for representatives of government and trade unions to support and win acceptance for mobility-stimulating labour market policy and a wage policy of solidarity if there were good arguments for the policies leading to lower inflation and higher real wages. Both adherents and critics of Swedish labour market and wage policies have overlooked the comprehensive and coherent nature of the Rehn-Meidner model. The model was intended to satisfy all four objectives of post-war economic policy. Further, each policy measure had more than one purpose and also the aim of making other means more effective. The interaction between the means makes it difficult to lift out parts of the Rehn-Meidner model and keep the rest.

The prime aim of this paper is to analyse the application and functioning of the Rehn-Meidner policy model in Sweden. It also addresses the question of whether the

economic development in Sweden in the post-war period supports the model’s underpinning economic theory.

Analysing the application of the Rehn-Meidner model in Sweden is not without complications. An economic policy and wage policy in conformity with the model does not necessarily mean that the model itself has been guiding decision makers. Swedish politicians might have been influenced by economic-policy models, in some respects similar to the Rehn-Meidner model. Neither do politicians’ references to the model ex post prove that it really had any influence over the economic policy during the period under review. Another problem when analysing the application of the Rehn-Meidner model, is that its fathers do not provide an unambiguous blueprint of the design of general economic policy (fiscal and monetary policy) in a recession. The model was basically formulated for an overheated economy. However, difficulties defining the Rehn-Meidner program for a recession have not stopped me from drawing some conclusions about its applicability during the post-war period.

To start, I will provide a brief account of the Rehn-Meidner policy program and also of its underlying economic theory (Section 2). I will then outline the application and performance of the Rehn-Meidner model in Sweden through a summary description of Keynesian economic policy during the early post-war years (Section 3). The Rehn-Meidner model was then never fully and consciously applied, but it is possible to speak of a golden age for the model, and also for Sweden, from the end of the 1950s up to the first oil crisis in 1973-1974 (Section 4). The golden age was followed by a period, up to the deep Swedish economic crisis at the beginning of the 1990s, with major external challenges to, and some obvious departures from the model (Section 5). The 1990s meant a new institutional and theoretical framework for economic policy, and also a deviation from full employment, in Sweden (Section 6). Although the future of the Rehn-Meidner model in Sweden is uncertain in the light of globalisation, there are signs of a renaissance for the model on the EU level (Section 7).
2. The content of the Rehn-Meidner model

2.1 An integrated policy of macroeconomic stability, growth and equity

The original Rehn-Meidner model advocates a tight fiscal policy in an overheated economy, and also in the medium term, to control inflation. This policy was defined for an economy of fixed exchange rates. In the 1960s and 1970s, Rehn suggested revaluation as another deflationary means in the fight against inflation (see Rehn, 1977, p. 223). A restrictive fiscal policy, or a revaluation, should keep down nominal wage increases under peak conditions by its negative impact on prices, and thus on the amount of marginal (expected) profits from recruiting labour (see the marginal productivity theory). Fiscal restraint was also intended to put downward pressure on prices in the medium term in a situation where nominal wage growth was maintained by a selective policy of full employment (see below). In addition Rehn and Meidner expected that restrictive fiscal policy would have some wage-restraining effects, both in the medium term and under peak conditions, by its contribution to a decline of actual profit margins. They assumed that high gross profit margins would boost firms’ financial capacity to bid up wages for scarce labour. Rehn and Meidner also thought that high profit margins would increase firms’ willingness (and ability) to remunerate employees more generously than their performance merits (X-inefficiency wages).

In the Rehn-Meidner model, high marginal profits from recruiting labour and high actual profit margins, lead to widespread wage drift, i.e. to wage increases outside central agreements, in wage leading sectors. (In Sweden the exposed sector has

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2 Rehn and Meidner played down the possibility that the deflationary effects of fiscal restraint would be offset by increases in national competitiveness through domestic price reductions.

3 Rehn and Meidner maintained further, as today’s efficiency-wage theorists, that higher profits accruing to firms’ owners would provoke higher wage claims. However, Rehn and Meidner did not refer, as the efficiency-wage theorists, to the risk of adverse productivity effects if employers were to reject these demands for higher wages on equity grounds (see, however, Hansen and Rehn, 1956, p. 90 and Rehn, 1987, p. 76). It seems that Rehn and Meidner eventually fell back on the argument that high actual profit margins would intensify firms’ wage competition for scarce labour or their propensity (and ability) to pay X-inefficient wages (Rehn, 1952a, pp. 32-43, 1969, pp. 163 and 170, and 1987, pp. 65-8; Meidner and Rehn et al., 1953, pp. 92-3; Hansen and Rehn, 1956, p. 89; Erixon, 2000, pp. 25-9 and 2001, pp. 23-4).

4 The notion of profit margins in Rehn and Meidner’s works includes markups (over marginal costs) on imperfect product markets, intra-marginal profits on competitive markets in which product supply curves are uniform and upward-sloping, and intra-marginal profits on either perfect or imperfect
generally been wage leading in the postwar period.) It is employers who take initiatives to increase nominal wages while wage earners care about relative-wage positions. As a consequence, wage drift will subsequently result in compensatory demands from employee groups, who experience moderate wage drift, to reclaim earlier income relations.

Rehn and Meidner recommended a restrictive fiscal policy in the medium term not only to reduce inflation – this policy should also, by contributing to a decline in profit margins, alter functional income distribution in favour of labour and increase public saving at the expense of company saving. They preferred public saving for reasons of income and wealth distribution and industrial policy (Rehn, 1952a, pp. 36 and 51, 1952b, p. 74 and 1969, p. 165). These objectives make public saving the least market-conforming component of the Rehn-Meidner model.

The term “selective employment policy” is often used to distinguish the Rehn-Meidner model from a Keynesian strategy of full employment based on expansionary fiscal and monetary policy. In this paper, the term will comprise active labour market policies but also marginal employment subsidies, which Rehn anxiously came to argue in favour of from the 1970s. Rehn hoped that subsidies to firms that are recruiting labour or undertaking investment would reduce both unemployment and inflation by creating incentives to reduce prices. He also expected that marginal subsidies would lead to downward pressure on prices by the pertinent decline in profit margins for firms that do not qualify for the subsidies (Rehn, 1982; Erixon, 2000, pp. 27-9). In Rehn’s final proposal the subsidies should be permanent and offered to firms in all regions and sectors and for all kinds of labour (Rehn, 1987, pp. 71-2 and 1993, pp. 21-2).

Labour market policies are the main instruments in the original Rehn-Meidner model to prevent tendencies of increased open unemployment under a restrictive fiscal policy when nominal wages are more rigid than prices. What more is, labour-market policy measures to guarantee full employment at a high level of ambition explain why product markets in which firms have different productivity levels (the vintage approach). It is difficult however to associate perfect product markets in the long run with productivity differentials between firms (rather than plants), and also with upward-sloping product supply curves.
nominal wages are rigid downwards in the Rehn-Meidner model, at least in a recession and in the medium term. Rehn and Meidner assumed that an active labour market policy brings higher nominal wage increases than would occur in a regime of open unemployment as trade unions and individual workers gain strength in a full employment situation. The propensity of labour market policy to reduce inflation by making labour markets more effective (and wage earners more productive) is offset by the policy’s tendency to keep up wages. In the Rehn-Meidner model, labour market policies become a weapon in the fight against inflation through their contribution to a profit-margin squeeze.

Active labour market policies have three elements, supply-oriented measures (retraining, vocational education and relocation grants), actions to improve the matching process on the labour market and targeted demand policy, i.e. government measures to increase demand for labour in certain regions, industries and firms. Rehn and Meidner did not confront the demand component of labour market policy with the supply and adjustment oriented measures. Formulations e.g. in the 1951 LO report, however, point to Rehn and Meidner putting greater emphasis on mobility-enhancing policies (including retraining) than on job-creation measures (Meidner and Rehn et al., 1953, pp. 92-3). The purpose of labour market policy was, after all, not only to maintain full employment and combat inflation by contributing to a decline in actual profit margins. The policy was also intended to counteract inflationary bottlenecks in the labour market and support structural change in general.

A further task of mobility-enhancing labour market policies in the Rehn-Meidner model is to back up the solidarity wage policy in its endeavours to build a fair wage structure and rapid structural change. A wage policy of solidarity - which can be achieved through coordinated wage negotiations only - implies that employees with

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5 Rehn (1952a, p. 32, (1977, p. 212) and (1982, p. 44); Meidner and Rehn et al. (1953, pp. 46-9 and 99); Rehn (1987, p. 67), see also Erixon (2000, pp. 38-40 and 67). The argument that labour market policy should strengthen the bargaining position of labour is critical e.g. in the case of Sweden where economic compensation at retraining schemes is equal to unemployment compensation for trade union members. By their strong emphasis on market forces in wage formation (see wage drift) Rehn and Meidner could have argued instead that labour market policy keeps up wage growth by maintaining labour scarcity per se. Labour market training and relief work in particular may alleviate wage competition by reducing the number of job applicants and the intensity of job search. These phenomena are covered by the notion “locking-in effects” in the new bargaining theory.
identical jobs should be offered the same wages irrespective of the profits of firms and industries. Wage differences should reflect “objective” differences in working environment and job content, e.g. differences in accident and unemployment risks, physical strain and skill demands. In fact, solidarity wage policy is an instrument anticipating a long-run equilibrium in perfect labour markets (Rehn, 1969, p. 165). But for the attainment of fair wages, labour mobility-enhancing and deflationary-policy measures must be introduced to avoid significant wage differentials when dynamic firms try to recruit labour.

According to the Rehn-Meidner model, the wage policy of solidarity is compatible with economic growth. Equal remuneration for identical jobs will establish a cost pressure on low-productivity firms, which must rationalise or die. The closure of inefficient firms enhances average productivity per se, but also indirectly by freeing resources for the expansion of dynamic firms. Further, a wage policy of solidarity would strengthen incentives for structural change by leading to larger profit differentials between industries and between firms.

The role of solidarity wage policy in the Rehn-Meidner model is not only to combine equity with structural change, but also to participate in the struggle against inflation. This wage policy is supposed to hold back wage increases in profitable companies willing and able to pay higher wages than the ones of solidarity. Rehn and Meidner also thought that the establishment of a “rational” (fair) wage structure would mitigate inflationary wage-wage spirals, which tend to appear when unions try to increase or maintain the relative wage levels of their members. The wage policy of solidarity is a necessary, though not sufficient, condition for wage stability. The policy leads neither to wage stability nor to structural change, if there is no restrictive fiscal policy and active labour market policy to reduce overall profits and promote labour mobility (Meidner and Rehn et al., 1953, pp. 90-1 and 96; Rehn, 1952a, pp. 39-44 and 1977, p. 216).

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6 In the 1951 LO report the notion of rationalization is broad, including the elimination of production slacks (the definition in this paper), organizational changes, labour substitution and even the adoption of new technologies.
The Rehn-Meidner program is an alternative to a “free” market model of structural change in which labour mobility is induced by wage differentials between firms, occupations and regions. Rehn and Meidner thought that large wage differentials, which are required to overcome inertia on labour markets, are unfair and also inflationary. Widening wage gaps can seldom be achieved through absolute reductions of nominal wages and they will further call forth compensatory wage claims aimed at reinstating the initial wage structure (Rehn, 1952a, pp. 44-5, 1969, p. 165 and 1987, pp. 69 and 73-7; Meidner and Rehn et al., 1953, pp. 95-6).

As already mentioned, the Rehn-Meidner view of economic policy in a recession is ambiguous. A restrictive fiscal policy over the business cycle does not exclude a countercyclical fiscal policy or even an underbalanced public budget in a period of low economic activity. The LO report contains no reservations when recommending a countercyclical fiscal policy - an underbalanced public budget may be necessary to keep full employment (Meidner and Rehn et al., 1953, p. 91). Rehn also claims in other works that the price stabilising effects of an overbalanced budget in the medium term would indeed increase the scope for public budget deficits. But it seems that Rehn only recommended a fiscal policy leading to public budget deficits provided that the recession is deep (see Rehn, 1952a, p. 52, 1952b, p. 76, 1969, pp. 166 and 180, 1977, p. 213 and 1982, pp. 1-3, 8, 18 and 26). A reasonable interpretation of the Rehn-Meidner model is that it suggests a selective employment policy together with a countercyclical fiscal policy including the possibility of intentional public budget deficits during a deep recession (depression). During a “normal” (or weak) recession the model thus recommends selective employment stimuli within the framework of a fiscal policy that is neutral or restrictive.

Neither is monetary policy unambiguous in the Rehn-Meidner model. In the debate between him and Erik Lundberg in the early post-war period, Rehn had criticized the use of monetary measures in stabilisation policies. He considered the policy of permanently low rates of interest in Sweden at the time the most suitable monetary policy (Rehn, 1952a, pp. 51-2 and 1952b, pp. 75-6). But already in the 1951 LO report Rehn placed a restrictive monetary policy almost on an equal footing with a contractionary fiscal policy (Meidner and Rehn et al. 1953, pp. 84 and 90-1, see also Rehn, 1969, pp. 164-6 and 169-70). My interpretation of the Rehn-Meidner model is,
therefore, that monetary policy should be countercyclical, though restrained in the medium term, and directly expansionary in a severe recession only. The difficulty of analysing the application of the model’s monetary and fiscal policy lies, of course, in deciding whether a recession has been severe or not.

2.2 The Rehn-Meidner model in macroeconomics

The Stockholm school economist Erik Lundberg was the academic economist devoting the greatest amount of attention to the Rehn-Meidner model. Lundberg’s attitude was sympathetic but critical. His main criticism was political and ideological – major public savings and a selective economic policy programs would cause the emergence of a bureaucratic control apparatus that in the long term presented a threat to democracy. In economic terms Lundberg’s main objection to the model was that it underestimated the importance of high profits, both \textit{ex ante} and \textit{ex post}, for private investment. Admitting the risk of financial “locking-in” effects from self-financing, Lundberg advocated deregulation and capital tax reductions to improve the functioning of the capital market.\footnote{See Lundberg (1952b, p. 67), (1972, pp. 480-5) and (1985, p. 19). Rehn and Meidner’s reply to Lundberg was that economic policy must reduce profit margins in the medium term but not to depression levels. Profit margins must also be kept stable in the long run, e.g. through “voluntary” incomes policy. Further, Rehn and Meidner emphasised the salience of large profit \textit{differentials} rather than of high profit levels in general for economic growth. Labour market policies, marginal employment subsidies and solidaristic wage policy are means to promote structural change by widening profit gaps between dynamic and stagnating firms (and industries), see Meidner and Rehn \textit{et al.} (1953, pp. 90-4), Meidner (1969, p. 193), Rehn (1969, p. 157), (1977, p. 214), (1982, p. 44) and (1987, p. 67).}

However, Erik Lundberg referred to the “Rehn-Salter model” to indicate that the Rehn-Meidner model was a forerunner of the vintage theory in growth economics (Lundberg, 1972, pp. 470-4 and 1985, pp. 17-8). Lundberg shed light on the inevitable consequence of the Rehn-Meidner model that price reductions as the result of restrictive economic policy would stimulate productivity through squeezing average profit margins. If wages for identical work are uniform (the wage policy of solidarity), low-productivity firms would then need to rationalise or perish, in which case resources for structural change would be liberated. Rehn added in the 1960s that productivity is also stimulated by low profits in a recession – procyclical profit
margins contribute to a countercyclical productivity pattern (see Rehn 1969, pp. 151-2 and 157 and below for additional Rehn-Meidner arguments for countercyclical productivity development).

The Rehn-Meidner assumption that nominal wages are more rigid than prices on the aggregate level, both in the short and medium term, is crucial for the above argument. Labour market policy sustaining full employment prevents nominal wages (or rather nominal wage growth) from being fully adjusted to a downward shift in aggregate demand. (Rehn and Meidner also referred to the existence of adjustment rigidities on labour markets in the short run.) Significant price reductions may still occur if product markets are highly competitive, or if price-leading, high-productivity firms reduce their prices as a response to possible increases in (marginal) labour productivity. Rehn also suggested that low aggregate demand might force companies to reduce their markups. (The price elasticity of demand is a negative function of output.) Rationalisation might thus be stimulated by low aggregate demand in all firms during a recession, not only in low-productivity firms that are threatened by closures. Rehn further assumed, as did Harvey Leibenstein in his theory of X-inefficiencies, that firms experiencing a profit-margin decline not only would reduce their production slacks (rationalise), but also invest in new technologies (Rehn 1969, p. 151; Leibenstein, 1980, pp. 39, 46 and 234-6).

Rehn’s idea of countercyclical productivity and of productivity stimulation through restrictive macroeconomic policies, seems quite modern in the light of the “new” growth theory (cf. Aghion and Howitt, 1998, Ch.8). Yet the Rehn-Meidner model is basically a third way between monetarism and Keynesianism in stabilisation policies. The model was first an alternative to a Keynesian economic policy practised e.g. in Sweden during the early post-war years. The Keynesian post-war model is here seen as a countercyclical general economic policy with a tendency to expansionism, while the Rehn-Meidner model implies a countercyclical general economic policy with a tendency to deflation. The difference between the Keynesian post-war model and the

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8 Rehn came to emphasize a “Keynesian” growth theory when unemployment increased in the OECD area during the 1970s and 1980s - stimuli of total demand would have increased productivity due to increasing returns to scale (Rehn, 1982, pp. 1-5 and 1986, pp. 84-5). During his last years, however, Rehn returned to his productivity theory from the 1960s - high profits will reduce efforts by firm agents to become more efficient (Rehn, 1993, pp. 18-9).
Rehn-Meidner model can be defined more precisely in terms of the Phillips curve. The post-war Keynesian solution to the unemployment-inflation dilemma is connected in this paper with expansionary general economic policies, primarily fiscal policies or devaluations, in combination with regulation and selective contractionary fiscal measures to conquer inflation. It is mainly incomes policy that will result in a downward shift of the Phillips curve in the Keynesian model. In the Rehn-Meidner model, by contrast, a favourable trade-off between inflation and unemployment is obtained through a combination of restrictive fiscal policies (or revaluations) and active labour-market policy measures. In this model, it is basically a reduction of actual profit margins that leads to a downward shift of the Phillips curve (Rehn, 1969, p. 170). Labour market policy’s propensity to reduce inflation by making labour markets more flexible is less important here, as the policy also has a tendency to keep up wage claims by reducing open unemployment.

Rehn and Meidner were of the opinion that their policy, aimed at restraining aggregate demand, squeezing profit margins and making labour markets more effective, is superior to a Keynesian strategy for fighting inflation in an economy approaching full employment. They thought that incomes policy is a blunt instrument in the fight against inflation if full employment is maintained by expansionary general economic-policy means. In this situation, declarations of wage restraint cannot prevent wage drift or high compensatory central wage increases for wage-earner groups not covered by coordinated wage agreements. It is tempting for central trade unions to strive for wage-drift compensation when their bargaining position has been strengthened by low rates of unemployment. Further, the Keynesian remedy for inflation is not only ineffective, but also counterproductive. Price and investment controls hurt mainly efficient firms and investment projects. In addition, incomes policy weakens the willingness of firms to rationalise, if it is at all possible for the trade union movement - which Rehn and Meidner doubted - to moderate wage demands in an overheated economy. Besides, Rehn and Meidner feared that participation in incomes-policy agreements would weaken the legitimacy of trade unions in the eyes of their members (Meidner and Rehn et al., 1953, pp. 81-7, see also Rehn, 1952a, pp. 36 and 48-9 and 1987, pp. 62 and 67-8 and Meidner, 1952, pp. 21 and 25).
As in other Western countries, support for the Keynesian post-war model gradually waned in Sweden during the 1980s and 1990s. Today it is more relevant to compare the Rehn-Meidner model with rational expectation theories and other theories emphasising the limitations of demand management and regulation to maintain peak levels of employment, at least without accelerating inflation. Being a third way in economic policy, the Rehn-Meidner model shares some ideas with “new monetarism”. The founders of the model envisaged the difficulties of Keynesian fine-tuning, and they doubted, although with few references to expectations, that peak rates of employment could be preserved by a strict Keynesian strategy. Labour scarcity will result in high nominal wage increases under inelastic labour-supply conditions. Besides, “overfull” employment has adverse effects on productivity by leading to high absenteeism and excessive labour turnover (Meidner and Rehn et al., 1953, pp. 37-47 and 81-2; Rehn, 1952a, pp. 72-3; Hansen and Rehn, 1956, p. 98). The notions of NAIRU and a “natural” (equilibrium) rate of unemployment are not awkward from the viewpoint of the Rehn-Meidner model (see Rehn, 1982, pp. 11 and 17 and 1987, p. 65). The model’s recommendation of supply and adjustment measures on both labour and product markets could be interpreted as attempts to reduce NAIRU and increase GDP in the medium and long term. Rehn and Meidner here referred to marginal employment subsidies, labour market policies, and also to the need of measures to intensify price competition in individual product markets (Rehn, 1952a, p. 47 and 1953, p. 281).

However, there are significant differences between a modern monetarist and a Rehn-Meidner viewpoint. The Rehn-Meidner model resists the one-sided emphasis by monetarists on price stability, and their doubts about the efficiency of fiscal measures in stabilisation policy. Rehn and Meidner made no contribution to business-cycle theory, but had a weaker faith than most monetarists in the self-curative capacity of the laissez-faire economy. They believed that demand management has sustainable

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9 Of course, all contributions to new macroeconomics, or even to neo-classical macroeconomics, do not satisfy the basic principles of monetarism (see e.g. the new-Keynesian theory of wage and price stickiness in the first case). But the hegemony of the post-war Keynesian model has certainly been broken in macroeconomics. Modern textbooks emphasise the limitations of stabilisation policy by reference to the Ricardian equivalence, the difficulties of fine-tuning and the adjustment of price expectations in the medium or long term. Besides, incomes policy is here seldom seen as a complement to an expansionary fiscal policy for maintaining peak levels of output and employment without accelerating inflation.
effects on production and employment, and hence that a persistent Phillips-curve relation exists, except under overheated conditions (cf. Akerlof et al., 2000). Rehn and Meidner could have claimed here, like Keynes in the General Theory, that wage earners governed by relative-wage preferences will accept price increases leading to a general reduction of real wages. Furthermore, the Rehn-Meidner model excludes deregulation of labour markets which weaken the negotiating position of labour. Also, by participating in coordinated wage bargaining, central labour-market organisations are strategic agents for solidarity wage policy.

The Anglo-American monetarist literature does not contain a Rehn-Meidner hypothesis that productivity is stimulated directly by low profit margins. Rehn and Meidner suggested that fiscal restraints and labour market policies together have a positive impact on productivity in the medium term - a profit-squeezing economic policy would promote structural change, rationalisation and investment in new technologies. There are also very few references in the new macroeconomic literature to the Rehn-Meidner conjecture that lower markups and intra-marginal profits will reduce nominal wage growth by weakening the propensity (and ability) to offer X-inefficient wages or worsening the financial opportunities for wage bidding. In modern macroeconomics, lower markups will chiefly stimulate nominal wages (through their positive effects on labour demand) or leave them intact.

The main difference between the Swedish third way and a monetarist view is that Rehn and Meidner, despite all, believed in state interventionism to achieve very low rates of unemployment, at least below 3 per cent, without accelerating inflation. Neo-monetarists have profound doubts about the efficiency, not only of regulation, but also of selective employment programs. In fact, a basic assumption in the Rehn-Meidner model itself is that labour market programs will increase the pace of nominal

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10 As Rehn and Meidner focused on an overheated economy and on an economy with continuous productivity increases, they were not directly concerned with the case of absolute wage stickiness (Erixon, 2000, pp. 37-8).

11 The Rehn-Meidner model is also a “third way” by its hypothesis that inflationary wage-wage spirals are mitigated by fair wages. The monetarist view provides no room for income distribution in the analysis of stabilization policy. Income distribution matters for macroeconomic stability in post-Keynesian models - aggregate demand is stimulated by a decline in profits share of GDP since wage earners have a lower saving propensity than capital owners. This theory has no correspondance in the Rehn-Meidner model.
wage increases. The tendency to higher nominal wages through an active labour market policy is mitigated, but not offset, in the model by the policy’s contribution to a profit margin squeeze and a more flexible labour market. To meet a neo-monetarist criticism that the Rehn-Meidner model is inflationary, an adherent of the model must emphasise the positive productivity effects of a profit-margin decline. Any remaining differences between a Rehn-Meidnerian and neo-monetarist view on the possibilities of maintaining unemployment rates below 3 percent by policy interventions probably reflects more basic differences in their evaluation of the risk of misuses of political power.

There are also differences between the Rehn-Meidner wage theory and modern labour market theories in which real wages and employment are determined by price and wage setting functions. Solidarity wage policy and labour market policy in itself could easily be analysed within the new theoretical framework. But market forces have a stronger influence on (nominal) wages at the aggregate level in the Rehn-Meidner model than in modern trade union and bargaining theories, both directly and, by triggering wage drift, as a guideline for central wage negotiations (see the more detailed theoretical comparison in Erixon, 2000, pp. 46-56 and 53-65 and 2004, pp. 90-3). In addition, modern bargaining and trade union theories have not yet considered the Rehn-Meidner hypothesis that high profits promote X-inefficient wage increases. Further, the assumption that wage earners care, not for real wages, but for relative wages, e.g. by comparisons with people in dissimilar occupations, is fundamental in the Rehn-Meidner model but not always in wage-setting models.

This chapter has hopefully contributed to putting an end to some misconceptions about the “Swedish model” in the international literature. The Rehn-Meidner model is not, at least in theory, a social innovation of wage restraint. First, as wage earners are assumed to gain strength in a state of full employment, active labour market policy is not an instrument to reduce inflation in itself. It is by contributing to a fall in profit margins that the policy becomes a vehicle in the fight against inflation. The profit fall is supposed to mitigate the tendency to high nominal wage growth at low rates of unemployment, and further to stimulate the rate of productivity increases. Second, in
the Rehn-Meidner model, coordinated negotiations are means to achieving wage moderation only through their impact on the wage structure. In addition, according to the model, wage restraint cannot be achieved by coordinated wage agreements alone – it would depend on the support of a contractionary macroeconomic policy, a selective employment policy, and a wage policy of solidarity.

3. Swedish economic policy before the Rehn-Meidner model

Already at the beginning of the 1930s, a Social Democrat government had accepted, and partially also practised, the idea of public budget deficits in a recession. The Stockholm school, with Gunnar Myrdal and Bertil Ohlin as prominent spokesmen, contributed to the early breakthrough of “Keynesian” ideas in Sweden. The theories of Keynes and the Stockholm school provided arguments for an expansionary fiscal policy during mass unemployment, and a countercyclical economic policy in general, respectively. These theories had a strong influence on Swedish economic policy immediately after the Second World War. Myrdal served as an expert in the committee charged with the task of writing the post-war program of the labour movement (Arbetarrörelsens efterkrigsprogram, 1944). The LO economist Gösta Rehn was a coordinator of the committee, and consequently one of the authors of the program. The post-war program was a radical child of the Keynesian revolution, showing strong similarities to the “Beveridge plan” (Beveridge, 1944). Both programs recommended investment planning and regulation of capital and product markets (including some nationalisation) to maintain peak levels of employment.

The post-war program of the Swedish labour movement was built upon expectations of a coming depression similar to the one a few years after the First World War. But the expected post-war depression did not occur. The rapid reconstruction of Western Europe was very favourable to Swedish export industries, which specialized in raw materials, semi-finished goods, and investment goods. An export boom, coupled with high domestic investments and a pent-up demand for housing and durable consumer goods, led to overheating tendencies in the Swedish economy during the second half of the 1940s and the early 1950s. Neither Social Democrat governments, nor the non-socialist opposition, were prepared for the problems of economic instability typical of
an overheated market economy with its inherent tendency to a low rate of unemployment. Stabilisation policy in Sweden from the end of World War II to the mid-1950s showed similarities to the post-war program of the labour movement and the Beveridge plan. Both programs intended to fight inflation with the help of price controls, incomes policy and other regulations - not through a strict economic policy endangering full employment (Beveridge, 1944, pp. 198-207; Arbetarrörelsens efterkrigsprogram, 1944, pp. 48-9). Social Democrat governments did not use restrictive general economic policy to counteract the tendencies towards overheating during the second half of the 1940s and first half of the 1950s. Fiscal policy (by general government) was countercyclical but mainly expansionary (cf. Matthiesen, 1971, pp. 176-7). In fact, in 1947, with the support of the LO leadership, a Social Democrat government had abolished general sales taxes in stabilisation policy. Monetary policy was also expansionary until the mid-1950s. A policy of low interest rates - which was made possible through monetary regulation – led to a vast increase of liquidity in the Swedish economy.

The government revalued the krona in 1946 in order to weaken inflationary impulses from abroad. But after the revaluation, in line with the Beveridge plan and the post-war program of the labour movement, the government undertook a series of extraordinary measures to alleviate overheating, and to improve the trade balance. It fought domestic inflationary tendencies in 1946-1948 through profit and selective purchase taxes, price controls and regulation of the construction sector. Many measures were facilitated by regulation instruments developed during the war. In 1947, the development of a large current-account deficit, due to the revaluation of the krona and the domestic-demand boom, resulted in import regulations. In the fall of 1948, the government also managed to persuade the LO to accept a “wage stop” for 1949 (in effect a prolongation of the 1948 collective agreements). An extension of the wage stop until 1950 led to increased tensions between the government and the LO.

12 Sweden had been ruled by a broad coalition government during World War II. Immediately after the war, the Social Democrats formed a one-party government. Between 1951 and 1957, they joined a coalition government together with the Farmers’ party (Bondeförbundet). The Social Democrats then governed alone until 1976 when they were replaced by a non-socialist coalition government.

13 Ernst Wigforss was Minister of Finance from 1932 until the summer of 1949. He was also the chairman of the committee responsible for the post-war program of the labour movement.
These tensions culminated in September 1949 when the government devalued the
krona. The Swedish devaluation was caused most immediately by the devaluation of
the British pound. The krona was devalued by 30 per cent in relation to the dollar, and
by 13-15 per cent in relation to the currencies of Sweden’s main competitors on the
export market. Soon after the devaluation (in 1950), Sweden joined the Bretton
Woods agreement from 1944, which stipulated fixed exchange rates, provided the
countries were not hit by major external imbalances.

The devaluation of 1949, in combination with a positive demand and price
development for Swedish export products during the Korean War, led to a surplus in
the current account and a profit boom for Swedish export industries 1950-1951.14
Sweden also experienced a wage explosion and a relatively high rate of inflation. The
government attempted to check inflation through regulation of the construction
industry, price controls, stricter rules of inventory valuation, profit freezes and by
levying duties on investments and exports. In 1952-1953, the pace of inflation was
reduced by a “mini recession” and a normalisation of export prices. But the
subsequent recovery entailed overheating again in 1955-1956. For the first time
during the post-war period, the Central Bank (Riksbanken) forcefully tightened
monetary policy, at the same time as the government tried to mitigate overheating by
imposing investment fees and by phasing out the use of free depreciation allowances
for machinery and equipment.

Up to the end of the 1950s the post-war Swedish economic policy can be termed
Keynesian. As in many other Western countries, the consecutive Swedish
governments made “full employment” a priority, full employment being more
ambitiously defined than during the 1930s. Fiscal policy was countercyclical, as was
monetary policy from the mid-1950s, but with a tendency to expansionism.15
Governments tried to cushion the inflationary effects of their economic policies, and
tendencies to deficits in the current account, through regulation, including voluntary
incomes policy, and by extraordinary fiscal measures to weaken the incentives to

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14 Export prices increased particularly for the raw materials industries representing more than half of
Swedish export value during the 1940s and 1950s.
invest, and to moderate price and wage increases in the most overheated industries. Indirect taxes, fundamental ingredients of the Rehn-Meidner model, were not used as a source of government incomes, with the exception of selective purchase taxes.

4. The Golden Age

4.1 The breakthrough

Already in the late 1940s Erik Lundberg and Bertil Ohlin, who was now the chairman of the leading non-socialist party (Folkpartiet), wanted to conquer the stabilisation-policy failures of the post-war Keynesian model with a redefinition of full employment. Although receptive to the idea of active labour market policy, they came to advocate a general economic policy restrictive enough to stabilise nominal wages by giving up the high ambition of unemployment rates approximating 1-2 percent. In contrast, Rehn and Meidner were convinced at the time that a restrained macroeconomic policy could be conciliated with stronger demands for full employment than those recommended by Lundberg and Ohlin.

Throughout the hot controversy with the Social Democrat party over its economic policy in 1949-1950, the LO leadership came to support the new ideas of Rehn and Meidner. However, at the time of the 1951 report, the LO leadership had not yet

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15 The lack of countercyclical monetary policy was not a serious departure from Keynesian strategy. In fact, in the General Theory, Keynes had recommended a policy of steady low rates of interest to guarantee full employment (Keynes, 1936, pp. 375-6).

16 Lundberg and Ohlin also referred, as did in fact Rehn and Meidner at the time, to the existence in an overheated economy of excessive labour turnover rates, absence from work and disorganisation problems in firms for other reasons (bottlenecks in production etc.) having negative effects on productivity (production per hour worked). Ohlin also emphasised that absenteeism under over-heated conditions leads not only to disorganisation problems but also to reductions in hours worked per employed (Ohlin, 1949, pp. 10-26; Lundberg, 1952a, p. 9 and 1952b, pp. 70-1).

17 The LO Congress of 1951 sanctioned, although without any formal decision, the Rehn-Meidner guidelines for a new economic policy. The president of the Metal Workers’ Union, Arne Geijer, had opposed the solidarity wage policy of the Rehn-Meidner model at the congress. But once Geijer became president of the LO in 1956 he came to personify the support of the solidarity wage policy and also of the mobility-enhancing labour market policy. In the report of the LO economists to the 1961 LO Congress, “Coordinated Industrial Policy” (Samordnad näringspolitik), the focus was on structural change and economic growth, not on stabilisation policy as in the 1951 report. Meidner was then still head of the LO research department, while Rehn had left the LO for the Ministry of Finance.
abandoned its resistance to consumer taxes. The hesitation of the LO vis-à-vis indirect taxes throughout the 1950s contributed to delaying the reintroduction of general sales taxes (Erlander, 1976, pp. 265-74). Further, the role of employment offices was actually reduced in Sweden in the 1950s (Wadensjö, 2001, p. 8). The Rehn-Meidner model received its real political breakthrough in the late 1950s. In 1958 the Minister of Finance, Gunnar Sträng, became a supporter of sales taxes, reintroducing them in 1961 (Erlander, 1976, p. 266). Together with Bertil Olsson, new head of the National Labour Market Board (AMS) in 1957, Sträng also became the chief architect of the expansion of labour market policy.

A large-scale active labour market policy was introduced for the first time in Sweden during the recession of 1957-1958. The policy became even more extensive and comprehensive in the recessions of 1966-1968 and 1970-1972. The active labour market policy share of GDP and of central government expenditures has moved countercyclically since the late 1950s, at least up to the 2000s. But the share also showed a positive trend (even excluding regional policies) from the late 1950s until 1973. Expenditures on active labour market policy measures as a share of GDP were higher in Sweden than in other OECD countries at the time of the first oil crisis. This period also saw an increasing share of Swedish expenditures on active labour market policies allocated to measures stimulating occupational and regional mobility and improving the matching capability of labour markets; the share of demand-oriented measures did increase only in the recession of the early 1970s. The increasing priority given to supply side and matching measures until the mid-1970s was completely in line with the Rehn-Meidner idea of rapid structural change and a reduction of inflationary bottlenecks in labour markets.

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18 In his memoirs, Prime Minister Tage Erlander writes that he came to advocate the Rehn-Meidner labour market policy at a meeting with the LO leadership in 1955. Per Edvin Skölöd, Minister of Finance 1949-1955, was decidedly hostile toward the LO report. He warned against a reduction of company profits and a weakening of the economic responsibility of the trade union movement that would threaten the full employment policy and make a compulsory incomes policy necessary. During his term as Minister of Finance Skölöd also opposed indirect taxation. In 1955, when Skölöd retired as Minister of Finance, Rehn and Meidner were finally rid of their main opponent.

19 See Table 1 in Appendix, Johannesson (1981, Fig. 1, Table 2 and A.1) and SOU 1993:43, Diagram 5.1.
At the initiative of the employers’ federation, the SAF, in the mid-1950s, wage negotiations in the blue-collar (LO) area were coordinated. From the beginning of the 1960s up to the mid-1970s a radical equalisation of wages between and within different industries (and plants) and between men and women took place in Sweden. Pay equalisation between industries and plants was more far-reaching in Sweden than in other OECD countries, including other Nordic countries. The adjustment of women’s wages to men’s wages was, however, as comprehensive in Denmark and the Netherlands as in Sweden (Ohlsson, 1980; Hibbs and Locking, 2000). During the 1970s widespread pay equalisation also occurred in the private white-collar field in Sweden through coordinated negotiations (Jonsson and Siven, 1984).

Rehn and Meidner’s model yielded a strong economic-political alibi for putting major emphasis on active labour market policy and a wage policy of solidarity. There were many examples in the 1960s of union representatives on industry and local levels accepting the disappearance of jobs in stagnating low-wage industries (see textile and clothing industry in particular) referring to the need for labour mobility and structural change (Meidner, 1974, p. 64).

Moreover, it seems the Social Democratic government adhered to the general economic policy of the Rehn-Meidner model from the end of the 1950s until the beginning of the 1970s. Fiscal and monetary policy was still countercyclical - at least until the mid-1960s - but on average stricter than during the early post-war years. Fiscal policy (for the entire public sector) was only mildly expansive and even restrictive during the recessions of 1966-1968 and 1970-1972, respectively. The restrained macroeconomic policy, combined with the ambitious labour market policy, was in effect an approximative application of the Rehn-Meidner model for “normal” recessions. The two recessions were in fact “normal”, at least in comparison to those of forthcoming periods. In the midst of the 1970-1972 recession, Minister of

20 The employers took initiative to wage coordination as they shared the Rehn-Meidner fear of inflationary wage races in an overheated economy. Besides, in the interwar period, the SAF had actually supported a wage policy of solidarity before the LO.

Finance Gunnar Sträng pointed out that a Keynesian expansionary policy instead of a selective employment policy would have resulted in higher inflation and thus in a deteriorating competitive power for Swedish companies (Ministry of Finance, Budget Bill 1971, pp. 19-20 and Revised Budget Bill 1971, p. 11). Sweden also refrained from a devaluation of its currency during the second half of the 1960s, contrary to the policies of Great Britain, Denmark and Finland.

There are additional signs that the Rehn-Meidner model was applied in Sweden during the 1960s and at the beginning of the 1970s. OECD’s standardized measure shows that Swedish unemployment was not much higher than 2.5 percent even in the recession of the early 1970s (OECD Economic Outlook June 1985, Table R12). Furthermore, Sweden experienced a stronger reduction of profits’ share of value added in manufacturing than other OECD countries. In the 1960s and early 1970s, public savings as a share of total savings also increased markedly in Sweden, as compared to other OECD countries.

But the Social Democrats can hardly be said to have used the Rehn-Meidner model as a compass when designing the general economic policy from the end of the 1950s to the beginning of the 1970s. Fiscal policy (for the whole public sector) was, contrary to the Rehn-Meidner model, mainly expansionary in spite of the construction of a large public supplementary pension (ATP) fund system from 1959. According to the guidelines of the model, fiscal policy became too expansionary during the economic booms of 1965-1966 and 1968-1970. Fiscal and also monetary restraints to keep inflation down (and to improve the current account) were introduced too late, and as a consequence, the following recessions became unnecessarily deep (Matthiessen, 1971, pp. 205-23; Tson Söderström, 1990, p. 63-7). Rehn praised Gunnar Sträng for having met the tendency towards increased unemployment with an active labour market policy and not with an expansionary fiscal policy (Rehn, 1977, p. 223). But the fact is

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22 The Swedish recessions in the mid-1960s and the early 1970s were less severe than those of the interwar period but deeper than the ones during the previous post-war period.

23 See Table 2 in Appendix. The profit share is equal to profits before dividends, taxes, interests and amortisations as a percentage of value added.

24 In the mid-1950s, Rehn was a forceful agent in designing the Social Democratic proposal of a distributive system of public funds as buffers (Meidner, 1988).
that the large active labour market policy program was the result of wrong timing of a Keynesian “stop-go” policy rather than a strict application of the Rehn-Meidner model. Labour market policy was the only alternative to keep down open unemployment, considering the delayed employment effects of fiscal and monetary policies.

The tendency to falling profit shares in manufacturing, during the 1960s and the beginning of the 1970s, were not the results of a strict application of the Rehn-Meidner program. The profit decline was considerable in Sweden, and the full employment situation probably contributed to the negative profit trend. But declining profit shares and low unemployment were international phenomena at the time, i.e. characteristic also for countries without a sizeable selective employment policy. The absence of a Swedish devaluation during the 1960s - which could have neutralized the tendency to reduced profit margins in the exposed sector - was not mainly due to influences from the Rehn-Meidner model; Sweden simply had less external balance problems than countries that did devaluate.

The LO wage policy from the mid-1960s was not only an application of the solidarity principles of the LO report - equal wages for equal work - but also a general support for low wage groups and low wage industries. The organisation was not successful in the 1960s and 1970s in negotiating a job evaluation system for the determination of just wage differentials. Instead a major part of wage equalisation during the 1960s and 1970s followed the principle of equal wages for different jobs (Arai, 1994; Hibbs and Locking, 2000). The LO and Meidner were of the opinion that reducing wage gaps

25 According to Erik Lundberg and Assar Lindbeck the negative profit tendency during the 1960s and 1970s was partly a result of influence from the Rehn-Meidner model (Lundberg, 1985, p. 22; Lindbeck, 1997, pp. 1291-2). I have chosen to play down further the impact of the model on the profit decline.

26 The tendency to falling gross profit shares and gross profitability in Sweden was also effectively neutralised by tax relieves, in particular for large, capital-intensive enterprises. The profitability decline in Swedish manufacturing 1953-1972 is reduced with 50 per cent considering the development of profit taxes (Södersten, 1971, pp. 324-5 and 329; Erixon, 1987, Table 2.1). It seems however that the tendency to a weaker profitability decline in the 1960s and the early 1970s, because of reductions in effective taxes, also appeared in other OECD countries (Södersten and Lindberg, 1983, pp. 30-2; Erixon, 1987, pp. 52-3; Hoeller et al., 1996, Table 9).

27 Finance Minister Sträng’s well-known distrust of devaluations (see Bergström, 1987, p. 196) might however have been influenced by the Rehn-Meidner model.
between industries, and prioritizing low wage groups, was in agreement with the demand of the Rehn-Meidner model for a more just wage structure.\textsuperscript{28}

To summarize, the Rehn-Meidner model was not consistently applied in Sweden from the end of the 1950s up to 1973-1974. But the period must still be seen as the golden era of the model considering the breakthrough of the active labour market policy and the wage policy of solidarity, the tendency towards reduced profit margins and increased public savings, and the introduction of sales taxes (VAT). The question is whether the period was also a golden era for Sweden in terms of her economic-policy objectives of combining full employment and equity with price stability and economic growth.

4.2 A golden age for Sweden, too?

During the golden age of the Rehn-Meidner model, Sweden registered a historically high GDP per capita and labour productivity growth if the second half of the 1940s is excluded from the reference period (Erixon, 1991, p. 245, Table 1:1). Further, in the period of 1960-1973 Sweden was in the group of OECD countries with the highest labour productivity growth in manufacturing (Monthly Labor Review August 1991, Table 50; Erixon, 1991, p. 245, Table 1:2; Pilat, 1996, Table 3; U.S. Department of Labour, 2005a, Table 1.1).

In the 1960-1973 period, the trade-off between inflation and unemployment was more favourable for Sweden than for OECD as a whole (OECD Historical Statistics 1982, Table 2.14, 2.15 and 8.11 and 1999, Table 2.15 and 8.11). Erik Lundberg maintained that Sweden’s beneficial Phillips curve was no evidence of selective employment-policy measures making Swedish labour markets more flexible but a statistical phenomenon – labour-market policy had reduced the recorded rate of open unemployment (Lundberg, 1985, pp. 20-1). However Lundberg’s view that the favourable Phillips curve for Sweden reflected a statistical disguise of open unemployment is controversial. The Rehn-Meidner strategy to combine low rates of
unemployment with price stability does not rely on the favourable effects of selective employment policies on labour market flexibility. Rehn and Meidner took for granted that labour market policy, by guaranteeing full employment, would keep up the pace of nominal wage increases in a recession and also in the medium term. It is the combination of labour market policies and restrictive fiscal policies, leading e.g. to a squeeze of actual profit margins, that constitutes, together with the wage policy of solidarity, the main Rehn-Meidner strategy to fight inflation without giving up the high ambitions of full employment.

But there is no reason to overemphasize the success of Sweden and the Rehn-Meidner model in stabilisation policy in the 1960s and early 1970s. In fact, in 1960-1973, the unemployment record and the Phillips curve were equally, or even more, favourable in other small Western European countries. (These countries are Austria, Belgium, Denmark, Finland, the Netherlands, Norway and Switzerland throughout the paper.) Thus there are indications that stabilisation-policy strategies other than the Rehn-Meidner one had been equally successful, or that the beneficial Phillips curve for almost all small Western European countries merely reflected their joint openness and related capacity of wage restraint and productivity growth.

Furthermore, there are no reason to elevate Sweden’s growth performance or the positive growth effects of the Rehn-Meidner policy model in the 1960s and early 1970s. In the 1960-1973 period Swedish GDP per capita growth was moderate in comparison to that in other OECD countries. A sharp increase in female participation rates had positive effects on Sweden’s relative GDP per capita growth, but the effects were offset by strong catch-up tendencies in less developed countries. Also, other small Western European countries belonged to the OECD group with the highest productivity growth in manufacturing. Structural change, in terms of changes in industry composition, was not exceptionally strong in Swedish manufacturing in the 1960s and early 1970s, compared with that of other small Western European countries, including the Nordic ones (see literature survey in Erixon, 2000). Besides, the importance of a restrictive macroeconomic policy and a radical solidarity wage

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28 The 1951 LO report had in fact expressed scepticism against a systematic job evaluation and also argued for wage equalization between different occupations in the same manner as the LO in the 1960s (Meidner and Rehn et al., 1953, pp. 97-8).
policy (or an active labour market policy) for the high productivity growth in Swedish manufacturing shall not be exaggerated. Sweden’s good productivity performance in manufacturing was mainly the result of companies’ rationalisation as a response to increased competition from countries which had participated in World War II, their fast assimilation of new foreign (mainly American) technologies and the possibility for companies in small Western countries to exploit scale advantages when trade was liberalized (cf Erixon, 1997, Ch.5). It must be noted, however, that the Rehn-Meidner model does not say that the pace of structural change increases with solidarity wage policy, not even if combined with labour market policy, only that this growth strategy imposes lower costs in terms of inequality and inflation in comparison with a “free” market strategy based on large wage differentials.

The greatest victory of Rehn and Meidner’s growth theory during the golden era of their policy model was that reduced profit margins played an important role for the high productivity growth in Swedish manufacturing. Harder international competition in particular led to extensive rationalisations, mergers, and to closures of plants and industries with low profitability, which in turn created a basis for structural change. A stronger downward pressure on profit margins was an important reason for productivity growth and structural change being faster in Swedish manufacturing during the 1960s than in the 1950s (Rydén, 1971, pp. 198-206; Wohlin, 1970, p. 109).

The conclusion is drawn, although with some qualifications, that the period from the end of the 1950s to the early 1970s is the golden age not only of the Rehn-Meidner model but also of Sweden in terms of her objectives of economic policy. Swedish growth and stabilisation records were not exceptional in themselves. However, in Sweden, radical wage equalisation and low unemployment proved consistent with satisfactory economic growth and relatively low inflation. During the period under

29 Empirical studies of the 1963-1985 period indicate that the wage policy of solidarity had the expected effects on structural change in Sweden – employment expanded most in sectors with the highest initial wage rate and the lowest wage increase. The correlations in manufacturing were stronger in 1963-1975 than in 1975-1985, and stronger in Sweden than in the United States (Edin and Topel, 1997). It also seems that the wage policy of solidarity increased output and blue-collar labour productivity in the Swedish business sector between 1964-1993 by speeding up the transformation of resources between plants and industries (Hibbs and Locking, 2000). But neither study estimated the relative importance of solidaristic wage policy for Swedish restructuring and productivity growth. Comparisons of Nordic countries do not distinguish solidarity wage policy as a strategic factor behind
discussion, Sweden would have gained a top position in the OECD area according to a performance index based on all four goals of post-war economic policy.

5. The Rehn-Meidner model during the turbulent 1970s and 1980s

5.1 Challenges to and departures from the model

In the 1970s, Sweden was hit, as other small Western European countries, by two oil crises, subsequent forceful demand shocks and by uncertain currency conditions after the collapse of the Bretton Woods system (1973). A restrictive monetary policy to reduce inflationary pressure after the two oil shocks, mainly in West Germany and the United States (at the start of the 1980s), led to a major crisis for Swedish export industries. In addition, Swedish companies met with increased competition from Japan and new industrial countries operating in the world market for ships, iron ore and steel products. Also, the specialisation of exports in raw materials, semi-finished goods and investment goods was unfavourable to Swedish manufacturing during a period with deep international recessions. Export growth was lower for Sweden than for all other OECD countries in 1973-1982. However, during the 1980s, Sweden could, like other Western European countries, benefit from a long-term boom in the United States, “the Reagan boom”.

In the 1970s and 1980s general economic policy in Sweden became on average far too expansionary by Rehn-Meidner standards. Discretionary exchange-rate policy measures, credit deregulation, export shocks, and, to a smaller extent, expansionary fiscal policies resulted in great fluctuations in profit shares and profitability, and eventually in relatively high rates of inflation in Sweden during the period under review. The possibilities of using monetary policy measures to affect the real economy were limited due to the policy of maintaining the value of the krona on an ever more globalised currency market. Sweden first participated in the European structural changes, or even behind changes in the wage structure (see Erixon, 2000, p. 74 and Holmlund and Zetterberg, 1991, pp. 1023-5).
currency cooperation after the collapse of the Bretton Woods system, and then (in 1977) built its own system of fixed exchange rates. The value of the krona was decided in relation to a basket of currencies, in which every currency reflected the importance of the country as a competitor to Sweden.

A departure from the Rehn-Meidner macroeconomic policy occurred already in 1973-1974 when Sweden experienced a positive demand shock without correspondence in other OECD countries. (Finland is a possible exception.) Rising international raw material prices and increased foreign demand for investment goods led to a profit boom in Swedish export industries in 1973-1974. The Social Democrat government did not exploit the opportunity in connection with the breakdown of the Bretton Woods system to alleviate the profit boom through a revaluation. In the mid-1970s the situation with “excess profits” turned into a cost and profitability crisis. The wage cost crisis weakened Swedish competitiveness, which in turn contributed to the country’s loss of market shares during the second half of the 1970s. The adjustment of nominal wages to the positive demand shock 1973-1974 provides one explanation for why the cost crisis and decline in profit shares after OPEC I and in the following international recession became more spectacular in Sweden than in other OECD countries.

Erik Lundberg described the wage explosion, dramatic profitability decline and extensive selective employment programs (see below) in Sweden in the mid-1970s as a parody of the Rehn-Meidner model (Lundberg, 1985, p. 26). In fact, from a Rehn-Meidnerian perspective, the wage cost crisis was expected in light of the preceding profit boom. Furthermore, Swedish policy makers reacted to tendencies to stagflation in the mid-1970s by introducing a stabilisation policy with strong Keynesian elements. The “Haga agreements” 1974-1975 between the political parties and central labour market organisations were a conscious Keynesian effort to reach wage restraint. The expectations behind the agreements were that the combination of increased payroll taxes (aggravating the profit crisis in the short run) and reduced income taxes for wage earners would lead to lower central wage claims.

30 The fluctuations in profit shares since the mid-1970s have been larger in Sweden than in other OECD countries with the exception for the Netherlands, Belgium and Canada, see Table 2 in Appendix (standard deviations) and Erixon (1994, Table 5.2).
The so-called bridging policies of 1974-1976 in Sweden were a Keynesian effort to stimulate domestic demand during an international recession. It consisted mainly of a reduction of VAT in 1974, support to inventory investments (see below) and of the changed tax structure of the Haga agreements. The bridging policies, which were praised by the OECD, were partly a Keynesian reaction to the Rehn-Meidner policy during the recession at the beginning of the decade. (However a similar bridging policy was conceived in Denmark and Norway.) In the mid-1970s, the general attitude of politicians and economists was that domestic demand had been too low during the previous recession.

A bourgeois (non-socialist), three-party, coalition government formed in 1976 continued on the Keynesian road of devaluations, instead of introducing a policy of fiscal and monetary restraints, when the Swedish deficit in the current account increased after OPEC I. The non-socialist government devalued the krona once in 1976 and twice (with almost 16 per cent in relation to the currencies of competing countries) in 1977.

There is no reason to place too much stress on the deviation of the bridging and devaluation policies from the Rehn-Meidner model. The policies were adopted in a situation of exceptional recession tendencies and current-account deficits. Moreover, Swedish fiscal policy during the bridging policy years of 1975 and 1976 was in fact restrictive or neutral.

Irrespective of political colour, Swedish governments carried on ambitious selective employment programs during the second half of the 1970s and the early 1980s. The active labour market policy share of GDP and of central government expenditures increased in the recession in the mid-1970s. After a reduction during the recovery at

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31 The government in 1976 was formed by Centerpartiet (former Bondeförbundet), Folkpartiet and Moderata Samlingspartiet (Conservative Party). Folkpartiet formed a minority government 1978-1979. After the elections in the Autumn of 1979, the former bourgeois three-party government was reestablished. In 1981 Moderata Samlingspartiet left the government. After the elections in the Autumn of 1982 the Social Democrats recaptured all seats in the Cabinet.

32 This conclusion is true for fiscal policy of both central government and the entire public sector. Statistics do not even unambiguously show that fiscal policy was countercyclical during the 1975-1977 recession. However fiscal policy of both central and general government seem to have turned less
the end of the decade, labour market policy share of GDP and central government budget increased again at the beginning of the 1980s. The share of the labour force in labour market policy programs reached a record level – 5 percent – in 1984 (see Johannesson, 1995, Table 2.2 and Table 2 in Appendix).

Further, bourgeois governments from 1976 also embarked on a selective employment policy (or rather industrial policy) by subsidizing large enterprises in mining, iron and steel and shipbuilding industries to prevent plant closures and mass lay-offs. A non-socialist government also initiated a nationalisation and reconstruction of the steel industry. The enterprises receiving extraordinary government subsidies had been hit by a worldwide recession and increased competition from Japan and the NIC countries. Similar subsidies were paid in other countries, but they were more extensive in Sweden than in e.g. Finland and Norway (Carlsson, 1983). Between 1975 and 1983, Swedish industry subsidies amounted to 29 percent of the entire selective employment policy including regional policy (Johannesson, 1991, Table 1A and 1995, Table 2.1).

There is reason to ask if the direction of the selective employment policy, during the second half of the 1970s and beginning of the 1980s, was indeed compatible with the Rehn-Meidner model. The increase of expenditures on active labour market policy in the mid-1970s was first concentrated on measures to maintain labour demand of enterprises in order to avoid dismissals, mainly support to build up inventory and subsidies to in-plant training. The proportion of another demand-oriented measure – relief work programs (especially for youth) - increased the most, both absolutely and relatively, when unemployment rose in 1977 and in 1982-1983. There are arguments for not being too critical of Swedish employment policy during the actual period on Rehn-Meidner grounds. Despite extensive demand-oriented programs, mobility and adjustment measures did actually increase their share of total expenditures on active labour market policy in the second half of the 1970s.  

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33 See Table 1 in Appendix. Mobility and adjustment measures also increased their share of expenditures on active labour market policy in the second half of the 1970s if regional policy expenditures are included in the group of demand-oriented measures, see Johannesson (1981, Table 2) and (1991, Table 1A).
policy became more demand-oriented during the recessions of the mid-1970s and early 1980s was no serious violation of the principle of the Rehn-Meidner model; the possibilities of avoiding a major increase of open unemployment, through other labour market policy measures, were limited. However, the employment policy during the second half of the 1970s and early 1980s was probably too defensive to meet the model aims of rapid structural change. The subsidies to the “crisis industries” were definitely too large and lasted for too long from the perspective of the Rehn-Meidner model.

Moreover, it is easy on Rehn-Meidner, and also on Keynesian, grounds to criticise the expansionary fiscal policy of the bourgeois government during the recovery of 1978-1980. Fiscal policy became procyclical in spite of low real interest rates. During the 1974-1980 period of high inflation, Swedish real long-term rates of interest were, like those of many other OECD countries, even negative. On the other hand, the strict fiscal policy by non-socialist governments during the recession of the early 1980s could be acceptable from the Rehn-Meidner perspective, in particular as the policy was combined with extensive selective employment policy measures. Fiscal policy was acyclical or even procyclical, at least until 1982. The non-socialist restraint policy during the international recession, which was also marked by increasing real interests, was an obvious violation of Keynesian bridging policy. In fact, influential economists had begun reviewing the Rehn-Meidnerian economic policy during the early 1970s recession as an ideal (Jakobsson and Herin, 1981, pp. 48-50). However it is dubitable whether the tighter economic policy in the early 1980s really was in line with the Rehn-Meidner model considering the depth of the recession.

The “new” economic policy by bourgeois governments in the 1980s should be viewed against the background of high inflation after OPEC II and the emergence of a structural public budget deficit, for both central and general government, during the recovery at the end of the 1970s. Monetarist (or “pre-Keynesian”) ideas of crowding out as an effect of a large public budget deficit and public sector, had also begun to influence the Swedish economic-political debate. The non-socialist violation of
Keynesian economic policy of earlier decades was, however, not complete. In the fall of 1981, during a substantial capital outflow from Sweden due to a deteriorated balance of payment situation, the government devalued the krona instead of allowing the Central Bank to increase the prime interest rate.

Soon after regaining government power in the fall of 1982, the Social Democrats also devalued the krona. Open unemployment had increased more during the recession of the early 1980s than during the recession of the mid-1970s. Devaluation was the foundation of the Minister of Finance Kjell-Olof Feldt’s “third way” to improve Sweden’s current account, and at the same time to increase production and employment (Erixon, 1989). The devaluation policy was offensive in the sense that Sweden’s competitiveness had already been restored through the bourgeois devaluation the year before. High profits in the exposed sector were important means, along Feldt’s third way, to simultaneously increase overall employment and transfer resources to the private (primarily the tradeable) sector. The devaluation of 1982 was supported by the LO, but Finance Minister Feldt soon found it urgent to inform the parties on the labour market that compensatory nominal wage increases would not be corrected by new demand-stimulating measures. The “third way” of the 1980s reflected a rebirth of pre-Keynesian ideas of public crowding out, but also a lingering influence from the Keynesian post-war model – higher employment should be attained by a devaluation, backed up by informal incomes policies to guarantee price stability.

The devaluations of the early 1980s, reducing the value of the krona with 26 percent in relation to the basket of other currencies, along with a strong dollar and an international recovery, led to a new profit boom in Swedish export industries. The recovery of profit shares in Swedish manufacturing during the first part of the 1980s was strong by international standards (see statistical sources of Table 2 in Appendix). Feldt’s profit-enhancing “third way” was a clear departure from the third way of the Rehn-Meidner model. A Rehn-Meidner adherent would perhaps have some understanding of the difficulty of anticipating the force of the international recovery.

See Price and Muller (1984, Table 1), Calmfors (1993, Fig. 11), OECD Economic Outlook December 1994, 1995 and 1998, Table 30 and 31, Frank, Ohlsson and Vredin (1993, Fig. 5-6) and Braconier and Holden (1999, Fig. 5.2.5).
But the government did not revalue the krona in the mid-1980s, in spite of obvious signs of an overheated labour market and favourable external conditions in the form of a current-account surplus.

The overheating of the Swedish economy took on new proportions during the second half of the 1980s, through a deregulation of the credit market. Under the existing tax system, the deregulation led to a credit-financed consumption, construction and stock-market boom. The competitiveness and profits of Swedish manufacturing were maintained by the krona losing its value concurrently with the weakening of the dollar. (The dollar was assigned more weight in Sweden’s currency basket than the U.S. share of Swedish trade.) Fiscal policy was predominantly countercyclical during the boom of the 1980s, but not enough to counteract the strong tendency to overheating.35 It also did not become restrictive enough to eliminate the structural public budget deficit until 1987. The government tried to check inflation through price controls, and by appealing for wage restraint. In the middle of the decade, the parties on the labour market accepted to set a ceiling to wage increases through the so-called “Rosenbad rounds”. (Rosenbad is the name of the government office.) However, the pace of the wage increases was to break through the ceiling. When the boom reached its peak in 1990, the LO leadership (and the Metal Workers’ Union) also accepted a price, wage and strike stop. But the “stop package” did not get a majority support in Parliament, which in turn led to a government crisis and the resignation of the Minister of Finance, Kjell-Olof Feldt.

Stabilisation policy during the boom of the second half of the 1980s was a departure from the Rehn-Meidner model. It was based on an incorrect, if the model is to be interpreted strictly, combination of measures. The Social Democrat government attempted to control inflation by incomes policy deals instead of through the introduction of forceful restrictive measures (including hard currency policy). Continued low unemployment was achieved through high aggregate demand, not through substantial selective employment programs. The Rehn-Meidner model was followed during the second half of the 1980s in the sense that training replaced

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35 Fiscal policy during the boom of the 1980s was countercyclical both for central government (see (Calmfors, 1993, Fig. 11) and Frank, Ohlsson and Vredin (1993, Fig. 5 and 6) and, with some annual
demand-oriented programs as the most important labour market policy measure. (This reorientation of labour-market policy was obvious both in terms of expenditures and in terms of program participants if measures for disabled persons are ignored.) Furthermore, the model could hardly be used to criticize the fall in active labour market policy share of GDP (and the share of the labour force participating in AMS measures) in the mid-1980s as such (see Table 1 in Appendix, Johannesson, 1995, Table 2.2, Calmfors, 1993, pp. 28-9 and Ackum Agell, 1995, Fig. 2). But the dismantling of labour market policy in the second half of the decade was probably too drastic to satisfy the model’s recommendation for a severely overheated economy.

There were other departures from the Rehn-Meidner model during the second half of the 1980s. A radical wage equalisation had occurred during the first half of the 1970, but from the middle of the 1980s wage differences were allowed to increase substantially in the LO/SAF area (Hibbs and Locking, 1995 and 2000). Wage gaps widened, not only between wage earners with different qualifications and jobs inside industries (and plants), but also between wage earners with equal jobs in different industries (and plants) - a flagrant violation of the solidarity policy of the 1951 LO report. In 1984-1985, coordinated wage negotiations between SAF and LO were abandoned. The departure from wage coordination was initiated by the SAF but it was supported by the Metal Workers’ Union. Central agreements for blue-collar workers were settled on industry levels until 1998, although there were some informal coordination among central trade unions on the initiative of the LO and an incomes-policy parenthesis in the period 1991-1993 (see section 6.2 below).

This section has emphasised the departures from the Rehn-Meidner model in Sweden from the mid-1970s to the early 1990s. According to the yardstick of the model, Swedish macroeconomic policy became too expansionary e.g. by contributing to negative financial saving for the public sector. Further, subsidies to industries in crisis and some other selective employment policy measures broke with the principle of structural change in the Rehn-Meidner model. From the mid-1980s, wage gaps widened between workers with similar jobs. But the picture of a deviation from the Rehn-Meidner model is not clear-cut. To prevent open mass unemployment, both exceptions, for the consolidated public sector (OECD Economic Outlook June 1996, 1998 and 2000,
Social Democrat and non-socialist governments pursued an active labour market policy, especially during the recessions of the mid-1970s and the early 1980s.

5.2 Did the Rehn-Meidner model contribute to Swedish sclerosis?

Inflation was much higher in Sweden from the mid-1970s to the early 1990s than during earlier post-war decades, an experience the country shared with most other Western European countries. In the period 1974-1990, Sweden was not exceptional by showing a higher rate of inflation than West Germany. In fact, during the second half of the 1970s, when the Phillips-curve correlation ceased to exist in the OECD area, Sweden’s average (annual) inflation rate was not particularly high in comparison to that in other OECD countries, and only slightly above that of other small Western European countries.36 In the 1980s, the Swedish average rate of inflation became higher than the OECD total, less the most inflationary member countries, and also than that of other small Western European countries. In the years 1988-1991 Sweden’s rate of inflation came to deviate systematically from the OECD and EU total including the most inflationary nations.

In the 1970s and 1980s, Sweden still lived up to the Rehn-Meidner model’s strong demand for full employment, with a possible exception for the recession at the beginning of the 1980s. Unemployment did not increase considerably in these decades as in the then EC countries, including the Netherlands, Belgium and Denmark. The (annual) rate of open unemployment never rose above 3.5 percent in Sweden, even in the early 1980s. In the inflationary years 1998-1991, Swedish unemployment approached 1.5 per cent, a rate that the nation, however, had attained at several occasions during earlier post-war decades. In addition, from 1973 to 1990, the rate of labour force participation in Sweden increased from 75 to 83 percent, a higher rate than in other OECD countries, with the exception of Denmark (OECD Historical Statistics 1988, Table 2.15 and 2.20 and 2001, Table 2.6, 2.14 and 2.19).

36 In 1974-1976, thus in the era of the Keynesian bridging policies, inflation was actually lower in Sweden than in weighted OECD and EU countries and even lower than in other small Western European countries.
Sweden could even in the 1974-1979 period be compared to other small Western European countries in terms of the tradeoff between inflation and unemployment. In this period Sweden gave a stronger priority to full employment at the expense of price stability, but also procured a rather favourable Phillips curve, in comparison to remaining small Western European countries. The return of the Phillips curve in the OECD area already in the 1980s suggests that Sweden opted for low unemployment at the expense of relatively high inflation, but also that the country was rather successful in solving the unemployment-inflation dilemma. The issue at stake is whether the practice and theory of the Rehn-Meidner model can explain why Sweden succeeded in sustaining low rates of unemployment in the second half of the 1970s and the 1980s and also in achieving a relatively favourable Phillips curve.

The wage policy of solidarity may be an explanation for why deindustrialization in the 1970s and the 1980s did not lead to high structural unemployment in Sweden (see below). The results from evaluations of 1970s and 1980s labour market policy programs in Sweden are mixed. But it seems that labour-market training, in contrast to demand-oriented measures, was neutral or had even positive effects on regular employment.\(^{37}\) Despite all, harmful expenditures on relief work and “defensive” demand-oriented measures directed to firms were only approximately half of total expenditures on active labour market policy in the 1970s and 1980s. The other half was constituted by matching and supply oriented measures and measures targeting problem groups in the labour market (Forslund, 1994; Calmfors, 1995). But labour market policy (and other selective employment policy programs) mainly contributed to a sustainable low rate of unemployment in Sweden by having prevented open mass unemployment in the recessions of the mid-1970s and early 1980s. The selective measures of the Rehn-Meidner model limited the amount of hysteresis effects (through long-term unemployment) in Sweden.

\(^{37}\) See Calmfors \textit{et al.} (2001, pp. 93-4 and 102-4). Swedish economists draw the conclusion that labor market policy as a whole, primarily by lowering search intensity and raising wage claims, had served to push up (real) wages, although with the reservation that all studies have not shown a significant relationship (Calmfors, 1993). However, the Rehn-Meidner model does not dispute that labour market policy as a whole results in higher wages when compared with an open unemployment situation. The policy creates a labour shortage, and will therefore counteract its own tendency to limit the rate of wage increases through greater labour mobility.
But from a Rehn-Meidner viewpoint, the relatively favourable Phillips curve for Sweden in the second half of the 1970s was mainly temporary, especially as labour market policy measures were combined first with devaluations and then with expansionary fiscal policies during a recovery. From this perspective, low unemployment rates were primarily maintained in Sweden in the 1980s by perpetual devaluations and other positive demand shocks. The fiscal policy was not restrictive enough to offset the positive employment effects, and the upward adjustment of nominal wages not very fast, due to labour abundance in the initial state and relative wage preferences. Nominal wage growth was high in Sweden, but it took some time before the devaluation gains were eliminated (see Lindbeck, 1997, pp. 1310-1 and 1308-9). The relatively favourable Phillips curve for Sweden in the 1980s largely reflected the existence of delayed nominal wage adjustments. An explanation on Rehn-Meidner grounds of the slow adjustment of nominal wages to positive aggregate demand shocks focuses directly on labour-market conditions - labour abundance slowed the pace of nominal wage increases after the devaluations in the early 1980s - and on the existence of delayed wage-wage spirals.

Thus a Rehn-Meidner theorist can support a hypothesis that Sweden reached a temporary state of low unemployment in the 1980s by climbing up the Phillips curve, that is, by excess aggregate demand. A persistent low rate of unemployment was not achieved by labour market policy programs in the first place, and definitely not by a successful policy of wage restraint (see Calmfors, 1993, pp. 44-53 and Lindbeck, 1997, pp. 1308-9). The stabilisation-policy failures of Sweden in the late 1980s support the Rehn-Meidner view that incomes policy is an inefficient instrument in the struggle against inflation in an overheated economy. This policy would probably have failed even if wage coordination had survived the mid-decade strains. Foreign economists friendly to the “Swedish model” often neglect the substantial wage-drift component of total wage increases in Sweden, even in the days of coordinated wage

38 The wage cost crisis in the mid-1970s confirmed the Rehn-Meidner theory of high profits as having a destabilising role in an economy of the Swedish type. Incomes policy (see the Haga agreements) could not prevent a severe wage cost crisis in a situation where a profit boom and a considerable wage drift had already paved the way for a wage-wage-price spiral.

The widening wage gaps during the second half of the 1980s also confirmed a Rehn-Meidnerian hypothesis that Swedish redistribution policy was challenged not only by departures from coordinated wage bargaining but also by expansionary macroeconomic policies. In particular, devaluations led to high profits, and therefore to high wage drift, in established export companies in the mid-1980s. The devaluations contributed to the decision of Metal Workers’ Union to withdraw from coordinated LO-SAF negotiations. The union, organising the best-paid blue-collar workers in manufacturing, regarded wage coordination as a straitjacket in a situation of large opportunities for wage increases. Its members had earlier been disfavoured by wage compression within blue-collar and white-collar worker groups respectively. 

The relation between the Rehn-Meidner model and Sweden’s growth performance from the mid-1970s to the early 1990s is ambiguous. This ambiguity reflects not only the fact that the model was only partially applied, but also that international statistics provide no clear picture of the Swedish growth performance in this period. Almost all OECD countries experienced considerably lower GDP growth in the 1973-1990 than in the period 1960-1973. But influential Swedish economists claimed that there was evidence of a slower growth rate in Sweden than in other OECD countries and that a growth lag was inherent in the “Swedish model” – incentives for firms and individuals had been distorted by public saving and extensive public transfers (including high replacement ratios in social insurance systems), high and inappropriate taxes (including high progressive taxes on labour incomes), labour market legislation on job security, small income differentials, and centralized wage bargaining. Many features

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39 Foreign economists have probably overrated the wage-restraining capacity of the coordinated Swedish bargaining system (and also of the country’s “work-requiring” unemployment benefit system) in the 1970s and the 1980s, see Jackman et al. (1990, pp. 477-83), Layard, Nickell and Jackman (1991 Ch.9, Table 2, Nickell (1997, pp. 61-3) and Nickell et al. (2005, pp. 7-8). They often refer to regression studies showing that product wages are highly responsive to changes in unemployment in Sweden. But the parameter estimates for Sweden reflect the frequent use of devaluations, leading to lower product wages, and the avoidance of open unemployment in the recessions through selective employment policy. It also seems that foreign economists have exaggerated the favourable effects of mobility-enhancing labour market policy programs on the Swedish Phillips and Beveridge curves in the 1970s and 1980s. After all, these programs engaged only a minor part of the Swedish labour force (cf. Edin and Topel, 1997, pp. 164-7).
of the “Swedish model” were created or reaching their peak in the late 1960s or in the
1970s (see Lindbeck, 1997, pp. 1275-6).

The specific Rehn-Meidner aspects of the “Swedish model” were also accused of
having obstructed economic growth in the 1970s and 1980s. The growing importance
of public saving (until the early 1970s) was said to have led to misallocations of
capital, especially in the form of overinvestment in construction industries. Some
sceptical observers of Sweden maintained that centralized wage bargaining, a
necessary condition for the Rehn-Meidner wage policy, had resulted in less flexible
labour markets. Compressed wages between skilled and unskilled labour in the 1970s
and early 1980s were blamed for having weakened incentives e.g. for higher
education. In addition, the wage policy of solidarity was said to have released
manpower for the expansion of the public sector, not for the expansion of dynamic
industries.40

The thesis of a Swedish “system failure” in the 1970s and the 1980s is not obvious in
the light of comparative statistics on GDP per capita and productivity growth. It is
ture that in the period 1973-1990 Sweden’s GDP per capita growth was low, from an
OECD and EU perspective, despite a continuing huge inflow of women into the
Swedish labour market and a high rate of labour force utilisation (low unemployment)
(OECD Historical Statistics 2001, Table 2.5, 2.8, 2.14 and 2.19). Sweden’s labour
productivity growth was also low in this period compared to the OECD and EU total,
both in manufacturing and in the business sector as a whole. Yet, in the 1973-1990
period, productivity growth was higher in Sweden than in the United States, Canada
and the Nordic countries, with the exception of the catching-up country Finland
(Monthly Labor Review August 1991, Table 50 and June 1999, Table 45; OECD
Economic Outlook June 2005, Table 12; U.S. Department of Labor, 2005a, Table
1.1). Sweden’s growth lag largely reflected a catch-up process in less developed
countries (see e.g. Agell, 1996, pp. 1763-4). In fact, 1973-1990, few countries passed
Sweden in the “welfare league” based on OECDs latest figures on PPP adjusted GDP

40 See Henrekson et al. (1996, pp. 265-77), Lindbeck (1997, pp. 1281 and 1295-7) and Davis and
Henrekson (1997). See also Björklund and Kjellström (2002) for evidence of the Swedish decline in the
rate of return on college education in the 1970s and early 1980s.
per capita levels. Thus, comparative data on GDP per capita and productivity provide no strong support for a hypothesis that Sweden was haunted by deep growth problems in the 1970s and 1980s, the heydays of the “Swedish model”.

Neither does the criticism of the Rehn-Meidner model for having restricted economic growth in the 1970s and 1980s make an obvious point. An argument that smaller after-tax wage differentials between occupations and skills have weakened the incentives for e.g. investment in higher education, hits the Swedish progressive tax system, and the practice rather than the principle of the Rehn-Meidner wage model, which demands equal rewards for identical jobs only. The argument that the wage policy of solidarity, by putting a cost pressure on low-productive firms and stagnating industries, had released labour resources for the expansion of the public rather than the private sector, ignores the fact that the public sector predominantly recruited people (primarily women) formerly outside the labour force.

The growth argument against solidarity wage policy would be strengthened if the pace of labour mobility and structural change in Sweden could be shown to have slowed down in the 1970s and 1980s. But labour market mobility (adjusted for the business cycle) did not fall in Sweden during the 1970s despite radical wage equalisation. In fact, in the 1970s and 1980s, regional mobility seems to have been higher in Sweden than in other Western European countries, though not in comparison to the United States (Nilsson and Zetterberg, 1987, pp. 35-52; OECD Economic Outlook 1990, Table 3.3). Furthermore, in the 1970s and 1980s, the Beveridge curve, i.e. the

41 Comparisons of GDP per capita levels are complicated by continuous statistical revisions by the OECD, the OECD use of two PPP-adjusted measures, and the estimates by institutions other than the OECD. A rather unambiguous conclusion for the 1973-1990 period, however, is that Sweden’s position in the “welfare league” was rather stable and further, that the country passed Australia but was at the same time overtaken by Canada, Japan and possibly also by Norway (OECD, National Accounts of OECD Countries 2002, table B5 och B7; U.S. Department of Labor, 2005b, Table 1 and 2).

42 Hibbs and Locking (2000) emphasises that general wage compression, in contrast to equal wages for equal jobs, has been negative for labour productivity in the Swedish private business sector. However, the argument that general wage compression resulted in a reduction of the return on investment in higher education in the 1970s and early 1980s has been questioned by some Swedish economists. They point to the same reduction occurring also in other countries, reflecting the increasing supply of highly educated individuals (see Edin and Holmlund (1995) but also Lindbeck (1997, p. 1281). Other economists have emphasized that higher relative wages for unskilled labour in Sweden has put pressure on wage earners, threatened by unemployment to get more education (Agell, 1999) and on companies to invest in labour-saving technologies stimulating the development of domestic industries producing such technologies for the world market (Erixon, 1997, pp. 66-7).
mapping between the number of vacancies and unemployed (in relation to the labour force) was not only more favourable to Sweden than to all other OECD countries, but also shifted inwards, which was not the case in most other OECD countries (Jackman et al., 1990, pp. 477-83). Sweden’s relative Beveridge curve would probably have been less favourable including data for the early 1990s. But there is no strong evidence that the functioning of Swedish labour markets had been hurt by the wage policy of solidarity.

In the 1970s, in the decade of progressing wage compression, the rate of structural change in manufacturing, in terms of changes of industry composition, slowed down in Sweden to an even slower pace than in large OECD countries such as West Germany and the United States (Erixon, 2000, p. 73). On the other hand, despite small wage differentials, the overall pace of structural change in manufacturing from 1978 to 1988 was more rapid in Sweden than in other OECD countries, excluding Canada and the United States (Hansson and Lundberg, 1995, pp. 146-8). In fact, the wage policy of solidarity seems to have been not only compatible with, but also beneficial to, structural change. According to Lawrence Summer, workers who lose attractive high-wage jobs are less reluctant to accept jobs in other firms and industries if pay differentials of equally skilled labour are relatively small (Summers, 1986, pp. 370-80). The compressed wage structure in Sweden made it easier for wage earners in high-wage industries, in a crisis, to accept employment in other industries (Erixon, 1985, p. 27; Rehn, 1987, pp. 76-7, see also Hibbs and Locking, 2000). In the late 1970s and early 1980s, the employment decline in crisis industries was, in spite of generous subsidies to enterprises, more comprehensive in Sweden than in other Western European countries (Erixon, 1985, Appendix 2).

In addition, in the light of the growth theory of Rehn and Meidner, neither Sweden’s relatively weak productivity performance, nor her loss of market shares from the mid-1970s, came as a big surprise. Under the influence of e.g. the Rehn-Meidner model, a productivity commission drew the conclusion in the early 1990s that the transformation pressure (omvandlingsstrycket) on exposed Swedish industries became too weak in the 1980s. The devaluations weakened stimuli to rationalise, to introduce new products, technologies and organisations, and to transfer resources to expanding industries (Swedish Productivity Commission, 1992; Erixon, 1991; Eklund, 2000). In
the 1980s, there was evidence in Sweden of a slower transfer of resources to R&D-intensive industries and to industries with high (labour) productivity growth in general (Hansson and Lundberg, 1995, pp. 79-82; Lind, 2003, Table 3). A Rehn-Meidner argument that Sweden’s (modest) lag in GDP per capita growth in the period 1973-1990 was caused by devaluation policies, and by expansionary macroeconomic policies in general (including credit deregulation), is at least as plausible as the argument about the negative effects of the “Swedish model”.43

A conclusion that Swedish productivity growth especially in the 1980s was restricted by macroeconomic policy failures does not exclude the possibility of an underlying long-term growth problem in the Swedish economy. The thesis about a “system failure” in Sweden includes the argument that the country is strongly dependent on a few large global corporations, primarily in engineering, founded already before World War I or in the interwar period. These companies have gained from being owned by large private banks (through so called strategic pyramiding) and, at least until the 1990s, from a tax system favouring retained earnings and borrowing. As a consequence, new firms have been crowded out on capital markets, and their expansion restricted by tax disadvantages for issued equity and individual ownership (Erixon, 1997, pp. 58-65; Henrekson and Jakobsson, 2001; Högfeldt, 2005). In the 1970s and 1980s, non-agricultural self-employment, as a proportion of total civilian employment, fell in Sweden to a lower level than in any other OECD country (OECD Employment Outlook July 1992; Blanchflower, 2004, pp. 19-23).

The wage policy of solidarity was accused of having strengthened the mature status of the Swedish business sector by subsidizing large established capital-intensive companies and eliminating small firms with a large growth potential (Davis and Henrekson, 1997). But in the post-war period Swedish wage policy of solidarity was probably a subordinate force behind firm concentration and financial locking-in tendencies (Erixon, 1997, pp. 25-8; Erixon, 2000, p. 77). The argument that solidarity wages were responsible for the early death of progressive firms is weakened by the fact that equal wages is also paid for equal work in a “free” labour market in the long

43 Serious overheating during the 1980s probably had a negative effect on productivity by the mechanisms discussed in footnote 16. In addition, the shortage of manpower during the long boom of
run. In the Swedish case, large multinational companies and strategic export industries have, in their position as wage leaders, put a wage cost pressure on other firms and industries throughout the post-war period, regardless of the solidarity wage policy.

6. Sweden’s road from full employment

6.1 Depression and a new economic-policy regime

At the start of the 1990s, Sweden experienced an economic crisis without precedent in the earlier postwar period or counterpart in other OECD countries at that time, save Finland. During three years (1991-1993) Swedish GDP growth was even negative. Labour force participation rates fell drastically in Sweden from 1990 to 1993. Further, standardised open unemployment increased from 1.7 percent in 1990 to 9 percent in 1993, one percentage point below the EU average only. Thus Sweden entered the road to mass unemployment as other OECD countries had done in the two preceding decades.

The Swedish (and Finnish) deep economic crisis at the start of the 1990s was to a great extent a consequence of domestic overheating in the 1980s. In particular, enterprises in the construction and service sectors (including real estate and financial services) had made very substantial investments during the credit boom of the 1980s. They were now facing reduced demand and falling stock market and real estate prices, e.g. as a consequence of increasing interest rates. Many enterprises, having borrowed to finance their expansion during the 1980s, had difficulties paying interest on loans, leading to bankruptcies and a very serious banking crisis. Furthermore, increased real interests (and payment of earlier credits) contributed to an increase of household savings, which in turn was an important reason for the low GDP growth in Sweden during the first half of the 1990s. Higher real interest rates were an international phenomenon, reflecting a German reunification and a lower rate of inflation. But it was augmented in Sweden by a weak confidence in the krona, a result of the country’s relatively high rate of inflation in the 1980s. Real interest after tax did also
increase in Sweden through a tax reform in 1990-1991, which included a reduction of progressive income taxes.

Swedish economic policy in the 1990s was shaped, not only by the deep recession at the beginning of the decade, but also by new rules of the game. The efficiency of fiscal policy in Swedish stabilisation policy was reduced by a decision in November 1992 to abandon the system of fixed exchange rates. The neutralization of fiscal policy was accentuated by a continuing globalization of financial markets and a complete abolition of Swedish currency controls in 1989. But also the possibilities for using monetary measures to affect activity levels were restricted under a flexible exchange rate regime by an introduction of inflation targets for the Central Bank in January 1993. The room for an expansionary economic policy was further reduced in Sweden by an agreement between the Social Democrat government and the non-socialist opposition in 1990 to apply for membership in the European Union. Sweden became a full member in 1995 after a referendum the previous year. Sweden is still outside the European Monetary Union – a referendum in 2003 clearly rejected Swedish participation – but governments felt obliged to adhere to convergence rules of the Maastricht Treaty of 1991 and also of the Stability and Growth Pact of 1997. In addition, in the mid-1990s, a Social Democrat government restricted fiscal policy by defining ceilings for public expenditures and goals for public saving over the business cycle (see Section 6.3). The possibilities to achieve low rates of unemployment in Sweden by expansionary monetary and also fiscal policies were further restricted by constitutional changes making the Central Bank independent; the formal decision was made in 1998.

The new economic policy rules in Sweden reflected a negative review of Keynesian stabilisation policy during the 1970s and 1980s. They were also influenced by economic theories about rational expectations and time inconsistencies in political decision-making, challenging the Keynesian post-war model, and in some respect also the Rehn-Meidner model. According to an influential argument, the Social Democrat government came to prioritise the struggle against inflation in 1990-1991, thus giving lower priority to full employment (cf. Lindbeck, 1997, p. 1303; Jonung, 1999, pp. 69-
However, the argument is based on declarations by the government at the time when the Swedish economy was still overheated, or immediately after, when available information as to the depth of recession was still limited (Ministry of Finance, Budget Bill 1990, p. 12 and 1991, pp. 1-8). In fact, already in the 1950s and 1960s, Social Democrat governments had made similar shifts in economic-policy priorities over the business cycle. A change of stabilisation policy regime in a less state-interventionist direction was definitely taking place in Sweden. But the change was gradual, beginning already in the mid-1980s, by the dismantling of instruments in monetary policy (see the deregulation of credit markets). Furthermore, the policy shift in the 1980s and early 1990s was first of all a departure from a Keynesian “accommodation policy”, guaranteeing full employment by devaluations or expansionary fiscal policies, not from the objective of low rates of unemployment in itself. Already in the early 1980s, the Social Democrats had actually abandoned an expansionary fiscal policy despite a relatively high rate of unemployment. However, as shown by the party’s expansionary economic-policy program while in opposition in the 1990s, its incomes-policy intentions after having regained power and its countercyclical fiscal policy after the public budget crisis in the mid-1990s, the Social Democratic departure from Keynesianism was not definite.

From the mid-1980s, leading Social Democrats and their economic-policy advisors were certainly influenced by “norm economics”, a Swedish version of neo-monetarism. The norm economists emphasised the negative experiences of Swedish “accommodation policy” and the need for measures to reduce inflation expectations in the country by strengthening confidence in fixed rates of exchange (cf. Tson Söderström et al., 1985 and Jakobsson, 2000, pp. 124-7). Their attitude to the Rehn-Meidner model was ambiguous. Some norm economists saw the Rehn-Meidnerian stabilisation policy at the beginning of the 1970s as worthy of imitation (Tson Söderström et al., 1985, pp. 36-7). They also underlined, e.g. by references to the Swedish Productivity Commission, the need for transformation pressure when opposing devaluations and a reduction of payroll taxes in the early 1990s (Tson Söderström et al., 1992, pp. 13-4 and 49-53). The similarities between norm policy and the Rehn-Meidner model, however, should not overshadow the fact that the norm economists were critical of state intervention in general, a criticism that hit labour market policy. Also, by supporting a transfer of resources from the public to the
private sector, essentially the open one, most Swedish neo-monetarists had no structural objections to the devaluations of the 1970s and 1980s. Their main criticism of the Social Democratic devaluation in 1982 was that the following fiscal spending policy was not restrictive enough to guarantee a transfer of resources to the private sector (Jonung, 1991, pp. 14 and 32). In spite of the devaluations, general government’s share of total employment actually increased in Sweden in the 1980s.

6.2 The only way

In May 1991, the Social Democratic government decided to tie the krona to the ECU. The government wanted to convince the actors in financial (and also labour) markets that devaluations were ruled out. Declarations by the Social Democrats, at one occasion together with non-socialist parties, that new devaluations were excluded had not prevented significant capital outflows from Sweden due to speculations against the krona in 1990-1991.

The Social Democratic defence of the krona was in accordance with a Rehn-Meidner policy of price stability and transformation pressure. But from a Rehn-Meidnerian, and also from a Keynesian, point of view the Social Democrats should have pursued a loose fiscal policy at the first indications of a deep recession. In fact fiscal policy for the entire public sector was countercyclical during the dramatic recession of 1991 (Braconier and Holden, 1999, Fig. 5.2.5; OECD Economic Outlook June 2001, Table 31 and June 2005, Table 30). However, the full extent of the recession was still unknown when the Social Democratic government fell in September 1991.44

The non-socialist four-party government 1991-1994 used the concept of “the only way” to dissociate its economic policy from “the third way” of the Social Democrats. But in reality, “the only way” was only a continuation, although more explicit, of the

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44 The passive labour market policy in 1991 has sometimes been seen as confirmation that the Social Democrats downgraded the priority of full employment and also adopted the view by Swedish norm economists that wages and inflation had been forced up by active labour market policy (SOU 1993:43, pp. 38-9 and 47). But the main reason for the modest size of active labour market policy measures in 1991 was that the government was yet not aware of, or prepared to meet the strong tendencies towards mass unemployment.
Social Democratic challenge of a Keynesian economic policy. The “new” policy involved deregulation of product markets (e.g. for telecommunications, postal services and passenger air traffic) and cuts in social expenditures and income taxes (mainly on capital). It was also governed by an ambition to keep a tight fiscal policy.

The purpose of reducing VAT in 1992 was not primarily to counter the recession, but to adjust to the tax profile of the EU countries. The convergence rules of the Maastricht Treaty in addition provided new arguments for an economic policy without devaluations and large public deficits.

The policy along “the only way” failed, however, in its chief task of creating confidence in the Swedish krona. The budget deficit of the public sector increased considerably during 1992. In 1993 it was larger than in any OECD country with the exception of Greece. The large increase in public deficit in 1992 was the result both of a recession (through automatic stabilisers) and, more importantly, of an expansionary fiscal policy in spite of the intentions of the non-socialist government to be restrictive.

The budget deficit was an important reason for the currency crisis hitting Sweden in the fall of 1992. The Central Bank failed to prevent a major outflow of capital from Sweden. The government, in consultation with the Social Democratic opposition, decided on two fiscal policy crisis packages to defend the krona. The crisis packages contained reduced payroll taxes to increase Sweden’s competitive strength, but also sizeable budget increases. The defence of the krona failed, and in November 1992 Sweden abandoned the system of fixed exchange rates.

However, fiscal policy (for the entire public sector) was not tighter in 1993 and still expansionary in 1993-1994 despite crisis packages and the non-socialist government’s ambition to reduce the public budget deficit. The absence of a strict fiscal policy indicates that the violation of the Keynesian post-war model was not complete in practice. Neither was the absence of a contractionary fiscal policy in a situation with increasing unemployment any breach of the Rehn-Meidner model. On the other hand, the abandoning of a system of fixed exchange rates, and the reduction of payroll taxes, can be looked upon as a dismantling of Rehn-Meidner policy to fight inflation and to create transformation pressure; in fact, in her tenacious defence of a fixed krona and opposition to reduced payroll taxes, Minister of Finance, Anne Wibble, referred to the need for transformation pressure to increase economic growth. But the
inflation targets for the Central Bank could simultaneously be seen as devices, in the spirit of the Rehn-Meidner model, to create a price-stabilising framework for employment policy, and to maintain transformation pressure. It is however dubitable whether the specific inflation target - 2 per cent inflation with an allowed flexibility of one percentage point in both directions - was in agreement with the high employment ambitions of the model.

The non-socialist government carried on an ambitious labour market policy during the crisis. During the last years of the Social Democratic government, the active labour market policy had in fact not been very active, despite increasing unemployment. Expenditures on labour market policy as a share of GDP rose considerably during the first years of the non-socialist government (see Table 1 in Appendix). Continued prioritization of labour market policy by the bourgeois government meant that the share of labour force in active labour market programs reached a post-war peak in 1994 (7.3 per cent). In addition, spending on active labour market policy in the first half of the 1990s was high in Sweden compared to other OECD countries, especially if adjusted for the rate of unemployment (Statistics Sweden 2000, Table 263; Nickell, 1997, Table 4; OECD Employment Outlook, various issues).

The orientation of labour market policy under the non-socialist government was also almost in full agreement with the 1951 LO report. Supply and adjustment oriented measures increased significantly in 1992. The training share of total expenditures and participants in labour market policy was reduced during the last two years of non-socialist government when (public) relief work and the basically demand-oriented work experience schemes (ALU projects) and youth practice programs were expanded. But supply and matching measures were still the most important part of expenditures on active labour market policy (Table 2 in Appendix; Johannesson, 1995, Table 2.2; Ackum Agell, 1995, pp. 70-3; Statistics Sweden, 1998, Table 306). The government also introduced a system of general employment subsidies in 1994, though the proposal was temporary and more limited in scope than what Rehn had envisaged. (The Social Democrats had in mid-1980s introduced a system of marginal recruitment grants, which was permanent though less general than the non-socialist proposal.)
“The only way” of the non-socialist government showed similarities to the Rehn-Meidner model, not only in its prioritization of labour market policy. It also, like the Rehn-Meidner model, expressed scepticism of incomes policy. The previous Social Democrat government had put great trust in the Rehnberg Commission, a mediation body set up when the economy was still overheated (1990). The commission managed to bring about a coordination of wage negotiations for the period 1991-1993, including almost all central labour market organisations.

Possible similarities between the non-socialist “only way” and the Rehn-Meidner model must not obscure the fact that employment policy during the first half of the 1990s may have been too passive according to the criteria of the model. But a Rehn-Meidnerian criticism of the non-socialist government must concentrate on the new restrictions on general economic policy, or on the scope and character of selective employment programs, not on the actual fiscal policy. In the period 1991-1994 fiscal policy was, although not deliberately, expansionary and largely countercyclical, contributing significantly to the size of the Swedish public budget deficit. The non-socialist government was too divided to embark on a fiscal policy along its own “only way”.

6.3 A new Social Democratic economic policy

While in opposition the Social Democrats had criticized the non-socialist government for making the fight against inflation a priority, and for its unwillingness to see low domestic demand as the main problem of the Swedish economy. Until early 1994 the party therefore advocated a Keynesian program of higher public consumption and investment. Employment had fallen drastically in the public sector in the years of the bourgeois government. However the Social Democratic government, taking over in September 1994, was to implement the fiscal policy restraint that the non-socialist government had started but not had the strength or political support to fully realize. The restrictive policy of the Social Democrats was to a larger extent constituted by higher income taxes than the “only way” of the former bourgeois government.
The Social Democratic fiscal policy of the mid-1990s can safely be called the largest system change in Swedish economic policy since the early 1930s. The party that had pioneered the Keynesian revolution now introduced an extremely restrictive fiscal policy in a situation of mass unemployment. The Social Democratic fiscal restraint 1995-1998, with Göran Persson as Prime Minister (Minister of Finance 1994-1996), has no equivalent in other OECD countries in the period of comparative statistics from 1970 and onward (Price and Muller, 1984, Table 1; OECD Economic Outlook June 1997 and 2001, Table 31 and June 2005, Table 30; Braconier and Holden, 1999, pp. 24-7). In 1998, the public budget deficit disappeared through an international recovery and, above all, through a restrictive fiscal policy.

The ambition of the Social Democrats to meet the Maastricht convergence criteria had been strengthened by the party’s participation in the campaign for membership of the EU, and by Sweden joining the union in 1995. The government support of a strict fiscal policy also built on new economic theories emphasising the value of moderating expected inflation. In 1994 and 1995 the gap between Swedish and German long-term interest rates had risen again after a decline in 1991-1993. The Social Democrat government shared the view of Swedish economists that expectations of a depreciation of the krona were due to the large public deficit. The government also felt than an elimination of the public budget deficit could increase employment – lower inflation expectations would lead to lower rates of interest, and thus stimulate GDP through higher investments (Ministry of Finance, 1995; Swedish Government, 1996).

The restrictive fiscal policy of the Social Democratic Cabinet in a situation of high unemployment was inconsistent, not only with the Keynesian, but also with the Rehn-Meidner model. Erik Lundberg’s labelling the economic policy of the mid-1970s a parody of the Rehn-Meidner model holds some truth also for the economic policy of the mid-1990s. The Social Democratic government now combined an exceptionally restrictive fiscal policy with substantial labour-market policy measures (see below).

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45 The Social Democrats received support in parliament for its fiscal restraint, first from the Left Party (former Communist Party) and then (from January 1995) from the Center Party (Centerpartiet). From Autumn 1998, the Social Democrats have been supported in its economic policy by the Left Party and the Green Party (Miljöpartiet).
Besides, the Central Bank, governed by the inflation targets from 1995, pursued a tight monetary policy until the beginning of 1997. But this economic policy deviates from what Rehn and Meidner recommended in a situation of mass unemployment. What more is, the Social Democratic theory of positive GDP and employment effects of a restrictive fiscal policy was not even anchored in modern economics. Fiscal policy is an ineffective instrument for affecting GDP and employment under flexible exchange rates, even in the short run. Furthermore, according to theories of a convergence to a natural rate of unemployment, the effects of a restrictive economic policy on output and employment are temporary and negative only. In addition, qualified macroeconomic theories say that a possible reduction in expected inflation has ambiguous effects on real interest rates (Blanchard, 2005, pp. 469-71).

Parts of the Rehn-Meidner model survived the definite “system change” in Sweden in the mid-1990s. The Social Democratic government, like the previous non-socialist government, engaged in an ambitious labour market program. In line with the priorities of the Rehn-Meidner model, public relief work became gradually less important from the mid 1980s, to be finally abolished in the 2000s (until 2006). In 1996 and 1997, the demand-oriented ALU projects involved more people than the training programs in labour market policy. This development could be seen as a deviation from the Rehn-Meidner program in a situation of excess demand for highly skilled people in the Swedish economy (see particularly the IT-boom in Sweden in the late 1990s). But expenditures on supply and matching oriented measures were still larger than spending on other active labour market policy measures. Furthermore, from 1998, participating in labour market training was again to dominate labour market policy, if programs for handicapped people are excluded. Since 2001 training programs have largely been substituted by special counselling and placement measures for long-term unemployed (aktivitetsgarantin). This change of Swedish labour market policy was not really a break with the supply and adjustment oriented Rehn-Meidner model. The remarkable "Knowledge Boost" (Kunskapslyftet) 1997-2002, to increase the level of education and to reduce unemployment among adults with only grammar school education, was in line with the supply-oriented Rehn-

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46 The character of Swedish monetary policy in the 1990s and the following decade is here defined by estimates of the difference between the Central Bank prime rate and nominal GDP growth, see Axelsson and Forsling (2004).
Meidner model. The program encompassed 2 percent of the working age population by the end of the first year (Holmlund, 2003, p. 7).

The government had also introduced a form of temporary employment subsidies in 1995 – firms recruiting the unemployed were given financial assistance. Furthermore, the increasing weight of employment subsidies in Swedish labour market policy since 1998 can be regarded as a late breakthrough for a crucial feature of the Rehn-Meidner model. In 1997, employment subsidy grants embraced only 1.9 percent of all individuals engaged in labour market policy programs financed by AMS and other public authorities. In 2003, this share had risen to 17.5 percent (Statistics Sweden 2005, Table 356). Also, in 2005, the Social Democrats extended their employment subsidy program for long-term unemployed, and decided to stimulate employment in small firms by similar measures. (The non-socialist opposition suggested similar recruitment grants to combat unemployment.)

But the relation between the Rehn-Meidner model and the Social Democratic labour market policy from the mid-1990s was ambiguous.\footnote{A similar ambiguity appears in the case of Social Democratic attempts to reduce the “natural” rate of unemployment and NAIRU in the mid-1990s (see further above). Exceptions to the Job Security Act and lower replacement ratios could be seen as measures to stimulate labour supply and labour-market flexibility in accordance with the Rehn-Meidner model. However, these measures might also be regarded as challenges to the model by weakening the bargaining position of labour.} Firstly, the share of the labour force engaged in labour market policy programs steadily decreased in Sweden from the mid-1990s until 2004. Swedish expenditures on labour market policy as a share of GDP showed a similar decline. To a large extent, the weaker emphasis on labour market policy reflected improved labour market conditions from 1998. But expenditures on active labour market policy programs as a share of GDP became lower in Sweden than in two countries with less unemployment. In 2000, Denmark and the Netherlands replaced Sweden as the leading countries of active labour market policy.\footnote{Further, in the period 1999-2002, subsidies to regular employment in the private sector recommended by Rehn and Meidner were higher in Belgium, Italy and Spain than in Sweden as a share of GDP. This share was also approximately as high in Finland, France and Canada as in Sweden (OECD Employment Outlook 2004, Table H).} It cannot be excluded, however, that Sweden’s lower ranking is explained by an increasing weight of employment policy measures by other public authorities than the AMS (see for example the “Knowledge Boost”). In any case, lower priority of
AMS programs meant that the government was not prepared to meet increasing unemployment in 2002-2003 or the slow employment recovery in the following export-led expansion.

Secondly, the Social Democratic scheme of employment subsidies in 1995 can, as can the non-socialist program, be criticised on Rehn-Meidner grounds for being temporary and too small. The former subsidies were limited by their non-universal character, that is, subsidies were paid to the unemployed only. (By being given also for the reemployed the subsidies were not even marginal.) In a similar manner, the employment subsidy programs from 1998 have, on the recommendations of labour-market economists, targeted long-term unemployed and older people to minimize crowding-out effects (see the evaluations of labour market policy in next section).

A similar ambiguity attaches to the relation between the Rehn-Meidner model and the fiscal policy after the public budget crisis in the mid-1990s. The government introduced some disciplinary budget reforms, which can be seen as an (unconscious) application of the model. In 1995 it decided to introduce a ceiling for expenditures by central governments, effective from 1997. The ceiling covered all items in the national budget including social insurances (but excluding interest on the government debt). In addition, the Social Democrat government has had a fiscal policy target since 1997 that the consolidated public budget must show a surplus of 2 percent of GDP over a business cycle. This budget reform was clearly in accordance with the Rehn-Meidner model. One government motif for a public budget surplus over the business cycle was also in conformity with the Rehn-Meidner view – the surplus makes countercyclical fiscal policy possible without big budget deficits in a recession (Ministry of Finance, 2000, pp. 29-30). But the government did not formulate a Rehn-Meidner argument of public savings to replace savings in domestic enterprises for reasons of stabilisation, distribution and growth.

The disciplinary budget reforms and the ambition to keep down inflation expectations reduced, together with restrictions on fiscal policy under flexible exchange rates, the possibilities and willingness of the Social Democratic government to speed up the employment recovery in the late 1990s by introducing expansionary fiscal measures. However, it is difficult to put forth strong objections to Swedish macroeconomic
policy from the late 1990s, using the Rehn-Meidner model as a norm. Fiscal policy has for the entire public sector been restrictive, though mainly countercyclical (see OECD Economic Outlook June 2005, Table 30 and also von Hagen and Bruckner, 2002, pp. 140-3). The demand-stimulating central government fiscal policy in 2001 and 2002 was in accordance with a Rehn-Meidnerian (and Keynesian) policy for a recession in which unemployment was high by Swedish standards. Neither was the direction of monetary policy from the late 1990s a serious challenge to the Rehn-Meidner model, considering the employment situation in the country. The policy of the Central Bank was not only countercyclical during the first half of the 2000s, but also mostly expansive from 1997.

At the same time there were indications of a political business-cycle behaviour by the Social Democratic government. The Social Democrats decided upon an expansionary fiscal policy before the elections in 1998, 2002 and 2006 (announced in 2005). The election policy was a threat to the self-imposed budget goals of the government, but also quite alien to the disciplinary economic policy of the Rehn-Meidner model.

A Rehn-Meidner criticism of the new economic policy in Sweden must concentrate on the tendencies to a political business cycle and on the size and composition of labour-market policy programs, including employment subsidies. It can also be directed towards the level of ambition in employment policy as such. In 1996, the Social Democrats set up the same goal for unemployment as in fact the former bourgeois government - to reduce open unemployment to 4 percent before 2000. There are indications that the government agreed with some Swedish economists and the OECD that the equilibrium rate of unemployment and NAIRU had increased in Sweden in the 1970s and 1980s, due e.g. to higher replacement ratios and declining wage coordination, and also in the first half of the 1990s (Revised Budget Bill 1995,

\[49\] Some examples of a procyclical fiscal policy under the Social Democrat government, even after the mid-1990s, reflected a book-accounting view of fiscal policy – the government declared that improvements in the budget balance provided room for welfare reforms and for compensations to low-income groups for earlier fiscal restraints (see Ministry of Finance, Budget Bill 1998, pp. 19-20 and Revised Budget Bill 1998, pp. 27-8, 1999, p. 24, 2000, p. 19 and 2001, pp. 19-20). Both election and book-accounting considerations explain (together with a strong pressure from the LO) the decisions by the Social Democrats in the election year of 1998 to reduce income taxes and increase public expenditures, e.g. by raising replacement rates to its pre-1995 level (from 75 to 80 percent). These decisions led to a fiscal expansion in 1999.
Appendix 1.1, p. 91 and Budget Bill 1996, Appendix 1, p. 38). The Social Democrats therefore accepted the need for structural reforms in the mid-1990s (Revised Budget Bill 1995, p. 31). The government decided on further reductions in unemployment benefits - the bourgeois government had reduced the replacement ratio in 1993 - and exceptions from the Job Security Act of 1974 by allowing short-time employment contracts. (The reduction of the replacement ratios was, however, primarily a part of the budget consolidation policy.)

The employment policy ambition of the Social Democrats – 4 percent open unemployment - was satisfied in 2000, but it was definitely too modest to meet the strong demands of the Rehn-Meidner model. Hence it seems that the redefinition of full employment by Bertil Ohlin and Erik Lundberg in the early post-war years eventually had won the day.

The Social Democratic abandoning of the goals of very low rates of unemployment, and of expansionary macroeconomic policies to attain a strong employment recovery, was a clear challenge to Keynesianism in Sweden. But there were reminiscences of the Keynesian post-war model in the new stabilisation-policy regime of the 1990s – incomes policy. The Social Democrats again brought the idea of incomes policy onto the political agenda, after the non-socialist parenthesis. The government had plans for tripartite wage negotiations in the mid-1990s, plans that were hardly compatible with the Rehn-Meidner recommendation that the trade union movement should not take responsibility for the stability of the national economy, especially in a situation of high profits (see below). Further, the plans were inconsistent with the Swedish tradition of wage negotiations without government interventions dating from the late 1930s. There was also some inconsistency between the government’s corporate plans for wage restraint and its declarations that Sweden should not compete with low wages. However, the government did not realise its plans for tripartite negotiations, but instead in 2000 set up a separate mediation institute.

In the first half of the 1990s, the LO and other parties on the labour market, of their own initiative had worked out a wage policy program according to which wage increases on a Western European level would reduce long-term interest rates by lowering the risk premium. Such wage increases would also allow higher real wages
through appreciations, once the confidence in the *krona* was increased, although ideally within limits to secure high profit shares (The Edin Group, 1995, pp. 33-4). However, the LO became no part of an incomes policy agreement in the second half of the 1990s and the early 2000s. A bargaining agreement between central labour market organisations in manufacturing, the so-called Industrial Agreement (*Industriavtalet*) was signed in 1997. Agreements are settled for three-year periods stipulating wage moderation in order to keep up Swedish competitive strength in terms of relative unit labour costs and profit margins of the exposed sector. Negotiations take place under the whip of the explicit inflation targets for the Central Bank (cf. Carling *et al.*, 2000 and Industrins Ekonomiska Råd, 2003). Today, the Industrial Agreement has counterparts in other sectors of the Swedish economy. However, the Industrial Agreement was expected to serve as guideline for wage negotiations outside manufacturing.

The Industrial Agreements have hitherto, if compared to the Rehn-Meidner recommendations, put greater emphasis on stabilisation than on distribution. Also, wage coordination for individual sectors has restricted the possibilities to pursue a comprehensive wage policy of solidarity. Besides, there is no analogy in the new wage philosophy to the Rehn-Meidner growth theory, in which high profit margins have a negative effect on productivity. The initiators of the agreements also have a greater faith than Rehn and Meidner in the ability of central labour market organisations to influence the general wage development, even in a situation of high profits.

An obvious challenge to the priorities of the Rehn-Meidner model was the further increase in wage differentials among blue-collar workers in the Swedish private sector in the first half of the 1990s. Wage dispersion increased the most between industries and plants, compromising fairness in the terms of the original notion of solidaristic wage policy (Hibbs and Locking, 2000, Fig. 1). As in the United States and the United Kingdom, there was also a continued increase in the dispersion of gross earnings between all workers in Sweden (OECD Employment Outlook 1996, pp. 61-3). In the period 1995-2002 wage gaps between blue-collar workers in the private business sector was first stable, but then actually *decreased* in the early 2000s. However, in the same period, wage differentials increased considerably between white-collar workers,
and also between white-collar and blue-collar workers (Lundborg, 2005). The relative wage development in Sweden since the mid-1990s has primarily challenged the policy of general wage compression beyond the Rehn-Meidner model. But wage gaps also grew between employees in the public and private sector until the early 2000s, indicating a simultaneous departure from the model’s principle of equal pay for identical jobs.

There were other departures from the Rehn-Meidner model in the 1990s and the early years of the new millennium. In 1998, pension reform agreement between the Social Democratic government and the non-socialist opposition reduced the element of public saving in the Swedish social insurance system. In the mid-2000s, securities and shares owned by individuals, but administrated by a national authority (PPM), were responsible for more than half of total savings in the Swedish pension system (Ministry of Finance, Budget Bill Spring, 2005, Table 4.18).

The most important new challenge in Sweden to the Rehn-Meidner model in the 1990s and 2000s, beside the departure from full employment, was the confirmation of a tendency to higher profits share of GDP in the business sector. According to the Rehn-Meidner model, high profit shares are undesirable not only from an income-distribution point of view. They are also a source of low economic growth and macroeconomic destabilisation. In fact, the increase in profits share in manufacturing from the mid-1970s to the early 2000s was arguable stronger in Sweden, Finland and Canada than in other OECD countries (see Table 2 in Appendix). The boost in profits share was exceptional in Swedish manufacturing during the first part of the 1990s. In the first year of floating exchange rates (1993), the krona was depreciated with 25 percent against the currencies of competing countries. The depreciation explains, together with strong productivity growth and higher rates of unemployment, why the profit share in Swedish manufacturing rose to higher levels in the mid-1990s (above 40 percent) than ever before in the post-war period. (I disregard here the profit boom during the Korean War.) What more is, the profit share remained on a high level despite an appreciation of the krona in 1995-1996 and a falling rate of unemployment in 1998-2001. The profit boom was consolidated in the late 1990s and early 2000s by continuing productivity increases, and by a weaker krona, which particularly mitigated the profit fall in the 2001-2003 recession. Higher unemployment in the
1990s and the 2000s compared to earlier decades is a salient structural condition for the upward shift of profit shares in Sweden.

In conclusion, the relationship between the actual economic and wage policy of the 1990s and 2000s and the Rehn-Meidner model is fraught with contradictions. There are signs that Social Democratic, as well as non-socialist, governments had taken over - without reference to the model - its basic idea of stabilisation; that full employment must be reached within the framework of a restrictive macroeconomic policy. Explicit inflation and budget targets, and also Central Bank independency, could be seen as price-stabilising frameworks for an active employment policy. Social Democratic and also non-socialist governments pinned their hopes on labour market policy in the 1990s, thus during a decade when theories of the limitations of an interventionist economic policy received their definite breakthrough.

But there were clear divergencies from the Rehn-Meidner model in the 1990s and the 2000s. Sweden no longer met the strong requirements of full employment in the model. Besides, the decline in labour force participation rates was a divergence from the active employment policy of the model. The inflation targets for the Central Bank are probably too demanding to satisfy the high employment ambitions of the Rehn-Meidner model. The restraining fiscal and monetary policy in the mid-1990s in a situation of mass unemployment was the clearest expression of a departure from the priorities and means of the Rehn-Meidner model. The reduction of expenditures on labour market policy as a share of GDP in the second half of the 1990s, even though unemployment was still high, was another violation of the ideas of Rehn and Meidner. From the viewpoint of their model there was also an unwarranted boost in the profits share of GDP. A continuing wage spread, lower priority of collective pension funds, and an incomes policy of wage restraint, without strong redistribution ambitions, were other deviations from the Rehn-Meidner model in the 1990s and early 2000s.

6.4 A simultaneous profit and productivity boom – a challenge to the Rehn-Meidner growth theory?

From 1992, Swedish economic policy has fulfilled the Rehn-Meidner target of price stability. Governments and the Central Bank succeeded in their endeavours to reduce
expected inflation; the gap between German and Swedish long-term rates of interest was reduced in the second half of the 1990s and even disappeared in 2000. The actual rate of inflation between 1992-2004 was on average lower in Sweden than in total OECD, EU and also somewhat lower than in small Western European countries (1.6 and 1.9 percent per year respectively). At the same time, the Phillips curve was beneficial to Sweden in comparison with total EU and OECD, and also with other small Western European countries and the United States (see OECD Economic Outlook June 2005, Table 13 and 18 and OECD Main Economic Indicators August 2005).

But for the first time in the post-war period, Sweden was no longer an example to follow in the case of employment. In 1992-2004 unemployment in Sweden was on average higher than in other small Western European countries, if Finland is excepted from this group, and also than in the United States. Swedish governments could neither prevent the emergence of mass unemployment in the early 1990s, nor bring it down to prior levels when the economy recovered. After a steady decline in 1998-2001, the rate of unemployment began to rise again and is today (December 2005), despite an economic recovery, approximately 5-6 percent. Thus, Sweden has departed even from the modest Social Democratic goal of 4 percent open unemployment in the mid-1990s. Participation rates are also still much lower than at the start of the 1990s. Neither has the goal of the government in 1998 to increase the employment share of the population aged 20-64 years to 80 percent before 2005 been achieved. (This share was 77 percent in 2004.) The question is whether the practice and theory of the Rehn-Meidner model can explain Sweden’s employment decline and higher unemployment in the 1990s and 2000s.

The Swedish crisis of the early 1990s confirms the Rehn-Meidner picture of the costs of an overheated economy. The absence of a suitably tight economic policy during the 1980s brought a relatively high rate of inflation and increased relative unit labour costs during the 1988-1991 period. Exactly as in the middle of the 1970s, a Swedish “cost crisis” coincided with an international recession. (The cost and profitability crisis around 1990 was however more limited than the one in the mid-1970s.) Neither were public savings at the end of the 1980s large enough to provide a basis for an expansionary fiscal policy without large budget deficits in the early 1990s. There is
also reason to focus on the Rehn-Meidner productivity theory when explaining the heavy employment losses in Swedish manufacturing during the first half of the 1990s. During the lengthy boom of the 1980s enterprises had “hoarded” personnel to meet the high rate of absenteeism, and deferred rationalisations due to high profits. Employment then fell rapidly in the early 1990s as a result of reduced overstaffing and comprehensive rationalisations.

Restrictive fiscal and monetary policies in the mid-1990s – alien to the Rehn-Meidner remedy in a situation of high unemployment - probably delayed the recovery in Sweden after the deep economic crisis at the start of the decade. These policies, together with a modest international recession, led to an increase in open unemployment in 1996-1997. There is evidence that Sweden maintained a low rate of inflation in the 1990s and the early 2000s compared to earlier post-war decades by climbing down the Phillips curve. A trade-off between inflation and unemployment can still be discerned, even if data for the exceptional first half of the 1990s are excluded. But there are also structural explanations for Sweden’s higher rate of unemployment in the 1990s and 2000s.

Some economists have opposed the argument that the functioning of Swedish product and labour markets became worse in the 1990s, leading to a higher rate of equilibrium unemployment (see e.g. Holmlund, 2003). They draw attention to reductions of replacement ratios and marginal taxes, deregulation and the emergence of coordinated industrial wage bargaining. Tendencies to an outward shift of the Swedish Beveridge curve (and also of the country’s Phillips curve) in the 1990s are probably explained by structural changes in the Swedish economy (cf. Holmlund, 2003, pp. 29-32 and 42-5; National Institute of Economic Research, 2004, pp. 21-2 and 2005, pp. 15-6; Nutek, 2005, pp. 45-8). In the 1980s, the reallocation of resources to dynamic sectors within manufacturing and to the private service sector, had been retarded in Sweden by a weak krona and a high foreign demand for traditional Swedish products. Further, new technologies and demand patterns in the 1990s and 2000s might have strengthened the tendency to greater occupational and regional imbalances on the Swedish labour market. In total, stronger structural tensions in the 1990s and 2000s could have led to a rise in Swedish unemployment given the incentives and adjustment capacities of the
labour market. This structural explanation for Sweden’s higher rate of unemployment is compatible with the assumption of a stable or even decreasing equilibrium rate of unemployment. It also rhymes better with the Rehn-Meidner model than with a Keynesian model underlining the decisive role of low (domestic) demand. But the validity of the Rehn-Meidner model is not always confirmed by Swedish experiences since the early 1990s.

Extensive labour market policy programs certainly pressed down open unemployment in Sweden in the 1990s. The sheer volume of labour market policy and the postponement of a restrictive fiscal policy are salient reasons why open unemployment was kept lower in Sweden than in Finland during the first half of the 1990s. However, labour market policy was an insufficient tool to bring down unemployment in a situation of large negative demand shocks. Further, the positive employment effects of extensive labour market policy programs were either small or non-existent (Forslund and Krueger, 1997; Calmfors, et al., 2001).

These conclusions are not really critical for the Rehn-Meidner model, in which labour market policy measures are only complements to aggregate-demand stimulations in a deep recession. Besides, findings of serious direct crowding-out effects (deadweight and substitution effects) from labour market policy in the first half of the 1990s hit youth programs in particular, thus not the supply and adjustment oriented measures emphasised in the Rehn-Meidner model. In fact, no crowding-out effects on employment were observed for labour market training. On the other hand, it seems that employment subsidies have resulted in strong crowding-out effects (Calmfors et al., 2001, pp. 99-192). Neither the Social Democratic targeted subsidy in 1995, nor the corresponding non-socialist general subsidy one year earlier seem to have had a significant impact on either the level of employment or the rate of inflation (Anxo and Dahlin, 1996; Johansson et al., 1999, pp. 111-27). These empirical results are critical for the Rehn-Meidner model even with the caveat that the subsidy programs were too limited to have any inflation-dampening effects, or designed in a way that inevitably led to crowding-out tendencies.

A common opinion in Sweden today, challenging the Rehn-Meidner theory, is that incomes policy in the 1990s and 2000s has been a successful tool to combat inflation
and increase employment. When explaining the reduced pace of wage increases at the beginning of the 1990s the Social Democrats were of the opinion, as was the LO, that the Rehnberg commission had contributed to reducing the pace of wage increases, particularly in 1992. A supporter of the Rehn-Meidner model would probably rather have stressed the direct importance of lower demand for labour during the deep recession of the early 1990s. The sceptical Rehn-Meidner view of incomes policy seems to be rejected by the fact that the pace of nominal wage increases under coordinated industrial agreements from 1998 has, despite high profit margins and low priorities of income redistribution, satisfied the goal of low inflation and, approximately, that of global competitiveness in terms of relative unit labour costs (National Institute for Economic Research, 2005, p. 39). However, high rates of unemployment have put an efficient brake on wage-wage spirals in Sweden, e.g. by having weakened the negotiating position of low-income groups. The critical moment of the new incomes-policy regime will come when Sweden approaches the low unemployment rates of the early post-war period. A strong tendency in Sweden to local wage agreements between companies and local trade unions or individual employees, especially white-collar workers, has added fuel to a Rehn-Meidner scepticism of the possibilities controlling general wage developments by incomes policy. This scepticism is supported by the fact that wage drift has constituted almost half of total wage increases for white-collar workers in the private business sector since the Industrial Agreements were launched in 1998 (National Mediation Office, 2005).

A related issue is whether the Rehn-Meidner wage theory can explain the widening wage gaps in Sweden in the 1990s and 2000s. According to this theory, coordinated wage bargaining, restrictive macroeconomic policies, low unemployment and extensive labour market policy programs to enhance labour mobility are all necessary conditions for a fair wage structure. A macroeconomic explanation of the larger wage inequalities in Sweden is that sizeable depreciations of the *krona* in the early 1990s led to greater profit differentials between plants and industries. Weak groups in labour markets may also have had difficulties in defending their relative wage position when unemployment rose in the first half of the 1990s. A labour-mobility explanation of larger wage gaps focuses on the global shift in labour demand, favouring skilled labour. In the absence of extensive training and educational programs, which could
have stimulated the supply of skilled labour, wage gaps increased considerably in favour of white-collar workers in Sweden as in other OECD countries. A strong company demand for scarce computer specialists and R&D personnel culminated during the IT-boom in the late 1990s.

However, these mechanisms behind widening wage gaps in Sweden in the 1990s and 2000s seem not to have been decisive. Similar macroeconomic and relative-demand developments took place in Finland, Sweden’s “twin country” in economics since the 1980s. But wage inequalities decreased in Finland in the 1990s. When explaining the larger wage inequalities in Sweden in the 1990s and 2000s, a Rehn-Meidner theorist must stress the limited scope and priorities of the Industrial Agreements and the strong tendency to local agreements between companies on the one hand, and local trade unions and individual workers on the other.

As in the two preceding decades, the picture of Swedish growth performance, and the validity of the Rehn-Meidner growth theory, in the 1990s and 2000s is ambiguous. Between 1991-2004, Sweden’s GDP per capita growth was close to the EU-15 on average, but lower than that of total OECD and the United States, despite a strong Swedish recovery since the mid-1990s. (The recovery from the mid-1990s was, however, stronger in Finland than in Sweden.) Simultaneously, Sweden showed higher (labour) productivity growth in the business sector (and manufacturing) than all other OECD countries with the exception for Ireland and Korea. Sweden’s poorer growth performance in terms of GDP per capita than in terms of productivity is “explained” primarily by the sharp decline in labour force participation rates in the country. Between 1990 and 2004, no other OECD nation, with the exception of Turkey, experienced a similar decline in participation rates (OECD Employment Outlook 2005, Table B).

Since the early 1990s Sweden has definitely lost her top position in the “welfare league” based on OECD figures on GDP per capita levels (current PPPs). Between

50 U.S. Department of Labor (2005, Table 1.1), OECD (2005) and OECD Economic Outlook 2005, Table 12. The OECD figures on labour productivity growth in the business sector in the 1990s and 2000s are particularly favourable for Sweden as output here is related to employment, not to hours worked. From 1990 to 2004, hours worked per employed increased in Sweden in contrast to almost all other OECD countries (OECD Employment Outlook, various issues, table F9).
1990 and 1992, Sweden fell from sixth to 16th place, and the country has not yet regained the prominent position it held before the crisis of the early 1990s. The incomplete Swedish regain of earlier welfare positions is “explained” by the poor recovery in labour force participation rates, and also by a deterioration of terms of trade. Sweden’s worse terms of trade reflected a strong reduction in the prices of teleproducts during the second half of the 1990s, and a depreciation of the krona in the early 2000s.

It is outside the framework of this survey to judge whether the Swedish debâcle in the “welfare league” in the early 1990s, and the country’s partial recapture only of ranking positions reflect a delayed system failure or an economic-policy failure as expected, for example, from the viewpoint of the Rehn-Meidner model. The Swedish economic crisis of the early 1990s could be seen as the result of economic-policy mistakes during the overheating of the 1980s. Also, the recovery in GDP was definitely postponed in the mid-1990s by a restraining fiscal and monetary policy. However, the unfavourable development in Swedish participation rates from the mid-1990s is largely explained by factors beyond the reach of the Rehn-Meidner model.

High labour productivity growth in the Swedish business sector, and particularly in manufacturing, in the first half of the 1990s (from 1992) may be viewed as evidence supporting the growth theory of the Rehn-Meidner model. The rationalisation stimuli were strong during the deep recession, as was the potential for productivity increases, due to overstaffing and postponed rationalisations during the boom of the 1980s. A radical elimination of inefficient production units contributed to the high productivity growth in Swedish industries during the first half of the 1990s.

But the continued high productivity growth in Swedish industries in 1996-2004 appears to contradict the growth theory of the Rehn-Meidner model. A new “productivity wonder” in Sweden coincided with a sustainable increase in the profits share of GDP, and with a further departure from the wage policy of solidarity. But

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51 The Swedish fall 1990-1992 was from eigth to 16th place when GDP per capita levels are expressed in constant PPPs (National Accounts of OECD Countries Volume I, 2003, table B5 and B7). In 2003, Sweden was in 14th or 10th position in the GDP per capita league, depending on whether the GDP per capita levels are expressed in current or constant PPPs (OECD Main Economic Indicators July 2005; National Accounts of OECD Countries Volume I, updated July 2005).
high productivity growth in manufacturing, and also in the business sector as a whole, mainly reflected a rapid development of, and wide spread use of, innovations in high-tech industries brought about by strong international competitive pressure. Telecom products represented by far the largest part of productivity growth in Swedish manufacturing during the period 1995-2001 (Confederation of Swedish Enterprise, 2002, pp. 13-4; Edquist and Henrekson, 2001, p. 415; Lind, 2003, pp. 45-7). In fact, the U.S. and Finland experienced a similar “productivity wonder” from the mid-1990s due to high total factor productivity growth in the IT-sector including telecommunications (Jorgensen and Stiroh, 2000; Saito, 2001). This sector’s share of total production is larger in the United States, Finland and Sweden than in other OECD countries. Productivity increases did not gain momentum in other OECD countries from the mid-1990s despite an increase in the profit share of GDP. What more is, the reconstruction of the Swedish (and Finnish) business sector during the depression of the early 1990s probably laid the foundation for a positive productivity development in the long run. Further the deep IT-crisis in Sweden in the early 2000s forced enterprises, e.g. the leading telecom company Ericsson, to make product improvements and rationalisations prolonging the period of high Swedish productivity growth. Both conjectures are clearly in line with the theory of transformation pressure, and therefore with the growth theory of the Rehn-Meidner model.52

To summarize, after the deep economic crisis of the early 1990s, Sweden’s growth and stabilisation-policy performance has been encouraging, particularly compared to the EU average. The economic success of Sweden is less apparent in the light of the U.S. experience and the country’s own employment and equity profile. Perhaps paradoxically for a foreign observer, the “Swedish model” has been able to produce price stability, but not to maintain the low rates of unemployment or the small wage gaps of the 1970s and 1980s. However in the mid-1990s, Sweden still appeared as a country of extensive wage equalisation (OECD Employment Outlook, 1996, Table 3.1).

52 High profits in Swedish manufacturing in general are perhaps one explanation of why the transfer of resources to knowledge-intensive industries seems to have slowed down in the 1996-2002 period (Nutek, 2005, p. 15).
The economic collapse of Sweden in the early 1990s had certain unique features, but it was also expected from a Rehn-Meidnerian analysis of the negative consequences of overheating. Higher unemployment in the country in the 1990s and early 2000s, compared to earlier decades, was probably a combination of more serious demand shocks (especially in the early 1990s), creating large hysteresis effects for the first time in the post-war period, more restrictive macroeconomic policies (especially in the mid-1990s) and of stronger structural imbalances. These explanations are compatible with the combined macroeconomic and structural approach of the Rehn-Meidner model, particularly with the amendment that employment subsidies and supply or matching labour market programs were not ambitious enough, or improperly designed. On the other hand, the apparent success of voluntary incomes policy in Sweden, and also the continuing “productivity miracle” of the country in a profit-boom situation, is a challenge to the Rehn-Meidner theory. However, high rates of unemployment have had a slowing effect on nominal wages, and high productivity growth was probably largely unrelated to the profit boom.

7. The future of the Rehn-Meidner model

The Swedish model is often defined in terms of the country’s general welfare programs, income-related social insurances, redistributing taxes, interventionist economic policies and corporatist, consensus-oriented, arrangements in politics and labour markets. At most, Sweden has departed here from other countries in degree but not in kind in the post-war period, making it extremely difficult to separate a Swedish model from a Scandinavian, North European or even a European model. However, there is no counterpart outside Sweden to the Rehn-Meidner program of combining full employment and equity with price stability and economic growth. This paper has analysed the application and performance of the Rehn-Meidner model in Sweden and the validity of the model’s underlying economic theory in the light of Sweden’s post-war economic development. The latter analysis has contained an assessment of Swedish economic policy with the Rehn-Meidner model as norm.

The Rehn-Meidner model legitimised and contributed strongly to the expansion of labour market policy and the practice of a radical wage policy of solidarity in Sweden
in the 1960s and 1970s. But the model was, despite its all-embracing and conditional view of economic and wage policy, never consistently implemented, not even in the heydays of the model. As in other OECD countries, decision makers in economic policy have gradually switched from a Keynesian to a new-monetarist strategy in the post-war period. At the same time, Swedish economic policy has been shaped by the third way of the Rehn-Meidner model. Today’s economic policy in Sweden is a hybrid, although not fully consistent, between a Keynesian, Rehn-Meidnerian and neo-monetarist model, in which countercyclical fiscal policies and voluntary incomes policy is combined with selective employment policies and with strict rules for monetary and fiscal restraints.

The partial application of the Rehn-Meidner model and the importance of more basic determinants warrant a warning against overstating the impact of the model on Sweden’s macroeconomic development. However, by pressing down open unemployment during recessions, active labour market policy has probably avoided large human sacrifices and the erosion of indispensable human endowments in Sweden. The wage policy of solidarity could also have had a progressive role in the transformation of Swedish industries, particularly by facilitating the phasing out of stagnating industries in the late 1970s and early 1980s.

An economic policy more in line with the Rehn-Meidner model might have resulted in fewer stabilisation policy problems and higher economic growth in Sweden, particularly in the late 1970s and the 1980s (see also Eklund, 2001). But the Rehn-Meidner model’s value as a guide for economic-policy making could very well have been reduced during the period under review. Institutional and structural-economic conditions for the model have, undeniably, changed radically since the 1950s. Globalisation of financial markets and enterprises has indubitably reduced the efficiency of national economic policy aimed at reducing industrial profit margins. Countries following the stabilisation policy recommendations of the Rehn-Meidner model run the risk of flight of capital and relocation of production to other countries. The possibilities of maintaining solidarity wage policies in a country like Sweden may have been reduced through increased labour mobility across frontiers. Coordinated wage negotiations at the EU level seem, as of yet, quite distant. Further, the definition of identical jobs - a centrepiece of the solidarity wage policy - has probably been
complicated by the introduction of new technologies and work organisations favouring more decentralised and individualised wage negotiations. Finally, the example of Sweden in the 1990s seems to confirm the view that selective expansionary measures are inadequate means in a situation of mass unemployment.

But signs of the Rehn-Meidner model having become obsolete are not unambiguous. A criticism that globalisation of companies and finance markets has made the model out of date must be qualified, as it recommends supply and adjustment oriented measures on product and labour markets, together with restrictive general economic policies, to fight inflation. Marginal employment subsidies, for instance, could persuade global enterprises to invest in a given country in spite of falling profit margins on average. The consumption taxes of the Rehn-Meidner model are not as vulnerable for global tax competition as individual and corporate income taxes. International labour mobility is also still too limited to threaten a Swedish wage policy of solidarity. Swedish experiences since the mid-1980s show that more decentralised and individualised wage bargaining has not excluded tacit agreements among LO unions, or the emergence of new institutions for wage coordination. An argument that the Rehn-Meidner model is inapplicable in situations of high unemployment ignores that the model does not exclude the use of effective demand stimuli in a deep recession, although in combination with selective employment policy measures.

It is difficult to draw unambiguous conclusions regarding the status of the Rehn-Meidner model in an increasingly politically integrated Europe. The EU project has, in several respects, brought a renaissance for the Rehn-Meidner ideas. The requirements of the EU Stability and Growth Pact of 1997 for the member countries’ public budget to be in balance or even show a surplus over the economic cycle, are in conformity with the Rehn-Meidner model. The Commission’s recommendations of full employment, life-long learning and active labour market policies to enhance labour mobility and skills within the framework of a sound macroeconomic policy bear strong resemblances to the Rehn-Meidner model (European Commission, 2005). The Employment Guidelines for member countries regard Swedish labour market policy as an example to follow.
There are additional signs of a renaissance for the Rehn-Meidner model at EU level. EMU membership makes depreciation/devaluations impossible, thereby enhancing the pressure for transformation in case of adverse shocks to profit margins in sectors exposed to foreign competition. By entering the EMU, fiscal policy and supply and adjustment promoting measures on the labour market gain increased importance in the economic policy. These arguments must, however, be modified, considering the importance of explicit inflation targets in many OECD countries with floating exchange rates. The inflation targets of e.g. the Swedish Central Bank mean that non-membership of the EMU will not necessarily imply weak incentives to labour market reform, or provide room for depreciations securing the survival of low-efficiency enterprises.

Certain aspects of the EU project contradict the Rehn-Meidner model. The original Stability and Growth Pact forbids public budget deficits larger than 3 per cent of GDP. Countries with a large public sector will have difficulties meeting the budget deficit constraint imposed by the Pact, in case of deep recessions. Restrictive fiscal policies may even be necessary to counteract tendencies toward large public budget deficits, induced by low economic activity, through automatic stabilisers. A strict application of the rules of the Stability and Growth Pact in Sweden would, therefore, be incompatible with the high employment ambitions of the Rehn-Meidner model.

Neither have EU incomes policy ambitions since the mid-1990s confirmed the scenario of a European rebirth of the Rehn-Meidner model. The Commission, in its so-called White Paper, recommends, not only an active labour market policy, but also a “social dialogue” with social partners in order to reduce inflation and strengthen European competitiveness through increased profit margins (The EU Commission, 1993). The 1999 EU government conference in Cologne recommended a “macroeconomic dialogue” between labour market stakeholders and monetary and fiscal policy actors, in order to fulfil the ambitions of the White Paper. According to the Rehn-Meidner model, incomes policy is an unnecessary arrangement in a situation of high unemployment, an inefficient means of achieving wage restraint in an overheated economy, and, possibly, a negative condition for economic growth, if it were to lead to high profit margins.
The ambiguous attitude of the EU to the Rehn-Meidner model must not obscure the fact that the model, with its unique combination of economic and wage policy measures, could indeed animate the discussion of a future European policy for high economic growth, low inflation, social justice and full employment. What more is, the vision, and partially also the practice, of the Rehn-Meidner model makes a substantial contribution to the contemporary discussion of the “third way”, a concept that hitherto has been too general and vague to serve as a guideline for economic policy in the 21st century.

**Literature**


Landstingsförbundet, LO, Metall, SACO, SAF, SIF and TCO. Stockholm: LO, mimeo.


Ministry of Finance, Budget Bills of Sweden, periodical.

Monthly Labor Review, periodical.


OECD. Main Economic Indicators, periodical, Paris: OECD.

OECD. Historical Statistics, periodical (until 2001), Paris: OECD.

OECD. Economic Outlook, periodical, Paris: OECD.

OECD. National Accounts of OECD Countries, Volume I and II, periodica, Paris: OECD.


Appendix

Table 1: Swedish labour market policy 1965-2003. Expenditures by the National Labour Market Board (AMS) on active labour policy measures of various kinds, less regional policy measures. Expenditures on labour market policy by AMS as a share of GDP and by AMS and other public authorities as a share of GDP (in brackets).

<table>
<thead>
<tr>
<th>Year</th>
<th>Matching</th>
<th>Training</th>
<th>Job creation</th>
<th>Employment subsidies</th>
<th>Programs for disabled</th>
<th>Others</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>12.1</td>
<td>16.4</td>
<td>61.6</td>
<td>-</td>
<td>7.6</td>
<td>2.3</td>
<td>0.9</td>
</tr>
<tr>
<td>1966</td>
<td>13.5</td>
<td>20.1</td>
<td>55.3</td>
<td>-</td>
<td>9.0</td>
<td>2.1</td>
<td>0.8</td>
</tr>
<tr>
<td>06/68</td>
<td>11.6</td>
<td>25.8</td>
<td>52.4</td>
<td>-</td>
<td>8.6</td>
<td>1.6</td>
<td>1.2</td>
</tr>
<tr>
<td>06/69</td>
<td>11.8</td>
<td>25.3</td>
<td>51.0</td>
<td>-</td>
<td>10.6</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>06/70</td>
<td>15.6</td>
<td>28.9</td>
<td>41.1</td>
<td>-</td>
<td>12.7</td>
<td>1.7</td>
<td>1.2</td>
</tr>
<tr>
<td>70/71</td>
<td>13.9</td>
<td>30.8</td>
<td>36.2</td>
<td>-</td>
<td>17.0</td>
<td>2.1</td>
<td>1.1(1.5)</td>
</tr>
<tr>
<td>71/72</td>
<td>9.9</td>
<td>23.8</td>
<td>52.6</td>
<td>-</td>
<td>12.5</td>
<td>1.2</td>
<td>1.8(2.3)</td>
</tr>
<tr>
<td>72/73</td>
<td>9.5</td>
<td>22.3</td>
<td>55.5</td>
<td>-</td>
<td>11.9</td>
<td>0.8</td>
<td>2.1(2.8)</td>
</tr>
<tr>
<td>73/74</td>
<td>10.9</td>
<td>25.5</td>
<td>47.3</td>
<td>-</td>
<td>15.6</td>
<td>0.7</td>
<td>1.6(2.2)</td>
</tr>
<tr>
<td>74/75</td>
<td>13.4</td>
<td>37.0</td>
<td>35.9</td>
<td>-</td>
<td>22.7</td>
<td>1.0</td>
<td>1.2(1.7)</td>
</tr>
<tr>
<td>75/76</td>
<td>13.3</td>
<td>24.8</td>
<td>37.8</td>
<td>-</td>
<td>23.3</td>
<td>0.8</td>
<td>1.4(1.9)</td>
</tr>
<tr>
<td>76/77</td>
<td>9.0</td>
<td>27.6</td>
<td>45.3</td>
<td>-</td>
<td>17.5</td>
<td>0.6</td>
<td>2.1(2.7)</td>
</tr>
<tr>
<td>77/78</td>
<td>8.5</td>
<td>29.1</td>
<td>46.8</td>
<td>- 2</td>
<td>15.1</td>
<td>0.5</td>
<td>2.6(3.3)</td>
</tr>
<tr>
<td>78/79</td>
<td>9.4</td>
<td>36.0</td>
<td>38.0</td>
<td>- 2</td>
<td>15.9</td>
<td>0.7</td>
<td>2.4(3.1)</td>
</tr>
<tr>
<td>79/80</td>
<td>10.1</td>
<td>37.0</td>
<td>33.9</td>
<td>- 2</td>
<td>18.2</td>
<td>0.8</td>
<td>2.2(2.9)</td>
</tr>
<tr>
<td>80/81</td>
<td>11.2</td>
<td>33.9</td>
<td>32.3</td>
<td>- 2</td>
<td>21.8</td>
<td>0.8</td>
<td>1.8(2.6)</td>
</tr>
<tr>
<td>81/82</td>
<td>11.2</td>
<td>32.9</td>
<td>31.5</td>
<td>- 2</td>
<td>23.4</td>
<td>1.0</td>
<td>1.9(2.7)</td>
</tr>
<tr>
<td>82/83</td>
<td>9.4</td>
<td>29.5</td>
<td>39.5</td>
<td>- 2</td>
<td>21.1</td>
<td>0.5</td>
<td>2.1(3.0)</td>
</tr>
<tr>
<td>83/84</td>
<td>9.1</td>
<td>26.6</td>
<td>44.2</td>
<td>- 2</td>
<td>19.9</td>
<td>0.2</td>
<td>2.2(3.3)</td>
</tr>
<tr>
<td>84/85</td>
<td>9.7</td>
<td>24.4</td>
<td>36.8</td>
<td>8.2</td>
<td>20.7</td>
<td>0.2</td>
<td>2.1(3.1)</td>
</tr>
<tr>
<td>85/86</td>
<td>13.3</td>
<td>37.9</td>
<td>31.3</td>
<td>4.6</td>
<td>22.8</td>
<td>0.1</td>
<td>2.0(2.9)</td>
</tr>
<tr>
<td>87/88</td>
<td>13.5</td>
<td>35.2</td>
<td>20.0</td>
<td>2.8</td>
<td>28.3</td>
<td>0.2</td>
<td>1.7(2.5)</td>
</tr>
<tr>
<td>88/89</td>
<td>13.7</td>
<td>37.1</td>
<td>16.5</td>
<td>2.2</td>
<td>30.4</td>
<td>0.2</td>
<td>1.6(2.2)</td>
</tr>
<tr>
<td>89/90</td>
<td>15.5</td>
<td>35.7</td>
<td>11.8</td>
<td>1.7</td>
<td>35.1</td>
<td>0.2</td>
<td>1.4(2.1)</td>
</tr>
<tr>
<td>90/91</td>
<td>12.4</td>
<td>31.4</td>
<td>10.7</td>
<td>1.2</td>
<td>43.8</td>
<td>0.5</td>
<td>1.3(1.6)</td>
</tr>
<tr>
<td>91/92</td>
<td>8.5</td>
<td>41.1</td>
<td>12.6</td>
<td>3.7</td>
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<td>0.4</td>
<td>2.0(2.5)</td>
</tr>
<tr>
<td>92/93</td>
<td>8.1</td>
<td>35.5</td>
<td>23.0</td>
<td>5.5</td>
<td>27.9</td>
<td>-</td>
<td>2.7(3.1)</td>
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</table>

Sources: Johannesson (1981, Table A.1), (1991, Table 1 A) and (1995, Table 2.1), Statistics Sweden and OECD Employment Outlook.
Definitions:
Matching activities include labour market information, geographical mobility and investigation costs. Training includes labour market education organized by AMS. Job creation measures include youth measures such as work experience schemes and practice programs, in-plant training to avoid lay-offs, trainee replacement schemes, start-up grants, orders and other supports to industries, introduction places, measures for partial unemployment, specific job creation programs, stock-piling subsidies, special job-design programs and relief work. Employment subsidies include general, special and extended recruitment and employment grants (incentives). They do not include relief work and training replacement schemes covered by the notion “individual employment support” used by AMS since 1998. Employment subsidies in the table is identical to the OECD category “subsidies to regular employment in the private sector”. Programs for disabled persons include special work-adjustment measures, vocational rehabilitation and public sheltered work.

1 The share is underestimated. Some expenditure on labour information and regional mobility are counted as labour market training. On the other hand, the inclusion of expenditures on geographical mobility in the matching category throughout the table is questionable. Thus, there are arguments for summing up the first two columns to show the supply and adjustment oriented policy share of labour market policy.

2 Recruitment subsidies during these years are included in the category job creation or excluded from the table by their regional nature.

3 Estimates of the composition of labour market policy for these years are based on OECD Employment Outlook (see also the labour market policy share of GDP in brackets). The OECD statistics cover expenditures on labour market policy programs not only by AMS but also by other public authorities.

4 The period 1995-96 includes 18 months, from July 1, 1995 to December 31, 1996.
Table 2: Trends and fluctuations in gross profits share of gross value added in manufacturing, 10 OECD countries 1955-2003

<table>
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<td>s.d.</td>
<td>trend</td>
<td>s.d.</td>
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<td>(-9.30)</td>
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<td>(3.14)</td>
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<td>0.18</td>
<td>0.05</td>
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<tr>
<td></td>
<td>(3.70)</td>
<td></td>
<td>(1.59)</td>
<td></td>
<td>(3.61)</td>
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<td>Finland (1)</td>
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<td>0.51</td>
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<tr>
<td></td>
<td>(2.23)</td>
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<td>(-1.90)</td>
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<td>(4.94)</td>
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<tr>
<td></td>
<td>(-0.40)</td>
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<td>(-1.61)</td>
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<td>(3.95)</td>
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<tr>
<td></td>
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<td>(-0.92)</td>
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<td>Germany (2)</td>
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<tr>
<td></td>
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<tr>
<td>United Kingdom</td>
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<td>-0.37</td>
<td>0.02</td>
<td>0.29</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>(0.25)</td>
<td></td>
<td>(-18.21)</td>
<td></td>
<td>(3.10)</td>
<td></td>
</tr>
<tr>
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<td>0.02</td>
<td>0.09</td>
<td>0.13</td>
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<tr>
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<td>(0.19)</td>
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<td>0.03</td>
<td>0.61</td>
<td>0.17</td>
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<td>(-4.45)</td>
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Source: Eurostat, OECD National Accounts Vol. II and National Statistics
Note: The augmented Dickey-Fuller (ADF) test was used to decide whether the time series of annual profit shares are nonstationary. The regression equations included a constant and a trend term. The augmented test was based on equations generally including two lagged first differences of the profit variables. Test statistics have been compared to the MacKinnon critical values for rejecting the hypothesis of a unit root on the 5 and 10 percent levels. In the cases of a rejection, the first differences of the profit variables were regressed on a constant, representing the stochastic time trend. In the cases where the ADF-tests were unable to reject the hypothesis of a unit root, the deterministic trends were estimated from an equation with the profit share as a dependent variable and a constant and a trend term as independent variables. These estimates were based on an ARIMA specification.