How Can Economic Policy Strike a Balance Between Economic Efficiency and Income Equality?

Assar Lindbeck

Can income equality be combined with high economic efficiency and rapid economic growth? Fortunately, we need not answer such a general question. Indeed, the question is poorly phrased. The relationship between income and wealth distribution on one hand, and efficiency/growth on the other, depends on *how* a certain distribution of income and wealth has come about. For example, if a given redistribution of income is a result of a more even distribution of land holdings and human capital, the implications for economic efficiency and growth would certainly differ from equally large redistributions via more progressive taxes and more generous benefit systems,[1] not to mention income equality brought about by strict wage and price controls in confrontations with market forces or the nationalization of physical and financial assets. Moreover, the consequences for economic efficiency and growth of government transfers and taxes of given size also depend on how the benefit systems are constructed in detail and how exactly they are financed.

In other words, we should not start from the *a priori* assumption that there is necessarily a conflict between income equality and economic efficiency. All policy measures that reduce the dispersion of income do not reduce economic efficiency, and all actions that increase the dispersion of income do not result in higher economic efficiency. Indeed, some policy actions may both equalize income distribution and enhance efficiency and growth. Thus, relevant questions are when

do conflicts arise? When don't they arise? And when they do, can the conflicts be mitigated?

These reflections are also relevant when evaluating the results of broad macroeconomic cross-country regressions of the association between income distribution on one hand, and economic efficiency and economic growth on the other. One serious limitation of such studies is precisely that the *determinants* of observed differences in income distribution among countries have not been well specified, if at all.

I do not discuss the pros and cons of a more or less even income distribution. But I will assume that poverty is a more severe problem than a wide dispersion of the overall distribution of income expressed, for example, by the Gini coefficient. It is then important to note that the characteristics of poverty have recently changed in developed countries. Today, poverty is less related to old age than it used to be. In contrast to the past, the poor are mainly individuals of working age, often with children (Cantillon, 1996). This reflects the impact of generous welfare-state arrangements for the elderly and rising unemployment or diminishing rewards from work among low-wage groups. More specifically, poverty in most countries on the European continent is now closely connected with highly persistent long-term unemployment and hence with failures of macroeconomic policy and poorly functioning markets, in particular for labor. In the United States, poverty is more tied to the prevalence of low pay (the working poor) and hence to failures in providing education and training of low-productivity workers, which is also a reflection of deficient social integration and malfunctioning families and neighborhoods.

I begin with issues related to *factor-income distribution*, also attempting to identify the driving forces behind recent changes in this distribution. Next, I consider the possibilities of influencing this distribution without strongly negative consequences for economic efficiency and economic growth.

It is probably fair to say that governments have been particularly involved in attempts to make the *disposable-income* distribution

more even than the factor-income distribution—largely through welfare-state arrangements and progressive taxation. So in the second part of the paper, I turn to attempts by governments to disconnect disposable income from factor income and to ways of minimizing the negative consequences of this disconnection for economic efficiency and growth. Of course, government interventions of this type often feed back onto the factor-income distribution.

Forces behind changes in the factor-income distribution

While the overall factor-income distribution in most developed countries became gradually more even during most of the twentieth century, the trend was reversed in the late 1970s or early 1980s. This reversal is particularly clear if individuals with zero earnings are included in the statistics—as they should. Because labor income constitutes the bulk of national income, I start by discussing the distribution of this type of income. But it is also important to take a separate look at relative employment rates among different groups of workers, because having a job is a crucial component of individual welfare, in addition to the income it generates. More specifically, it is generally agreed that work organizes life, boosts self-respect, contributes to social interaction and is beneficial to health and well-being. This obvious point is worth keeping in mind, for example, when comparing the working poor in the United States with benefit-financed unemployed individuals on the European continent.

A useful way of looking at the development of wage distribution is Jan Tinbergen's (1975) vision of a "race between education and technology." What he meant, of course, was that while education and training increase the supply of skilled labor, technological development usually increases demand. In this framework, the simultaneous widening of wage distribution and the fall in relative employment rates of low-skilled workers during the last decade or two suggest that technology now has the upper hand in Tinbergen's race.[2] Of course, technology (narrowly defined) is not the only driving force on the labor demand side. Increased international competition from low-wage countries has been singled out as another factor, though available studies do not suggest that this has been a dominating force

so far. Outsourcing of labor-intensive activities to low-wage countries by multinational firms may also have contributed to shifting labor demand away from low-skilled workers in developed countries (Markusen, 1998). Another conceivable explanation is recent reorganizations of firms, because these changes have given employees increased responsibilities in the workplace, which probably favors not only high skills, as traditionally defined, but also cognitive abilities, reliability and social competence (Lindbeck and Snower, 1996). An indication that this may be an important factor is that the distribution of wages and employment rates has also widened *within* narrowly defined groups of workers with similar education and skills (Levy and Murnane, 1992; Katz and others, 1993; and references therein).[3]

A demand-supply framework also goes a long way in explaining differences among countries in terms of changes in relative wages. During the last two decades, the demand-supply balance for low-skilled workers appears to have deteriorated much more in the United States and the United Kingdom than in countries on the European continent (Katz and others, 1993; Nickell, 1997; and references therein). This is certainly consistent with the observation that wage distribution has widened much more in the former countries than in the latter.[4] The role of the demand-supply balance is also illustrated by the fact that some countries on the European continent with broadly based, effectively run systems of vocational training have been able to avoid a drastic deterioration in the relative employment rates of low-skilled workers despite only rather modest reductions in relative wages of such workers. It is usual to refer to Austria, the Netherlands, western Germany, and Switzerland. It has also been suggested that not only a large flow of fairly skilled workers into the labor market, but also the existence of a large stock of such workers at a given point in time, limit the rise of relative wages for highly skilled workers in response to shifts in the composition of labor demand in their favor (Nickel, 1997). The reason is that there is then a large group of workers who are fairly good substitutes for high-skilled workers. This limits the induced rise in relative wages of high-skilled workers when demand for them increases.

The development of the demand/supply balance is certainly not the whole story behind cross-country differences regarding recent changes in wage distribution and employment. As we know, many observers have referred to *institutional differences* in the system of wage formation in the United States and the West European continent. I refer to the greater importance of labor unions and highly centralized wage bargaining in most European countries, which are likely to have contributed to rigid relative wages. The greater flexibility of relative wages in the United States is asserted to help explain the combination of a larger widening of the wage dispersion in that country and a larger rise in unemployment among unskilled workers in Europe—the latter measured as the change in the unemployment rate in percentage points.[5] Common sense suggests that this reference to institutional obstacles to relative wage flexibility is a useful *complement* to the demand-supply explanation in the Tinbergen tradition.[6] But a severe limitation of this attempted explanation is that it finds little support in cross-country comparisons among individual countries in Europe. This indicates that other differences among countries often neutralize the effects of institutional obstacles to flexible relative wages.

The earlier mentioned increase in the heterogeneity of jobs and workers also makes centralized wage bargaining more problematic than before. The reason is that good knowledge about jobs and workers today exists only at individual firms or even plants. There has also been a rapid increase in new types of labor contracts in the form of temporary work, project work, outsourcing to other firms including self-employed individuals, and so on. All these developments favor decentralized wage bargaining (Lindbeck and Snower, 1996).

Indeed, a shift in this direction is already on the way in some European countries. This will probably result in a wider dispersion of wages in at least some of these countries, in particular, where centralized bargaining has compressed wage distribution in the past. But it is not likely that more decentralized wage bargaining in countries in continental Europe will make wage distribution as wide as in the United States, at least not at the lower end of the distribution. This is because human-capital distribution at the bottom of the income

distribution is more even than in the United States (Nickell, 1997). Indeed, it may be argued that countries on the European continent are in a better position than the United States and the United Kingdom to have decentralized wage formation without generating a very uneven wage distribution.

Of course, the overall distribution of factor income among individuals and households depends not only on the distribution of labor income but also on the distribution of capital income. In a century-long perspective, the share of statistically recorded capital income out of national income has gone down. This is partly the result of the fact that the number of wage earners has increased relative to the number of employers in connection with the industrialization process, including the gradually reduced importance of agriculture. But other factors have also been operating, such as changes in competition in product markets and changes in the powers of labor unions. It seems that the trend toward a gradually smaller capital income share reversed in most developed countries during the 1980s. One likely explanation is that unions have become weaker in connection with rising unemployment. In countries with an initially compressed capital income share, the internationalization of capital markets and production has also forced unions to accept higher return on capital.

Policy interventions to equalize factor-income distribution

Obviously, it is difficult and presumably also undesirable from an economic efficiency viewpoint for government to reverse the factors that have recently contributed to widening factor-income distribution and increasing unemployment of low-skilled workers. Those factors include technology, international trade, outsourcing of labor-intensive jobs to low-wage countries, reorganization of firms, and in some countries also more decentralized wage bargaining. So it is easy to understand that recent policy proposals have instead emphasized measures to counteract undesirable effects of these developments on income distribution.

There is a plethora of suggestions along these lines. Here, I consider six types of policy measures to equalize factor-income distribution,

mainly in its lower tail. Four are meant to improve the earnings or employment prospects, or both, of low-productivity workers: higher minimum wages, better education and training of low-productivity workers, lower payroll taxes, and increased public-sector employment of such workers. The fifth measure is designed to improve the market powers of individuals with specific disadvantages in the labor market. While these five suggestions are intended to equalize labor-income distribution, a sixth is designed to equalize the distribution of capital and capital income.

Minimum wages

There is no question that minimum wages can compress factor-income distribution among employed workers. Indeed, in cross-country comparisons, the higher the level of the minimum wage relative to the average, the lower the proportion of low-paid workers in total employment (OECD, 1998, Ch. 2). In cross-country comparisons, higher minimum wages are also associated with less inequality in earnings between men and women and between younger workers and adults.

However, an obvious limitation of a minimum wage as a tool of income equalization is that it is poorly targeted if we are concerned with inequality of *family income*. The reason is that many workers with minimum wages—including the young and many married women—are members of households with household income that is not particularly low. Indeed, in European Union countries, only about 20 percent of full-time/full-year low-paid workers (with earnings of less than 50 percent of the average) live in poor households, though the corresponding figure is about 40 percent in the United States (OECD, 1998, p. viii). Moreover, a minimum wage fails to help households with no employed individuals. Indeed, for the Organization for Economic Cooperation and Development (OECD) area as a whole, about 40 percent of low-income individuals live in households with no one in paid work. Since low-paid individuals are not highly concentrated to poor households, an increase in minimum wages will have a rather limited impact in reducing overall family poverty.

Of course, the traditional objection to higher minimum wages is that they may create unemployment among low-skill workers. But it is not likely that today's minimum wages are a dominant factor behind aggregate unemployment in developed countries.[7] One indication is that minimum wages have fallen considerably in most OECD countries from the mid-1970s in real terms and as a ratio to average wages (OECD, 1998, Charts 2.1 and 2.2).[8] Nevertheless, the empirical evidence is that minimum wages are detrimental to youth (in particular teenagers) employment in some countries, though this factor can explain only a modest part of youth unemployment.

But it is unavoidable that a large *increase* in minimum wages would harm the employment prospects of at least some low-productivity workers.[9] The most obvious examples are young, unskilled, inexperienced workers; housewives; immigrants with poor knowledge of the domestic language; and the physically and mentally handicapped. Such consequences are particularly likely in countries where minimum wages are high as compared to the productivity of the relevant groups of workers. I refer then not only to statutory minimum wages but also to minimum wages via collective bargaining.[10] The main negative employment effect of higher minimum wages is probably not that labor demand is reduced marginally in existing types of jobs, but rather that some types of jobs simply disappear or may never emerge in the market. For example, three or four decades ago, teenagers often entered the labor market as "delivery boys"—providing services that very few consumers would buy with today's minimum wages. Moreover, youngsters in the United States often pack purchased products in supermarkets, at rather low minimum wages, while this type of job hardly exists on the European continent with its higher minimum wages.

It is also difficult for new types of services to households to develop when minimum wages are very high, because households can choose between household production and purchases of many types of services in the market—maintenance and repair work, cleaning, gardening, meal preparation, and so on. This effect is strongly accentuated by the wide marginal tax wedges for labor income in many European countries. For example, suppose that my

marginal tax rate is 50 percent (all labor taxes included) and that a potential supplier of household services has the same marginal tax rate. I would then have to earn four times as much before tax as the supplier gets after tax. In many instances, I will then either abstain from consuming this type of service or produce the service myself. This reduces job opportunities for many low or moderately skilled workers, because their remuneration is not likely to fall in proportion to the tax wedge. And if it would fall this much, some of them would decide to drop out of the labor force, for example, to live on benefits.

These various types of effects of minimum wages, often amplified by wide marginal tax wedges, are difficult to capture in traditional econometric studies. Nevertheless, the overall judgment must be that greatly increased minimum wages, designed to raise earnings of employed low-skilled workers, create a conflict not only with economic efficiency but also with distributional concerns for those who will be unable to get jobs because of a hike in minimum wages.

Better education and training of the low skilled

In view of the limitations of higher minimum wages and the risks of negative employment effects, it is easy to understand that economists usually emphasize subsidies to education and training instead—ordinary schooling for the young and re-education and retraining for adults. The major gain in the United States of such investment in human capital would be fewer working poor. Countries on the European continent would, instead, expect such policies to result in higher employment rates for low-skilled workers, who today are priced out of the labor market by regulated wages exceeding their productivity—provided wages are not raised in proportion to the rise in productivity brought about by better education and training.

An obvious strength of such an education/training strategy is that distributional ambitions would go hand in hand with higher economic efficiency. Instead of a conflict between distribution and efficiency, these two aspects would be complementary. There is also empirical evidence of the advantage of this strategy. Countries with a relative

even distribution of human capital, in particular in the lower end of the distribution, have been able to compress wages with less severe consequences for the employment prospects of low-wage groups than in other countries. In periods with a particularly rapid increase in the supply of skilled labor, wage distribution has tended to be compressed rather than widened. Investment in human capital among the low skilled would also be expected to reduce the dispersion of *lifetime income*; many observers probably regard this as more important than a compression of yearly wages.

But there are some reservations to this attractive policy option. First, the effects on factor-income distribution take considerable time. Second, large-scale, tax-financed training programs for adults have turned out to be quite expensive for the government, which means that they require higher taxes, and hence accentuate existing tax distortions. My understanding of experiences from various countries is also that the cost effectiveness of vocational training (an element of active labor-market policy) is usually much higher if firms, rather than government agencies, are in charge of the programs. (See, for example, OECD 1998.) Skills will be much better adjusted to demand, and the trainees are more likely to have access to modern equipment, relevant workplace organization, and experienced supervisors.

It is also important to create institutional arrangements that guarantee that the training programs include general and not just firm-specific training. This point tends to be more important as time passes. I refer to the current reorganization of firms, which requires more general competence among individuals in the connection with more multitasking and teamwork and the increased requirement of social competence among employees.

In the case of the young workers, a close relationship with schools also seems to be important. The most obvious approach is apprenticeship systems, with a rotation between theoretical education in school and on-the-job training. Wages may then be kept sufficiently low during the training period to induce firms to provide general vocational training. According to Lynch (1998), German apprentices earn

only about one-third of the adult unskilled wage rate, while apprentices in the United States and the United Kingdom typically earn 60 percent or more of the adult rate.

A great advantage of apprenticeship systems is that economic efficiency is enhanced at the same time that it becomes socially and politically acceptable to keep down the entrance wages of the young, because they can expect a rather steep wage profile over time. Inequality of yearly income is certainly a much smaller social problem if there is high-income mobility between income classes, so that a large rise in the dispersion of lifetime income may be avoided.[11] Certification of skills acquired during apprenticeship periods through a nationally organized process also seems important to keep a check on the quality of training and to make the programs attractive to potential trainees.[12] In Germany, organized influence from local chambers of commerce and employees has also turned out to be useful in bringing about a good balance between theoretical education and general and firm-specific vocational training.

As emphasized in the literature on endogenous growth, subsidies of investment in human capital are also likely to speed up *long-term* (steady-state) economic growth because of various externalities linked to such investment. The most obvious examples of such externalities are perhaps that increased skills and working capacity tend to raise the productivity of other workers as well, even in other firms.

Of course, one general limitation of education and training is that some individuals are not willing or able to learn much from such activities. Moreover, suppose that differences in personal characteristics, such as cognitive abilities, reliability, and social competence, tend to play an increasingly important role for productivity and wage setting, as hypothesized above. Such characteristics may be more difficult to change via education and training than traditional skills. This could be another limitation of education and training because methods in reducing inequality of income through general education should help mitigate these limitations.

Reduction in wage costs for low-skilled workers without a fall in take-home pay

Because it takes considerable time to raise the demand for low-skilled labor via education and training, it is natural that suggestions abound to reduce wage costs for workers of this type via *lower payroll taxes* or outright wage subsidies. The basic idea is to pay individuals for working, rather than for not working, as in the case of unemployment benefits and other safety nets. Of course, this issue is more complex than it sounds, because it requires lower government spending or increases in other taxes.

The extent to which reduced payroll taxes result in either higher employment or a higher real (after-tax) consumption wage depends on the consequences for wage formation. In the case of workers with binding minimum wages, a payroll tax reduction would certainly result in a reduction in wage costs, and hence higher employment. But minimum wages often also influence wages of low-wage workers for which the minimum wage is not binding. In such cases, we would expect lower payroll taxes to result in a *combination* of a higher real consumption wage and lower wage costs and hence also higher employment. Indeed, this combination is exactly what makes payroll tax reductions attractive.

In the same way that today's payroll taxes of 30 percent to 40 percent in many European countries are not likely to have reduced wages of low-skilled workers in that proportion, a general payroll tax reduction today of say, 10 percent or 15 percent, financed by either an increase in other taxes or reduced government spending, is not likely to raise the wages of low-wage workers in that same proportion.

Favorable employment effects would be expected for low-wage earners regardless of whether the payroll tax reduction is general or selective. But bringing about large effects of this type on low-wage workers by a general payroll tax reduction would unavoidably be very expensive for the government. So it is tempting to rely instead on selective payroll tax reductions. To prevent a sudden discontinuity

in the tax-rate schedule at a specific wage, selective payroll taxes obviously must be graduated.

But there are also drawbacks to graduated tax concessions for low-productivity workers. Though measures of this type reduce government revenues less than general payroll tax reductions (with the same effects on disposable earnings of low-wage groups), they are nevertheless quite expensive because they are designed to cover a rather large fraction of the labor force, perhaps as much as 20 percent. Thus, the accompanying tax increases for other groups must be substantial, even if the reform is partly self-financing due to higher aggregate employment and output. Another limitation is that selective, graduated tax reductions act like an implicit marginal tax rate on investment in human capital, because the tax concession is reduced when a worker becomes able to earn higher wages due to better training. This undesired side effect could, at least to some extent, be mitigated if the reform is combined with explicit subsides of education and training of low-skilled workers. This illustrates the importance of exploiting complementarities among different policy instruments, and hence, of considering *packages* of policy actions rather than isolated changes in a single policy instrument.

Another objection to labor-tax reduction to improve employment prospects is that *alternative income* to earnings from work, such as unemployment benefits, may be changed in proportion to after-tax wages. If so, reduced payroll taxes or income taxes would be followed by a corresponding increase in income from non-work, which would remove the intended stimulation to take on jobs and possibly also induce firms to pay higher wages. But then it is not the tax reduction that is without positive employment effects, but rather the accompanying benefit increase that prevents the tax cut from having its intended effect. Here then is another illustration of the importance of considering interactions among different policy measures. Perhaps as a minimum requirement on the rationality of government policy, the government should not wipe out the intended effects of its own policy actions.

The cost increase for the government could be mitigated if reduced

payroll taxes, or increased employment subsidies, are marginal in the sense of being confined to net changes in the workforce of low-wage workers in individual firms. But there are problems with such policy actions. After a while, expanding production sectors will enjoy lower wage costs than would stagnating and contracting sectors for similar types of workers. This is bound to create distortions of the allocation of labor in the national economy. It would be tempting to alleviate this effect by making the subsidy temporary. But the positive employment effects would then be correspondingly limited.

Another way of mitigating disincentive effects on work intensity and investment in human capital would be to reserve employment subsidies for *long-term unemployed workers*, for instance, by allowing them to transform their unemployment benefits into job vouchers; see, for example, Snower (1993). But one problem with this approach is that unemployed workers are then encouraged to reduce their job searches when the unemployment spell approaches the length required to receive an employment voucher. Moreover, because these specific benefits are tied to individuals rather than to the aggregate of low-wage workers hired by a firm, negative quality signals are unavoidable if prospective employers interpret long-term unemployment as an indicator of inferior working capacity. Such negative signaling effects are avoided with earlier discussed selective payroll tax reduction or subsidies paid directly to firms.

A selective reduction in payroll taxes for low-wage groups may be seen as a complement and not just as an alternative to minimum wages. Indeed, in some countries on the European continent with relatively high minimum wages, negative employment effects have been counteracted recently by targeted reductions in payroll taxes or explicit employment subsidies, or both. It is certainly possible to continue along this path.

The main danger of this type of policy is perhaps that employees and firms, and their organizations, become more inclined to agree about wage increases in the future, expecting that the government will again respond by cutting payroll taxes. If so, reduced payroll taxes may result in a spiral of higher wages and lower payroll taxes

for low-wage workers—in particular if the government is also induced to raise minimum wages. Such developments would subsequently create severe strain on the financial position of the government and force the government to raise income or consumption taxes to higher and higher levels, possibly combined with expenditure cuts. Thus, it is an open question whether reduced payroll taxes for low-skilled workers is really a sustainable strategy *in the long run* to boost the employment prospects for these groups of workers.

Public-sector employment

Increased public-sector employment is another conceivable method of increasing the demand for low-skilled workers. But such policies are likely to crowd out private employment in the long run via higher taxes, upward pressure on wages, and the substitution between private and government spending. But such crowding-out effects take time. In the meantime, aggregate employment may be kept up for low-skilled workers. So it is not surprising that a *sequence* of repeated increases in public-sector employment of low-wage workers may boost their employment level for a considerable time. This helps explain why Sweden was able to combine a compressed distribution of relative wages with full employment in the 1970s and 1980s, when public-sector employment was gradually increased from about 15 percent to about 30 percent of the labor force.

But a policy strategy to expand public-sector employment is bound to result in high tax rates. It is also likely to distort the allocation of resources as long as increased public-sector employment does not happen to be desirable from that viewpoint as well. This means that such policies may not be sustainable in the long run. This is illustrated by the fact that the policy of unlimited expansion of public-sector employment in Sweden had to be abandoned in the mid-1980s because of the high costs for the public sector and an undesired allocation of resources between the private and the public sector. The subsequent contraction of public-sector employment in the first half of the 1990s then contributed to the collapse of full employment, with a particularly strong deterioration of the employment situation among the low skilled. Hence, this method of

boosting factor income of low-wage groups runs the risk of running into a conflict between distributional and efficiency aspects. It is certainly not a strategy that is sustainable in the long run.

Strengthening market powers of weak groups in the labor market

It is worth noting that overall cross-country variations in employment rates refer mainly to those who often have outsider status in the labor market, such as the young, married women, the handicapped, and the elderly—rather than to those with insider status, such as prime-age males with permanent employment contracts (Leibfritz and others, 1997). So it is important to consider the possibilities of strengthening the market powers of outsiders in the labor market relative to insiders. This may be brought about not only by concentrating training programs for outsiders, but also by reducing the hiring and firing costs of workers (labor-turnover costs). See Lindbeck and Snower, (1988). The situation of outsiders may also be improved by removing legislation that helps unions strengthen the market powers of insiders, such as the legal extension of collective bargaining contracts to unorganized workers and the right to strike against firms that are not involved in bargaining conflicts.

The effects of reduced turnover costs on low-wage workers are likely to show up more in their employment opportunities than in their wages. The reason is that many low-skilled workers encounter regulated wages via minimum-wage legislation or wage tariffs determined in collective bargaining. There seems to be no conflict in this case between efficiency and distributional aspects, though wages and job security are likely to deteriorate for some insiders.

Unfortunately, these hypotheses about the distributional consequences of variations in labor-turnover costs have not been empirically studied very much.

Special arrangements are required if redistribution policy is supposed to reflect ethical considerations. It must then be particularly important to improve employment prospects and earnings of the physically and mentally handicapped. They need quite special,

rather than general, forms of assistance in the labor market, including specialized training and comprehensive job protection (for example, in the form of selective job subsidies). The costs of such support for the national economy may very well be higher than the potential increase in output of these groups of citizens. But cost-benefit calculations of such policies should also include the advantage of helping these special groups to get jobs and hence becoming better integrated in the labor market and society at large. So even though conflicts between distribution and efficiency aspects may occur in this case, they are likely to be rather modest if a great weight is put on the integration of handicapped and other excluded people in working life.

Single parents (read mothers) are another example where special arrangements are important, particularly in the form of subsidized childcare outside the home. To the extent single mothers are able to produce more in the labor market than the resource costs of such childcare, there will also be a rise in measured GDP. But this effect could be lost if the subsidy is graduated in the sense that it is reduced when the individual becomes qualified for higher earnings due to longer working hours, increased work intensity, or investment in human capital—a standard disincentive problem with means-tested benefits.[13] Moreover, single-parent status is usually more based on individual choice than on insurable risks, as is the case of individuals with physical and mental handicaps. This means that problems of moral hazard cannot be avoided when single mothers are heavily subsidized—an issue to which I will return.

As with lower payroll taxes and increased public-sector employment of low-skilled workers, increased market powers of weak groups in the labor market improve the welfare of low-wage earners, not only by boosting their earnings but also by helping them earn a living by working, rather than by having to rely on benefits from the government.

Equalizing capital-income distribution

So far, I have dealt only with labor income, given that this is the dominant part of national income. Now I turn to capital income. A broadly defined group of middle-income earners holds the bulk of the capital

stock. But expressed as a ratio of an individual's factor income, capital income naturally has the greatest impact in the upper tail of income distribution. Thus, concern for factor-income distribution at the very top of the distribution makes a case for policies that equalize capital-income distribution as well. This concern is accentuated by the earlier mentioned fact that the capital-income share of national income has increased considerably in most developed countries since the mid-1980s.

If we want to bring about a more even capital-income distribution, we could, in principle, *either* reduce the rate of return on capital *or* equalize capital-asset distribution. The first alternative is hardly feasible, because the conflict between distribution and efficiency may become strong. For example, domestic investment would suffer, in particular, in a world with multinational firms. Achieving a more even distribution of capital assets is a more realistic policy strategy. The most obvious measures would be to stop discriminating against small asset holdings, require financial institutions to contribute to increased transparency of returns and risk, and promote competition between financial institutions to reduce the administrative fees for small asset transactions. A more activist policy measure would be to stimulate small wealth holdings through selective subsidies or tax concessions to such holdings—policies that already exist in some countries. One special variant is to encourage stock ownership for employees. Another is to shift to funded pensions systems, which could well lead to an increased dispersion of the return on capital assets—more on this below. Such redistribution of capital is favorable for low-income groups not only because of the capital income they receive but also because of economic security connected with *owning* capital assets. It is reasonable to regard wealth as an argument in the individual's utility function besides consumption financed by capital income (Lindbeck, 1963, Ch.2).

Consequences of disconnecting disposable income from factor income

Even though government policies have influenced factor-income distribution, it is reasonable to say that redistribution policy has mainly

attempted to disconnect disposable income from factor income and hence from work—basically to create income protection in connection with contingencies such as sickness, disability, unemployment, old age, single parenthood, childbirth, and so forth. In other words, a basic intention of redistribution policy has been to insert wedges between the factor-income distribution and disposable-income distribution. This holds mainly for yearly income, but to a considerable extent also for lifetime income. This is the case not only *ex post*, as in all insurance systems, but also *ex ante*. But some wedges are also unintended side effects of means-tested benefit programs and the financing of government spending.

As a result of all this, average tax wedges (including implicit tax wedges in means-tested benefit programs) currently hover around 40 percent to 50 percent for large groups of citizens in some countries in northern and northwestern Europe. This means that the distribution of yearly factor income of individuals contains rather limited information about the distribution of yearly disposable income, in particular, when the latter is adjusted for family composition. (Sweden is a rather extreme example; see Lindbeck, 1983.) It tells even less about the distribution of disposable lifetime income.

The welfare-state arrangements in northern Europe, to a considerable extent, have also equalized the overall size distribution of income and the distribution of income between social classes (such as manual workers and white-collar workers). By contrast, the traditional family system in southern Europe has primarily equalized income distribution between active and inactive generations. Indeed, as a result of the sharing of family income between generations, the income level of the young and the elderly relative to the middle-aged is higher in southern than in northern Europe (Vogel, 1997).

It is a commonplace that policies that create wedges between factor income and disposable income have positive and negative consequences for economic efficiency and growth. The most obvious positive efficiency effect is perhaps that compulsory social insurance compensates for well-known limitations in private capital and insurance markets, such as high administrative costs and problems of

adverse selection and free-riding. Some welfare-state arrangements also stimulate investment in human capital, obvious examples being subsidies of prenatal care, better nutrition for children, schooling, and health care. In some cases, general transfers to low-income groups might also remove liquidity constraints for the education of children. Such policies do not immediately impact economic efficiency. Because the full efficiency-enhancing effects emerge only gradually, economic growth will also be stimulated during a period of transition to a new efficiency level. This transition period may be quite long because some of these policies improve the health and raise the working capacity of future generations.

It is also often argued that progressive tax and benefit systems act as income insurance and that this will encourage individuals to take greater entrepreneurial risk, because the "downfall" in case of failure is cushioned. This is often believed to be favorable for economic efficiency and growth. (However, I am somewhat skeptical to the idea that the individuals who start enterprises consider living on government-provided safety nets if they fail.) Sometimes also, it is hypothesized that the mitigation of poverty, and perhaps the overall reduction in economic inequality reduce the propensity to redistribute income via distortionary taxes (Persson and Tabelini, 1994), and to promote social and political stability (Alesina and Rodrik, 1993). This is likely to have advantageous effects for economic efficiency and economic growth.

Nevertheless, as we know, there is great comprehension today that ambitious redistribution policies will reduce either economic efficiency or economic growth, or both, because of undesired behavioral adjustment of work, saving, investment, and entrepreneurship. More specifically, efficiency losses will arise as a result of deviations between social and private returns on work, saving, or investment. Negative effects on economic growth may arise as a result of slower accumulation of capital assets, human capital, or knowledge. Such negative effects on economic growth also imply efficiency losses to the extent that deviations are created between individuals' evaluation of consuming today rather than tomorrow, compared to the social return of postponing consumption.[14]

In recent years, at the same time that factor-income distribution has become more uneven in many countries, ambitions to mitigate the consequences for the distribution of disposable income seem to have receded.[15] Superficially, this may seem paradoxical, because we would expect the political forces favoring redistributions to be strengthened when there is an increased dispersion of the factor-income distribution. The solution to this apparent paradox is probably that there is an increased awareness of disincentive effects in connection with welfare-state arrangements and related redistributions of income.

The most obvious example of efficiency losses is probably disincentive effects due to the wide *tax wedges* that are unavoidable in societies with high ambitions to redistribute income. As we know, these wedges are usually measured by the deviation between the costs paid by firms for using factors of production, that is, labor and capital, and the after-tax return to individuals supplying these factors. The consequences for the national economy depend, of course, not only on the size of the tax wedges but also on the sensitivity (elasticity) of individual behavior to a given tax wedge.

Tax wedges function, in principle, like tariffs on foreign trade, leading to various types of autarkic economic behavior. So it is surprising that some economists and politicians, who worry about the deadweight costs of tariffs and hence pledge against tariff increases, are much less concerned about the often quite higher deadweight costs of taxes. While tariffs in developed countries today may create distortions in relative prices of 5 percent to 20 percent at most, marginal tax rates create distortions in relative prices between the taxed sector and the non-taxed sector by as much as 100 percent or even 200 percent in the most advanced welfare states because marginal tax wedges are often one-half or two-thirds for most income earners (when all taxes are included in the calculation). This comparison is highly relevant because the type of distortion is the same in both cases. Tariffs and taxes discriminate in the same way against trade. In the first case, they discriminate in favor of production in the national economy rather than international trade; and in the second case, in favor of household production (including leisure) and various types

of underground economic activities rather than exchange in the regular market (Lindbeck, 1988, p. 26).

What I want to emphasize regarding this well-known issue is the *pervasiveness* of the tax distortion, that is, the many types of private decisions that are affected. Most empirical studies have concentrated on the effects on hours of work and perhaps also private saving. But there are many other types of potentially important effects, such as on the choice between household work and market work, work intensity, willingness to move between jobs and geographical regions, to strive for promotion, to pursue tax evasion, and other types of economic crimes. High marginal tax rates also counteract the earlier mentioned stimulation of investment in human capital via subsidies to such investment.

The *allocation of real investment* is also distorted by high taxation of capital income because of various asymmetries in the taxation of different types of assets and income. It is perhaps tempting to argue that such distortions have nothing to do with redistribution policy and the welfare state. But they do. The reason is that the leverage of various tax asymmetries, many of which are administratively and politically difficult to avoid, are accentuated by high tax rates, which in turn depend on the size of redistributions and the generosity of the welfare state.

Maybe each of these tax distortions is not very costly to the national economy. But their *sum may* nevertheless be just that. This is particularly likely in countries where marginal tax wedges are as wide as 50 percent to 70 percent for a large fraction of the taxpayers (when all relevant taxes are considered). As is well known, tax distortions rise rapidly with the marginal tax wedge, in fact, by the square of the tax wedge in standard models.

Some observers deny the existence of such unfavorable effects of explicit taxes and implicit taxes in benefit systems. On theoretical grounds, it is sometimes argued that the effects are ambiguous because substitution effects and income effects would pull in opposite directions, in analogy with the effects of changes in wages. It is true

that a fall in real wages in connection with reduced labor productivity creates substitution effects and counteracting income effects for the average wage earner. But this conclusion cannot be mechanically translated into an analysis of the effects of explicit or implicit tax increases. Higher taxes make more government spending possible; this counteracts the income effect of higher taxes. In addition, distortions of economic incentives are connected with substitution effects rather than with income effects. For these reasons, it seems logical to concentrate on the substitution effects when looking at the consequences for economic efficiency of changes in explicit and implicit tax wedges (Lindbeck, 1982).

Benefit systems also create disincentive problems because nonwork is, in fact, subsidized. As a result, not only will hours of work be reduced among such groups, labor-force participation is often also discouraged.

Strongly *targeted* benefit systems have specific advantages and disadvantages. A basic advantage is that government spending can be kept down. Benefit-cost ratios of the per capita benefit received by target groups to government spending also become quite high; see, for example, Mateus (1983). But a more elaborate efficiency calculation should compare two different types of inefficiencies related to target transfers. One type of inefficiency occurs when individuals outside the targeted group also receive some benefits. Another type of inefficiency arises when individuals in the target group do not receive the intended benefits—because of deficient information, administrative difficulties, or stigmatization associated with targeted benefits. Both *ad hoc* reasoning and empirical studies suggest that stricter targeting simultaneously tends to reduce the second type of inefficiency but to increase the first type (Atkinson, 1990; Cornia and Stewart, 1993). So efficient targeting requires a tradeoff between the two.

Means-tested benefits are a special form of targeting—with benefits tied to income rather than to some other characteristic such as age, geographical location, health, or education. Advantages and disadvantages basically coincide with those of other targeted systems. Specific problems, though, are the much discussed poverty

traps and unemployment traps for low-income earners as a result of income-graduated benefits. But there are situations when such problems are *not* likely to be severe. I have in mind not only cases where poverty is related to easily identified physical and mental handicaps but also to destitute and homeless people, who in some cases, sleep in the streets. It would not cost taxpayers much to create more decent living conditions, including accommodation, for this small number of people. The risk that large groups of citizens would like to join their ranks seems remote. Indeed, many of these people seem to be mentally ill, alcoholics, and/or drug addicts.

Countries with *universal benefit systems* have been much more successful than countries with strongly targeted systems in moving people out of poverty simply because very few poor individuals are then left outside the group of beneficiaries. For instance, in several countries in northwestern and northern Europe with universal benefits, about 70 percent to 80 percent of the pre-transfer poor seem to have been lifted from poverty by various welfare-state arrangements; examples are Belgium, Denmark, the Netherlands, Norway, and Sweden. By contrast, in Canada, the corresponding figure is less than 50 percent and in Australia just under 40 percent (Cantillon, 1996). The figure is even lower in the United States, although non-cash benefits (such as food stamps) have moved a large group of people out of severe poverty there.

Of course, the government's costs for universal systems become quite high, and traditional benefit/cost ratios low. Moreover, while poverty traps are mitigated, disincentives appear instead in the form of moral hazard, that is, a tendency among individuals to adjust their behavior to become eligible for benefits, even though these benefits were originally intended for others. Moral hazard is a problem in all types of insurance, when individuals can influence the insurance outcome by their own conscious actions. But this happens to be a particularly serious problem for various welfare-state arrangements because individuals have considerable discretion in making themselves eligible for such benefits. Thus, incentive problems cannot be avoided by simply moving away from means-tested benefit systems to universal benefit systems.

For example, we want to be generous toward individuals who are sick, but the more generous we are, the more people tend to call in sick because the costs of such behavior then become rather modest for the individual. These problems seem to be particularly serious when the replacement rates in a sick-benefit system are as high as 60 percent to 100 percent, when there is no qualifying period, and when the control systems are lax. There are also good reasons to be generous toward unemployed workers, because their status as unemployed may often be regarded as a consequence of institutions and policies for which they do not have much, if any, responsibility. But negative effects on job searches are unavoidable when unemployment benefits are generous and can be kept for long periods, and the administration of benefits is lax. There is also a strong case for generosity toward single mothers, because we do not want children to be punished for the way their parents behave. But the more generous we are to single mothers, the more single mothers we are likely to see because of out-of-wedlock births, divorce, and runaway fathers. Moreover, the more generous we are in granting subsidized early retirement, for example, to individuals with vague health problems, the more individuals tend to retire ahead of ordinary retirement age. In the case of means-tested benefits and universal benefits, it is also difficult to avoid cheating with benefits and the taxes to finance them.

Reliable and systematic empirical studies are scarce in all these fields. But there is a plethora of casual evidence from various countries. We should not close our eyes to this evidence.[16] But it is important to note that governments often set up specific institutional arrangements to mitigate some of these disincentive effects—a point that Tony Atkinson (1997) emphasized. For example, negative effects of high marginal tax rates on the labor supply of married women are often counteracted by subsidies of social services, such as childcare and old-age care outside the family. Because these services are substitutes for work in the home, they tend to stimulate labor supply in the open labor market (Lindbeck, 1982). Moreover, labor force participation is often encouraged by tying future benefits to work and earnings—important examples are employment benefits, sickness benefits, benefits for parents who stay home to take care of small children, and pensions. Coinsurance, qualifying periods, and administrative

controls are other examples of institutional arrangements to mitigate disincentive effects of various welfare-state arrangements and redistribution policies. Realistic analyses of disincentive effects and proposals for reforms of welfare-state arrangements and redistribution policy should not neglect such arrangements.

The consequences of redistribution policies on saving, investment, and entrepreneurship are more controversial. Simple life-cycle and precautionary saving models, with an exogenously given retirement age, predict that private saving is reduced by compulsory social insurance systems because the need for such saving declines in preparation for contingencies such as sickness, unemployment, and old age. But it is well known that more complex versions of such models give more ambiguous predictions, for instance, because the retirement age is likely to fall, which increases the need for old-age saving (Feldstein, 1974). Redistribution of yearly income and lifetime income from high-income groups to low-income groups would also be expected to reduce aggregate private and national saving, in particular, because many low-income families seem to be liquidity constrained.

On balance, my interpretation of available econometric studies is that the effects on private saving are, indeed, negative in countries with highly generous social insurance systems and large redistributions to low-income groups.[17] Fragmented empirical observations point in the same direction. For example, it is suggestive that countries with exceptionally generous welfare-state arrangements and large redistributions of income, such as Sweden, have very low household saving, while countries with exceptionally weak welfare-state arrangements, such as several countries in Pacific Asia, have very high household saving.[18] But because saving is influenced by so many other factors, it is difficult to see much systematic relation between social insurance and private saving among countries between these extremes.

There has also been some controversy as to whether reduced domestic saving has negative effects on domestic capital formation. The background to the controversy is, of course, that financial markets

have become highly internationalized and that a global pool of saving is asserted to exist. But I would argue that domestic saving *influences* domestic investment. One reason is the often-observed close relationship between national saving and national investment (Feldstein, 1974). A reasonable explanation is that the current account of the balance of payments is a target variable for the government. As a result, low domestic saving generates policies that keep down domestic investment or increases saving or, most likely, both. Another reason for the observed correlation between domestic saving and investment is the observed bias among asset holders in favor of domestic assets, either because of information advantages, or because the commitments of asset holders are often expressed in domestic currency, which means that holdings of foreign assets are associated with exchange-rate risks. Moreover, new and small firms need equity capital and loans from private individuals—such as family or friends—because such funds are often difficult to obtain (at acceptable terms) from international capital markets or from domestic financial institutions.

It is also important to realize that private saving and government saving are not perfect substitutes. Government saving implies increased government control over the supply of capital and hence over the allocation of resources. Capitalism requires capitalists, and capitalists presuppose private saving.

For these various reasons, it is safe to conclude that reduced domestic saving has negative consequences for domestic investment and entrepreneurship and hence also for labor productivity and labor-productivity growth.

Let me also make a somewhat more speculative point about the effects of redistribution policies on entrepreneurship. To the extent that they are successful, entrepreneurs make income distribution more uneven, in some cases drastically more uneven. This helps explain why, for quite a long time, private entrepreneurs have been regarded as rather *alien* figures in some egalitarian countries, including Sweden. There is then an obvious risk that public opinion and policies in highly egalitarian countries contribute to a deterioration of the

political and economic environment for small firms via heavy taxes, pervasive regulations, and negative political and social attitudes toward small businessmen. It is only recently, in connection with serious economic crises including heavy and persistent unemployment, that these attitudes have started to change in a more positive direction in several European countries.

Moreover, important reservations are in order regarding the earlier mentioned assertions that an equalization of disposable-income distribution contributes to reducing social and political conflicts. The relation between the overall income distribution on one hand, and social and economic conflicts on the other, may not be monotonic. With a highly uneven disposable-income distribution at the outset, it is quite likely that an equalization of income distribution will be conducive to social and political stability—up to a point. But it is unavoidable that far-reaching government interventions in income distribution politicize distributional issues and that the political debate tends to become focused on distributional conflicts rather than other issues. As a result, political conflicts between different groups in society may subsequently be accentuated rather than subside.

This also has consequences for how voluntary organizations function in civil society. Many of these organizations were originally established for the purpose of mutual assistance among their members. Most of them perhaps still do. But over time, along with the expansion of redistribution policies, some organizations have increasingly turned to the government for subsidies, transfers, and regulations in their favor at the expense of other groups in society—branch organizations, labor unions, associations of owners of residential houses, tenants associations, and the like. We may say that some voluntary organizations have been transformed from being Putman-type organizations, based on strong interaction among members, to Mancur Olson-type organizations, largely squeezing rents from the state, that is, from the general taxpayer. This is also likely to contribute to political conflicts.

For example, it is my impression that policies in highly egalitarian Sweden are more dominated by distributional conflicts today than

they were 30 or 40 years ago, when factor-income distribution and disposable income was much more uneven. Long ago, de Tocqueville (1848) speculated that attempts to even out income distribution by political interventions sooner or later might accentuate rather than mitigate political and social conflicts.

Another problem with redistribution policy is that some disincentive effects are likely to be delayed due to various institutional constraints on individual behavior, for instance, because of legislation or collective bargaining in regard to hours of work. But such institutional obstacles themselves may eventually be affected by government-created disincentives. For example, when high marginal tax wedges reduce the incentive to return to work and hence, make leisure less expensive than before in terms of lost income, voters are inclined to support legislation reducing working hours. Union members are inclined to push in the same direction in collective bargaining—a process that takes time.

It is also likely that individual behavior will be constrained, at least temporarily, by the influence of *habits* and *social norms*. I refer, for instance, to habits and social norms in favor of work and against living on handouts from others, including the government (Lindbeck, 1995; Lindbeck, Nyberg, and Weibull, 1998). Such habits and norms, which are inherited from the past, are probably much more important in the case of social assistance, subsidized early retirement, and unemployment benefits than in the case of ordinary pensions, because the latter are probably regarded simply as postponed earnings. But economic incentives probably influence habits and social norms, though with a lag.

This means that welfare-state arrangements and redistribution policies easily "overshoot" in the sense that voters and politicians might have chosen less generous spending programs and less redistribution if they had been able to predict in advance all induced adjustments in individual behavior, including changes in institutions, habits, and social norms.

What I have said so far is quite consistent with a positive evaluation of redistribution policy and welfare-state arrangements. But it is

important to choose methods carefully and to keep redistributional ambitions within bounds. Otherwise it is difficult to avoid the emergence of hazardous welfare-state dynamics in the form of vicious circles by which generous welfare-state arrangements generate more and more clients over time. If this process goes very far, the welfare state and related redistribution policy may undermine its own economic foundations.

Friends of egalitarian redistributions and generous welfare-state arrangements should be the first to be on the lookout for these risks. Unfortunately, most of them are not. Instead, many have a tendency to place an unrealistic burden of proof on those who suggest that there are risks of serious disincentive effects.

The skepticism among some social scientists and politicians toward the risks of severe disincentive effects of welfare-state arrangements and redistribution policies reminds me of the skepticism a few decades ago among some natural scientists toward early warning signals of serious ecological disturbances. Non-motonicity, non-linearities and time lags complicated systematic research, at the same time as fragmented and unsystematic evidence, including everyday experience, was often rejected. There is a risk that some economists, other social scientists, and politicians "with blinders on" will make similar mistakes in the case of redistribution policy and welfare-state arrangements, though our awareness of potential problems has no doubt increased in recent years.

How to limit distortions of disconnecting disposable income from factor income

How then could disposable income be boosted for individuals with low factor income, with the smallest possible losses in economic efficiency? It is useful to distinguish among three types of reforms to promote this:

(1) stronger and better designed measures to boost the disposable earnings of low-wage individuals who are able to work;

(2) structural changes in various redistributional arrangements for the purpose of improving their benefit-cost ratios; and

(3) reduced benefits to the middle class to finance better support to especially disadvantageous groups of citizens.

When considering reforms in this area, it is obviously important to be clear about the priorities of redistribution policies, for example, by trying to find a reasonable balance between income protection for the middle class, redistributions from the rich to the rest of the population, and support of the poor.

It is also important that policy recommendations are differentiated among countries depending on differences in the initial income distribution. For instance, the overall disposable-income distribution for households is considerably more even in northwestern and northern continental Europe than in southern Europe, the United Kingdom, and North America.[19] Poverty rates (usually defined as the proportion of individuals with income below 50 percent of average disposable income) are also much lower. Affluence rates (defined, for example, as the proportion of individuals with income above 150 percent of average disposable income) are usually also lower in the former group of countries.[20]

Boosting disposable income for low-wage groups

Earlier, I discussed reduced payroll taxes on low-wage groups as a way of boosting their employment and hence, also their factor income, in particular, in countries with relatively high minimum wages. Countries without minimum wages—or with only modest minimum wages, such as the United Kingdom and the United States—have opted instead for income-tax reductions for low-wage groups. For example, they have done this by topping up their incomes with "work-in benefits" such as the *earned income tax credit* (EITC) in the United States and *family credit* in the United Kingdom. Such systems certainly are also worth expanding, though perhaps in modified form, as several writers suggest (for example, Phelps, 1997).

These types of tax measures are much better targeted than minimum wages to deal with family poverty. For example, it is quite conceivable to raise the take-home wage to a level of say, 50 percent above the minimum wage via selective income-tax reductions for low-wage workers. By contrast, a similarly large increase in take-home pay via higher minimum wages is likely to create serious employment effects for some groups of workers unless combined with reduced payroll taxes. If we are more anxious to improve job opportunities for low-wage workers than to raise their consumption wage, a selective payroll-tax reduction is, however, more adequate than selective income-tax reductions—though perhaps mainly in a short- and medium-term (perhaps up to three or four years) perspective.[21]

Structural welfare-state and tax reforms

Structural reforms to reduce the disincentive effects of existing redistribution policies, of course, may involve both benefits and taxes. Two very different types of reforms of benefit systems have recently been on the policy agenda in many countries. One is to abandon income-compensation in proportion to earlier factor income. The other reform is to move in the opposite direction, that is, to strengthen the relationship between benefits on one hand, and previous income and previously paid contributions, on the other hand.

The first strategy implies a *safety net* equal for everyone in connection with well-defined contingencies, rather than income protection in proportion to previous income. Such a "back-to-Beveridge" strategy would then retain comprehensive health insurance (or highly subsidized public-sector health services) for everybody. One advantage of such a reform is that poverty traps would be mitigated. Since aggregate government spending could be kept lower than today, tax wedges could also shrink. Individuals would be forced to take considerable responsibility for their own economic security, which some observers regard as an advantage. Private insurance policies and saving and hence, probably also domestic investment would then increase, which would stimulate economic growth at least during a transition period.

The consequences of this type of reform for income distribution are difficult to estimate. Low-income groups would certainly be favored by a system with fixed benefits, equal for all, in particular, if financed by progressive taxes. But the redistributional elements of today's pay-as-you-go social insurance systems (such as unemployment benefits, sick benefits, and pensions) would subside, which works in the opposite direction.

But there are some important reservations to this picture of the back-to-Beveridge strategy. By contrast to systems in which contributions and benefits are income-related, fixed benefits are financed by pure taxes, without elements of insurance fees—with unavoidable disincentive effects. Problems of adverse selection would also pop up again, because the system would have to be combined with more reliance on complementary voluntary insurance systems.[22] Moreover, total administrative costs of income insurance in society at large would rise when individuals add voluntary insurance on top of the common safety net. But individuals would be compensated for this by a higher return on their insurance fees than in today's pay-as-you-go systems, in which the implicit return for the individual equals the growth rate of the tax base.

Some economists have also suggested a shift from pay-as-you-go social insurance systems and means-tested benefits to *negative income taxes*, that is, a combination of fixed (flat) transfers from the government to all—with strictly positive marginal tax rates on factor income. The main difference as compared to the back-to-Beveridge strategy is that the fixed benefits would *not* be tied to specific contingencies such as old age, sickness, and unemployment; they would be given to everybody. A main advantage of such a system is that it is easy to administrate because both means tests and tight administrative control of eligibility can then be avoided. Poverty traps and unemployment traps for low-income groups would also be mitigated. Some advocates of a negative income tax also argue that it is advantageous to do away with the stigmatization connected with means-tested benefits.

But the necessarily high costs for the government of a negative

income tax imply that marginal tax rates would have to be quite high for other income earners. So it is doubtful whether a shift to a negative income tax would have positive efficiency effects on the national economy as a whole, compared to today's transfer systems. Another problem is that a negative income tax serves, in fact, as a general subsidy to individuals with a high valuation of leisure, because the benefit is not tied to specific contingencies such as sickness or unemployment. I am particularly concerned that young people would become accustomed to living on benefits from the government, amplified by incomes either from their families or from work in the underground economy, or both. More specifically, in the long run, social norms in favor of work in the official economy may be seriously weakened. By a slight exaggeration, a negative income tax functions as a "hippie subsidy."

The second reform strategy, that is, to strengthen the connection between contributions and benefits, would make social insurance *more actuarial.* The most frequently discussed proposals along this line are compulsory funded social insurance and compulsory saving accounts with individual drawing rights. In a fully actuarial system, the expected return on fees must be equal to the return on capital markets, which means that the marginal distortions of work would be removed. But the redistributional ambitions of the current social security systems would then basically disappear. If these redistributional effects are regarded as important, there is a case for combining a shift to a highly actuarial or even a funded system, with new types of redistributional devices, which are bound to create new disincentive effects.

As we know, the dominant reform strategy to mitigate disincentive effects of government spending in the 1980s and 1990s was *tax reforms* in the form of lower tax rates, a broader tax base, and a partial removal of asymmetries in the taxation of different types of income and assets. Tax rates were made more uniform, that is, more similar for different products and factors of production; several loopholes were also closed.

An alternative reform strategy could have been optimum taxation, that is, strongly differentiated tax rates, with lower rates for products

and factors of production with high elasticities of demand and supply. A main reason for not pursuing this strategy was probably that the door would then have been wide open for lobbying and manipulation by different interest groups to get more favorable tax rates than others. For example, they could argue that particularly high elasticities of demand and supply characterize their products and factors.

Nevertheless, some governments have recently felt compelled to move in the direction of optimum taxation in some instances, though in an *ad hoc* fashion rather than by invoking principles. The most obvious example is reductions in capital taxation in response to increased international mobility of capital. Another example is a tendency to reduce income tax rates in a selective fashion for specialists with high international mobility, such as research personnel in universities and corporations. In some countries, there are also proposals to reduce income tax rates selectively for internationally outstanding athletes. I am not convinced that proponents of optimal taxation had such *ad hoc* legislation in mind when they developed their optimization theories.

Reduced middle-class benefits to finance aid to the poor

Though some countries have recently pursued reforms like those discussed above, the most usual change of benefit systems in recent years has simply been *ad hoc* benefit cuts or more specifically, reduction in the replacement rates of various welfare-state arrangements. Such measures certainly mitigate problems of moral hazard and hence reduce the temptation to live on benefits, not only because they have become lower, but also because tax rates on earnings can then be cut. In countries with very high replacement rates (for example, 70 percent to100 percent), such measures may very well be a reasonable strategy. A serious transitory problem, though, is that the life-cycle planning of the individual is disrupted. Persons aged 60 or 65, or those who are unemployed or long-term disabled are suddenly told that they will get only x percent of their previously expected benefits. No one can live a life all over again for the purpose of saving and buying private insurance.

Of course, benefit cuts will also have distributional consequences. Disposable income tends to fall both for the broad middle class and for some low-income groups, because the corresponding tax reduction is spread over the entire population. Individuals able and willing to respond to improved work incentives would be at least partly compensated via factor income gains, though at the expense of leisure. The losers would be those who continue to be out of work—due not only to high evaluation of leisure but also as a result of inability to work, for example, in connection with poor health or involuntary unemployment. Because these groups are over-represented among low-wage groups, the overall dispersion of disposable income would probably widen, in particular in the lower tail of the distribution.

Of course, from a strictly technical-administrative viewpoint, it would be possible, even rather easy, to combine benefit reductions for individuals belonging to a broadly defined middle class with improved support to particularly disadvantaged groups in society. I refer, in particular, to the physically and mentally handicapped, the destitute, and the homeless, that is, those who are most drastically excluded from decent living conditions today. Ethically, this would certainly be a major achievement of a society that wants to be civilized. The net impact effect would then be reduced benefits for the middle class and improved benefits for particularly disadvantaged groups. It is another matter how feasible such a reform strategy is from a political viewpoint. It is also unavoidable that the earlier discussed problems connected with targeting and means would pop up again.

Final comments

This paper has considered *alternative* reforms to reduce conflicts between redistribution and efficiency/growth. But it is obvious that various reform proposals can easily be combined.

When trying to influence the distribution of earnings, we would ideally like to avoid both poverty related to persistently high long-term unemployment as in several countries on the continent in Western Europe, and a high frequency of working poor, as in the United States. In more positive terms, we would like to combine high labor-

market participation and low unemployment with take-home pay that individuals can live reasonably comfortably on. Bluntly speaking, the idea is to pay individuals for working rather than for remaining idle.

Unfortunately, this is not as easy as it sounds. In the long run, education and vocational training (provided mainly by firms) for low-productivity groups is certainly an important part of the solution. In a short-term perspective, reduced payroll taxes (employment subsidies) for low-wage groups also help, though in a long-run perspective, households and firms may then be less restrained in agreeing about higher wages that subsequently force the government to reduce payroll taxes even further. Reduced income taxes for low-wage workers (such as tax credits) may also be part of the solution, though this tends to increase the progressivity of the tax system if government spending is not reduced correspondingly. Lower benefit levels (replacement rates) on various safety nets, including unemployment benefits and subsidized early retirement, may also be important to increase the willingness to take jobs in countries where the safety nets are very high today. A weakening of the market powers of insiders in the labor market may also be an important part of a successful policy package, for example, by less strict job-security legislation and fewer privileges of other types for insiders and unions in the bargaining process.

When trying to disconnect the distribution of disposable income from factor income, a safety net equal for everyone (à la Beveridge) could be supplemented by more actuarial compulsory systems, possibly even fully funded systems with individual accounts managed by private institutions—or even "social funds" with individual accounts and drawing rights.

In other words, there is a strong case for designing a *package* of policy measures, combining the advantages of each separate type of arrangement, and exploiting various complementarities.

If, at least to some extent, redistribution policy is based on ethical considerations, efficiency-enhancing reforms would have to be

combined with powerful redistributions in favor of individuals who are not able to work, including physically and mentally handicapped and many destitute and homeless people. Such policies would not require large resources as compared to what is spent today on welfare-state arrangements and redistributions among individuals within a broadly defined middle class. But the possibilities of getting strong political support for such a program may certainly be questioned.

Author's Note: I am grateful for useful comments from Per Molander.

Endnotes

[1]As an illustration, in several countries in Pacific Asia after World War II, rapid economic growth has been associated with a rather even distribution of land holdings and human capital and, as a result, also of income. Redistributions of income via government transfers and taxes have been quite modest. This contrasts with the situation in some countries in Latin America, where land holdings and human capital have been less evenly distributed, while transfers and tax rates have often been much higher. Economic growth has been rather modest.

[2]For statistics about changes in the distribution of factor income, see, for instance, Atkinson and others (1995), according to whom this distribution has become more uneven in most countries during the last one or two decades, in particular, in the United States, the United Kingdom and, though from an initially very even starting point, also in Sweden.

[3]The literature trying to explain the recent development of the distribution of earnings includes also Bhagwati (1998), Katz and Freeman (1991), Davis (1992), and Leamer (1998).

[4]This interpretation is also consistent with empirical studies by Card, Kramarz, and Lemieux (1995), Nickell and Bell (1995), and Jackman and others (1996).

[5]See OECD statistics. I assume that the *difference* in the unemployment rate between low- and high-skill workers is a more relevant measure than the *ratio* of the unemployment rates. For instance, a rise in unemployment for low-skilled from, say, 8 percent to 16 percent is certainly a more severe social problem than a rise in the unemployment rate among skilled workers from, say, 2 percent to 4 percent—even though the proportional increase is the same in both cases.

[6]The falling employment rates among low-skilled workers show up in both reduced labor-force participation and rising unemployment rates. While aggregate employment rates (men plus women) have fallen in most countries on the European continent, they have risen in the United States due to the rapid increase in employment rates for women.

[7]Economists who have recently taken this position include Card and Krueger (1995) and Dolado and others (1996). See also the discussion in *Industrial and Labor Relations Review*, July 1995.

[8]The negative employment impact of minimum wages is often also mitigated by allowing lower minimum wages for young workers.

[9]When some economists argue that minimum wages may not harm employment prospects, they usually refer to monopsony powers of firms in the labor market, in the sense that some firms are confronted with an upward-sloping supply curve of labor. Under such market conditions, it is well known from elementary economic theory that minimum wages, up to a certain level, may enhance rather than harm the employment prospects of low-skilled workers. But it is hazardous to base policy proposals on this theory. We do not know in which production sectors, and for which types of labor, such monopsony powers actually exist, and how strong these powers might be for different employers and employees. There are, therefore, obvious risks that higher minimum wages will result in job losses.

[10]Among OECD countries, statutory minimum wages as a fraction of mean wage rates seem to vary from about 25 percent to 33 percent in Japan and Spain to about 70 percent in Belgium and France; see OECD (1998).

[11]High-income mobility seems, in fact, to exist in most developed countries today, with inequality of lifetime income often being only a third or half of the inequality of yearly income—without much difference in terms of income mobility between European countries and the United States.

[12]See the excellent discussion of country experiences of the training problem by Lynch (1998).

[13]Such subsidies help explain why the employment rates for single mothers are so high in the Scandinavian countries.

[14]I will make no attempt to summarize the vast theoretical and empirical literature on disincentive effects of redistribution policies, or more generally of tax and benefit arrangements.

[15]However, there are hardly any signs of increased poverty, measured as the fraction of the population with less than 50 percent of mean disposable income (adjusted for family composition)—except probably in Australia, the United Kingdom, and the United States (Cantillon, 1996).

[16]For instance, in Sweden people chose to stay away from work due to asserted sickness an average of 25 days a year in the late 1980s when the replacement rates, after tax, were about 95 percent. In the early 1990s, early retirement was taken by about 8 percent of the working-age population in Sweden, 12 percent in the Netherlands (in the form of disability pensions), and an even larger fraction of the working-age population in Italy.

[17]See, for instance, surveys in Leibfritz and others (1997).

[18]For a discussion, see Ståhlberg (1988).

[19]The Gini coefficient of the distribution of disposable income of households (adjusted for household composition) seems to be in the interval 0.18-0.25 in the Nordic countries, Belgium and Ireland; in the interval 0.28-0.31 in West Germany, the Netherlands, Luxembourg, and France; about 0.35 in Italy, Spain, Greece, the United Kingdom, and the United States; and 0.45 in Portugal. (Atkinson and others, 1995; Vogel, 1997) Family composition is taken into account by using an "equivalence scale," usually with a coefficient of unity for the first adult in the household, 0.5 for other family members over age 14, and 0.3 for younger children.

[20]In the Nordic countries the poverty rate seems to be in the interval 5-6 percent of the population; in West Germany, the Netherlands, France, and Belgium in the interval 11-23 percent; and in the remaining European Union (EU) countries in the interval 11-26 percent. The affluence rate (defined in a parallel fashion to the poverty rate) hovers in the interval 7-12 percent of the population in the Nordic countries and in the interval 13-17 percent in other EU countries. (Vogel, 1997, Graphs 15.10 and 8.16). In the United States, both the poverty rate and the affluence rate are higher than in practically all countries in Western Europe. (All these measures are adjusted for family composition, as explained in endnote 5.)

[21]Work-in benefits also act as a form of insurance against temporary fluctuations in income in a similar way as progressive income taxes. For instance, the OECD Secretariat refers to a study according to which, over a 10-year period, 40 percent of families in the United States tend to experience one or more years when wage income declines so much that they would become eligible for the U.S.earned income tax credit (OECD, 1998, p. iv).

[22]Free riding would be less of a problem, as the back-to-Beveridge strategy would provide a safety net, if it were combined with adequate sick insurance.

References

Alesina, A., and D. Rodrik. "Distributive Politics and Economic Growth," *Quarterly Journal of Economics*, 109(2) (May 1994), pp. 465-90.

Atkinson, A.B. *Ethics*, 1990, pp. 569-85.

__________. "The Economics of the Welfare State: An Incomplete Debate," Oxford: Nuffield College, manuscript, (February 1997).

__________, L. Rainwater, and T. M. Smeeding. *Income Distribution in OECD Countries*. Paris: OECD, 1995.

Bentolila, S., and G. Bertola. "Firing Costs and Labour Demand: How Bad is Eurosclerosis?" *Review of Economic Studies 57:3*, 1990, pp.381-402.

Bhagwati, J. "Play it Again, Sam: A New Look at Trade and Wages," Festschrift in Honor of T. N. Srinivasan, 1998 (forthcoming).

Cantillon, B. "The Challenge of Poverty and Exclusion," Document, DEELSA/ELSA/SP (96)5. Paris: OECD, 1996.

Card, D., F. Kramarz, and T. Lemieux. "Changes in the Relative Structure of Wages and Employment: A Comparison of the United States, Canada, and France," Industrial Relations Section, Working Paper No. 355, Princeton University, December 1995.

__________, and A. B. Krueger. *Myths and Measurement: The New Economics of the Minimum Wage*. Princeton, N.J.: Princeton University Press, 1995.

Cornia, G.A., and F. Stewart. "Two Errors of Targeting," *Journal of International Development* vol. 5, no.5, 1993, pp. 459-96.

Dolado, J., F. S. Kramarz, S. Machin, A. Manning, B. Margolis, and C. Teulings. "The Economic Impact of Minimum Wages in Europe," *Economic Policy 23*, (October 1996), pp. 319-72.

Feldstein, M. "Social Security, Induced Retirement and Aggregate Capital Accumulation," *Journal of Political Economy*, vol. 82, 1974.

Freeman, R. "The Large Welfare State as a System," *American Economic Review*, Papers and Proceedings, vol. 85, 1995, pp. 16-21.

__________. *Industrial and Labor Relations Review*, (July 1995).

Jackman, R., R. Layard, and S. Nickell. "Combatting Unemployment: Is Flexibility Enough?" Discussion Paper No. 293, Centre for Economic Performance, London, 1996.

Katz, L., and R. Freeman. "Industrial Wage and Employment Determination in an Open Economy," in J. Abowd and R. Freeman, eds., *Immigration, Trade and the Labor Market*. Chicago: University of Chicago Press, 1991.

__________, G.W. Loveman, and D.G. Blanchflower. "A Comparison of Changes in the Structure of Wages in Four OECD Countries," NBER Working Paper No. 4297, 1993.

Leamer, E. "Competition in Tradables as a Driving Force of Rising Income Inequality," manuscript, Kiel Conference, June 1998.

Leibfritz, W., J. Thronton, and A. Bibbee. "Taxation and Economic Performance," Economics Department Working Paper No. 176, 1997. Paris: OECD

Levy, F., and R. J. Murnane. "U.S. Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations," *Journal of Economic Literature*, XXX, (September 1992), pp. 1333-81.

Lindbeck, A. *A Study in Monetary Analysis*, Stockholm Economic Studies, Stockholm: Almquist and Wiksell, 1963.

__________."Tax Effects versus Budget Effects on Labor Supply," *Economic Inquiry* XX, (October 1982), pp. 473-89.

__________. "Interpreting Income Distributions in a Welfare State: The Case of Sweden," *European Economic Review 21*, 1983, pp. 227-56.

__________. "Welfare-State Disincentives with Endogenous Habits and Norms," *Scandinavian Journal of Economics*, *97*(4), 1995, pp. 477-94.

__________, S. Nyberg, and J. W. Weibull. "Social Norms and Economic Incentives in the Welfare State," *Quarterly Journal of Economics*, 1998 (forthcoming).

__________, and D.J. Snower. *The Insider-Outsider Theory of Employment and Unemployment.* Cambridge Mass.: MIT Press, 1988.

__________. "Reorganization of Firms and Labor Market Inequality," *American Economic Review* 86(2), 1996.

Lynch, L.M. "Payoffs to Alternative Training Strategies at Work," manuscript, 1998.

Markusen, J. R. "Global Investment Liberalization: Effects on Labor and the Location/ Agglomeration of High-Tech Activities and Production," manuscript, Kiel Conference, June 1998.

Mateus, A. "Targeting of Subsidies for the Needy: The Use of Cost-Benefit Analysis and Institutional Design," World Bank Staff Working Paper 617. Washington, D.C.: World Bank, 1983.

__________. "Unemployment and Wages in Europe and North America," Leverhulme Trust Program on the Labour Market Consequences of Technical and Structural Change, Discussion Paper No. 6, University of Oxford, 1996.

Nickell, S. J. "Unemployment and Labor Market Rigidities: Europe versus North America," *Journal of Economic Perspectives 11*(3), (Summer 1997), pp. 55-74.

__________, and B. Bell. "The Collapse in Demand for the Unskilled and Unemployment across the OECD," *Oxford Review of Economic Policy* 11(1), (Spring 1995), pp. 40-62.

OECD. *Employment Outlook*, (June 1998). Paris: OECD.

Persson, T., and G. Tabelini. "Is Inequality Harmful for Growth?" *American Economic Review* 84(39), (June 1994), pp. 600-21.

Phelps, E. *Rewarding Work.* Cambridge, Mass.: Harvard University Press, 1997.

Snower, D. J. "Getting the Benefit Out of a Job," *Financial Times*, February 23, 1993.

Ståhlberg, A.C. *Pensionssparandets inverkan på hushållens sparande*, (The Effect of Pension Schemes on Household Saving). Expertrapport, Spardelegation, Stockholm, 1988.

Tinbergen, J. *Income Distribution Analysis and Policies.* Amsterdam: North-Holland, 1975.

Tocqueville de, A. *Democracy in America*, J.P. Meyer, ed., New York: Anchor Books, 1969 (original edition in 1848).

Vogel, J. "Living Conditions and Inequality in the European Union, 1997," Working Document, Statistics Sweden, (May 1997).