Welfare to Work

1. Replacing or Supplementing Labour Market Incomes?

Social policy evens out the distribution of income. It prevents social unrest, it satisfies the taxpayers' sense of justice and it insures against random variations in people's lifetime careers. Ideally, it insures risks that are not privately insurable, either because risk markets suffer from adverse selection or because private insurance comes too late in a person's life, when the veil of ignorance has already been lifted.

Welfare programmes "... serve to even out differences in life chances, to achieve greater equality between generations and to redress inequality by race, gender, or health status. More generally, these programmes are intended to help people reallocate income over the lifecycle, to insure against events which cause income loss, and to provide a sense of security to all citizens" (Atkinson 1999, pp. 5–6).

This is the theory. In practice poverty is dominated by joblessness, and large quantities of money are spent on the condition that the beneficiaries do not work and do not earn. The replacement of labour income with public transfers becomes the dominant form of assistance.

As employment is the most important source of income, the replacement of labour income is a plausible implication of the social-policy motives expressed by Atkinson. The problem, however, is that the fraction of people not having a job is not exogenously given but depends heavily on policy itself. Benefits under the condition of not working operate like a wage paid for idleness which the market wage has to exceed. Since no one is willing to work at a market wage below the social benefit attainable without working – with the exception of those who fear being stigmatised as "welfare scroungers" – this benefit is a lower bound on market wages.

However, in a market economy, an upper bound on an individual's market wage is given by his (or her) productivity, i.e. the value added he or she is capable of creating. Thus there is a fundamental problem with people whose productivity is below the benefit that the welfare state is willing to provide. These people, in principle, cannot find a job in a market economy under traditional policies. The wage has to be above their benefit to make them offer their labour, and the wage has to be below productivity to make firms demand this labour. The two conditions are mutually exclusive. Although driven by good intentions, the wage replacement policy turns out to be a policy of increasing the reservation wage – the wage below which a worker will refuse a job – and of preventing the creation of jobs which otherwise would have been available.

This problem used to be minor when benefits were low relative to average incomes. However, the gradual expansion of the welfare state (expressed as the proportion of gross domestic product being spent on unemployment compensation and social assistance) has increased the number of people who are affected and has therefore increased the number of unemployed, in particular among the less educated, whose productivity is low relative to the minimum income which the state provides them. Unfortunately, this situation seems unlikely to change in the future.

The productivity effects of the New Economy are likely to stimulate aggregate income growth and with it the growth of social standards. However, the number of people who just cannot keep up with the New Economy and who are unable to cope with modern work requirements may be increasing. The digital divide may not only be a problem among nations but also among the people within a nation.

European integration may increase the desire for harmonisation of social standards. If traditional welfare benefits are harmonised, many people in the less-developed regions of Europe may find themselves in a situation where their labour productivity is below common European benefit standards. In Europe, there are regions where labour productivity is only a quarter of that elsewhere. Harmonising social standards without changing the conditions under which social benefits are paid would undoubtedly create mass unemployment in many of the less-developed regions if the benefits were sufficient for the more productive regions. The problem of the Mezzogiorno would spread.

Thus it is opportune to search for alternative ways of designing the welfare state, ways that make it possible to help the needy without driving many of them into unemployment. Basically, these ways involve redefining poverty and the conditions under which the welfare state delivers its benefits.

To satisfy Atkinson's definition of welfare programmes, it is not necessary to make benefits conditional on people being jobless. They could also be made conditional on people being employed and not earning enough. A new definition of poverty would capture that. It is not a person who does not work who is poor but someone who works to his physical and mental capacity and is nevertheless unable to earn a sufficient income.

With this definition of poverty, the welfare state would not replace labour income but supplement it when it is inadequate. Supplementing income to reach a social target level has very different implications for the functioning of the labour market than the current system because it circumvents the problem described above. Even people with very low labour productivity would be able to find jobs because social benefits would no longer establish a lower bound to wages. People would be willing to work at very low wages, because they know that this would make them eligible for social benefits, and, for the same welfare-state expenditures, they could even have higher incomes than in the current system.

A number of mainly Anglo-Saxon countries have followed this line of reform and have moved from a wage replacing to a work complementing welfare system. This chapter will report on the experience of welfare-to-work programmes and develop a proposal for a useful reform along these lines, respecting European norms of social protection.

2. The Traditional Approach

In the OECD countries, an important part of social protection against unemployment is unemployment insurance. In order to be eligible for compensation, claimants must have worked and contributed to the insurance fund for a given period of time, must be involuntarily unemployed and they must be actively looking for work.

Financial assistance for those no longer eligible for unemployment insurance takes two forms: unemployment assistance and social aid. Unemployment assistance is designed as a follow-up benefit to unemployment compensation, paying a lower benefit than unemployment insurance. Social aid is given to those who qualify for neither unemployment insurance nor unemployment assistance. The government acts as a provider of last resort to secure a minimum standard of living. Social assistance in the EU member countries normally has an unlimited duration (see European Commission, MISSOC 2000).

2.1. Replacement Policy

The traditional social security systems of most OECD countries can be characterised as passive. Benefits are provided to secure a minimum standard of living, and recipients receive the benefits without a strong obligation to look for work. This is especially true for social aid, which is provided without any significant obligation imposed on the recipient. Such a social security system leads to welfare dependency. It encourages inactivity, does not provide sufficient incentives to look for work and increases the opportunity cost of working in the market economy. In short, by following a wage replacement policy, the traditional social security system pushes the reservation wage up and thus destroys part of the employment opportunities which otherwise would have been available.

The extent to which the required wages are artificially pushed up is influenced by the level of unemployment benefits and social assistance, the duration of entitlement, the coverage of the system and the strictness with which the system is operated – as well as social attitudes.

The influence of the welfare system on reservation wages can be represented and quantified by the net replacement rate (NRR) defined as:

$$\text{NRR} = \frac{\text{Benefit income when unemployed} - \text{tax on benefit income}}{\text{Earned income} + \text{benefit income when employed} - \text{tax on earnings and benefits}}$$

The net replacement rate is the fraction of current or potential income which the social system provides to a person if he or she does not work. It varies according to the type of household, employee, sector of industry, wage and salary group and the reasons for not working.

Table 6.1 shows the net replacement rates for an average production worker receiving unemployment benefits (at the beginning of receipt of benefits) or social assistance (long-term benefit recipient). It demonstrates that the net replacement rate at the beginning of unemployment is relatively high for a couple with two children but lower for someone who is single. Hence, the bread-winner has little incentive to seek regular work. This is all the more true if the (participating) spouse is long-term unemployed. There are, of course, differences in the net replacement rate from one country to another. The net replacement rates for long-term benefit recipients are lowest in the United States and Spain and highest in the Scandinavian countries (except Norway), Switzerland and the Netherlands.

The replacement rate can be explained by the intended insurance function. However, a replacement rate also defines a minimum reservation wage, below which no one is willing to accept a job. In fact, for most people the minimum reservation wage may be even higher than that because when they decide to work they not only require a compensation for the lost special benefits but also for the time lost for leisure and for working at home or even for the loss of black market income. The higher the replacement rate, the better is the insurance protection, but the lower is the number of jobs which employers are willing to provide, given the skill distribution of the unemployed.

2.2 High Unemployment of Low-Skilled Workers

The destruction of jobs and output resulting from the traditional policy is particularly severe at the lower end of the income distribution. The information provided in Table 6.1 refers to an average production worker. Workers with an income below the average will have a higher replacement rate than that reported in the table, and what is more: the replacement rate would be above one for people who do not work because their productivity and potential wage is below the level of social aid. However, since they do not work, the wage at which they would find employment is not known. Thus, no statistical information is available on the replacement rates of this important group.

Social aid (and to a lesser extent unemployment assistance) is particularly problematic for the functioning of the labour market because, unlike unemployment insurance, it is a lower bound on the feasible wage distribution very much like a legally prescribed minimum wage. This lower bound is of limited importance for average production workers, but it destroys jobs for the less well qualified whose labour productivity is below the social aid level or not sufficiently above it to compensate for the work effort.

The consequence of social aid is that it compresses the wage distribution and concentrates unemployment on the lower qualification (or productivity) levels. As even less educated people are normally able to fulfil some useful functions in the economy, a wage is conceivable at which these people could find employment. The problem is that society considers this

Table 6.1
Net replacement rates by family type at the APW level[a)], 1997

	On unemployment benefits[b)]		On social assistance[c)]	
	Single	Couple 2 children	Single	Couple 2 children
Austria	57	73	54	70
Denmark	62	77	48	97
Finland	60	84	58	97
France	71	74	38	50
Germany	60	74	54	52
Ireland	33	62	33	62
Italy	36	54	28	62
Netherlands	75	85	60	79
Norway	66	73	36	54
Portugal	79	77	42	61
Spain	76	74	25	43
Sweden	72	84	58	100
Switzerland	73	84	61	90
United Kingdom	50	64	50	73
Australia	37	74	37	74
Canada	63	69	25	59
United States	60	61	7	48

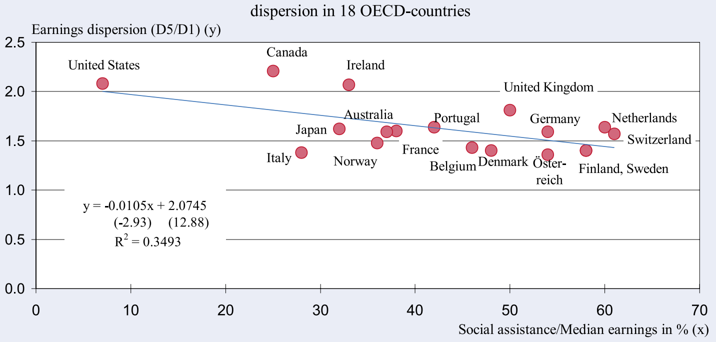
[a)] APW: Average production worker. – [b)] In the first month of benefit receipt: after tax and including unemployment benefits, family, and housing benefits. – [c)] For long-term benefit recipients (60 months): after tax and including social assistance, family, and housing benefits.

Source: OECD (1999), pp. 34 and 37.

Figure 6.1

SOCIAL ASSISTANCE AND EARNINGS DISPERSION IN THE OECD, 1997

Relationship between the relative level of social assistance for a single-person household and earnings dispersion in 18 OECD-countries



Note: The net replacement rate is calculated for the level of social assistance of a single and the earning of an average production worker. OECD database on earnings deciles refers to gross earnings. The erainings dispersion is the relation between median gross income (D5) to the gross income of the lowest decile (D1).

Source: OECD (1999), p. 37.

Table 6.2

Unemployment rates by education for population 25 to 64 years of age, 1999

		Below upper secondary education	All levels of education
Austria[a)]	Men Women	8.0 6.0	3.9 4.3
Denmark	Men Women	6.8 7.2	3.6 5.0
Finland	Men Women	12.0 14.4	8.1 9.3
France	Men Women	14.1 16.7	9.0 12.3
Germany	Men Women	17.7 14.1	8.4 9.5
Ireland[a)]	Men Women	11.7 11.4	7.4 6.5
Italy	Men Women	7.8 16.6	6.7 13.0
Netherlands	Men Women	3.6 6.7	2.1 4.1
Norway[a)]	Men Women	3.4 2.4	2.2 2.1
Portugal	Men Women	3.9 4.6	3.8 4.5
Spain	Men Women	10.5 22.8	9.2 20.1
Sweden	Men Women	8.5 9.7	6.5 5.8
Switzerland	Men Women	4.1 5.7	2.2 3.1
United Kingdom	Men Women	12.7 7.3	5.5 4.1
Australia	Men Women	9.2 7.6	6.1 5.4
Canada	Men Women	10.7 10.3	6.4 6.0
United States	Men Women	7.0 8.8	3.5 3.5

[a)] 1998.

Source: (2001) p. 274.

wage to be too low and it is therefore replaced by a higher level of social aid; but the good intentions turn out to have adverse employment consequences for those people who seemingly benefit.

Figure 6.1 gives some indication of the compression of the wage distribution through the social system. It regresses the earnings dispersion amongst relatively low earners as measured by the ratio of the median decile to the lowest decile of the wage distribution with the ratio of social aid and the average wage income across the 18 OECD countries for which the data were available. There is a significant negative correlation between these variables indicating that in countries like the United States and Canada, which have low levels of ordinary welfare payments, the distribution is indeed much wider than in countries like Denmark, Austria, Finland and Sweden where welfare payments are rather high.

Table 6.2 gives an overview of the employment situation among the EU countries. The majority of European countries are reporting high rates of unemployment. Many of the low-skilled unemployed are unemployed for over a year. The standardised unemployment rate for EU members is nearly 9 per cent. In every country, and for both sexes, the less skilled have the higher rate of unemployment. Average unemployment rates in excess of 10 per cent occur only in France, Italy, and Spain, and even there they are experienced only by women. For the less skilled such rates prevail in

Table 6.3
Underground economy as a percentage of GDP, 1998

	1998
Austria	9.1
Denmark	18.4
France	14.9
Germany	14.7
Ireland	16.3
Italy	27.8
Netherlands	13.5
Norway	19.7
Spain	23.4
Sweden	20.0
Switzerland	8.0
United Kingdom	13.0
Australia	14.1
Canada	15.0
United States	8.9

Source: F. Schneider (2000).

Finland, France, Germany, Ireland, Italy (for women), Spain, the UK (for men), and Canada. The unweighted average unemployment rate of workers with a "below upper-secondary education" is roughly 50 per cent higher than the general unemployment rate of the 12 EU member countries examined in Table 6.1.

Again, it should be noted that the statistical information is incomplete and misleading since those whose productivity is below social aid do not work enough to qualify for benefits and often do not look for work and, therefore, do not count as unemployed.

2.3 Black Market Activities

The policy of providing social assistance through replacing labour income has not only destroyed jobs by increasing reservation wages; it has also worked as a policy of subsidising black market activities. It is true, of course, that this was not intended, but as informal labour is the natural alternative to formal labour and as the payment of benefits stops when formal labour income is obtained, it is clear how the incentives have worked.

Table 6.3 reveals that the underground economy has reached a high level in most OECD countries. Black market activities are, of course, only partially brought about by the generous provision of social assistance. Other factors like high tax rates also play a significant role.

The replacement policy, however, not only provides incentives to work in the informal market, but also to use informal labour for home improvements, especially where home ownership is widespread. The spread of do-it-yourself stores not only reflects a fashion but also a rational reaction to economic incentives which undermine the division of labour and prevent the productivity gains that it entails.

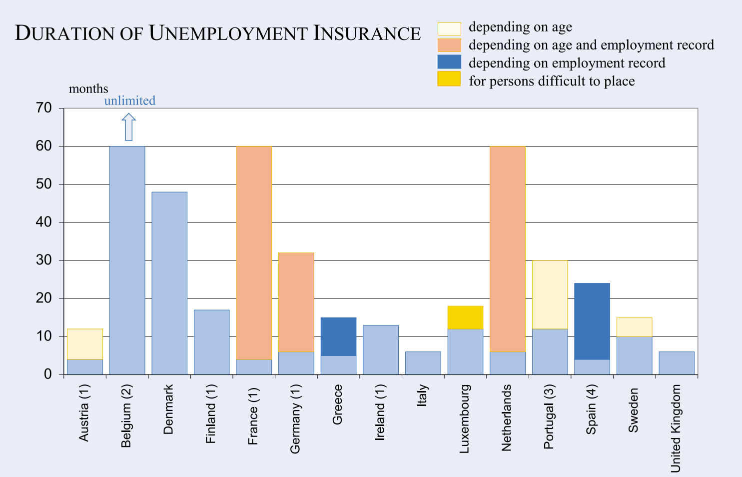
2.4 Attempts to Keep Disincentive Effects under Control

The disincentive effects have not been overlooked by policy-makers, but in most countries policy reactions have not called into question the traditional policy as such. There have been a number of attempts, however, to keep the disincentive effects under control.

One obvious provision in this regard has been the limitation of the periods during which people are eligible for benefits. Figure 6.2 gives an overview for EU countries.

In some countries, however, eligibility is of unlimited duration. Belgium is an extreme example, but even a country like Germany, which at first glance seems to have restrictive rules, pays unemployment

Figure 6.2



(1) Unlimited unemployment assistance
(2) Degressive
(3) Unemployment assistance: 12 to 30 months (depending on age)
(4) Unemployment assistance: 6 to 18 months

Source: EU Commission, MISSOC (as of 1 January 2000).

assistance (Arbeitslosenhilfe) at a replacement rate of slightly more than 50% for an indefinite period of time.[1] Entering the formal labour market as unemployed and then moonlighting is an extremely attractive option under these conditions.

Another attempt to keep misuse under control is the imposition of sanctions if a job is left voluntarily or if a job offered an unemployed person is not accepted. Table 6.4 gives an overview of the situation in some European countries. At first glance, the table signals a rather harsh approach in some countries, which even exclude the unemployed from benefits if they refuse a job twice.

The actual policies are, however, much milder than suggested by the table, since the jobs rejected must have been appropriate, and the definition of what is appropriate is always a matter of ambiguity. Also, of course, the provisions do not alter the fact that public money flows if people do not work and stops flowing if they begin to work. This is a challenge to the ingenuity of beneficiaries to invent reasons why an appropriate job cannot be found or why one offered is not appropriate.

[1] The United States provides unemployment insurance for six months but no unemployment assistance.

The problem may not be avoidable with unemployment insurance because benefits have to be provided if someone does not work. However, the provision of social aid and social assistance to the long-term unemployed or people who have never entered the labour force is clearly another matter. Here, in particular, the traditional policy should be reconsidered.

3. Welfare-to-Work Policies: Wage Replacement vs. Wage Supplement

The alternative to the policy of wage replacement is a policy of wage supplementation. Benefits are not given on condition of staying away from formal employment but on condition of participating in it and nevertheless not earning enough. When the reason for the assistance is not a random or temporary loss in employment but a permanent handicap that results in labour productivity too low to permit earning sufficient income even with full-time work, the policy of supplementation may be a useful alterna-

Table 6.4
Periods of benefit sanction following a voluntary quit and refusal of work or an ALMP placement

	First voluntary quit or dismissal for fault	Refusal of work or ALMP placement		
		First refusal	Second refusal	Subsequent refusals
Denmark	5 weeks	1 week (job), exclusion (ALMP)[a]	exclusion	
Finland	3 months[b]	2 months[b] (job), 0–2 months (ALMP)	2 months or exclusion	2 months or exclusion
France	4 months[c]	temporary or definitive exclusion[d]	temporary or definitive exclusion[d]	Temporary or definitive exclusion[d]
Germany	12 weeks[e]	12 weeks[e]	exclusion[f]	
Norway	8 weeks	8 weeks	12 weeks	26 weeks
Spain	exclusion[g]	exclusion		
Switzerland	6–12 weeks	6–12 weeks	6–12 weeks or exclusion[h]	6–12 weeks or exclusion[h]
United Kingdom	1–26 weeks	1–26 weeks (job), 2 weeks (ALMP)	1–26 weeks (job), 4 weeks (ALMP)	1–26 weeks (job), 4 weeks (ALMP)
Australia	4–5 weeks	4–5 weeks	6 weeks	8 weeks

Note: ALMP: active labour market policy.
[a] A first refusal of an ALMP placement leads to exclusion only during the "active period" (after 12 months of unemployment). – [b] Reduced to 1 month if the job in question is for less than 5 days. – [c] Admission to benefit after 4 months of unemployment is conditional on providing active job search during these 4 months. – [d] The word »exclusion« in this table generally implies an indefinite benefit stop or definite loss of remaining benefit entitlement. Legislation also provides for temporary exclusions. When an attitude of refusal of work is observed, exclusion is in principle definitive. – [e] Reduced in some circumstances. – [f] Exclusion follows when sanctions totalling 24 weeks have been pronounced. – [g] Exclusion in cases of a quit, but a 3-month waiting period in cases of dismissal for fault. – [h] A second refusal of an ALMP place leads to exclusion, and a second or third refusal of a job might lead to exclusion.

Source: OECD Employment Outlook 2000, p. 135.

tive which could at least partly replace traditional welfare programmes.

3.1 The Basic Argument

We consider a stratified society consisting of groups of (potential) workers each characterised by a particular (potential) productivity level. Figure 6.3 illustrates the case of a relatively low productivity group. Given the total amount of capital assigned to this group and the conditions pertaining in other labour market segments, there is a well-defined demand curve for labour of this quality as a function of its (net) cost to an employer. The supply of labour is assumed to be inelastic. In the absence of intervention, the market-clearing wage would be w^*, but this is below the socially acceptable minimum wage w. To prevent anyone from having to live on an income as low as w^* two policies are possible.

Figure 6.3

WAGE REPLACEMENT VERSUS WAGE SUPPLEMENT

Source: Sinn et al. (2001).

One is a wage replacement policy and the other is a policy of wage supplementation. The first offers a public benefit payment of the minimum socially acceptable income. This places a floor under the market wage and A*–A people, who are in excess of the market demand for such low productivity workers at wage w, will be unemployed. Between them they will receive public funds represented by the area CDHI.

Under the alternative policy of supplementing low earnings from public resources there is no floor to the market wage which for everyone in the relevant skill class falls to w^*. Their income is brought up to the social minimum w by an employment subsidy w-w^*, costing the government an amount represented by the area BDFE.

We now need to relax some of the assumptions underlying Figure 6.3. The demand curve was drawn on the assumption of a given stock of capital available to co-operate with the category of low productivity labour being considered. If the policy is changed only for this group, raising its employment, we would expect capital to be reallocated from co-operating with other groups, raising the productivity of the group in question and reducing the cost of the wage supplementation programme.

The situation is slightly more complicated but qualitatively unchanged, if there are several distinct groups (or a continuum) of low-skilled workers whose equilibrium wage would fall below w in the absence of intervention. It is also important to acknowledge that the combined effect of raising the employment of the least skilled groups and diverting capital to co-operate with them will be to depress the market wage for some other groups of workers whose wage was, and remains, above w. These workers, and their representatives in organised trade unions, are therefore likely to resent and resist the policy change advocated here.

The big advantage of the wage supplement policy is that it does not generate unemployment. It is possible to help the low-skilled workers without eliminating some of the jobs necessary to employ all of them. This is not only better, because it preserves the dignity of the people in need and gives them a chance of improving their qualifications on the job, but also because it goes along with a higher level of GDP. In Figure 6.3, the additional employment results in additional value added produced which is equal to the area CFIH.

The analysis shows that the frequent claim that more growth is needed to generate more employment may have to be turned around for, in fact, it is the additional employment that generates more output. We believe that a change over from the wage replacement policy to the wage supplement policy would be a key element in a programme that would generate more output in Europe.

The policy switch will not necessarily increase budgetary costs. The replacement policy gives a large subsidy to a small number of people. The supplement policy gives a small subsidy to a large number of people. Which case will cost the government less cannot be determined *a priori*.

In Figure 6.3, the answer depends on the relative sizes of the areas CDIH and BDFE. The size of these areas is a function of the labour demand elasticity in the low-wage sector.[2] Information on labour demand elasticities is scarce. With a linear homogeneous production function the constant- capital wage elasticity of labour demand is the ratio of the elasticity of substitution and the non-labour income share in GDP. While the former has been estimated to be in the range of 0.6 to 0.7, the latter can be assumed to be about 1/3. Thus, the absolute labour demand elasticity with a given stock of capital (and endogenous output) lies in the range of 1.5–2.[3] These estimates do not refer to the low-wage sector and do not consider the dynamics of labour demand resulting from the fact that lower wages will induce more capital investment. In the low-wage sector, the labour demand elasticity is higher than in the overall economy. If dynamic aspects are included, the elasticity increases further. Taking into account the special situation of the low-wage sector, long-term adjustments and the self-financing aspect of the promotion of higher employment, a wage supplement policy can be expected to cost the government less than the traditional policy and it would also generate more employment and a higher GDP.

If the wage were raised from w^* to the same level w (Figure 6.3) regardless of the workers' productivity level, very low productivity persons would have no incentive to study or otherwise raise their productivity a little; unless they could qualify themselves for a job paying more than w, they would be no better off. On the other hand, to pay a significant subsidy to everyone who works would be impossibly expensive. In practice, therefore, wage supplements are made a function of wages paid (or more often of earnings). Typically, the supplement or tax credit rises with earnings over a certain range of lower earnings and is spaced out over a range of higher earnings. The first effect ensures some incentive to improve one's skills and productivity – possibly through formal qualifications. The second has the disadvantage of adding to the effect of positive marginal income tax rates in tending to discourage both work and training. This disadvantage is hardly avoidable, but it seems less problematic than leaving people in idleness. The advantage of a wage supplementation policy is that, unlike the current systems, people can actually be induced to work and that it involves lower budget costs for the government, while achieving the same social objective.

3.2 Real-World Examples: A Country Comparison

The wage supplement policy is no longer pure theory. Several OECD countries have introduced policies that provide incentives to low-skilled workers to participate in the labour market. These policies go beyond the well-known active labour market policy or the tightening of the eligibility requirements for social benefits. Instead, they constitute a

---

[2] The crucial variable for finding out which policy is cheaper is the labour demand elasticity. Express the unemployed $A^*–A$ resulting from the replacement policy as part of the total labour force A^*,

$A^* – A = \gamma A^*$ (= HI),

and let the subsidy in the supplementing case be given by

$w – w^* = \delta w$ (= DF).

The ratio of the budgetary costs K in the two cases is then given by

$$\frac{K_r}{K_s} = \frac{(A^*–A)w}{(w–w^*)A^*} = \frac{\gamma A^* w}{\delta w A^*} = \frac{\gamma}{\delta}$$

where the subscripts r and s stand for the replacement and supplementing policies. The ratio of γ and δ is the demand elasticity for labour. This becomes clear if the first two equations are rewritten as

$$\gamma = \frac{A^*–A}{A^*} = \frac{\Delta A}{A^*}$$

and

$$\delta = \frac{w–w^*}{w} = \frac{\Delta w}{w}.$$

According to these equations, γ is a relative change of employment and δ is a relative change of the wage rate. The ratio of these variables,

$$\frac{\gamma}{\delta} = \frac{\Delta A/A^*}{\Delta w/w},$$

is the labour demand elasticity. Obviously, if, and only if, $|\gamma/\delta| > 1$ is the supplement policy the cheaper alternative since then $K_r / K_s > 1$.
See Sinn (2000).

[3] Burgess (1988) determined a value of 1.85 and Nickel and Symons (1990) estimated 1.92. Franz and König (1986) only found a value of one. Estimates of the output-constant demand elasticities are lower, usually in the range between – 0.3 and – 0.5, because they assume that capital input diminishes as employment goes up. See Fuchs, Krueger, Poterba (1998) and Hammermesh (1993). Of course, reference to the output-constant elasticity makes no sense in the present context, since capital input will increase rather than diminish when wages fall. The relevant elasticity for our purposes is one which incorporates all endogenous factor adjustments, and that elasticity is even higher than the capital-constant elasticity to which the text refers.

fundamental change of welfare policy. Social benefits are no longer provided to inactive persons but to people who are employed or who make efforts to become employed.

The welfare-to-work policies consist of a variety of measures:

- Employment-conditional benefits, tax credits or wage subsidies and payroll-tax rebates given to employers.
- The obligation of benefit recipients to be active (participation in public employment or job training). Otherwise, they lose their entitlement to benefits. By taking part in these activities, the benefit recipient will increase his or her human capital and become accustomed to working.
- The shortening of the duration of benefits. New benefits are often made available only for a limited period of time.
- The promotion of intensive job search.

There are mainly eight countries that have actually introduced major welfare-to-work programmes: the United States, Canada, the United Kingdom, Ireland, Denmark, France, the Netherlands and Sweden. The programmes differ substantially. The major features of six of these programmes are summarised in Table 6.5.

The US welfare-to-work programme consists essentially of an employment-conditioned tax credit (the Earned Income Tax Credit – EITC) and a workfare system. The UK's approach comprises the "working families' tax credit" and the "new deal programme". Denmark is making those active who have been unemployed for a long time and has made the eligibility criteria for social benefits more demanding. Sweden is "activating" the long-term unemployed and is offering a two-year wage subsidy to employers who hire unemployed workers aged 57 or older. In France, firms implementing the 35-hour week are entitled to relief on the employer's social security contributions; an employment-conditional tax credit was introduced in 2001. The Netherlands obliges the long-term unemployed to participate in public employment or training programmes and reduces employers' social security contributions when hiring certain types of unemployed workers. In the following we shall look more closely at the experience of the different systems.

United States

The US welfare-to-work programme provides employees in low-wage occupations with an earned income tax credit (EITC) whose goal is to create work incentives for low-wage earners and boost their incomes. The beneficiaries are subject to federal income tax. If the tax credit is higher than the income tax owed, the difference is paid out to the eligible families. Otherwise, it is deducted from the income tax. The earned income tax credit is administered by the Internal Revenue Service.

Employment is required for eligibility and the programme is primarily aimed at working people with children. The amount of tax credit received is based on gross earnings. Figure 6.4 illustrates the three ranges of the earned income tax credit. In the first range the increase in the tax credit is proportional to income. In the second range the tax credit remains constant. In the third range it declines until a maximum income is reached. The amount of tax credit and the income limits differ according to household type. Dis-

Table 6.5

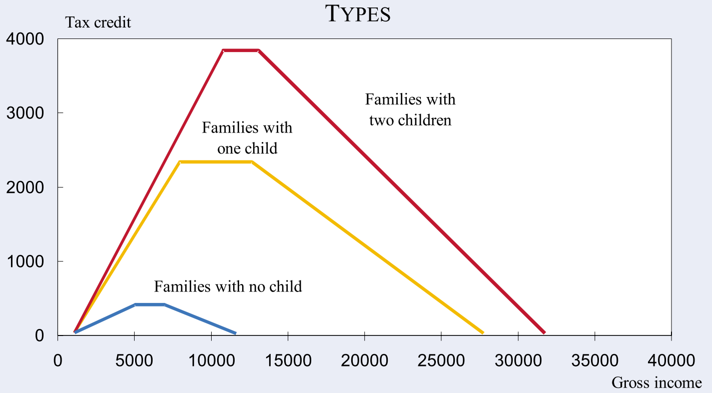
Welfare-to-work programmes

Elements	US	UK	Denmark	Sweden	France	Netherlands
Employment-conditional benefits and tax credits	X	X			X	
Wage subsidies		X		X		
Payroll tax rebates					X	X
Obligation to work for welfare recipients	X	X	X	X		X
Duration of benefit provision limited	X					
Support of job search	X					
Other: Tightening of eligibility requirements for social benefits			X			
Active labour market policy			X	X		X

Source: CESifo DICE Database.

Figure 6.4

US EARNED INCOME TAX CREDIT FOR VARIUS HOUSEHOLD TYPES



Source: R. Zahradnik, I.J. Lav, A D.C. Earned Income Tax Credit Could Provide Tax Relief and Reduce Child Poverty, Center on Budget and Policy Priorities, February 9, 2000.

tinctions are made in the case of families with two or more children, families with one child, and people without children. The highest credit is given to families with two or more children.

The parameters of the earned income tax credit in the year 2000 are shown in Table 6.6. A family with two or more children and a yearly income of between $1 and $9,720, for example, receives a tax credit of 40 cents for every additional dollar earned. With a gross income of $9,720 the maximum credit of $3,888 is reached. This remains constant until gross income reaches $12,690. For every dollar earned above $12,690, the tax credit is then reduced by 21 cents. With gross income reaching $31,152, the tax credit is reduced to zero. In the third range in which the tax credit is reduced, the marginal charges on income are higher than the marginal rate of income tax. As a rule, in this range of tax credit reduction, the marginal effective tax rate capturing both the reduction of the earned income tax credit and the increase in ordinary taxes amounts to about 50%.

In 1999, nearly 19 million workers took advantage of the tax credit. It amounted to an average of $1,632 (Economic Report of the President 2001, p. 200).

In addition to the earned income tax credit, the US has pursued a workfare model since 1996. The temporary assistance to needy families (TANF) programme was introduced in order to overcome welfare dependency. The legal entitlement to welfare was eliminated, and willingness to accept work was made a condition for welfare assistance. If this work requirement is not fulfilled, the claim to welfare lapses. The principle of reciprocity was firmly established: the state is obliged to provide money and jobs and, in return, the welfare recipient is obliged to work. In addition, the TANF programme sets a limit of five years on welfare benefits during a person's life time. Moreover, it gives priority to work over education and training. Finally, to a greater extent than in the past, the federal government gives the individual states authority to decide the (final) nature of their welfare programmes. Global subsidies to the states' budgets have created an incentive for the implementation of welfare reform.

United Kingdom

Along with the United States, the United Kingdom has had a long tradition of assisting working people who have low incomes. In 1971 a family income supplement was introduced. This was replaced in 1988 by the Family Credit (FC). This in-work benefit was in turn replaced at the end of 1999 by the Working

Table 6.6

US federal earned income tax credit parameters in 2000

Household type	Phase I		Phase II	Phase III	
	Credit percentage	Income limits[a)] ($)	Maximum benefits ($)	Phase-out rate (%)	Income limits[a)] ($)
Families with one child	34.0	0–6,920	2,353	15.98	12,690–27,413
Families with two or more children	40.0	0–9,720	3,888	21.06	12,690–31,152
Families with no children	7.65	0–4,610	353	7.65	5,770–10,380

[a)] Annual amounts for income or EITC assistance.

Source: H. Johnson (1999).

Families' Tax Credit (WFTC) (see Figure 6.5). The credit is paid to all low-income families with children who have at least one adult working for at least 16 hours per week. The payments are set at a level that guarantees families a minimum income of £200 per week, with additional payments for larger families. Furthermore, 70 per cent of all childcare costs (up to £150) are covered. A small additional payment is made if at least one adult per family works for more than 30 hours per week. When earnings exceed £90, the credit is reduced by 55 per cent of any additional earnings. However, because this adjustment is only made every six months, temporary marginal increases in hours worked are not discouraged. This "taper rate" comes in addition to income tax and social insurance contributions. The credit is paid through wage packets every month. In 2000, it covered 1.1 million recipients (in a country with a total of around 20 million households and 27 million wage and salary earners), costing over £5 billion per year – about two-thirds of a percentage point of GDP.

Since 1998, the working families' tax credit has been supplemented by a new arrangement, which aims at increasing peoples' employability and at helping them find work. It consists of a number of different strands. The new deal's target group are the young long-term unemployed, aged 18 to 24. After young people have been unemployed for 6 months, they enter a "gateway" of intensive counselling with a personal adviser. This can last for a maximum of 4 months, during which time they are expected either to be placed into a regular job or to have entered one of four subsidised programmes, lasting at least six months:

- A subsidised job with a regular employer (secured by a 6-month subsidy of £75 a week)
- Work experience in the voluntary sector (while receiving benefits plus £15 a week)
- Work experience in an environmental project (while receiving benefits plus £15 a week)
- Full-time vocational education (while receiving benefits).

All of the programmes described above include at least one day a week of training.

The new arrangement is well funded and has received general approval. Since April 1998, many young people have been provided with work, and long-term unemployment among young people has already declined by two-thirds (in a period of falling unemployment).

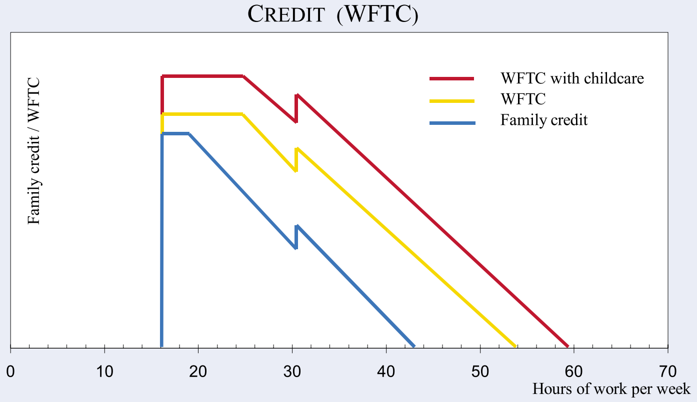
In addition, a pilot programme was initiated for those aged 25 and over who have been unemployed for two years or more. It offers personal advisers, a subsidised job, full-time education, training and continuing guidance for finding work.

Denmark

Denmark's welfare-to-work policy does not provide in-work benefits. Thus it does not really fit the listing made here. Nevertheless, the Danish approach is worth including because it involves exceptionally harsh punishment for people who do not accept job offers. Recent reforms included two elements. One is compulsory activation, introduced in 1996. Compulsory activation applies to the longer-term unemployed. It requires these unemployed to participate in full-time private and public on-the-job training in return for receiving unemployment benefits and social assistance. The length of unemployment before compulsory activation takes place is one year for those aged 25 years and older. For younger people, compulsory activation already applies after six months, and in addition the benefits are cut in half. One of the aims of this "right and duty" policy is to stimulate adequate job-search

Figure 6.5

A COPARISON OF FAMILIY CREDIT AND WORKING FAMILIES' TAX CREDIT (WFTC)



Source: R. Blundell, A. Duncan, J. McCrae, C. Meghir, The Labour Market Impact of the Working Families' Tax Credit, in: Fiscal Studies, Vol. 21, No.1, 2000, p. 78.

behaviour, thereby avoiding the need for compulsory activation.

The other element of the reforms is the tightening of the generous unemployment benefit system itself. The benefit period has now been reduced to four years, and activation does not start for a new benefit period. The eligibility criteria for unemployment benefits have been made more demanding. After the first job refusal, there is a one week penalty and after the second refusal unemployment benefits are cut altogether. The duration of occupational protection allowing unemployed people to refuse a job offer that involves a change of occupation has been reduced to three months. At the same time surveillance of benefit eligibility has been tightened.

Sweden

In Sweden, the so-called activity guarantee came into force in 2000. It applies to people who receive either unemployment or other social benefits and who have not had ordinary (unsubsidised) work for 27 months. This group comprised 50,000 persons ($1^1/_4$ percent of the workforce) at the end of 2000 who are obliged to participate in full-time activation to maintain their benefit entitlement.

The activity guarantee requires job seekers to participate in an active labour market programme or some other education or training in order to increase their human capital. Each activation period within the framework of the activity guarantee is planned for a maximum duration of six months, at the end of which an evaluation is made and a new six-month period may be planned. There is no fixed time limit to the total duration of the activity guarantee period; in principle it may be open-ended.

In addition to this new form of activating the long-term unemployed, a generous two-year wage subsidy is offered to employers hiring unemployed workers aged 57 or above during the activity guarantee period. This subsidy is 75 per cent of the wages, although it is subject to a maximum of SEK 525 per day.

France

France's welfare-to-work policy consists mainly of programmes intended to increase employment and to train specific groups having difficulty in finding work. Employers are exempt from social contributions or receive wage subsidies if they offer employment initiative contracts, on-the-job training, apprenticeships, etc. Since 1 January 2000, firms implementing the 35-hour week have been entitled to more generous relief on employers' social security contributions. The scheme combines both flat-rate relief and declining-rate relief. The relief decreases from FRF 21,500 per year if the legal minimum wage (SMIC) is paid to FRF 4,000 if a wage 80% above the minimum wage is paid. Thereafter, a flat-rate exemption of FRF 4,000 is provided.

In addition to the existing programmes, an employment-based tax credit was introduced in September 2001. Workers not earning more than 1.4 times the minimum wage (FRF 99,016 per year) will receive the tax credit. A couple with two children will receive FRF 3,400 up to FRF 9,400. This three-year programme is estimated to cost FRF 25 billion.

Netherlands

The Netherlands' welfare-to-work programme consists of an extensive programme of subsidised jobs for long-term unemployed workers who normally receive social assistance benefits (called Melkert jobs after the former Minister of Social Affairs and Employment). The aim is to provide about 60,000 jobs for 32 hours a week, at either the legal minimum wage or slightly above. It includes four different programmes: Melkerts 1, 2, 3 and 4. The jobs are created in municipalities (maintenance of public areas, education, child care, etc.) and in healthcare (hospitals, home care etc.). Recipients of social assistance who refuse these jobs suffer benefit sanctions.

In order to increase labour demand, employers' social security contributions for low-paid workers were cut (SPAK). Employers paying less than 115 per cent of the legal minimum wage are entitled to these cuts. SPAK reduces gross labour costs by 10 per cent. Moreover, firms hiring long-term unemployed workers can qualify for an additional reduction in social security contributions for a period of four years (VLW). The combination of SPAK and VLW can cut labour costs by up to 23 per cent.

3.3 Evaluation of the US Experience

Since the labour market conditions and the welfare-to-work programmes differ from country to country and since some of these programmes have only been introduced in recent years, a comparative assessment of their effects is not yet possible. However, there is now ample evidence on the results of US reforms.

The US welfare-to-work programme, consisting of the earned income tax credit (EITC) and the temporary assistance to needy families (TANF), had the objectives of increasing labour supply and employment and supporting the poor.

The latter objective has largely been achieved. Half of all payments go to families with income below the poverty line.

With regard to increasing labour supply, one must distinguish between two effects: the encouragement of participation in the labour force and the encouragement of the supply of additional working hours by those already employed. There is no doubt that participation has increased. The rise in net incomes and the accompanying decrease in net replacement rates has created work incentives. The effect on the supply of working hours, however, unsurprisingly, is not as clear. As income increases due to the earned income tax credit, a household can afford to enjoy more leisure and reduce working hours (the income effect). On the other hand, there are substitution effects caused by changes in relative prices between leisure and working time (the substitution effect). The substitution effect depends on which of the three ranges applies (see Figure 6.4). In the initial range, where the state subsidises each dollar earned with 40 cents, there is a clear substitution effect towards working more. In the flat intermediary range, there is no substitution effect. And in the third range where the tax credit is phased out the substitution effect is negative. Empirical studies confirm that there are, in fact, these effects, but they also show that the net overall effect on hours worked is positive. The people entering the labour force because of the tax credit and working longer in response to a higher net marginal wage are more important than those who work slightly less because the phasing out of the credit creates a highly effective marginal tax burden. The great achievement of the programme has been to integrate the unemployed into an orderly working life.

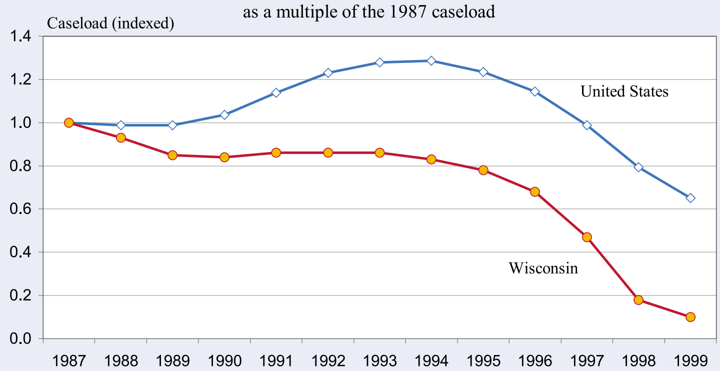
Part of the prosperous growth and the employment miracle in the United States during the last two decades can, in our opinion, be attributed to this effect. The additional jobs brought about growth since the employed were productive and generated income which financed additional consumption. This was supply-side policy at its best.

There is particularly good information on the results of the 1996 welfare reform carried out in Wisconsin. Basically these can be summarised as follows.

- The number of TANF welfare recipients has been reduced considerably. This is illustrated in Figure 6.6.
- Aggregate welfare expenditure has fallen.
- About 70 per cent of former welfare recipients were successful in finding jobs. They are now in a position to provide for themselves by working. 30 per cent do not work after leaving welfare.
- Illegal work is becoming less attractive and, indeed, unattainable for those obliged to work in the formal sector.
- Income of former welfare recipients who find a job has increased. It has decreased for those who continue not to work.

Figure 6.6

WELFARE CASELOADS, 1987 -1999
as a multiple of the 1987 caseload



Notes: The data refer to to ordinary welfare payments (AFDC) and temporary assistance to needy families (TANF). Wisconsin data: calendar year monthly average. U.S. data: federal fiscal year monthly average.

Source: U.S. Department of Health and Human Services, Administration for Children and Families; Wisconsin Department of Workforce Development, Economic Support Division.

- In-work benefits are lower than out-of-work benefits because they are only needed as a supplement to earned income.
- Close targeting of beneficiaries is a prerequisite for all measures.
- Work as a condition for social benefits activates a self-selection mechanism amongst welfare recipients which helps to limit abuses. In addition, welfare recipients are induced to be more active.

4. A Proposal for Europe

Helping the needy under the condition that they remain idle is a strange idea which has little in common with both the basic principles of justice and the positions of Europe's traditional parties, whether conservative, labour oriented, social democratic, Christian or green. Replacing wage income of the unemployed sounds better than paying for idleness, but it results in similar policy measures. Unemployment largely follows from paying people under the condition that they not work. The wage replacement policy that characterises Europe's welfare states increases the reservation wage, pushing it dangerously close to too many people's productivity or even above it.

The high and persistent level of unemployment in Europe makes it necessary to reconsider the European welfare state, the wage replacement policy and the definition of poverty.

Unemployment benefits in the usual sense of the word have a useful insurance function against random, temporary job losses. They should therefore remain a crucial ingredient. If the benefits are given only for a limited period of time, if the replacement rate is moderate, if recipients face penalties in case of job rejection and if they are forced to actively seek employment, this type of insurance will only generate limited moral hazard effects relative to the income security it provides.

Unemployment assistance that is paid for an unlimited period of time is much more problematic, since it provides a reasonable income to those who earned a relatively high wage and is all too often only the basis for additional income from moonlighting to make ends meet. Unemployment assistance of this sort should be abolished altogether and integrated with the payment of social aid.

Social aid itself needs to be reformed, however. Since it is fixed in absolute terms, independently of the previous wage, it prevents all those people from participating in the labour market whose labour productivity is lower than, or not sufficiently above, social aid. Labour productivity is an upper bound on wages, and social aid is a lower bound. The two bounds define an empty set of job opportunities for an increasing number of people.

We believe that a modified earned income tax credit system of the American type, albeit with significantly higher benefit levels, is to be recommended. Instead of taking money away if someone decides to accept a job, he or she should be given money. And instead of defining poverty as not having a job, it should be defined in terms of earning too little when working. This principle was explained in the introduction.

One major difference from the American system refers to the treatment of those who do not find a job despite the new policies or claim not to have found a job. To maintain their work incentives, they should receive only very low benefits during their search. The US benefit level satisfying this requirement may be too low, however, when judged by European social preferences. In fact, the minimum income definitions specified by social laws and supreme courts of justice preclude a simple translation of the American solution to Europe. To avoid this difficulty we include public jobs in the programme we propose.

Starting from a system with a given level of social aid which satisfies a country's minimum income requirement, we define four different categories of people and the welfare payments for which they are eligible.

1. People who cannot work for medical or social reasons to be defined by law. They receive the traditional type of social aid.

2. People who can work, but do not, for whatever reason. These people receive only a benefit level of the American type, much below the current level of social aid in Western Europe, but much above American levels.

3. People who work in simple government jobs. They receive a wage income equal to the country's minimum income requirement (the previous social aid). The government is obliged to provide the necessary number of jobs.

4. People who work in the private sector. They receive the earned income tax credit, properly adjusted to ensure that the sum of market wage and government subsidy exceeds the minimum income requirement (i.e. the income earned by category three).

This system defines an income ladder which people will be able to climb. It reduces the lower bound on wages to the level of social aid received by the second category of people and creates the additional jobs that are needed if that level is sufficiently low.

While it is true that, in the short run, the lower bound on wages could also be given by union wages, we believe that union wages will soon react to the new incentives and ensure that their members become eligible for the earned income tax credit.

In countries with statutory minimum wages it may be necessary, however, to reduce these wages to the level of social aid as given to people in category two above or to define minimum incomes such that they include the funds received from the government. This should not be a major problem.

It is crucial for the principles of our proposal that the second category exists. It is necessary to make sure that people climb the income ladder by working more rather than less. There will not be many people belonging to this category, though, and those who do will not be a problem. People who cannot work are in category one and people who need more income but cannot find a job in the private sector will be in category three. The few who congregate in category two must have alternative incomes from undeclared work in the informal economy which makes it preferable not to spend their time on the jobs provided by the government.

Compared to a traditional welfare system, the system we propose will shift the vast majority of the current welfare recipients into categories three and four. Most people will find a job in the private sector because low wages will fall. They will still be better off than before, because the sum of the earned income tax credit and the market wage will exceed the previous level of social aid. The others, who fail to find a job in the private sector, will work for the government where they receive an income that satisfies the legal or supreme court minimum income definitions.

In the short run, after introducing the new system, many people may find themselves in category three. Instead of receiving social aid for free they will have to work for it. Over time, however, the free market wage for simple labour will decline and more and more jobs will be created, as the American example has shown. Thus more people will gradually be integrated into the private job market, and category three will run dry. In the end, unemployment among the less skilled will largely be eliminated, and the economy will be closer to the full employment low-wage situation depicted by point F in Figure 6.3.

In sum, our proposal will create a better welfare state by improving its incentive structure and provide more income to the needy, given the overall expenditure which the government can afford. This new type of activating welfare state will better satisfy the goals defined at the outset than the current one, and it will bring about a higher activity level and more economic growth from which all will benefit.

References

Atkinson, A.B. (1999) *The Economic Consequences of Rolling Back the Welfare State,* Cambridge, London.

Blundell, R., A. Duncan, J. McCrae, and C. Meghir (2000) "The Labour Market Impact of the Working Families' Tax Credit," *Fiscal Studies* 21:1, 75–104.

Burgess, S. (1988) "Employment Adjustment in UK Manufacturing," *Economic Journal* 98, 81–103.

Economic Report to the President (2001), Washington D.C.

European Commission (2000), "MISSOC 2000 Social Protection in the EU Member States and the European Economic Area," Luxembourg, OPOCE.

Franz, W., and H. König (1986) "The Nature and Causes of Unemployment in the Federal Republic of Germany since the 1970s: An Empirical Investigation," *Economica* 53, 219–44.

Fuchs, V., A. Krueger, and J. Poterba (1999) "Economists' Views about Parameters and Policies: Survey Results in Labor and Public Economics," *Journal of Economic Literature* 36, 1387–1425.
Hammermesh, D. (1993) *Labor Demand*, Princeton.

Johnson, H. (1999) *A Hand Up. How State Earned Income Tax Credits Help Working Families Escape Poverty,* Washington (http://www.cbpp.org/11-12-99sfp.pdf).

Nickell, S., and J. Symons (1990) "The Real Wage-Employment Relationship in the United States," *Journal of Labor Economics* 8, 1–15.

OECD (1999) *Benefit Systems and Work Incentives,* Paris.

OECD (2000) *Employment Outlook*, Paris.

OECD (2001) *Education at a Glance,* Paris.

Schneider, F. (2000)" The Shadow Economies around the World: Sizes, Causes and Consequences," *Journal of Economic Literature* 38:1, 77–144.

Sinn, H.-W. (2000) "The Threat tio the German Welfare State," *Atlantic Economic Journal* 3, 279–294.

Zahradnik, R. and I.J. Lav (2000) *A D.C. Earned Income Tax Credit Could Provide Tax Relief and Reduce Child Poverty,* Washington (http://cbpp.org/2-9-00sfp.htm).