
9. Do European Welfare Regimes Matter in Explaining Social Exclusion?

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9.1 Introduction

In the Western world, hardly anybody would be living in poverty if the World Bank's austere poverty threshold of one dollar per person per day would be applied (World Bank, 2000). In cross-national research particularly within Europe (see also Chapters 6 and 8), the so-called 'relative' poverty thresholds, like the half-median equivalent income threshold, have become vastly popular. The use of these strictly relative measures implies that, if the level of inequality remains the same, even high economic growth figures will not reduce poverty. Indeed, evidence from the 1990s using these relative measures shows that unprecedented economic growth in these years in a number of European countries could not eradicate poverty. On the contrary, the level of income inequality and, hence, relative poverty seems to have increased, although not much. This small rise went, however, hand-in-hand with a shift in the composition of the poor. Evidence for the Netherlands shows that greater child and female poverty (one-parent families) are probably due to the flexibilisation of the labour market, the number of working poor and the growing number of persistently poor. Politicians not only have to acknowledge that poverty, be it short-term, transient or persistent, exists even in modern wealthy societies but also that their concern should be focused especially on the distributional and temporal aspects of poverty. Even when they believe that economic growth might be the best remedy for a country to eradicate poverty, policy-makers in the field of social policy should be increasingly aware that the fruits of economic growth might not trickle down unconditionally to the poor. In particular, the rising inequality in earnings and asset income that the Western world witnessed since the mid 1980s and the rising prevalence of extended durations of poverty spells show that Kuznets' (1955) alleged 'trickle-down' theory does not hold in many instances. This is likely to be due to all kinds of personal, institutional and socio-cultural 'barriers' inflicted upon the poor within society to inhibit them from profiting from the fruits of economic growth as

much as the rest of the population. In particular, the interest for the 'institutional' dimensions of poverty is rising. Within the political debate of the late 1980s and 1990s, and the background of the influence of the French discourse, it is likely that the term 'poverty' has been steadily substituted by terms such as 'social exclusion', 'social disintegration', and 'social marginalisation' (de Haan, 1998). People use popular phrases such as distress, deprivation and poverty, which are immediately associated with problems of hunger and starvation (see also Townsend, 1987). In the modern Western world of prosperity, 'hunger and starvation' are almost non-existent except for some particularly vulnerable groups such as the 'homeless' or 'illegal immigrants'. For that reason the focus on poverty research is gradually shifting from 'absolute' to 'relative' notions and from 'income poverty' and 'lack of basic needs' to 'social exclusion' and, its counterpart, 'social integration'.

In this chapter, the terms 'impoverishment' and 'social exclusion' will be used to refer to processes leading to a state of income poverty and multidimensional or resources deprivation, respectively (see Berghman, 1995). This restricts the notion of 'social exclusion' to a certain extent. A more comprehensive approach has often been followed in the literature, in which 'social exclusion' is understood as the denial of the social, political and civil rights of citizens in society (Silver, 1994; Walker and Walker, 1997; Byrne, 1999). This more theoretical 'rights-based' approach has been translated into an empirical one based on the twin-concepts of 'income poverty' and 'resources deprivation'. Such a limitation allows the notion of 'social exclusion' to be subjected to empirical study.

9.1.1 Outline

This chapter draws on empirical data to examine the relationship between income deprivation and resources deprivation. We use the European Community Household Panel data covering 14 European countries over a period of three years¹. The first aim of the chapter is to develop longitudinal measures of income and resources deprivation and to examine whether the association of longitudinal income with deprivation is stronger than the association between current income and current deprivation for the various years (see Muffels, 1993a, 1993b; Callan et al., 1996; Layte et al., 2000). Referring to Friedman's notion of consumption as *permanent income* we

¹ The datasets of the European Community Household Panel (ECHP) do not include data for Sweden. Data for Finland are only available for the third wave of 1996. For Austria the data for the first wave of 1994 are missing. Hence, we have information for 12 countries stretching over a period of three years, from 1994 to 1996.

might hypothesise that the relationship between the longitudinal measures is stronger than between the cross-sectional measures of income and resources deprivation. Income tends to be volatile and to vary more over time than consumption. Hence, since deprivation is more closely linked to consumption than income we should expect to find higher correlations between the longer-term positions than between the cross-sectional ones (Muffels and Dirven, 1998). Why that is important is quite evident: what matters for people more than their current economic position is their economic situation in the longer term and their economic prospects; the current situation might be very unstable and volatile. But the reason for showing interest in the relationship between short- and long-term income and deprivation in the first place goes back to the fundamental issue raised by egalitarians in the field, arguing either for 'equal opportunity' or for 'equal outcomes' as the reason for public interference in the domain of welfare policy. This translates readily into 'equal resources' as against 'equal welfare' (Goodin et al., 1999). The second aim of the chapter is to try to explain levels of income and resources deprivation and to examine the impact of *institutional factors* in comparison with other theoretically inferred factors. The 'institutional' aspect is brought into the picture by looking at the impact of country and 'welfare regime' differences on income and resources deprivation. For that purpose and drawing from the theoretical and empirical inferences made in the literature on poverty and deprivation, explanatory models for resources deprivation and income deprivation have been developed. The existing literature in the area of explaining levels of consumption or resources deprivation is relatively limited. Recently, Layte et al. (2000) applied a similar approach, also using European panel data, but primarily oriented at assessing the impact of 'social class' and country differences and not so much on explaining 'regime type' differences.²

9.1.2 Welfare Regimes

With a view to socio-economic policy, arguments abound to conceive each country or region as unique and different from each other. However, others believe that welfare states come 'in types' and that countries might be treated as belonging to a limited set of welfare regime types (Esping-Andersen,

² The findings here corroborate largely the results of Layte et al. although the impact of country differences appeared much larger in their approach – probably due to the use of an unweighted deprivation index. Using such an index, the differences across the countries are much higher than when the deprivation measure is weighted.

1990). The term 'welfare regime' refers to 'that larger constellation of socio-economic institutions, policies and programmes all oriented toward promoting people's welfare quite generally' (Goodin et al., 1999, p. 5). Regimes represent in this view a particular mode of policy intervention, a particular set of intervention strategies, policy tools and a particular design of the regulatory or institutional framework. However, these regimes must be viewed as *ideal-types* and there is not likely to be any country that fits perfectly in one type (see also Gallie and Paugam, 2000). There is surely much variation also within clusters.

The idea of 'welfare regime types' refers to Esping-Andersen's 'three worlds of welfare capitalism' and his seminal, historical and socio-political account of welfare state types. In this chapter, Esping-Andersen's classification has been used, albeit in an amended version and with recognition of the pitfalls and caveats of his approach. His typology has been amended by adding a fourth Southern welfare regime type. For this, credit is paid to authors like Leibfried (1992), Ferrera (1996) and Bonoli (1997) who argued that the Southern, Mediterranean countries constitute a different welfare regime type with its familial characteristics and its immature and selective social security system granting poor benefits and lacking a guaranteed minimum benefit system.

The recourse to Esping-Andersen's classification does not, however, imply that each country necessarily belongs to one particular regime cluster, nor that the classification is independent of the political domains to which the clustering apply nor that the belonging to a regime-cluster might not change over time. On the contrary it might well be that a country constitutes a 'hybrid' case since it does not belong to one particular cluster but to more clusters, or that a focus on 'employment', 'income', 'deprivation' or 'health' changes the belonging of countries to particular clusters. Particularly over time, a country might change its policies and move into another cluster. The Netherlands could be exemplary for the latter since the Dutch welfare state might be characterised by having been primarily a corporatist 'breadwinner state' in the 1960s, 1970s and early 1980s (passive labour market policies and low female labour market participation) oriented at stabilising the labour income of the family's head but changing its policies quite strongly thereafter. Dutch labour market and employment policies became more active in the spirit of what social-democratic policy-makers advocate as promoting the 'right to work'. During the 1980s and 1990s, social security policies also became stricter by tightening the eligibility rules for receiving benefits, downsizing the benefit levels and shortening their duration, but at the same time safeguarding the principles of equality, uniformity and universality. Regime-types might, therefore, be a dynamic concept that requires

continuous scrutiny to test its current value (and not, as erroneously believed, a stable feature of a country's socio-economic policy).

One of the countries of concern within Esping-Andersen's (1990, 1999) classification is *Ireland*, which has been put within the liberal cluster. In Chapter 6 it was argued that Ireland does not fit in the liberal type particularly because it shares the features of a breadwinner type of social security system as well as a Southern regime-type due to its familial characteristics. Some authors, therefore, believe that it belongs to a *hybrid* type of welfare state that does not fit in either type. Another country of concern in this respect is *Italy*, considered by Esping-Andersen to be a corporatist country but sharing in many respects the features of a Catholic, familial Southern regime. Because of the focus on 'life-style deprivation', in this chapter one might expect Italy to reflect a diverse picture in terms of 'life-styles' and 'resources deprivation', especially across the rich Northern and poor Southern region. The Southern part of Italy would then be more likely to be classified under the Southern familial type of regime whereas the Northern part seems to fit better in the corporatist cluster.³ Some authors, therefore, presume that also Italy constitutes a 'hybrid' case (Gelissen, 2001). In order to avoid the inclusion of Ireland and Italy in a 'hybrid' type it was decided to keep Ireland under the same liberal heading as the UK and to put Italy, as Esping-Andersen did, under the corporatist heading (see also Table 9.7). Countries like Germany, Belgium, France, Austria, Luxembourg and Italy, then, belong to a continental corporatist type of welfare state and the Netherlands and the Scandinavian employment regimes were classified in the social-democratic regime cluster. The Southern cluster, thus, consists of Spain, Greece and Portugal.

Whether such a solution makes sense empirically or not has, however, been tested, using the three-wave European panel-data. Such a test may reveal how well the regime clustering is capable of capturing the unique features of each country in explaining levels of income and consumption deprivation across Europe.

9.2 The Relationship Between Income and Resources Deprivation in the Short- and the Long-term

9.2.1 Income Deprivation

Before examining the relationship between the income and deprivation

³ For this reason we chose to depart from our classification of Italy in the Southern regime cluster as in Chapter 3. With respect to the structure of its labour market, Italy seems to fit better into the southern than the corporatist cluster.

concepts, it is necessary to clarify our definitions of income and resources deprivation. The term 'income deprivation' was coined by Sen (1979, 1983, 1985a) in the framework of the so-called 'poverty indices' approach in which the level of income deprivation in a country is not only dependent on the number of poor (the head count ratio) but also on the average distance to the poverty line (income gap) and the level of inequality among the poor (Gini coefficient). Since then, various alternative operationalisations of the income deprivation concept have been elaborated (Hagenaars, 1985; Chakravarty and Mukherjee, 1999). The term income deprivation used here only reflects one element of Sen's concept of deprivation, i.e. the notion of being deprived from a minimum level of income resources without taking the distance to the poverty line or the inequality among the income poor into consideration.

In order to measure income deprivation, a strictly relative poverty line and, hence, a *national* poverty line is preferred to a *European* or cross-national poverty threshold. In our view, a *strictly relative* threshold does more justice to the idea that people have much stronger ties and personal commitment to the society in which they live than to an elusive European community. It also better reflects the current state of affairs that rather large social and cultural dissimilarities and even barriers exist across the various countries.⁴ Therefore, it was decided to take the national 50% median equivalent household income threshold on an annual basis as the borderline for assessing income deprivation in the short-term. Hence, for each of the three years a 50% median equivalent household income threshold at the country level has been calculated. People are considered income poor or income deprived when their household income falls below this strictly relative threshold. Long-term or persistent income deprivation might yet be defined as the household's equivalent income over the three years falling below the 50% median equivalent income threshold in society over the three years of observation (see also Muffels et al., 2000).

9.2.2 Resources Deprivation

Within the ECHP much information is collected about the life resources of people, such as the possession of durables by the household, the health status of adult household members, the financial position of the head and the

⁴ One might even go a step further in supposing that people judge their living situation not in terms of their relative position to the wider community in which they live but to their immediate social contexts and, hence, to the local community, the neighbourhood or their primary social networks. The ECHP data, however, do not permit the provision of more detail here either because there is no information in the datasets or, where such information is available, the numbers would become unreliable small.

partner, housing conditions, etc. From this list of so-called 'deprivation items' a 'relative deprivation index' has been constructed (Townsend, 1979; Sen, 1979; Mack and Lansley, 1985; Desai and Shah, 1988; Callan et al., 1996; Muffels, 1993b; Layte et al., 2000). The deprivation index used in this chapter is slightly different from the one applied by EUROSTAT (2000a) and the European Commission (2000b).⁵ Subjective 'satisfaction' items which were included in EUROSTAT's list, were excluded from our list while our aim is to measure people's objective status of deprivation defined as 'being deprived of a minimum level of resources that is required to attain a decent living'. Only items that are aimed at measuring people's objective state of resources deprivation were maintained. The approach adopted here resembles the notion of 'enforced lack' by Mack and Lansley (1985) and especially the 'life-style deprivation' approach of Callan et al. (1996) and Layte et al. (2000).

The list of items in the deprivation index is not limited to monetary items only, but includes non-monetary items like health and housing. The index contains 21 items in four resource areas:

- health conditions;
- financial stress;
- housing conditions;
- possession of durables people want but cannot afford.

The entire list of items is given in Appendix 9.1. The 21 items were coded as 1 (deprived of that item) or 0 (not deprived of that item). The deprivation score is merely the sum of the deprivation scores over the 21 items but weighted with the proportion of 'haves' (not deprived) in the country. We only used the information on the head of the household and not on the partner to avoid the arbitrariness involved in bringing it to a household score. Therefore, the deprivation score of the head is assumed to reflect the deprivation situation of all household members.

This means that the deprivation score for each individual in the sample equals the sum over the items j , weighted with the sample proportion of 'haves' (ω_j) and normalised at 1 by dividing D_i for each person by the sum of the weights for person i over all items j :⁶

⁵ Compared to the EUROSTAT definition, more items are included in our index (21 instead of 15) but EUROSTAT items, which ask for a subjective evaluation of people's state in various life domains, are excluded. The reason for the inclusion of items EUROSTAT removed from their list is, that they only included items, which are fully comparable across the various countries, whereas our intention was to include items that reflect the national situation as best as possible.

⁶ This follows the normalisation procedure proposed in Chapter 6.

$$D_i = \frac{\sum_{j=1}^J \omega_j d_{ij}}{\sum_{j=1}^J \omega_j}$$

with $j = 21$ and $D_i \in [0,1]$ (0 if a person misses no items and D_i approaching 1 if a person misses all items while everyone else possesses them).

The idea behind the weighting scheme is that the extent of relative deprivation for an individual increases, the larger the share of people is who actually 'have' the item the individual is lacking. This follows Runciman's (1966) definition of deprivation according to which a person feels more deprived the more he sees other people as better off. Lacking a *trivial* item most people have will contribute more to a sense or 'feeling of deprivation' than lacking an *exclusive* item almost nobody possesses (Desai and Shah, 1988; Muffels, 1993b). Since the weights are calculated on the national samples, the weighting of deprivation with the proportion of 'haves' within the population is also likely to diminish the deprivation differences across the countries.

9.2.2.1 The calculation of a deprivation threshold

The question now arises how to calculate a deprivation threshold (Townsend, 1993). In the literature the approach commonly adopted is that either a direct yardstick in terms of 'the number of items lacking' is used or an indirect one e.g. the average equivalent income level that is associated with this threshold value (Townsend, 1979; Mack and Lansley, 1985; Ringen, 1988; Callan et al., 1996). Implicitly, the assumption is made in these approaches that beyond a particular point in the deprivation distribution a marked and sharp rise of deprivation might be observed, although in the empirical world such a fissure might not be found. The final distribution might be a continuous one without any clear cut-off point. For that reason we applied a different approach and calculated a 'strictly relative' yardstick, as was done for income deprivation. The threshold value is calculated using the mean weighted deprivation score for each country.⁷ People whose deprivation score exceeds the mean are

⁷ As in some Northern countries rather large fractions of the population are not deprived of any item and, hence, have a zero score on the deprivation index, the median would be zero. For this reason, we rescaled the deprivation index by the transformation $(1-D_i)$. Then, we recalculated the deprivation scores and as expected we found for these countries that the resulting distribution is much more skewed to the right than the income distribution. For this reason the resources deprivation threshold had to be defined at a higher level of the distribution than the half-median level. (70% median level witnessed rather small correlations with income poverty and since we defined deprivation not just as the lack of an item, but as *enforced* lack (due to lack of resources) we decided to take a threshold value having higher correlations with equivalent income.(cont.)

assumed to live in deprivation poverty, others not. Since we had information for three years we calculated the resources deprivation threshold for each of the three years: D1 to D3. For the calculation of longer-term or *persistent resources deprivation* we simply used the arithmetic average of the deprivation scores, cumulated over the three years.

9.2.3 Income and Resources Deprivation by Regime Type

Referring to what has been stated earlier about the features of the various regime types our conjectures with respect to income and resources deprivation by regime type may be summarised as follows:

1. In Southern regimes income and resources deprivation is larger than in corporatist and social-democratic regimes and even larger than in liberal regimes.
2. Income and resources deprivation are larger in liberal regimes than in corporatist or social-democratic regimes.
3. The dispersion of income and resources deprivation is largest in the Southern regimes, next largest in the liberal regimes and lowest in the corporatist and social-democratic regimes.

Table 9.1 mirrors the long-term equivalent income and persistent deprivation distribution by welfare regime type. Apart from the mean, the coefficient of variation is also depicted. The coefficient of variation is a measure for the inequality of the distribution of income and resources deprivation. The higher the coefficient of variation is for a particular welfare regime the more dispersed the underlying distribution is.

Table 9.1 shows that the liberal regime is outperforming the other regimes in terms of economic welfare. This is what we might expect from the liberal regime that prioritises economic efficiency and high economic growth. On the one hand, it has the highest mean equivalent income but on the other hand it also has a rather high coefficient of variation that is set on an even par with the Southern regime, indicating that the dispersion is quite large too. That also corresponds with what we might expect beforehand referring to Okun's alleged trade-off between efficiency and equity.

Contrary to this conjecture is that the social-democratic regime, which pursues and prioritises a high level of equality – confirmed by the relatively low dispersion in the income distribution of equivalent income – has a level

Hence, the straightforward and simple 'mean value' has been taken as our dividing line between the deprived and the non-deprived.

of economic welfare almost as high as the liberal regime. One might, however, argue that Ireland and even the UK might not be considered prototypes for the liberal welfare regime.

The picture for the level of deprivation is only partly similar to the income picture. It is similar with respect to the *level* of resources deprivation, being largest in the Southern regime, next largest in the liberal regime and lowest in the social-democratic regime.

Table 9.1 Persistent equivalent income and deprivation, mean value and coefficient of variation, by welfare regime type, 1994–1996

Regime Type	Persistent Equivalent Income (in Euro) ⁸		Persistent Deprivation Level	
	Mean	CV	Mean	CV
Liberal (UK, Ire)	13,281	0.65	0.106	1.13
Social-democratic (NL, Den)	12,909	0.52	0.054	1.38
Corporatist (Ger, Fr, Bel, Lu, It)	12,505	0.60	0.083	1.14
Southern (Po, Sp, Gr)	8,517	0.66	0.161	0.80
<i>EU</i>	11,995	0.63	0.099	1.10

Source: EUROSTAT, ECHP 1994–1996.

However, the picture is dissimilar with respect to the *dispersion* of deprivation that is largest in the social-democratic regime and lowest in the Southern regime. The liberal and corporatist regime perform equally well in this respect.

These findings confirm our first two hypotheses but run counter to our third conjecture. Note, however, that the dispersion of resources deprivation is about twice as large as the dispersion of income, which is at first sight remarkable, considering the fact that the score on the deprivation index might be viewed as reflecting at least partly the longer-term ‘consumption (possession of durables)’ status of individual household members. This

⁸ We use equivalent income standardised with the modified OECD scale, which assigns a weight of 1 to the head, a weight of 0.5 to all other adults in the household and a weight of 0.3 to each dependent child. The yearly incomes are corrected for purchasing power parities (PPS) differences across the countries.

finding clearly suggests that the resources deprivation yardstick based on a lifestyle index is rather different from measures using 'permanent income'.

In Table 9.2 the focus shifts to issues of persistent income and deprivation poverty. Looking at the proportions of the population living either in persistent income poverty or in persistent resources deprivation, the percentages are rather different, though this is not the case for the ranking of countries based on these percentages.

The highest rates of income and resources deprivation poverty are found in the Southern regime, the next highest in the corporatist and liberal regime and the lowest in the social-democratic regime. This is not surprising except for the corporatist countries knowing that they pursue income continuity and the stability of the heads of households' socio-economic status positions over time.

Table 9.2 Persistent income and deprivation poverty by regime type

	Persistently Income Poor	Persistently Deprived (below the mean)	Persistently Deprived (below 70% of the median)
Liberal	8.9	35.7	6.3
Social- democratic	5.3	31.3	1.1
Corporatist	9.2	36.1	2.6
Southern	11.3	42.0	5.5
EU	9.3	36.9	3.7

Source: EUROSTAT, ECHP 1994–1996.

Table 9.2 also shows that the percentages of resources deprivation poverty are very much dependent on the chosen threshold value and the 70% of the median threshold witnesses much lower percentages especially for the corporatist regimes (compare column 3). Although the concepts are measuring different things, there is obviously a kind of 'implicit tie' linking both concepts, indicating that inequalities in terms of income might be reinforced through inequalities in the other domains of life such as employment, health status, housing and social life. It is hard to believe about one-third of the population lives in deprivation poverty according to the mean value in Europe, which casts doubts about the definition of the threshold.⁹

⁹ In earlier work (Muffels et al., 1992, Muffels, 1993b), a different methodology has been elaborated. People in a representative Dutch panel survey were asked to assign a score (cont.)

9.2.4 *The Association of Income Poverty and Resources Deprivation*

These findings for income poverty and deprivation might tempt us to expect a weak relation between the two. In Table 9.3 (column 6) the correlations (Pearson's) between the various income and resources deprivation measures are shown. The correlations between long-term deprivation and persistent income are on the contrary quite high (0.40) but sufficiently distant from one another to rule out the possibility of a perfect association.

Table 9.3 Correlations between short- and long-term income and deprivation

Correlations between:	Long-term 1994-1996					Short-term 1996
	Lib	Soc-dem.	Corp	South	EU	EU
Income/deprivation	-0.41	-0.30	-0.38	-0.51	-0.43	-0.39
Deprivation/income poverty	0.27	0.24	0.28	0.36	0.30	0.29
Income/deprivation poverty	-0.40	-0.29	-0.32	-0.43	-0.35	-0.26
Inc. poverty/deprivation poverty	0.25	0.16	0.20	0.26	0.22	0.21

Note: Lib = Liberal; Soc-dem = Social-democratic; Corp = Corporatist; South = Southern.

Source: EUROSTAT, ECHP 1994-1996.

The evidence in the last two columns confirms our presumption that the longer-term correlations are likely to be higher than the short-term correlations due to the higher volatility of income in the short run. Without refuting the association between income and resources deprivation it can be concluded that these concepts are complements rather than substitutes, each providing different sorts of information about people's lifestyles.

The Southern regimes, having the highest income and resources deprivation levels, also witness the strongest correlations between income and resources deprivation. The weakest association is found in social

to their conditions of life. The threshold level was set at the level where the score mark was between 5 and 6 on a 10-points scale. This methodology reached much lower and more plausible levels of deprivation in the order of magnitude of 11% in 1988.

democratic regimes with the lowest levels of income poverty and deprivation poverty. Knowing that the long-term deprivation distribution is more skewed to the right than the long-term income distribution, the lower the cut-off point at the distribution, the lower the correlation will be. For the same reason the income poor experience less deprivation in social-democratic and corporatist regimes than in liberal or Southern regimes. This is shown in Table 9.4.

Table 9.4 Persistent deprivation by income poverty status

Regime Type	Non-poor	Poor (at least once poor over the 3 years)	Poor all three waves
Liberal	0.082	0.209	0.200
Social-democratic	0.046	0.141	0.162
Corporatist	0.069	0.169	0.168
Southern	0.133	0.293	0.313
EU	0.081	0.204	0.208

Source: EUROSTAT, ECHP 1994–1996.

A similar conclusion holds for the permanent poor (poor in all three waves). Note that in the social-democratic as well as in the corporatist regime the non-poor category is less deprived than in the other regimes.

Another way of showing the relationship between income poverty and deprivation poverty is to look at the correspondence between the head-count ratios for short and longer-term income and deprivation poverty (Table 9.5).

The correspondence between both classifications of income and deprivation poor appears again quite large either in the short- or in the long-term. In the long-term, the correspondence between income and deprivation is higher for the poor but lower for the non-poor than in the short-term. This shows once again that the volatility in the short-run is higher in the lower ranges of the distributions than in the higher ranges.

Income poverty and resources deprivation, although clearly associated, are not mere substitutes but rather complements to one another. Inequalities in terms of income seem to be reinforced by inequalities in terms of financial stress, consumption of durables, housing conditions, health status and social contacts. Across regime types, we found large disparities setting the liberal and Southern regimes apart from the corporatist and social-democratic ones. The performance of the latter two in terms of preventing persistent income poverty and persistent deprivation is undoubtedly better than that of the

liberal and Southern regime but possibly at the cost – although apparently not much – of economic efficiency in terms of the level of equivalent income.

Table 9.5 Correspondence between income poverty and relative deprivation

Regime Type	Lib	Soc-dem	Corp	South	EU
<i>Short-term (1996)</i>					
Poor and deprived	63.1	59.1	61.2	72.1	63.7
Not poor and not deprived	69.8	75.9	69.3	62.8	68.7
<i>Long-term (1994–1996)</i>					
Poor and deprived	74.0	67.6	67.7	78.2	71.3
Not poor and not deprived	68.1	70.1	66.8	62.5	66.5

Source: EUROSTAT, ECHP 1994–1996.

9.3 Do Welfare Regimes Matter in Explaining Deprivation Levels Across Countries?

The second question to be dealt with relates to the issue of whether welfare regimes matter at all in explaining differences in income and resources deprivation levels across countries. The previous findings suggest that they do, but these were not based on multivariate analyses in which account could have been taken of the impact of other sorts of differences across the regimes. One might think of differences across countries related to differences in the demographic structure (fertility rates, life expectancy, speed of ageing, marriage and divorce rates or migration), disparities in socio-economic conditions (economic growth, employment and unemployment) possibly caused by the occurrence of asymmetric economic shocks and, last but not least, dissimilarities in the income distribution, in socio-cultural attitudes, norms, values and culturally determined behavioural patterns.

The explanatory models to be developed here look at factors at the micro-level that might explain the differences across countries but these microlevel factors often refer to variables at the macrolevel. Including, for example, the level of education in the model implies that we correct, at least partially, for differences in the education structure, related to the education level of that country. The impact of the institutional education system as such is, however, not captured. In order to incorporate, at least partially, the possible role of the institutional framework, the ‘welfare regime type’ dummies are inserted in

our models. These are assumed to reflect partially these differences in institutional designs. These dummies partly also reflect other non-observed differentiating factors not included in our model like cultural values and social norms.

9.3.1 Theoretical Underpinnings

We can derive the most important factors at stake in explaining levels of poverty and deprivation from the rich literature on social and economic inequality and poverty. Among others, we could review a few of the most relevant theoretical underpinnings for the issue at stake. Well-known and extremely important in this respect is *human capital theory*, which predicts that the distribution of advantage and disadvantage in society is associated strongly with the human capital endowments built up during the various stages in life at school (education), in social networks (preschool and social learning) and at work ('on the job' learning). Another related economic theory is *job search theory* which pays particular attention to the temporal and institutional factors involved in the job search process itself which might be held responsible for the realisation of successful 'job matches' on the labour market and therewith on the distribution of income and poverty during lifetime. The sociological and increasingly influential *life course theory* that is narrowly linked to modernisation theory states that the occurrence of biographical life events such as marriage, childbirth, divorce, migration and death act as triggers for economic success and failure in the various stages of life and therewith for the socio-economic fate of people during life.¹⁰ And the classical *social mobility and social stratification theory* points to factors such as *social position and social class, inherited wealth and social background* for the explanation of social success and upward social mobility. In the literature on poverty and deprivation, reference is directly or indirectly made to these general theories for selecting the factors that might explain the occurrence of different forms of poverty in society.

From the literature on explaining poverty and deprivation the following factors might be used and implemented in our models given the limitations of the dataset:

¹⁰ Leisering and Leibfried (1999) have employed the term 'biographisation of poverty' to refer to the impact of life events which trigger, in particular, the occurrence of new, transient or temporal forms of poverty. This notion is, therefore, closely associated with the notion of the 'risk society' in modernisation theory elaborated, among others, by Giddens (1992) and Beck (1992), according to which individuals are increasingly confronted with risk and uncertainty by the emergence of a post-traditional social order in response to which people adapt their life biography decisions and change their life-styles to cope with the rising 'uncertainty'.

1. Personal and household characteristics determining individual preferences (head's age and sex, age squared).
2. Needs differences, determined by household size and household structure (number of adults and children, marital status).
3. Household formation and dissolution events reflecting the 'biographisation' of poverty (marriage/separation).
4. Socio-economic position indicated by employment status and human capital endowments (education level, work experience, (un)employment history).¹¹
5. Labour market status and labour market events (longitudinal employment status and changes in employment status over time).
6. The distribution of income and poverty in society.
7. Institutional differences related to the particular set-up of national policies (welfare regimes).

The factors listed under 1 to 7 are assumed to reflect the common – not to country or regime-related – structural, causal factors that determine the deprivation levels across all European countries. In the models to be estimated, the institutional regime type dummies might interact with these structural causal factors and that part of the regime type impact must be attributed to these structural regime and country-related interaction effects. To the extent that all or parts of the regime effects are captured through the inclusion of these interaction effects, the estimation results show to what extent the regime type effects are sustained or not. In this sense, the model estimations constitute the *litmus test* for the relevance of the regime type classification, *sui generis*, for explaining income and resources deprivation across Europe. In the end it might well be that the estimation results show that there is hardly any *pure regime type effect* in addition to the impact of the common structural factors and the interaction effects of these with regime types or that its impact is rather small.

Since the deprivation measures deployed in this chapter are continuous variables, OLS regressions were applied to estimate the two sorts of models, on income deprivation and on resources deprivation. Income deprivation is measured in terms of income-to-needs (equivalent income divided by the poverty line). Resources deprivation is once again measured by means of the weighted deprivation scale. Before we report on the estimation results of the various models, we describe the variables to be included in the models.

¹¹ 'Social class' also belongs to this category. The factor 'social class' is determined by income, socio-economic position and professional status. In this chapter, the focus is restricted to the underlying factors 'income' and 'socio-economic position'. For an explicit treatment of 'social class' to explain deprivation, see Layte et al. (2000).

9.3.2 The Variables to be Included in the Model

9.3.2.1 Personal characteristics

Personal characteristics are included to account for differences in taste and individual preferences that might affect the reported and experienced level of deprivation. Apart from the head's age and sex in the various models, age squared is included to allow for the possibility that the relationship between deprivation and age is a U-shaped or saddle shaped pattern with deprivation initially decreasing with increasing age but after a certain age threshold, increasing again.

9.3.2.2 Needs variables

We expect income and resources deprivation to be affected by the needs of the household. Welfare economic theory states that due to 'economies of scale' the household's welfare is affected by the sheer size and composition of the household, i.e. the number and age of adults and living-in children. The marital status variable (dummies for married, single, divorced) is included here to reflect the life stage people are in, which is likely to affect their needs due to the impact of the scale factor as well as the impact of a shared 'household budget management' practice.

9.3.2.3 Household formation and household dissolution

These variables capture the impact of life biography events, which are believed to trigger the processes for moving into or to escaping from instances of deprivation and poverty. Since we have data for three years we were able to assess empirically whether between 1994 (the first interview date) and 1996 (the last interview date) such a life event (marriage, separation, childbirth and children moving in or leaving home) has taken place or not. Dummies were included in the model to capture these life events (more or less adults, more or less children). The reference group was households with no change in the number of adults or children between 1994 and 1996.

9.3.2.4 Socio-economic status

A fourth factor is socio-economic status, which is presumed to play a significant role in explaining deprivation. It combines the likely impact of human capital endowments measured by education level with the impact of the current employment status and (un)employment history on deprivation.

This factor refers to the role of the labour market in preventing and resolving situations of deprivation whose likely impact has been stressed by many authors.

We have included two education level dummies for a high or low education level (the medium level acts as the reference category) and one dummy for being involved in 'on the job' training or not. Next, we included dummies to assess whether people had some experience with unemployment or not in the last five years prior to the interview and whether they had had some work experience in the three years before or not.

To account for other relevant factors affecting the labour market position a factor is used to deal with being involved or not in 'household and caring duties' and a variable whether people are retired or not.

9.3.2.5 Labour market status and labour market events

A variable 'longitudinal employment status' is included. The longitudinal employment status variable is aimed at measuring the degree to which people are attached to or included in the labour market in the 36 months prior to the interview in 1996. People are classified as 'work insecure' when their attachment to the labour market, in terms of the number of months being employed, is less than 100% of the number of months available for work, but more than 50%. People are called 'partially excluded' when they work between 0–50% of all the months available for work, but at least one month. People are considered 'fully excluded' if they do not work at all during the three-year period. The reference category consists of people 'fully employed' during the three-year period. This variable allows the changes in employment status to be captured during the years prior to the interview date (see also Chapter 3).

9.3.2.6 Income and poverty status

The question to what extent 'resources deprivation' in 1996 is affected by the income position might be answered by considering the past income status of the respondent in the years prior to 1996. The obvious idea is that the higher past or lagged income is, the lower resources deprivation will be. Furthermore, it might be that the deprivation situation is particularly affected by previous spells of income poverty, which presumably exaggerates experiences of financial stress and economic strain. For equivalent income and the income-to-needs level the conjecture is that previous instances of economic strain and financial stress resulting in deprivation poverty might affect the earnings capacity and therewith the income position. For this reason, in the resources deprivation model a variable of past equivalent

income is included as well as a variable measuring the past income poverty status of the household. This latter variable is measured by the frequency of poverty hits in the previous three-year period (poverty 'hit-rate'). In the equivalent income and the income-to-needs model we included the lagged deprivation level and the past deprivation poverty status measured again by the poverty 'hit-rate'.

9.3.2.7 Regime type and interaction effects

Finally, regime type dummies are included in the model to allow for variations in policies and institutional designs that are likely to affect the distribution of poverty and deprivation in society. Earlier, it was stated that the possibility of significant interaction effects between 'regime type' and other factors cannot be ruled out.

In the model we will include interaction effects that might capture the dissimilarities in the socio-economic and socio-cultural context. In the model we want to account for differences in the demographic composition (household size, separation/divorce), the employment structure (a dummy for being fully excluded from the labour market or not; the employed act as the reference category) and the income distribution (equivalent income). Hence, interaction variables were created between three regime types (the corporatist regime is taken as the reference category) and these four structural variables. It resulted in the inclusion of 12 additional interaction effects.

9.3.3 Testing the Relevance of the Regime Type Classification

Before the models were estimated we ran a few regressions to test our hypothesis about the likely impact of 'regime type' classifications compared to the inclusion of country dummies for explaining income and resources deprivation. Following the debate in the literature about which countries should or should not be included in the various clusters like Italy and Ireland, several alternative classifications were tested. It is clear from the outset that a model with inclusion of country dummies alone has more explanatory power than any other model with any kind of 'regime type' classification alone. However, if we stick to a model with inclusion of country dummies, we implicitly render priority to the idea of the uniqueness of each country without testing the possibility that a particular clustering might prove useful.

In the model estimates reported in Tables 9.6 and 9.7 the focus is on resources deprivation. Apart from a model with only country dummies (Model 1), three models with only 'regime type' as independent variable were estimated:

- Model 2: Regime type with four clusters and Italy in the Southern cluster.
- Model 3: Regime type with Italy and Ireland in a fifth 'hybrid' cluster.
- Model 4: Regime type with four clusters and Italy in the corporatist cluster.

The results indicate that the explanatory power of these deprivation Models with only country or regime type included is quite low, below 10%. Apparently, most of the variance in deprivation across countries is explained by common factors not related to country or regime type.

Table 9.6 Regression model for resources deprivation with only country dummies, 1996.

<i>Deprivation in 1996</i>	<i>Model 1: only country dummies</i>	
<i>Country dummies</i>	<i>Parameter</i>	<i>t-value*</i>
Denmark	Ref.	
Netherlands	-0.01	-8.51
Germany	-0.05	-1.86
Belgium	0.01	2.68
Luxembourg	-0.02	-1.85
France	0.02	20.91
United Kingdom	0.02	21.86
Ireland	0.03	7.69
Italy	0.03	34.02
Greece	0.13	64.96
Spain	0.06	55.12
Portugal	0.14	68.19
Austria	0.00	2.49
Finland	0.04	13.20
Constant	0.07	98.47
R ²	0.080	
N =	123,322	

Note: *p ≤ 0.05 for t-values > 2.0.

Source: EUROSTAT, ECHP, Wave 1–Wave 3, 1994–1996.

Yet, comparing the various alternative models (see Table 9.7), Model 3 explains almost 80% of the variance explained by model 1 and is, therefore, superior but has the disadvantage of distinguishing a 'hybrid' cluster. Therefore, it has been decided to take the 'second best' solution (Model 4 in which Italy is part of the corporatist regime type) as our starting point for running more extended models. This model still explains 70% of the variance that is explained by the first model with only country dummies. Later on, it

will be shown that in the full model the impact of country and 'regime type' is even smaller than in the models discussed here. The full deprivation model with 'regime type' dummies explains 94% of the variance explained by the same model with country dummies.

Table 9.7 Regression models for resources deprivation, 1996 (21 items), only 'regime type' dummies

Deprivation in 1996	Model 2: Italy in Southern cluster		Model 3: Italy and Ireland in 'hybrid' cluster		Model 4: Italy in corporatist cluster	
	β	<i>t-val.</i> *	β	<i>t-val.</i> *	β	<i>t-val.</i> *
Regime types						
Constant	0.074	150.3	0.074	151.7	0.081	196.0
Corporatist	Ref.		Ref.		Ref.	
Social-Dem.	-0.011	-8.0	-0.011	-8.1	-0.018	-13.9
Liberal	0.015	15.2	0.015	15.4	0.080	8.6
Southern	0.052	70.2	0.079	85.9	0.072	80.9
'Hybrid' (It/Ire)	-	-	0.026	28.6	-	-
R ² (relative to Model 1)		0.044 (55%)		0.062 (78%)		0.056 (70%)

Note: * $p \leq 0.05$ for *t*-values > 2.0.

Source: EUROSTAT, ECHP, Wave 1–Wave 3, 1994–1996.

9.3.4 The Estimation of Models for Income and Resources Deprivation

Next, a series of models has been estimated in which in subsequent order the original Model 4 with only 'regime type' dummies is extended with personal characteristics and needs variables (Model 5); with household formation events variables (Model 6); with interaction effects between regime type and needs variables (Model 7); with socio-economic position and labour market status variables (Models 8 and 9) and with interaction effects with labour market status (Model 10). Then, past income and poverty status variables are added (Models 11.1 and 11.2), as well as the interaction effects between regime type and income (Model 12.1 and 12.2). Finally, we estimated the full model replacing the 'regime type' dummies (including the interaction effects) with country dummies (Model 13). The additional explanatory power of the various models compared to model 4 is given in Table 9.8. We also present the results for the OLS-models on log equivalent income and the income-to-needs level (income deprivation).

Viewing the outcomes of these income and resources deprivation models, their similarity rather than their differences is striking, although this deserves further scrutiny. In all three models the household 'needs', the head's 'socio-

economic position' and the lagged level of household resources/income and poverty indicators are undoubtedly the three factors explaining most of the variance. Despite the similarity, there are also noteworthy differences.

Table 9.8 Explaining resources deprivation, equivalent income and income-to-needs in 1996: estimation results of 13 OLS-models

<i>Model</i>	<i>Variables</i>	<i>Deprivation</i>	<i>Log eq. Income</i>	<i>Income-to-needs</i>
Model 4:	Regime type	5.6%	6.6%	1.5%
Model 5:	+ Basic Needs	+ 4.4 %	+5.5%	+ 2.2%
Model 6:	+ Life events	+ 0.4%	+0.9%	+ 0.2%
Model 7:	+ Interaction effects regime×needs	+ 0.2%	+0.5%	+ 0.2%
Model 8:	+ Socio-economic status	+ 9.5%	+12.9%	+ 8.7%
Model 9:	+ Labour market events	+ 0.2%	+0.0%	+ 0.2%
Model 10:	+ Interaction effects regime×labour market exclusion	+ 0.1%	+0.1%	+ 0.2%
Model 11.1*:	+ Past income and past income poverty	+ 8.4%	-	-
Model 11.2*	+ Past deprivation and past deprivation poverty	-	+6.8%	+ 8.0%
Model 12.1*:	+ Interaction effects regime×income	+ 0.9%	-	-
Model 12.2*	+ Interaction effects regime×deprivation	-	+0.2%	+ 0.6%
<i>R</i> ²	<i>Regime type model</i>	29.7%	33.4%	21.8%
Model 13*:	+ Country dummies (replacing 'regime type')	+ 1.7%	+2.5%	+ 0.9%
	+ all other variables			
<i>R</i> ²	<i>Country model</i>	31.4%	35.9%	22.7%

Note: *In these models data for Finland and Austria are missing.

Source: EUROSTAT, ECHP, Wave 1–Wave 3, 1994–1996.

Limited though the impact of 'regime type' generally is, its effect is much larger in the 'resources deprivation' and the 'equivalent income' model than in the 'income-to-needs' model. The reason might be that the 'income-to-needs' measure on the wide scale of absolute to relative measures is more towards the relative one than the 'equivalent income' threshold and certainly more towards it than the 'resources deprivation' threshold. Differences across countries or regimes will show up less easily in the 'income-to-needs' model. Note that the contribution of the 'basic needs' factor to explaining

deprivation, income or income-to-needs levels is larger in the former two than in the latter model. This finding seems surprising but just mirrors the typical feature of the various measures. Because the 'income-to-needs' ratio has already corrected for needs differences due to household size, the needs play a less prominent role than in the 'resources deprivation' case, which is not adjusted for such household composition effects. Nevertheless, apart from household size, these needs variables also reflect the impact of 'household formation' processes (marriage, divorce, separation) on the likelihood of earning a high income or running into income poverty and resources deprivation. These effects are apparently quite strong even in the deprivation model. This might explain why even in the equivalent income model, the needs variables are still playing an important role. Important though these needs effects are, they are of less weight than the socio-economic variables. These reflect the traditional impact of class, educational and social status and labour market position on the economic conditions and lifestyles of people in society. They indicate that equality in terms of outcomes is very much dependent on the distribution of opportunities and resources.

A third factor contributing to the explanation of deprivation and income levels is, respectively, past income and deprivation, and past income and deprivation poverty. This corroborates our earlier findings that, however different both concepts might be, there is a strong association between the two. Therefore, past deprivation and deprivation poverty have a substantial impact on equivalent income and income-to-needs levels, and past income and income poverty status (number of poverty hits in the three-year period) on resources deprivation.¹²

Finally, Model 13 clarifies how much of the variance explained by the 'country model' with inclusion of the full set of variables is explained by the 'regime type' model. The relative performance of the models appears quite good (94–96% of the variance explained) and shows that it makes sense even after taking the most likely differences across countries into account in considering a clustering of countries into the four regime types.

In Table 9.9 the results of the model estimates are given in more detail. The results for the interaction effects in Models 10 and 12 are presented in Table 9.10. The focus has particularly been on the question as to the sustained impact of 'regime type' after inclusion of the three types of interaction effects. Results are presented only for a selection of three models of resources

¹² These lagged income and deprivation variables are measured over the years prior to the interview year. Since household income is measured as the yearly income in the calendar year prior to the interview date, and 'resources deprivation' as the respondent's current deprivation score, past income and income poverty is averaged over three years and past deprivation and deprivation poverty over two years.

deprivation (6, 10 and 12). For reasons of space, we do not show the results for equivalent income and the income-to-needs level.

The signs for age and age squared are reversed in Model 10 compared to Model 6. Model 10 differs from Model 6 because socio-economic variables are added as well as interaction effects between regime type and needs (household size, separation) and between regime and long-term exclusion from the labour market. Whether deprivation decreases or increases with age seems, therefore, to depend on the attachment to the labour market. The more people stay attached to the labour market when they age, the lower the likelihood that deprivation will increase. A change in sign is also found for the 'female head' variable, but here quite strong interaction effects with long-term exclusion from the labour market and equivalent income seem at stake. These are not reported here since they do not improve the fit of the model but they do suggest that, after correction for employment opportunities and income, female heads tend to be more deprived. This is also confirmed by the effects for *lone parent* and *separation*, which are both strongly and positively related to deprivation. This confirms the conjectures generally made about the *feminisation* of disadvantage and poverty. The strong negative effect on deprivation reveals that marriage is a warrant for keeping deprivation down.

Singles are much more likely to experience deprivation than couples, and the departure of young children or grown-up children from home is likely to contribute to the worsening of the already unfavourable living conditions. Interestingly though, the arrival of children in the household through birth or a child moving in also raises the deprivation level of the household head. The obvious reason is that children leave the home when they are getting economically independent and they move in when they become dependent again (after a broken marriage or study). In both cases the living conditions of the household gets worse.

The presumptions of human capital theory that a higher education reduces deprivation and improves the life prospects of people are firmly confirmed. Though the effect of a higher level of education is strong, the reverse and rising effect on deprivation of a low education level is even more striking. For the same reason, being involved in education or training programmes within or outside the firm strongly lowers the deprivation level.

Considering the income variables, it is shown that a high permanent income makes it very unlikely to experience high levels of deprivation. The poverty status variable reveals the obvious fact that people having a '*poverty career*' because they lived in income poverty more than once in the past, are more deprived than people who have not.

Table 9.9 Results of the estimation of three regression models for resources deprivation, (21 items), 1996, with 'regime type' and interaction effects

	Model 6		Model 10		Model 12	
	β	t-val.*	β	t-val.*	β	t-val.*
Constant	0.072	23.3	-0.020	-3.9	0.125	21.7
<i>Personal characteristics</i>						
Age	-0.001	-8.1	0.002	8.6	0.002	10.1
Age squared	0.001	11.5	-0.002	-7.9	-0.003	-9.6
Female head	0.002	3.4	-0.010	-11.6	-0.005	-6.2
<i>Needs variables</i>						
N of adults	0.007	16.4	0.007	12.5	0.002	4.3
N of children	0.016	30.2	0.016	25.2	0.008	13.5
Marriage	-0.018	-12.9	-0.012	-8.1	-0.014	-9.8
Separation	0.008	4.9	0.014	6.3	0.014	6.6
Single	0.038	22.3	0.046	23.2	0.031	16.6
Lone-parent	0.073	26.7	0.069	24.5	0.050	18.4
Less adults	0.012	10.9	0.010	8.4	0.087	7.5
More children	0.005	2.7	0.012	7.3	0.015	9.7
Less children	0.008	5.8	0.008	5.9	0.001	0.6
<i>Regime type</i>						
Liberal	0.005	4.8	-0.001	-0.3	0.074	11.3
Soc.-dem.	-0.029	-18.4	0.002	0.4	-0.048	-4.6
South	0.070	72.1	0.070	23.3	0.137	28.2
<i>Long-term employment status</i>						
Fully employed			Ref.		Ref.	
Work Insecure			0.026	20.1	0.018	14.8
Partially excluded			0.052	34.8	0.030	21.0
Fully excluded			0.060	37.5	0.036	23.0
<i>Socio-economic status (SES)</i>						
Unempl. History			0.029	28.0	0.021	22.1
Work experience			0.000	-5.4	-0.000	-2.4
Retired			-0.020	-10.8	-0.012	-6.7
Home work/Caring duties			-0.024	-15.6	-0.020	-13.4
High education			-0.022	-19.9	-0.005	-4.8
Low education			0.037	42.2	0.023	28.1
Education/training			-0.040	-20.3	-0.029	-15.3
<i>Past income and poverty status</i>						
Past poverty status					0.006	8.7
Past income					-0.040	-49.1
<i>Interaction effects</i>						
(see Table 9.10):	None		Needs + SES		Needs + SES + Income	
R ²	10.4		20.3		29.7	

Note: *p ≤ 0.05 for t-values > 2.0.

Source: EUROSTAT, ECHP, Wave 1–Wave 3, 1994–1996.

The 'regime' effects remain significant in all models, though moving from Model 4 to Model 12, the effects get smaller for the liberal and social-democratic regime due to the inclusion of the interaction variables for needs and socio-economic status differences. The Southern regime exerts a significant and strong positive effect on deprivation in all models but so also does the liberal regime. The sign for the egalitarian social-democratic regime is, indeed, negative, indicating that the regime causes deprivation to be lower than in the corporatist regime. The magnitude of the regime effects is once again raised by the inclusion of the interaction effects for long-term income, and particularly the ones for the liberal and social-democratic regime type. It shows that notwithstanding taking account of a lot of, at first sight, important interaction effects with compositional differences, the 'regime' effects remain significant. Their contribution to explaining the total variance across the populations might not be that large even when we do not take the interaction effects into account, but they seem to capture most of the variance caused by the sheer country differences. The conclusion might be that though other factors play a more dominant role in explaining differences in deprivation levels than regime type, 'regimes' might be important in their own right while they might bring light in the 'dark forest' rather than causing the researcher to be lost in the 'myriad of unique trees'.

Viewing the interaction effects in Table 9.10 it emerges that the strongest effects are exerted by long-term employment status (dummy for being fully excluded) and past income. Though household size, on average, increases deprivation, it lowers deprivation in the social-democratic and Southern regime compared to the corporatist regime. In the former regime, it is likely to be the government that takes care of the larger family (collective solidarity), whereas in the latter it is family support (family solidarity) that prevents deprivation from rising in larger families. As a study by Goodin et al. (1999) has shown, separation is not only more prevalent in liberal regimes, it also implies a higher risk of entering income poverty for those it concerns. The findings here suggest that due to its higher prevalence, particularly in liberal countries, it also leads to more resources deprivation.

Whereas being excluded from the labour market raises deprivation across all regimes, it leads to less deprivation particularly in the Southern regime. This adverse effect might be due to the larger role of the 'informal' sector particularly for people excluded from the labour market. A similar effect was found in Chapter 3. The positive effect for the liberal regime shows that being long-term excluded from the labour market has a stronger impact on deprivation than in the corporatist regimes. The role of permanent income in reducing deprivation is generally larger and stronger in the liberal and Southern regimes than in the corporatist ones. The positive sign in the social-democratic case shows that in more egalitarian societies a rise in income might exert a smaller effect on downsizing deprivation than in less egalitarian countries.

Table 9.10 Regime effects for the interaction variables of models 10 and 12 (see Table 9.9)

	Model 10		Model 12	
	β	<i>t-value*</i>	β	<i>t-value*</i>
<i>Household size</i>				
Corporatist	Ref.		Ref.	
Liberal	0.001	1.07	0.000	0.24
Social-democratic	-0.007	-5.47	-0.005	-3.67
Southern	-0.004	-4.76	-0.005	-6.39
<i>Separation</i>				
Corporatist	Ref.		Ref.	
Liberal	0.018	4.94	0.010	2.86
Social-democratic	-0.013	-1.99	-0.009	-1.36
Southern	-0.003	-0.67	-0.007	-1.53
<i>Long-term employment status: dummy for being fully excluded or not</i>				
Corporatist	Ref.		Ref.	
Liberal	0.021	8.69	0.017	7.26
Social-democratic	-0.008	-1.89	0.001	0.20
Southern	-0.010	-4.57	-0.016	-7.94
<i>Long-term income</i>				
Corporatist	Ref.		Ref.	
Liberal			-0.024	-11.60
Social-democratic			0.017	4.86
Southern			-0.038	-24.25

Note: * $p \leq 0.05$ for t -values > 2.0 .

Source: EUROSTAT, ECHP, Wave 1–Wave 3, 1994–1996.

9.4 Conclusions and Discussion

In this chapter social exclusion is understood as multidimensional poverty in which the dimensions are defined in monetary as well as non-monetary terms. The term 'resources deprivation' is used for a state of enforced lack of resources, which are fairly common in the ordinary lifestyles of people in the society where they live. The dimensions underlying the concept might be manifold but the panel data of the European Community puts severe restrictions on the sort of dimensions that might be distinguished. In this study, four of them can be used for our purpose: health; financial stress; housing and the possession of durables that people want but cannot afford. The basic idea was to examine the relationship between income and resources deprivation (consumption of durables and life style goods) using panel data for the 1990s. The second aim of the chapter was to explain levels of income and resources deprivation across welfare regimes by estimating OLS-regression models for the log of equivalent income, resources deprivation and

income deprivation. The primary focus has been on the impact of institutional variables translated into the impact of 'welfare regime types' on income and resources deprivation.

9.4.1 The Relationship between Income Poverty and Resources Deprivation

In the first part of the chapter we looked at the association between income and resources deprivation and concluded that the association between long-term income and long-term deprivation is stronger than between short-term income and resources deprivation. The same holds for the association between long-term income poverty and deprivation poverty. We also found that deprivation status tends to be somewhat more stable than income status although significant mobility was found in both income and deprivation status (see also Walker, 1994). The fact that the dispersion in the deprivation distribution is much larger than in the income distribution, particularly in the egalitarian countries, tempts us to conclude that attaining income equality does not mean that inequalities in other domains of life are also successfully tackled.

However, the main focus of this chapter is on regime type differences and it became clear that long-term income as well as long-term deprivation poverty tend to be more prevalent in Southern and liberal regimes and less so in corporatist and social-democratic regimes. Liberal regimes were outperforming the other regimes in attaining high levels of economic welfare. This confirms our conjectures that egalitarian regimes perform a better job in preventing poverty and deprivation, but at the cost – although not much – of economic efficiency in terms of attaining high levels of economic welfare.

Viewing the association between income and resources deprivation the study shows that the income poor experience lower levels of persistent deprivation in regimes with lowest levels of income and deprivation poverty (i.e. the social-democratic and corporatist regimes) and higher deprivation in regimes with a high level of income and deprivation poverty (the liberal and Southern regimes). When we examine the correspondence between income poverty and deprivation poverty this finding is confirmed. About 64% of the short-term poor and 71% of the long-term poor are also living in short- and long-term deprivation poverty in the EU. For the social-democratic countries, the correspondence between income and deprivation poverty is somewhat lower whereas for the Southern regimes the percentages are slightly higher. The conclusion drawn from this was that although both concepts of income and deprivation are clearly associated, they are certainly not substitutes but rather complements, each focusing on different dimensions of the lifestyles of people in society.

9.4.2 Explaining Income and Resources Deprivation

In the second part of the chapter, we went into the issue of whether welfare regimes matter at all in explaining differences in income and resources deprivation across countries. The estimates from OLS-regression models of *deprivation levels* with inclusion of only country or 'regime type' dummies show that the regime type model explains 70% of the variance explained by the country model. In the full model, with the inclusion of a broad set of theoretically inferred indicators, the regime type model performed even better and explained 95% of the total variance explained by the country model.

Nonetheless, we found that most of the variance is not explained by country or regime type differences – which have a rather small effect (5.6% explained) – but by common structural factors like the 'needs of the household', the 'human capital' of its members, the turnover and dynamics on the labour market and the distribution of permanent income. Particularly interesting is the large contribution of socio-economic status variables to explaining deprivation, which reflects the traditional impact of class, education and employment status. This suggests that inequality in terms of outcomes (income, poverty and labour market exclusion) ultimately depends on the distribution of resources and opportunities (human capital, health, employment creation and destruction, inherited wealth, etc.). The 'interaction effects' with needs variables (household size, separation), socio-economic status and long-term income, though significant in most cases, did not emasculate the effects of 'regime type'. On the contrary, the effect of 'regime type' remained strong and significant in the full model even after the inclusion of the various interaction effects.

By way of conclusion, the assertion was made that common structural factors obviously play a larger role in explaining differences in deprivation levels across Europe than regime type effects. However, this is not to say that 'regimes' are not important in their own right, as they shed light on the 'dark forest' rather than causing the researcher to be lost in the 'myriad of unique trees'. However true this might sound from an analytical perspective, from a policy perspective, one should keep in mind that regime types should not erroneously be believed to be stable features of a country's policy but instead a dynamic reality that requires continued scrutiny to test its heuristic and practical value in an increasingly dynamic economic and social context.

9.4.3 Relevance for Social Policy

That the association between income and deprivation is far from perfect and that the inequality in the deprivation distribution is much larger than in the income distribution suggests that policies aimed to fight social exclusion should not be just income policies. It should be preferable, from a policy perspective, to extend their scope to employment policies, health policies,

education and housing policies. Policies should thus take a broader picture on board and focus on the entire set of dimensions underlying the exclusion concept. The large similarity in the various models in explaining equivalent income, income deprivation and resources deprivation suggests that the processes behind the occurrence of inequalities in the various domains of life are also fairly similar, from a broader theoretical perspective. Nevertheless, since these social processes boil down to the features of the broader 'social and economic order', it requires a good deal of 'social engineering' to tackle the perverse equity effects for particular groups in the various domains of life. This chapter clearly indicates that the 'social fabric' in the various countries is designed substantially differently and with different success in the way forward to attaining a society with a high level of economic welfare and low levels of poverty and deprivation. The challenges for social policies are, thus, quite dissimilar and therefore so also are the ways to achieve the goals most of the welfare states under scrutiny in this book are prioritising. Some regimes perform better in achieving these goals than others. This finding might not only be attributed to the design of their social and economic policies but is also likely to stem from the whole range of economic, social, political and physical 'assets' a society possesses. But the fact that countries whose policies are more balanced in terms of prioritising economic as well as social goals, prove to be more successful in tackling social misfortune than others is clearly a conclusion that supported by the findings of this chapter. In this respect, there is scope for European interference not only to define the framework within which the goals are set and shared but also to support countries that are trying to define new roads for improving the social quality of their societies.

Appendix 9.1 The list of indicators for resources deprivation

Health situation

- Health of the person in general.
- Person is hampered in daily activities by a physical or mental health problem, illness or disability.

Financial stress

- Can the household afford keeping you home adequately warm?
- Can the household afford paying for a week's annual holiday away from home?
- Can the household afford replacing worn-out furniture?
- Can the household afford buying new, rather than second-hand, clothes?

- Can the household afford eating meat, chicken or fish every second day, if wanted?
- Can the household afford having friends or family for drink/dinner once a month?
- Has the household been unable to pay scheduled mortgage payments or rent for the accommodation during the past 12 months?
- Has the household been unable to pay scheduled utility bills during the past 12 months?
- Has the household been unable to pay purchase hire instalments or other loan repayments during the past 12 months?

Housing situation

- Does the dwelling have bath or shower?
- Does the accommodation have shortage of space?
- Does the accommodation have damp walls, floors etc.?
- Does the accommodation have rot in window frames or floors?

Possession of durables (not possessing for financial reason)

- Possession of a car.
- Possession of colour TV
- Possession of a video recorder.
- Possession of a microwave oven.
- Possession of a dishwasher.
- Possession of a telephone.