CHAPTER

15

Population and living standards, 1945–2005

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Contents

Introduction

The sixty or more years since the end of the Second World War have seen
an unprecedented increase in the average European's material standard of
living. Europeans are now enjoying incomes that are, on average and in
real terms, about three to five times as high as in 1950; those born now
can expect to live about ten years longer than the generation born in the
early 1950s, and access to secondary and tertiary education is far wider
than it was sixty years ago.

The now widely-used Human Development Index (HDI) seeks to capture
changes in the quality of life as a weighted composite measure of per capita
income (GDP), longevity, and years of formal education cum literacy. A
bounded, relative index of development, the HDI is useful as a convenient
means to document *some* of the comparative quantitative dimensions of
welfare change in Europe. Below we report HDI scores for nineteen
European countries. Leaving aside, for the moment, changes in country
rankings, regional variations and the behavior of the underlying series, the
big message is clear: in HDI terms just as much as in terms of per capita
GDP, Europeans are now much better off than they were in 1950, and
variance in HDI across European countries is now only half the level it
was then.

However, the HDI is certainly a less than perfect measure of broadly
conceived living standards. It ignores the extent to which human rights,
civil liberty, and political freedom are protected. It makes no allowance for
how income and wealth are distributed among members of society or for the
extent of unemployment. It incorporates longevity, but not the health status
of the population. Most tellingly, perhaps, it does not tell us about what could
be reasoned to be a fair expression of human well being – happiness. Richard
Layard's recent work (2003) has shown that the happiness of the population
in the western world has not increased, despite rapid growth in material living
standards.

The changes in living standards across Europe since the end of the
Second World War have been shaped by changes in incomes, demo-
graphics, and the institutional settings of "welfare delivery." The chapter
starts by sketching out the Europe-wide rise of the public sector. The
second section offers a comparative quantitative examination of changes
in key welfare measures and the relationships between them. The final
section explores the causes and economic consequences of demographic
change.

The role of the state

Welfare expenditure

The origins of public involvement in the provision of welfare services reach back into the late eighteenth century. Initially this meant no more than "poor relief" and, to a very limited extent, also some provision for education. The introduction of basic social insurance schemes to cover industrial accidents, sickness, unemployment, and old age pensions for manual workers started in the late nineteenth century. By the interwar period most European countries had adopted some or all of such measures in some form. However, after 1945 public welfare provision changed in both its quantitative and qualitative dimensions (Johnson 1999, pp. 122–3; Lindert 2004, pp. 11–15). In most European societies, coverage across economic sectors, the labor force, and the population at large became almost universal. The objectives of public welfare provision were expanded beyond limited alleviation of hardship towards comprehensive social protection, encompassing unemployment and invalidity benefits, income support for those on low incomes or no income at all, the provision of pensions via public agencies, and free access to healthcare. The outcome was a long-term increase in the absolute level of social expenditure and its share in national product in practically every (Western) European country (see Figures 15.1 and 15.2). This holds irrespective of the significant differences in the accounting conventions used by national and international agencies and the respective changes over time which so complicate the production of reasonably consistent comparative data.

A detailed treatment of the deeper causes of rapid advance of the modern "welfare state" after 1945 as reflected in the growth of "social" expenditure is beyond the scope of this chapter. It ought to be emphasized, however, that it was the rise in tax-based social spending that accounted for most of the growth in post-war total government spending and taxation, not, for example, national defense, public transport or public enterprises (Lindert 2004, p. 20). This shift in the composition of public expenditure reflects the shift in the role of the modern state beyond its traditional role of guarantor of the physical security of the citizens and their property rights towards that of provider of far more broadly conceived economic and social protection. In the literature this process has been linked to three "other great social transformations: the transition to fuller democracy, the demographic transition toward fewer births and longer life, and the onset of sustained economic growth" (Lindert 2004, p. 20). The effects of demographic change and economic growth will be dealt with in the following sections. Here it is important to note the fundamental change in the societal and political context within which welfare delivery occurred after
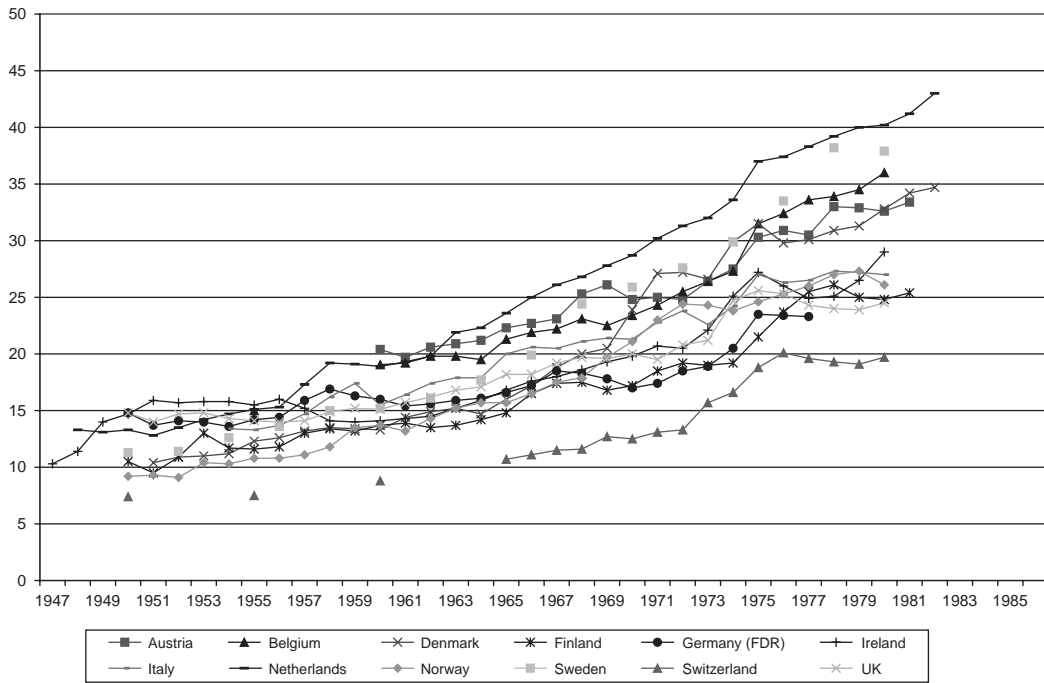
Figure 15.1 Social expenditure as percentage of GDP, 1947–82. *Source:* Flora 1986.

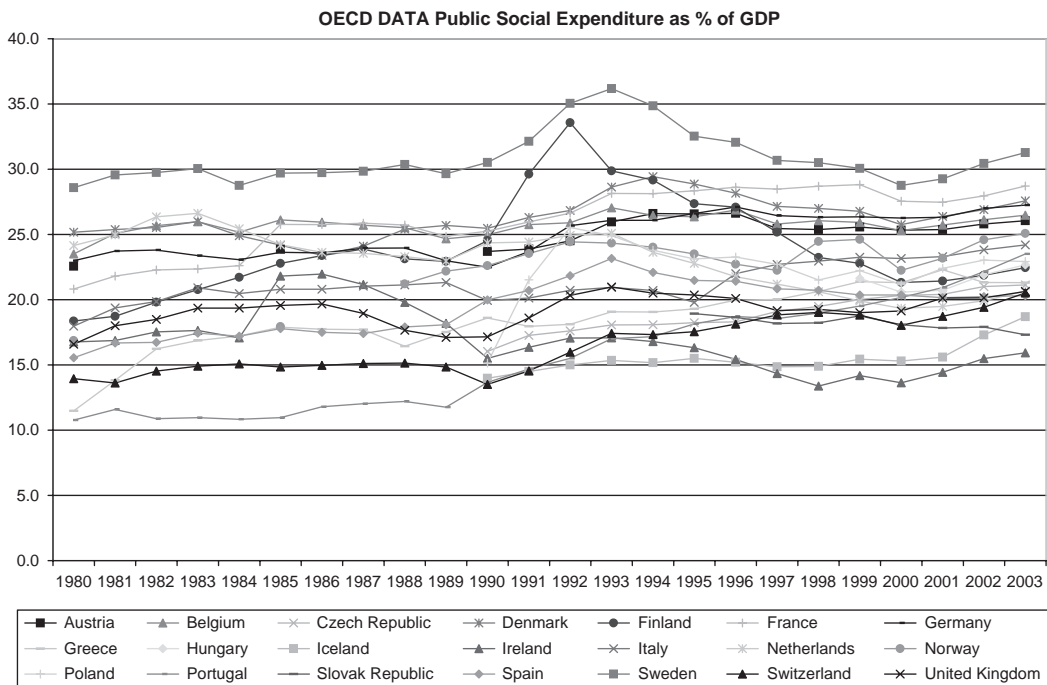**OECD DATA Public Social Expenditure as % of GDP**

Figure 15.2 Social expenditure as percentage of GDP, 1980–2003 *Source:* OECD 2007a.

the Second World War as compared to earlier periods. Following Johnson (1999, p. 123), two broad explanations can be identified among the many on offer that speak directly to the hypothesis of political change and "democratization" as necessitating and engendering the expansion of public welfare spending in Western Europe. Milward (1992) views both the rise in social spending and the inclusion of previously excluded social groups as a key component in post-war policies to re-establish the nation state and relegitimize it in the eyes of the citizenry. Baldwin (1990) maintains that the creation of extensive post-war welfare systems was to a large extent an outcome of governments' attempts to fashion supportive electoral alliances among groups faced with similar exposure to social risks and similar needs of public support.

However, whilst there are strong common threads running through welfare policies across Europe, one should not lose sight of the fact that the specifics of welfare delivery within countries, its mechanisms, means, aims, objectives, and outcomes, were shaped by historical contingency as much as by deliberate political choices. The European Commission (1995, pp. 33–4) suggested that EU member countries in the early 1990s were clustered into four distinct groups. The first group includes the Scandinavian countries. Here social protection is a citizen's right and coverage is universal. The system is centrally administered and general taxation provides the main source of finance for social protection, augmented by additional occupational schemes for the gainfully employed. The second group comprises the United Kingdom and Ireland, where coverage of social protection is either universal or nearly so. Whilst administration is also centralized, benefits are more modest than in Scandinavia and means-testing of eligibility is more widespread. Healthcare is funded through general taxation, but social insurance contributions from both workers and employers play a major role in financing much of the remainder of social expenditure. The third group of countries is made up of Austria, the Benelux countries, Germany, and France. Here the emphasis is on a "Bismarckian" -type coverage whereby employment and family status, rather than citizenship, offer entitlements. The insurance principle underlies the determination of earnings-related benefits and often different regulations apply to different occupational groups. The system rests heavily on contributions from employers and employees, augmented by (tax-financed) social assistance schemes for those falling through the gaps in work-related social protection. The fourth group comprises the southern countries of Greece, Italy, Portugal, and Spain. Here we find a mixture of fragmented "Bismarckian" income maintenance schemes and separate social assistance for the uninsured. Benefit levels tend to be markedly lower than in the third group of countries and gaps in coverage are greater than elsewhere in the EU.

In Central and Eastern Europe and up until the fall of communism in 1989/90, social protection evolved under fundamentally different political, economic, and social conditions (Berend 1998; Eichengreen 2007). For most of the period under review, this makes east–west comparisons of social provision based on broad expenditure data practically impossible. Such comparisons are already problematic when looking only at the West European experience, since definitions of "social expenditure" change over time and vary between countries and the different international bodies charged with collecting comparative statistical material on the issue. Figures 15.1 and 15.2 should, therefore, be read with some caution: the definitions of social expenditure used in the Flora (1986) data set for 1947–82 are slightly different from those that apply to the OECD (2007a) data for 1980–2003. However, both data-sets broadly correspond with Lindert's (2004, pp. 6–7) delineation of social transfers as consisting of tax-based government spending, including basic material assistance to the poor, unemployment compensation, public (non-contributory) pensions, public health expenditure, and housing subsidies. What is of interest here is, first, the significant rise in social expenditure across virtually all Western European societies up to the early 1980s, notwithstanding differences between countries in the relative levels of resources devoted to social protection (Figure 15.1). Starting from a range between about 7 to 15 percent of GDP, social expenditure
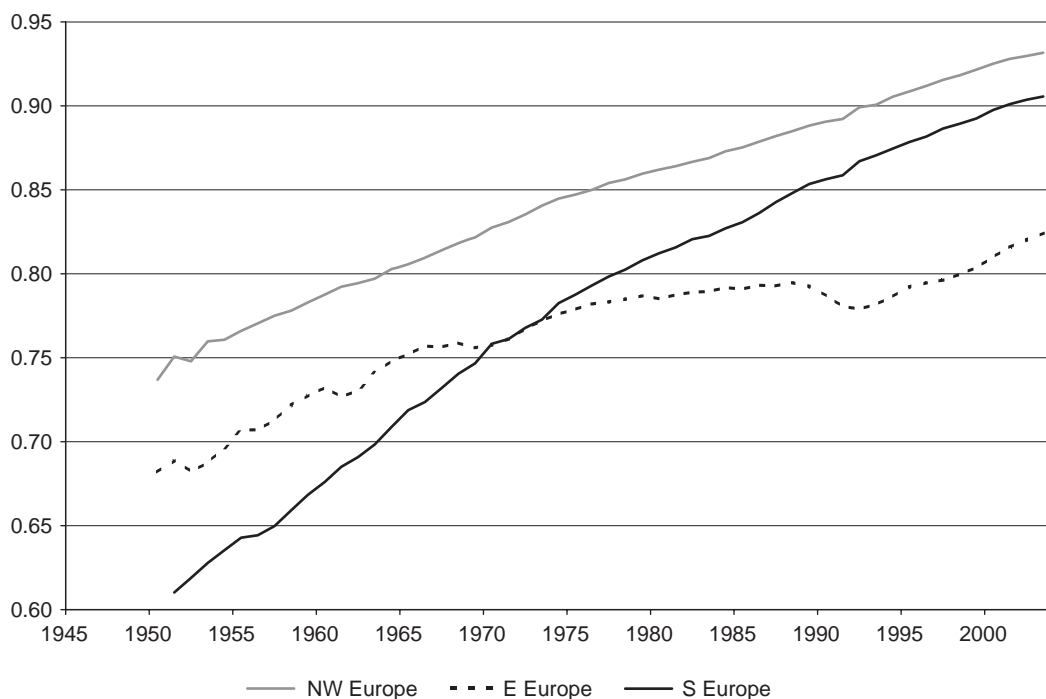

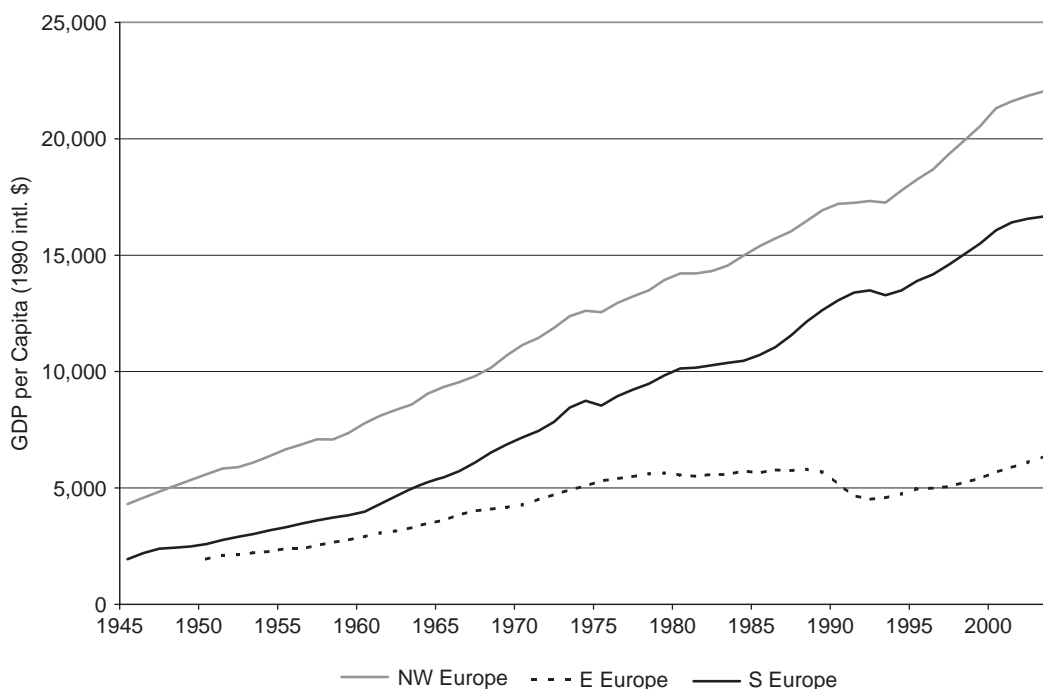**Figure 15.3** Human Development Index. *Sources:* see Table 15.1.

Figure 15.4 GDP per capita. *Source:* Maddison 2007.

rose to between 20 and 42 percent in 1980. To some extent, this is the outcome of post-war economic growth. As real per capita incomes grew rapidly (see Figure 15.4) and basic necessities became readily accessible to consumers, demand for goods with an income elasticity over one increased. Social protection, e.g., better health care or provision for old age, falls into this category: during the golden age all West European countries had social expenditure elasticities greater than unity, which means that for every one percent rise in GDP, social expenditure increased by more than one percent.

In the 1980s social expenditure growth slowed down, but so did GDP growth. With some variation between countries, social expenditure elasticities remained slightly above or at least near unity up until the end of the century. But there were no more such pronounced increases in social expenditure as a share of GDP as in earlier decades (Figure 15.2). The reasons for this are manifold, and the motives behind governments' attempts to limit the growth in social expenditure ranged from growing general concerns about the state of public finances to perceived adverse effects of welfare provision on incentives to find paid work.

For individual European economies and over time there is strong evidence for a positive association between higher income levels and higher social expenditure. This impression is broadly confirmed in a cross-section of these

economies at any one point in time (Johnson 1999, pp. 133–4). However, one ought not to read this as unequivocal support for the notion of social expenditure growth being a mere concomitant of economic growth. There is enough variation in the European sample to suggest that factors other than growth played a role as well: similar levels in GDP per capita were not necessarily associated with similar social expenditure shares. This is a clear pointer to historical contingency. As set out above, post-war national welfare regimes developed against a background of different historical conditions and different ideological traditions (cf. Esping-Anderson 1990). Further, the timing and extent of political and social pressures for substantial changes in welfare expenditure were only partially aligned across different European countries.

Outcomes

What were the outcomes of growth in European social expenditure over the longer term? Did the "welfare state" make for improvements in the standard of living of the European population? Two widely used criteria to assess public welfare performance are the extent of poverty prevalent in a society and the degree of income. The proportion of people living in poverty is a basic, but reasonably useful indicator of the effectiveness of a welfare system, for it captures the success or otherwise of attempts to protect people from the potentially detrimental consequences of being unable to work, of being made redundant, or of having large families. As alternative indicators, measures of income inequality can point to broader welfare issues. 'Poor' households in rich European countries may not be poor in an absolute sense: they may well be able to afford the basic necessities of life such as food, clothing, and housing and they may not be poor compared with households in developing economies. But they may have an income so much below the average or median in their society that they cannot fully participate in social life. Hence a very unequal distribution of income within a country may lead to the social exclusion of a significant number of its members. Wilkinson (1992) has argued that beyond certain threshold levels of income it is *relative* income, rather than absolute poverty, that matters for health outcomes. Further, while there appears to be no strong evidence suggesting an association between differences in per capita incomes and differences in life expectancy *across* developed economies, *within* these economies life expectancies and health are related to income distribution and social stratification (Wilkinson 2005; Wilkinson and Picket 2006).

However, consistent measurement over time in this area is as much of a problem as finding coherent and compatible indicators of social expenditure across countries. Modern, developed welfare states have a general tendency to

equalize post-tax and post-transfer incomes and one may very well argue that this is a (if not the most) important part of the exercise in the first place. Yet transfers can go from poor to rich taxpayers just as much as the other way round: the classic example being university education which, in most European countries, is still enjoyed disproportionately by students from families with above-average income, but which is substantially financed out of general tax revenue.

Taking the European Community definition of people living in poverty if they have an income of less than half the average income in their country, the proportion of EC citizens living in poverty increased from 12.6 percent in 1975 to 14.7 percent in 1993 (Johnson 1999, p. 128). This rise coincided with the slowdown in social expenditure growth documented in Figure 15.2 and a general increase in income inequality in the 1980s. However, the comparative country evidence suggests that there is a relationship between high levels of social expenditure and low levels of poverty. That social expenditure mattered in terms of alleviating poverty is further borne out by different data which compare the percentage of families in poverty (defined as living on half the median net income) before and after social transfers. According to this evidence for the mid-1980s, between 32 and 38 percent of families in seven Western European countries had incomes below half the median prior to transfers. Receipt of transfer payments reduced that proportion to between 5 and 10 percent (Bradshaw 1993, p. 57).

Internationally comparative data on income inequality that reach back in time are hard to come by. Here, the figures from World Development Indicators (2007) have been used. They provide good geographical coverage for the late 1990s and the early twenty-first century and have been augmented by additional data for *c*. 1985 from Mitchell and Bradshaw 1992. Both studies rest on the Luxembourg Income Study database, allowing for at least some degree of broad compatibility over time and between countries. Five main messages emerge from Table 15.1. First, prior to the collapse of communism, the countries of Central and Eastern Europe displayed persistently lower levels of income concentration than their western capitalist neighbors. Secondly, the period since the fall of the Berlin Wall saw a sharp increase in income inequality throughout the transition economies of the former eastern bloc countries. Thirdly, in the West, too, income inequality increased significantly over the last decade or two of the twentieth century: the evidence seems to suggest that the post-golden age flattening out in the growth of social expenditure as a proportion of national income (Figure 15.2) was associated with a marked rise in income inequality as measured by Gini indices. In other words, the volume and direction of transfer payments, taken together, now add up to comparatively less redistribution towards the relatively poor than in the 1980s. Fourthly,

Table 15.1 Income inequality: Gini indices (post-tax and post-transfer current incomes)

	c. 1985	*c.* 2000
Albania	..	29.1
Austria	..	29.1
Belgium	..	32.9
Bosnia and Herzegovina	..	26.2
Bulgaria	23.4	34.3
Croatia	22.8	29.0
Czech Republic	**19.4**	25.4
Denmark	..	**24.7**
Estonia	23.0	35.8
Finland	..	26.9
France	30.0	32.7
Germany	25.0	28.3
Greece	..	34.3
Hungary	20.9	26.8
Ireland	..	34.3
Italy	**31.0**	36.0
Latvia	22.5	37.7
Lithuania	22.5	31.8
Macedonia, FYR	..	39.0
Netherlands	26.0	30.9
Norway	..	25.8
Poland	25.2	34.5
Portugal	..	38.4
Romania	..	30.2
Russian Federation	23.8	**45.6**
Slovak Republic	19.5	25.8
Slovenia	23.6	28.4
Spain	..	34.7
Sweden	21.0	25.0
Switzerland	..	33.7
United Kingdom	28.0	36.0

Note data refer to observations for or nearest to 1985 and 2000, respectively. Minima and maxima printed in bold. A low Gini index indicates a more equal income distribution, while a high Gini index reflects a more unequal distribution. An index value of 0 corresponds to perfect equality (everyone having exactly the same income) and 100 corresponds to perfect inequality (where one person has all the income and everyone else has zero income).
Sources: World Development Indicators (April 2007); Mitchell and Bradshaw 1992.

the Scandinavian countries score highly in terms of their capacity to maintain a relatively equal distribution of income through their tax regimes and/or social security measures. In the cases of Denmark, Finland, and Norway this was achieved against a background of relatively modest social expenditure to GDP ratios of around 22 to 26 percent in 2000, pointing to either fairly flat pre-tax income distributions to start with or a strongly redistributive component in the

tax system. In the case of Sweden, we find both a strong tax impact and a strong benefit impact on the distribution of net incomes (Bradshaw 1993, pp. 57–9). Finally, within the group of Western European economies the gap between those with relatively modest degrees of income inequality (e.g., Scandinavia) and those with relatively high income concentration (e.g., Portugal, United Kingdom) widened over the last twenty or so years. Again, this is a pointer towards the significance of national welfare policies which, clearly, made for far less "convergence" in *within*-country distributional patterns than *between*-country income distribution.

Decomposing changes in the standard of living

Human Development Indices as a means to evaluate changes in living standards

The Human Development Index (HDI) is a useful tool for summarizing changes in historical living standards. It attempts to capture the *quality* of life by summarizing the core components of material wealth, longevity, and knowledge in a single index and measuring each of these components in terms of the distance traveled between an assumed minimum and maximum.[1] However, the HDI has its drawbacks as a welfare measure. For example, it fails to capture important issues such as economic inequality or respect for human rights. Every year (since 1990), the UN has published HDI estimates for almost all countries in the world.

The HDI represents a *relative* index of development. A country with a GDP per capita of $ 40,000 international dollars (at 2000 purchasing power parity), an average life expectancy at birth of eighty-five, enrollment rates for all levels of education of 100 percent and a 100 percent adult literacy rate, would score 1. Table 15.2 reports HDI scores for nineteen European countries, organized by rank for each year.

The average HDI score for Europe rose by almost 30 percent between 1950 and 2003 (0.699 → 0.905). There has also being a marked decline in the level

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[1] We use the following formula (as in Crafts, 2002a, 395–396):

$$HDI = (E + I + L)/3$$

Where

$$E = 0.67 LIT + .33 Enrol$$
$$I = (\log y - \log 100)/(\log 40,000 - \log 100)$$
$$L = (e_0 - 25)/(85 - 25)$$

E= education, I= income, L= longevity, Lit= the adult literacy rate, $Enrol$= percentage of relative age group enrolled in primary education, y = GDP per capita, and e_0= life expectancy at age 0.

Table 15.2 Historical HDI scores for Europe

1950		1975		2003	
Denmark	0.786	Switzerland	0.873	Sweden	0.957
Netherlands	0.784	Sweden	0.864	Norway	0.950
Switzerland	0.782	Netherlands	0.862	Switzerland	0.935
Sweden	0.780	Denmark	0.862	Finland	0.934
Norway	0.776	Norway	0.859	Ireland	0.929
UK	0.774	France	0.845	Italy	0.929
Germany	0.744	UK	0.841	Austria	0.928
France	0.729	Belgium	0.840	Netherlands	0.927
Belgium	0.727	Finland	0.839	France	0.926
Austria	0.720	Germany	0.837	Belgium	0.926
Finland	0.707	Austria	0.836	UK	0.924
Ireland	0.698	Italy	0.826	Denmark	0.924
Hungary	0.682	Spain	0.810	Spain	0.921
Italy	0.668	Ireland	0.807	Germany	0.919
Poland	0.657	Poland	0.790	Portugal	0.867
Spain	0.627	Hungary	0.788	Poland	0.856
Bulgaria	0.607	Bulgaria	0.774	Hungary	0.854
Portugal	0.530	Romania	0.763	Bulgaria	0.803
Romania	0.510	Portugal	0.727	Romania	0.784
Average	**0.699**		**0.823**		**0.905**
Coefficient of Variation	0.119		0.048		0.053

Sources: Own calculations and Crafts 2002a.

of dispersion of HDI scores across the continent, as measured by the coefficient of variation (0.119→0.053) as well as some significant change in the country rank order. What does this mean? The HDI is primarily concerned with providing a comparative measure of development. For instance, we could think of the UK in 1950 (0.766) as a having a level of development close that of China in 2004 (0.768), or of Portugal in 1950 (0.530) being comparable to Bangladesh in 2004 (also 0.530). Of course, this also highlights the limitations of the HDI, as there are many reasons why most people would be reluctant to draw an equivalence between these countries at these points in time. (Human Development Report 2006). Europe in 1950 can be categorized as a region of 'medium human development', if we take an HDI of 0.8 as the threshold (in line with Human Development Report 2006). No countries (at least in this nineteen-country sample) could be categorized as countries of 'low human development' (HDI below 0.5). By 1975, the vast majority of European countries could be described as having 'high human development' (above 0.8). Only the countries of Eastern Europe and Portugal were below 0.8. By 2003, most of Europe had achieved an HDI of greater than 0.9, except again for the countries of Eastern Europe and Portugal. Today, in evaluating

changes in living standards the HDI loses a lot of its power. This is because of the heavy discounting of growth in material living standards (as measured by GDP per capita), non-linear relationships between longevity and incomes, and also "bounds" on the values for the knowledge component (for instance, most of Europe is now achieving close to full enrollment and 100 percent adult literacy rates). Hence there is a need to investigate alternative and more comprehensive measures of living standards.

Within Europe, there has also been notable variation in rank of HDI score over the past fifty years: for instance, the relative improvement of Ireland (twelfth in 1950, fifth in 2003), and the relative decline of Denmark (first in 1950, twelfth in 2003). However, rank is not nearly as important in 2003 as it was in 1950, because the coefficient of variation is much lower in 2003, and differences between, say, the first and twelfth positions are much smaller in the later time period. The decline in variation in HDI in Europe is a rough indication of convergence in living standards over the period.

Regional variations in HDI

By aggregating annual HDI scores for individual European countries into regions, it is possible to identify three distinct trajectories in the growth of living standards in post-war Europe.[2] In 1950, north-west Europe was clearly more developed than both the southern and eastern regions of the Continent (Figure 15.3). However, the southern European experience since is very much characterized by convergence. The HDI there grew far more rapidly than in north-west Europe, and the differential between the two regions declined from about 0.16 to 0.03 points.

The trend in Eastern Europe's HDI is very different from the rest of Europe. From 1950 to about 1965, the HDI increased at a rapid rate, slightly above that of north-west Europe. After 1965, however, HDI growth in Eastern Europe diminished strikingly, and in the late 1980s a period of decline followed, before the HDI picked up again in the 1990s (1991–2003). What drove these patterns? How can we explain southern Europe's convergence, and Eastern Europe's relative failure in improving living standards to levels experienced elsewhere on the continent? The first step in answering these questions is to break up the HDI scores, and examine the trend in the three components of income, longevity, and knowledge.

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[2] Regional aggregation is as follows: North-west Europe: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Netherlands, Norway, Sweden, Switzerland, United Kingdom; Eastern Europe: Bulgaria, Hungary, Poland, Romania; southern Europe: Italy, Portugal, Spain.

Regional analysis of HDI components

Income

In terms of material standards of living, southern Europe's convergence with north-west Europe is magnified by the construction of the *income* component in the HDI series, where growth is discounted at higher income levels. Analysing the raw data (Maddison 2007), the overall picture is of persistent income growth and also a consistent movement towards similar levels in GDP per capita. Southern Europe's GDP per capita amounted to about 46 percent of north-west Europe's in 1950. By 2003, the differential had fallen to a level where southern Europe's GDP per capita was equivalent to 75 percent of north-west Europe's.

Eastern Europe, however, experienced a divergent trend in GDP per capita over the post-war period. Growth for the period as a whole was 2.6 percent per annum for north-west Europe, 3.6 percent for southern Europe, and 2.3 percent for Eastern Europe. However, as with the HDI series, we can distinguish three different phases in the evolution of Eastern European income. From 1950 to 1979, GDP per capita grew at 3.8 percent on annual average, but after 1979 income growth stagnated and GDP per capita even declined in the early 1990s. Average growth for 1979–93 was -1.2 percent per annum, recovering to 3.2 percent in 1994–2000. However, 1979 levels of GDP per capita were not achieved again until 2000.

The differential timing and pace of economic growth across the nineteen European countries generated three distinct phases of income convergence and divergence (Figure 15.5). First, the period between 1950 and 1978 is characterized by a sharply diminishing coefficient of variation in GDP per capita. From 1978 to 1993, intercountry inequality increased, returning to 1965 levels by 1993. After 1993 variation declined again, albeit at a slower rate than before. This pattern was driven by Eastern Europe's far more dramatic growth slow-down relative to the rest of Europe after the golden age.

The causes of Western Europe's rapid economic advance during the golden age, and Eastern Europe's initial success in keeping up with or even exceeding western rates of growth in national product and subsequent failure to do so in the post-golden age period, are discussed elsewhere in this volume (see Chapters 12 and 13). Here it suffices to say that the era of communism and central planning produced poor results at least from the early 1970s, and that the stagnation and relative decline in eastern living standards and incomes contributed to the collapse of these regimes (Dobrinsky, Hesse, and Traeger 2006, p. 1). Initially, strong growth during the golden age was primarily a result of the reallocation of labor, from the primary sector (agriculture etc.) to secondary industries (manufacturing). However, resource allocation was
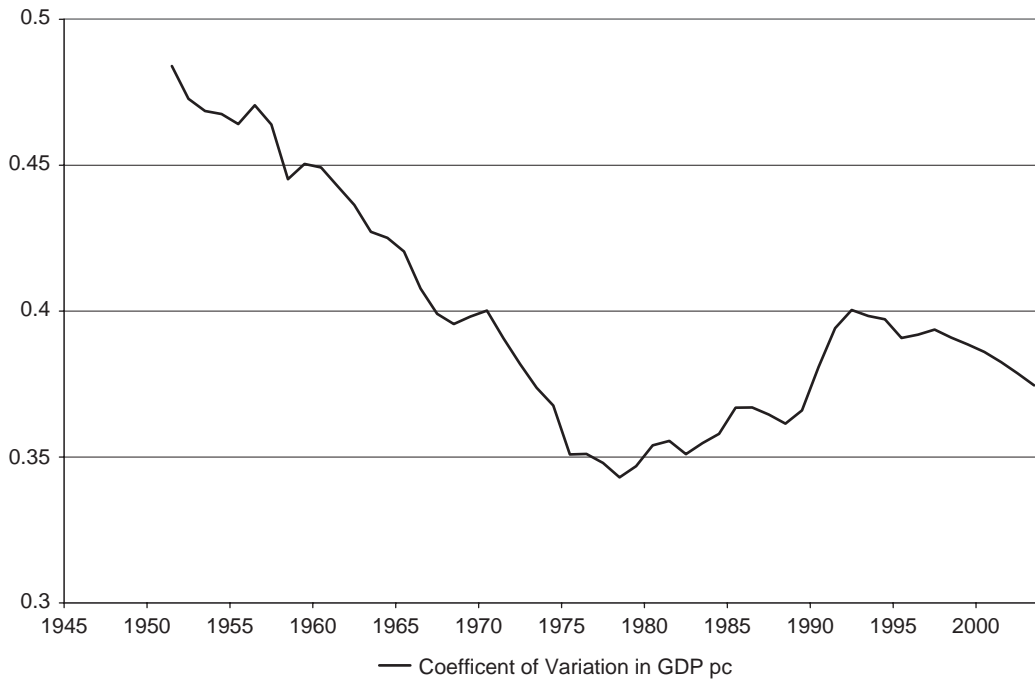
Figure 15.5 Coefficient of variation, GDP per capita. *Sources:* see Figure 15.4.

based on the motivations and political priorities of the central planners, not necessarily on any economic rationale. Eventually, such sub-optimal economic policy, together with insulation from international markets, would translate into slower growth (Dobrinsky, Hesse, and Traeger 2006, p. 11). It was only after the collapse of central planning and the subsequent "transitional recession" that income growth resumed during the early to mid-1990s.

The absolute and relative advance in material well being of the average Western European is brought into even sharper relief when the decline in hours worked is accounted for. The average person in 1992 worked significantly fewer hours per year than the average person in 1950 (Figure 15.6), aided by strong growth in productivity. The resultant impact on welfare, ignored by measures such as GDP per capita and the HDI, is, of course, hugely important as people gained leisure time to pursue non-work-related but welfare-enhancing activities and had the material means to do so.

Life expectancy

Growth in life expectancy at birth for both sexes (e_0) was a great achievement of the post-war era and primarily a result of the spread of antibiotics and immunisation (Mesle 2004, p. 46). North-west Europe added over a decade to average life expectancy between 1950 and 2002. Even more
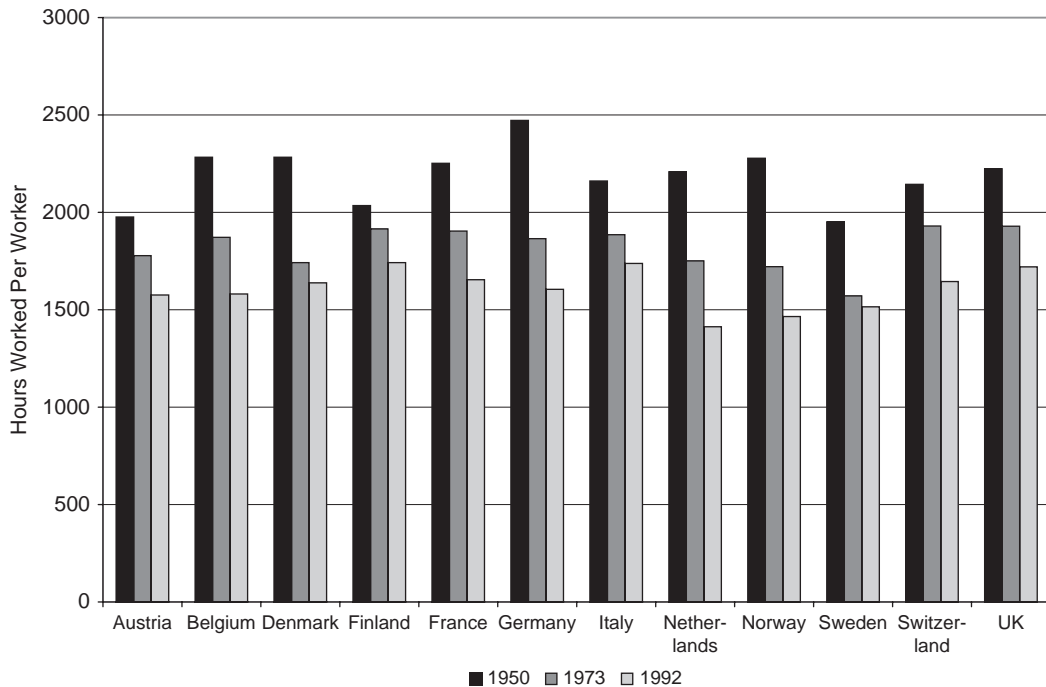
Figure 15.6 Annual hours worked per worker. *Source:* Crafts 1997, p. 316.

remarkable is the catch-up of southern Europe, adding a population average of sixteen years per person to life expectancy. Recently the trend in life expectancy has converged between north-west and southern Europe. However, the data on Eastern European life expectancy are shocking, especially when viewed relative to the trends elsewhere in Europe. Southern and Eastern Europe had a similar level of life expectancy in 1950, and both experienced a strong rate of growth until their paths diverged in the late 1960s. From 1973 to 1991, the growth rate of Eastern European life expectancy was effectively zero. Only after 1997 did it display consistent growth again. In 2003, life expectancy was over seventy-eight years for both north-west and southern Europe, and just over seventy-two years for Eastern Europe (Figure 15.6).

However, a more disaggregate country- and age group-specific perspective reveals some interesting features. Take the example of Hungary, where life expectancy, for both sexes, was sixty-two years in 1950. By 2003, this had increased to seventy-two years. However, male *age-specific* life expectancies actually *fell* for every year of age over ten, for the years 1950–1996. (In contrast, female age-specific life expectancy rose between 1950 and 1996.) For every age point after age 0, male life expectancy at that age was lower in 1996 than it was

in 1950 and 1975. This contrasts with the experience in north-west and south-west Europe, where there is no evidence of decreases in age-specific life expectancy. We return to this point below.

Education

The knowledge component of the HDI comprises the combined general enrollment rate (⅓ weight), and the adult literacy rate (⅔ weight). Interestingly, Eastern Europe scores relatively well in this regard, with only a slight divergence from the trend in north-west Europe (Figure 15.8). Southern Europe experienced strong catch-up and convergence, in the main driven by Portugal's very low initial levels in education and subsequent high growth. However, enrollment and literacy are only the very basic measures of human capital. The implied convergence as indicated by the HDI components series may be misleading. For example, if we examine a measure of knowledge at the higher end of the scale, such as scientific journal articles per capita, north-west Europe has currently about seven times Eastern Europe's level.
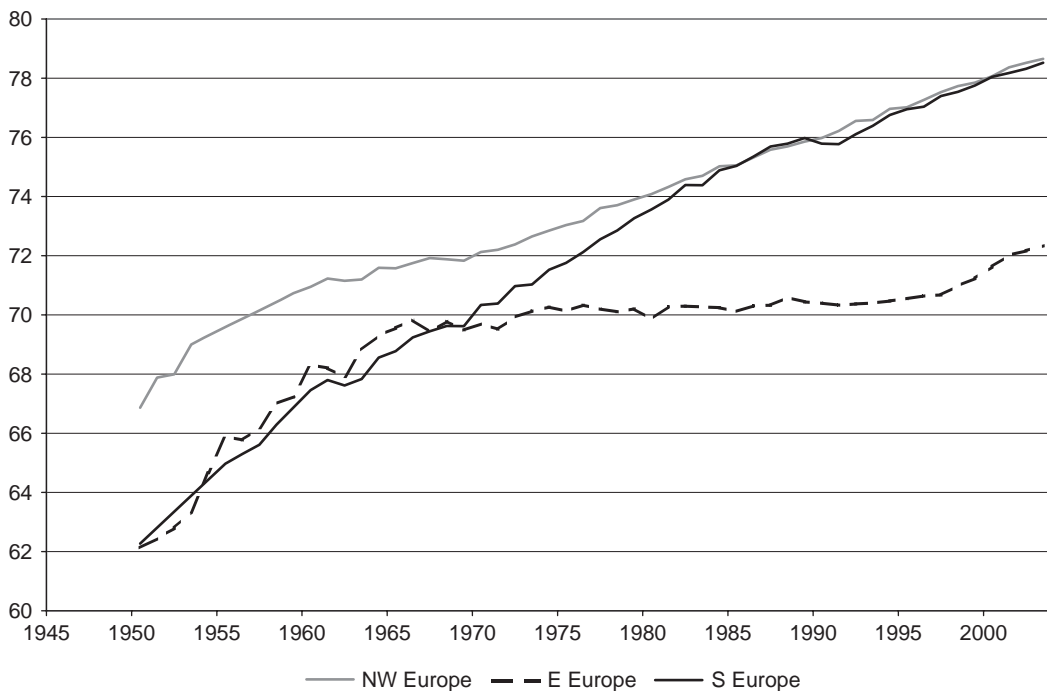

Figure 15.7 Life expectancy at birth. *Sources:* own calculations based on Rothenbacher 2005 and World Development Indicators (2003).
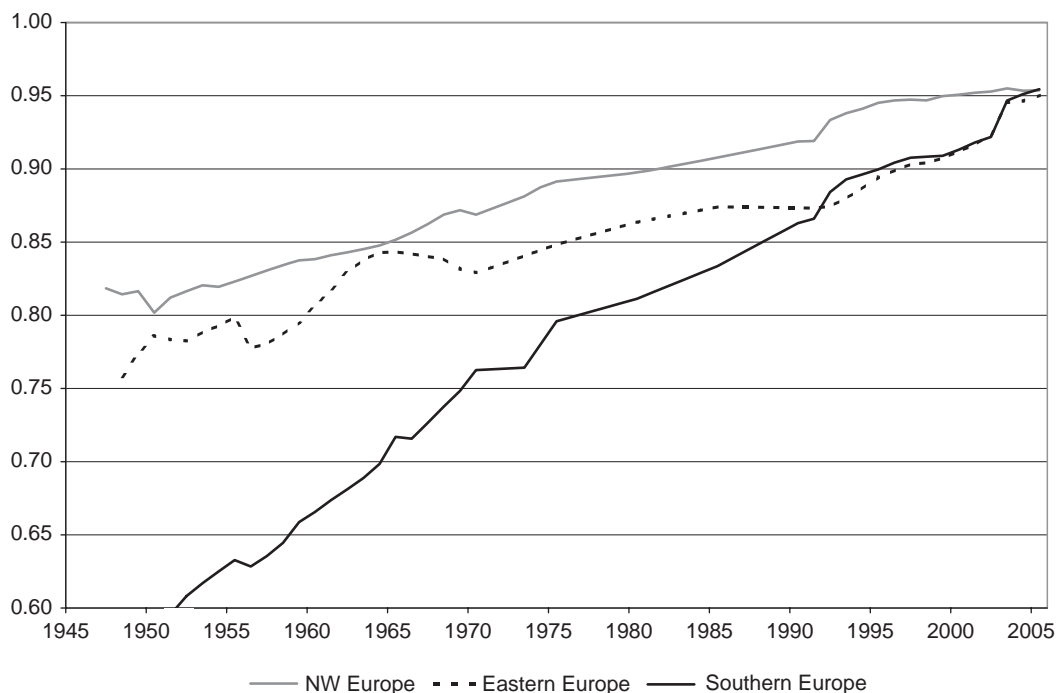
Figure 15.8 Education index. *Sources:* own calculations based on Flora 1986; Mitchell 2003; World Development Indicators (2007).

Causes and consequences of demographic change

Causes of the decline in mortality

In general, mortality decline in Europe has been substantial since the Second World War. Continuing pre-war trends, life expectancy in north-west and southern Europe at birth increased by some nine to eighteen years, for both males and females (Table 15.3). Southern European countries experienced strong convergence with the north-west, while improvements in Eastern Europe were more modest. Life expectancy in Spain and Portugal, for example, was relatively low in 1950, but rose relatively fast. The fall was caused by the use of antibiotics, which were unknown before the war, better diet – a product of economic growth – and a large fall in the incidence of cardiovascular disease.

The components of the mortality fall are as follows. The widespread introduction of antibiotics further reduced adult mortality. It was already relatively low, because of the fall in deaths from infectious disease – along with war, the major cause of adult death. The fall in infant mortality was much more significant. Table 15.4 shows that in 1950, the variance in infant mortality

Table 15.3 Expectation of life at birth in selected European countries (years)

	1950	2005
W. EUROPE		
Belgium	64.68	79.48
France	66.57	80.21
Germany	66.51	78.93
Sweden	71.97	80.55
Switzerland	68.69	81.24
UK	68.80	78.95
S. EUROPE		
Greece	65.08	78.99
Italy	65.55	80.33
Portugal	59.12	78.07
Spain	62.15	80.57
E. EUROPE		
Bulgaria	n/a	72.56
Czech Republic	64.63	75.91
Hungary	62.13	72.85
Poland	61.57	75.00

Note: 1950 values are varying year averages centered around 1950.
Source: own calculations based on Rothenbacher 2005 and World Development Indicators (2007).

Table 15.4 Infant deaths in the first year, selected European countries (deaths per 1,000 live births)

	1950	2005
W. EUROPE		
Belgium	53.4	4
France	43.5	3
Germany*	55.7	4
Sweden	21.0	3
Switzerland	31.2	4
UK	31.2	5
S. EUROPE		
Greece	35.4	4
Italy	63.8	4
Portugal	94.1	4
Spain	64.2	4
E. EUROPE		
Bulgaria	45.0 (1960)	12
Czechoslovakia*	64.1	3
Hungary	85.7	7
Poland	108.0	6

*excludes GDR in 1950.
**Excludes Slovakia in 2005.
Source: World Development Indicators (2007).

Table 15.5 Contribution of changes in age-specific mortality to the gains and losses in life expectancy between 1965 and 1995 (years)

Age group	Mediterranean Europe	N. Europe	E. Europe	Former USSR	All Europe
Males					
0–1	1.93	1.23	2.13	0.54	1.30
30–59	1.23	1.29	−1.41	−4.52	−1.25
All ages	6.69	5.59	1.31	−6.26	0.74
Females					
0–1	1.68	1.02	1.95	0.48	1.21
30–59	1.23	0.98	0.33	−1.21	0.21
All ages	7.73	5.56	4.07	−1.98	3.37

Source: Mesle and Vallin 2002, p. 171.

was extremely large. It was 21 per 1,000 live births in Sweden and 108 in Poland. By 2005, it had fallen to 3/000 and 6/000, respectively. This affected both Eastern and Western Europe. There were two main reasons. The effect of the fall in fertility meant that, on average, the mother's age at birth was lower and the baby was lower in the birth order, both of which are associated with lower infant mortality. Secondly, the fall in infant (and child) mortality was related to policy intervention, for example, government-owned clinics in both Eastern and Western Europe. This largely nullified the effect of differences in the level of urbanization (which was related to GDP growth) – so that infant mortality was not related to GDP growth. Finally, in recent years, there has been a rise in the life expectancy of older people. This has implications for age structure. (See below.)

However, governments in Eastern Europe failed to implement the appropriate health policies to tackle cardiovascular disease mortality. This is the key source of the divergence in life expectancy between east and west (Mesle 2004, p. 66). In general, mortality in most Eastern European countries failed to fall between the mid-1960s and the mid-1990s at a time when mortality was falling continuously in Western and southern Europe. Table 15.5 shows this. For example, between 1965 and 1995, male life expectancy (30–59) gained nearly 1.2 to 1.3 years in Western and southern Europe, but *fell* by 1.41 years in Eastern Europe. In the former USSR it *fell* by 4.52 years.

The Russian life expectancy figure is a special case, with deaths from excessive drinking falling substantially when Gorbachev increased the price of vodka in 1985–6. During this brief period, life expectancy grew by three years year for males and one year for females. It also briefly rose (by 5.7 and 3 years) during the economic crisis of 1991–4 (Mesle and Vallin 2002, p. 175). In other words, the further reduction in cardiovascular disease depended partly on

individuals changing their behavior. Such behavioral changes occurred in other parts of Europe, but not in Eastern Europe – as we may see in the former USSR, for example. The lack of government interest is important here. (Until recently, the population continued to smoke heavily, for example, and accidents and homicide also remained high.)

The unfavorable development in life expectancy in Eastern Europe was also related to other factors. Apart from the former Czechoslovakia, the former USSR, and East Germany (the GDR), most of the East European economies were, after the Second World War, still characterized by large agricultural sectors in both absolute and relative terms. The Eastern European economic model prioritized accelerated industrialization, i.e., the enforced shift of labor and material resources into industry and mining (cf. Eichengreen 2007, ch. 5). Thus at a time when the more developed Western European economies began to "deindustrialize" (as reflected in changing employment shares) – i.e., from the mid-1950s to the mid-1970s – industrialization continued in the former USSR, Czechoslovakia, and the GDR, and began in earnest in the other countries. As a consequence, the share of industry in total employment rose from 37 percent in Czechoslovakia and 23 percent in both Hungary and Poland to 48, 45 and 34 percent, respectively, in 1971. These employment shares are comparable to those in early twentieth century Britain. A large proportion of the labor force became engaged in physically demanding work in an industrial environment that was far less severely governed by safety; health, and environmental protection laws and their enforcement than in Western Europe. In reverse, the later upturn in East European life expectancy coincided with the process of deindustrialization that started with the post-1989 transition process.

Changes in fertility

Fertility was falling in most European countries before the Second World War. In general, fertility fell during the war, but there were important exceptions: it rose in Britain, France, and Scandinavia. Following the war, there was a brief post-war rise in fertility. This was essentially the births that had been postponed during the war. There was virtually no European equivalent of the "baby boom", and hence of the "baby boomer" generation, which was a phenomenon confined to the USA, Canada, Australia, and New Zealand. (The "baby boom" was a change in behavior, in effect an increase in the desired family size by one whole child.) European fertility then continued slowly to rise until the mid-1960s. But from then onward there was a major change. Fertility began to decline in every country and, eventually, to very low levels. The overall effect is

Table 15.6 Total fertility rate, selected European countries (children born per woman)

	1950	2005
W. EUROPE		
Belgium	2.35	1.72
France	2.93	1.92
Germany	2.10*	1.36
Sweden	2.28	1.77
Switzerland	2.40	1.42
UK	2.69 (1960)	1.80
S. EUROPE		
Greece	2.46 (1951)	1.28
Italy	2.49	1.32
Portugal	3.08	1.40
Spain	2.48	1.33
E. EUROPE		
Bulgaria	2.34 (1960)	1.31
Czechoslovakia	2.08	1.28**
Hungary	2.02 (1960)	1.32
Poland	2.98	1.24

*excludes GDR in 1950.
**Excludes Slovakia in 2005.
The number of births is completed family size (cohort measure) except for later years, when future births to women who have not completed childbearing is estimated – i.e., a period measure. The latter is not expected to be significantly different from the former.
Source: World Development Indicators (2007).

shown in Table 15.6. There has been some recent recovery but, at the time of writing, no European country has replacement level fertility. (Clearly, a mean total fertility rate of just over two is necessary for the population to grow naturally in the long run.) In the 1990s, for example, only 15 percent of European population growth was natural; 85 percent was immigration.

Measurement

The expectation of life at birth shows the period a newly born person will live assuming s/he is subject to the relevant mortality at each age. This is a so-called period measure. Period measures are partly an abstraction. They do not account for changes in future mortality, which are known only for people who have already died. Similarly the total fertility rate (Table 15.6) shows the number of children, that on average a woman will have assuming current fertility (normalized by age) continues. We do not know, for example, if younger women whose fertility is currently low will achieve a *completed family size* which is higher than that predicted, although most demographers do not

expect this to happen. In the 1930s, for example, current fertility rates predicted large falls in population in most European countries. Fertility did not actually fall until the 1960s, which of course was a different female cohort.

Reasons for the fertility fall

Here, we are concerned with the trend fall in the total fertility rate (TFR). Fertility is subject to short-term fluctuations, but these are usually caused by economic uncertainty – i.e., the trade cycle – and the long-run effect on the economy is limited. Table 15.6 shows that the fertility decline was a Europe-wide phenomenon. Hence, we may discount those causes which are relevant to only one country. For example, it is tempting to relate falling fertility to the cost of children's education, religion, or the extent of child employment. But the variance in these factors across Europe was much greater than the variance in fertility. Similarly, the introduction of particular birth control methods, particularly the contraceptive pill, is a tempting hypothesis. But fertility fell in countries where the pill was rarely used. (Abortion was common, and legal, in most of Eastern Europe from the 1950s to the 1980s.) This implies that the method used to prevent pregnancy was less important than changes in the desire to have children. (The low fertility of the 1930s was achieved in some countries using what today would be considered very inefficient methods.) In other words, there is an important distinction between sex and fertility. More efficient contraception affected coital frequency to a greater extent than fertility.

Consider the general and long-run changes in post-war European fertility. We might start with the rather nebulous concept of "modernization." But what we do know is that an increasing proportion of the population lived in cities; mass communication made people more aware of conditions in other parts of their own country or further afield; female education improved and the position of women in the labor market also improved. So far, so good. But we are left with a paradox. If, for example, children were substitutes for consumer durables, why did the increase in household income lead to rising fertility to the mid-1960s and then to falling fertility?

The most likely general explanation concerns the relation between income, female employment, and status. Assume that in an ideal world most women desire both to have children and a fulfilling occupation. In the 1950s, when most women were married, household income was rising, making it possible for a family to live (at then-current expectations) on a single income. On the other hand, employment opportunities for women were limited and poorly paid. Hence, for a woman the opportunity cost of children in terms of both

Table 15.7 Participation rate, 15–64-year-old females, selected European countries, 2006 (full and part time; percent)

	Full time	Part time
W. EUROPE		
Belgium	38.5	20.4
France	49.3	14.6
Germany	41.7	26.8
Sweden	69.3	14.7
Switzerland	40.0	34.1
UK	43.0	27.3
S. EUROPE		
Greece	47.9	7.1
Italy	35.9	14.9
Portugal	59.4	9.0
Spain	48.1	13.0
E. EUROPE		
Czech Republic	58.9	3.4
Hungary	53.6	2.3
Poland	47.6	9.2

Source: OECD (2007b).

income and status was low. But by the later twentieth century, the labor market was different. Female occupations, particularly in services, were often well paid and had high status. But it was difficult for a woman to acquire sufficient human capital to establish a career if she had two or three children. This partly depends on the cost of childcare. Estimates of the impact of raising two children born before the mother reaches age thirty on a woman's lifetime income are very varied – ranging, for example, from -25 percent (France) to -50 percent (Britain). We show female participation rates in some European countries in Table 15.7.

One criticism of this approach is that it applies less to southern than to northern Europe. Fertility fell to exceptionally low levels in Spain and Italy, for example, but female labor force participation was somewhat lower (Table 15.7). It might be more instructive to stress the *rise* in the participation rate in southern Europe, which was exceptional. In other words, it is possible that we are observing lagged behavioral changes rather than cultural differences. To reiterate, we are not arguing that women forwent childbearing completely in order to enter the labor force. Most wanted both children and a job that was more fulfilling than domesticity.

Overall, female participation rates were high (60–80 percent of the 15–64-year-olds in Western Europe). It follows that most of the women in the labor force must have had (one or two) children. The proportion of women who were

working part time was much more varied – reflecting the cost and quality of childcare in the different countries.

There was also a major change in the timing of births in the years after the Second World War. The childbearing period became more compressed. Women completed childbearing at an early age or, alternatively, postponed having children until they had established a career. (The former was the more common.) Currently, about 20 percent of married women in Europe are childless (although that is not always from choice) and 80 percent have only one or two children. Hence, it is the decline of the three- and four-child family that has driven the fall in fertility. There have also been major changes in the composition of the household since the 1950s. In the 1950s, the nuclear household (husband, wife, and children) was almost universal throughout Europe and most children were born within marriage. This was because marriage was the insurance against unwanted pregnancy. More recent years have seen the growth of single-person households, composed of both older and younger women. Children have been able to leave home at a younger age which is related to the growth of "cohabitation" (technically, heterosexual non-married partnerships). The fertility of unmarried couples is lower than that of married couples, however. Moreover, illegitimate births as a consequence of promiscuity are rare in most European countries other than Britain.

The consequences of demographic changes; changes in age structure

In recent years there have been two main reasons why populations are ageing: first, the effect of falling birth cohorts; secondly, the change in relative mortality rates, in particular falling mortality of older persons. The fastest ageing has been in southern Europe. This is because fertility in the past was relatively high, so that there are many older survivors of large earlier birth cohorts. Life expectancy at sixty five in the EU25 was 15.9 for males and 19.5 for females in 2004 (Carone and Costello 2005). In theory this has increased the number of "dependants" relative to "producers." In Europe, in 2000, there were about four people aged 15–64 to those aged over sixty-five. By 2025, this will fall to about three. (Children are an addition, of course.) But we may not be defining "dependency" correctly. For example, the demand for manual employment, which could not be undertaken by older people, is falling relative to the demand for service employment, some of which could. In other words, as the population ages, participation increases. In the UK, for example, changes in the male participation rate, which had been falling since 1931, had twice the effect of changes in age distribution (Johnson 1997, p. 1898). Moreover, many older workers have high levels of human capital. The latter point is critical. In the

main, the increase in the participation rate of older workers did not cause the youth unemployment problem, which has become commonplace in virtually every European country, since that is caused by the low human capital embodied in many young people. Moreover, population ageing did not lead to a reduction in expenditure on education, as it might have, because educational expectations rose. There was a large increase in expenditure on tertiary education, for example.

Finally, dire predictions that the ageing of European populations would lead to a slowdown of economic growth have not occurred. This, it was argued (e.g. by Keynes), would lead to a fall in the savings ratio, and hence in investment. But, as we know, the most important component of economic growth since the Second World War has been total factor productivity. In other words, the investment rate has been largely determined by the growth rate, not *vice versa*.

Pensions do, however, provide a challenge

Under so-called 'pay-as-you-go' pension schemes, which have been commonplace in post-war Europe, individuals, while working, pay for the pensions of retired people in return for an expectation that someone else will pay for their pension in the future. There is no fund, as in a private pension scheme. Such schemes became more generous in the 1950s and 1960s. It is easy to see why. Politicians were able to benefit from promises to improve pensions which, at the time, were easy to finance because there were relatively few existing pensioners and they had not built up large contributions. In most European countries pension scheme receipts increased faster than expenditure in the 1950s and 1960s, allowing pensions to increase without increases in taxation. In France and Italy, for example, many (but by no means all) workers could expect a retirement income at sixty of two thirds their average salary index-linked.

Table 15.8 Ratio of persons aged 15–64 to those aged sixty-five or more

	1960	1980	2000	2025
France	5.32	4.57	4.24	3.12
Germany	6.25	4.27	4.24	3.01
Italy	7.04	4.98	4.02	2.9
Spain	7.81	5.88	4.39	3.38
Sweden	5.52	3.94	3.72	2.6
UK	5.56	4.26	4.24	3.12

Source: OECD 2007b.

The equation

$$W(\% \text{ t.y}) = P(\%\text{p.w})$$

models a pay-as-you-go pension scheme, where W is the size of the labor force; P, the number of pensioners; %t, the contribution rate; %p, the replacement rate (the ratio of pensions to average income); y, average income and w the average wage. This shows that if the size of the labor force (W) falls (for example, because of population ageing), the level of pensions (P) can only be maintained if contributions (% t.y) rise or the value of pensions (% p.w) falls. Note that a rise in GDP will not solve the problem, since it would lead to a rise in average income (w) and hence a rise in pensions. The equation shows why changing the age of retirement has been the preferred policy response to the funding problem. Germany and the Scandinavian countries have already changed the retirement age – coupled with a small increase in contributions. As yet, no European government has abandoned a pay-as-you-go pension scheme, making pensions dependent on individual contributions. Such a policy would mean that existing taxpayers would have paid taxes (their "contributions") but would not receive adequate pensions. Moreover, in a privatized scheme, the government would have no option but to pay pensions to people with no savings – i.e., the very poor. Hence, changing the terms of the existing pay-as-you-go schemes has been politically more attractive. The UK is exceptional, however. The state pension was inadequate when it was introduced in 1948, and was subsequently eroded by inflation. Hence, personal (usually occupational) pensions were the norm. This meant that the UK government's exposure to pension problems was comparatively limited.

Migration

In the immediate post-war period European migration was dominated by refugees and displaced persons. West Germany was the largest recipient because of expulsions from Eastern Europe. But by the early 1950s, the immigrants were predominantly workers. Immigration increased until the early 1970s, when it peaked at 3 million (1.5 million net). By 1973, 12 percent of the German labor force were foreigners (and 10 percent of the French.).

It is easy to see why immigration was so high. "Golden age" growth rates led to labor shortages. Transport costs were low. The domestic labor force could not increase fast enough – i.e., via increased participation and structural change (e.g., labor moving from low productivity sectors, such as agriculture) to compensate for the low fertility of the 1930s and the losses during the Second World War. About 10 percent of the increased labor demand in the

golden age was met by immigration. Within the original EEC six, migration was uncontrolled but only Italy, where incomes were relatively low, had significant *intra*-EEC migration. Immigration from outside the EEC was strictly controlled. Immigrants entered on fixed-term labor contracts. Starting in the 1950s, workers were recruited from Turkey, former Yugoslavia, Portugal, Greece, North Africa, West Africa, Spain and – before its EEC entry in 1958 – Italy. The West German *Gastarbeiter* – literally "guest worker" – experiment of the 1960s is the best-known scheme, although it post-dated similar schemes in France and other countries. (Before 1961, when the Berlin Wall was built, West Germany could rely on immigration from the GDR.) The assumption of all the schemes was that the immigrants would return home when demand for their labor fell. Recruitment stopped in the early 1970s as growth slowed, but many temporary workers declined to leave. Since deportation would have been politically impossible, the European governments, and particularly the West German, had no choice but to transform them into permanent immigrants. In turn, this meant that more dependents entered than workers in the 1970s and 1980s. Britain was an exception. There were no *Gastarbeiter*, or their equivalent, in Britain, but immigration from the Irish Republic was uncontrolled, and high in the 1950s and 1960s.

The immigrant populations were clustered. Most immigrants from Turkey and former Yugoslavia were to be found in Germany, for example. There are three reasons. First, recruiters targeted certain nationalities. Secondly, the phenomenon of "chain migration." Migration is characterized by uncertainty and previous immigrants (sometimes relatives) are a key source of information about, for example, the labor market. And finally, because of colonial links. The most important of the colonial immigrants were people from North Africa in France, from the Indian sub-continent and the Caribbean in Britain, and the Caribbean in the Netherlands. However, the immigration of ethnic minority people from erstwhile colonies has been politically problematic. Following political pressures, most countries changed the status of colonial or ex-colonial citizens. For example, before the 1960s, any person born within the British Empire – e.g., anyone born in India or Pakistan before independence (1947), or in Hong Kong, was a British citizen and had to right to live and work in the UK. Following racial tensions in the 1960s, it became necessary for a British passport holder to have a British-born parent to exercise this right.

There were major changes in immigration patterns towards the end of the twentieth century (Table 15.9). Immigration rates increased. There was a large increase in south to north immigration – i.e., from Africa. The migration pattern in the southern European countries, Italy, Spain, and Portugal changed from net emigration to net immigration. The expected influx of immigrants from Eastern Europe was less than expected. The number of immigrants

Table 15.9 Net migration, 1991 and 2006 (per 1,000 population)

	1995	2006
W. Europe		
Belgium	1.3	4.8
France	0.6	1.5
Germany	7.5*	0.3
Sweden	2.9	5.6
Switzerland	–	3.4
UK	1.3	2.6
S. Europe		
Greece	11.7*	3.6
Italy	0.1	6.4
Portugal	7.2	2.5
Spain	1.6	14.6
E. Europe		
Czech Republic	−5.5	3.4
Hungary	1.7	0.4
Poland	−0.4	−0.9

Note: net inflows except where marked as net outflows.

＊exceptional (political) factors.

Source: Eurostat, *Demographic Yearbook* 2004, 2007.

claiming asylum increased and (net) emigration out of Europe fell. These trends are relatively easy to explain. Labor demand continued to increase in most European economies, but there were structural problems in some European labor markets. Natural increase in every European country was negative. At the same time, restrictions on non-European immigration continued. In effect, the only legal way to enter an EU country was to be an EU citizen, to obtain a work permit (increasingly, only given to skilled workers), or to claim asylum.

In economic theory, assuming no barriers to migration, trade, or capital movements, migration is explained by the difference in the return to labor in the origin and destination countries. In turn, this is determined by the relative abundance of capital. *Ceteris paribus*, labor moves to where capital is relatively cheaper and capital moves to where labor is cheaper, until a low net migration equilibrium is reached – so called "factor price equalisation." (Theoretically, the relative abundance of resources is important, but this is not relevant to recent European migration.) By the late twentieth century, there was free trade in manufactures and free movement of capital in the EU, resulting in real income convergence. Hence, we would expect net migration rates across EU borders to have been low and this was the case, although gross movement was high. The exception was migration from accession countries. Countries entering the EU were usually relatively poor. Moreover, as in many other parts of the world, on

average the productivity of both labor and capital was lower in these countries than in the richer countries, predicting large migration flows. But existing EU members did not have to offer free labor mobility for up to six years. At the time of writing immigrants from the Baltic States and Poland, for example, without a work permit may only (legally) enter the UK, Ireland, and Sweden. Bulgarian and Romanian nationals may not. The majority of permits were normally granted to skilled workers (and their dependants). Hence, in the later twentieth century, the mean level of skills of non-EU immigrants was rising and that of intra-EU immigrants was falling.

Obviously, the composition of the immigration flows was largely determined by the labor market in the main immigrant countries. Two of the three traditional immigrant sectors, manufacturing and agriculture, had declined. (Only construction continued to attract large numbers of immigrants.) The demand for skilled labor in high-end services was met by recruitment, some of which was within multinational corporations. But the main demand was for workers in low-end services, particularly in the larger and wealthier cities. Since these services could not be traded, the demand was met by unskilled immigration from within the EU and by undocumented immigrants. These relatively low-productivity jobs were not filled by natives, usually because their reservation wage was too high and internal migration too low. But there were also structural reasons from within the domestic labor market. There were still many (usually older) workers whose skills had become redundant because of industrial decline. They found it very difficult to retrain into the new service occupations. In some countries (e.g., the UK) they were sustained by social security payments on the grounds that they could not undertake heavy manual labor. Moreover, in several European countries, many young men (and, though not to the same extent, young women) had few marketable skills. For example, some of the declining industrial towns and rural areas of Eastern Europe have surplus male populations because a large proportion of the young women have left to take up jobs in the larger cities – an option which is not open to young, low-skilled men.

The rate of immigration is affected by an additional structural factor: the extent of the secondary labor market. Undocumented immigrants work in the informal sector because they cannot obtain a social security card. They are to be found in every European country. But the largest number is to be found in those countries with the largest informal labor market, e.g., Portugal, Spain, Italy, and Greece. Social security contributions, mainly paid by employers in these countries, can increase the wage bill by 50–100 percent. This encourages employers to hire undocumented workers. (Attempts to regularize their position have often been unsuccessful because the workers would lose their jobs if the employers had to pay social security contributions.) There is no question that

the demand for illegal immigrant labor is more than zero, for example because many of them provide low-cost domestic services. But in some countries they have a presence in several sectors. The source of undocumented immigrants was extremely wide, including Albania, north and west Africa, Latin America, and Russia. (Note that the undocumented immigrants did not cause the growth of the informal labor market. It was *vice versa*.) Finally, the number of immigrants claiming asylum increased in the late twentieth century. All the richer countries were affected, but Germany was the most important recipient, with large numbers of refugees from former Yugoslavia. Most of these returned, however. Asylum seekers were universally disliked by the electorate. Hence, policy in virtually all European countries has been seriously to discourage them. It is easy to see why. At its peak in the late 1990s, there were about 500,000 applications per year in Europe. Of these, some 50,000 were accepted. Of the 450,000 who were refused, only 150,000 were deported. This left some 300,000 living in Europe illegally.

Conclusion

The six decades since the end of the Second World War have seen a major increase in broadly conceived living standards in most parts of Europe. Welfare improvements in Western Europe were easier to achieve, however, during the rapid economic expansion of the golden age, when incomes rose faster than in subsequent decades, when social expenditure as a proportion of rising output increased, and when demographics were more favorable than in the late twentieth century. The evidence for Eastern Europe is far more ambiguous. While initially Eastern Europe performed as well as southern Europe, if not better, in terms of the HDI, there was a distinct falling off in welfare levels relative to the west from the early 1970s onwards. This was, on the one hand, an outcome of slower economic growth and, on the other, the result of a flattening out in the growth of life expectancy. The stagnation in life expectancy, we hypothesize, may have been an outcome of the failure to match the continued fall in cardiovascular diseases in Western Europe, and also the price paid for rapid post-war industrialization, with its emphasis on the expansion of heavy and pollutant-intensive industries. Alternatively, much of Eastern Europe was experiencing after the Second World War what the economically most advanced parts of Western Europe experienced during the industrial revolutions of the nineteenth century.