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Ensuring social inclusion in changing labour and capital markets*

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Abstract

This paper consists of two parts. Part I ("The economics of achieving social inclusion in changing labour and capital markets") provides an economic analysis of the challenge of meeting the Europe 2020 objectives with regard to employment and social inclusion. Part II ("Putting people first and macro-economic policy") is concerned with the objectives of macro-economic policy and their communication to the citizens of the EU.

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Part I: The economics of achieving social inclusion in changing labour and capital markets[2]

Introduction

1. Social protection and the European labour market
2. Employment in a global context
3. The changing nature of employment
4. The institutional structure of social protection
5. The capital market: factor shares and household wealth
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Introduction

This essay is concerned with equitable growth in the EU and the achievement of the Europe 2020 target for social inclusion. The EU has set an ambitious objective, seeking to ensure that, by 2020, 20 million fewer people are at risk of poverty and social exclusion. Concretely, this means a significant reduction in the number of people with low relative incomes, or who are severely materially deprived, or who are living in households with very low work intensity. There are however already serious reservations as to whether this can be achieved. Some Member States have set national targets commensurate with this ambition, with large absolute contributions from the planned reductions of 2.2 million in Italy, 1.6 million in France, and 1.5 million in Poland – see Table 1. A number of Member States have set national targets close to their proportionate share, including, with over 85 per cent, Belgium, Bulgaria, Greece, Hungary, Ireland, Italy, Lithuania, Latvia and Poland. But a number of Member States fall a long way short, or have not expressed their national objectives in a form that can be assessed. The total, summing all the national targets in Table 1, falls well short of the Europe 2020 target.

In its Annex to the Annual Growth Survey 2012, the Commission observed that "the EU target of lifting at least 20 million people out of poverty and social exclusion by 2020 will not be reached based on current national targets. According to a first preliminary estimation of the cumulative ambition around 12 million people would be lifted out of poverty and social exclusion by 2020. If spillover effects of strategies focusing on, for example, combating child poverty or reducing long-term unemployment are taken into account, this number can be increased by 25%. However, this would still fall short by at least 5 million or 25% of the EU headline target" (European Commission, 2011, pages 3-4). The Commission went on to say that "while the current difficult economic context and ongoing fiscal consolidation are constraining the level of ambition, further efforts will be

[2] An earlier version of some of the material in Part I was presented at the ECFIN Annual Research Conference in November 2012. In preparing this version, I have benefited from the comments of the discussant, Juan Jimeno, and of the conference participants. I am most grateful to Stephan Leibfried for drawing my attention to the discussion of EU unemployment insurance in the Marjolin and MacDougall Reports.

needed over the next years to make sure that the objectives set at the EU level are reached by 2020" (2011, page 4). The November 2012 report on *Employment and social developments in Europe 2012* concluded that

> "the current economic stagnation and the widespread lack of progress on their national targets in a number of Member States makes achieving the EU 2020 headline target very challenging. Serious progress requires stepping up efforts and targeted measures" (European Commission, 2012a, page 45).

The second reason for doubt about the likelihood of reaching the target is that the Europe 2020 agenda appears to have been almost totally displaced in the pre-occupations of policy-makers by short-term macro-economic concerns. While priority must be given to the resolution of the management of the euro and of the fiscal problems of Member States, this does not mean that longer-run ambitions have to be abandoned. Indeed, in terms of securing the democratic support necessary for the success of macro-economic policies, a vision of the medium-term future is essential. The citizens of Europe are asking, not just will the EU survive until 2020, but why should it survive? It is to the credit of Europe's leaders that they spelled out the Europe 2020 Agenda, but there has to be a roadmap to its achievement and – with two years of the decade already past – the map needs to be filled in more completely.

If there are grounds for any optimism, then one of the most promising is the return to the belief that the social policy goals, in terms of inclusion, may be complementary with, rather than in competition with, the achievement of economic goals. In the early days of the European welfare state, complementarity was seen to be the case. One of the motives for the introduction of the Bismarckian system of social insurance was to underwrite the modern industrial employment relationship. Modern employment meant that many workers faced a (0,1) situation, where unemployment, sickness or retirement meant a total loss of earnings. This led to the establishment of unemployment insurance, industrial injury benefits, sickness insurance and old age pensions. Added reason for such an expansion of social protection was provided by the 1870-1914 period of globalisation, where Europe was exposed to greater competition. The possible adverse incentive (moral hazard) effects of social transfers were fully recognised, and the institutional features of social benefits were designed so that, as far as possible, social and economic policy worked in the same direction (Atkinson, 2002). In the same way, when, in the United Kingdom, Beveridge drew up his 1942 plan for post-war social security, he worked together with Keynes to ensure that macro-economic and social policy worked together, notably via the role of social transfers in providing automatic stabilisers. Later, in the 1960s, the introduction of earnings-related unemployment benefit in the United Kingdom was seen as a means of increasing labour market flexibility by encouraging movement from contracting to expanding sectors. In the United States, Moses Abamovitz argued that "the support of income minima, health care, social insurance , and other elements of the welfare state, was … a part of the productivity growth process itself" (1981, pages 2-3).

It was in the 1980s and 1990s that social protection came to be viewed as an obstacle, rather than a complement, to economic performance. Unemployment benefits were seen as causing unemployment; and state pay-as-you-go pensions were seen as lowering savings rates and causing a slowing of the growth rate. According to James

Buchanan, writing in 1998, "the 'social model' that many Europeans hold as superior to the somewhat more limited welfare states elsewhere is not economically viable for the twenty-first century" (1998, page 14). An influential document in Europe on "Growth and employment", prepared by Jacques Drèze and Edmond Malinvaud, argued that social protection introduced un-desired rigidities in the functioning of European labour markets and was responsible for mounting public debts. They concluded that "the agenda should be to make the Welfare State leaner and more efficient" (1994, page 82).The view was expressed by international organisations: "we see it as extremely important for the future of European economic and monetary union that member countries be flexible enough, that they alleviate the impact on their budgets of regimes of unemployment benefits or social security which are no longer suited to the present world, and are of very high cost" (Michel Camdessus, IMF Managing Director, 1997).

Today, in contrast, a more nuanced view has come to be held, recognising that the design of the welfare state needs to be reformed to address adverse incentives, but also understanding that social protection can be a positive force (a "productive factor") facilitating economic change while promoting social inclusion. It is therefore with economic change in the labour market, confronted by globalization and technological change, that I begin in Section 1.

The challenge to securing equitable growth is typically framed in terms of a European labour market that faces twin threats: ever-increasing competition from newly-industrialising countries ("globalization") and rapid technological development ("ICT"). The standard story argues that these forces are raising the demand for skilled workers and threatening the wages and jobs of unskilled workers. This textbook account is rooted in the theory of international trade: as it was put by Paul Krugman, general equilibrium trade theory has produced "textbook models whose time has come" (Krugman, 1995, page 362). He has employed the two-good two-factor model of trade to explain how globalization has had a differential impact on the United States, with a limited welfare state, and on Europe, with more generous social protection. In the United States, wage dispersion has widened, with the premium to skill increasing, whereas in Europe the effect has been increased unemployment of unskilled workers. This analysis supports the strategy adopted by the EU, and other advanced countries, of prioritising investment in education, coupled with measures to increase labour market flexibility.

Does however this widely-used model of globalization and technical progress provide a sufficient basis for exploring complementarities between social and economic policies? In this paper, I argue that there are *five* major shortcomings, considered in turn in Sections 2-6, and that addressing these shortcomings may point to a richer set of policy conclusions.

The *first objection* is that there is an inconsistency in applying the standard model to a world where there is both the United States and Europe, in addition to the newly-industrialising counties. The inconsistency arises because the model implies, in the absence of complete specialisation, with Europe and the United States both trading the two goods, that their relative price on world markets determines the skill premium. We have therefore to enrich the model, and this is the subject of Section 2. The enrichment takes the form of introducing the non-traded service sector, which is important in its own

right. While some services are actively traded, there are distinct limits to outsourcing and for many services there remains an essential local ingredient. In considering the future prospects for employment in Europe, we have to pay particular attention to service sector jobs.

The *second major shortcoming* is that the standard model fails to take account of the changing nature of employment. It assumes the continuation of the "modern employment relationship" where employment is a (0,1) phenomenon up to retirement: you are in a job or you are not. But just as the emergence of this relationship in the industrial revolution represented a major departure, so too today we are observing a transformation. While (0,1) employment still remains the case for many people, employment is increasingly fractional and less well-defined. By choice, or perforce, people are holding portfolios of activities. In Section 3, I look to the future implications if such a development becomes widespread in the EU. To some extent, these implications have already been recognised. To its credit, the EU has been early to act, having for instance played an important role in developing employment rights for part-time and other non-standard workers. But the implications are quite wide-reaching. The Europe 2020 employment objective is defined in terms of employment rates, where the (0,1) is central. This simple headcount measure needs to be re-evaluated. The same applies to the social inclusion indicator. Even if, in the jobless household indicator, the definition allows for fractional employment, these objectives focus on paid employment or self-employment, not recognising the contribution of other activities. In the field of social policy, we need to consider how social protection benefits providing insurance against loss of employment, or providing for the ending of employment, need to be recast to apply to a world of a portfolio of activities.

The design of social protection is the subject of Section 4, which is concerned with the institutional structure of the welfare state. As was evident to those who designed welfare states a century ago, social protection has to be carefully designed in order to avoid disincentives. The chief architect of the United Kingdom 1911 legislation for National Insurance (Sir Hubert Llewellyn Smith) drew up a list of fifty two possible objections to the new scheme that had to be countered, including the increased risk of lay-off unemployment and moral hazard. The administrative machinery was explicitly created in such a way as to limit the possible disincentives and – in conjunction with labour exchanges – operate to improve the functioning of the labour market (Harris, 1972, page 307). This brings us to a *third limitation* of the textbook story: that it fails to capture adequately the institutional structure of social protection. The treatment of unemployment benefit, for example, fails to include the conditions under which it is paid. To treat unemployment benefit as "the wage when not working" is to ignore the precise features that have been introduced to help social protection work *with* – rather than *against* – the grain of economic policy.

The *fourth limitation* of the standard model is that it fails to treat the capital market, and this is the subject of Section 5. The capital market, and the associated question of the share of profits in total income, was in the past a central element in the analysis of the distribution of income. It has been given less prominence in recent decades. This reflects the belief that wealth has become less concentrated and that there has been a spread of property ownership. However, the role of capital income now needs

to be reconsidered, for at least three reasons. The first is the rising share of profits at the macro-level over recent decades. The second is that private wealth has become much more important: private wealth in Europe was less than two and a half times national income in 1950, but in the past 60 years has risen sharply to reach more than 5 times national income. This suggests that capital is "back" and that the low wealth-income ratios observed in Europe in 1950s-1970s were an anomaly. This brings us to a third reason: the return of inherited wealth. Material wealth is becoming again a significant element in the transmission of advantage.

The *fifth, and final, limitation* of the standard model is that it fails to take account of market power. The model assumes that all agents act as price-takers: that we have perfect competition. In the real-world, there are firms that have market power, as do collective organisations such as trade unions. The relative bargaining power of different actors determines the way in which economic rents are shared and hence the distribution of income. For instance, the share of wages in national income may be influenced by the coverage of trade unions. Whether or not a worker is low paid may depend on the bargaining strength of employers in a local labour market. A household may face exclusion from access to financial services on account of the decision by banks not to open branches in poor neighbourhoods, or from access to housing by the lending decisions of financial institutions. Section 6 considers some of the ways in which market power modifies the conclusions drawn. As was observed by Kalecki, "perfect competition - when its real nature, that of a handy model, is forgotten - becomes a dangerous myth" (1971, page 3).

A central theme of the paper is indeed that our choice of economic model has often a profound effect on our assessment of the extent to which welfare state inclusion policies compete with, or complement, economic performance. It therefore influences the conclusions drawn with regard to policy options in Section 7, where I consider a number of radical initiatives at the EU-level. But the economic analysis of the labour and capital markets is important for a second major reason: the achievement of the Europe 2020 social inclusion objective depends as much on what happens to the pre-redistribution distribution of income as on social transfers. As is self-evident, at a time of fiscal problems, non-fiscal measures have a particular claim on our attention. In Section 7, I consider the possibilities for actions in the labour market, the capital market and the product market. As will become clear, a number of the proposals take us far beyond those at the moment on the table. They may therefore be dismissed as politically infeasible. However, I have written the paper on the assumption that the aim of these Fellowships is to encourage long-range reflection and "thinking outside the box".

Table 1 National targets: Social inclusion

	Column 1	Column 2	Column 3	
Member state	National target (thousands)	Proportionate share of 20 million (thousands)	National target as percentage of proportionate share	Notes
AT	235	334	70	
BE	380	430	88	
BG	260	298	87	
CY	27	32	84	
CZ	30	420	7	
DE	330	3,254		Refers to long-term unemployed
DK	22	220		Refers to households with low work intensity
EE	34	54	63	
EL	450	450	100	
ES	1,500	1,836	82	
FI	150	214	70	
FR	1,600	2,590	62	
HU	450	398	113	
IE	186	178	104	
IT	2,200	2,412	91	
LT	170	130	131	
LU		20		No target
LV	121	88	138	
MT	7	16	44	
NL	100	660	15	
PL	1,500	1,520	99	
PT	200	424	47	
RO	580	852	68	
SE		374		Target not possible to interpret
SI	40	82	49	
SK	170	216	79	
UK		2,484		Child poverty target but no overall target

Source: http://ec.europa.eu/europe2020/pdf/targets_en.pdf

Note: the proportionate share is equal to 20 million multiplied by national population at divided by total EU population (population figures downloaded from Eurostat, Population at 1 January, in November 2011).

1. Social protection and the European labour market

The labour market is central to the achievement of the Europe 2020 social inclusion objective. In order to see in what ways social policy can make a positive contribution, we need therefore to understand the challenges currently faced by the European labour market. In particular there are two powerful forces that are widely seen as a threat to social cohesion: skill-biased technological change (notably via Information and Communication Technologies)[3] and increased competition from newly industrialising countries (NICs).

The standard textbook model that underlies most public debate on these issues is the international trade model of the Heckscher-Ohlin variety, where there are two countries in which two factors of production (skilled and unskilled workers) are employed in a perfectly competitive economy with two sectors. One of the sectors produces an advanced manufacturing good (or service), which uses skilled labour relatively intensively; the other sector produces an intermediate good that uses unskilled labour relatively intensively. Typically OECD countries export the first good and import the second. This model has been used by Krugman (1994 and 1995) to examine the impact of globalization on Europe with its welfare state and the United States with a (largely) unregulated labour market. There are fixed numbers of skilled and unskilled workers. Providing certain assumptions hold, there then is a unique relation between relative goods prices and relative wage rates. (In this model, only relative prices matter.) The higher the wage premium for skilled workers, the higher the relative price of the good that uses skilled labour relatively intensively.

Increased competition from newly-industrialising countries that produce the intermediate good has the effect of reducing the price that an OECD country pays for its imports relative to the price it obtains for its exports. From the relation just described between goods prices and relative wage rates, we can deduce that the market-clearing wage ratio will tilt against unskilled workers. (Conversely, the wage premium for skilled workers would fall in the newly industrialising countries.) The same would happen if technical progress raised productivity more in the sector producing the export good.[4] This assumes flexible wages, and Krugman contrasts the situation just described with the situation where there is a European welfare state that sets a floor to the unskilled wage. If the wage of the unskilled workers is fixed in terms of purchasing power (where it is assumed that spending on the two goods are in constant proportions), then this determines the relative wage and hence the factor inputs per unit of output. Relative demands are a function of the relative goods price. Assuming that the fixed relative wage of the unskilled is above that consistent with full employment, there will be unemployment of unskilled workers (who are still better off in financial terms). In this situation of fully integrated and costless trade, the intervention of the welfare state, for redistributive reasons, causes unemployment, and increased competition from newly-

[3] Skill-biased technological change "refers to any introduction of a new technology, change in production methods, or change in the organization of work that increases the demand for more-skilled labor relative to less-skilled labor at fixed relative wages" (Autor, Katz, and Kearney, 2008, page 310n).

[4] It may be noted that this is *sector-specific* technical progress, in contrast to the more usual assumption of *factor-specific* technical progress.

industrialising producers of the intermediate good has the effect of increasing unemployment.

In this way, we appear to have a unified explanation as to how the challenges to the labour market from globalization can have a differential effect on the United States and Europe. Standard international trade theory, in the form of the Stolper-Samuelson Theorem (1941), allows us to predict the US outcome, and, coupled with an assumption about the impact of the welfare state, we can see how the outcome in Europe may be different. As Krugman described the position, "the relatively generous level of welfare benefits has made workers unwilling to accept the kind of low-wage jobs that help keep unemployment relatively low in the US" (1994, page 1). Moreover, one policy conclusion follows immediately from this analysis. Raising the skill level of a country's labour force renders that country less vulnerable to the adverse effects of both globalization and skill-biased technological change. A country with a highly skilled labour force may indeed be fully specialised in the production of the advanced product or service. In that case, it can only benefit from globalization, since it is able to import the intermediate good at a lower relative price. The terms of trade turn in its favour. This conclusion appears to be fully in line with the strategy adopted by the EU, and other advanced countries, of prioritising investment in education: "equipping people with the right skills for the jobs of today and tomorrow" being one of the Europe 2020 initiatives.

In other respects, the policy conclusions reached on the basis of the standard trade model are discouraging. There is apparently a choice between two unpalatable outcomes to the challenge posed by globalization: either unskilled workers become unemployed or they see their real pay fall. While some people have drawn the conclusion that the European welfare state should be scaled back to reduce unemployment, it is clear that this is obtained at the expense of widening wage dispersion. Widening wage dispersion may in turn increase the number of people who are trapped in working poverty. Social exclusion in the form of unemployment may be replaced by social exclusion in the form of low pay. Experience with the decade of the Lisbon Agenda is not encouraging in this regard. As it has been described by Corluy and Vandenbroucke, there was no general conversion of employment policy success into a reduction in poverty:

> "Prior to the financial crisis, the Lisbon strategy could be regarded as a qualified success in the field of employment … On the other hand, though, the Lisbon strategy largely failed to deliver on its ambitious promise concerning poverty. Notwithstanding generally higher employment rates, as well as declining poverty in some Member States, other Member States saw poverty increase. In many Member States there was a standstill in the poverty record" (Corluy and Vandenbroucke, 2012, page 3).

In its recent report on *Employment and Social Developments in Europe 2012*, the Commission noted that

> "In-work poverty significantly increased in ⅓ of EU countries between 2006 and 2011, including in Germany (+2 percentage points), the Netherlands or Denmark where overall economic and labour market conditions were more resilient than in the rest of the EU. Factors include wage moderation and the reduction of working

hours of people in employment, notably due to the wide use of short term working arrangements" (European Commission, 2012a, page 43).

I return to short-time working in Section 3.

But is the "standard model" a sufficient basis for policy, or should it be reconsidered? Such a re-consideration has been underway in the field of international trade. Indeed, one influential paper has claimed in its title the irrelevance of the key theorem on which the conclusions drawn above are based: "Stolper-Samuelson is dead" (Davis and Mishra, 2007). These authors point to the danger that in applying such results "we come to believe that we have provided an answer even when clearly central aspects of the problem are addressed inappropriately" (2007, page 88).[5] Here I consider five major shortcomings, discussed in Sections 2 to 6.

2. Employment in a global context

The application of trade theory to understanding the challenge to European labour markets in effect went beyond the usual assumption that the world consists of two trading blocs. We were concerned with three blocs: Europe, the US and the newly-industrialising countries (NICs). However, as pointed out by Davis (1998 and 1998a), this formulation is inconsistent and misses an important point: the interdependence of Europe and the US. The analysis in effect treats two parallel universes: Europe trading with the NICs, and the US trading with the NICs. But all three blocs co-exist and co-existence modifies the conclusions.

We need therefore to consider a three-bloc model (Europe, NICs and US), and this has significant implications. If, in a unified analysis, the US and Continental Europe both produce the intermediate manufactured goods that face NIC competition, then the wage floor in Europe determines the relative goods prices. The minimum wage floor prevents the relative price from falling. The US is therefore unaffected by increased trade. Europe bears the brunt in terms of unemployment. European unemployment tends to prop up US wages, as in the title of the article by Davis (1998). Set out this way, the trade story becomes a consistent one. At the same time, it is clear that the conclusion is driven by the straitjacket imposed by the assumptions of the model, which "imposes an implausible degree of structure on the world economy" (Neary, 2001, note 3). What happens if we relax the assumptions? Does the role of trade become less all-powerful if we allow for a non-traded sector of the economy?

The most obvious non-traded sector is that of personal services. While some services are actively traded, for example via call centres located in developing countries, there are distinct limits to such outsourcing (as witnessed by the repatriation of such services in recent years) and for many services, such as delivery, there remains an essential local ingredient. The service sector may therefore be an important source of

[5] In their paper, they quote from the original letter from the editor of the *American Economic Review,* which praised the Stolper-Samuelson paper for its "brilliant theoretical performance" but nonetheless rejected it for publication on the basis that it does not "have anything to say about any of the real situations with which the theory of international trade has to concern itself" (see Deardorff and Stern, 1994, page xi).

growing employment, with the demand stimulated in part by the rising wages of the better-off, so that a key role is played by the income-elasticity of demand for personal services. As is noted in *Employment and Social Developments in Europe 2011,* "Given that over 70 per cent of the working population is employed in the services sector, services might be expected to have a sizeable influence … This was certainly the case in the decade preceding the crisis, when services accounted for virtually all growth at the top and bottom of the job-wage distribution" (European Commission, 2012, page 45, citing Fernández-Macias and Hurley, 2008).

The introduction of non-traded goods does not change the fact that world relative prices determine the relative wage rates, providing that both traded goods are produced (Davis and Mishra, 2007, page 92). But it does change the determination of the domestic price level, and hence the implications of a real floor to the unskilled wage. If we take a simplified version of the model where personal services are produced simply by unskilled labour (and in manufacturing unskilled labour produces the intermediate good, which is in turn an input, along with skilled labour, into the production of the advanced good), the existence of the non-traded service sector means that increased globalization can cause simultaneously a widening of the wage distribution in the United States and a rise of the unemployment of unskilled workers in Europe (Atkinson, 2008, page 14). At the same time, the existence of the service sector moderates the conclusions drawn earlier. The terms of trade improvement and the decline in the unskilled wage rate (lowering the price of services) both operate to increase the real income of skilled workers and hence increase their demand for services, which tends to offset the decline in demand for unskilled workers in manufacturing.

This analysis switches the spotlight to the demand side of the economy, highlighting the role potentially played by differences in consumer demand, where the United States has a larger demand for personal services (Freeman and Schettkat, 2005). Comparisons of Europe and the United States have tended to concentrate on the labour market, but the pattern of consumption can play an important role. The United States, with its greater role for market purchase of services, may find it easier to make medium-term adjustments to globalization and to technical change. Put the other way round, policy-makers in Europe should intensify efforts to stimulate household demand for services. This in turn means considering the whole portfolio of household activities, which brings us to the changing engagement of households with the market economy considered in the next section.

3. The changing nature of employment

The standard model is "standard" in another respect: the model assumes, implicitly, that employment takes the form of a regular full-time job. Yet people today are increasingly – voluntarily or involuntarily - in forms of non-standard employment, including part-time and short-time working. This may be a cyclical phenomenon, but there is also a secular trend as part of a move to greater labour market "flexibility":

> "atypical work is a type of work that is performed by what is often referred to as the flexible workforce. This is a large and growing group of workers, most of whom

> are women (over 80 per cent of the flexible workforce). Examples of atypical workers include part-timers (21 million people in the EU), those on fixed term contracts (14 million), homeworkers (10 million), or those in a large number of other arrangements, such as seasonal work, casual work, telework, family work, or self-employment. The main common characteristic of all such groups is that their working arrangements differ from those of the 'typical employee' (an imaginary person working full-time on an indefinite contract)" (Le Blansch, Muller and Wijntuin, 2000, page 29).

According to Gunther Schmid, "the last decades have seen an erosion of the traditionally defined 'standard employment relationship' through part-time work, fixed-term contracts, temp-agency work and self-employment" (Schmid, 2011, page 171).

The extent of this change in the EU varies across Member States. As is shown by Schmid, non-standard employment is relatively low (around 10 per cent of working age population) in the newer Member States of Eastern Europe and the Baltics. In contrast, the non-standard employment rate is high in the Nordic countries and – as is well known – in the Netherlands. In the middle, non-standard employment is around a quarter in the United Kingdom and "even in family centred or so-called conservative employment systems like Austria, Belgium, France, Germany, Italy, Spain and Portugal" (Schmid, 2011, page 175). In the majority (sixteen) of the twenty four Member States covered, the non-standard employment rate increased between 1998 and 2008, and in only four did it decrease. Since 2008, some forms of non-standard work have declined, such as fixed term contracts, but others, notably part-time work, have increased: "during the period when total employment contracted between 2008 and 2010, and the number of full-time workers shrank by 6.2 million, the number of part-timers was up by 1.1 million" (European Commission, 2012a, page).

The trend towards a more fluid employment relationship is found globally in advanced economies. The McKinsey Global Institute 2012 discussion paper on *Help wanted: The future of work in advanced economies* found that

> "managing employees and contract workers across the Internet, companies now have the ability to make labor more of a variable cost, rather than a fixed one, by engaging workers on an as-needed basis. Across the OECD (Organisation for Economic Co-operation and Development) nations, part-time and temporary employment among prime-age workers has risen 1.5 to 2 times as fast as total employment since 1990. … In our own surveys of US employers, more than one third say they plan to increase use of contingent labor and part-time workers in the years ahead, and we see a range of new intermediaries emerging to supply high-skill talent for short-term assignments" (McKinsey Global Institute, 2012, page 3).

They went on to say that "the jobs that will be created in the future are increasingly unlike those of the past" (2012, page 4).

The definition of non-standard employment covers both the type of contract (fixed-term, temporary etc.) and the extent of engagement at a point of time (part-time, self-employment, etc.). The former has been treated in models of labour market transition, as in the job-matching literature (discussed in Section 6) where there is a

probability of termination, but the latter – the extent of engagement - has rather different implications. I referred earlier to the (0,1) nature of the "modern employment relationship" that developed as part of the industrial revolution, and recent trends in labour market activity may be seen as a reversal of that process. While (0,1) employment still remains the case for the majority, we are increasingly moving to a situation where employment is more fractional: people are holding portfolios of activities, including paid employment, unpaid employment (such as internships or volunteering), self-employment, and caring (for children or the elderly). They are offering "slithers of time". The phenomenon is well captured in the title of a study of second jobs in the United Kingdom "And in the evening she's a singer with the Band" (Böheim and Taylor, 2004). This study found little increase in the prevalence of second jobs in the United Kingdom over the 1990s, but evidence for the 2000s showed that in the Euro area (17) the number of people in the Labour Force Survey reporting second jobs rose from 3.7 million in 2000 to 4.9 million in 2011 (Eurostat website, 2012, tps00074).

One immediate consequence of the trend towards more fluid employment relationships is that we need to reconsider the EU employment target. It is not sufficient to simply adopt a headcount measure: people with jobs. This aspect has been investigated in a recent paper by Andrea Brandolini and Eliana Viviano (2012). As they note, in a number of official EU statistics, the issue of part-time work is treated by reporting full-time equivalent employment rates, which assign each part-time worker a weight lower than one. For example, the ratio of average hours of part-time workers to average hours of full-time workers has been used in the *Employment Rates Report 1998*, which observed that "full-time equivalents measure the volume of employment while standard employment rates measure how many people have a job" (European Commission, 1998, page 8). Brandolini and Viviano (2012) propose, in place of the headcount employment level, a measure of work intensity defined on the basis of the months of employment and hours worked per month, normalised by the average annual hours of work of a person employed full-time throughout the year. Their findings show a rather different picture across Member States: "when we control for work intensity, the gap between Northern Europe and Southern Europe in the amount of labour supplied by individuals narrows. Differences are even smaller if we look at the household labour supply." (Brandolini and Viviano, 2012, page 12). The calculations do not tell us how work intensity indicators would have changed over time, but it seems possible that a move to an intensity-based definition of the employment target would be more challenging. If there is a move to more fractional employment, then more jobs are required to raise full-time equivalent employment.

The adoption of an employment target implies that such a target has normative content. It could be that employment as such is valued, and I return to this argument in Section 7, but a second – and different – line of argument is that a rise in employment contributes to raising household well-being. In the case of involuntary unemployment, this is evidently so, and the case for an unemployment target is uncontroversial. The same carries over, with fractional employment, to situations where part-time work is involuntary. For workers, non-standard employment may not be a matter of choice. As put by the International Labour Organisation, "there is a fundamental distinction to be made between voluntary and involuntary part-time employment: whether people deliberately choose to work part time or accept reduced hours of work simply because they cannot find

full-time employment. In the latter case, part-time work becomes a form of underemployment" (1997, pages 562-3). The evidence presented by the European Commission (2012a, Chart 21) shows that part-time work as "involuntary" in a relatively small proportion (less than 10 per cent) of cases in Belgium, Denmark, the Czech Republic and Germany, but was 30 per cent in France, 40 per cent in Latvia and over 60 per cent in Greece.

On the demand side, the choice by employers is influenced by the relative costs of employing full-time and part-time workers (or standard versus non-standard contracts). Here account has to be taken of tax and other policies, which may be tilting the playing field away from standard employment: "policies designed to promote part-time work by lowering its cost below that of full-time employment are likely to have the perverse effect of increasing the proportion of involuntary part-time workers, i.e. underemployment, with adverse consequences both social especially for women and other workers already at a disadvantage on the labour market and economic, depressing demand, growth and employment" (International Labour Organisation, 1997, page 578).

On the supply side, the opportunity cost is to be found in non-market household production. Paid employment is only one of the activities that determine the level of living of a household. It is stating the obvious to point out that there is a great deal of unpaid work that is crucial to the functioning of households, particularly those with children and those with elderly dependents. As was noted by the Stiglitz Commission, "many of the services people received from other family members in the past are now purchased on the market. This shift translates into a rise in income as measured in the national accounts and may give a false impression of a change in living standards" (2009, para 26). At the same time, the scale of household production remains substantial: the Stiglitz Commission estimated that household production amounted to about 35% of conventionally-measured GDP in France (average 1995-2006), about 40% in Finland and 30% in the United States over the same period (2009, page 36).

The role of household production has been much discussed in relation to the difference in hours spent in market work in Europe and in the United States. Freeman and Schettkat, for example, attribute "the greater time worked in the US to greater marketization in the US of traditional household production: food preparation, childcare, elderly care, cleaning houses" (2005, page 5). As they emphasise, in order to understand the aggregate difference, it is necessary to disaggregate. Disaggregation is necessary to allow for the fact that household production is differently substitutable with different marketed commodities and services, and that there is a differential impact of public policy. As has recently been studied by Ngai and Pissarides (2011), sectors are taxed and subsidised to different degrees: for example, health and social work are subsidised in all of the OECD countries studied, but to a considerably greater degree in Scandinavia.

Disaggregation is also necessary within the household. The article by Ngai and Pissarides assumes – in common with much of modern economics - that household decisions are made by a "representative agent" maximising a single utility function, whereas there is considerable evidence against such a unitary model of household behaviour. This is the conclusion reached by Browning, Chiappori and Weiss in their recent review of the empirical literature. A variety of alternative models of household decision-

making have been proposed, taking account of the individual interests of household members and their bargaining power. For example, participation in market employment may enhance bargaining power, with the consequence that there is an "inefficient" over-allocation of time to market work. In such models, there may be a role in the determination of the extent of home production for other factors apart from the degree of taxation or subsidy, and there will certainly be issues of the distribution by gender. Part-time work, for example, is much more common for women in many EU Member States. In 2011, according to the *Benchmarking working Europe 2012* report, "nine countries have at least every third woman in part-time employment … with shares of more than 40% - the UK, Austria, Belgium, Germany, and the Netherlands (76.4%). The Netherlands is the only country that has a substantial share of men in part-time work" (European Trade Union Institute, 2012, page 31).

Finally, we should note that employment has a number of dimensions apart from the hours spent. One dimension that is crucial to individuals is the degree of autonomy that they possess in their role as a worker: how much control do they have over their work and working conditions. This applies especially to families. It matters a great deal to the well-being of the family whether or not the parents can respond to home emergencies or can vary their input according to the rhythm of the school day and school year. For those with or without children, autonomy at work has been found to be positively related to health status: for example, the epidemiologist Michael Marmot (2004) has identified the psychic benefits of "being in control" of one's life. Marmot argues that we should make our society more participatory and inclusive in order to increase overall levels of health.

In this section, I have argued that we need to take a more nuanced view of employment and of decision-making. The macro-economics of employment, and employment targets, takes us inevitably into the micro-economics of the labour market and of household decision-making. Such a view may affect the way in which we evaluate performance, as is discussed further in Section 7, and the design of social protection, which is the subject of the next section.

4. The institutional structure of the welfare state

Economists have typically paid little attention to the institutional structure of the welfare state. I believe this to be a mistake, as argued in this section, which focuses on the design of the welfare state with regard to benefits for people of working age, specifically unemployment benefit. Unemployment benefit is important in view of the role that it has played in debates about labour market reform and because there is active discussion of the possibilities for such a benefit to be established at the EU level as a cyclical stabilisation instrument (discussed in Section 7). Unemployment benefit also serves to illustrate how assumptions made in economic analysis tend to ignore important institutional features. In the first column of Table 2 are listed the main characteristics of unemployment benefit as typically assumed in economic models. A person who is unemployed is simply assumed to receive unemployment benefit. As is spelled out in column 1 of Table 2, this means that the benefit is paid unconditionally and with no termination. The column is labelled "hypothetical", since it has little relation to real-world benefit systems. As noted in the Introduction, unemployment benefits were from

the outset designed with a strong element of conditionality. Table 2 shows in the second and third columns typical features of unemployment insurance (UI) and unemployment assistance (UA), as for example summarised for EU Member States in the MISSOC Comparative Tables on Social Protection, Section X.

In the real-world, in contrast to the assumption in most economic models, a person may discover on becoming unemployed that he or she is not eligible for benefit, either during an initial period or at all. The first reason is disqualification, which may occur either because the person is deemed to have quit their previous job voluntarily or because the person was dismissed on grounds of "industrial misconduct". This may lead to benefit not being paid for a lengthy period: for example, up to 26 weeks in the United Kingdom. The second reason, which affects UI, but not UA, is that the person may not satisfy the contribution conditions. For German UI (Arbeitslosenversicherung), the unemployed person must have been compulsorily insured for at least twelve months during the last two years. The rules may be quite complex: according to MISSOC, in the Netherlands

> "A person who has been employed for at least 26 weeks in the 36 weeks before the first day of unemployment (weeks' condition) qualifies for a three-month benefit. A person who has received wages for at least 52 days in four of the five calendar years preceding the year in which s/he became unemployed (years' condition) qualifies for a benefit payable for a number of months that equals the number of months in employment (with a maximum of 38 months)" (MISSOC, Section X, downloaded January 2013).

In the absence of contribution conditions, UA resembles the hypothetical benefit, and it may also be paid for an unlimited duration. But UA, like UI, is conditional on job search and on the acceptance of jobs offered. This may require, for example, the unemployed person to register regularly at an employment office and to provide evidence of job search activity. It may require attendance at training and counselling sessions. Sanctions may be applied where these conditions are breached or where a person refuses a job: for example in the case of Germany, benefits may be suspended for up to 12 weeks in the event of an unjustified refusal of a reasonable job. In Sweden, there is a reduction by 25 per cent of the unemployment benefit for 40 days if the applicant has refused a suitable job offer. A second refusal means a reduction by 50 per cent and a further refusal leads to the suspension of benefits (MISSOC, 2012, Section X).

Unemployment assistance may also not be paid to an unemployed person on account of the receipt of other income or ownership of assets or because he or she is living in a household where there are other sources of income or assets. This is why it is described as *assistance* rather than *insurance.* In the case of the United Kingdom income-based Jobseekers' Allowance, "all the income and savings of the family is aggregated, and the amount they are deemed to need to live on is determined by adding together the basic amounts and any premiums which apply. If the amount they have coming in as income is less than the amount the family needs to live on, they qualify for benefit" (MISSOC, 2012, Section X). This means that a person may find, on loss of job, that he or she is ineligible for UA on account of the earnings of his or her partner. In contrast, UI resembles other forms of insurance, in that the payment by the insuring body does not take account of the income of the recipient: it is unemployment insurance, not income insurance.

One response by economists may be that institutional detail is irrelevant. It could be irrelevant for two different reasons. The first is that the black-letter law is itself hypothetical and does not correspond to what happens on the ground. The conditions listed in columns 2 and 3 of Table 2 may not apply because they are not enforced. Administrators may have set out with good intentions but, it is argued, over time the operation of the schemes has become increasingly lax. The second possible reason is that the benefit rules have no impact on the actual economic functioning of the benefits system. Both of these arguments have to be taken seriously. It is evidently the case that even well-run benefit systems fall short of complete enforcement of the rules, and it is quite conceivable that the hypothetical version captures the essence of the economic impact.

A direct test is to consider the proportion of the unemployed who are receiving benefits. The hypothetical model assumes that this is 100 per cent, whereas if the various qualifying or disqualifying conditions are serious, then we would expect the proportion to be considerably below 100 per cent. The report on the *Social Situation in the EU 2008* investigated this issue on the basis of the research of the European Observatory on the Social Situation and Demography (European Commission, 2009). The information collected in 2006 for the EU as a whole (excluding Malta) showed that just over half (53 per cent) of those aged 25-49 who reported being unemployed for between one and three months during the previous year also reported receiving unemployment benefit; if we add those receiving another form of benefit, such as sickness, disability or social exclusion benefit, then the proportion rises to 60 per cent. Among those unemployed for more than 3 months, the figure receiving any of the types of benefit increases to 71 per cent for those unemployed for between four and six months, but then falls to 58 per cent for those unemployed for at least six months. The proportion receiving benefit varied a great deal across countries. For those reporting between one and three months of unemployment, the proportion receiving benefit of some kind ranged was over 90 per cent in Germany, Austria, the Netherlands and Finland. In these cases, then hypothetical pattern is close to reality – at least as far as coverage is concerned. But for the same group of unemployed in Estonia, Greece, Italy, the United Kingdom and Lithuania, the proportion was a third or less. The benefit systems fail to provide a comprehensive social safety net. We cannot simply assume that the unemployed receive benefit.

The reality of benefit receipt can in turn affect the economic impact of social protection; these are not irrelevant details. A first example is provided by the job search model that is now widely used in both macro-economics and micro-economics (and will be discussed further in Section 6). In this model it is assumed that an unemployed person is free to accept or reject job offers, and no account is taken of the possibility that rejection will involve the loss of benefit. Other models assume that new entrants to the labour force receive unemployment benefit, whereas we have seen that not to be the case with contributory unemployment insurance. A second kind of model that makes unrealistic assumptions about the working of unemployment benefit is the "shirking" version of the efficiency wage model advanced by Shapiro and Stiglitz (1984). Worker effort depends on the risk of being fired and the cost of being fired is assumed to be that the worker has to live on unemployment benefit. But dismissal for shirking can lead to disqualification from benefit, and we have to remember that employers may have an incentive to report job terminations as resulting from misconduct, since this can reduce

their employer liability. These considerations are under-scored by the recent literature on behavioural public economics. As expressed by Peter Diamond, "one of the key messages of behavioural economics is that context (also referred to as situation) matters in ways that are not recognized in standard modelling" (Diamond, 2008, page 1859). In the case of unemployment benefit, an important part of the context is the way in which these benefits are perceived both by recipients and by non-recipients. Public rhetoric that leads to recipients being stigmatised can cause those eligible for benefit to decide not to claim and those who do claim to feel themselves socially excluded. In the former case, the benefit system is failing to fulfil its objectives and is failing to perform a stabilising macro-economic function. In neither case is social inclusion being ensured.

The institutional structure of social protection is not set in stone. Indeed, I earlier noted that one of the factors underlying the introduction of social insurance was the need to underwrite the modern industrial employment relationship and, given that the employment relationship is changing, as argued in the previous section, we should be seeking to ensure that the form of social protection adapts to these changes. There are provisions for part-time unemployment in a number of Member States. These cover, for example in Austria, Germany, Ireland and Portugal, cases of short-time working. In some Member States, part-time work is explicitly covered. In the case of Finland, "a jobseeker is entitled to adjusted unemployment allowance (Sovitettu työttömyysetuus) if: he/she has accepted full-time employment lasting no more than two weeks, or he/she is in part-time work (max. 80% of full time work) through no choice of his/her own, or he/she has income for a small business activity of his/her own, which does not prevent accepting other work" (MISSOC, 2012, Section X). But in twelve Member States, the MISSOC entries for part-time unemployment benefit indicate "no special provision". In some cases this means that part-time workers are treated proportionately within the regular scheme, but it is evident that there are potential difficulties with regard to the definition of availability of work and the refusal of job offers condition.

Self-employment creates a number of problems for unemployment benefit, including the precise definition of the status of "self-employment". According to the study of atypical work for the European Parliament, "in most cases, individuals' employment status, whether employed or self-employed, is beyond dispute, but on occasion the distinction may be unclear. Some workers, for example homeworkers, may regard themselves as employees, while those providing them with work may consider them to be self-employed. In some countries special legal provisions have been installed to distinguish employees from the self-employed by their level of economic dependency on one commissioning party. If, for instance in the Netherlands, more than 50 per cent of one's income is derived from one and the same commissioning party, the latter is looked at as the de facto employer" (Le Blansch, Muller and Wijntuin, 2000, page 139). Member States differ considerably in the extent to which the self-employed are covered by unemployment insurance (as, for example, in the Czech Republic, Denmark, Finland and Hungary) or can voluntarily be covered (as in Austria and Romania).

In this section, I have argued that the design of social protection is important and influences its economic impact. What is more, the design needs to be continually updated to reflect the changing nature of the labour market. I have taken unemployment benefit as an illustration, since it is one of the key points of intersection between macro-

economics and social policy (pensions being the other main example) and since it is relevant to the proposals for an EU unemployment benefit discussed further in Section 7. Before that, I turn from the labour market to the capital market.

Table 2 Conditions for unemployment benefit

1.Hypothetical (as typically assumed in economic models)	*2. Typical real-world Unemployment Insurance (UI)*	*3. Typical real-world Unemployment Assistance (UA)*
Benefit paid irrespective of reasons for entering unemployment	Benefit refused where person enters unemployment voluntarily or as a result of dismissal for industrial misconduct	As UI
There are no prior contribution conditions	Receipt depends on satisfying past contribution conditions	As hypothetical
Benefit is paid for all days on an unemployment spell	Benefit may not be paid for an initial period	As UI
Benefit is unlimited in duration	Typically a limited duration and rate of benefit may decline over time	As hypothetical
No condition of job search is imposed	Benefit conditional on being available for work and engaging in job search	As UI
There is no penalty for the refusal of job offers	Refusal of job offers may lead to disqualification from benefit	As UI
There are no income conditions	As hypothetical	No entitlement where income or assets exceed specified limits
Benefit is unaffected by the circumstances of other family members	As hypothetical	Entitlement to UA depends on income and assets of other members of the benefit unit.

5. The capital market: factor shares and household wealth

Much current policy-making attention is focused on the regulation of financial markets at national and EU levels. It is therefore ironic that much less attention is being paid to the role of capital markets in the determination of economic performance and in the determination of household living standards. Yet for many years the roles of capital and labour lay at the heart of economic analysis. As David Ricardo famously remarked,

> "the produce of the earth—all that is derived from its surface by the united application of labour, machinery and capital, is divided among three classes of the community, namely, the proprietor of the land, the owner of the stock or capital necessary for its cultivation, and the labourers by whose industry it is cultivated. . . . To determine the laws which regulate this distribution is the principal problem in Political Economy" (Ricardo, 1817, page 1 in 1911 edition).

And this interest continued in the twentieth century: for example, the supposed constancy of the shares of capital and labour in national income (the factor shares) was discussed by Keynes (1939) and featured among Kaldor's stylized facts of economic growth (Kaldor, 1961).

Since the 1960s, factor shares have been downplayed. In part, this is because the relationship between the factor distribution of income and the personal distribution of income has become more complex. As described by Lydall,

> "Adam Smith, Ricardo, and Malthus took it for granted that landlords were rich, labourers were poor, and capitalists were somewhere in the middle. … Much of the discussion of the problem of distribution is still carried on in these terms, despite the fact that it is well known that many landowners are poor, many employees earn more than some capitalists, many property-owners work and many workers own property"(Lydall, 1968, page 2).

Not only do people now have multiple sources of income, no longer being identified as workers or capitalists, but much more importance attaches to the intervening institutions that stand between the factor distribution and the personal distribution, in particular the state, the corporate sector and bodies such as pension and life assurance funds. The property owned by workers is now to a considerable extent owned indirectly in the form of rights to a current or future pension. Put the other way round, in 1963 individuals owned more than half of domestically-owned United Kingdom ordinary shares, but by 2010 this had fallen to under 20 per cent (Office for National Statistics, 2012, page 6). In the opposite direction, the net worth of the state has declined. Before the onset of privatisation, the United Kingdom state had a substantial holding of productive assets, to be set in the balance against its obligations to pay state pensions.

Complexity means that there is no longer a straight read-across from income source to the living standards of households. But it does not mean that the factor distribution is without importance; rather we have to study the mechanisms in all their complexity. This is all the more important in that the share of labour appears to be falling in many OECD countries. Before the crisis, in 2007, the IMF noted that "over the past two decades, there has been a continued decline in the share of income that accrues to labor, especially in Europe and Japan" (2007, page 168). The European Commission equally reported that

> "The part of added value allocated to labour reached a historically low level in 2006. This trend is in particular the result of technological progress and globalisation. It may have a negative impact on social equity, economic efficiency and macro-economic stability. It is for this reason that developments towards a knowledge-based economy should be accompanied by employment and flexicurity policies that are particularly aimed at less qualified workers" (Summary of chapter in *Employment in Europe 2007*, European Commission 2007).

According to the 2012 Employment Outlook of the OECD,

> "In recent decades, the labour share, or the share of labour compensation (wage, salaries and benefits) in the total national income, has been declining in almost all OECD countries. The median labour share dropped to 61.7% in the late 2000s, from 66.1% in the early 1990s and in some countries this decline began over 30 years ago" (OECD, 2012, page 110).

Over the recent crisis, according to the IMF, "during the recession, profits were the component that contributed most often to the decline in income, which caused the labor share to increase. During the recovery, although all components of GDP increased, profits rebounded quite strongly in most economies, leading to a decline in the labor share" (Jaumotte, 2012, page 1).

All of this points to the need for our macro-economic perspective to incorporate capital. To the two factors of production in the standard model – skilled and unskilled labour – we have to add capital. Is it the case that the rise in the profit share can be attributed to the same causes as the rise in the skill premium? Does skill-biased technological change favour capital as well as skilled workers? Is it capital-deepening rather than skill-biased technological change that has hurt unskilled workers? The move to a three-factor model does indeed change the analysis. Indeed, Stokey described the standard model as "anomalous" (1996, page 422). She notes that the conclusions regarding the impact of globalization should apply to trade between the "old" and "new" Member States of the EU, with the skill premium falling in the latter countries. Yet, she argues, this did not happen. The same applies to two-factor analyses that focus on labour and capital. Many years ago, James Meade in his book, *Efficiency, equality and the ownership of property,* identified the problem posed by technological change reducing the opportunities for workers and raising the share of profits. He referred to "automation", whereas today we refer to "ICT", but his book, published in 1964, was very prescient. At the same time, he did not consider wage dispersion. He posed the analysis in terms of labour and capital; today we analyse growing inequality in terms of skilled and unskilled labour. In my view, we need all three factors.

A three-factor model, with skilled and unskilled labour and capital, is necessary to highlight both the weakening position of unskilled labour in the light of technological change/globalisation and the possible secular weakening of the position of labour relative to capital. Both of these can have profound distributional consequences. In order to explore this further, we have to examine the patterns of substitutability and complementarity between factors. There is a presumption, dating back to Griliches (1969) of complementarity between capital and skilled labour, whereas capital and unskilled labour are assumed to be substitutes. This, in turn, means that we have to specify how these are measured, and this is much more complicated with three or more factors (as is brought out by Blackorby and Russell, 1989). In the two-factor case, the effect of changing wages or profit rates on the shares in total income depends simply on whether the elasticity of substitution between the two factors is greater or less than one. (The elasticity measures the response of the relative quantities to changes in the ratio of the factor prices.) Where the elasticity is equal to one, then the factor shares are constant – the famous Cobb-Douglas case. In that case, a ten per cent rise in the wage premium causes a ten per cent fall in the quantity of skilled labour employed. Where the elasticity is greater than one, a rise in capital intensity (the capital-labour ratio) is associated with a rise in the profit share – as observed in recent decades.

Where there are three (or more) factors, it is possible to define partial elasticities in the same way between any two factors, but the comparative statics of income shares depends on which of the two factors is changing in price: we can no longer focus just on the relative price of the two particular factors. This is because there is always the third factor in the background. If we look at the elasticity between skilled and unskilled labour, then a rise in the skilled wage also changes its ratio to the cost of capital, leaving the relative costs of unskilled labour and capital unchanged. But a fall in the unskilled wage changes its ratio to the cost of capital, leaving the relative costs of skilled labour and capital unchanged. The effects on the share of capital may be quite different.

The move to a three-factor world may change the way in which we view the increased skill premium. The study by Krusell, Ohanian, Ríos-Rull and Violante (2000) used a two-level production function, with two types of labour and two types of capital, to examine the United States experience over the period 1963 to 1992. The fitted production function, with estimated parameters that are consistent with capital-skill complementarity, predicts competitively determined factor prices that are "able to capture the behavior of the relative income shares of skilled and unskilled labor closely" (2000, page 1041). As they say, they find that "capital-skill complementarity … alone can account for most of the variations in the skill premium over the last 30 years" (2000, page 1029). There is no need to bring in skill-biased technological change.

But what about the capital share? Krusell, Ohanian, Ríos-Rull and Violante state that the model is "consistent with the relative constancy of aggregate labor's share of income" (2000, page 1041). Labour's share, however, has not been constant: the fall in the United States is evident from their Figure 6, and it has been more marked in other OECD countries. To explain the fall in the wage share, other studies have therefore combined capital-skill complementarity with technical progress. Arpaia, Pérez and Pichelmann (2009) construct a model calibrated to data for nine EU Member States over the period 1970-2004. They find, like Krusell et al (2000), a high degree of substitution between capital and unskilled workers and complementarity between capital and skilled workers, but conclude that capital deepening was accompanied by capital-augmenting technical progress: "most of the declining pattern in labour shares in nine EU15 Member States is governed by capital deepening in conjunction with capital-augmenting technical progress and labour substitution across skill categories" (2009, page 2). They go on to say that "not only has the labour share fallen over the past three decades, but it may decline further in the future as a result of capital accumulation and an increasing share of skilled labour in total employment" (2009, page 37).

Armed with this richer view of the macro-economic developments, we need to examine the implications for the distribution of household incomes.

Household wealth

The implications for households of the rise in the share of capital in national income depend on the ownership of property. Here the twentieth century saw a remarkable U-shaped time-path, particularly marked in Europe (Piketty and Zucman, 2013). Private wealth in Europe was around 6 times national income in 1910, and fell to less than 2½ times in 1950. Then, in the past 60 years, it has risen sharply to reach more than 5 times national income. This suggests that private capital is "back" and that the low wealth-income ratios observed in Europe in 1950s-1970s were an anomaly.

The rise in the wealth-income ratio could be the result of life-cycle savings and demographic developments: as life expectancy increased, and retirement ages fell, so the target ratio of assets to income would have risen. However, life expectancy at age 65 increased steadily over the twentieth century. Nor is the timing right for the rise in the wealth-income ratio to be explained by earlier retirement: in the United Kingdom, for example, the average effective age of retirement for men in the UK fell more between

1950 and 1980 than between 1980 and 1995, whereas the wealth-income ratio fell from around 4 in 1950 to under 3 in 1980. The U-shaped pattern since 1950 must reflect other factors. One obvious explanation in the case of the United Kingdom, and in a number of other countries, is provided by the ownership of housing and rising house prices. Owner-occupation increased rapidly over the twentieth century. Insofar as this was accompanied by a fall in private landlords, there was no change in the sector of ownership. Indeed, in the United Kingdom, there was an increase in state-owned housing and a fall in personal sector ownership. This in part explained the downward section of the U-curve. The fall was reversed following 1979 by the sale of council houses as part of the Thatcher programme of privatisation. The total personal ownership of houses rose, explaining in part the upward section of the U shape, and was re-inforced by the relative rise in housing prices that took place in the later part of the period. In 1970 house prices in the United Kingdom were no higher relative to consumer prices than in 1948, but between 1970 and 2009 house prices doubled in real terms.

Housing is not, however, the only factor accounting for the rise in the personal wealth-income ratio. In seeking to understand the other factors in operation, and taking the United Kingdom as a case study, it is instructive to look at total *national* wealth, expressed as a ratio to net national income. The ratio rose in the first part of the period but then stabilized. In 2010, it was at much the same level as in 1979. The recent rise in the personal wealth-income ratio must therefore have come at the expense of falling net worth of other sectors. In the same way, in the earlier period, the rise in national wealth before 1979 must have been associated with a rise in the net worth of other sectors, since the personal wealth-income ratio was falling. Here one of the most important elements is the net worth of the state. During the period before 1979, the public sector in the United Kingdom moved from a position where the national debt exceeded the value of assets by an amount of around half national income to a positive position, with a wealth-national income ratio of 1.3. In the next 30 years, as a result particularly of the privatisation programmes, the net worth of the state declined back to zero. In effect, the state transferred title in much of its real assets to individual households.

The rise on the personal wealth-income ratio means that capital has come to play a larger role in determining the living standards of households. The distribution of wealth is therefore more important. Here too we have seen a U-shaped time-path in a number of European countries. A long period of high rates of income taxation, coupled with high rates of taxation on the transmission of wealth, reduced the capacity of large wealth-holders to sustain their pre-eminence. Where the key factor is the difference between the "internal rate of accumulation" (the savings rate times the rate of return net of taxes) and the rate of growth of the economy, then taxation of both income and wealth transfers caused the share of the top 1 per cent of wealth-holders to fall. Alongside this was the growth of "popular wealth" owned by the bottom 99 per cent. The trajectory has however changed in the final part of the twentieth century. After reviewing the evidence about the changing distribution of wealth in seven countries, Ohlsson, Roine and Waldenström concluded that

> "the development over the twentieth century seems unambiguous. Top wealth shares have decreased sharply in all countries studied in this chapter with the exception of Switzerland, where the fall has been small. The magnitude seems to

be that the top percentile has decreased its share of total wealth by about a factor of 2 on average (from around 40–50 per cent in the beginning of the century to around 20–25 per cent at the time of writing). It also seems that the lowest point in most countries was around 1980 and that the top percentile wealth share has increased in most countries since then" (2008, page 62).

As a result, the top 1 per cent of wealth-holders own around 20-25 per cent of total personal wealth, and this degree of concentration contributes significantly to the share of the top 1 per cent in total income. If this wealth were less unequally shared, then this could contribute to raising living standards at the bottom of the distribution.

The rise in the personal wealth-income ratio, and the upturn in the degree of concentration, mean that the role of capital income warrants more attention than it has typically received in the past. This is re-inforced by the recent finding that the inheritance of material wealth may be returning. In France, this has been shown in a recent study by Thomas Piketty (2011). He examines the amount of wealth transferred each year, expressed as a fraction of national income. A hundred years ago, this was about 20 per cent, but the amount inherited fell over the twentieth century until it was some 3 per cent in the 1950s and 1960s. Estates and gifts inter vivos then began to rise and total transmitted wealth as a proportion of national income has been "multiplied by a factor of about 3–4 between the 1950s and the 2000s" (Piketty, 2011, page 1073). The evidence for the United Kingdom is less dramatic but shows that the ratio of bequests to national income has risen since 1977 (Atkinson, 2012). These figures focus on the inheritance of material wealth, but family wealth also facilitates the transmission of human capital. Access to high-status educational institutions, with their combination of academic quality and personal networks, is influenced by family background, and social mobility remains limited.

In short, the capital market is an important part of the story. Introducing capital is necessary to understand the evolution of the macro-economic distribution, and wealth is increasingly significant in determining household living standards. The Europe 2020 objectives focus on the labour market, but redistribution of wealth could contribute – both directly by raising incomes and indirectly by equalising chances in access to education and employment.

6. Market power

The standard model of section 1 is an application of the theory of general competitive equilibrium, a powerful body of economic theory but one that gives no role to real world institutions such as corporate firms and trade unions that do not act as price-takers. Nor does it allow for the possibility that individuals on their own may have bargaining power. Market power is important in the labour and capital markets that I have been considering and in the product markets that have not yet been explicitly treated in this essay. In this section, I outline some of the ways in which market power is relevant to ensuring equitable distribution and social inclusion.

Factor shares and bargaining power

Following directly on from the previous section, we can see that market power is potentially relevant to the determination of factor shares. The factor shares discussed there are the competitive market shares, where firms hire workers up to the point where value of the marginal product is equal to the wage. In valuing the output, firms were assumed to take the market price as given, just as they take the wage as given. If, on the other hand, the firm possesses a degree of monopoly power, m, in the product market, then selling more reduces the price received, and workers are hired up to the point where the marginal revenue product is equal to the wage, where the marginal revenue product is (1-m) times the marginal product.[6] (Firms are assumed to be monopolistically competitive, not simple monopolists.) In this way, the share of labour is reduced by (1-m). As argued by Kalecki (1939), the share of labour in national income is governed by the average degree of monopoly in the economy.

On the other hand, it is not just firms that have market power. In his final article, on the "Class struggle and the distribution of national income", Kalecki argues that "under perfect competition the share of wages certainly will not change when wage rates alter. However, an oligopolistic market structure, excess capacities, and mark-up pricing are the basis for a successful wage bargain. The more powerful the trade unions are, the more they will be able to restrain the mark-ups and thereby to increase the share of wages in national income" (1971, page 9). The impact on the labour share does, however, depend on the way in which the labour market operates. As spelled out by Bentolila and Saint Paul (2003), where the unions set wages and employers determine employment (the "right-to-manage model"), the relationship described in the previous paragraph still applies, with labour employed until the marginal revenue product is equal to the wage. But where workers and employers bargain over both wages and employment (the "efficient bargain model"), and the outcome takes the form of the Nash solution, the share of labour increases with the bargaining power of unions, parameterised as ß. The negotiated wage is (see Bentolila and Saint Paul, 2003, section 2.4.2) a weighted average of the average product of labour (with weight ß) and its opportunity cost (with weight (1-ß)). It is, furthermore, possible that there are differences between skilled and unskilled workers, as discussed by Arpaia, Pérez and Pichelmann (2009), where there is a higher degree of unionisation among unskilled workers. In that case, the labour share may decline as the ratio of unskilled to skilled workers falls.

Declining bargaining power of trade unions may be one cause of the falling share of labour in national income. As is shown by Carley, measures of trade union density have been decreasing in Europe in the recent past:

> "For most countries examined, the latest figures produced by this crude calculation method can be compared with data for 2003 (or the nearest year), revealing a clear downward trend in trade union density across Europe. Of the 24 countries for which the relevant information is available, all but two – Belgium and Greece – experienced a decline in density between 2003 and 2008" (Carley, 2009, page 23).

[6] Where firms are monopolistically competitive in the fashion of Dixit and Stiglitz (1977), the mark-up is a decreasing function of the number of firms, and hence of the scale of the market (see Atkinson and Stiglitz, 1980, pages 210-211).

At the same time, Carley emphasises that such calculations of trade union density are in themselves "very problematic". Moreover, density is only one dimension. As is extensively discussed by Jelle Visser (2012), the impact of collective bargaining depends crucially on the institutional structure, which varies considerably across countries, and cannot be adequately captured by a single macro-economic variable such as trade union density. It is perhaps for this reason that the empirical analysis finds little clear evidence. The IMF (2007) concluded that changes in trade union density had no significant effect on labour shares. Bentolila and Saint Paul (2003), who used a variable for labour conflicts, found only a "possible" effect. Arpaia, Pérez and Pichelmann find that "the unskilled workers' bargaining power does not provide any further explanatory power to labour share movements" (2009, page 32).

Labour market search

Bargaining power is not limited to firms and unions, as is shown by search and matching models of the labour market that involve individual workers and employers. Frictions in the labour market mean that, while ex ante competition may drive down the expected value of filling a job vacancy to the cost of its creation, ex post the matching of a worker to a vacancy creates a positive surplus or rent. The worker offered a job has a degree of bargaining power, since if he or she rejects the job offer, the employer has to return to the pool with the risk that no match can be secured. The magnitude of the risk, and hence the worker's leverage, depends on the tightness of the overall labour market; the worker's leverage also depends on the cost of remaining unemployed. The assumption typically made in the search literature (for example, Diamond (1982) and Pissarides (1990)) is similar to that described above: the surplus is shared between employer and worker in proportions ß to the worker and (1-ß) to the employer, where the parameter ß measures the bargaining power of the worker and determines the share of the worker in value added. The worker's share is also an increasing function of the level of unemployment benefit, although it should be noted that these models ignore the institutional features of real-world unemployment insurance discussed in Section 4.

Labour market frictions are important here because they introduce for the first time in our analysis a reason for the existence of unemployment other than the payment of unemployment benefit. In the standard model of Section 1, as applied to the "European case", unemployment only arose on account of benefits (placing a floor under the unskilled wage). In contrast, in the search model people will be unemployed even in the absence of social protection. It is true that in the search model a reduction in social protection leads to a reduction in equilibrium unemployment/increase in labour market tightness, as does a reduction in ß, the bargaining power of workers. Both of these lead also to a fall in wages, so that the workers bear part of the cost of adjustment, potentially augmenting the risk of in-work poverty. We are led back to the disappointment that higher employment may not end social exclusion. But the analysis reveals that there are other possibilities. The equilibrium level of unemployment can also be reduced by improving the

efficiency of matching,[7] by reducing the risk of job terminations, by cutting the costs of job creation, and by reducing the rate of discount applied by employers (see, for example, Atkinson, 2003, equation 10). Where these measures are brought into play, unemployment can be reduced, while wages are increased – in contrast to the strategy of cutting social protection.

One conclusion that we can draw is that, when seeking to combine economic progress with social inclusion, it is important to remember that there are three sides to the triangle: workers, employers and the state. Attention tends to be directed at the need for flexibility by workers, but employment can be promoted by policies that benefit workers and avoid the danger of simply replacing unemployment by in-work poverty. I would stress in particular the role of the – little discussed – discount rate applied by employers when evaluating employment decisions. If employers have become increasingly short-term in their horizons, raising the discount rate, then this explains the low rate of investment in private sector job creation. Here the interaction between the labour market and the capital market is important. If managers are focused on the share price of their firm, and if stock markets reward job lay-offs but not job creation, then the current interaction is highly inimical to Europe's employment objectives.

Supplying the market and social exclusion

The exercise of market power by monopolistically competitive firms means that they are restricting output to secure a higher mark-up. There are immediate consequences for the levels of living of consumers, which are in turn relevant to the social inclusion objective. Specifically, the severe material deprivation element of the Europe 2020 indicator means that a household lacks - because it cannot afford them - at least four of nine items, which include being able to keep their home adequately warm, having a telephone, a washing machine, a colour TV or a car, and avoiding arrears on rent or utility bills. Ability to "afford" them depends on the income of the household, but also on the terms on which these goods and services are supplied. In a number of cases, the terms of supply are determined by private enterprises, often enterprises – such as utility companies - that have some degree of market power. There is no reason to suppose that profit-maximising companies will set their prices or tariffs at levels that can be afforded by the poorest consumers. A firm may well calculate that, while raising the price will put the good or service outside the reach of the poorest, this is more than offset by the gain in revenue from better-off consumers (Atkinson, 1998, section 2.3). A power company for instance may set the fixed element of its tariff at a level that excludes those with the lowest incomes. A supermarket may charge higher prices at inner-city stores than at out-of-town hypermarkets (Somekh, 2012). The decision depends on the number of consumers in different groups, and in this way the options open to the poorest are related to the distribution as a whole. As a society gets richer, so suppliers will cease to supply goods of basic quality, such as cheap cuts of meat, thus making it impossible for some households to have "a meal with meat, chicken or fish every second day" (fourth EU material

[7] The *Employment and social developments in Europe 2012* report draws attention to a possible movement in the reverse direction, in the form of a deterioration in the matching process since 2010 (European Commission, 2012a, page 29).

deprivation indicator). People are excluded by the decisions of firms and other suppliers. Moreover, the range of goods and services regarded as necessary is likely to grow. For example, in a modern economy access to financial services is increasingly a pre-requisite to participate in society. Hence the concern about the withdrawal of bank branches from poor neighbourhoods.

The lesson for tackling social exclusion is that we need to look, not only at the labour and capital markets, but also at the product market. Consideration should be given to the supply-side of markets providing goods and services that enter the indicators of material deprivation: concerned with food, housing, lighting, heating and communication. Regulation has in the past sought to ensure that the poor were served. In the United States, "'Universal Access' has been a historical commitment of the telecommunications industry and its regulators" (Gillis, Jenkins and Leitzel, 1986, page 35). In today's EU, social inclusion policy requires action across a wide range of Directorates.

7. Future directions for policy: Thinking outside the box

The standard view of the future of the EU labour market – the twin challenges posed by globalization and skill-biased technological change – leads to the policy directions on which the EU has focused, notably education/up-skilling and labour market reform. In this paper, I have argued that the standard view needs to be enriched to take account of important current and future developments. Enrichment is valuable because it enhances our understanding but also because it points to new policy directions. In this section, I outline some of these possible directions. Some proposals take us far beyond those at the moment on the table, and they may therefore be dismissed as politically infeasible. However, I have written the paper on the assumption that the aim of these Fellowships is to encourage "thinking outside the box".

Services and the demand for labour

The first area concerns the demand side of the labour market. Policy has tended to focus on the supply side of the labour market, but equally important are the drivers of demand. One of the lessons from section 3, which extended the standard economic model to a richer sectoral treatment of production, is that we need to give greater emphasis to the role of service sector employment. Important parts of the service sector are less open to global competition and offer employment opportunities to a range of different skill levels.

In considering the scope for further expansion of service sector employment, though, two sets of considerations are suggested by the earlier analysis. One is the impact of taxes and subsidies, and what can be achieved at a time of fiscal retrenchment. The major taxes imposed in Member States – income tax, social security contributions and VAT – all serve to create a wedge between the cost of purchasing market services and the cost of home production. But we should not conclude that this is an argument for fiscal retrenchment to be concentrated on the spending side of the budget, since the expansion of market employment in services (for example in Scandinavian countries) appears to have

been achieved through the subsidisation of these services. If austerity measures raise the cost of such services – either through increased charges or through the withdrawal of services provided free – then there may be negative effects on employment. Even in the absence of an explicit objective of raising market employment (see below), such subsidies have a clear rationale in terms of the optimal design of taxation (Sandmo, 1990 and Kleven, Richter and Sørensen, 2000).

The second consideration is that the expansion of service sector employment depends on decisions within the household (and about household formation), particularly given the more fluid nature of employment described in Section 3. Despite recent research we know relatively little about such decision-making and policy interventions to encourage service market employment raise a number of questions. There are questions of a positive nature about the likely impact of interventions and questions of a normative nature about the objectives, including most importantly a gender perspective.

A target for activity not employment?

The second area concerns the nature of employment and the EU employment target. The EU is aiming by 2020 to have in employment 75 per cent of those aged 20 to 64, but once we recognise the more fluid nature of market work, and the increasing significance of part-time employment, of unpaid employment, of multiple jobs and other developments, this target becomes increasingly open to question. Employment is undoubtedly important, but we have to examine the underlying motives.

The most evident reason for increasing employment is to increase output. The US has a higher Gross Domestic Product per head than that in the EU, because, it was argued at the time of the Lisbon Agenda, at least in part, of a higher input of labour. If that is the justification, then it is total hours of work that matter, and not counting the number of people in employment. As discussed in section 3, we need to convert the employment target to one based on full-time equivalent workers. Expanding part-time employment should be given a weight less than 1. But we should go further. If increasing output is the objective, then it is not evident why a distinction should be made between marketed and non-marketed output. Why should we not include un-remunerated employment?

It may be that governments are concerned with marketed output for fiscal reasons: it is marketed output that provides the tax base. Interns are not contributing to solving the fiscal problems of their countries. But if the concern is genuinely with output, then employment should be defined to include interns and volunteers. In the case of personal care services, for example, where output is measured by the clients aided, it is surely irrelevant whether the services are provided by paid staff or by volunteers working for a charity. Should we however go beyond this and include home production? Should not the private carer be counted? Here there may be an argument that caring outside the home involves a degree of inclusion in society that may not be realised in the home (particularly where the latter is involuntary). There are also likely to be problems in validating measures. In the case of caring, where there is an identifiable output, a measure may be possible, but other forms of home production may be less easily verifiable.

If therefore we move to a measure of "activity", rather than employment, then we need to determine the activities that qualify, which may include unremunerated work but may exclude home production other than caring.

Smart design for social protection

There is no doubt social protection in Europe is an essential element in combating poverty and social exclusion. Equally, EU policy-makers have been right to emphasise that social protection in the EU requires reform. There are aspects of social protection that are counter-productive and that stand in the way of achieving our economic goals. In this paper I have argued that it is possible to combine these two objectives. Social and economic policy can be complementary, not in competition.

In this section I consider two – radical – proposals that would make a reality of this ambition, and contribute actively to the attainment of the Europe 2020 social inclusion objective. Both are discussed in the recent report on *Employment and Social Conditions in Europe* (European Commission, 2012a, page 62). The first is an EU-wide unemployment benefit. This is far from a new idea, having been proposed – without success - by the Marjolin Report in 1975 and supported by the MacDougall Report in 1978 (see Leibfried, 1993, page 153 n24). The Marjolin Report devoted considerable space to the proposal, and it is worth quoting in full their introductory paragraph:

> "A Community initiative in the unemployment field is particularly opportune, for it will have beneficial effects on the economy and society as a whole. Without waiting for ambitious programmes of generalized harmonisation to become operative, one definite step in this direction might be to prove before public opinion that Community solidarity is a reality. Moreover the size of the problem posed at present for the member States by unemployment justify the effort to find appropriate means at Community level to enable the Community to provide assistance in this way" (Marjolin, 1975, page 34).

The proposal was endorsed by the MacDougall Report:

> "Apart from the political attractions of bringing the individual citizen into direct contact with the Community, it would have significant redistributive effects and help to cushion temporary setbacks in particular member countries, thereby going a small part of the way towards creating a situation in which monetary union could be sustained" (MacDougall, 1977, page 16).

Fast forwarding a third of a century, the proposal has been put back on the table in the report to the December 2012 European Council Meeting on the Roadmap *Towards a Genuine Economic and Monetary Union* (Van Rompuy, 2012). Under the heading, "Options for the shock absorption function of the euro area fiscal capacity", it is suggested that at the microeconomic level this could take the form of unemployment insurance:

> "In this case, the level of contributions/benefits from/to the fiscal capacity would depend directly on labour market developments. In this scenario, the fiscal

capacity would then work as a complement or partial substitute to national unemployment insurance systems" (Van Rompuy, 2012, page 12).

The proposal has been spelled out further by Commissioner Andor. In October 2012, he described the proposal as follows:

> "an EU-level unemployment insurance structure can be a logical element in this new [fiscal solidarity] framework as an automatic stabiliser mechanism effective in the short-term. We need and must study possible set-up of such a European unemployment benefit scheme as we develop the next phase of Economic and Monetary Union. Such an automatic stabilisation mechanism could also make mobility a more credible option for European workers and job seekers. … This is not a threat to the national social protection systems. It is a tool to prevent social protection from spiralling to the bottom. A European unemployment benefit a scheme would act as an automatic stabiliser by temporarily reducing the social public spending of the countries most affected, without introducing long-term transfer flows. It could help to dampen fluctuations in real GDP, in case of asymmetric shocks affecting some parts of the EU more than others (insurance function), and maybe also if a symmetric shocks affect everybody (stabilisation function). Such a scheme would leave most of the stabilisation function of government spending and even of spending on unemployment benefit at national level. The EU-level scheme would represent a supplement, or perhaps a basic provision, which would then be topped up by the Member States as they so wish. Some form of harmonised coverage/eligibility would probably also be necessary" (Andor, 2012, pages 2 and 3).

In considering how this can be developed, a key issue of institutional design is that raised in the final two sentences: the relation with existing national systems of unemployment benefit. (This issue was discussed in the Marjolin Report, 1975.) It is assumed here that Member States would be expected, as a matter of good faith, to maintain their national benefit systems: i.e. they would not simply reduce their national benefits by the amount of the EU-benefit. But there remain crucial questions concerning the relative roles of the EU and Member State benefits. An EU "supplement" and an EU "basic benefit" are quite different; indeed they may be seen as polar opposites. At one extreme, eligibility for the EU-level scheme could be determined entirely by the existing national unemployment benefit provisions, with the EU-benefit adding x per cent or €X to the existing national entitlement. At the other extreme, an EU-level benefit would be paid as a separate benefit under EU-conditions, with Member States acting as the agents of the EU to determine eligibility and make payments. Neither seems satisfactory as an immediate way forward. The first version would leave unresolved the present problem of incomplete coverage; the second version would require the negotiation of the full set of rules covering eligibility (such as those concerned with availability for work, and refusal of job offers). Both versions would raise issues of integration with national means-tested benefits. Member States may leave their unemployment benefit schemes unchanged, but, unless there is a specific exemption, the operation of income-tested benefits may automatically reduce the payments made under unemployment assistance or housing benefits or other benefits to which an unemployed person is entitled. Where this happens,

the EU scheme is providing budgetary aid to the Member State and making no direct contribution to reducing income poverty.

An intermediate path seems the best way forward. As Commissioner Andor notes, some degree of harmonisation is required. In my view, this is more likely to be achieved if the EU benefit takes the form of unemployment *insurance* than if the benefit is income-tested, as with unemployment assistance. This judgment is based on two main considerations. The first is that the conditions for unemployment insurance are substantially simpler than those involved in a test of means: they are individually based and do not require an income and asset assessments. The second is that we have seen in a number of Member States a move in recent years away from individual-based contributory social insurance to household-based income-tested assistance for the unemployed. This move was justified by reference to "better targeting", but the policy contains serious flaws. It weakened the link between social security contributions and potential benefits. People came to view contributions as little different from taxes. Ironically, at the same time, governments have switched to relying more heavily on contributions as a source of revenue. What is more, the household-based assessment means that the unemployment of one household member reduces the incentive for other earners in the household to take up work or to increase their earnings. The shift to "greater targeting" has had the unintended effect of reducing work incentives. If these drawbacks are now understood, Member States may be more willing to reconsider the role for unemployment insurance, and see the EU scheme as a vehicle for restoring the insurance basis.

Following this line of argument, the most straightforward EU scheme could take the form of extending the duration of unemployment insurance beyond the current national limits. As such it would not be focused, as suggested by Van Rompuy (2012), on short-term unemployment, but it would closely parallel the federal extended Unemployment Insurance benefits in the United States. When unemployment reaches a threshold level, US states are required by federal law to extend benefits. In 2013, under the Emergency Compensation Program, benefits are paid according to a tiered scale: for example, up to 54 weeks where the state unemployment rate is 6 per cent or higher, reaching a maximum of 73 weeks where the unemployment rate is 9 per cent or higher. The lessons for the EU from the United States have been considered by Dullien (2007), who concludes that "the idea of having "extended benefits" with automatic triggers which increase the benefit duration in an economic downturn seems extremely sensible" (2007, page 33).

Extended unemployment insurance would help address the problem of non-coverage, but other aspects would require action on the other conditions. Here the EU scheme could, more ambitiously, seek to harmonise conditions such as those regarding "voluntary entry" into unemployment, availability for work, and refusal of job offers. An alternative would be to re-open the idea of a X+1th state.[8] In the 1980s-1990s, this was proposed by Danny Pieters: the EU would constitute itself as an additional state (at that time the 13th state) providing an autonomous social security system. As such, Europe

[8] In the field of pensions, such a proposal was made by Mario Monti in his 2010 report on the Single Market: "a 28th regime for supplementary pension rights. This would be a regime entirely set by EU rules but existing in parallel to national rules, and thus optional for companies and workers. A worker opting for this regime would be subject to the same rules for its non statutory benefits wherever it goes in Europe" (Monti, 2010, page 58).

would move, in the terms of Stephan Leibfried and Paul Pierson (1995), from being a fragmented welfare state to being a segmented welfare state. Initially envisaged for migrant workers, for whom it could be either voluntary or compulsory, a European Social Security System could be opened on a voluntary basis to all EU citizens. As such, it would provide a benchmark for national systems. It is also possible that such a newly designed system could accommodate the pattern of changes in the labour market, discussed in Section 3, as people are increasingly engaged in a portfolio of activities rather than a single full-time employment.

Our aspirations for reform of social protection should not however be limited to unemployment benefit. At the same time, we have to recognise that the scope for action at the EU level is limited by considerations of subsidiarity and by the fact that we are faced with Member States with very different institutions and levels of income. The long-standing nature of this issue suggests that its resolution may have to be found in new forms of social security. Of these, perhaps the most discussed is the idea of a "citizen's income or a "basic income", whereby a universal benefit is paid individually to all citizens. A less radical description is to say that the basic benefit would represent the cash value of the income tax exemption for a single person. (The cash value would be set at t times the exemption, where t would be an average rate of tax.) It would replace the income tax exemption, but have the advantage of providing for those below the tax threshold who do not currently obtain the full value of the exemption. The extension would in part be paid for by the fact that the basic income would be the same for all, whereas an income tax exemption is worth more to those with higher incomes paying a higher marginal rate of tax.

This is in fact an old idea, but – with one exception – has not been adopted as part of European social protection. It has indeed typically been most discussed at times of reconstruction, such as after the Second World War. In that sense, it may be a natural idea for the EU to consider, with the basic income defined by the EU but varying across Member States, for example as a percentage of median income. It does however raise certain issues. While a basic income is often described as "unconditional", this is not the case. There has to be a qualifying condition. This is usually taken to be citizenship, but citizenship is not the same as the basis for taxation nor is it evidently the right basis in an EU labour market. Citizenship would mean that a Bulgarian worker in France would receive the Bulgarian basic income, not the French basic income. The rationale for a basic income that varies across countries is that the basic income should vary with the cost of participating in a particular society. If that is accepted, then residence rather than citizenship should be the criterion. Put the other way round, it seems unlikely that countries would agree to pay the basic income to citizens living outside the EU.

An alternative approach is to make the basic income conditional, not on citizenship, but on participation in society. Such a "participation income" has been proposed in Atkinson (1995 and 1996), where "participation" is defined broadly in terms of social contribution, which for those of working age could be fulfilled by full- or part-time waged employment or self-employment, by education, training or active job search, by home care for infant children or frail elderly people, or by regular voluntary work in a recognised association. It should be noted that non-market activities would require

validation; it is not proposed that just any form of home production would qualify (see the earlier discussion of the "activity" target.

The exception to the statement that a basic income had not yet entered European social protection concerns child benefit. The payment of a universal benefit for all children, perhaps varying by age, can be seen as a specific form of basic income. Such payments are common in EU countries. If the EU is to go down the basic income route, then a natural starting point is with an EU basic income for children. Some ten years ago, the High-Level Group on the future of social policy in an enlarged EU (European Commission, 2004) made such a proposal, as part of a possible "inter-generational pact". In concrete terms, this could mean an EU-wide basic income for children, administered by each Member State. Such a programme – refined in its details – would allow the EU to invest in its future – children and human capital. Investment in children is a crucial element in economic growth. As noted by the French Conseil de l'Emploi, des Revenus et de la Cohésion sociale (CERC) in their 2005 Report, "poverty affects not only the child well-being at the moment when resources are insufficient, but also … hinders their capacity to develop, to build the required capabilities, including knowledge capital, cultural capital, social capital, health capital" (2005, page 6).

Fairer shares of property income

One of the godfathers of the idea of a citizen's income was Thomas Paine. In 1797 in his *Agrarian Justice,* he concretely proposed:[9]

> To create a national fund, out of which there shall be paid to every person, when arrived at the age of twenty-one years, the sum of fifteen pounds sterling, as a compensation in part, for the loss of his or her natural inheritance, by the introduction of the system of landed property. And also, the sum of ten pounds per annum, during life, to every person now living, of the age of fifty years, and to all others as they shall arrive at that age (Paine, 1797).

This embodied a basic income for those aged 50 and over, but also a capital element. In this section I consider the scope for the redistribution of the benefits from capital and inheritance. The return of capital income, described in Section 5, means that this policy area should receive more attention than it has.

The proposal of Paine for a capital element payable on reaching the age of majority has its modern counterpart in various schemes for asset-based egalitarianism (see Ackerman and Alstott, 1999). In the United Kingdom, such a scheme was enacted in 2004 in the form of child trust funds, which were a vehicle for saving tax free with a contribution paid by the government. The funds were abolished by the Coalition Government on coming to office, which illustrates the political vulnerability of such schemes (they were replaced by a Junior ISA, which provides tax exemption for savings but no further redistributive element). An interesting feature of the United Kingdom

[9] The text can be downloaded from the Official Website of the U.S. Social Security Administration. The website carries the caution: "this is an archival or historical document and may not reflect current policies or procedures".

scheme was the contributions made by grand-parents, and – despite the short-lived nature of the United Kingdom experience – a child trust fund could form an interesting element in an inter-generational pact.

The financing of the capital element was considered at length by Paine. He favours taxing

> "at the moment that property is passing by the death of one person to the possession of another. In this case, the bequeather gives nothing: the receiver pays nothing. The only matter to him is that the monopoly of natural inheritance, to which there never was a right, begins to cease in his person. A generous man would not wish it to continue, and a just man will rejoice to see it abolished" (Paine, page 11).

Given the return of inheritance, it seems important today to reconsider the role of inheritance taxation. Historically, the taxation of wealth transfers was an important source of tax revenues. In the United Kingdom, wealth transfer taxation was reformed at the end of the nineteenth century in the form of Estate Duty, and it was a significant source of revenue: around 15 per cent of the population were liable for Estate Duty at death and this rose to some 30 per cent of the population in the 1930s. At that time, a higher proportion of the population were taxed on their estates than typically paid income tax on their incomes in any one year. Today (2011/12), the contemporary Inheritance Tax raises less than £3 billion, compared with £151 billion from income tax (HMRC website, Tax receipts and taxpayers). As the recent Mirrlees Review of the tax system says, "the current UK system does not stack up terribly well against any reasonable set of principles for the design of a tax on inherited wealth" (Mirrlees, 2011, page 360). For this reason, they look to the introduction of a comprehensive lifetime wealth transfer tax (see Atkinson, 1972). Such a tax would be based on the (indexed) total amount received in bequests and gifts over the lifetime. Calling it a receipts tax, rather than a transfer tax, would emphasise the aspect at which the tax is directed – the transmission of unearned advantage.

The role of firms and employers

Much EU policy towards employment and social inclusion is focused on the role of workers and labour market flexibility, but in this paper I have argued for taking account of the other side of the labour market: the role of employers. We have to ask why jobs are not being created, and seek to encourage investment in Europe's labour force. By operating on the demand side – for example by measures to reduce the rate of discount applied by firms – it will be possible to raise employment without creating in-work poverty.

Firms are equally important in product markets – an aspect of social exclusion that is much neglected. Material deprivation arises in part on account of the pricing and supply policies of enterprises such as utilities and food supermarkets. The Commission, in seeking to meet the Europe 2020 objective of social inclusion, needs to engage those responsible for the regulation of consumer markets.

Summary

At the beginning of this paper, I summarised the doubts as to whether the EU is on course to achieve the ambitious objective set in Europe 2020 in the field of social inclusion and the need for further efforts. While policies for education and for labour market reform have been set in place, there is an urgent need for new ideas. In this section, I have specifically suggested that serious consideration should be given to:

- Measures to encourage service sector employment, with particular reference to the demand side and the financing of new jobs;
- Re-consideration of the employment target, replacing it by full-time equivalents, and possibly moving to an "activity" target;
- An EU unemployment insurance scheme, involving extended duration benefits, and possibly a X+1th state;
- An EU-wide child basic income, and possibly an EU basic income for all;
- Taxation of lifetime capital receipts, and, possibly, EU child trust funds
- Measures, such as product market regulation requiring universal access, to ensure that poor consumers are not excluded.

These proposals are radical, but in my view radical measures are necessary if the EU is to be able to achieve the ambitious goals set in the Europe 2020 agenda.

Part II: Putting people first and macro-economic policy[10]

Introduction

1. Will changing the headline indicators of progress make a difference?
2. Definitions and judgments
3. How can we generate sufficiently up-to-date estimates?

Conclusions

Introduction

The principal message of this part of the paper is that, rather than starting with Gross Domestic Product (GDP) and the instruments of economic policy, and then considering the social consequences, the policy-making process should be turned on its head. The starting point should be the living standards and well-being of individuals and their families. Macro-economic policies, and indeed all policies, are means to an end, not ends in themselves. Their justification should be found in their service to our citizens.

Starting from individual well-being is right for two main reasons. The first is that it is intrinsically the proper approach and one that can be provided with an ethical foundation in principles of equity and social justice. The fundamental concern of the policy-maker should be with the interests of individual citizens. Social welfare should be defined in these terms, not in terms of macro-economic aggregates such as growth, inflation or employment. Of course, it is important to monitor these variables, but they should be interpreted in the light of their meaning for individuals and families.

The second justification for commencing with individual well-being is that such an approach is essential in order to legitimise the measures being undertaken as part of the achievement of macro-economic stability and growth. There has to be democratic support, and such support depends on the impact on individual citizens. We have to know who is gaining and losing from austerity measures in the short-term and from economic growth in the longer-term. This was stressed by ECFIN in its Issues Note on "Economic growth perspectives for Europe", "the growth process cannot enjoy sustained democratic support if its fruits are reaped by just a privileged few" (ECFIN, 2012). Where macro-economic policies are perceived as unwarranted or unjust, political support will shift towards extremist political parties.

[10] In preparing this part of the paper, I have been greatly aided by Katya Navicke, Olga Rastrigina and Holly Sutherland, who provided me with results from the EUROMOD nowcasting exercise. I am grateful to Andrea Brandolini for supplying Italian data and making valuable suggestions, and to Thomas Helgeson for drawing my attention to the work of the OECD-Eurostat Expert Group on "Disparities in a National Accounts framework". I have received helpful comments from Juan Jimeno and participants in the ECFIN Annual Research Conference 2012, and from participants in the OECD New Approaches to Economic Challenges Group October 2012 meeting in Paris. I have benefited considerably from the papers presented at the 2012 EU-SILC International Conference at Statistics Austria, organised by Eric Marlier as part of the Net-SILC2 project. None of the above, however, should be held responsible for the views expressed.

There is likely to be widespread agreement that – for these two reasons - macro-economic policies are means not ends, and that the ultimate goal is individual well-being. The need for new measures of economic progress was recognised in the Commission publication "GDP and beyond" (European Commission, 2009a). There was general acceptance of the recommendation of the Stiglitz-Sen-Fitoussi Commission on the measurement of economic performance and social progress that "while it is informative to track the performance of economies as a whole, trends in citizens' material living standards are better followed through measures of household income and consumption" (Stiglitz, 2009, paragraph 23).

But what is agreed "in principle" has yet to be turned into regular practice. GDP remains the headline news item. While Eurostat, in conjunction with OECD and other bodies, is taking significant steps in the right direction,[11] the design of policy and presentation of macro-economic policy remains focused on GDP. The objectives of policy-makers are perceived as being far-removed from a concern with the impact on individuals and their families. Radical steps are needed to engage the individual citizen. At present, neither EU nor national government policies are tailored to the person in the street, and this is one major reason why people are indeed out on the streets in protest. My aim here, building on Atkinson (2011), is to make the case for moving further, and more speedily, towards adopting a new perspective for the measurement of changes in economic performance based on the impact on household living standards and on an explicit consideration of distributional consequences. A number of objections may be raised to such a process and three are addressed here.

The first objection is that changing the headline indicators would make no difference. In section 1, I show how we would have had a different picture of developments in the Euro-zone over the past decade if we had looked at household disposable income rather than at GDP, and how, over the longer run, the distributionally-adjusted growth performance of the United Kingdom was less impressive than appeared from looking only at mean income.

The second objection – considered in Section 2 – is that, whereas there is general agreement on the measurement of GDP, the move to a new headline indicator would shatter the consensus, since there are conflicting views about the appropriate definition of social justice and since the democratic process will generate many different views about the appropriate performance indicator. The reader may feel that the box was best left unopened. This paper argues however that this would be a mistake. The different elements in the new indicator are discussed in turn, and the issues of definition are addressed. Definitions indubitably involve social judgments, but so does the current headline indicator, where the underlying social values are implicit rather than explicit. In my view, it is better to make these judgments explicit and to recognise that there may be a range of different values.

[11] For example, from the October 2012 edition of its quarterly household news release, Eurostat has replaced the indicator "Household real disposable income" by "Household real income per capita". It states that "this change stems from work on measuring progress, well-being and sustainable development (GDP and beyond)" (footnote 1 on page 3). Later in the paper I draw on the work of the OECD-Eurostat Expert Group on comparisons of national income and household survey-based estimates of total income.

The third objection is that the move to a headline indicator that takes account of household composition and of income distribution means that there will be lengthy delays in their appearance. Writing in January 2013, I can access GDP figures for the third quarter of 2012, whereas the most recent income distribution data published by Eurostat relate to 2010. These delays are particularly important when we focus – as in this paper – on the *changes* in economic performance. In section 3, I consider two methods – already being explored by Eurostat and DG Employment – of having more current data.

This paper is largely about statistics. Statistics are often seen as an anorak subject, but they are of key political importance. The political success and survival of governments depends on the way in which their performance is measured. It is therefore essential that these measures reflect our ultimate objectives. That is why we need to change the headline indicators.

1. Will changing the headline indicators of progress make a difference?

In the autumn of 2012, statistics showing that GDP in the United Kingdom (UK) grew by 1 per cent in the third quarter of 2012 were widely reported in the media and heralded by the government as a sign of the success of its economic policies. But this announcement probably meant little to the UK average citizen, who could see no connection between a statistic produced by the Office for National Statistics and their own economic circumstances. Suppose instead that the government had published the change in the previous quarter in household disposable income, adjusted for family size and distributionally adjusted. This too would require explanation. The precise form of the definition requires careful consideration, and there may be differences of view about how it should be measured. But it starts from a concept that is immediately recognisable: household income.

In arguing for household income as the headline indicator of progress, I am not suggesting that GDP is unimportant. The growth of GDP is a key to explaining what is happening to the well-being of households. But we should start from the household perspective and then drill down. To understand how GDP is important, we need to understand how household income moves in relation to GDP. If they move together in lock-step, then the importance of GDP will become apparent to the citizen. If household income rises more or less than GDP, then we need to know why this happens. The same applies to distribution. If all citizens share equally in growth, then macro-economic aggregates are enough to judge economic performance. If, as has been claimed, "we are all in it together", then the impact of the economic crisis can be seen from the national accounts. But opposition to austerity measures, and other macro-economic policies, comes from those who believe that the burden is not being equally shared. To investigate this, we need to examine the distributionally-adjusted level of incomes.

Would it, however, make a difference? In what follows, I give two examples to show how adopting the proposed headline indicator could seriously modify the conclusions that we draw, both in the short-term and in the longer-term, about macro-economic policy.

Does it make a difference? Growth

The potential quantitative importance of the adjustment to a household basis is illustrated in Figure 1. The graph compares the movements in GDP and in household disposable incomes in the Euro-zone (17), both expressed in real terms to allow for price changes (see the note to Figure 1). There are two striking features. The first concerns the period of the economic crisis. While GDP fell sharply in the Eurozone in 2008 and 2009 – a fall of 5.7 per cent – household disposable incomes were broadly maintained, at least until the end of 2010. Automatic stabilisers and stimulus packages were apparently successful in protecting household incomes during the first years of the economic crisis. As was noted in the report *Employment and Social Developments in Europe 2011,* "automatic stabilisers and (limited) discretionary measures have played an important role in supporting household incomes" (European Commission, 2012, page 33).[12] This is a remarkable, and little heralded, achievement. I find it surprising that our political leaders have not made more of this. More attention should have been given to the success in maintaining household incomes in the first stage of the crisis; if this had been flagged up more forcefully, then it would have been easier politically to ensure democratic support for macro-economic policy.

The second striking feature of Figure 1 is that in the first part of the period, up to the onset of the crisis in 2007, household disposable income rose less than GDP. The annual growth rate from 1999 to 2007 was 2.5 per cent for GDP, but only 1.9 per cent for household disposable income. Looking to the future, it seems probable that, when steady growth in Europe is resumed, household disposable incomes will grow less rapidly than GDP, and this needs to be made apparent to the citizens of Europe.

Does it make a difference? Distribution

The impact of future growth on Europe's citizens depends not only on the growth of mean income but also on its distribution. The potential effect is illustrated by the long-run historical experience of the United Kingdom (UK) in Figure 2, which shows the impact of the distributional adjustment applied to mean household income, using the Gini coefficient (discussed below). When account is taken of rising inequality, the annual growth rate of household income falls from 1.9 per cent to 1.5 per cent – a significant difference. Over the 50 year period shown, it makes a difference of a fifth to the end level of performance. The distributional adjustment also changes the relative performance in different periods. There is no longer a marked difference between the 1980s of Mrs Thatcher and the 1990s of Mr Major and Mr Blair. Whereas mean income grew at 3.2 per cent per annum in the 1980s, compared with 2.1 per cent in the 1990s, the distributionally adjusted growth rates are virtually the same (2.1 per cent in the 1980s and 2.0 per cent in the 1990s). The worsening of the income distribution in the 1980s effectively wiped out the gain from the higher growth rate.

[12] The figures in this report go up to 2009, and are drawn from the study by Jenkins et al (2013).

Summary

The issues discussed here are therefore quantitatively important ones.

If we adopt this shift in perspective, then a number of questions have to be addressed. First, there is the definition of the different terms in the decomposition of the headline indicator? For example, how do we define inequality? What do we mean by household income? Secondly, there is an obvious difference between the macro-economic aggregates in Figure 1, for which we have quarterly data up to 2012, and distributional data, such as those for the UK in Figure 2, that typically appear only with a considerable delay. How can we obtain a more up-to-date picture? These questions are addressed in the next two sections.

2. Definitions and judgments

The choice of definitions may be seen in terms of the five stages of adjustment required to move from GDP to the new indicator proposed here covering households (denoted by HH). The move affects both concepts and sources. Conceptually, for example, we have to replace per capita calculations of income by measures that make allowance for differences in household composition via a process of "equivalisation". In terms of sources, we have to move from national accounts (NA) to survey-based household (HS for Household Survey) income. The five adjustments to be applied are:

Current headline indicator = real GDP (per capita)[13]

x Mean NA HH per capita disposable income/GDP per capita (Adjustment 1)

x Mean HH per capita spendable income/Mean NA HH per capita disposable income (Adjustment 2)

x *Mean HS HH per capita disposable income/Mean NA HH per capita spendable income (Adjustment 3)*

x Mean HS HH equivalised disposable income/Mean HS HH per capita disposable income (Adjustment 4)

x Distributionally adjusted HS HH equivalised income/Mean HS HH equivalised income (Adjustment 5)

= **Proposed new headline indicator**.

(Adjustment 3 is shown in italics since it is not certain that an adjustment should be made – see below.) The adjustments affect both the level and the change in the indicator. Here I focus particularly on the change over time. In what follows, I illustrate the five stages

[13] As in the Selected Macro-economic Indicators in the Annex to the Macro-economic Report to the Annual Growth Survey 2013. In the macro-economic press releases of Eurostat, the current indicator is real GDP, not expressed per capita.

with reference to the experience, either of the EU, the Euro area, or of individual countries.

Households versus whole economy

The elements of Adjustment 1 are obtained directly from the national accounts. These were used in Figure 1 which showed how real "household disposable income" in the Euro area (17) moved in relation to the volume of GDP.[14] The change in the ratio, indexed at 1 in 1999 Q1, is shown in Figure 3. The contra-cyclical movement is clear, but it is also apparent that there is a medium-term downward trend. It would be interesting to see how far this pattern is to be found in individual Member States and over a longer time perspective. How far is it the case that a focus on household disposable income would show a lower growth rate than GDP? Does this affect international comparisons of growth rates?

Spendable income (Adjustment 2)

The term household disposable income in the national accounts needs however some deconstruction; it is not the same as "spendable income". In the early days of national accounts, this variable was closely related to the amounts reported in income tax returns, and hence was easily recognisable. The definition has however become progressively more extensive and the current Eurostat definition of adjusted gross disposable income includes several items that the person in the street may not recognise as part of income.

The possible effects of such an adjustment is illustrated in Figure 4 for the United Kingdom, where in moving to spendable income (Adjustment 2) we modify the definition in a sequence of steps. The first is the allowance for the change in households' net equity in pension funds. Step 1 shows the effect of omitting this allowance. The second, and larger, allowance is for the value of individual services which households receive free of charge from the government, such as health, educational and cultural services. Step 2 shows the effect of omitting this item; it is apparent that it contributed a sizeable amount to the growth of the national accounts figure. The final element included in the Eurostat definition is an imputation for the rent attributable to owner-occupiers for the services provided by their houses. Step 3 shows the effect of omitting this allowance. All of these elements of the national accounts figure for adjusted household disposable income have a clear logic. The definition makes sense. But it is not particularly intuitive. The non-economist would acknowledge that they do indeed benefit from public services and from not having to pay rent, and that in the future they may benefit from the pension funds. However, these are not spendable income, and over time the gap has widened. Between 2001 and 2011 the ratio of spendable income to national accounts household income in the UK has fallen from 0.77 to 0.71 – see Figure 5.

[14] Figure 1 showed GDP and household income in total, not per capita. The ratio is evidently the same as for the per capita variables.

The particular deductions made in Figure 4 and Figure 5 may be challenged, but my main point is that the definition of income is not simply a matter for national accountants. National accounts are very important, and I fully accept that the concepts employed for purposes of economic management may need to depart from those usually understood in everyday speech. This has been well expressed by Fesseau, Wolff and Mattonetti: "national accounts rules go beyond the households" self-perception. In fact, the idea of producing a set of systematic and detailed descriptions for a total economy is to introduce some concepts that are not immediately understood by households or, in any case, that are not consistent with their perception" (2012, page 13). But, by the same token, the national accounts cannot be the only basis for assessing economic performance. To evaluate the changing state of the economy, we have to relate the national accounts to variables that are meaningful in terms of the everyday experience of individual citizens.

Household surveys versus national accounts (Adjustment 3)

Adjustment 3 takes us from national accounts as the source to the use of individual-based data, whether from surveys or administrative registers. Such data are required if we wish to take account of household composition, not simply to divide by the number of people, and if we wish to take account of the distribution of income. At this point, we enter the area of reconciling macro (national accounts) and micro (household surveys) estimates, the importance of which has been recognised in the establishment of an OECD-Eurostat Expert Group on "Disparities in a National Accounts framework". The work of this Group has been summarised, up to August 2012, in Fesseau, Wolff and Mattonetti (2012). Such comparisons have long been conducted at national level (for example, Atkinson and Micklewright, 1983, for the UK, and Kavonius and Törmälehto, 2003, for Finland) and there have been earlier cross country comparisons (for example in the OECD report by Atkinson, Rainwater and Smeeding, 1995, Section 3.6, and Törmälehto, 2009).

In building a bridge between national accounts estimates of income and household surveys of income, it is important to bear in mind a number of ways in which these sources may differ:

- Timing: the income may relate to different time periods (this is particularly a problem where the survey questions cover a period shorter than a year);
- The national accounts may cover not only the S14 household sector but also non-profit organizations serving households (S14 + S15);
- The household surveys typically exclude the non-household population: the institutional population and others who are not living in households such as the homeless, who are in principle covered by the national accounts;
- The national accounts impute a number of income components that are in most cases not available in household surveys (although a number of these – such as the value of government services consumed by individuals – may already have been deducted in Adjustment 3).

Neither source may correspond to exactly what is desired. We may for example ideally want to exclude non-profit organizations serving households but to include the non-

household population. In the OECD-Eurostat Expert Group study, four countries made adjustments for the latter, mainly by using a percentage of the population derived from demographic statistics (Fesseau, Wolff and Mattonetti, 2012, page 6).

The preliminary results of the OECD-Eurostat Expert Group (Fesseau, Wolff and Mattonetti, 2012, page 11) are based on national studies, typically for the years 2008 or 2009, that have sought to reconcile differences such as those listed above. Overall, for 19 countries, disposable household income averaged 84 per cent of the national accounts total, with a range from 47 per cent to 126 per cent. In the case of the component wages and salaries, the average was higher at 91 per cent and the range narrower: from 65 per cent to 107 per cent. For self-employment income, the average was lower at 72 per cent and the range wider: from 14 per cent to 163 per cent. While there are some definitional issues, including the treatment of depreciation,[15] the poor match for self-employment income is of concern. Fesseau, Wolff and Mattonetti (2012) discuss a number of the reasons for the macro-micro differences. On the side of household surveys, one thinks naturally of differential non-response and under-reporting. Where response rates differ according to income level or to income composition, then the grossed-up survey results may mis-represent the income totals (see Atkinson and Micklewright, 1983, section 2.2). Under-reporting, occurring either because a source is omitted in survey responses or because the amount is under-stated, causes the household survey totals to be too low. Fesseau, Wolff and Mattonetti report that, on the side of the national accounts, "most compilers are making an adjustment for deliberately under declared activity affecting the balance item. This adjustment can have a strong impact on the final value. Indeed, five countries report that it represents more than 50% of the final mixed income value" (2012, page 14). They go on to comment that such an adjustment "has a quality difficult to assess". Since many people tend to assume that national accounts are the "gold standard" to which household incomes should be adjusted, it is important to note such qualifications to the national accounts estimates. In the same spirit, we should note the uncertainties surrounding the elements of the national accounts obtained as residuals. As was observed long ago, "like all figures obtained as residues, the estimate of personal income from rent, dividends and net interest cannot be regarded as accurate" (CSO, 1968, page 103). Great improvements have undoubtedly been made, but it remains the case that questions must be asked about both sides of the account.

What do such considerations imply for the adjustment to be made in the present case? On the "gold standard" view, that the deficiencies lie with the household surveys, no adjustment at all should be made. But where the differences arise on both side of the account, adjustment may be necessary. In considering this, we need to bear in mind that our focus here is on the measurement of change over time. To this extent, it would not affect the calculations if the household survey (HS) income total were always 84 per cent of the national accounts (NA) total. Problems arise when the ratio changes over time. (In this respect, it would be valuable if the OECD-Eurostat Expert Group could extend its comparisons to other years.) In that case, an adjustment should be made to the extent that, for example, the national accounts have changed the allowance for under-reporting.

[15] The depreciation reported in surveys typically reflects the allowances made according to tax accounting rules, whereas the national accounts estimate current replacement cost.

On the other hand, where the ratio has fallen on account of increased non-response by high-income groups, no adjustment should be made.

Equivalisation (Adjustment 4)

The use of *equivalence scales* allows for the fact that the effective value of economic resources depends on how many people, of what age, live in a household. The literature is technical, but the basic concept is readily conveyed. Two people cannot live as cheaply as one, but they can achieve some economies of scale. Small children do not eat as much as working adults. It is for this reason that the OECD applies an equivalence scale of 1 for the first adult, 0.3 for all children under 14, and 0.5 for additional persons aged 14 and over (the so-called OECD "modified" scale). The well-being of a household is then judged by its income relative to the scale relevant to that household. This means that a couple with 2 children aged under 14 require an income of 2.1 times X in order to reach the equivalent standard of living to a single person with an income of X. This may be contrasted with the per capita calculation where they would require 4 times the income to reach an equivalent standard of living. In that sense, people living together "produce" more well-being from a given money income.

An adjustment for household composition is important both in the short-term and in the longer-term. In the short-term, one of the responses to the economic crisis has been that young people are less likely to leave home. Such income-sharing means that we need an income of 1.5X to reach a standard of living of X each, rather than 2X. In the reverse direction, in the longer-term, one use to which European countries have put their increased prosperity takes the form of more people living independently – particularly younger adults and the elderly. Simply counting national income misses this increase in the "cost" of living.

Equivalisation can make a major difference to the measured standard of living. Figure 6 shows the effect for Italy over the period, using two different equivalence scales: the modified OECD scale and a square root scale. With the latter, a household of 4 has a scale of 2, which is close to the OECD modified scale value of 2.1, but it would be rather different if the 4 members of the household were adults, in which case the OECD modified scale value would be 2.5. With the OECD modified scale, in 1987, the mean equivalised income was 156 per cent of the income if everyone had lived on their own, so that household formation made a major difference. Over time, this difference was reduced, as households became smaller, reaching 146 per cent in 2010. With the square root scale, the fall would be more marked: from 180 per cent to 162 per cent. This shows that the choice of equivalence scale affects both levels and trends of measured well-being.

Distributional adjustment (Adjustment 5)

Adjustment 5 involves making explicit distributional judgments. This may be seen as a radical step, but such judgments underlie most policy evaluation. The measurement of national income implicitly makes the judgment that €1 is valued the same irrespective of who receives it. But that is only one of many different judgments that could be made.

There is a wide choice about the weight that should be attached to an extra €1 received by a person. We may agree that the weight should be positive (or at least non-negative), and that it should be smaller the larger their equivalised income, but disagree about how rapidly it should decline. Mirrlees (1978, page 134) has suggested that the marginal valuation of income should follow an inverse square rule, so that the weight attached an extra €1 to a person with income Y is proportional to Y^{-2}. This means that the weight attached to an extra €1 received by a person with an income of 2X should be a quarter of that for a person with an income of X. More generally, the weight could be proportional to $Y^{-\varepsilon}$, where ε is a parameter. An elasticity of 2 has been taken by a number of economists when considering the rate of discount to be applied in climate change analysis (see, for example, Weitzman, 2009). The US Census Bureau (2012), on the other hand, takes much lower values when measuring income inequality: between 0.25 and 0.75.

Distributional weights are implicit in the use of summary measures of inequality, such as the Gini coefficient, used in Figure 2 discussed earlier. Amartya Sen (1976) has shown how weights based on a person's rank in the distribution (so that a person who is F per cent of the way from the bottom receives a weight of 2(100-F)/100) imply that the distributional impact should be measured by the Gini coefficient. The implications of applying such a distributional adjustment based on the Gini coefficient in recent years are shown in Figure 7. The bar chart shows the *change* in the distributional adjustment between 2004 and 2010. A positive change means that income inequality has fallen, so that distributionally adjusted income has risen. For example, the Gini coefficient in Poland was 0.356 in 2004 and 0.311 in 2010, giving the 7 per cent improvement shown in the first bar. Member States with less than a 2 per cent change are omitted, but there are changes greater than this in 11 Member States. Figure 7 shows the distinct downward shift in the cases of Bulgaria, Germany, Spain and Denmark. In contrast, the distribution became less unequal by 5 per cent or more in Poland, Portugal and Lithuania, and, to a lesser extent, Belgium, Estonia, Italy and the UK.

The Gini coefficient is widely used, but, as argued in Atkinson (1970), it may be better to make explicit the underlying distributional values. The use of the elasticity ε is a good way of recognising the diversity of judgments and we may be well advised to follow the US Census Bureau in providing results for a range of values (although not in limiting ε to be less than 1). Another possibility, used by the European Commission (2012, page 25) in its analysis of the changes in the distribution between 2007 and 2009 is to take the median income, which has the advantage of ease of explanation. The adjustment 5 would then be based on changes in the ratio of the median to the mean.

3. How can we generate sufficiently up-to-date indicators?

An obvious objection to the proposal made in this paper is that the headline indicator would be hopelessly "out of date", since it depends on distributional information that is only available with considerable delay. The data in Figure 7 relate to 2010, and in some cases to 2009. I would, however, turn this objection around and say that it is a scandal that we are making policy without any real idea as to who is bearing the burden of austerity programmes. How can national governments or the Commission discuss fiscal and employment policy late in 2012 on the basis of data from no recent than 2010?

What can be done? Two steps can be taken. The first is to speed up the processing of the essential distributional data: for the EU, the data collected in the EU Survey of Income and Living Conditions (EU-SILC). The second step is to use the available past distributional data to forecast the current situation ("now-casting).

Speeding up data availability

The current timetable for EU-SILC data may be set out schematically:

Income year n-1	Interview in year n	Processing and release of data
	Collect income data	Or attach data from registers

The current deadline for submission of data by Member States is the end of November in year n+1 (Mercy, 2012, page 8), so that income received in January 2010 would, in the case of interview, be recorded in 2011 and have entered results delivered for a deadline in November 2012 – nearly three years later.

There is clearly scope for improving timeliness and this is a major concern of the Task Force established by Eurostat to review EU-SILC. In considering this issue, it is important to distinguish between income data collected in the interview and cases where the income data are taken from administrative registers. It should be noted that this is not a "hard and fast" distinction between "register" and "non-register" countries. As is noted by Montaigne and Di Meglio (2012), countries making use of administrative registers differ in the extent in which these data sources are used: "for the income domain, Denmark, Finland, Ireland, the Netherlands, Slovenia, Sweden, Iceland, Switzerland and Norway take data mostly from registers while some other countries can only extract information for some income components and/or for certain subpopulations" (Montaigne and Di Meglio, 2012, page 2).

One set of measures to improve timeliness consists of those that are intended to accelerate the process while maintaining the present income definitions. It may be possible to speed up the processing, although this may require additional resources – resources that are hard to obtain in times of budget cuts. It may also be possible to make early estimates of income variables before the full round of checks have been completed. The Spanish statistical office (INE) has shown how such a speeding-up can be achieved: on 22 October 2012, INE published the provisional results for incomes in Spain in 2011. This demonstrates that the lag can be significantly reduced. On this basis, the Eurostat delivery date – at least for priority data such as those on income – could be brought forward by twelve months.

The scope for bringing forward the delivery date may however be limited where the source of the data is administrative records. The limitations in this case have been set out by Montaigne and Di Meglio: "administrative data refers to data that are primarily collected for the administration of a particular function, in our case usually tax and social security authorities. Their business process is therefore built around the primary function these data serve … Statistics production is an ancillary function of these registers" (2012, pages 5-6). The delivery of statistical data depends on the operational timetable. They

show that the delivery date for incomes in year n-1 range from September in year n (Austria) to August in year n+1 (Netherlands). For Denmark, France, Italy and Sweden, the delivery dates are all in year n+1. These delays typically relate to the specific administrative and legal system, but Montaigne and Di Meglio suggest ways in which the timeliness could be improved. These include the use of provisional data and mixed-mode approaches where, in cases where it was known at the time of interviewing that the register data were likely to be missing or delayed, interview data were used in place of the register.

A further set of measures involves use of a different income concept. In particular, the Eurostat Task Force is considering (Mercy, 2012, page 8) the use of questions in the interview in year n that relate to income in that year. The questions could be about income in the most recent month or about the change in income compared with twelve months previously.

"Now-casting"

The second possible approach to the issue of timeliness is to use the available past distributional data to forecast the current situation. Such a "nowcasting" exercise is being developed by Holly Sutherland and colleagues as part of the EUROMOD project funded by the Commission (Navicke, Rastrigina and Sutherland, 2012). Now-casting is increasingly being used with regard to macro-economic variables.[16]

EUROMOD is a tax-benefit microsimulation model constructed with the purpose of analysing the impact of changes in tax-benefit policies on income poverty, the income distribution, work incentives and the public budget. EUROMOD is a static model, so capturing the effects of changes means that dynamic elements must be introduced. Starting from the EU-SILC distributional data, the exercise involves (i) adjusting for changes in the labour market using information from the Labour Force Survey, (ii) updating market incomes using aggregate data from macro-economic statistics or forecasts, (iii) updating demographic and compositional data, and (iv) feeding these into an updated version of the tax-benefit simulation model incorporating known changes in policy parameters such as tax rates and benefit levels, and other specific policy changes (such as increases in the pensions age).

Some flavour of the EUROMOD-based results may be obtained from the work of Navicke, Rastrigina and Sutherland (2012), who describe the nowcast for 8 countries: Estonia, Greece, Spain, Italy Lithuania, Latvia, Portugal and Romania. Their estimates for Greece suggest that since 2010 median household disposable income has fallen by 18 per cent (in nominal terms) and that inequality, as measured by the Gini coefficient, has risen

[16] According to Wikipedia, "nowcasting has recently become popular in economics. Standard measures used to assess the state of an economy, e.g., gross domestic product (GDP), are only determined after a long delay, and are even then subject to subsequent revisions. While weather forecasters know weather conditions today and only have to predict the weather tomorrow, economists have to forecast the present and even the recent past."

by 1.6 percentage points. The fall in the median means that the poverty line (set at 60 per cent of the median) has fallen and, judged by this lower standard, the headline risk of poverty rate has changed little. Navicke, Rastrigina and Sutherland go on to point out, however, that "the nowcasts for population subgroups reveal that poverty risk is set to rise for children and prime age adults (by more than 2 percentage points) and to fall dramatically for elderly people (by nearly 9 percentage points). This is because pensions have been frozen while other incomes have been falling in nominal terms" (2012, page 20). In the Baltic states, the poverty rate is estimated to be higher in 2012 by more than 1 percentage point than in 2010 in Latvia and Lithuania, and by 0.6 percentage point in Estonia. In the other countries, the changes are small, except in the case of Portugal, where the poverty rate is shown to have fallen by 0.5 percentage point and the Gini coefficient to have increased by 1.4 percentage points.

The possibility of applying the nowcasting approach represents a return to the far-sighted investment made by the Commission in the construction of EUROMOD; at the same time, the approach needs to be further developed. As has been discussed by Navicke, Rastrigina and Sutherland (2012), there are different approaches to updating: for instance, explicit modelling of transitions between states as opposed to re-weighting observations.

Conclusions

Recommendation 2 of the Stiglitz Commission on the measurement of economic performance and social progress stated that "while it is informative to track the performance of economies as a whole, trends in citizens' material living standards are better followed through measures of household income and consumption" (2009, paragraph 23). In this part of the paper I have argued that we urgently need to make a reality of this recommendation, accelerating the steps already being taken, and to make it the starting point for macro-economic analysis. For individuals, it is household living standards that are the most salient indicator. If we wish to avoid a total "disconnect" between the discourse on economic policy and the experience of citizens, then the headline indicator should be a measure of household living standards taking account of distributional concerns. Such a re-positioning is, in my judgment, essential if the EU and Member State governments are to secure the support of their voters.

The shift in perspective proposed here means that our assessment of economic performance may differ from that indicated by GDP (or Gross Domestic Income) per capita for five reasons:

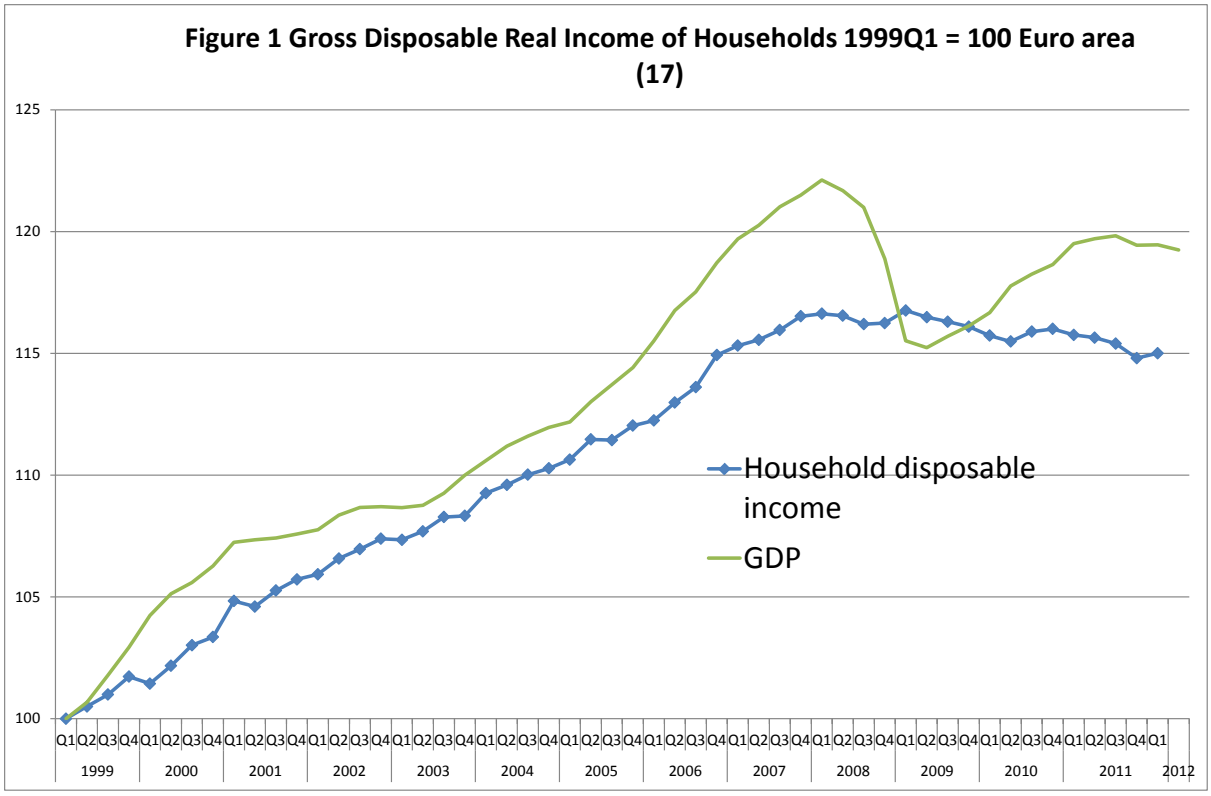
- Changes in the share of households in total income (Adjustment 1);
- Spendable income may have moved differently from total household income, notably on account of the imputations made in arriving at the latter total (Adjustment 2);
- Changes in national accounts procedures that have no counterpart in household surveys (Adjustment 3);
- Changes in household composition affecting the equivalised income of households (Adjustment 4);

- Increased or decreased inequality of income (Adjustment 5).

Put in reverse, if the headline indicator becomes distributionally adjusted equivalised household disposable spendable income, then we can work back to see how the different elements have contributed to an improvement or a worsening of performance.

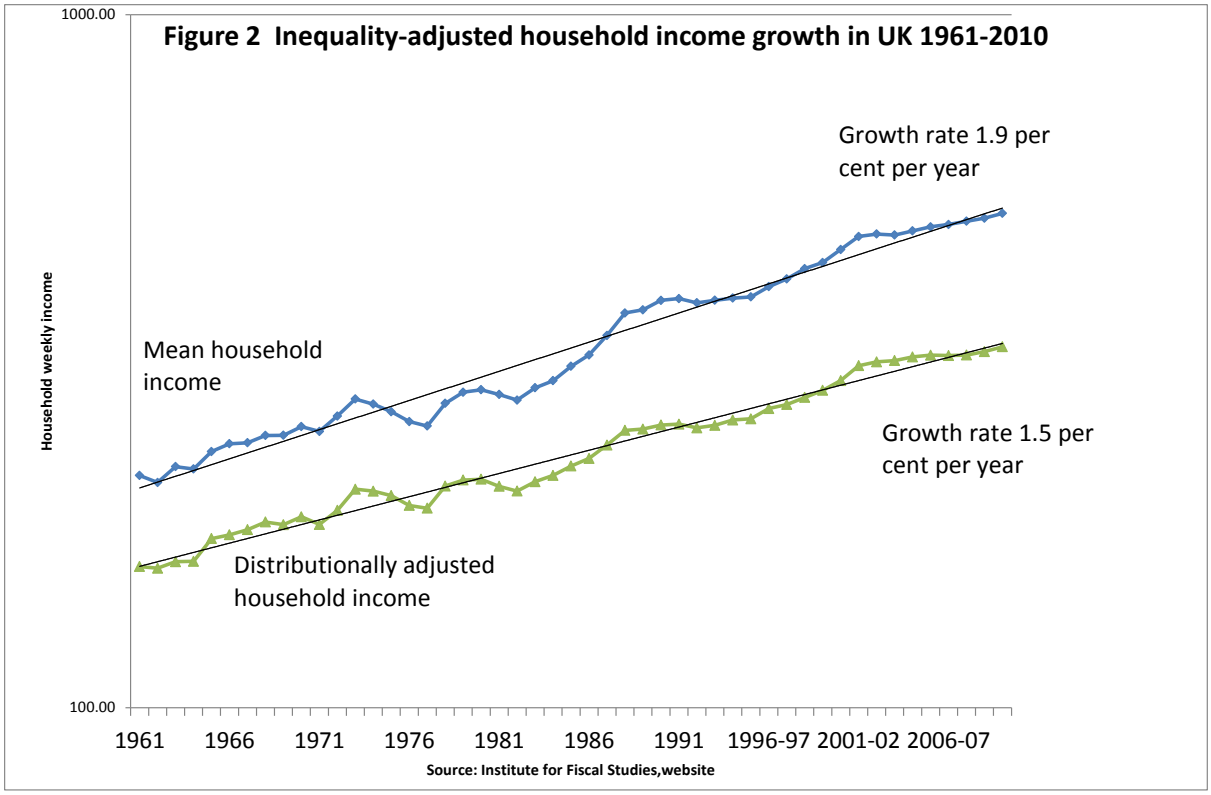
In response to the objections that may be raised, I have argued that the adoption of distributionally adjusted equivalised household disposable spendable income as the headline indicator can make a significant difference to the way in which we view economic performance. Household incomes moved in a different way from GDP both before and during the economic crisis. It is quite possible that in the future household spendable income will have to grow more slowly than GDP. Changes in the distribution of income can change significantly the measured rate of growth.

It is true that the definition of the proposed household income indicator involves judgments of value. But such judgments are implicit in the current approach, and in my view making the judgments explicit renders it more probable that they will be understood and accepted by the citizens of Europe. Finally, it should be possible to produce the indicator with a reasonable degree of currency through steps to speed up the availability of distributional data and the use of nowcasting techniques.



Reading note: The graph shows the change in GDP and in household disposable income in terms of index numbers, so that each series starts at 100 in the first quarter of 1999. At its peak in the first quarter of 2008, GDP has a value of 122.1, so that it was 22.1 per cent higher than in the first quarter of 1999.

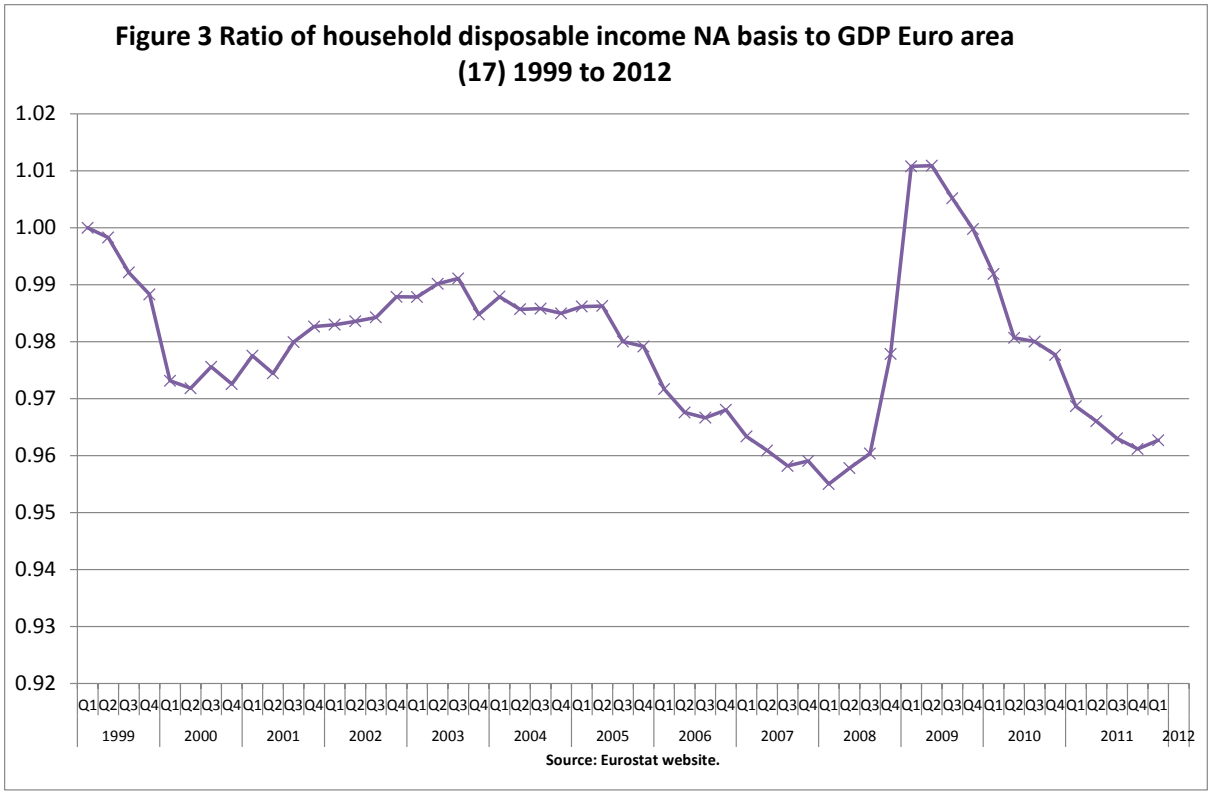
Note: The growth of household disposable income is expressed in real terms using the deflator for the seasonally adjusted final consumption expenditure of households (including non-profit institutions serving households). Part of the difference between the two series may therefore be accounted for by prices for final consumers rising at a different rate from the prices of domestically produced goods and services measured by the GDP deflator. The terms of trade are the major factor that accounts for different movements of the GDP deflator and final consumer prices.



Reading note: The upper series shows the mean household income (defined below) in real terms, expressed in 2009/10 prices, measured on a logarithmic scale, so that constant proportionate growth takes the form of a straight line. The fitted line shows that the average annual growth rate over the period 1961 to 2009/10 was 1.9 per cent. The second series shows the mean income multiplied by a distributional adjustment equal to 1 minus the Gini coefficient. The Gini coefficient is equal to half the mean difference divided by the mean. So a value of 0.26, as at the beginning of the series, implies that, if we choose two households at random, the expected difference in their incomes is 52 per cent of the mean. Where negative incomes are set to zero, the Gini coefficient takes a value between 0 (completely equal incomes) and 1 (where one person has all the income). This means that the second series lies everywhere below the mean income. The fact that the Gini coefficient was 0.36 in 2009/10 means that the increase in distributionally adjusted household income was less than the increase in mean income by a factor of 64/74.

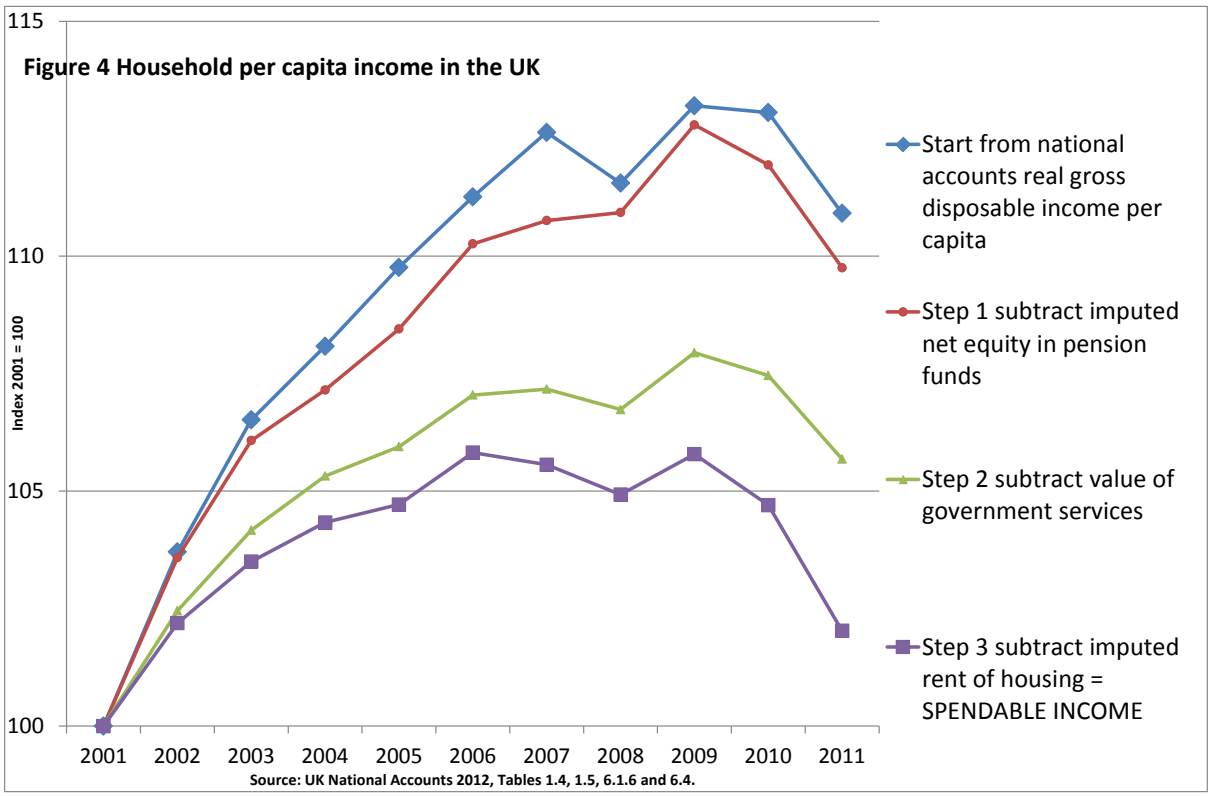
Note: Incomes are household weekly incomes net of direct taxes. They are expressed as the equivalent for a childless couple using the Modified OECD equivalence scale. The series are presented on a UK basis from 2002/03 onwards; earlier years relate to Great Britain. All prices are expressed in average 2009/10 prices using an index constructed by the Institute for Fiscal Studies.

Source: The data are from the spreadsheet accompanying IFS Commentary No. 118, "Poverty and Inequality in the UK: 2011".

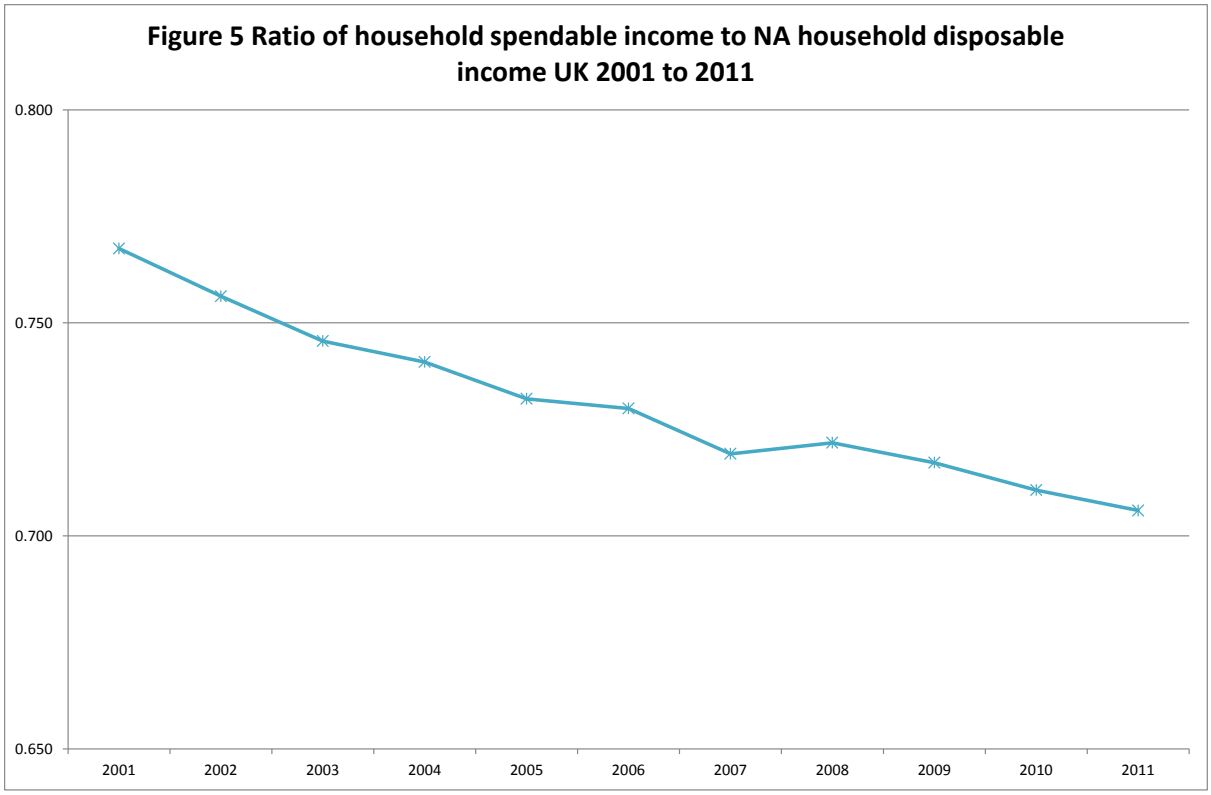


Reading note: The graph shows the ratio of two series, each expressed as an index number set at 100 in the first quarter of 1999. The ratio therefore starts at 1. The final value is 0.963, which means that household disposable income has fallen by 3.7 per cent relative to GDP.

Note: see note to Figure 1.

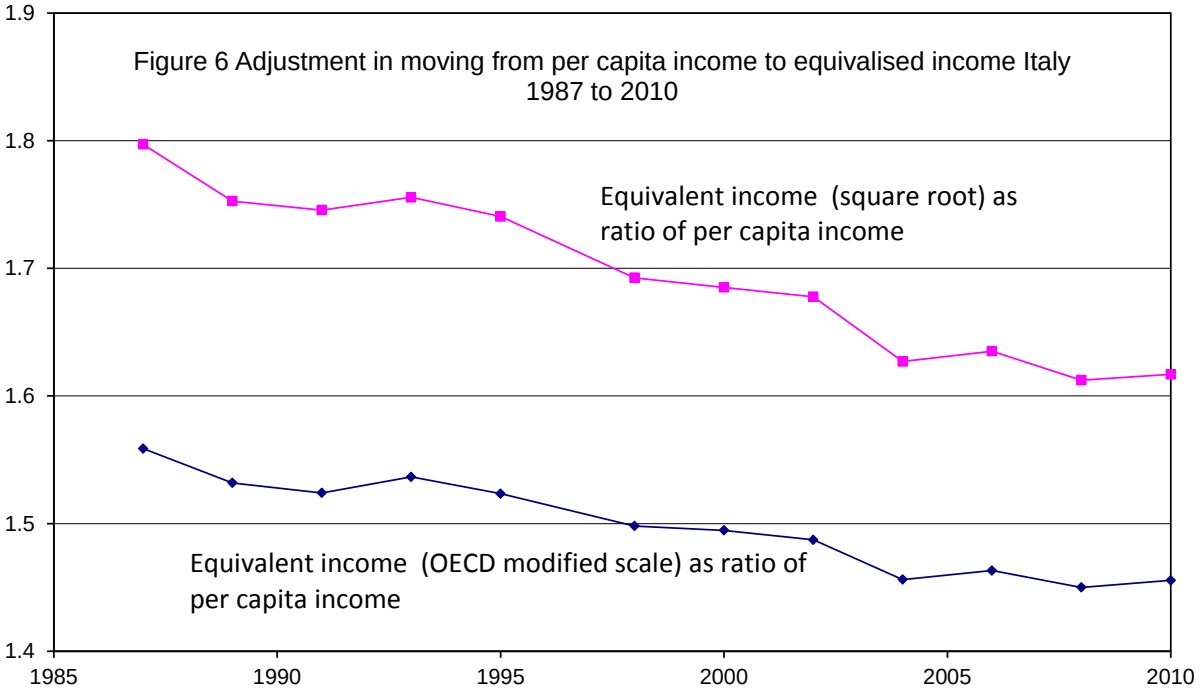


Reading note: The graph shows the different steps involved in moving from household disposable income to household spendable income in the UK national accounts as an illustration of Adjustment 2. The data are annual. In each case the series is expressed as index number with the 2001 value as 100. Each step involves subtracting an item that is not included in spendable income as defined here. There is no reason why the curve should be lowered by such a subtraction, since the base year value is also affected. The fact that the curves lie below means that the subtractions have become larger over time. The final step shows that, for instance, spendable income in the UK in 2008 was 5 per cent higher than in 2001.



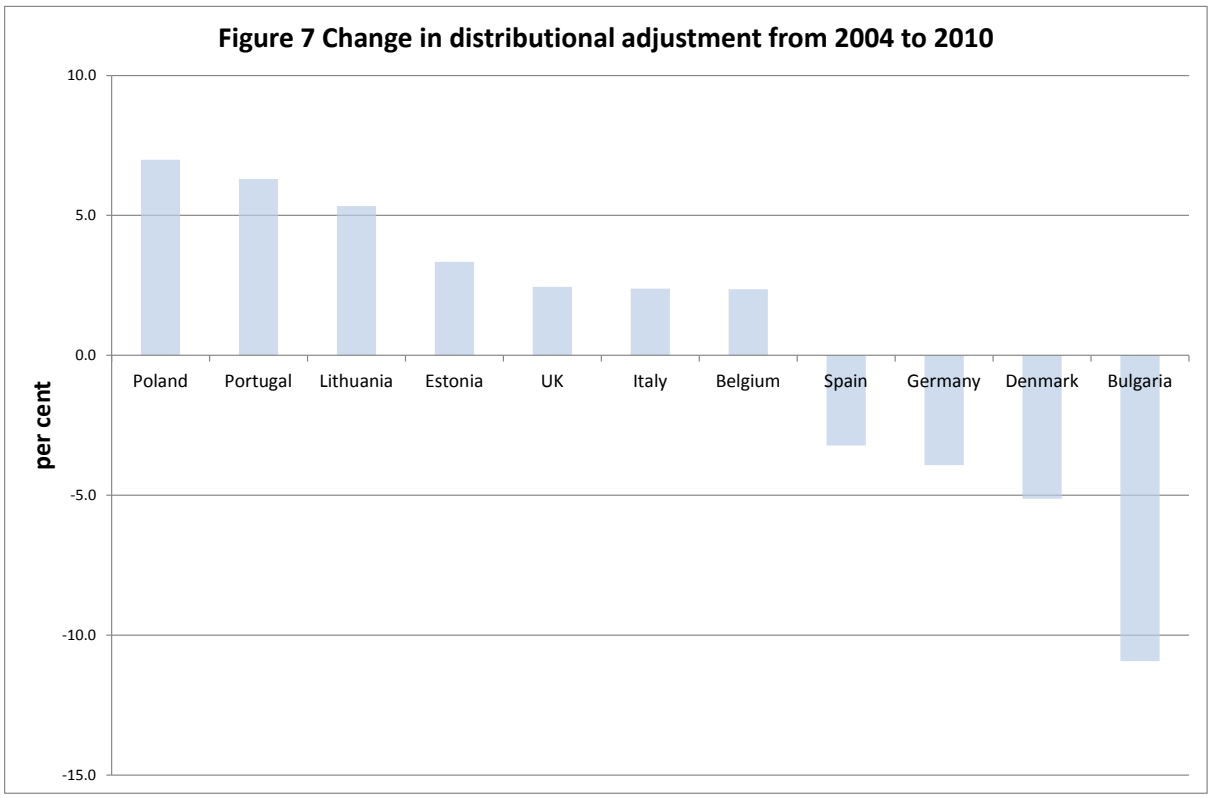
Reading note: This graph shows the ratio of spendable income to disposable income in the UK. The first figure shows that in 2001 spendable income was 76.7 per cent of disposable income.

Source: see Figure 4.



Reading note: The graph shows the *ratio* of average equivalised disposable income (person weights) to per capita income for two different equivalence scales (see text). For example, using the OECD modified scale gives an average equivalised income which in 2010 is 1.46 times per capita income.

Source: data supplied by Andrea Brandolini, based on the Bank of Italy Survey of Household Income and Wealth.



Reading note: The graph shows the change in the distributional adjustment (based on the Gini coefficient) between 2004 and 2010. A positive change means that income inequality has fallen, so that distributionally adjusted income has risen. For example, the Gini coefficient in Poland was 0.356 in 2004 and 0.311 in 2010, giving distributional adjustment factors of 0.644 and 0.689, respectively. 0.689/0.644 = 1.07, giving the 7 per cent improvement shown in the first bar.

Note: France and Romania are omitted on grounds of breaks in the data series. Other countries are omitted if the change between 2004 and 2010 is less than 2 per cent.

Source: Eurostat website (ilc_di12). Distribution of equivalised disposable household income by individuals. Equivalisation is based on the so-called modified OECD scale: 1 for first household member, 0.3 for household members aged under 14, and 0.5 for remaining household members. The data relate to income years, which – apart from the UK – correspond to the following survey year, so that income data for 2010 are obtained in the 2011 EU-SILC. The data for Bulgaria and Italy relate to 2009 (not 2010).

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