Social Inequality and Social Cohesion: Causes, Consequences and Policy Implications

<u>Proposal acronym:</u> **SINESOC**

<u>Type of Funding Scheme:</u> **Collaborative Project (small or medium-scale focused research project)**

<u>Work programme topics addressed:</u> **Activity 8.2. Area 8.2.2. Regional, territorial and social cohesion SSH-2009 - 2.2.1. Social inequalities, their implications and policy options**

<u>Duration:</u> **39 months**

<u>Name of the co-ordinator:</u> **Dr Felix Roth, PhD Economics, Research Fellow, CEPS**

<u>List of participating institutions</u>

Participant No.	Acronym	Institute name	Country
1 (coordinator)	CEPS	Centre for European Policy Studies	Belgium
2	NIESR	National Institute of Economic and Social Research	UK
3	TARKI	TARKI Social Research Institute	Hungary
4	ESRI	Economic and Social Research Institute	Ireland
5	ISAE	Istituto di Studi e Analisi Economica	Italy
6	CRISS	Centro di Ricerca Interuniversitario sullo Stato Sociale	Italy
7	IfW	Kiel Institut für Weltwirtschaft	Germany
8	UGOE	Georg-August Universität Göttingen	Germany
9	AU	Aarhus University	Denmark
10	CCEIA	Cyprus Centre for European and International Affairs	Cyprus
11	FINLAB	Labour Institute	Finland
12	CPB	Centraal Planbureau	Netherlands
13	UNIABDN	University of Aberdeen	UK

<u>Scientific Co-ordinators:</u>

Dr Istvan Toth, PhD Sociology, Director of TARKI
Dr Martin Weale, ScD Economics Cantab., Director of NIESR

Abstract

The research is designed to undertake a policy-oriented, multi-dimensional study of inequality in the EU and in other advanced countries. It will address inequality in all of its manifestations – economic, social and educational and in health and gender – exploring changes over time as well as differences across countries. It will also identify the extent to which initial conditions and institutional arrangements affect inequality, the implications of inequality and the appropriate response to it. Attention will be paid to inequality of opportunity in general and specific examples of this phenomenon, the circumstances of women and inter-generational transmission of economic, educational and health inequality from parents to children. It will study the social, political and cultural consequences of these different aspects of inequality and identify how socio-economic characteristics interact with developments of institutional settings. Finally it will provide a policy-oriented synthesis of the findings, identifying the long-term impacts of inequality and the policies that can be adopted to correct inequality. The research will contribute to achieving the Commission's Social Agenda. Some of its work will address the question of increasing the quality and productivity of work by identifying barriers to the take-up of education and training; it will also contribute to identifying ways of building a more cohesive society with equal opportunities for all.

Keywords: Economic Inequality, Social Inequality, Inter-generational Transmission of Inequality, Social Cohesion.

Table of Contents

1.   Scientific and/or technical quality, relevant to the topics addressed by the call

1.1   Concept and objectives

1.1.1 Introduction

The central purpose of this project is to examine inequality in the context provided by the 2005 Social Agenda as part of the Lisbon Strategy but also in broader terms, identifying factors that contribute to long-term persistence of inequality. It will also assess how the situation in Europe compares with that in other advanced countries. While widening inequality is a trend that has been observed in a number of EU countries, the project will examine how far initial conditions and institutional arrangements affect both the implications of inequality and the appropriate response to it.

The concept of inequality studied is broad in scope, with attention paid to economic inequality, education and health inequality, gender inequality and the social, political and cultural consequences of these different aspects of inequality. This reflects the recognition of European countries and institutions that inequality is a multi-dimensional concept that goes far beyond simple monetary issues (Atkinson, 2006).

1.1.2 Objectives

The objectives of SINESOC are to:

1.   Undertake an evidence-based assessment of inequalities in the European countries in a comparative perspective

2.   Study inequality in a broad sense, with attention paid to economic inequality, education and health inequality, gender inequality and social inequality

3.   Identify factors that contribute to long-term persistence of inequality

4.   Assess how the situation in Europe compares with that in other advanced countries

5.   Examine the welfare implications of high inequality on objective and subjective measures of well-being

6.   Examine how far initial conditions and institutional arrangements affect both the implications of inequality and the appropriate response to it

7.   Study the social, political and cultural consequences of these different aspects of inequality and identify how socio-economic characteristics interact with developments of institutional settings

8.   Provide a policy-oriented synthesis of the findings, identifying the long-term impacts of inequality and the policies that can be adopted to correct inequality.

1.1.3 Research tasks

The pursuit of these objectives will involve the implementation of a wide range of research tasks, which will be divided into three multi-disciplinary strands.

1.   Strand A is descriptive: it offers a comparative assessment of inequality and investigates levels of inequality and its welfare consequences in different countries as measured by a number of different dimensions. Methodological improvements to existing means of comparison will add value to this work and provide a sounder basis for future comparisons and assessments of progress.

2. Strand B is devoted to explanatory tasks: it aims to identify drivers of inequality. These include inter-generational transmission of education and health inequalities, labour market institutions, and possible forms of myopic behaviour by households, identifiable differences in preferences and tax fraud and evasion.

3. Strand C examines some immediate cultural and behavioural consequences of increased inequality, paying particular attention to their effect on trust, civic participation, voter turnout, social unrest, political stability and levels of confidence in the market economy.

By design there are a number of threads running across the three different strands. For example, in strand A there will be an assessment of health inequality. Strand B will look at the inter-generational transmission of health inequality and in strand C some of the social consequence of health inequality will be investigated. To give another example, improved measures of comparison of economic inequality will be developed in strand A and their implications for views on the consequences of inequality and the demand for redistribution will be assessed in strand C.

In order to fulfil our goals concerning the implications and long-run consequences of increased inequality, the fourth (cross-cutting) strand D will provide forward-looking policy analysis and it also intends to provide a framework for efficient management and quality assurance of the project.

Research Tasks grouped in strand A (Measurement of Inequality) include:

-   Cross-country comparison of the evolution of overall inequality and its major dimensions. Analysing the relationship between changes to income inequality and changing population and employment patterns, identifying also the impact of movements in top incomes and the pressures that give rise to these. Exploring movements in health and educational inequality and their relationship with income inequality.

-   Exploring and identifying methodological options in the measurement of inequality and assessing the impact of inequality on convergence of well-being, both in economic terms and as measured subjectively. In particular, it is necessary to analyse whether comparisons between different countries and comparisons over time are best done using standard measures of income and standard purchasing power parities. Analysing whether different patterns of household composition to influence assessments of the way in which relative poverty levels change over time and how they compare in countries with different social systems. Using information from consumption patterns to examine the effects of tax evasion on inequality and using distribution-adjusted and subjective well-being measures to study the impact of rising inequality on well-being convergence across space and time with the EU and with other regions.

-   Examining the nature of inequality, both with specific reference to the gender pay gap and, more generally, with reference to the distinction between equality of outcome and equality of opportunity.

Research Tasks grouped in Strand B (Drivers of Inequality) include:

-   Exploring the role of inequality of opportunity as a source of overall inequality using both broad measures of access to services such as child care and health services, and more specific analysis of the links between parents' jobs and incomes and those of their children, exploring in particular the link between returns to education and family background and the connection between industrial structure and inequality.

-   Analysing the transmission of health status from one generation to the next, examining in particular whether persistence in health status in families is transmitted directly in childhood

or indirectly in adulthood through the inter-generational transmission of economic disadvantage.

- Explaining two ways in which myopia may be a source of inequality. The first is whether it influences people's willingness to undergo post-compulsory education and the second is whether and how it influences people's willingness to save for retirement and thus income inequality between old and young people and also, given the existence of state benefits, the distribution of income of old people.

- Investigating the extent to which inequality in the labour market is determined by international trade and technological change and how far it is driven by the interactions between education and training. It will also study the way the incentives to undergo education and training depend on other labour market institutions such as minimum wages.

- Indicate long-term mechanisms by which policy and social pressures can influence socio-economic inequalities. They will make it possible for us to identify where policy action is needed and where it is most likely to be effective in addressing structural causes of inequality in society;

Research tasks grouped in strand C (Consequences of Inequality) include:

- An analysis of the effects of increased inequality on social cohesion, social and systemic trust, as well as political and civic participation in the various European societies will be studied. It is to be shown how far increased inequality contributes to the break-up of trust relations, having an immediate consequence on social cohesion. The impact on alternative indicators of social cohesion such as political stability, participation in social unrest, crime rates and levels of confidence in market economies will also be researched.

- An analysis of how the increase of inequalities induces differential evaluations among people positioned in various parts of the income distribution and social structure. To understand how the perceptions and individual evaluations are assumed to have a direct effect on the demand for redistribution, inducing long-term shifts in welfare arrangements and in political structures.

Research tasks grouped in strand D (Policy, Management, Evaluation and Dissemination)

Strand D will be (in addition to providing efficient management, quality assurance and dissemination) devoted to provide a synthesis of the findings from research results of strands A to C to answer the following questions:

- What are the key drivers of inequality and what are the most effective means by which policy-makers can minimise the extent of inequality in free democratic societies?

- What are the social, political and cultural implications of accepting high levels of economic and social inequality?

1.1.4. How does the project relate to the objectives of the call?

The aims of the project can be directly associated with the relevant keywords contained in the call for proposals, as outlined in the table below.

Keywords contained in the call	Project responses
Address challenges associated with rising inequalities within contemporary high-income societies, such as those of Europe, the US, Canada, Japan, Australia and New Zealand	The project is comparative in nature: the work packages are intended to cover the broadest possible set of countries, including the EU27 and some of developed non-European countries.

Understand the key aspects of increased inequality and its impacts on society and identify policy options for various actors	Strand B is devoted to analysis of the main drivers of inequality. Each work package is summarised in a policy brief to highlight policy choices and alternatives.
Research should address the social, cultural and political impact of the increase of income and wealth and the emergence of new, or newly significant, forms of inequality, such as in access to education	Inequalities in access to education is a main thread running through the project, together with health inequality, which seems to emerge as a major form of inequality in ageing societies. The analysed impacts of rising inequality include the changing demand for redistribution, together with potential risks of fragmentation and break-ups in social cohesion.
The policy lessons that can be learned from these different societies, both for public policy and for other societal actors, should be identified	The terms of reference of the policy briefs will require these to be brought out in the briefs.
Achieve co-operation within and between disciplines to the degree which is most appropriate for the issues addressed	The consortium covers a multi-disciplinary research community as well as a territorially balanced research group from various parts of Europe, drawing their local expertise on all major welfare regimes in Europe.
Involve, as appropriate, users and stakeholders in the implementation of the project	The project will hold two conferences to which stakeholders and users of the research will be invited. They will also be invited to working group meetings as appropriate.
Define and pursue appropriate strategies for making the data generated in the project available to the broader research community	All deliverables are fully available for the broadest public and specific summary policy briefs will be published to inform the specialised and the policy-making audience.

1.2 *Progress beyond the state-of-the-art*

1.2.1. The evolution of inequality in Europe and the OECD countries

The most recent analysis on inequality published by the OECD concludes that in the past 20 years income inequality showed heterogeneous trends in member countries, but countries experiencing an increase in inequality were more numerous than those recording decreasing inequality (OECD, 2008). Inequality increased significantly in Finland and New Zealand, while other eight countries (among the European countries Germany, Italy, Portugal, Sweden, Norway) experienced smaller increases in income inequality. During the same period inequality declined in only France, Ireland and Spain, while it has remained broadly unchanged in other countries. Inequality has also increased rapidly during the years of transition in the former socialist countries (Fleming & Micklewright, 1999). Deep structural changes, decreasing employment and increasing inequality and poverty have accompanied the transformation to market economy. One notable feature of inequality trends is a surge in top incomes in some countries over the last 10-20 years. On the other hand relative poverty rates have increased simultaneously with soaring top incomes. Top income shares have generally been affected in Anglo-Saxon countries, including the US, the UK, Canada (Atkinson, 2003; Piketty & Saez, 2003) while in Europe, the Netherlands, France and Switzerland display hardly any change in top income shares (Atkinson & Piketty, 2007).

The driving forces of the evolution of inequalities are demographic changes, labour and capital market inequalities and the redistributive effect of the government tax and transfer system. Widening of the earnings dispersion contributed to increasing inequality in the past two decades. Between 1990 and 2005, inequality of gross hourly wages was on the rise in the Netherlands, Germany, Ireland, Denmark, Sweden, the UK (OECD, 2008) and the transition countries (Rutkowski, 2001), while countries where earnings inequality declined were Finland and France. Educational qualifications of the labour force improved during this period in the EU countries, but despite these changes, the wage premium of education has increased in several countries. Wage differences by education level increased after 1994 in Italy, Germany, Greece (Budria & Telhado-Perieira, 2006) and the transition countries (Rutkowski, 2001), while Portugal, Finland, Sweden, the Netherlands and Austria recorded decreasing educational wage premia.

Economists have formulated several hypotheses about the causes of the widespread changes in income inequality. Among them are a shift from manufacturing to service production, technological change, expanding international trade and finance and technological advances. Computerised technologies have shifted labour demand in favour of relatively high-skilled workers. If in the short-run the increase in the supply of educated people fails to match the increase in the demand, the premium for education increases. Atkinson (2000) has criticised this explanation coined as 'transatlantic consensus'. Piketty & Saez (2003) argue that changing social norms and power are important factors in moderating and even counteracting these global economic pressures on income distribution. They challenge the skill-biased technological change hypothesis on the grounds that it is not able to explain the rise of the working rich. Historically the dramatic increase in tax progressivity that took place in the inter-war period and that remained in place until the recent decades was the main factor preventing top income shares from being reduced back to the levels observed at the beginning of the last century. It also has to be noted that changes in inequality can actually cause policies to change as they may have an impact on the relative political power of different socio-economic groups.

Evidence also shows that very dissimilar reasons may lie behind widening inequality in different countries. Piketty & Saez (2003) reckon taxation, executive compensation and shocks to capital returns have played a central role in the recent rise of mega-incomes for the very top earners in the US. On the other hand in some countries like Finland and to some degree in other Nordic countries wage differentials have not been a major factor contributing to the substantial increase in inequality. Thus the evolution of income inequality also reflects the impact of institutions and policies, which are subject to choice. Several OECD countries have recently faced severe budgetary pressures, which may lead to lowering marginal tax rates in top-income tax brackets and reductions in benefit levels. In addition, the pressures caused by globalisation have lead to system competition with tax rates and provision of public infrastructure between countries. When considering the reasons for widening inequality and policies to combat this trend, it would be of major importance to separate these effects from the changes caused by the global trends mentioned above.

According to the OECD report, countries differ in the extent to which the tax and transfer system modifies the income distribution. The inequality-reducing effect of government redistribution is the most important in the Scandinavian countries and the lowest in the US and Korea. Interestingly, the inequality-reducing effect of government redistribution declined during the nineties in these countries and also in Ireland and the Netherlands. On the other hand, countries such as the Czech Republic, Italy, France and Germany have seen an increase in the redistributive effect of the tax and transfer system (OECD, 2008).

In WP A1 we will summarise recent international trends in inequality in advanced countries broadening an understanding of what changes have been taking place, looking at the role of top incomes and movements and cross-country differences in education and health as well as movements in income inequality. The key advance to be offered by the work in WP A1 is that it will provide a clear picture of the inter-relationship between these different aspects of inequality. A particular gap in

this research area to be filled by WPA1 is to study trends in Europe over time and focus on comparisons between old and new member states. Particular questions that arise are whether we are observing convergence in distribution-adjusted well-being, subjective well-being (an issue studied by Senfey & Teksöz, 2007 and Gruen & Klasen, 2006 for transition countries), and non-income dimensions of well-being. Paes, Molinas, Ferreira & Saavedra (2009).

However, there are questions about the suitability of income-based comparisons being carried out, and the work in WP A2 will explore both micro and macro aspects of this. The first of these is an examination of the ways in which adjustments are made for relative prices, the second being an exploration of the role of tax evasion and the third is an analysis of inequality adjustments to measures of aggregate income as a basis for comparing countries' economic performance and the interaction between these and measures of subjective well-being.

Comparison of living standards in different countries is generally recognised to be an important task. To facilitate this, the OECD has developed its triennial cycle of international price comparisons which result in the production of its measures of purchasing power parity (e.g. OECD, 2005). Measures of GDP per capita at international purchasing power parities are widely used as means of assessing comparative economic performance. And they are also used (e.g. Brandolini & Smeeding, 2007) to compare different points in the income distribution so as to examine, for example, how the living standards of people low down the income distribution in one country compare with those of people at a similar point in the income distribution in another country. Such comparisons are important for a number of reasons. First, they inform comparison of attitudes to inequality (Amiel, Creedy & Sturn, 1999) and Halder (2005). Secondly, they may influence policy-makers who wish to address the issue of inequality. Thirdly they may be useful to inform an understanding of the effects of inequality on economic performance (Zak, 2001, Voitchovsky, 2005, Bjornskov, 2008), in the context of a number of other socio-economic variables.

Separately, one may wish to explore what motivates the efforts that different countries put into poverty reduction. Brady (2005) and Garfinkel, Rainwater & Smeeding (2006) show the importance of the welfare state as an influence on relative poverty. Moller, Bradley, Huber, Nielsen & Stephens (2003) look at the interaction between this and political forces as determinants of poverty. Plainly such analysis may be sensitive to the way in which poverty and income distribution are measured. Atkinson & Brandolini (2001) draw attention to some of the pitfalls which can arise.

The principles of making aggregate comparisons using purchasing power parity are now widely discussed in terms of index number theory (e.g. Neary, 2004). But comparisons of poverty thresholds and other points on the income distribution have been made using a single aggregate purchasing power parity index rather than reflecting the fact that people at different points in the income distribution have different consumption patterns and that these can be affected differentially by the deviation between market prices and purchasing power parities. If poor people in one country buy a good which is unusually cheap there – and do so much more than does the average consumer – then a comparison based on aggregate purchasing power parities will overstate their poverty relative to countries where that is not the case. Similar issues are raised in assessing the effects of changes over time for people with different consumption patterns (Fry & Pashardes, 1985, 1989). Their approach is, however, based on assumptions about the relationship between demand and income which Banks, Blundell & Lewbel (1997) reject. However, as Oulton's (2008) analysis suggests, there is no obstacle to using an approach based on the latter's quadratic almost ideal demand model in order to make the comparison.

Particular problems in making comparison both across countries and over time using income data arise from differential tax evasion; these tend to be ignored in international comparisons but can be addressed using the framework required for the work on real income comparisons. Tax evasion is the act of paying less tax than the law mandates through commission of fraud. In addition to causing inefficient allocation of resources, tax evasion can change the redistributive role of the tax system. If

high-income individuals evade taxation, the progressivity of the tax system is reduced (vertical inequality). Also tax evasion creates inequality between a compliant and non-compliant taxpayer who face similar economic circumstances (horizontal inequality).

In theory, the effects of tax evasion on after-tax income inequality are not clear. Kakwani & Lambert (1998), and later Freire-Serén & Panadés (2008) use the standard model of tax evasion of Allingham & Sandmo (1972) with scheduled fines as in Yitzhaki (1974) to highlight that the distribution of after-tax income will depend on the distribution of risk aversion, a characteristic that may or may not be correlated with income. Pestieau & Possen (1991) further assume that the ability to evade taxes depends on whether the individual is self employed or works as an employee.[1] In this case the income distribution of tax evasion will depend on the income distribution across these two employment types. To our knowledge only a few studies attempt to investigate the impact of tax evasion on income inequality on empirical grounds and the results obtained are conflicting. For instance, Bishop et al. (1994) using data from the US find that tax evasion increases the progressivity of the tax system (the proportion of under-reported income is decreasing with income in this database); whereas Alm et al. (1991) find the opposite for Jamaica.[2] Pashardes & Polycarpou (2008) estimate the tax-evasion in Cyprus and compute three measures of income inequality: the shares of aggregate household income by income group, the percentile ratios and the Gini Index. Based on all indices, inequality increases after income under-reporting was corrected.

A major obstacle in measuring tax evasion is the fact that the motivation behind under-reporting of income is precisely to avoid the true income to be registered in data available to others. Researchers have tried to sidestep this problem using alternative methods based on monetary and other national accounts data (e.g. Gutmann, 1977, Feige, 1979, Tanzi 1983, Frey & Weck-Hanneman 1984 and Aigner et al., 1988), but these have been criticised for relying on flawed statistical techniques.[3] This part of WP A2 will use the link between real incomes and consumption patterns to provide, for the first time internationally, estimates of the scale of tax evasion and of its impact on inequality.

Regarding distribution-adjusted well-being measures, much theoretical work has been done, including pioneering work by Atkinson (1970) and Sen (1982) who devised inequality-adjusted measures of well-being. A range of empirical applications have been done with particular focus on developing countries (e.g. Kakwani, 1982). Since the 1990s, a series of papers has applied and extended these measures of inequality-adjusted well-being to compare levels and trends in well-being in selected industrialised and developing countries. Klasen (1994) examined trends in distribution-adjusted well-being in the US, Jenkins studied inequality-adjusted well-being trends in the UK, and Gruen & Klasen (2001) examined the issue in transition countries. They all demonstrate the very large effect of inequality levels and trends on the development of well-being in the countries studied. Gruen & Klasen (2003) take up these intertemporal trends and make comparisons for a large number of countries and levels and trends of global inequality and Gruen & Klasen (2008) examine comparisons of inequality-adjusted well-being for different benchmark years for a large number of countries.

A related area of research deals with the impact of inequality on subjective well-being. Here a number of studies by Oswald, Alesina et al. (2004), reviewed in Klasen (2008) have found that inequality appears to reduce subjective well-being, but different types of inequality and the context seems to matter a great deal. The link between this literature and the one on distribution-adjusted well-being is rather tenuous at present and one open question is to link these two literatures to determine the

---

[1] In the 1988 US Taxpayer Compliance Measurement Program (TCMP) report, under-reporting was 0.5% for wages and salaries, but 58.6% for self-employment income (see Shemrod & Yitzhaki, 2000).

[2] Bishop et al. (2000) further show however that tax evasion in the US produces substantial horizontal inequality.

[3] Gutmann (1977), for instance, measures tax evasion with changes in the ratio of currency to demand deposits; Feige (1979) uses changes in the ratio of total dollar transactions to GNP; Tanzi (1983) uses the elasticity of the ratio of currency to M2 to changes in tax rates.

apparent welfare penalty for different types and extent of inequality. A second open issue is the relationship between the distribution-adjusted and subjective well-being indicators with other 'objective' non-income well-being measures such as health and education indicators, measures of social exclusion and the like (see Klasen, 2001, 2008 for a discussion). The final part of A2 will explore these issues.

The work described above is intended to provide a detailed account of observed inequality from a number of different perspectives. However, it is also important to know what lies behind the measures which will be prepared by those studies. This will be explored in WP A3. Particular attention will focus on the gender wage gap because reducing this is an integral part of the European employment strategy with member countries committed to make substantial progress in this area by 2010 and there is obvious policy interest in raising understanding of factors behind the gender wage gap rather than simply observing it. However, the issue is much more general than that and this part of the work will quantify inequality of opportunity broadly defined, and examine its relationship with conventional equality.

The underlying concept used in most analysis of inequality is equality of outcome, that is the final inequality resulting from the economic, demographic and social processes that generates the distribution of income. However, there is a strongly-held view that policy should be concerned not with equality of outcome but with equality of opportunity. This is consistent with the philosophical arguments from authors such as Dworkin (1981), Arneson (1989) or Cohen (1989) who place a great deal of weight on personal responsibility. According to them, economic and social policies should only try to address inequality stemming from factors beyond the scope of individual responsibility (circumstances in the terminology introduced by Roemer), while letting, at the same time, individuals bear the consequences of factors for which they can be held responsible. This line of thought was recently introduced in the economics literature by John Roemer in several important theoretical and empirical contributions (Roemer, 1998; Roemer, 1993) and Roemer et al., 2003).

To measure inequality of opportunity for a certain outcome, total inequality in the outcome can be decomposed into two parts: one resulting from circumstances beyond individual control and a second part resulting from unequal individual effort and luck. (Ferreira & Gignoux, 2008). Unequal outcomes resulting from circumstances are generally considered socially unacceptable or, at the very least, undesirable.

This issue has, of course, been addressed with reference to the gender wage gap. The latter is defined as the difference between men's and women's gross hourly wage as a percentage of men's average gross hourly wage. It has been analysed extensively in the economic literature (Alton & Blank 1999, Kane 2000) as reflecting partly differences in human capital (Mince & Poacher 1974) and job effort (Chinua, Murphy and Pierce 1993, Poacher 1981, Kim & Poacher 1994) and partly discrimination against women (Rice 1999, Fortin & Limoux 2000, Belau and Kahn 2000, 2003, Rubery et al., 2002). Blinder (1973) and Oxaca (1973) have proposed a method decomposing the observed gender wage gap into a part explained by differences in human capital (education), job and other characteristics (experience, skills, etc.); and a part not unexplained by these characteristics and, thereby, reflecting potential discrimination.

Based on data[4] reported in the EU Survey on Income and Living Conditions (EU-SILC) in 2006 the gender pay gap in the EU-25 is almost 15%, with the largest pay gap found in Cyprus (25%) and the smallest in Malta (3%). The gender wage gap is also large in Slovakia, Germany and the United Kingdom. A number of studies attempt to assess the discrimination part of this gender wage gap. For instance, Beblo et al. (2003) investigate the cases of France, Germany, Italy, Spain and the UK and find that the percentage of the gender wage gap that is attributed to discrimination is around 80%,

---

[4] Estonia, Italy, the Netherlands and Croatia are not included in the 2006 data.

8

60%, 140%, 120% and 84%, respectively[5]. Jolliffe (2002) found for Bulgaria that 86% of the gender wage gap is attributed to discrimination[6]. Other studies try to explain how the gender wage gap relates to labour market characteristics, e.g. Olivetti et al. (2008) find a negative correlation between gender wage gaps and gender employment gaps, whereas Blau et al. (2003) find that more compressed male wage structures and lower female net labour supply are both associated with a lower gender pay gap.

Blau & Kahn (1996), supported by Kidd & Shannon (1996), and later by Brainerd (2000) show that wage inequality within a country is positively related to gender wage inequality. Barry et al. (2001) also finds a positive association between wage inequality and the gender wage gap in the EU15, however this result is not confirmed when the analysis includes all EU25. This is due to some new member states like Slovenia, Poland, Lithuania, Latvia, Bulgaria and Romania where the level of wage inequality does not seem to be related to the level of the gender wage gap, probably due to the different economic system of these countries. However, there is, as yet, no systematic of the picture in the European Union or any analysis of how things have changed since the mid-1990s.

Investigation of other limits on opportunity has been more sporadic. Paes, Molinas, Ferreira & Saavedra (2009) apply the methods of Ferreira and Gignoux to Latin America, applying decomposition of economic outcomes to different indicators of household welfare: labour earnings, household income per capita, and household consumption, expenditure per capita. The rationale for using three variables is to capture the differentiated impacts they have on household welfare and, thereby, gain a more complete understanding of inequality of opportunity. They also address the problem of producing a combined index which aggregates inequality of access to basic public services, inequality in economic outcomes and inequality of educational achievements.

The study of advanced economies from these perspectives, with attention paid to changes over time as well as across countries will make it possible to explore the interaction between different types of inequality of opportunity and their relationship with more conventional measures of inequality.

1.2.1 Drivers of Inequality

The purpose of WP B1 is to explore – with a focus on all EU25 countries and from a multidisciplinary perspective – family background as a constraint on people's economic experience, identified by their occupations, educational attainments and income levels. The work package combines the analysis of social mobility using a homogeneous database for all the European Union member states with analysis of hitherto unexplored issues associated with social mobility and obstacles to economic success.

The study will extend recent work on aspects of inter-generational persistence of inequality to the whole of the EU and make comparisons with the United States of America. Breen (2004) looked at the link between parents' and children's jobs in only nine EU members and did not use common datasets although it did attempt to homogenize the results afterwards; data from the 1990s were used. As well as providing a truly comparative database for the analysis of European patterns of social mobility, the EU-SILC data (see Franzini & Raitano, 2009) will also allow us to compare patterns from 2005 with those published by Breen (2004). The study will also extend comparison of parents' and children's living standards beyond the limited range of countries considered by Solon (2002), Corak (2004) and Jannti et al. (2006).

---

[5] The decomposition is based on the Lewbel (2002) wage regression. The raw wage gap is decomposed into the endowment effect, the remuneration effect and the unobservable effect. The remuneration effect is often interpreted in the literature as an estimate of wage discrimination. Since the contribution of one of some effects may be negative it is possible that the contribution of other effects exceeds 100%.

[6] The decomposition is based on the Oaxaca (1973) decomposition using the male wage structure as the base. Based on the women wage structure, 105% of gender wage gap is attributed to discrimination.

The study will then look in more detail at the mechanisms which might lead to persistence of inequality by studying the intergenerational transmission of educational attainment. Most studies of this have looked at a single country or a very limited number of countries (Checchi et al., 1999; Mocetti, 2007; Chevalier et al., 2005) and/or for specific levels of educational attainments (e.g. tertiary degrees or, as with OECD, 2004, attainment at age 15). Only two studies (de Broucker, Underwood, 1998 and Hertz et al., 2007) tried so far to compare among countries intergenerational persistence of education, although without using a homogeneous data set and without covering all EU member states. Thus our work will improve the knowledge of the phenomenon, allowing a true EU25 comparative analysis (based on the homogeneous ISCED international classification and EU-SILC data). A first descriptive picture of the intergenerational correlation of education attainments has been drawn by Gabriele & Raitano (2008). Unlike the OECD study, task three will present results for all adult cohorts currently alive, and therefore show how the picture of transmission has changed with time. The results will be presented for men and women separately and for different levels of parental attainment.

A separate but related issue is whether the benefit of education depends on people's family background; this too may result in intergenerational transmission of inequality. This topic has been looked at only occasionally with considerable variation in findings. For example Bennett, Glennerster & Nevison (1992) found that in the United Kingdom and Gabriele & Raitano (2007) for Italy. However, Checchi, Fiorio & Leonardi (2007), taking into account drop out rates and risk perception, found expected gains of college completion increasing in parental education. This project will build up an international picture of the position.

The final part of WP B1 will explore the link between industrial structure and inequality with the aim of indicating whether the development of the knowledge economy has helped or hindered equality of opportunity. There is a well developed literature (Lipset & Bendix 1959; Blau & Duncan 1967; Goldthorpe et al., 1980) on the relationship between industrialisation and social mobility which argues that the skill demands of high technology mean that industrial societies will become increasingly meritocratic. However in practice countries with strong high technology sectors do not seem to be particularly meritocratic. There has been no attempt to examine whether the hypothesis is true within societies across industries.

While inequalities in education may have a direct bearing on income inequality, the links with health are less direct. However, health is an important aspect of personal well-being and across industrialized countries, those who are disadvantaged in terms of income, education or occupational level also tend to be disadvantaged in terms of health status and length of life (Mackenbach & Bakker, 2002). Research across a range of countries has consistently shown that those at the bottom of the social class ladder have at least twice the risk of serious illness and premature death as those at the top. Moreover, between the top and the bottom health standards show a continuous social gradient, so those near the top of the ladder have more disease than those at the top, but less than those below them, a pattern repeated all the way down the scale (Bartley, Blane & Montgomery, 1997; Blane, Bartley & Davey-Smith, 1997). Almost all socio-economic measures, including education, income and social class, display this gradient to varying degrees.

Perhaps the most important development in understanding health inequalities has been the adoption of a life-course perspective which studies the importance of exposure to different determinants of disease at different points in life (Davey Smith, Blane & Bartley, 1994; Vågerô & Illsley, 1995; Kuh & Shlomo, 1997). Richard Barker's (Barker et al., 1989; Barker, 1992; Barker, 1994) work built on this but focused more on the impact of the pre-natal environment rather than childhood nutrition. Barker and colleagues work suggested that adult health status may be 'programmed' in the womb and that this explained adult inequalities in cardiovascular disease. Subsequent work has shown that that later exposure to social disadvantage must play a larger role than that allowed for by Barker and colleagues, but Barker's work was important in reorientating researchers toward a life-course model of disease aetiology.

Previous comparative analyses of health status across European countries has been limited to EU15 countries using the European Community Household Panel Survey (Cantarero, Pascual & Sarabia, 2005); (Mackenbach, 2006); in WP B2 we will explore patterns across the 27 countries of EU-SILC. We will examine the relative impact of early and later life deprivation on current health using the intergenerational module in the 27 country data file of the 2005 round of EU-SILC. The project will seek to establish first whether there is a significant association between the socio-economic status of family of origin and the health of the adults in the survey and if so, how this varies across country. Having established the basic association, the project will then examine the extent to which parental social class and education directly influences current health or whether its effect is transferred indirectly via the influence of parental class and education on own educational and occupational attainment. This analysis will be performed using path analytic and structural equation models which can quantify direct and indirect effects. Exploratory and confirmatory factor analysis will then be used to construct a latent measure of health combining the three measures available and controlling for measurement error (Layte, 2007). It will then examine the relationship between current health status using different measures and the living standard, education and social class of parents around the age of 14 and the independent effect of parental background on current health controlling for own educational and occupational attainment and current living standards.

The first two work packages of this strand examine in detail intergenerational drivers of inequality. However there is a separate question whether it is affected by i) the way in which people take decisions and ii) by labour market institutions. WP B4 will investigate the role of decision-making in the context of two important decisions which influence both income and wealth inequality- the decision to undertake post-compulsory education and the decision to save for retirement.

Economists tend to assume that people make decisions on a rational economic basis. In the last few years there have been a number of studies looking at people's consumption and savings decisions in this context (e.g. Gourinchas & Parker, 2002). More recently, French (2005) looked at people's decisions to save for retirement in the light of uncertainty about the future and Sefton van de Ven & Weale (2008) looked at the impact of a policy reform in a similar context. Studies such as these typically claim to be able to replicate reasonably well the behaviour of the average consumer but often do not discuss (French, 2005) or are rather less successful (Sefton et al., 2008) at representing the dispersion of people's experiences.. There has been no empirical analysis of possible explanations for this, although it is widely believed (e.g. by the UK Pensions Commission, 2006) that people make decisions in a myopic manner (Harris & Laibson, 2001, Diamond & Koszegi, 2004) as suggested by behavioural economics. Essentially the argument is that people discount future events, such as consumption from saved income, in a manner which depends on their distance in the future. It is, nevertheless, not necessarily the case that hyperbolic discounting must lead to under-saving. (Salanie & Treich, 2006).

Similar issues arise with participation in education. Since the work by Schulz (1961, 1963) economists have viewed participation in non-compulsory education as an investment decision based on the economic return made possible by that education. It is, however widely observed that participation rates in post-compulsory education by people of different social classes continue to differ substantially- despite some evidence of narrowing of the gaps. Explanations of this have been offered by, for example Breen & Goldthorpe (1997) and Davis, Heinesen & Holm(2002) with the former explaining this phenomenon in terms of rational decisions subject to constraints, and the latter arguing that people are concerned about the risk of ending up with lower educational attainment than their parents (the relative risk hypothesis).

This work will explore the implications of myopia on saving for retirement and on willingness to participate in post-compulsory education. Using a simulation model of people's decision making developed from the model described by Sefton, van de Ven & Weale (2008), and augmented to include the effects of myopia and also to reflect education decisions. The method of simulated moments (French, 2005) will be used to explore the magnitude of an excess discounting of the near

future. The study will break new ground because it will be the first study to assess the possible role of myopia- one of the key elements of behavioural economics- as a factor behind inequality.

WP B4 considers the interaction of rising income and employment inequality for educational strategies and labour market reforms. First the impacts of technological change and globalization on inequality in the labour market are examined theoretically. This will provide an insight into the changing requirements in skills needed by workers. Based on the concept of life long learning, the work package then shows how educational policies and labour market institutions have to be designed to support the concept of life long learning in earlier and later stages of life. Specifically, a second part of the work package examines the role of complementarities in education and training, and a third part analyses the effects of labour market institutions on agents' incentives to invest in human capital. Finally, the work package examines the direct effects of labour market institutions on inequality.

The literature on the effects of globalization on inequality has not always considered that biased technical change will affect relative commodity prices and hence income inequality, and it has mainly ignored the effect of biased technological change on the steady state capital labour ratio. This literature misses the insight that a factor biased technology shock causes an increase in the steady state capital labour ratio, which in turn matters for the predicted change in relative factor prices and the pattern of specialization and trade. Important contributions to this literature include Leamer (1998), Krugman (2000), Xu (2001), and Findlay & Jones (2000). Becker & Gundlach (2007) consider that relative commodity prices would react to biased technology shocks, but also assume that the factor endowments of an economy can be treated as being independent of the technology shock. However, the traditional neoclassical growth model (Solow, 1956) predicts that a factor biased technology shock causes a change in the factor endowment ratio. This theoretical insight is expected to improve the predicted changes of specialization and trade in an integrated world economy, and hence the changes in inequality between high skilled and low skilled workers in rich and poor countries.

Skills can be upgraded by private training, which focuses on employed workers, and by publicly financed training, which focuses primarily on the unemployed. The positive returns to private training measures have been documented in a large literature (e.g. Lynch, 1992, Parent, 1999 (US); Booth, 1991 (UK); Pischke, 2001 (Germany); see Leuven, 2004, for an overview). Positive employment effects of publicly financed training have also been reported (e.g. Boone & van Ours, 2004; Rinne et al., 2007), but the evidence is generally mixed and the effects are not uniform (Kluve, 2006). Furthermore, empirical studies find almost unanimously that better educated workers are more likely to engage in training, so training may contribute to inequality (see e.g. Arulampalam et al., 2004, Carneiro & Heckman, 2003, Cunha et al., 2005, Cunha and Heckman, 2007; but see Ariga & Brunelli, 2006, for the opposite finding). Although research on the returns to training is extensive, evidence on the effect of private training on other labour market outcomes, such as employment duration, unemployment, and more generally economic inequality is rare (except OECD, 2004). Moreover, it is an open question how the quality of education affects the labour market outcomes of training (cf. Bassanini et al., 2005). To reveal how the concept of life-long learning can play a role in reducing inequalities, we thus examine how learning earlier in life affects the labour market outcomes of education and training later in life (on the job training, second degree, further training).

Labour market institutions will also affect the outcome of training and education. However, the impact of labour market institutions on inequality through different incentives for human capital accumulation has not received much attention so far. One exception is Lechthaler & Snower (2007, 2008), who base their work on literature that explains why firms actually invest in the general human capital of their workers (see e.g. Acemoglu & Pischke, 1997; 1999 a, b). Lechthaler & Snower (2008) show that a minimum wage reduces training investments for low-skilled workers due to a higher separation rate and increases training investments for medium-skilled workers. By exploring how labour market institutions like firing costs, unemployment benefits, and minimum wages affect workers' decisions to invest in their human capital, this part of the work package provides a new

perspective. While a compressed wage structure increases a firm's incentive to invest in human capital it is likely to reduce a worker's incentive to invest in human capital.

In order to avoid a biased evaluation of labour market institutions on inequality, we will contrast the indirect effects of labour market institutions with the direct effects. In contrast to the literature, which commonly assumes a policy-invariant matching function (Mortensen & Pissarides, 1994), a purely micro economically-founded model is applied (Brown et al., 2007). Since the matching process can itself be influenced through labour market institutions, this approach avoids running afoul of the Lucas critique. Evidence suggests a strong role of changes of labour market institutions in generating different outcomes in different European countries (Bertola et al., 2002) as well as a significant explanatory power for the outcomes within countries (Nickell et al., 2005). Checchi & García Penalosa (2008) show that stronger institutions are correlated with lower inequality and report that reforming them might reduce both unemployment and inequality. However, labour market institutions may have ambiguous effects on inequality, e.g. if they decrease income differentials but at the same time increase unemployment or vice versa. The final part of the work package explores the various channels by which different labour market institutions directly affect the employment-inequality trade-off.

1.2.3. Consequences of Inequality

According to the OECD report "Growing Unequal-Income distribution and poverty in OECD countries" social inequalities have increased in more than three-quarters of OECD countries over the past two decades. According to data from the Luxembourg Income Study (LIS) income inequality increased steadily for the US from 34.4% in 1979 to 40.1% in 2000. For the United Kingdom, it increased from 28.9% in 1979 to 37% in 1999. Judging from the social capital literature of the last 10-15 years, this development seems to pose a threat to the social cohesion of OECD countries.

Indeed, one of the most robust results of the recent literature on the determinants of social trust is that income inequality is negatively associated with trust. The earliest studies in a literature that is still not much more than ten years old, suggested that the strongest determinant of both social trust and participation in voluntary organizations was the level of income inequality in the surrounding society, whether at the level of the country, federal state or city (Brehm & Rahn, 1997; Alesina & la Ferrara, 2000; Uslaner, 2000, 2002). Several studies at the level of US states reconfirm that there is a strong and robust association between income inequality and both trust and broader concepts of social capital (Putnam, 2001a; Uslaner, 2002; Brown & Uslaner, 2005). Likewise, Knack (1992) suggested that a drop in social trust could be tracked in the simultaneous fall in voter turnout, a line of study apparently not followed in more recent work. At the level of the nation state, a long series of recent studies also tend to confirm that income inequality associated with trust (Knack and Keefer 1997; Delhey & Newton 2005; Rothstein et al., 2005; Bjørnskov, 2007, 20008; Roth 2008). Some of these studies also confirm that, as far as can be ascertained by the use of instrumental variables, this association is causal – a particular weak point in the trust literature pointed out by Nannestad's survey of the most recent studies (2008). The typical finding from both US state-level and cross-country studies is that a one standard deviation increase in income inequality, as measured by Gini coefficients, is associated with a decline of social trust of, on average, one third of a standard deviation.

This result is of imminent importance as scientists from various fields have agreed on the importance of trust (Coleman, 1990; Misztal, 1996; Newton, 1997; Luhmann, 2000; Putnam, 1993, 1995, 2000, 2001b; Paldam, 2007; Roth, 2007). Empirical research has so far shown that an optimal level of trust is crucial for political stability (Paxton, 2002; Gabriel et al., 2002; Offe et al., 2001), economic reforms (Heinemann & Tanz, 2008) and economic performance (Knack & Keefer, 1997, Zak & Knack, 2001, Beugelsdijk et al., 2004, Roth, 2009). Trust can hereby regarded as very good proxy of social cohesion within society. Thus it can be concluded that once trust levels move beyond the optimal threshold political stability and economic performance may be endangered.

Uslaner (2002) and Jordahl (2008) outline three potential transmission mechanisms connecting income inequality (and other types of inequality) to social trust:

Inequality can affect the degree to which people share social ties, values and norms; in other words, belong to a 'moral community'. This in turn limits trust as people are more trusting towards fellow citizens who share their position in life, as their motives and background is more immediately interpretable.

Inequality can lead to conflicts over resources that can magnify the incentives for deceitful and dishonest behaviour, which in turn is detrimental to trust.
Redistribution, i.e. creating a more equal income distribution, could have a positive effect as high opportunity costs of time, coming about since "working and trusting is more attractive than spending time verifying that others are trustworthy", becomes more likely as an aggregate behavioural feature when the incomes for the relatively poorest are raised.

However, mounting evidence from diverse areas such as the political support for redistributive policies and welfare state interventions (Alesina & Angeletos, 2005) and the economics of happiness (Bjørnskov, Dreher & Fischer, 2007) suggests that individual beliefs about economic processes mediate such associations, not least mechanisms 1) and 2).

Alesina & Angeletos (2005), for example, explain why the US does not have a European-style welfare state by documenting that the typical American believes that poverty is substantially more of an individual choice than Europeans, who tend to believe that poverty is the outcome of societal forces outside individual control. Referring to individually held beliefs about structures of control and power distribution in society that differ substantially between Black and non-Black Americans, Uslaner (2000: 580) notes that "you can't build trust when some feel left out and believe that others control the resources".

Following this type of thinking, the most recent work by Bjørnskov (2008) and Gustavsson & Jordahl (2008) therefore discuss the conditions under which inequality is associated with social trust and the broader concept of social capital. Taking their lead in Hayek's (1944: 117) assessment that "inequality is undoubtedly more readily borne, and affects the dignity of the person much less, if it is determined by impersonal forces than when it is due to design", both studies find evidence that inequality is only associated with trust under specific conditions. Gustavsson & Jordahl (2008), using municipality-level data from Sweden, find that normative beliefs about the desirability to reduce income inequality mediates the associations between inequality and trust to the extent that people who do not hold the normative belief that inequality should be reduced are not less trusting in more unequal municipalities while people who believe that inequality should be reduced are. Reflecting this finding, Bjørnskov (2008) finds that in a cross-country analysis, inequality is only associated with trust in countries with sufficiently leftwing political traditions, i.e. traditions that tend to ascribe the distribution of national income to personalized, conscious forces. As such, this is consistent with Leigh's (2006) finding that income inequality is *not* causally associated with trust across a large set of Australian communities.

In related areas, Bjørnskov, Fischer & Dreher (2007) likewise substantiate that the associations between inequality and individual happiness to a large extent reflect individuals' assessment of the 'procedural utility' of the processes generating the income distribution (Frey & Stutzer, 2005). Their individual-level study shows that the happiness of people who place themselves on the outer left wing is negatively affected by higher levels of income inequality while the happiness of those placing themselves on the outer right wing is actually positively affected.

Although social and systemic trust are important and valid proxies for social cohesion, a whole range of literature considers civic participation and political participation as well more objective indicators as for instance crime rates and social unrest as crucial measures for the social glue which holds societies together (Paxton 1999).

In a whole series of publications for instance Robert Putnam (1993, 1995, 2000, 2001) argues for the importance of civic participation. Constructing an index of civic participation (2000) he argues it is an influence on economic as well as social conditions. One of those conditions includes a positive relationship between high levels of social capital and the equality of society. However, Puttnam's work has been limited to the US since the social capital index which he constructed for the US has not yet been constructed for the OECD and EU27. It is thus crucial to first construct a social capital index and the analysis the possible impact of social inequalities on the index.

As a supplement, a long tradition in political science explores the relations between political stability, political participation, the broader thought of social cohesion, and inequality. Relative power theory, for example, contends that income inequality discourages poorer citizens from participating in the political process, both in terms of voting and by making them less informed. Conflict theory, on the other hand, argues that inequality creates stronger incentives to participate and engage in politics, yet the incentives are clearly connected to a decrease in the cohesion across segments of society. The most recent evidence presented in Dahl (2006) and Solt (2008) points to a negative effect of inequality on political participation as well as political stability, although these questions are far from settled.

Although interpersonal and systemic trust are related to confidence levels in market economies the concept should be kept distinct as the latter represents a crucial ingredient for free market economies and capitalistic production in general. Should people feel strongly dissatisfied with the system of market economies they may find it rational to pressure national governments to move towards more communitarian / socialist modes of production (Alesina et al 2001). As, according to a Globescan report (Globescan 2008), there has already been a significant decline in confidence levels in free markets in the big European economies in 2007 and a further decrease in confidence can be expected after the financial crisis an analysis of the impact of inequality on confidence levels seems to be crucial.

Summarizing, the state-of-the-art research on social trust and other dimensions of social cohesion and political participation suggests that increasing income inequality is *in general* associated with lower levels of trust, but not subjective wellbeing, and that the strength of the association may very likely depend on beliefs about societal processes and justice, that can differ substantially across different groups of society, and across different countries. However, relatively little is known at the moment of the causal mechanisms and, consequently, of the relative merits of different distributive policies.

Overall, it seems valid to say that the different types of inequality endanger social cohesion in various fields including citizen's willingness to participate in civic and political issues, the overall societal and political stability as well citizen's willingness to trust each other and their confidence towards institutions and the market economy as a whole.

The main aim of WP C2 is to analyse in depth the main drivers of individual preferences towards income inequality and redistribution in EU Member States in order to infer the degree of aversion to inequality emerging in European countries and, then, to assess national policies addressed to offset inequality. The United States will be also used as a comparative benchmark for several topics of the research. Values and norms about income inequalities are important in the determination of primary (pre tax and transfer) income inequalities (Atkinson, 1999, Smeeding 2002) as well as in shaping the attitudes on (and demand for) redistribution (Tóth, 2007). Attitudes to inequality not only differ between various European countries and the US (Svallfors, 1997, Kelley & Zagorski, 2004) but they also vary substantially in individual countries (Osberg & Smeeding 2006). However, perceptions of levels of inequality may not always correspond to actual levels of income differentials as measured by various inequality measures (see, for example Förster & Mira d'Ercole, 2005, OECD 2008, Lübker, 2004). Even more, sometimes even perceptions of trends may not correspond to actually observed

directions (Boeri & Brandolini, 2004, Tóth, 2003, 2005, 2006)- and hence the importance of looking at subjective well-being as well as income or consumption.

Comparison incomes of various types can be derived from consumption or incomes of (a weighted average of) general others Duesenberry (1949) or some special reference groups ("significant others as called by Merton, 1968). Derived from this approach comes the theory of relative deprivation (Runciman, 1966) underlining that deprivation may occur relative to others' position, not only in absolute terms. The direction (sign) of comparison incomes in models explaining inequality evaluations may be negative in certain countries and positive in others (Senik, 2005 and 2006). Others assume that depending on the context, a sequence of signs change can follow each other, due to a "tunnel effect" as coined by Hirschman (1973). In addition, past experiences and future prospects of income mobility may be important elements of personal well-being and they may also determine evaluations of inequalities. The more widespread acceptance of large inequalities in America (as compared to European countries in general), is, for example, claimed to lie in the "American dream". This type of 'American exceptionalism' is heavily discussed but also criticised in the literature (see the arguments in Alesina, Di Tella & MacCulloch (2004) on the one hand (Osberg & Smeeding 2006 and Bratsberg et al) on the other. Another explanation stresses historic factors like ideological indoctrination (see Glaeser, 2005, for example in a US-Europe comparison and Alesina & Fuchs-Sündeln (2005) for and East-West German comparison, while some counter evidence for 'socialist legacy' the CIS countries by Murty & Tiongson, 2008).

The demand for redistribution under majority voting systems is often linked to the extent of inequalities in various countries. The Meltzer & Richard (1981, from now on: MR) paradigm, predicts that inequality leads to larger social spending as the distance between the median and the average incomes derives the median voter into a pro-state position, should her acts be driven by self interest. However, as it is shown by empirical tests (reviewed most recently by Borck, 2007), the evidence is very mixed in this respect, to say the least.

However, it is not only current social status and current material circumstances but also the change in social status (be it actual or perceived, in the past or in the future) that may play a role in defining redistributive preferences. Piketty (1996) and Alesina & La Ferrara (2005) derived the demand for redistribution from personal experience of social mobility. Bénabou & Ok (2001) developed a formal model of the relationship between redistributive claims and the prospect for upward mobility (they call it POUM model). Ravallion & Lokshin (2000) have shown positive results when testing these hypotheses for Russia, while Tóth (2008) also confirmed this for Hungary. Fong, 2001, Alesina & La Ferrara, 2005 argue that belief in the fair operations of the economic system also assumed to contribute to a smaller demand for redistribution. Piketty (1996) and Fong (2001) found that beliefs about the determinants of individual success (whether it is effort or luck that leads to higher positions) are significant predictors of the demand for redistribution.

Others argue that certain deviations from the MR prediction can be derived from the general value systems people endorse. Egalitarian attitudes lead to a critique of the reward system of market economies and, as a consequence, a preference for redistribution to correct for these failures will be formed. Elsewhere, in certain regimes (like in transition countries experiencing a move from communism to a capitalistic social order) the moral authority of the free market may form the base for inequality evaluations (Kelley any Zagorski, 2004). The larger demand for redistribution is also attributed to cultural values and to socialisation (especially in the case of the post transition countries, see Alesina & Fuchs-Schündeln (2005), Suhrcke (2001) and Gijsberts (1999).

On the methodological ground, the research work will use the median voter model used by the "political economy" literature (Drazen, 2000) as the starting point of the analysis. According to the theoretical tool, under appropriate hypotheses, the majority voting is in favour of redistribution when the income distribution is right-skewed, that is the median voter's is poorer than the mean-income individual. Empirical evidence, however, often does not support this theoretical assumption. For

instance, in a country with a very high per capita income as the United States the size of redistribution is much lower than in countries as most European countries with a lower per capita income. This clearly indicates that some other mechanisms are at work. One of the most credited alternative hypotheses is that the preference for redistribution mainly depends on the beliefs that people hold about the ultimate origin of success in life. Those who think that merit and effort, and not luck, are the major determinants of income and wealth tend to distinguish between the deserving and the undeserving poor, and more generally think that governments should give priority to investment in education instead that to welfare subsides. On the other hand, in many countries social mobility reaches a so scant percentage that people incline to think that low skill workers gain low incomes not under their own responsibility.

WP C2 seeks to understand why attitudes toward income inequality and redistribution vary among individuals living in EU Member States and which are the main factors shaping these attitudes. Underlying the heading of "other-regarding" behaviour of individuals who sacrifice their own interest in order to favour others, there are two quite different strands of literature:
1. Social preferences as inequality aversion: individuals prefer the alternative for which the inequality index is lower (possibly, ranking first their own upgrading, and then the others' upgrading, in income equalization). (Fehr & Schmidt, 1999, and Bolton & Ockenfels, 2000).
2. "Outcome-oriented" view, disregarding the way these outcomes were produced.
Social preferences as procedural fairness: individuals' propensity to reciprocate the intensions perceived in others' actions (as in Rabin, 1993: individuals have preferences for benefiting those who are kind to them and for harming those behaving badly with them), or, more generally, the fairness in the procedure that has determined a certain outcome, as in Bolton, Brandts & Ockenfels,2005, and Hoffmann et al., 1994 (sensitiveness to procedural motives).

The work package will improve upon the existent literature analyzing in depth such issue by two different perspectives: by using European based and country specific survey about individual opinion about inequality and its main sources and experimental sessions on "preferences for redistribution". The latter will draw on recent experimental designs on attitudes towards redistribution described by Durante & Putterman (2008) and Eseray, Salmon & Barrileaux (2007).

1.3   *European coverage and comparative perspective*

The proposed research provides two dimensions of European coverage. First of all, it addresses issues of major and immediate concern to European policy-making institutions. Secondly, it is designed to cover the European Union in the context of advanced countries as a whole. The work has to be done on a European basis because it brings together research expertise which would be difficult to find on a national basis. Since the studies typically involve drawing inferences from the experiences of a number of European and other countries, they benefit substantially from the involvement as full participants or as assessors, institutions and individuals from a wide range of European states.

The European Commission is concerned with "the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress and a high level of protection and improvement of the quality of the environment". The Social Agenda European Commission, 2005- see also European Commission 2004) identified two priority areas:

1. Moving towards full employment, making work a real option for all, increasing the quality and productivity of work and anticipating and managing change.

2. A more cohesive society: equal opportunities for all.

This proposal is focused primarily on the second priority area, but some of the research is also relevant to the first priority area. The primary focus in the first priority area is delivered by work packages in strand B. The aim of these work packages is to identify drivers of inequality so that

policies can be designed to offset inherent causes of inequality in society. One cause of inequality is inequality in access to post-compulsory education or inequality in the benefits that people derive from it. Work package B1 will explore the extent to which returns to education are influenced by family background. If this indicates that the benefits people derive from education are sensitive to their background may point to the need for policies to be devised to offset this both from an individual perspective and from the perspective of increasing the productivity of work. Work package B3 will explore an alternative possibility, that myopia discourages people from undertaking post-compulsory education. Once again, should the research find that this is both a possibility and helps to explain take-up patterns, there will be a clear case for policies which offset the effects of this myopia so as to increase the employability and productivity of people. Work package B4 explores, among other things, the interaction between labour market institutions and the incentives to take up post-compulsory education and training. Thus it can be expected to identify institutional obstacles to the achievement of this first priority.

All of the work packages contribute to the second objective of achieving a more cohesive society with equal opportunities for all. Work package A1 is designed to provide an overview of the current state of inequality. Work package A2 provides improved insights into the measurement of inequality and its welfare consequences and also into the role of tax evasion as a source of inequality. Issues of inequality of opportunity in general and the specific issue of gender discrimination are researched in work package A3; in particular this focuses on how far low pay for women is a consequence of access to education and how far it is explained by pure discrimination. Thus this research will make it possible to identify where inequality of opportunity is concentrated.

The work in strand B on drivers of inequality focuses on other key aspects in addition to the question of employment and education discussed above- although inequalities in this almost certainly limit social cohesion. Health inequality can be an important limit on social cohesion, and the research here which will shed light on the inter-generational transmission of health inequality will valuable in identifying one of the possible factors behind this. Decision-making myopia may affect people's willingness to save for old age as well as their willingness to undertake post-compulsory education; thus, if not offset by policy, it may be a factor leading to poverty and inequality in old age.

The second objective is also addressed in strand C since this focuses on the cultural, social and political consequences of inequality. In work package C1 we identify the impact of inequality on a key component of social cohesion, trust and a set of supplementary indicators of social cohesion. These include political stability, political participation, social unrest, and crime levels. We also seek to identify normative and perceptional conditions under which inequality need not affect social cohesion. In work package C2 we then explore the impact of inequality on people's preferences, identifying how inequality may shape society. This will establish whether, in the medium term, inequality is likely to set in train the political processes which might abate it.

The research also provides comprehensive coverage of Europe in a geographic sense. In our research we look at European countries in an overall context also provided by other advanced economies. The coverage of each component of the research obviously has to reflect the data that are available. Some of our research is in the nature of detailed case studies and is intended to highlight areas of policy importance rather than, at this stage, to compare a range of countries. Other research, in work-packages B3 and B4 is carried out by means of simulation methods and will be used to explore key aspects of the European environment. The research which is based on major survey data sources is designed to ensure that, subject to the limitations of the data sources such as the Luxemburg Income Survey and the overall budget constraint, coverage of European countries within the set of advanced economies is thorough. This will ensure that the key differences in social systems as described by Esping-Andersen (1990) are represented, so as to make it possible to understand i) the way in which these related to differences in the various aspects of inequality which we will study between countries and ii) the way in which social systems have influenced changes to these aspects of inequality over time.

## 1.4   S/T methodology and associated work plan

(i) Overall strategy of the work plan (1 page max)

Addressing the issues raised in the call is best handled by distinct pieces of research on a range of topics chosen so as to cover the call. As the earlier part of the proposal makes clear, we have found it helpful to group these into three strands representing related pieces of work on measurement of inequality, drivers of inequality and consequences of inequality. We have adopted research methods appropriate to the topics in question, relying on a combination of statistical and econometric methods and simulation modelling.

With the exception of the production of datasets by some consortium members for use by them and other members, the main body of the research is not of a type such that some components have to be completed before other components can be carried out. This property, dictated by the nature of the call, obviously greatly reduces the risks faced by the overall project because, until the final work in D1 on drawing the results together to produce prospective analysis, the work packages can run largely independently of each other. Splitting the work into three strands makes the project more manageable than would otherwise be the case.

In order to guarantee the scientific quality of the research, two evaluators have been appointed, one an economist with experience public policy work and the other a sociologist. These evaluators will report to the scientific co-ordinator on progress on an annual basis, with the final report three months ahead of the end of the project so that the final documents can be revised as necessary. Other expert scientific input will be introduced by inviting appropriate experts to the conferences and workshops. Our experience is that this is better than a scientific advisory board as a means of delivering quality because it brings in people who are keen to attend meetings on topics in which they have a particular interest but do not feel able to make a more substantial commitment.

(ii) Timing of Work Packages
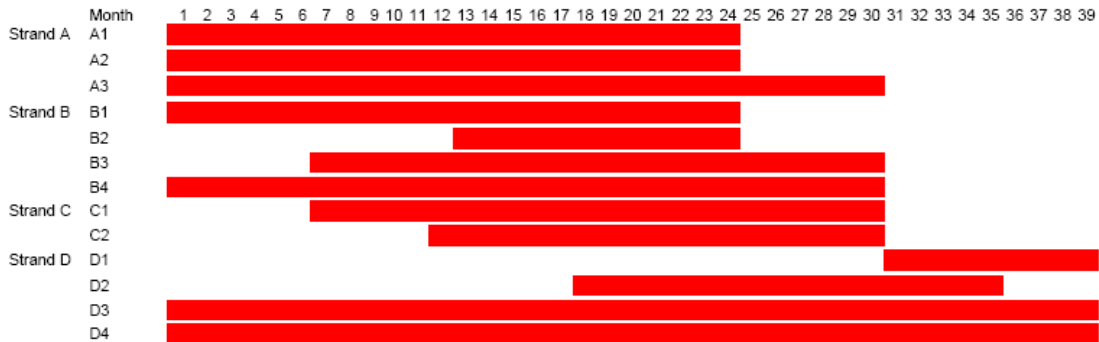
Table 1.4 a. Work package list

Work package No[7]	Work package title	Type of activity[8]	Lead participant no[9]	Lead participant short name	Person-months[10]	Start month[11]	End month[11]
A1	Recent Developments in Inequality and Poverty	RTD	3	TARKI	28	M1	M24
A2	Welfare Measurement, Inequality and Tax Evasion	RTD	2	NIESR	47	M1	M24
A3	Opportunity and Gender Discrimination	RTD	10	CCEIA	34	M1	M30
B1	Intergenerational Mobility and Family Background Effects on Returns to Education	RTD	5	ISAE	26	M1	M24
B2	Intergenerational Aspects of Health Inequality	RTD	4	ESRI	14	M13	M24
B3	Behavioural Myopia as a Source of Inequality	RTD	2	NIESR	18	M7	M30
B4	Labour Market Institutions as Drivers of Inequality	RTD	7	IfW	33	M1	M30
C1	Social Cultural and Political Consequences of Inequality	RTD	1	CEPS	47	M7	M30
C2	Attitudes to Inequality	RTD	3	TARKI	26	M12	M30
D1	Policy Synthesis	RTD	2	NIESR	17	M31	M39
D2	Appraisal	RTD	12	CPB	4	M18	M36
D3	Scientific Management	MGT	1	NIESR	5	M1	M39
D4	Administration	MGT	1	CEPS	7	M1	M39
				TOTAL	306		

---

[7] Work package number: WP 1 – WP n.

[8] Please note: RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium; OTHER = Other specific activities, if applicable in this call, including any activities to prepare for the dissemination and/or exploitation of project results and coordination activities.

[9] Number of the participant leading the work in this work package.

[10] The total number of person-months allocated to each work package.

[11] Measured in months from the project start date (month 1).

Table 1.4 b. Deliverables List

Del. No. [12]	Deliverable name	WP no.	Nature[13]	Dissemina-tion level[14]	Delivery date[15]
A1.1	Recent developments in inequality and poverty.	A1	R	PU	M12
A1.2	Effects of structural changes on income inequality.	A1	R	PU	M21
A1.3	Top income shares and overall inequality.	A1	R	PU	M18
A1.4	Inequalities in skill composition.	A1	R	PU	M16
A1.5	Health Status	A1	R	PU	M16
A1.6	Policy Brief	A1	R	PU	M25
A1.7	Final Research Report	A1	R	PU	M25
A2.1	Cross-country Comparisons using ETK and QUAIDS	A2	R	PU	M12
A2.2	Household type and cross-country comparisons	A2	R	PU	M12
A2.3	Tax evasion and income inequality	A2	R	PU	M15
A2.4	Tax evasion consumption patterns and inequality	A2	R	PU	M18
A2.5	Convergence of inequality-adjusted well-being	A2	R	PU	M18
A2.6	Inequality and subjective well-being	A2	R	PU	M24
A2.7	Micro and macro dimensions of well-being measures	A2	R	PU	M24
A2.8	Policy Brief	A2	R	PU	M24
A2.9	Final Research Report	A2	R	PU	M24
A3.1	Inequality of Economic Opportunities	A3	R	PU	M12
A3.2	Inequality and children's opportunities	A3	R	PU	M18
A3.3	Discrimination and the Gender	A3	R	PU	M30

[12] Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>. For example, deliverable 4.2 would be the second deliverable from work package 4.

[13] Please indicate the nature of the deliverable using one of the following codes:

R = Report, **P** = Prototype, **D** = Demonstrator, **O** = Other

[14] Please note following codes used in this table:

PU = Public
PP = Restricted to other programme participants (including the Commission Services).
RE = Restricted to a group specified by the consortium (including the Commission Services).
CO = Confidential, only for members of the consortium (including the Commission Services).

[15] Measured in months from the project start date (month 1).

	Pay Gap				
A3.4	Policy Brief	A3	R	PU	M30
A3.5	Final Research Report	A3	R	PU	M30
B1.1	Social mobility in EU	B1	R	PU	M6
B1.2	Intergenerational persistence of income conditions M9	B1	R	PU	M9
B1.3	Intergenerational persistence of educational attainment.	B1	R	PU	M12
B1.4	Returns to education by family background	B1	R	PU	M18
B1.5	The link between industry and social mobility in selected European countries	B1	R	PU	M23
B1.6	Policy Brief	B1	R	PU	M25
B1.7	Final Research Report	B1	R	PU	M25
B2.1	Variation in the impact of socio-economic processes on health and the role of intergenerational transmission across European states	B2	R	PU	M22
B2.2	Persistent poverty and the transition between good and bad health	B2	R	PU	M20
B2.3	Policy Brief	B2	R	PU	M23
B2.4	Final Research Report	B2			M24
B3.1	Hyperbolic preferences and education	B3	R	PU	M24
B3.2	Hyperbolic preferences and retirement saving	B3	R	PU	M30
B3.3	Policy Brief	B3	R	PU	M30
B3.4	Final Report	B3	R	PU	M30
B4.1	Trade, factor-biased technical change and inequality	B5	R	PU	M9
B4.2	Training and learning complementarity	B5	R	PU	M15
B4.3	Labour market institutions and educational inequality	B5	R	PU	M21
B4.4	Direct effects of labour market institutions on inequality.	B5	R	PU	M27
B4.5	Policy Brief	B5	R	PU	M31
B4.6	Final Research Report	B5	R	PU	M31
C1.1	Micro-analysis of social trust	C1	R	PU	M12
C1.2	Impact of economic and social inequalities on trust	C1	R	PU	M12

C1.3	Relationship between income inequality and voter turnout	C1	R	PU	M18
C1.4	Economic and Social inequalities and civic participation	C1	R	PU	M18
C1.5	Economic inequality and political stability	C1	R	PU	M24
C1.6	Impact of economic and social inequalities on a broader set of social cohesion indicators	C1	R	PU	M24
C1.7	Impact of income and wealth inequalities on confidence levels towards market economies.	C1	R	PU	M30
C1.8	Policy Brief	C1	R	PU	M31
C1.9	Final Report	C1	R	PU	M31
C2.1	Measured, Perceived and Tolerated Inequality	C2	R	PU	M18
C2.2	Explaining Inequality Intolerance	C2	R	PU	M24
C2.3	Determinants of the Demand for Redistribution	C2	R	PU	M27
C2.4	Preferences for Redistribution: Experimental Results	C2	R	PU	M21
C2.5	Coherence between Individual and Social Preferences	C2	R	PU	M28
C2.6	Policy Brief	C2	R	PU	M31
C2.7	Final Research Report	C2	R	PU	M31
D1.1	Summary Report on Strand A.	D1	R	PU	M34
D1.2	Summary Report on Strand B	D1	R	PU	M34
D1.3	Summary Report on Strand C	D1	R	PU	M34
D1.4	Synthesis of Long-Term Policy Options	D1	R	PU	M37
D1.5	Combined Research Report	D1	R	PU	M39
D2.1	Mid-term Evaluation Report on Strand A	D2	R	PP	M19
D2.2	Mid-term Evaluation Report on Strand B	D2	R	PP	M19
D2.3	Mid-term Evaluation Report on Strand C	D2	R	PP	M19
D2.4	Final Evaluation Report on Strand A	D2	R	PP	M34
D2.5	Final Evaluation Report on Strand B	D2	R	PP	M34
D2.6	Final Evaluation Report on Strand C	D2	R	PP	M32
D2.7	Evaluation Report on Policy Synthesis	D2	R	PP	M36
D3.1	Consortium Meeting	D3	O	RE	M3

D3.2	Strand A Meeting	D3	O	RE	M12
D3.3	Strand B Meeting	D3	O	RE	M12
D3.4	Strand C Meeting	D3	O	RE	M12
D3.5	Mid-term Conference	D3	O	RE	M18
D3.6	Strand A Meeting	D3	O	RE	M24
D3.7	Strand B Meeting	D3	O	RE	M24
D3.8	Strand C Meeting	D3	O	RE	M24
D3.9	Consortium Meeting	D3	O	RE	M30
D3.10	Consortium Final Conference	D3	O	RE	M36
D3.11	Ad hoc reports as Required by the Commission	D3	R	PP	–
D4.1-D4.3	3 Annual Administrative Progress Reports	D4	R	PP	M13, M25, M37
D4.4	Mid-term Administrative Progress Report	D4	R	PP	M19
D4.5	Final Administrative Report	D4	R	PP	M39
D4.6	Workshop Minutes	D4	R	PP	-

Table 1.4 c. List of milestones

Milestones are control points where decisions are needed with regard to the next stage of the project. For example, a milestone may occur when a major result has been achieved, if its successful attainment is required for the next phase of work. Another example would be a point when the consortium must decide which of several technologies to adopt for further development.

Milestone number	Milestone name	Work package(s) involved	Expected date [16]	Means of verification[17]
MS1	First Batch of Research Papers	A1 A2 A3 B1 B2 B4 C1	M12	Posted on Website
MS2	First Conference	A1 A2 A3 B1 B2 B4 C1	M18	Public Event
MS3	Second Batch of Research Papers	A1 A2 A3 B1 B2 B3 B4 C1 C2	M24	Posted on Website
MS4	Final Batch of Research Papers	A3 B4 C1 C2	M30	Posted on Web Site
MS5	Final Conference	All	M34	Public Event

---

[16] Measured in months from the project start date (month 1).

[17] Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For example: a laboratory prototype completed and running flawlessly; software released and validated by a user group; field survey complete and data quality validated.

Table 1.4 d. Work package descriptions

Work package number	A1	Start date or starting event		Month 1			
Work package title	Recent Developments in Inequality and Poverty						
Activity type[18]	RTD						
Participant number	3	1	11				
Participant short name	TARKI	CEPS	FINLAB				
Person-months per participant	15	5	8				

Objectives

This work package will explore the evolution of overall inequality and its major dimensions across countries and over time. It will answer the following questions:

Q1. What do the most recent comparative income data for the EU27 and the other major OECD countries say about inter-country differences in the levels and changes in income distribution and poverty? (Task 1)

Q2. How far are these changes due to changing population structure, such as improving educational qualifications, increasing female employment in explaining evolutions in earnings inequality? (Task 1)

Q3. What are the links between the evolution of top income shares and factors that account for the global market pressures on income distribution, like labour income share, real wage growth, GDP growth, real interest rates and measures of the openness of the economy? (Task 2)

Q4. What are the impacts of labour market and other institutions as well as factors governed by political decisions on top income shares? (Task 2)

Q5. How does educational inequality compare in the different countries? (Task 3)

Q6. What is the relationship between income and health inequalities? (Task 3)

Description of work :

Task 1. Description of the evolution in inequality in the EU (TARKI)

Research tasks and research methods
We will provide a description of income inequality and poverty will be provided using the most recent data available in the EU, Canada and the United States. Differences in income structure between countries will be explored, and the effect of different income components on total household income inequality will be studied by decomposition analysis (Shorrocks, 1982).

We will study the effect of structural changes and changes in between group inequality on the evolution of overall earnings inequality. We will examine the role of demographic factors (household formation, size and composition, age structure), labour market factors (individual and household employment patterns) and human capital distribution structure (education attainment).

Data and country coverage
Data used will be most recent releases of EU-SILC covering EU-27 and Norway and Iceland. LIS data will be used for US, Canada and New Zealand. ECHP and LIS data will be used to provided historic data.

---

18 Please indicate <u>one</u> activity per work package:

RTD = Research and technological development (including any activities to prepare for the dissemination and/or exploitation of project results, and coordination activities); DEM = Demonstration; MGT = Management of the consortium; OTHER = Other specific activities, if applicable.

Task 2. The role of top income groups in shaping inequality trends (FINLAB)

Research tasks and research methods
Descriptive analysis will outline how top income shares have evolved in different countries, with special attention paid to whether development has been similar in countries with the same institutional characteristics. Distributional indicators calculated from the LIS will be compared with top income shares in order to see whether they have similar patterns. We will also examine whether the relative shares of capital and labour income and their distribution are linked to the evolution of top income shares.

Econometric analysis will consist of various time-series, cross-country regressions. We will explain the evolution of top income shares by changes in macroeconomic conditions and institutional characteristics. We will also experiment with specifications where top income shares are used as explanatory rather than dependent variables in order to see whether they have had an impact on economic growth or contributed to the changes in the political and institutional conditions. The methods will take into account the dynamic nature of the data as well as aim to test for the exogeneity of our explanatory variables, which reflect the development of economic institutions.

Data and country coverage
The primary source of data on top incomes is provided by Atkinson and Piketty (2007, 2009). Macro-economic indicators are provided by the OECD data bases with institutional data provided by Nickell (2006). Additional distributional data will be drawn from the Luxembourg Income Studies data and the UNU-WIDER World Income Inequality Database.

We will select a group of countries, which includes representatives from each major institutional setting, including Nordic countries, Anglo-Saxon countries, North European countries and Mediterranean countries.

Task 3. Income inequalities and the distribution of education and health (TARKI and CEPS)

Research Tasks and research methods
We will study inequality of educational attainment, the report analyses the EU's skill composition in comparison with OECD countries, here in particular the US. The study will look at changes over time in Gini coefficients, and 50/10 and 90/10 quotients. We will also investigate the interrelationship between inequality in income and inequality in self-perceived health using probit analysis of individual data, taking due account of possible endogeneity between health and driving factors such as income.

Data and country coverage
Education data will be drawn from Labour Force surveys. Quality of education data will be provided by OECD PISA studies. These data are available for OECD countries.
When studying the effect of income differences on the self-perceived health status of individuals we use recent data from EU-SILC.

Deliverables:
A1.1. Paper on recent developments in inequality and poverty in the EU and inter-country differences in income distribution. (TARKI) M12
A1.2. Paper on effect of structural changes on the evolution of income inequality. (TARKI) M21
A1.3. Paper on top income shares and overall inequality. (FINLAB) M18
A1.4. Paper on evolution of inequalities in the skill composition and education of the EU's and OECD's labour forces. (CEPS) M16
A1.5. Paper on the effect of income differences on the self-perceived health status of individuals. (TARKI) M16
A1.6. Policy Brief M25
A1.7. Final Research Report M25

Work package number	A2		Start date or starting event			M1	
Work package title	Welfare Measurement, Inequality and Tax Evasion						
Activity Type	RTD						
Participant number	2	3	10	8			
Participant Short Name	NIESR	TARKI	CCEIA	UGOE			
Person-months per participant	10	9	15	13			

Objectives: The overall aim is to explore four alternatives to conventional measures of income and income distribution as indicators of inequality and welfare at both micro and macro levels. We will address the following questions.

Q1. What are the implications of differences in consumption patterns in different countries for comparisons of income distribution and relative living standards across countries, over time and in the light of differences in household composition and what does this imply for overall welfare indicators? (Task 1)

Q2. What is the implication for inequality of tax evasion and what will be the practical impact of policy measures designed to reduce evasion and inequality? (Task 2)

Q3. How far has economic welfare, as indicated by distribution-adjusted measures of well-being converged in the OECD and in sub-groups such as old and new EU countries and accession countries? (Task 3)

Q4. What is the relationship between inequality and subjective well-being and how has this relationship changed over time? How far is this affected by the non-income dimensions of well-being? (Task 3)

Description of work:

Task 1. Comparison of Income Levels and Welfare (NIESR and TARKI)

We will estimate "true" price indexes using consumption data for different groups for 1995, 2000 and 2005 or years close by. Ranking the survey data by income after correcting for differences in household size, we will first use the ETK (Fox, 2003) method to compare the average incomes of people in three income bands (5-15th percentile, 45th-55th percentile and 85th-95th percentile) based on PPP data. This standard method will provide a reference point. We will then for each of the three categories and for the full group of consumers, estimate the consumption parameters of the QUAIDS (Banks, Blundell and Lwebel, 1997) demand system using the data in panel form so as to be able to explore the relative positions of the people in the three bands in the manner applied to national averages by Neary (2004); we will estimate the QUAIDS system taking account of the effects of household composition on demand (Logan, 2008). Using welfare indicators based on Kornüs price indices (Oulton, 2008) we will produce an aggregate welfare indicators as suggested by Kehoe, Levine and Romer (1990). The work will be done for Cyprus, France, Hungary, Italy, Poland, Spain, Sweden UK and US, reflecting availability of household budget data..

Task 2. Analysis of Tax Evasion (CEEIA)

We will use household survey data to estimate, for each country, a complete demand system based on QUAIDS and extended to incorporate tax evasion parameters (Lyssiotou, Pashardes and Stengos, 2004). This system will be used to estimate the "utility" level of each household and integrate it backwards to derive their "true" income level. We will then compare the distribution of the estimated "true" income with the distribution of reported income, using alternative measures (Gini coefficient, percentiles ratios, mean income or shares of income groups), and infer about the effects of tax evasion on inequality in these countries, depending on which of the distributions is more unequal. We will further analyze the impact on income inequality from: (i) substituting income taxes for consumption taxes; and (ii) adopting "presumptive taxation" methods. We will do this either though micro-simulations or using alternative techniques (e.g. regression analysis) to associate individual tax liability and benefit entitlement with gross income, for cases where data availability problems may limit the scope for simulations. With regard to consumption taxes, we will be illustrating the dilemma that although this type of taxes are more difficult to evade, they usually have

less scope to be as progressive as income taxes; and we will further exploit the discretion allowed by the EU on VAT tax differentiation to analyze how progressive consumption taxes can actually be. In the assessment of "presumptive taxation" we will propose alternative indicators of "true" income, including consumption and/or ownership of durables, and evaluate the effects that their adoption may have on income inequality. The work will be done for Cyprus, France, Italy, Spain and the UK using data for 2005 or close by. The impact of under-reporting on the distributional and welfare measures produced in task 1 will be examined

Task 3. Distribution-adjusted Well-being (UGOE)
Distribution-adjusted well-being measures will be computed using the measures set out by Gruen and Klasen (2008) applied to inequality data from LIS, WIDER, and EU SILC and PPP-adjusted income data from the 2005 PPP round.. A macro analysis will be carried out to explore the role of aggregate income, income inequality, welfare state and tax regimes as determinants of well-being and distribution-adjusted well-being. A particular focus will be on examining to what extent there is convergence in distribution-adjusted well-being measures within the EU and particular subgroups (EU15 and 2004 accession countries), as well as with potential accession countries. The role of changes in inequality in affecting convergence will be examined in detail. A micro analysis will be conducted of the relationship between income inequality and subjective well-being inequality using data from several waves of the European Values Survey. Finally the inter-relationship between distribution-adjusted well-being, subjective well-being, and non-income dimensions of well-being (e.g. health and education outcomes indicators) will be explored using panel methods.

Deliverables:

A2.1. Paper on ETK and QUAIDS comparison of relative incomes of people in the three different bands. (NIESR/TARKI) M12
A2.2. Paper on comparison of relative incomes computed using QUAIDS after taking account of household type. (NIESR/TARKI) M12
A2.3. Paper on tax evasion on Southern EU countries and income inequality (CCEIA) M15
A2.4. Paper on income inequality after accounting for tax evasion and different consumption patterns (CCEIA/NIESR/TARKI) M18
A2.5. Paper on convergence in distribution-adjusted well-being within the EU 25 and potential accession countries (UGOE) M18
A2.6. Paper on inequality and subjective well-being in EU countries (UGOE). M24
A2.7. Paper on micro and macro dimensions of well-being measures (UGOE) M24
A2.8. Policy Brief M24
A2.9. Final Research Report M24

Work package number	A3	Start date or starting event			Month 1	
Work package title	Opportunity and Discrimination					
Activity Type	RTD					
Participant number	UGOE	CCEIA				
Person-months per participant	19	15				

Objectives:
The purpose of this work package is to explore equality of opportunity and to examine the evidence for gender discrimination. We will answer the following questions
Q1. How widespread is the inequality of opportunity faced by adults and children? (Task 1)
Q2. What are the changes in economic opportunities faced by adults on children? (Task 1)
Q3. What are the links between the gender wage gap and how far is it accounted for by country institutions? (Task 2)
Q4. What are the effects of removing the discrimination (inefficiency) part of the gender wage gap on both wage and income inequality? (Task 2)

Description of work:

Task 1. Inequality and Inequality of Opportunity (UGOE)

The first task will be carried by classifying households into groups such that all households in each cell have similar circumstances (circumstances exogenous to the individual such as gender, race / ethnicity, total number of household members or birthplace describe the individual circumstances that might influence inequality in economic opportunity). If the cells are appropriately defined, differences between cells can be associated with inequality of opportunity while differences within cells can be considered the result of effort or luck. Theil's L-index will then be used as an overall indicator of inequality in each country studied; it meets the requirements of being both decomposable and path independent. Different population groups can be ranked from least to most advantaged to the most disadvantaged ones, which gives an opportunity profile of the population. The set of circumstances for groups with the fewest opportunities provides an opportunity deprivation profile since it identifies those groups which are most disadvantaged through no fault of their own. These calculations will be performed for household labour income and household disposable income. The household groups are likely to be defined by household structure and location in our analysis of the circumstances of adults.

We will then look at the circumstances of children, exploring access to post-compulsory education and, in countries without free medical treatment, expenditure on health services, or, for countries with available data, access to a health services profile. We will then follow Paes, Ferreira, Molinas and Saavedra (2009) calculating their D-index which provides a summary comparison of different groups' probabilities of accessing particular opportunities in order to identify the probability of access to post-compulsory education and health expenditure above an appropriate threshold. We will then further produce their Human Opportunity Index which adjusts the D-index for the average probability of access.

The first two steps provide an insight in inequality changes and can show rank correlations between changes in different levels of adult (income) and childhood (opportunity) inequality (high/high, high/low, low/high, low/low). This step basically shows how different characteristics of inequality developed jointly over the observed period. We will show how changes in adult (income) inequality impact on childhood (opportunity) inequality. Additionally to this descriptive analysis we will try to give a prospective answer to what would be inequality in the future, according to different scenarios of social expenditure (levels and targeting), according to results from the first two research steps.

Task 2. The Gender Pay Gap (CEEIA)
The first step will be to compute and analyze descriptive statistics of male and female wages for EU countries, using data from the 2006 EU Survey on Income and Living Conditions (EU-SILC). The second step will be to analyze the determinants of wage formation, by estimating wage equations for males and females in each country. These estimates will follow the Heckman (1979) method for correcting for sample selection bias due to the low participation of women in the labour market (important for cross country comparison). The following step will be to decompose the gender wage gap into a component that can be explained by differences in skills and employment characteristics (and can therefore be justified on efficiency grounds), and an unexplained part reflecting potential discrimination. To do this decomposition we will follow the Blinder (1973)-Oaxaca (1973) methodology, which uses regression analysis to split the observed gap into three components: (i) reward to different skills (efficient component); (ii) difference in the reward for male characteristics (male advantage); (iii) difference in the reward for female characteristics (female disadvantage). This analysis will be also undertaken using "quantile" regressions (following Christofides and Vrachimis, 2007), which will allow us to examine the relationship between the gender-wage gap and the explanatory variables at various points of the distribution (e.g., at the fifth percentile, at the median, and at the ninety-fifth percentile). We will then use these estimates to infer on how the gender wage gap may affect inequality among women, by observing at which quantiles the gap is wider. In addition, we will analyze whether the discrimination part of the wage gap can be associated with country institutions (maternity leave, child care, tax benefits, etc.). Finally, we will perform micro-simulations to understand whether wage and income inequality can be reduced by eliminating the component of the gender-wage gap

that cannot be explained on efficiency grounds; and we will propose specific policy measures to reduce this component, without exacerbating inequality.

Data and Country Coverage

This work will be carried out using data from household budget surveys stored in the LIS data base, EU-SILC and the ECHP. The first part of the study will be carried out for Canada, France, Germany, Italy, Poland, Russia, Sweden, the United Kingdom and the United States for 1995 and 2005 or as near as possible given data availability while the second part will be carried out for EU countries using EU-SILC for 2006 and for those countries for which ECHP is available for 1995.

Deliverables:

A3.1. Paper on inequality of economic opportunities. (UGOE) M12

A3.2. Paper on the impact of changes in inequality of economic opportunities on childhood opportunities. (UGOE) M18

A3.3. Paper on the Impact of the Gender Wage Gap on Income Inequality: a Cross Country Study. (CCEIA) M30

A3.4. Policy Brief M30

A3.5. Final Research Report M30

Work package number	B1	Start date or starting event			Month 1	
Work package title	Intergenerational Mobility and Family Background Effects on Returns to Education					
Activity Type	RTD					
Participant number	5	4				
Participant Short Name	ISAE	ESRI				
Person-months per participant	18	8				

Objectives: The purpose of this work-package is to explore family background as a constraint on people's economic experience. It will answer the following questions:

Q1. Which pattern of social mobility emerges from the new EU-SILC data base for European countries? (Task 1)

Q2. Is the relationship between current income and the living standard of parents strong in European countries? (Task 2)

Q3. How deep is the intergenerational persistence in educational attainments? (Task 3)

Q4. Do earnings and/or returns to education differ by family background? (Task 4)

Q5. Is the intergenerational transmission process uniform across industries and occupational locations? (Task 5)

Description of work: We will analyse the interactions between knowledge, education, skills and social (intergenerational) mobility. Lack of social mobility can produce poor social cohesion and inequality of opportunity, but it also has a direct economic cost as the talents of disadvantaged groups are underutilised. There is now a very well developed literature in the area of social and income mobility. Two main approaches have been adopted: economists have largely focused upon the correlation in earnings between fathers and sons. Sociologists, on the other hand, have focused on contingency tables and analysed the association between the occupational class of parents (usually fathers) and their children. In all modern societies significant associations between family background and individual attainment have been found. International comparative research has had some success (Erikson and Goldthorpe 1992; Breen, 2004;

Corak, 2006), but international comparisons are complicated by differences across national data sources (Solon, 2002; Erikson and Goldthorpe, 2002). In order to minimise these comparability problems this work package uses a new harmonised dataset for European countries - the 2005 wave of the EU-Survey of Income and Living Conditions (EU-SILC). This includes retrospective information on the respondent and their family of origin.

Task 1. Parents' and Children's Occupational Class (ESRI)
An examination of the association between the occupational class of respondents to the EU-SILC survey and that of their parents when the respondent was a teenager. This work will analyse how the social class association varies across European countries.

Task 2. Parents' and Children's Living Standards (ISAE)
The second task is a comparative analysis of the relationship between current income and the living standard of parents, which is inferable from the EU-SILC question (PM100) on "Financial problems in household when young teenager". Education is acknowledged as the main mediating factor in social mobility processes (Ishida, Müller and Ridge, 1995), but research suggests that modern societies are not "meritocracies" in the sense that, once educational qualifications (and other "merit" variables) are controlled for, class of destination is no longer dependent on class of origin; on the contrary, a significant and often substantial dependence remains (Breen and Goldthorpe, 2001). Tasks one and two will investigate the mediating role which education plays in income and social class attainment.

Task 3. Intergenerational Transmission of Educational Attainment (ISAE)
Every country studied research has found high correlations in the educational attainment across generations. The reasons of this persistence have usually been sought either in liquidity constraints which are believed to hinder the children of lower educated groups from investing in higher education, and/or a form of origin dependent auto-selection in terms of scholastic choices (Cameron and Taber, 2000; Carneiro and Heckman, 2002). The association between intergenerational educational attainments in European countries will be studied using EU-SILC data.

Task 4. Family Background and Returns to Education (ISAE)
One important channel for the transmission of intergenerational educational attainment could be differences in the earnings and/or returns to education by family background. Such differentials would act as a disincentive to lower income/lower educated parents and children. Family background is often used as a control variable in wage equations aimed at evaluating the returns to schooling, but little attention has been paid to the issue of differential returns by social origin, apart from a few studies focused on a single country (Bennett, Glennerster and Nevison, 1992 for UK; Godde and Schnabel, 1998, for Germany; Checchi, Fiorio and Leonardi 2006 and Gabriele and Raitano 2007 for Italy). Again EU-SILC data makes it possible to examine the differential in earnings and returns to the investment in human capital across European countries.

Task 5. Industry Influences on Meritocracy (ESRI and ISAE)
The processes through which advantage is transmitted across generations could be influenced by the skill requirements of different sectors. Where these skill requirements are high, such as in knowledge based industries, this may lead to higher levels of meritocracy making these industries more porous to lower income groups. The link between industry and social mobility in selected European countries will be analysed as task 5. Unfortunately data on industry in the public version of EU-SILC are limited so analysis will be carried out by the ESRI using the Irish SILC data and ISAE using a specific Italian data set (ILFI).

Task 6. Cross-Country Comparison of Family Background Role (ISAE)
This work for the final report will gather together the main results of the work package and provide valuable insights into the manner in which the different dimensions of mobility vary across European countries. This report will also assess the policy interventions that may improve the allocation of talents and equality of opportunity thereby raising education attainment in different structural conditions. The main policy issues will be summarised in a policy brief.

Deliverables:

B1.1. Paper on social mobility in the EU. M6 (ESRI)

B1.2. Paper on intergenerational persistence of income conditions. M9 (ISAE)

B1.3. Paper on intergenerational persistence of educational attainment. M12 (ISAE)

B1.4. Paper on returns to education by family background M18 (ISAE)

B1.5. Paper on the link between industry and social mobility in selected European countries M23 (ESRI and ISAE)

B1.6. Policy brief M25 (ISAE)

B1.7. Final Research Report M25 (ISAE)

Work package number	B2	**Start date or starting event**			Month 13		
Work package title	The Intergenerational Transmission of Health						
Activity Type	RTD						
Participant number	ESRI	ISAE					
Participant Short Name	4	5					
Person-months per participant	6	8					

Objectives: The work package will improve understanding of the direct and indirect routes through which deprivation influences health outcomes and contribute to health and social protection policy development. It will answer the following questions:

Q1. What is the relationship between income, education, social class and self-assessed measures of current health across European countries? (Task 1)

Q2. Does current health status vary by parental education/class and does this vary across country? (Task 2)

Q3. Does family background influence current health status controlling for own current income, education and social class? (Task 3)

Q4. Does parental education/class influence own health directly or via own educational and occupational attainment? (Task 4)

Q5. Is the nature intergenerational transmission of health the same across European countries? (Task 4)

Description of work:

We will compare the impact of early and later life disadvantage on inequalities in health across income, education and social class groups.

Task 1. Determinants of Health Status (ESRI)

This will examine the association between the income, deprivation, education, social class of respondents to the EU-SILC survey and their current health status. The EU-SILC survey has three types of self-assessed health measures and analyses will examine the manner in which income, education and class are related to each of these measures and whether a consistent pattern across countries and measures appears. Previous comparative analyses of health status across European countries has been limited to EU15 countries using the European Community Household Panel Survey; this project will be able to examine patterns across the 27 countries of EU-SILC. Exploratory and confirmatory factor analysis will then be used to construct a latent measure of health combining the three measures available and controlling for measurement error (Layte 2007).

Task 2. Health and Parental Social Class (ESRI)

This will examine the relationship between current health status using different measures and the living standard, education and social class of parents around the age of 14. Although EU-SILC does not include a measure of parental income it does include a question on "Financial problems in household when you were 12 to 14". The assessment of living standards during adolescence is likely to be effected by the economic situation at the time thus analyses on a cohort basis will be carried out to examine the influence of parental characteristics on self-assessed hardship and how this varies across countries.

Task 3. Parental Background and Current Health (ESRI)

This will examine the independent effect of parental background on current health controlling for own educational and occupational attainment and current living standards. Path-analytic and structural equation models will be used to differentiate between the direct effect of parental background on own current health status and indirect effects working through the respondent's educational and occupational attainment. Education is acknowledged as the main mediating factor in social mobility processes (Shavit and Müller 1998), but research suggests that modern societies are not "meritocracies" in the sense that, once educational qualifications (and other "merit" variables) are controlled for, class of destination is no longer dependent on class of origin; on the contrary, a significant and often substantial dependence remains (Breen 2005). Given this, Task Three will construct structural models of the paths through which parental background can influence current health and measure the impact of each path separately on health outcomes.

Task 4. Poverty and Health State Transitions (ISAE)

This task will analyse the effects of the transition from good to bad health and the role of persistent poverty in this. The cross-sectional analysis of income and health cannot identify the direction of causality, i.e. whether lower income decreases health or vice versa. A dynamic analysis provides insight into the nature of the relationship. We will use the EU-SILC panel data from 2005/2006 – and 2007, 2008 (if available in time). It is likely that the longer a person is exposed to low income and poverty the greater the likelihood that it will impact on their health so we will examine: 1) if people who experience persistent income poverty have a lower health status relative to those who are not poor, and those who become poor in the last year; 2) if the health status of those in persistent poverty is associated with family background; 3) if people who become poor and are not able to get out of poverty for more than one year experience a significant worsening in their health status relative to their first year of poverty; 4) the consequences of a worsening of health status for the probability to becoming poor or suffering job loss. 5) Finally we will examine whether the impact of health on socio-economic life varies with parental background. This task will be carried out by researchers from ISAE.

Deliverables:

B2.1. Paper on the variation in the impact of socio-economic processes on health and the role of intergenerational transmission across European states. (ESRI) M22

B2.2. Paper on persistent poverty and the transition between good and bad health. (ISAE) M20

B2.3. Policy brief M23

B2.4. Final Research Report M24

Work package number	B3	Start date or starting event				Month 18	
Work package title	Myopia and Inequality						
Activity Type	RTD						
Participant number	2						
Participant short name	NIESR						
Person-months per participant	18						

Objectives :

The purpose of this research is to explore the possible link between economic myopia and inequality. The research will address the following questions.

Q1. Does economic myopia affect the take-up of non-compulsory education in a way which has important implications for inequality later in life? (Task 2)

Q2. How does economic myopia affect saving for retirement and what are the implications of this for inequality? (Task 3)

Q3 What policy measures might offset the effects of myopia? (Tasks 2 and 3)

Description of work:
The analysis will explore the role of economic myopia as represented by quasi-hyperbolic discounting (Diamond and Koszegi, 2004) as a possible source of inequality.

Task 1. Development of a Suitable Model
We will develop a model of inter-temporal choice working from the model of the saving and labour supply decisions of people facing uncertain future incomes and uncertain life-spans presented by Sefton, van de Ven and Weale (2008). Diamond and Koszegi (2004) show that quasi-hyperbolic discounting can be represented by introducing an appropriate state variable. Once this is done the method of simulated moments can be used to estimate the model parameters, including the key excess discounting associated with the hyperbolic discounting model. We will do this paying attention not only to the sample means (as French, 2005) does, but also to the dispersion of the data relative to the means. By comparing quasi-hyperbolic models with traditional rational agent models we will be able to identify the importance of myopia as a means of explaining the data and thus as a source of inequality.

Task 2. Education, Myopia and Inequality
We will address the question of education before that of retirement saving because it is conceptually simpler; the decision to undertake post-compulsory education is undertaken ahead of more standard labour supply and saving decisions. We will make the assumption that the effects of education on earnings are as represented by Blundell, Dearden and Sianesi (2005) with the National Child Development Survey also providing information on the distribution of maths and reading ability at age 11. From this and the information on the effects of post-compulsory education on earnings provided by Blundell et al, it is possible to construct i) an estimate of the dispersion of that ability and ii) an assessment of the impact of different types of post-compulsory education as a function of that ability. This will allow us to explore the degree of myopia needed to give the best fit to the data on educational participation identified in surveys such as the Labour Force Survey, with information on patterns of subsequent labour supply and consumption provided by the Expenditure and Food Survey. We will take appropriate account of the effects of rising higher education participation by the different cohorts represented in the cross-section of data provided by the Survey.

Task 3. Retirement Saving and Myopia
We will similarly address the issue of saving for retirement, taking as our key data source the new Wealth and Assets Survey which provides information on the extent and nature of people's wealth as a function of age. As before we will examine the role of myopia in accounting for both average holdings of wealth and the dispersion of wealth holdings. The exercise will initially de done separately of the study of education participation. However, there is an obvious question whether the same parameter values are delivered in the two separate cases. We will address this as the last part of the project.

In both cases we will examine policies which might offset the effects of myopia. For education these might include grants or cheap loans while for retirement saving they may include tax incentives and employer contributions. It is straightforward to represent these in our model.

The study will be carried out with reference to UK data.

Deliverables:
B3.1. Paper on myopia, education take-up and inequality. M24
B3.2. Paper on myopia, retirement saving and inequality. M30
B3.3. Policy Brief M30
B3.4. Final Research Report M30

Work package number	B4	Start date or starting event		Month 1	
Work package title	International Trade and Labour Market Institutions				
Activity Type	RTD				
Participant number	7				
Participant short name	IfW				
Person-months per participant	33				

Objectives:

This work package will address the labour market as a source of inequality. The first task will be to explore the role of international trade and technological change as determinants of increasing inequality between skilled and unskilled labour. The subsequent tasks will explore the effects of institutional features of the labour market and the way in which these interact with incentives to undergo education and training as influences on inequality.

Q1. What are the effects of technical change and globalisation on inequality in the labour market? (Task 1)

Q2. How does learning earlier in life affects the labour market outcomes of education and training later in life? (Task 2)

Q3. How do labour market institutions affect workers' incentive to invest into human capital? (Task 3)

Q4. What are the effects of labour market institutions on inequality via their direct labour market outcomes? (Task 4)

Description of work:

Task 1. International Trade and Wage Inequality

As a theoretical point of reference for the analysis of tasks 2 and 3, a 3x2 Heckscher-Ohlin model of the world economy with skilled and unskilled labour as the factors of production is considered that can account for global differences in factor prices in the presence of free trade and diversified production for each country. This model differs from previous approaches in two important ways. Since technological change is considered to be a global phenomenon, we depart from the small country assumption and allow for endogenous goods prices. And since a technology shock will affect the economy's factor endowment ratio, we take this into account when predicting the effects on the pattern of production. This analytical framework can be used to discuss how a common, global technology shock affects the prospective pattern of specialization and trade in an integrated world economy, and hence it shows how it affects the global income distribution and the within-country income distribution for high skilled and low skilled workers. Depending on the specific underlying model assumptions, various scenarios of inequality patterns are possible. The major objective of this work package is to seek strategies that can reduce these predicted technology-induced inequalities in an integrated world economy.

Task 2. Life-long Learning and Wage Inequality

To reveal how the concept of life-long learning can play a role in reducing inequalities, we then look for educational strategies that would help to reduce potential skill gaps, as they have been derived in question 1. Using econometric techniques that control for the potential bias arising from selection into training based on unobserved variables such as ability (sample selection models, propensity score matching, and panel data methods controlling for individual-level heterogeneity), we will examine how learning during earlier stages in life affects the labour market outcomes of education and training later in life. The labour market impacts will be summarized by variables such as income, the time spent in employment, job tenure and turnover, job security, or the duration of unemployment spells. We will use the German SOEP, which provides individual biography data on training activities, on education and family background, and on labour market outcomes. Using similar data sets, we intend to reproduce the same analysis for other countries (UK, Sweden, US) to identify and control for the effect of different institutional frameworks.

Task 3. Labour Market Institutions, Inequality and Learning Incentives
To answer the third question, we will introduce a worker's decision to invest in human capital (education) into the model of Lechthaler and Snower (2007) and analyze the effects of labour market institutions, specifically unemployment benefits, employment protection legislation and minimum wages, on education. We will explore whether the effects of labour market institutions on education, or more generally the effects on a worker's incentives to invest in human capital might run in an opposite direction to the effects on firm's incentive to invest in training. We will distinguish between workers with different abilities to be able to analyze the consequences for the inequality of human capital. To identify the most important effects analytically, we will first concentrate on a model with only one period. Then the analysis will be extended to a model with infinite periods. In this setup we will calibrate the model for various European and other OECD countries and show the effects of labour market institutions on both firm training and education in numerical simulations.
Furthermore, we will complement this analysis of the indirect effects with an analysis of the direct labour market effects of the same institutions on inequality on the basis of a fully micro-founded labour market model. In line with the previous analysis we will calibrate the model for various European other and OECD countries. We will explore the channels via which several labour market institutions affect the employment-inequality trade-off. Thereby, we will be able to avoid a partial account of the effects of labour market institutions on inequality.

Deliverables:
B4.1. Paper on factor biased technical change on inequality in the labour market. M9
B4.2. Paper on training, skill gaps and complementarities between early-life learning and mid-career education and training. M15
B4.3. Paper on labour market institutions and educational inequality, i.e. how do labour market institutions affect the incentives to invest in education for workers with different abilities. M21
B4.4. Paper 4 on direct effects of labour market institutions on inequality. M27
B4.5. Policy Brief M31
B4.6. Final Research Report M31

Work package number	C1		**Start date or starting event**			M7	
Work package title	Social, Cultural and Political Consequences of Inequality						
Activity Type	RTD						
Participant number	1	9					
Participant Short Name	CEPS	AU					
Person-months per participant	22	25					

Objectives:
Analyse the social, cultural and political consequences of an increase in social inequalities. A particular focus is laid upon the impact on interpersonal and systemic trust, confidence levels in market economies, indicators of civic participation, voter turnout, political stability and a general set of indicators of social cohesion including citizens life satisfaction, social unrest and criminality rates. Formulate policy recommendations taken the various results of the analyses into account.
Q1. Do individually-held normative perceptions matter for the transmission between income inequality and social trust? (Task1)
Q2. Which type of inequality has the strongest impact on levels of social and systemic trust? (Task 2)
Q3. Does income inequality affect the voter turnout? (Task3)
Q4. How do different types of inequality affect the civic participation and civic culture of a nation? (Task4)
Q5. Do income and wealth inequalities endanger political stability? (Task5)
Q6. How do different types of inequalities affect social cohesion? (Task6)
Q7. Do income and wealth inequality matter for people's confidence towards market economies? (Task7)

Description of work: The work package tackles a wide array of research questions and should be further specified according to the following seven tasks.

Task 1. Inequality and Social Trust- Micro Analysis (Aarhus and CEPS)
The first task of the work package will address the question whether individually-held normative perceptions matter for the transmission between income inequality and social trust. The level of analysis will be the individual, using data from selected OECD and EU27 countries. The data will be taken from the recent waves of the World Values Survey and the International Social Survey Programme. Analysis will include US, Japan, Germany, France, Italy, UK, Canada, Denmark, Poland, Czech Republic and one Baltic state. Furthermore, the task aims at exploring the relation between trust and the shape of the income distribution. Taking Gustavsson and Jordahl (2008) as the only previous study, this analysis will address the question whether certain income distributions (Gini, 50/10 quotient, 90/10 quotient) have different impacts on trust on micro-level. By doing so, one can shed more light on whether the relations between trust and income inequality are mainly due to comparison effects to relatively rich segments of society, to relative poverty effects, or due to broader objective differences between citizens of the same society.

Task 2. Inequality and Social Trust- Macro Analysis (CEPS and Aarhus)
The second task aims at analyzing the relationship between economic and social inequalities and trust at an aggregated level. This has already been done for the relationship between income inequality and trust by Roth (2008) in an OECD23 country sample using data from the Luxembourg income study. The analysis would now broaden the country sample by including the new member states and including the latest wave of the WVS from 2005. It will also draw on data from the two latest waves of the European Social Survey (ESS) which were conducted in 2004 and 2006. More importantly the analysis will incorporate other forms of inequality here in particularly wealth inequality, educational inequality and health inequality to test which inequality affects levels of trust. The analysis will test whether those countries which have a high perception towards social inequalities behave differently than those which do not. Furthermore, depending on the data availability the analysis will draw on longitudinal data of trust as already performed by Brown and Uslaner (2005) and Keele (2007) for the US. Longitudinal data will be collected for the US and Germany (Noelle 2005). Especially the analysis of the German longitudinal data on trust will add immensely to the existing state of the art between inequality and trust and the existing state of the art of the determinants of trust. If possible interpersonal and systemic trust will be differentiated. Where possible the analysis will make use of the measures of inequality developed in WP A2

Task 3. Voter Turnout and Inequality (Aarhus)
Taking voter turnout as an alternative measure of social cohesion, following Knack (1992), the third task explores the relations between income inequality and potentially other types of inequality on social cohesion. The analysis will focus on OECD countries as far back as the available data on voter turnout in national elections and income inequality allow. Consequently, it is possible to employ both cross-country and temporal variation in the data to estimate a dynamic relation. As such, this task has the potential of providing an answer to the question of whether inequality affects the degree of political participation and thus political influence of citizens.

Task 4. Inequalities and Social Capital (CEPS)
To tackle cultural consequences the fourth task aims at analyzing the relationship between social inequalities and social capital. By social capital we here refer to the social capital index which has been constructed by Robert Putnam for the US state level in 2000. The analysis first wants to replicate the construction of his social capital index, consisting most of all of indicators of civic participation and civic culture. Once the index is constructed it is going to be tested whether economic and social inequalities, here in particularly income, wealth, educational and health inequalities affect levels of social capital in the OECD and EU27 country sample. The analysis will be based on a cross-section analysis.

Task 5. Political Consequences of Inequality (Aarhus)
The fifth task will explore the relationship between economic inequality, here in particular, income and

wealth inequalities and a set of political indicators. The question whether these two inequalities endanger political stability and participation in political processes is central to the analysis. The political indicators to be explored will be indicators of governance covering the six aspects i) voice and accountability, ii) rule of law, iii) corruption, iv) government efficiency, v) political stability and vi) regulatory quality, and indicators of perceptions of corruption (Kauffman at al 2008). The analysis will be carried out using a cross-section analysis. Classical control variables will be introduced to take account of other factors such as income, ethnic fractionalization; levels of civicness (cf. Solt, 2008). Next to the world bank's governance indicators data from the corruption perception and freedom house index will be utilized. In addition, we explore the direct effects of inequality on political participation, primarily measured as voter turnout in national elections, which allows for an extended panel analysis. Other measures of political cohesion such as fragmentation as captured by the rise of protest parties and political extremes in modern democracies will also be considered.

Task 6. Inequality and Social Cohesion (CEPS and Aarhus)

The sixth task will explore the relationship between the different types of inequality and broad dimensions of social cohesion. The variables examined will include levels of happiness and life satisfaction, confidence in the basic institutions of society (judicial systems, police, democracy), social unrest as measured by strike activity, political participation captured by rates of voter turnout, political cohesion or fragmentation as captured by the rise of protest parties and political extremes in modern democracies, and crime rates (violent crime separate from economic crime). The work will be done simultaneously at an aggregate level and an individual level. The aggregate work will use a cross-section system approach. Various indicators, primarily strike data from the International Labour Organisation (ILO), and data on happiness, life satisfaction and institutional confidence taken from the WVS and the different Eurobarometer surveys will be utilised. This task thus taps into a rapidly growing literature on subjective outcomes, which is also gaining political interest in a number of countries.

Task 7. Social Inequality and People's views of the Market System (CEPS)

The seventh task aims at analyzing the relationship between economic inequality, here in particular income and wealth inequalities, and confidence levels towards market economies. Although interpersonal and systemic trust are related to confidence levels in market economies the concept should be kept distinct as the latter represents a crucial ingredient for free market economies and capitalistic production in general. Should people feel strongly dissatisfied with the system of market economies they may find it rational to pressure national governments to move towards more communitarian / socialist modes of production (Alesina et al. 2001). The work will be conducted on an aggregated level using a cross-section analysis and an individual level using a survey from the GlobeScan Institute.

Deliverables:

C1.1. Paper on micro-analysis of social trust with respect to citizens perceptions in selected OECD countries and different ratios of income inequality. (Aarhus and CEPS) M12

C1.2. Paper on the impact of economic and social inequality on trust at an aggregated level using a longitudinal, cross-section and panel research design. (CEPS and Aarhus) M12

C1.3. Paper on the relationship between income inequality and voter turnout. (Aarhus) M18

C1.4. Paper on the impact of economic and social inequalities on civic participation. (CEPS) M18

C1.5. Paper on the relationship between economic inequalities and political stability and an index of governance. (Aarhus) M24

C1.6. Paper on the impact of economic and social inequalities on a broader set of social cohesion indicators including well-being, social unrest and political participation. (CEPS and Aarhus) M24

C1.7 Paper on the impact of economic inequality on confidence levels towards market economies. (CEPS) M30.

C1.8. Policy Brief M31

C1.9. Final Research Report M31

Work package number	C2	**Start date or starting event**			Month M10		
Work package title	Attitudes toward income inequality in EU and their Implications						
Activity Type	RTD						
Participant number	3	6					
Participant short name	TARKI	CRISS					
Person-months per participant	15	11					

Objectives: The main aim is analysis of the main drivers of individual preferences toward income inequality and redistribution and to assess national policies addressing inequality. The work package will answer the following questions:

Q1. What is the relationship between actual, perceived and tolerated inequality across countries?

Q2. Which are the main sources and determinants of these attitudes: national context or individual-level characteristics?

Q3. What are the determinants of welfare attitudes and of the demand for redistribution and what role inequality tolerance plays?

Q4. Are preferences for redistribution mainly determined by beliefs rooted in the specific cultural values of a country, or personal characteristics-namely, heterogeneous attitudes about risk - are most important in shaping social preferences?

Q5. Is it possible to infer a social preference function-both at EU and national level-from individual attitudes and are national policies consistent with the revealed attitudes?

Description of Work:

The five tasks in this work package build upon each other and use outputs of work package A1 on descriptions of inequality patterns in the countries covered.

Task 1: Analysing the link between the measured and of the perceived/evaluated income inequalities (TARKI)

We will test the country-level relationship between actually measured level of inequalities and their evaluations in the largest possible set of countries available (covering EU27 and the major non European OECD countries). First we select the most suitable and robust measures of actual inequalities (both variance based aggregates like Gini, MLD, SCV and others and simpler distributive measures, shares and ratios) for the purpose. Next, we will develop alternative measures of subjective inequality tolerance (like direct agreement/disagreement questions on the one hand and more complex, computed measures of perceived vs. prescribed pay), so that the closest theoretical link to the applied "real" measure" can be ensured. Applying time series analysis and cross sectional regressions, we will analyse how the overall level and change of income inequality relates the measured level of satisfaction/acceptance of inequalities.

Task 2. Searching for an explanation of inequality (in)tolerance (TARKI)

We will build up models to test the role of objective socio-economic factors, past subjective mobility and future mobility expectations in explaining attitudes of individuals towards income inequalities. To execute, first we will identify proper proxies for inequality (in)tolerance to substitute the most commonly used simple opinion poll question on agreement to the statement on "too large" inequalities. The resulting index of inequality aversion will be explained by the relative income position of individuals, reference group comparisons, individual evaluations of past mobility experiences and future mobility prospects as well as by general ideological attitudes. For that, a multi-level dataset will be built, from properly chosen variables at individual, household, regional and country level, to facilitate running multi-level regressions and to identify contextual effects on correlates of the base variables.

Task 3. The determinants of preferences for redistribution (TARKI)
First we will construct a proper index of individual redistributive preferences of the individuals. To execute, we will broaden the understanding of "redistributive attitude" from opinions on vertical tax/transfer schemes to a fuller range of state activities to reflect the complexity of the real world situation when voters are offered trade-offs of public budget alternatives (regulatory alternatives, in kind services, job creation, free education, health and social expenditures, housing and agricultural subsidies, etc.). We will run regressions, with the base hypothesis that the demand for redistribution depends on (1) the economic self interest of the respondents as measured by objective material variables, (2) subjective evaluations of past mobility experiences and future mobility prospects, (3) the degree of risk aversion of the respondents, (4) the general attitude of the respondents about the role of individuals in securing safe economic positions for themselves and for their families and (5) the respondents' evaluation of the level of tolerable inequalities.

Task 4. Experimental Analysis (CRISS)
The fourth task consists in an experiment on "preferences for redistribution" across countries. We aim to investigating cross-cultural differences in the motivations for other-regarding preferences about the end-state income distribution after tax and transfers, also taking into account procedural fairness. We are interested in comparing the patterns in which the two motivations (inequality aversion and procedural fairness) interact in countries that appear broadly different in institutional terms – namely, the United States and Italy. We have planned sessions at Emory University, in Atlanta, and at the LUISS in Rome.

We have already set up the protocol, whereby the participants are asked to state their preferred tax rate, under different treatments. The subjects are asked to perform tasks aimed to elicit their effort and ability, also controlling for risk and ambiguity aversion. Subjects (the students recruited in each University) will be assigned different income categories on the basis of their relative rankings in (a) a lottery; (b) an effort-based task; (c) an ability-based task. They are then asked their preferred tax rate over the group earnings under conditions of:

1. Their choice only affecting others' earnings: "basic" propensity towards inequality aversion when this is not affected by individual self-interest.
2 Their choice affecting their own earning as well as others' earnings, before receiving information about their ranking in past interactions.
3 Their choice affecting everyone's earning, after receiving information about their ranking in past interactions.
 Cultural roots and the social status of the participants will be obtained through a questionnaire.

Task 5. Analysis of Individual and Social Preferences (CRISS)
The final task is an analysis, drawing on the earlier results investigating if and how specific national policies for offsetting inequality (and the same features of the welfare system) are shaped by individual preferences. In other terms the possibility to build a social preference function (both at individual and EU level) from individual preferences will be inquired too.

 Datasets used
 Potential candidates for the datasets to be used for the assessment of "real" income inequalities include EU-SILC for the EU27 and LIS datasets for the non-European countries, in addition to the already existing World Income Inequality Database of the World Bank and of the UNU-WIDER. As for the subjective, evaluation data, by the time of the contract period of this research, the first four waves of the European Social Survey (ESS), the first four waves of the World Values Survey (WVS), two waves of the International Social Survey Programme (ISSP) "Role of government" module and three waves of the inequality module of the same survey will be available. In addition to these, suitably chosen variables from the European Quality of Life Survey (EQLS) first two waves and the

Life in Transition Survey (LITS) of the EBRD will be available as well as various different modules of the Eurobarometer.

For the multi-level dataset to be used in tasks 2 and 3, administrative datasets will be used to have aggregate level data on regions and national territorial units (administrative data available on the regional level like average unemployment rate, inactivity rate, regional GDP and some inequality proxies).

Deliverables:

C2.1. Paper on measured, perceived and tolerated level of inequalities. (TARKI) M18
C2.2. Paper on explaining inequality (in)tolerance. (TARKI) M24
C2.3. Paper on determinants of the demand for redistribution. (TARKI) M27
C2.4. Paper on preferences for redistribution: Experimental Results. (CRISS) M 21
C2.5. Paper on coherence between Individual and Social Preferences. (CRISS) M28
C2.6. Policy brief M31
C2.7. Final Research Report M31

Work package number	D1		**Start date or starting event**		Month 31		
Work package title	Inequality: Its Nature, Causes and Effects						
Activity Type	RTD						
Participant number	1	2	3				
Participant Short Name	CEPS	NIESR	TARKI				
Person-months per participant	4	4	9				

Objectives:

1. To bring together the research results to provide a thorough analysis of the scale, the causes and the effects of inequality in advanced economies.
2. To inform policy.

Description of work:

In order to achieve these objectives the project will devote the final year to synthesising the research results from strands A to C. This will be carried out by the Strand leaders in collaboration with work package leaders.

Task 1. Summary of research results for Strand A (TARKI)
Task 2. Summary of research results for Strand B (NIESR)
Task 3. Summary of research results for Strand C (CEPS)
Task 4. Foresight analysis of long term policy options (TARKI)

Tasks 1-3. are designed to synthesize the research findings on the evolution of inequalities, on drivers and on potential consequences on social cohesion and on demand for redistribution. Task 4, based on pre-designed templates for the policy briefs of all Strand A-C work packages , summarizes expert assessments of potential long term policy options. Researchers in various work packages of each strand will be asked to fill out expert questionnaires on long term consequences and policy options, while drafting their policy briefs. These will be used as a base for setting up expert assessments to set out long term policy choices with differing weights given to likely future evolution of drivers of inequalities.
These summaries will be presented at the project's final conference. Researchers who have contributed to a particular strand will be asked to scrutinise the results from the other two strands so as to ensure that common themes and outcomes are fully identified. .

Task 4: This will produce a combined research report based on a synthesis of the results from the three strands. . It will draw out the findings of the research on the long-term effects of inequality and the policies available to national governments and the European Union to abate inequality in the long term.

The timing of this work is planned to allow adequate opportunity to accommodate points made by the evaluators in strand D2

Deliverables:

D1.1. Summary Report on Strand A. (TARKI) M34

D1.2. Summary Report on Strand B (NIESR) M34

D1.3. Summary Report on Strand C (CEPS) M34

D1.4. Synthesis and long term policy options (TARKI) M37

D1.5. Combined research report M39

Work package number	D2	**Start date or starting event**				M17		
Work package title	Evaluation							
Activity Type	MGT							
Participant number	12	13						
Participant Short Name	CPB	UNIABDN						
Person-months per participant	2	2						

Objectives: To provide independent evaluation of the work of the project as it advances, monitoring progress against the proposal and providing feedback on the way in which difficulties are resolved during the course of the work.

Description of work:

Each evaluator will provide a written report on the work of each strand at the end of years 1-3, attending the annual conference and studying written material. Each evaluator will also report on the relevant deliverable of work package D1 in year 4.

CPB will lead and co-ordinate the evaluation process.

Deliverables:

D2.1. Mid-term Evaluation Report on Strand A. M19

D2.2. Mid-term Evaluation Report on Strand B. M19

D2.3. Mid-term Evaluation Report on Strand C. M19

D2.4. Final Evaluation Report on Strand A. M34

D2.5. Final Evaluation Report on Strand B. M34

D2.6. Final Evaluation Report on Strand C. M34

D2.7. Evaluation Report on Policy Synthesis. M36

Work package number	D3	**Start date or starting event**				Month 1	
Work package title	Scientific Management and Dissemination						
Activity Type	MGT						
Participant number	1	2	3				
Participant Short Name	CEPS	NIESR	TARKI				
Person-months per participant	1	2	2				

Objectives: To provide effective scientific management of the project

Description of work:

The scientific management of the project will be handled strand by strand, with István Tóth (TARKI) responsible for the management of strand A, Martin Weale (NIESR) for strand B and Felix Roth (CEPS) for strand C. These three will also be responsible for overseeing dissemination, helping consortium members to prepare their work for publication, promoting the findings of the project to journalists and ensuring that policy-makers are fully aware or them. No explicit time is allocated to the scientific management of work package D1 since these project participants play leading roles in that work.

Deliverables:

D3.1. Consortium Meeting. M3
D3.2. Strand A Meeting. M12
D3.3. Strand B Meeting. M12
D3.4. Strand C Meeting. M12
D3.5. Consortium Mid-term Conference. M18
D3.6. Strand A Meeting. M24
D3.7. Strand B Meeting. M24
D3.8. Strand C Meeting. M24
D3.9. Consortium Meeting. M30
D3.10. Consortium Final Conference. M36
D3.11. Ad-hoc Reports as required by the Commission. Various dates.

Work package number	D4	Start date or starting event					M1
Work package title	Administrative Management						
Activity Type	MGT						
Participant number	1						
Participant Short Name	CEPS						
Person-months per participant	7						

Objectives: Administration to integrate the relevant results and to ensure dissemination of the findings. To ensure the coordination and management of the project. The project coordinator will be supported by scientific leaders (NIESR and TARKI) and the WP leaders - partners responsible for work packages

Description of work:

The management will involve the following tasks:
- Provide general management and administration, preparation of costs statements, verification of cost statements of participants

- Prepare annual progress reports to the Commission

- Prepare the workshops scheduled to take place in Brussels and support the preparation of the other workshops scheduled to take place in the WP leaders' hosting institutes

- Organise Mid-term review of the project

- Prepare and submit the final report to the commission (incl. scientific achievements)

Deliverables:

D 4.1-4.3. 3 annual administrative progress reports. M13 M25 M37
D 4.4. 1 mid term administrative progress report. M19
D 4.5. Final progress administrative report. M39
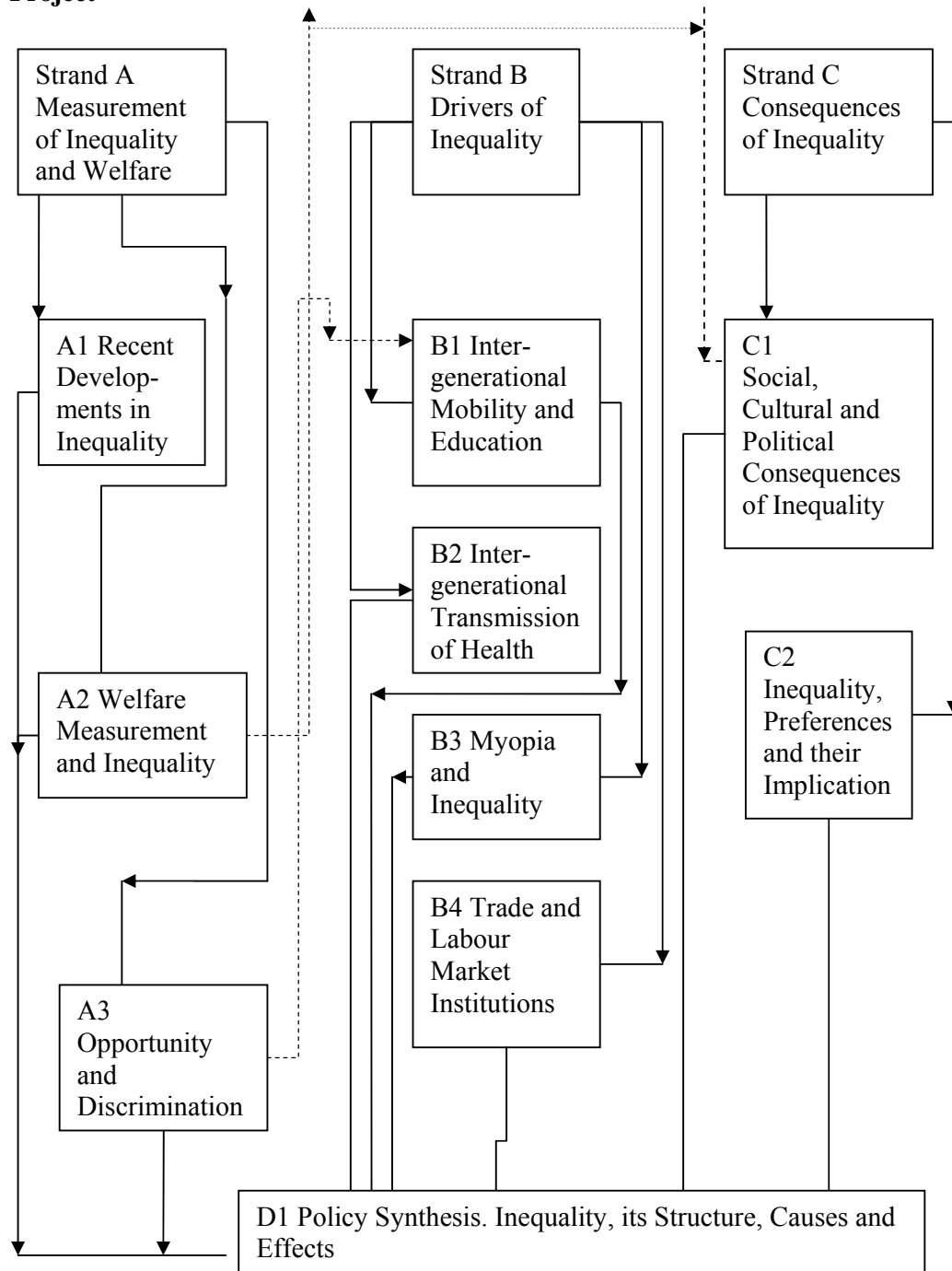D 4.6. Minutes from workshops.

Table 1.4 e Summary of Effort

Participant no./short name	WPA1	WPA2	WPA3	WPB1	WPB2	WPB3	WPB4
1CEPS	**5**						
2NIESR		**10**				**18**	
3TARKI	15	9					
4ESRI				8	**6**		
5ISAE				**18**	8		
6CRISS							
7IfW							**33**
8UGOE		13	**19**				
9AU							
10CCEIA		15	15				
11FINLAB	8						
12CPB							
13UNIABDN							
Total	28	47	34	26	14	18	33

Participant no./short name	WPC1	WPC2	WPD1	WPD2	WPD3	WPD4	Total
CEPS	**22**		4		1	**7**	39
NIESR			4		**2**		34
TARKI		**15**	9		2		50
ESRI							14
ISAE							26
CRISS		11					11
IfW							33
UGOE							32
AU	25						25
CCEIA							30
FINLAB							8
CPB				**2**			2
UNIABDN				2			2
Total	47	26	17	4	5	7	306

Note: Work-package leaders are shown in bold.

iv) Pert Chart: The Structure of the Project

Strand A
Measurement of Inequality and Welfare

Strand B
Drivers of Inequality

Strand C
Consequences of Inequality

A1 Recent Developments in Inequality

B1 Inter-generational Mobility and Education

C1 Social, Cultural and Political Consequences of Inequality

B2 Inter-generational Transmission of Health

A2 Welfare Measurement and Inequality

C2 Inequality, Preferences and their Implication

B3 Myopia and Inequality

B4 Trade and Labour Market Institutions

A3 Opportunity and Discrimination

D1 Policy Synthesis. Inequality, its Structure, Causes and Effects

v) Describe any significant risks, and associated contingency plans.
The researchers involved in the project are all experienced and work at institutions used to cross-border co-operation, giving confidence that the programme of work proposed here can be delivered to time and to budget. However, the project is structured so that the work packages are largely independent of each other, with the implication that problems in any single work package will not slow down the rest of the research. WP C1 will draw on the work on distribution adjusted well-being

in WP A2 but the time by which the results from A2 are required is not crucial to the efficient running of C1.

The research institutes all work in a range of areas. This means that, should one be forced to drop out for any reason, with the research only partially completed, it will be possible for one of the others partners to take over the research and ensure that the project as a whole is brought to a satisfactory conclusion. The project board (see below) will manage such an eventuality in the unlikely circumstance that it should arise.

The project is designed so that internal evaluation takes place in the course of the project. This provides a check on the work as it progresses and therefore offers additional protection from risk associated with the way in which the research is conducted.

2. Implementation

2.1 Management structure and procedures

Management Arrangements
A project of this size and complexity, with a large number of participating institutions, requires a clear management structure. The project leaders decided to separate the administration from the academic coordination so as to benefit from their specific expertise. Therefore the scientific programme will be jointly coordinated by István György Tóth and Martin Weale. István György Tóth holds a PhD in Sociology and, as Chief Executive of Tarki Social Research Institute and, as core team member of the European Social Observatory on Social Inclusion and Income Distribution has wide experience of research management. Martin Weale holds a ScD in Economics and is Director of the National Institute of Economic and Social Research. His experience of research management comes from that post and also from having been the co-ordinator of the FLASH project in the 4th Framework and the scientific co-ordinator of the AHEAD project in the 6th Framework. The combination of Tóth and Weale provides the combination of skills and experience appropriate to the scientific co-ordination of this multi-disciplinary project. Tóth will lead the first strand and Weale the second strand. The administration of the project will be undertaken by CEPS which has administered many projects in the fourth, fifth and sixth frameworks.

A **project board** will be set up consisting of the two scientific co-ordinators, , Felix Roth, who leads the third strand (see below) and the administrative coordinator Sally Scott, who will be the main point of contact with the European Commission. The board will be responsible for:
- Ensuring the project is carried out according to the work plan;
- Communication with internal consortium members, through periodic newsletters;
- Maintenance of the web site including posting working papers;
- External relations;

Martin Weale will chair this board but operational decisions will be taken on a consensual basis. Martin Weale will also be responsible for external relations while István Tóth will be responsible for academic content. Sally Scott will be responsible for financial management. The board will be assisted by Diana Mendes who will be the administrator of communication and web-site management. It will monitor each work-package with respect to the timing of the deliverables and also for article submitted to academic journals; given publication lags, it is unlikely that much output will be published in academic media during the course of the project.

As outlined above the project is divided into four strands. The **scientific coordination** of each strand is allocated as follows: Strand A, István Tóth (TARKI); Strand B, Martin Weale. (NIESR) Strand C, Felix Roth (CEPS) and Strand D, István Tóth and Martin Weale. Each Strand manager(s) will undertake to ensure that the programme of work is adhered to both in terms of timing and the quality of the academic output. They will do so through frequent contact with work package leaders, by e-

mail or at face to face meetings and through contact with individual consortium members by means of periodic consortium meetings. Each work package has a designated leader who will be responsible for its content. The list of WP leaders is shown in table 1.3d

Each participating institution will appoint a project manager. The project manager (one per partner) is responsible for organising and managing the different activities in which his/her institution is involved, including the human and material resources. The project manager is also responsible for the reporting, administrative and financial matters relating to the participation of the institution in the project. All the project managers report to the project board.

A **steering committee** for each strand will be set up consisting of the project managers of that strand and the strand leader. This will meet at each strand/consortium meeting (M3,M12,M18,M30,M36) to review progress and to steer the work of the project board. It is responsible for solving all the issues linked to the global definition, progress and implementation of the project. Problems will be resolved by the steering committee if they cannot be resolved by individual members or are too complex to be solved by any single partner. Decisions will, if necessary, be taken by majority vote, with the strand leader having a casting vote in the event of deadlock. Deliverables will be approved by the strand steering committee. The strand evaluators will be expected to attend strand steering meetings in M12, M25 and M37. Commission evaluators will be invited to attend all strand meetings

Each partner will appoint a **work package leader** for each work package. The work package leader reports to the institution's project manager and may be the same person. The work package leader is responsible for the co-ordination between the different parties involved in a given work package and for monitoring the achievements originating from the different tasks of the work package. He/she is also responsible for ensuring that the results of his work package are suitably integrated with the results coming from the other work packages.

The entire consortium will meet at the inception of the project to plan activities, at the mid-term conference to discuss the academic output and progress. Substantive decisions concerning content and direction of the project will be discussed at these meetings. The consortium meeting in month 30 will plan the integrating work package. In addition to the strand meetings mentioned above meetings will be held on individual work packages as required.

Management Facilities
In addition to the meetings described above, the following management facilities will be available:

Communication Procedures between the different parties and the facilities needed for them will be provided. The European Network of Economic Policy Research Institutes server, maintained by CEPS will be made available to all parties on the project so that documents can be exchanged electronically in an agreed standard format. In addition dedicated bulletin boards for specific work packages and for any other important issues will be created in order to allow an exchange of ideas and know-how on specific subject fields.

In general the implementation of the research project will require frequent meetings/workshops to ensure an efficient flow of data and interfacing between the various components. Technical workshops will be organised if necessary for solving problems linked to a given work package or integration task. Technical aspects, such as problem solving, testing, debugging etc will be addressed. The technical staff will normally take part in such workshops.

Recording and Contact
E-mail will be the primary means of communication between the partners. The administrative co-ordinator, CEPS, will take responsibility for recording minutes of consortium meetings and circulating them within two working days of each meeting so that discussions are properly recorded. The strand leaders will produce records of each strand meeting on the same basis.

Reporting

The work package leaders will provide reports on their work packages as needed to meet the reporting requirements of the Commission and to provide the information needed for the mid-term review.

2.2 Individual Participants

1. Centre for European Policy Studies, CEPS

NAME of the Institute	Centre for European Policy Studies (CEPS)
Brief description of the organisation, main tasks and previous experience	CEPS is an independent membership-driven organisation with more than 100 corporate members and a large number of central banks, diplomatic missions and international business organisations in its constituency. CEPS' core business is the conduct of policy research on European affairs and the broad dissemination of its findings through a regular flow of publications, public events and electronic commentary. It strives to bring new knowledge to the attention of decision-makers and to offer fresh insights into important public policy issues of the day. Since its founding in 1983, CEPS has acquired a solid reputation for integrity and excellence in research. CEPS has amply demonstrated its ability to anticipate trends and to analyse policy questions well before they become topics of general discussion.
Staff profile	
Daniel Gros	**Daniel Gros** Director of CEPS, Head of the Economic Policy research programme and Senior Research Fellow, holds a PhD in Economics from the University of Chicago (1984). He has served on the staff of the IMF, as an advisor at the European Commission, and as visiting professor at the Catholic University of Leuven and the University of Frankfurt. He was advisor to the European Parliament and member of the Conseil Economique de la Nation (2003-2005); 2001-2003 he was a member of the Conseil d'Analyse Economique (advisory bodies to French Prime Minister and Finance Minister).
Felix Roth	**Felix Roth** is a research fellow at the CEPS and post-doc fellow at the Georg-August-University in Göttingen. He holds a PhD in economics from Göttingen and a Master degree in sociology from Munich. Before working at CEPS he has been a research fellow of the postgraduate programme "The Future of the European Social Model" in Göttingen. His PhD thesis analysed the relationship between social capital, trust and economic growth. Publications include articles in peer-reviewed journals, one book and chapters in books. His research contribution will be on the impact of social inequalities on social cohesion and work on educational gini-coefficients. He will lead WPC1 and will co-ordinate strand C. He will also participate in WPA1.
Sally Scott	**Sally Scott** is Head of Finance and Administration at CEPS and has an MBA from the Open University. She is responsible for the financial and administrative coordination of all the research contracts. She has extensive experience in managing FP5 and FP6 research projects, including the financial management of an Integrated Project, and of working with partners from across Europe.
Diana Mendes	**Diana Mendes** is a research assistant at CEPS. She has a BA in Journalism from Carleton University and is currently finishing her Master degree in international history from the LSE. Ms Mendes will be responsible for the communication and web-site management.

2. Legal Entity Descriptions: National Institute of Economic and Social Research, UK

Brief description of the organisation, main tasks and previous experience	The National Institute was set up in 1938 as an independent research institute. It aims to promote, through quantitative and qualitative research of high academic standard, a deeper understanding of the interaction of economic and social forces that affect people's lives and to identify policies which will improve them. It has nearly thirty researchers with the majority working on issues surrounding labour markets, training and education, household behaviour, productivity and economic growth. Its Director reports to a Council consisting of leading figures from business, policy-making and academia. The research that it carries out is for the most part funded by specific research contracts and the National Institute conducts its research to high academic standards with the goal of publication in highly-regarded academic journals. The National Institute has a history of involvement and scientific leadership of projects involving international collaboration, including projects under FP7 and its precursors.
Relevance of institute's work for the particular project proposal Over many years the National Institute has been at the forefront of work on issues related to inequality. Recent projects have included analysis of income dynamics, and study of the effects of state pension reforms on inequality. It has also carried out important work on international comparisons, most recently under the EU-KLEMS project. Its expertise on international comparisons will be brought to bear on the comparison of incomes at key points on the income distribution across countries and over time. Its expertise on the use of dynamic programming models used to study state pension reforms, for example in the DEMWEL project, enables it to address the issue of myopia and its implications for saving and participation in education.	
Project Number, Relevance	EUKLEMS- Cross-country comparisons using PPP data DEMWEL- use of dynamic programming to examine saving under uncertainty
Staff Profile	
Martin Weale	Director of NIESR since 1995. MA Cantab 1977, ScD 2006, CBE. He has a wide body of experience in working on economic and statistical issues, including the analysis of pension reform using dynamic programming and analysis of welfare indicators. Published in journals such as *Review of Economic Studies*, *Economic Journal*. *Journal of Public Economics*. He will be joint scientific co-ordinator of the project and will lead WPA2
Justin van de Ven	Research Fellow at NIESR since 2002. DPhil Oxon 2002 Developed dynamic programming models for application to analysis of household behaviour. Also worked on equivalence scales and their relationship with tax systems. Published in journals such as *Economic Journal* and *Oxford Bulletin of Economics and Statistics*. To work on WPB3
Silvia Lui	Research Officer NIESR since 2007. PhD Queen Mary College 2007. Recent research involves the analysis of survey data and in matching different data sets. Also expert in time-series methods. To work on WPA2

3.   Legal Entity Descriptions: TARKI Social Research Institute, Budapest

NAME of the Institute	TARKI Social Research Institute
Brief description of the organisation, main tasks and previous experience	TARKI Social Research Institute, founded in Budapest in 1985, is an employee-owned, non-partisan research centre. The institute's profile comprises research on a wide range of issues related to social stratification, labour markets, income distribution, intergenerational transfers, tax-benefit systems, consumption and lifestyle patterns and attitudes. Recent additions to TARKI include a public health unit and an institute for macroeconomic research. TARKI is engaged in the analysis of Hungarian social issues with a strong emphasis on comparative analyses, and provides expertise on European social structure, income distribution, social mobility and attitudes as well as on the operation of national social welfare regimes. TARKI regularly advises international and national decision-makers. TARKI publishes the highly regarded *Hungarian Social Report*. TARKI hosts Hungary's national social science data archive, a member of the Council of European Social Science Data Archives (CESSDA).
Relevance of institute's work for the particular project proposal TARKI has conducted the Hungarian Household Panel Study (yearly between 1991 and 1997, and a follow-up in 2007-2008), and the TARKI Household Monitor Survey. TARKI produces annual reports on European income distribution trends within the framework of the Social Situation Observatory. TARKI participated in SIMGLOBE – Is Social Europe Fit for Globalization?, which identified policy challenges arising from the impact of globalization on European social conditions. IN 2008 TARKI has published its *European Social Report* on the 27 EU Member States using data from EU-SILC.	
Project Number, Relevance	TARKI will coordinate the three work packages of Strand A. TARKI will also lead work packages A1 – "Evolution of inequality" and C2 – "Attitudes to Inequalities" and will contribute to work package A2. TARKI has experience coordinating international research projects and actively participates in international research networks.
Staff profile	
András Gábos	Senior Researcher. Areas of Specialisation: fertility effects of intergenerational transfers, cost of raising children, work incentive effects of family policies, poverty
Márton Medgyesi	Senior Researcher. Areas of Specialisation: income distribution, private and public intergenerational transfers, and redistribution
Péter Róbert	Senior Researcher. Areas of Specialisation: social stratification and mobility, educational inequalities, and life course transitions
Tamás Rudas	Academic Director and Senior Researcher. Areas of Specialisation: empirical research methodology, statistical modelling, multivariate data analysis, categorical data analysis, micro-simulation
Péter Szivós	Managing Director and Senior Researcher. Areas of Specialisation: income distribution analysis, poverty, social indicators, micro-simulation. To work on WPA2
István György Tóth	Director and Senior Researcher, Areas of Specialisation: income distribution, poverty, social policy, economics of the welfare state, attitudes towards social policy. Joint scientific co-ordinator. Lead WPA1. Work on WPC2

4.   The Economic and Social Research Institute (ESRI), Dublin

NAME of the Institute	**The Economic and Social Research Institute, Dublin (ESRI)**
Brief description of the organisation, main tasks and previous experience	The Irish Economic and Social Research Institute (ESRI) is a not-for-profit organisation, which was founded in 1960. ESRI research has been a vital constituent in national and international debates on economic and social issues over the past 40 years. The fundamental aim of the ESRI is to bring the latest thinking in economics and the social sciences to the actual and potential problems of Irish and European society. Thus, ESRI research is primarily policy oriented and the Institute's research programme covers a broad range of topics including the labour market, social exclusion, the environment, education and health. A central theme in the research conducted at the ESRI is the determinants of growth and convergence at the national, regional and firm level. In all activities the ESRI's goals are academic excellence, objectivity, policy relevance, and widespread dissemination of results. Contact with other researchers and dissemination of ESRI research is achieved through a range of events and publications. ESRI research is published in international journals, books, and working paper series including the Institute's own publication series.

Relevance of institute's work for the particular project proposal
Researchers at the Economic and Social Research Institute have published widely on stratification, inequality and social mobility and this research has increasingly turned to the impact of social disadvantage on health outcomes and the extent to which disadvantage is transmitted across generations. Working in the social mobility tradition, ESRI researchers have been at the fore-front of analyses of intergenerational mobility in Ireland and other industrialised countries. A strong theme of the institutes work has been the measurement of poverty, deprivation and social exclusion as well as analysis of the processes leading individuals and households into and from poverty and social exclusion. Recent work has focused on the extent to which the multi-dimensionality of social exclusion can lead to vicious circle processes which decrease the chances of the person leaving poverty. A third theme of the Institutes work is the manner in which lower income, education and social class impact on morbidity and mortality and the role of health behaviours in this. This project will bring together all three of these themes to examine important questions about the intergenerational transmission of health status and educational disadvantage.

Project Number, Relevance	The ESRI will contribute the work package WPB1 on Intergenerational Mobility and Family Background Effects on Returns to Education and will lead WPB2 on the intergenerational transmission of health inequalities.

Staff profile	
Richard Layte	Professor RICHARD LAYTE MSc Oxon 1992; Dphil Oxon 1996: Based at the ESRI, Richard Layte is the principal investigator on WPB2. Prof. Layte has extensive experience in the analysis of complex social surveys including analysis of a number of comparative social surveys including the European Household Panel Study and EU-SILC.
Bertrand Maitre	BERTRAND MAÎTRE MA Sorbonne 1990: Bertrand Maître is a Research Officer at the Economic and Social Research Institute, Dublin. His main research interests focus on multidimensional approaches to poverty, social exclusion and quality of life. He has gained extensive experience in the use of a wide range of large European (ECHP, EU-SILC, European Quality of Life Survey) and Irish data sets. He has published articles on these issues in various international journals, e.g. The *European Sociological Review*, The *Journal of European Social Policy* and *Social Indicators Research*.

5.   Legal Entity Descriptions: ISAE – Istituto di Studi e Analisi Economica

NAME of the Institute	ISAE – Istituto di Studi e Analisi Economica (Institute for Studies and Economic Analysis)
Brief description of the organisation, main tasks and previous experience	ISAE is a public research institute that conducts analyses, research projects and forecasts suited to economic and social policy decisions. ISAE carries out business and consumer surveys; provides quarterly and annual macroeconomic forecasts; supplies studies on economic structure, public finance and welfare; examines the economic policies attained through the public budget and through regulation; analyses the complex dynamics of sustainable development in its environmental, economic and social aspects. ISAE was set up in 1999 and stems from the merge between the National Institute for Studies on Economic Cycles (ISCO) and the Institute of Studies for Economic Planning (ISPE) which - up to 1998 - had provided technical support for short- and long-term studies respectively. ISAE is part of the Italian public research bodies and institutions. It carries out analyses and research projects "with the specific target of making useful analyses for the economic and social policy decisions of the Government, of Parliament and of the General Government ".

Relevance of institute's work for the particular project proposal
The department *Microeconomics* analyses income distribution and human development issues and studies the policies to improve equity and equality of opportunity. Its researchers have a long experience on social and distributional issues and conducted projects on interaction between social mobility and education.

Project Number, Relevance	ISAE will lead WPB1, on Intergenerational Mobility and Family Background Effects on Returns to Education. ISAE has a wide experience in international research projects, and has participated in three projects under the 6th Research Framework Programme financed by the European Commission (AHEAD, AIM, EU KLEMS).

Staff profile	
Stefania Gabriele	Director of the "Microeconomics" Research Unit, ISAE. Areas of Specialisation: welfare state, income distribution, social issues.
Michele Raitano	Research consultant in the "Microeconomics" Research Unit ISAE. Areas of Specialization: welfare state, social security, social mobility.

6. Legal Entity Descriptions: CRISS Italy

Brief description of the organisation, main tasks and previous experience	CRISS (Centro di ricerche interuniversitario sullo stato sociale), is a network of economists working on the Welfare States, which has been promoted by academics and researchers of the Universities of Siena, Rome "La Sapienza" and Bocconi University, Milan. The mission of the CRISS is to carry out research work on the variety of models by which social protection is implemented, with a special focus on the European Union in the era of globalisation. In these years, the research work by CRISS members has been presented in many Seminars and Conferences. Also a number of Working Papers have been published. Many of these papers have appeared on leading scientific journals
Relevance of institute's work for the particular project proposal The relevance of the CRISS for the organisation of the project proposal lies in the papers, database, deliverables and policy proposals produced in the FP6 project "*Inequality: Mechanisms, effects and policies",* The CRISS has played the role of the leading institutions in carrying out this research project, which has now been completed. The project has pursued three objectives: a. to analyse the economic and social mechanisms that are producing polarisation and inequality within European countries, within EU neighbouring Countries; b. to investigate the effects inequality has in societies, and its relations with economic performance and social integration; c. to identify actual and possible policies, at the national, EU and global levels. A variety of economic (taxation, expenditure, welfare reform, etc.) and social (on gender, immigrant, social rights) policies have been proposed, aimed at counteracting inequality within Europe.	
Project Number, Relevance	INEQ, Contract No 2005-029093
Staff profile	
Staff member (add as many lines as you need)	**Francesco Farina**, Professor of Economics at the Faculty of Economics of the University of Siena. Francesco Farina teaches European Economics in the PhD Programme. His previous teaching positions were at the Universities of Naples and Perugia in Italy and at the University of Toronto in Canada. He is the author of books and articles on Theory and Measurement of Economic Inequality, European Economic Integration among other topics. He has contributed with four papers to the Work Package 6 of the CRISS research project "*Inequality: Mechanisms, effects and policies"* .
	Gianluca Grimalda, research fellow at IN+ - Center for Innovation, Technology and Policy Research (Instituto Superior Tecnico, Lisbon) and visiting fellow at the Centre for the Study of Globalisation and Regionalisation (Warwick University). Gianluca Grimalda (PhD in Economics, Southampton, 2003) has formerly been research fellow and teaching assistant at Warwick University. He has co-ordinated a research programme on "Globalisation and regional integration: Their Impacts on Employment and Inequality in EU Neighbouring Countries", as a part of a research project on "Inequality: Mechanisms, Effects, and Policies", funded by the European Commission. He has publications on International Review of Applied Economics and Constitutional Political Economy.

7.   Legal Entity Descriptions: Kiel Institute for the World Economy

NAME of the Institute	The Kiel Institute for the World Economy
Brief description of the organisation, main tasks and previous experience	The Kiel Institute is an international centre for research in global economic affairs, economic policy consulting and economic education. The Institute engages especially in creating solutions to urgent problems in global economic affairs. On basis of its research, the Institute advices decision-makers in policy, business, and society and informs the broader public about important developments in international economic policy. As a portal to research in global economic affairs, the Kiel Institute has established a network of International Research Fellows that supports the worldwide awareness of the Institute's activities and gives additional research impulses in form of scientific advice, joint research, and teaching stays in Kiel. The research of the Kiel Institute focuses on creating solutions to urgent problems in global economic affairs that meld economic efficiency and social justice and offer adequate incentives for economic activity based on individual initiative.

Relevance of institute's work for the particular project proposal
The research area *Reforming The Welfare Society* analyses how welfare states—with their objectives to provide social insurance, redistribution, lifecycle transfers, and access to services subject to market failures (such as education and health services)—respond to the challenges created by global changes as well as how should reform policies be designed to enhance people's adaptability, so that they can turn themselves from losers into winners on their own. The research area aims to examine the effectiveness of welfare policies from the perspective of economic efficiency and equity. The research area *The Global Division of Labour* empirically assesses major aspects of the international division of labour in the globalizing world economy. The activities of this research area address the challenge of integrating an increasing number of countries into the international division of labour without widening the income gap between these countries, as well as the corresponding challenge of adjusting the pattern of specialization of integrating countries without widening the income differences within these countries.

Project Number, Relevance	The Kiel Institute will contribute the work package WP2.5 on Institutional Drivers of Inequality analyzing the effects of technical change and complementarities between different stages in education and training on income, employment, and inequality as well as the effects of institutions on inequality. The Kiel Institute has extensive experience in managing complex research projects, often with international collaborators.

Staff profile	
Alessio J.G. Brown	Head of the Research Area "Reforming the Welfare Society", Areas of Specialisation: Labour Economics, Labour Market Policy and Institutions.
Dennis Görlich	Research Associate, Areas of Specialisation: Inequality on European Labour Markets, Human Capital, Migration and Remittances
Erich Gundlach	Management Coordinator Research, Areas of Specialization: International Productivity Differences, Economic Growth and Trade, Global Long-run Transitions
Wolfgang Lechthaler	Research Associate, specialised in Labour Economics, Human Capital, Monetary Policy and International Economics.
Christian Merkl	Head of the Research Area "Monetary Policy under Market Imperfections", Assistant Professor, CAU Kiel; Areas of Specialisation: Macroeconomic Policies, Labour Market Rigidities, and the Interactions of Monetary Policy and Labour Markets
Dennis J. Snower	President, Kiel Institute for the World Economy, Professor, CAU Kiel. Areas of Specialisation: Labour Economics, Monetary Policy, Reforming the Welfare Society

8.   Legal Entity Descriptions: Georg-August-Universität Göttingen

Name of the Institution	Georg-August-Universität Göttingen, Germany
Brief description of the organisation, main tasks and previous experience	The Georg-August-Universität Göttingen is a renowned research university devoted to both distinguished teaching and excellent scientific research. It was recently selected as one of nine universities in Germany to receive recognition and funding in the so-called 'Excellence Initiative'. The Faculty of Economic Sciences can refer to a long tradition of successfully conducting collaborative research projects and has a strong commitment to do research on Europe. The Faculty's Centre for European, Governance, and Economic Development Research – *cege* – has been facilitating research in this area since 1999. Research results have been widely published in internationally peer-reviewed academic journals. As part of the German 'Excellence Initiative' the Courant Research Centre 'Poverty, Equity and Growth in Developing and Transition Countries: Statistical Methods and Empirical Analysis' has been founded recently. The Centre promotes interdisciplinary research and strengthens the expertise in the field of applied inequality research.

Relevance of institute's work for the particular project proposal:
The research group coordinated by Stephan Klasen which will carry out the project work, has a particular focus on causes, measurement, and welfare and development consequences of economic inequality. Economic inequality has been analyzed using both income and non-income dimensions. A particular recent emphasis has been to measure the well-being consequences of economic inequality. Related recent work includes conceptual and applied work on the measurement and analysis of social exclusion and the measuring of well-being using subjective measures.

Project Number, Relevance	Göttingen University will contribute to work packages WPA2 (Inequality and well-being) and WPA3 (Adult income inequality and inequality of childhood opportunity).
Staff Profile	
Stephan Klasen	Stephan Klasen is Professor of Economics. He holds a Ph.D. from Harvard University and has held positions at the World Bank, King's College (Cambridge, UK) and the University of Munich. An important research focus is on the measurement of well-being, poverty, and inequality. In particular, he has worked for over 15 years on the theoretical and empirical approaches to incorporating inequality in an assessment of well-being. Apart from his academic work, he has advised UNDP, UNESCO, the OECD Development Center, and the World Bank on well-being measurement issues.
Carola Grün	Carola Grün is junior professor in economics. She holds a Ph.D. from the LMU in Munich and has also held a position as lecturer in economics at the University of the Witwatersrand in South Africa. She has considerable joint work with Stephan Klasen on the role of inequality in the measurement of well-being. In addition, she has worked extensively on the determinants of subjective well-being in different settings.
Thomas Otter	Thomas Otter is research associate at the Ibero-America Institute of Economic Research at the University of Göttingen. He holds a Ph.D. from the University of Goettingen and has since worked on the measurement of poverty and inequality, including particularly questions of inequality of opportunities.

9. Legal Entity Descriptions: Aarhus University

NAME of the organisation	Aarhus University
Brief description of the organisation, main tasks and previous experience	Aarhus University is the second university in Denmark. It consists of several units. However, for the relevant purpose, it has two units: 1) the university, and 2) Aarhus School of Business, which forms part of the university. As all Danish university, Aarhus University is publicly owned. As any university, the main tasks are divided between roughly 50 percent teaching, 40 percent research and some administration. Aarhus University was established in 1928 and currently ranks number 81 in the world, according to the Times Higher Education poll.
Project Number, Relevance	Aarhus will contribute to work package C1
Staff members	
Martin Paldam	Martin Paldam has been professor of economics at the School of Economics and Management, Aarhus University, since 1986. He is also honorary professor at Deakin University in Melbourne, Australia, and international research fellow at the Institute of World Economics in Kiel. From 1996-2002, Martin Paldam also served on the Steering Committee of the Social Capital Project at the World Bank. His publication list comprises a long list of papers published in journals, including papers in the *British Journal of Political Science* and the *Journal of Economic Surveys*.
Christian Bjørnskov	Christian Bjørnskov is associate professor of economics at the Department of Economics, Aarhus School of Business, Aarhus University. He is also a board member of the European Public Choice Society and affiliated with the Centre for Political Studies, Copenhagen. His publications include papers in journals such as *Public Choice* and the *Journal of Development Economics*.

10. Legal Entity Descriptions: Cyprus Centre for European and International Affairs

Name of the Institution	Cyprus Centre for European and International Affairs, University of Nicosia
Brief description of the organisation, main tasks and previous experience	The CCEIA is an established research centre in Cyprus focusing on economic, political, social, and security issues, currently affiliated with the University of Nicosia. It operates independently and is governed by a board of directors from among the local academic and business community. The CCEIA has published a sizeable body of literature independently or in collaboration with other research centres and academic institutions in Cyprus, and in Europe. It has experience in coordinating and managing funded research projects.

Relevance of institute's work for the particular project proposal:	
The Centre´s current research interests have been focused in the areas of fiscal policy and social economic issues. Staff members have expertise in the area of fiscal policy and will work in collaboration with consultants with expertise in the fields of inequality, tax evasion, and the gender wage gap.	
Project Number, Relevance	The CEEIA will contribute to working packages A2 (Welfare Measurement, Inequality and Tax Evasion) and A3 (Opportunity and Gender Discrimination). In working package A2 we will analyse the relationship between tax evasion and income inequality, and analyze the impact which alternative measures aimed at reducing tax evasion (e.g. more focus on indirect taxes and presumptive taxation) can have on income inequality. In working package A3 we will investigate how the gender wage gap relates to both wage and income inequality, for individuals and households, distinguishing between the "efficiency" and the "discriminatory" part of the pay gap. We will also estimate the effects of removing the discrimination (inefficiency) part of the gender wage gap on both wage and income inequality, and discuss the relative merits of specific policy measures proposed in the literature.

Staff profile	
Leonor Coutinho	Research Fellow in Economics. Also Assistant Professor at the University of Nicosia. Published in professional journals, including the Open Economies Review, in the Review of Economic Surveys, produced working papers, and participated in various reports and a book chapter. Previously a research fellow of the Portuguese Science Foundation, at Georgetown University (Washington D.C.). Was also a Marie Currie Research Fellow at the Centre for European Policy Studies (Brussels), and worked also for the World Bank. Has worked extensively on fiscal policy. Holds a Ph.D. from the European University Institute (Florence).
Panos Pashardes	Consultant. Also Professor at the University of Cyprus. His research interests are in the areas of public and welfare economics, consumer demand, and applied econometrics. Has a significant number of publications in refereed journals, including the American Economic Review, the Economic Journal, and the Journal of Public Economics. Has published and edited a number of books, and has contributed to various book chapters. Has also completed a significant number of commissioned reports for the European Commission, the Institute for Fiscal Studies (London), and Cypriot institutional bodies. Has previously worked at the City University and at the Institute of Fiscal Studies, in London. Holds a Ph.D. degree and a M.Sc. degree in economics from the Birkbeck College, University of London.

11. Legal Entity Descriptions: Labour Institute for Economic Research, Finland

NAME of the Institute	The Labour Institute for Economic Research
Brief description of the organisation, main tasks and previous experience	The Labour Institute for Economic Research is an independent and non-profit research organisation founded in 1971. The Institute carries out economic research, monitors economic development and publishes macroeconomic forecasts. The aim is to contribute to the economic debate and to provide information for economic policy decision making in Finland. The permanent staff of the Institute consists of 16 persons, of which 11 are economists (this number includes the director, research director and three research coordinators). Most of the research staff have a doctoral degree in economics. The main emphasis is on empirical research based on theoretical approaches. The main fields of research are labour market issues, public economics (including inequality and social exclusion) and macroeconomic issues and economic policy. Publishing in academic journals and presenting research results at scientific conferences is part of the cooperation with the international research community. Commenting on economic trends and participation in the economic policy debate in the media are also an important part of the work.

Relevance of institute's work for the particular project proposal	
The Labour Institute has a long tradition in studying income inequality, welfare and economic exclusion. Projects in the recent years have explored the role of taxation and social transfers in the evolution of Finnish income inequality, health and inequality, poverty, comparison of using consumption and income in distributive analysis, wealth distribution and the progressivity of taxes. The Institute has also organized international seminars in distributional analysis.	

Project Number, Relevance	The Labour Institute will contribute to work package WP1.1 which is a general survey of evolution of inequality. The Labour Institute will specifically analyse the evolution of top income shares in a panel of countries and the links between top income shares and macroeconomic indicators, institutional characteristics and policies including tax policy. The analysis will also include investigating the relationship between top income shares and other measures of inequality. The Labour Institute has extensive experience in analysis of income inequality and empirical data analysis.

Staff profile	
Ilpo Suoniemi	Ilpo Suoniemi, Senior Economist, areas of specialisation: analysis of income distribution and poverty, taxation, public provision of private services, household consumption and econometrics.
Mari Kangasniemi	Senior researcher, areas of specialisation: empirical labour economics, productivity.

12. Legal Entity Descriptions: Central Planning Bureau. Netherlands

Brief description of the organisation, main tasks and previous experience	CPB Netherlands Bureau for Economic Policy Analysis was founded sixty years ago as the Centraal Planbureau (Central Planning Bureau), with Nobel laureate Jan Tinbergen as its first managing director. CPB provides independent forecasts and analyses that are scientifically sound and up-to-date and that are relevant for the policy decisions of government, parliament, and societal organisations such as political parties, trade unions, employers' associations, and the European Commission. CPB combines two tasks, which in other countries tend to be separate: the bureau is the accounting centre for budgetary and economic policy and a research centre preparing independent forecasts and analyses. It has a staff of 180 persons.
	CPB activities cover a broad range of topics. CPB conducts policy-relevant medium- and long-term analyses on the functioning of the labour market and the organization of the welfare state. These analyses make intensive use of general-equilibrium models. In the field of growth, structure and knowledge economics CPB conducts policy-relevant institutional and empirical economic analyses on education, innovation, R&D and ICT. A major aim is gaining insight into the causes and consequences of productivity growth. Research on competition and regulation deals with a multitude of questions around the leading theme: what role can the government play for a better functioning of markets. Most studies in this field make use of the theory of industrial economics and institutional economics. Work in the fields of mobility, infrastructure, spatial economics, agriculture, housing, nature and the environment includes policy-relevant regional and spatial analyses, cost-benefit analyses of major projects, research on European agricultural policy and land policy, as well as institutional and empirical analyses of housing issues.
Relevance of institute's work for the particular project proposal	
Project Number, Relevance	AHEAD, Contract No SP21-CT-2003-502641
Project Number, Relevance	AGIR, Contract No QLK6-CT-2001-00517
Staff profile	
Staff member (add as many lines as you need)	Dr Ed Westerhout (1965) is leader of the programme Pensions at CPB Netherlands Bureau of Economic Policy Analysis and member of the Netspar theme "The Macroeconomics of Pension Reforms". Ed has studied economics at the University of Tilburg. He finalized his PhD thesis in 1997 at the University of Amsterdam ("Imperfect Asset Substitutability, Capital Income Taxation and the EMU"). In previous jobs at CPB, he worked on health care economics, disability schemes and the labour market. As lecturer, he has been affiliated with the Economics Faculty of the University of Amsterdam for more than five years. He participated in three earlier ENEPRI projects, namely AGIR, DEMWEL and AIM.

13. Legal Entity Descriptions: University of Aberdeen (UNIABDN)

NAME of the Institute	The University Court of the University of Aberdeen (UNIABDN)
Brief description of the organisation, main tasks and previous experience	The University of Aberdeen was founded in 1495 and is Scotland's third oldest University and the fifth oldest in the UK. The University is at the forefront of teaching and research in medicine, the humanities and sciences. It has been involved in European projects since framework 3 and has to date been successful in participating in more than 590 grants funded by the European Commission. The University of Aberdeen has a number of administration departments which are available to support European grants, as well as personnel dedicated to dealing specifically with EU contracts.
Staff members	
Claire Wallace	**Claire Wallace** is professor of Sociology and Director of the New Europe Centre. She has co-ordinated 3 framework programme projects and was a partner in another 3. She has undertaken consultancies for the European Commission, the European Parliament, the European Foundation for the Improvement of Living and Working Conditions, the World Bank and the European Bank for Reconstruction and Development. She has written 13 books and 50 articles in peer reviewed journals. She was formerly editor of the international peer reviewed journal "European Societies", a leading sociological journal. She is currently president of the European Sociological Association.

2.3.   The Consortium as a Whole

The consortium is a group of leading universities and research institutes selected so as to bring a range of skills to the research. While most of the researchers in the group are trained as economists, the project brings together both economists and sociologists, in order to provide a multi-disciplinary perspective to the research. All of the researchers have backgrounds working on issues related to inequality and the consortium is designed to bring together skills in economics, political science and sociology. Even where for example, the primary discipline of researchers is economics, it is the case that the institutions and the researchers themselves have done some of their work on the margins between economics and sociology. Key points are that all the institutions have experience of working with large household surveys or even larger administrative data sets ensuring that the consortium as a whole offers the skills needed to deliver the research which is required and that many of the researchers are familiar with work in an interdisciplinary environment.

Scientific coordination will be carried out jointly by the scientific co-ordinators, István György Tóth at TARKI and Martin Weale at NIESR. They have a history of past successful collaboration in FP6 projects.

The different members have either co-operated with each other in earlier EU projects or, as with NIESR, and IfW and CEPS, Aarhus and Göttingen collaborated with each other in other projects or been involved in each other's activities and followed each other's work.

The partners are chosen to bring together the multidisciplinary mix of expertise needed for successful work on inequality. They combine experience in the study of labour markets, household surveys and household data and international comparisons looking at economic, political and societal questions. They are experienced in carrying out and disseminating academic research successfully to a range of different audiences by means of academic conferences and publication for academic audiences, seminars and policy workshops for policy-makers and press releases and press briefings to ensure wide dissemination through news media to the public at large. There are two assessors, one economist from an institution on the boundary between academic research and public economic policy (the Netherlands Central Planning Bureau) and the other an academic sociologist. Their function is, by studying the papers produced by the project, to appraise the work critically while it is underway so that the researchers can respond to their comments. Thus the consortium as a whole is structured to bring together a group with previous experience of various forms of collaboration structured so as to cover the breadth of the topic.

Past/Current Projects	
AHEAD	ESRI, NIESR, CPB, CEPS, ISAE, TARKI
EUKLEMS	NIESR, CPB
INNODRIVE	CEPS, NIESR
INEQ	CRISS

2.4   Resources to be committed

The resources to be committed reflect the needs of this multidisciplinary project. Time is allocated by work package in a manner which reflects the complexity of the tasks.

The project has tried to equally distribute the resources over Strand A-C with significantly higher resource allocation on the description of the evolution of inequality in Europe and the OECD in Strand A and a significant smaller amount of resources for the scientific and administrative management in Strand D. The allocation of person/months among the four strands is illustrated in the following table:

Groups	Months	%
Strand A	109.0	35.0
Strand B	91.0	30.0
Strand C	73.0	24.0
Strand D	33.0	11.0
TOTAL	306.0	100.0

As seen, about 35% of the man months are distributed on Strand A, the general description of the evolution of inequality in Europe and the OECD countries. 30% of the man months are taken to analyze the drivers of inequality and 24% of the man months are taken to analysis the consequences of inequality. Necessary and adequate provision has been made for the costs of survey data.

Care has been taken to ensure that adequate resources are devoted to the scientific management and dissemination of the work. TARKI, NIESR and CEPS shares the work of synthesizing strands A to C, respectively. In addition, in WPD1 adequate time has been allowed for TARKI to produce a full and thorough forward-looking synthesis of the research in addition to the standard reports to be produced on the work. Travel costs will be held down by holding meetings in towns which are accessible cheaply.

The project puts emphasis on internal quality control. Each deliverables are to be assessed by independent evaluators and adequate resources are budgeted to cover their efforts. In addition to funding research, resources are devoted to delivering high quality output. Thus, as discussed above, assessment is an integral part of the project. Also, two conferences are planned with funding adequate to ensure that they can be attended by international experts in the field. Resources for coordination the production of the synthesis and final report are designed to ensure that these exercises can be properly undertaken to produce outputs which are of direct policy relevance. Administrative costs are limited because CEPS has experience at managing such projects efficiently. Furthermore, CEPS has resources, at very start, to build up the international contacts and preparation of policy oriented seminars.

3.   Impact

3.1   *Expected impacts listed in the work programme*

Introduction
This project will have a broad impact on both understanding of a wide range of issues associated with inequality including the factors which lie behind inequality, the relative magnitude of inequality in different countries and the cultural, social and political consequences of inequality. It will identify policy changes which can be implemented as structural means of addressing inequality.

The work packages in strand A will provide a basis for individual countries to understand how the key international dimensions of inequality are inter-related, enabling them to form an overall view of how their own experience of inequality compares with international patterns. A general description of the state of inequality will be complemented by more detailed research into three particular questions. The first is intended assess the suitability of income as an indicator of inequality, looking at whether adjustments need to be made for differences in relative costs of living for people in different circumstances, whether adjustments need to be made to allow for tax evasion and how inequality-adjusted measures of aggregate income relate to other indicators of well-being. The second is an assessment of inequality on objective and subjective indicators of well-being in a comparative setting. The third is intended to address a broader aspect of inequality, the link between inequality of outcome and inequality of opportunity and the particular issue of how far the gender pay gap is the consequence of discrimination. The work will make it easier for countries to address this issue; the

methodology will allow countries not covered in the study also to identify how they should focus their policy effort.

The research in strand B will add to our knowledge of a range of deeper factors which are possible causes of inequality allowing countries to see the scope for long-term policy intervention. Identifying the contribution made by inequality of opportunity will allow countries to address this. An understanding of the role that family background plays in the persistence of inequality will enable policy makers to focus their efforts where they are likely to be most effective. Evidence on the transmission mechanism of health status from parents to children will establish where governments need to focus resources to break any links. If the way in which people plan for the future accentuates inequality policy-makers will be able to identify policies which can offset the effects of myopic planning, such as near-compulsory saving for retirement or incentives to undertake post-compulsory education. Political pressures can be expected to influence inequality, and may in themselves be determined by levels of subjective well-being and the way in which it changes over time as well as inequality in well-being Labour market institutions may be powerful influences on people's willingness to undergo training after full-time education is completed and an understanding of the way in which these affect incentives to accrue human capital will therefore also identify how policy can affect inequality.

Strand C will look at the cultural, political and social consequences of inequality. This will both serve as a warning of what the effects might be of ignoring high levels of inequality and also identify the risk that inequality may, in itself create political obstacles to the mitigation of inequality. Such an effect might arise, for example, because it results in generally low levels of trust and, with low levels of trust, politicians find it difficult to introduce effective policy programmes addressing both inequality and other social and political problems

Each stand of the research project and each work-package individually will have a significant impact on both brining forward academic research and in identifying implications for policy. However it is vital in such an ambitious project to deliver research outcomes which are more than the sum of the parts. For this reason the consortium has decided to devote the final year to bringing together the diverse findings and making a concerted effort to debate among ourselves and report on causes and consequences of inequality. The range of research methodologies and underlying paradigms will ensure that subtle aspects of these causes and consequences are more likely to be identified than would be the case if the consortium were made up of people working only in a single discipline. The resulting synthesis and policy report should have a substantial impact on analysis of inequality and on policy-making at both a national and an international level. It will isolate those aspects of society which embed inequality and show its implications for other aspects of social cohesion. Thus it will provide policy makers will valuable information on the likely consequences policy decisions which affect and react to inequality.

We now move on to a more detailed analysis of each work-package strand by strand.

Strand A
The impact of work-package A1 will arise from the co-ordinated way in which it presents an overall picture of inequality in advanced countries together with a more detailed analysis of some key aspects of inequality. Only by putting countries on a fully comparable basis and by decomposing the factors behind movements in the different dimensions of inequality is it possible for different countries to compare their experiences with each other and to understand their circumstances.

Following the objectives stated by the Lisbon strategy, EU Member States adopted policies to promote employment growth. Employment growth has resulted in changing structure of employment in several countries: the education level of the employed has generally improved, female participation has risen, shares of part-time and fixed-term employment have increased. By studying the effect of changes in population structure the work contributes to the understanding of the consequences of this

evolution on the distribution of incomes and the extent to which they may change further as a result of future progress towards the Lisbon goals allowing policy makers to form an overall view of this aspect of the Lisbon strategy.

The impact of work on top-income shares – which may have an important bearing on economic inequality – will show how far these are driven by domestic economic institutions, which are a consequence of policy choice, and how far they are affected by global market pressures that are largely exogenous with respect to policies. It may also indicate how far recent economic disruption can affect top income shares. The work will allow governments to understand how far taxation and public expenditure are effective as influences on the forces driving concentration of income at the top end of the distribution.

We will analyse the way in which economic institutions and income distribution affect voting behaviour and political decisions. There is generally a conflict over social choices, ultimately resolved in favour of groups with greater political power. Growing inequality may change the power base in the society and the political process so that future interventions are less or more likely. This would have implications for the importance of early intervention and also provide an understanding of the persistence of inequality.

Study of education and health will provide an overview of the inter-relationship between these dimensions of inequality and economic inequality. An analysis of the interaction between them will provide an indication of the wider benefits public spending on both education and health

Work package A2 will provide new means of making comparisons over time of the relative incomes of households in specific income bands and of identifying, on the basis of consumption patterns, the magnitude and impact of tax evasion. This will have will have three major impacts. First of all it will provide a better and more robust framework for assessing how households at different points on the income scale compare across countries. This will provide a basis better than that existing at present for countries to assess their performance, on a relative basis, in combating poverty. This will be helpful for countries which want to assess income redistribution programmes relative to others' experiences or want to drawn on practice elsewhere. It will also enable them to see how living standards at the upper end of the income scale compare with those of other similar countries. This too may be important for a number of public finance issues, such an assessment of taxable capacity in the light of the risks of tax competition.

Secondly the research will be valuable for researchers who wish to study either the determinants of inequality across countries or its effects. Atkinson and Brandolini (2001) have drawn attention to the need to ensure that data actually represent what it is thought that they represent; such a point obviously applies to any study involving a comparison of relative living standards. The methodology we set out is also suitable for an assessment of movements of living standards of different types of household over time- this is of similar importance both to policy-makers and to researchers. Moreover, the analysis of the impact of inequality on trends and comparative levels of objective and subjective indicators of well-being will allow policy-makers to understand the welfare impact of inequality in a comparative setting. It will also allow a more detailed assessment of income and well-being convergence between EU members.

Thirdly, application of the work to the study of tax evasion will point to number of implications for specific tax policy as well as possibly identifying a source of inequality which has, hitherto not received much attention. It is generally believed that direct tax is more subject to evasion than indirect tax. Taking account of evasion will influence views of direct taxation relative to indirect taxation as a means of delivering a progressive tax structure. The study will identify the spread of tax evasion showing how it correlates with income and developing indicators for governments to use in measuring their success at reducing tax evasion. At low levels of income tax evasion merges into benefit fraud and the study will also assess how far benefits may be misdirected as a result of fraud.

The importance of measurement extends, however, beyond simple inter-relationships between standard indicators of inequality. Work package A3 will have its impact by drawing attention to the difference between inequality of income and inequality of opportunity, both in general terms and with specific reference to the gender pay gap. The results from the first part of the study may relationships between inequality of adults and inequality of opportunity for children, highlighting the risk that inequality may be self-perpetuating or even self-reinforcing with increases in inequality today pointing to larger increases in inequality tomorrow,

The second part of this study needs to be seen in a context where EU countries have been called on to formulate targets to achieve a substantial reduction of the gender wage gap by 2010. According to the European Commission (2006), however, the gender wage gap has been given little profile in a significant number of countries. Work package A3 will bring the debate to the forefront of the EU policy agenda. Much of the reluctance of policy makers in adopting policy reforms attacking gender wage discrimination may be due to suspicion that such reforms may distort pay differentials consistent with free market optimisation principles. Our study will address this issue by distinguishing between differences in wages that can be justified on efficiency grounds (with which politicians are reluctant to interfere), and differences that are likely to be due to gender discrimination and/or other market failures, and deserve direct policy attention.

The work will also impact on policies intended to reduce gender and overall wage/income inequality in a number of ways. First of all, the fact that it covers all the EU countries will help identify those components of gender pay discrimination that are common to all countries and require action at the EU level; and those components which are country specific and require action at national level. Secondly, by highlighting the within vs. between gender pay differences in various EU countries, our analysis should help design and implement EU-wide measures promoting wage equality between men and women without exacerbating the wage inequality among men and/or among women. Thirdly, knowing the degree of gender pay discrimination across the wage distribution spectrum can improve the targeting of anti-discriminatory policies, e.g. measures addressing 'glass ceilings' are more appropriate for attacking discrimination at the top end of the wage distribution; while measures addressing 'sticky floors' are appropriate for attacking discrimination at the bottom part of the wage distribution. Finally, by connecting wage to income inequality, our study can help assess how far policies pursuing wage equality help reduce income inequality at both the individual person and the household level.

Strand B

The work packages of this project will contribute to the overall objective of the project of understanding the drivers of inequality and identifying the ways in which policy-makers may influence these. The focus here is on underlying processes deeper than those identified in strand A but which show clear possibilities for either correction or offsetting through policy interventions.

In WP B1 a picture of social, income and education mobility in EU countries will be drawn. The Lisbon knowledge society requires equality of opportunity and an increase in educational attainments, so it is important to highlight differences and similarities in mobility structures between countries. The research will improve knowledge about intergenerational transmission of inequalities and educational attainments. Up to now, such research is limited by differences across national data sources. To this end a new harmonised dataset for European countries - the 2005 wave of the EU-Survey of Income and Living Conditions (EU-SILC), that includes retrospective information on the respondent and their family of origin – will be used.

In pursuit of a knowledge society it is very important to focus on the channels which may influence human capital investment. The international literature has recently pointed out that intergenerational transmission of inequality could be a factor of utmost importance, causing strong persistence of

educational attainments between parents and offspring and limiting the widening of number of graduates. The analysis of differences in earnings and/or returns to education by family background in European countries is devoted to highlight an aspect that can impact on individual incentives to human capital investment. Should these effects prove substantial the research will an important topic requiring the attention of policy-makers.

Understanding how meritocracy varies across industries and sectors will be very fruitful for assessing the relationship between the pattern of economic activity and inequality on the one hand and, on the other hand they way in which industrial evolution drives inequality. To this end the link between industry and social mobility in two selected countries (Ireland and Italy, where data are available) will be analysed. The research will show whether family background is more of an obstacle in some forms of employment than in others. It will identify whether there are substantial groups in society which, without policy intervention, are being excluded from well-paid employment.

Socioeconomic inequalities in health are increasingly recognised as an important public health issue through Europe and this has led to a number of important reports by the WHO and EU as well as country specific documents. These lay out the evidence available to date on the scale and nature of inequalities across groups and lay out their consequences in terms of quality of life, unnecessary loss if life and economic Burden. In terms of the latter alone, recent analysis (Mackenbach et al., 2007) has estimated that the economic impact of socioeconomic inequalities in health is of the order of about €1,000 billion, or 9.5% of GDP.

The work under work package B2 will examine research on the causes of inequalities in health and test specific hypotheses about whether inequalities stem from early exposure to disadvantage and deprivation or from later processes of social selection and determination. The results of the work package will offer important insights into the most effective policy response in different states and thus facilitate the development of policies which can reduce health inequalities. As Croombie et al. (2005) show, policies to reduce inequalities in health are an important aspect of the Lisbon process.

The study, in Strand B3, of the role of myopia as an influence on inequality has the potential to make a major impact on the way in which people see inequality and also on the policies which are needed to address it. Should it turn out that myopia is an important factor behind an unwillingness to invest in education and an unwillingness to save for retirement, then governments will face the need to devise policies which combat that myopia. For students this may include substantial grant or advantageous loan schemes. With retirement saving it may include a mixture of incentives and opt-out rather than opt-in decisions similar in form to those proposed for Personal Accounts in the United Kingdom.

The work will have a more general impact on economics research because it will demonstrate how to address questions of myopia when looking at practical decision-making problems. It will set up a methodology which other researchers will be able to use in a wide range of contexts and thus develop the knowledge base of the subject.

The impact of the final work package of strand B will lie in shifting the focus towards social drivers of inequality. It will provide policy makers with insights into various sources of labour market inequality and offers them a kaleidoscope of measures to address it. National policy makers can not only use the analysis to understand what drives inequality in their country, but they can also use the results to introduce effective actions in education policy and labour market reforms to counter labour market inequality. Moreover, the output of this work package will not only provide a policy-based prospective analysis, but it also advance academic knowledge in this area.

Specifically, work package B4 will enhance our understanding of the effects of international trade and technological change on income inequality and the way in which these different forces interact as a result of complementarities between different types of skill. The analysis of the labour market outcomes of education and training and of the extent of complementarities between the different

stages of learning will indicate how the risks of both technological change and globalization leading to high long-term inequality can be avoided

The analysis will also establish the role of labour market institutions in determining workers' incentives to invest in human capital and provide policy-makers with full insight into the consequences of the choices that they make. Analysis of this is timely given the pressures in the European Union for moving towards a common structure for labour market institutions (Commission of the European Communities, 2007).

Strand C
Until now, the literature on the relation between social trust and broader conceptions of social cohesion has tended to show that cohesion is hampered by high levels of inequality. This has lead to the rather blunt policy implication that inequality should be reduced in order to further trust and cohesion. However, recent studies show that this relation need not hold for all countries, all dimensions of cohesion or for all groups in society.

One of the policy impacts of work package C1 therefore lies in its contribution to a deeper understanding of the relation between trust / cohesion and forms of inequality and the way in which the latter affect the different dimensions of social cohesion. It is, for example, highly relevant for the contemporary research tradition to explore conditions under which the social fabric is adversely affected by rising levels of inequality, and potentially also which groups in society are affected. In particular, the impact depends on our further exploration of the degree to which perceptions of inequality mediate transmission mechanisms between income inequality and trust.

Such an understanding will provide better estimates of the scope for increasing social cohesion or alleviating threats to its continued strength. As such, in countries in which the perception of inequality has a strong impact the policy recommendation may need to be very different from those in countries where there is no transmission process. Likewise, in countries where the predominant perception of differences between rich and poor is that it is the result of a fair process creating the distribution, there will probably be less scope for redistribution, both with the aim of strengthening trust and as a normative prescription.

Thus it might be that in certain countries, the policy implication could be that in order to further trust one should not reduce inequality, but instead facilitate a change in citizens' procedural perceptions. The analysis tests which quotient of income inequality might be driving trust and tests whether income differences among people in the bottom half of the income distribution is more strongly associated with lower trust. The micro analysis will, in addition, be of high importance as we will figure out in the course of the project, in which countries an increase of inequality matters for trust and in which it does not matter as much.

Another policy impact of WP C1 arises from a good understanding of how the different types of inequality affect civic and political participation, both of which are crucial measures for a society's cohesiveness and ability to solve problems requiring collective action. This also includes an overview of the relationship between different measures of inequality and the overall societal and political stability measured by a range of indicators from crime rates, to citizens' confidence toward the market economy. The work will make it possible for governments to identify where inequality is at its most damaging for overall social structure and either take measures to alter inequality or derive appropriate alternative policies.

The policy impact of WP C2 lies in the importance of understanding the individual attitudes towards inequality and redistribution. Individuals who are more intolerant towards inequality and prefer more redistribution are expected to vote for a higher tax rate (ceteris paribus). Moreover, intolerance towards inequalities might also lead people to engage in other types of political activity such as strikes, manifestations and revolution. Thus, studying directly inequality intolerance and demand for

redistribution will enhance our understanding about the formation of these attitudes. Such analysis will clarify whether people's views on inequality or redistribution are determined by their income situation (present or expected) or other factors contribute as well.

Furthermore WP C2 contributes to a deeper understanding to the question whether intolerance towards inequality and preferences for redistribution affect political choices and hence whether they have an effect on economic growth. Some authors have outlined a political-economy theory about the relation between inequality and growth. Persson & Tabellini (1994, 2000) for example argue, that higher inequality results in slower growth because – by lowering the income of the median voter relative to average income – it reinforces the demand for redistribution, which results in a higher tax rate. As taxes generally have distortive effects on economic decisions, a higher tax rate leads to lower growth. Other studies (e.g. Benhabib & Rustichini, 1996) state that absolute or relative poverty may motivate people to participate in property crime, which is also detrimental to growth. Following this line of thought, if individual attitudes towards inequality and redistribution affect voting behaviour and/or participation in political upheaval, they will also have an effect on growth prospects of a given country.

Strand C will provide the policy and academic community with information on the extent to which inequality affects levels of trust and other dimensions of social and political cohesion in the larger member states of the EU, making a comparison with the other G7 countries. It will show i) how far normative beliefs play an important role in mediating between social cohesion and inequality, ii) how inequality shapes civic and political participation, and iii) how inequality affects social and political participation and stability, as well citizen's confidence towards market economies. Overall Strand C will provide evidence how to foster social cohesion in the EU and consequently inform progress towards meeting the goals of the Lisbon agenda.

3.2   Dissemination and/or exploitation of project results, and management of intellectual property

3.2.1 Project Results

Ensuring this analysis informs policy makers will be achieved through consortium conferences and workshops targeted at specific individuals with an interest in social inequalities and their impacts on social cohesion – the latter will comprise both international and country specific events. Panels of experts and policy makers will be invited to events at all stages of the research project, including initial design stages. This ensures the project keeps abreast of the concerns of policymakers.

The dissemination strategy of the project will present its results and findings to the following different audiences:
1. Policy makers
2. Academics
3. The public at large

A project web site will be set up and maintained by CEPS as part of the ENEPRI (European Network of Economic Policy Research Institutes) web site and maintained beyond the end of the project for at last three years. All of the project outputs will be available here and the site will be designed to be accessible to all three categories of user.

Beyond this, different strategies will be needed to reach each of these three audiences

Policy Makers
The two main mechanisms for reaching policy-makers are through the circulation (in paper and electronically) of policy briefs prepared in each work package and the summary findings which will be prepared in work package D1 and by means of non-technical conferences and workshops. The presence of CEPS in Brussels makes it simple to organise these in a manner convenient to European

Commission officials. Many of the partners have close links with their national policy-makers; this will ensure thorough dissemination of the findings at a national level.

We will compile from the databases of the participating institutions, an overall database of policy-makers classified according to their particular interest and supplemented as necessary. We will produce a newsletter with key findings to be circulated every six months and will attach the policy summaries as available.

The final conference, at which the policy findings will be presented and the implications of the work for the future of the knowledge society assessed, will be designed specifically for policy-makers. In addition we will hold a mid-term policy briefing in Brussels coinciding with the mid-term consortium meeting. In addition each participant will be expected to hold workshops for policy makers in their country and each work package will hold a workshop to disseminate its findings.

Academics
The project participants are all experienced at working on policy-relevant research and in presenting the results to public officials. However, at the same time they are all academic institutions or public bodies which give great importance to publication in academic media. The core outputs of the project will be written up in a manner intended to be suitable for academic publication in appropriate journals. These will be available initially as discussion papers, both from the project web site and in the discussion paper series of the individual participants. The participants will submit them for presentation at suitable conferences such as the annual meeting of the European Economic Association and the European Meeting of the Econometric Society so as to obtain feedback on them and then submit them for journal publication. The time lags in journal processing mean that most of the research is likely to be published after the end of the project.

In order to promote academic awareness of the research we will send our newsletter to academics on participant institutions' databases.

The Public at Large

The main method of disseminating the findings to the public at large is through the printed media. Experience suggests that the best way of ensuring journalists take an interest in the work is through personal contact. Once researchers build up relationships with local journalists it is possible to talk to them about the areas where the project produces results in areas in which they have direct interests. The fragmented nature of the printed media means that this has to be done institution by institution, with its institution using its press contacts to handle dissemination of findings in its own language. At the two conferences the partners will discuss what findings are suitable for dissemination to the press. NIESR will produce a press notice in English and the other institutions will translate this into their home languages for dissemination to their local media.

3.2.2 Intellectual Property
The purpose of the project is to produce research results for publication in academic media and dissemination to other users of research. It is not expected that the project will result in any intellectual property issues; the findings are designed to be placed in the public domain.

4. Ethical Issues
The only ethical issues which arise in the proposal stem from the experimental work to be carried out in work-package C2. This involves non-invasive work on healthy student volunteers. The experiments will be put to the ethics committees in the two universities concerned for approval before any experiments are carried out. The ethical guidelines pertaining to both the national and EU levels will be followed and informed consent will be obtained. The researcher concerned, Prof Farina, has considerable expertise in developing experiments which meet ethical guidelines, and the need for

approval is therefore unlikely to be an obstacle to carrying out this work. He also has the experience needed to maintain the security of the individual data using password security.

The ethics committees of the universities concerned will make the final decision, but we do not believe that national approval is required for experimental work of this type.

	Research on Human Embryo/ Foetus	YES	Page
*	Does the proposed research involve human Embryos?		
*	Does the proposed research involve human Foetal Tissues/ Cells?		
*	Does the proposed research involve human Embryonic Stem Cells (hESCs)?		
*	Does the proposed research on human Embryonic Stem Cells involve cells in culture?		
*	Does the proposed research on Human Embryonic Stem Cells involve the derivation of cells from Embryos?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

	Research on Humans	YES	Page
*	Does the proposed research involve children?		
*	Does the proposed research involve patients?		
*	Does the proposed research involve persons not able to give consent?		
*	Does the proposed research involve adult healthy volunteers?	X	40
	Does the proposed research involve Human genetic material?		
	Does the proposed research involve Human biological samples?		
	Does the proposed research involve Human data collection?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		

	Privacy	YES	Page
	Does the proposed research involve processing of genetic information or personal data (e.g. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?	X	40
	Does the proposed research involve tracking the location or observation of people? I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		

	Research on Animals	YES	Page
	Does the proposed research involve research on animals?		
	Are those animals transgenic small laboratory animals?		
	Are those animals transgenic farm animals?		
*	Are those animals non-human primates?		
	Are those animals cloned farm animals? I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

Research Involving Developing Countries	YES	Page
Does the proposed research involve the use of local resources (genetic, animal, plant, etc)?		
Is the proposed research of benefit to local communities (e.g. capacity building, access to healthcare, education, etc)?		
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

Dual Use	YES	Page
Research having direct military use		
Research having the potential for terrorist abuse I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

Appendix to Section 4. Information Sheet and Consent Form

A4.1. Information Sheet

DESCRIPTION OF THE RESEARCH

You are invited to participate in a research study about how people make decisions. A sum of money will be made available to participants by us (the researchers). You and the other participants will earn a payoff that depends on your and others' decisions. At the end of the research a questionnaire will be administered asking your opinions about some aspects of today's societies, and some information about you.

WHAT WILL MY PARTICIPATION INVOLVE?

If you decide to participate in this research you will be asked to make a series of decisions regarding how to allocate the sum of money made available to today's participants by the researchers. All decisions will be anonymous as they will be processed by a computer programme that does not reveal your identity either to other participants or to us. You will also be required to perform some simple tasks/*(answer some quizzes)/(participate in some random draws)*, which may also affect your final earnings. These do not require any particular skill or competence.

Your participation will last approximately 90 minutes in total.

ARE THERE ANY RISKS TO ME?

There are no risks involved in participation in this research. You will be provided money on which you will be asked to make decision by us, and thus, you will not use your own money. All money that you earn in the research is yours to keep. Additionally, any behaviour or responses during this research will be kept completely confidential and anonymous.

ARE THERE ANY BENEFITS TO ME?

You are free to take home any money you receive during this research.

You will receive a fixed show up fee of 6 Euros plus any money received during the research for the participants' decisions.

You are free to withdraw at any time of the research, but in this case you will receive no compensation.

HOW WILL MY CONFIDENTIALITY BE PROTECTED?

While there will probably be publications as a result of this study, your name will not be used. Only group characteristics will be published. You will be identified in the research only by an ID number, and there will be no record linking your actual identity with your responses.

WHOM SHOULD I CONTACT IF I HAVE QUESTIONS?

You may ask any questions about the research at any time. Some of these may be answered only at the end of the whole research. You are free to retain this information sheet and contact us at the following email/phone number:

Gianluca Grimalda, Ph.D.

Your participation is completely voluntary. If you decide not to participate or to withdraw from the study there will be no adverse consequences.

If you consent to participation in this research, you may walk into this room now. You will then have to sign the enclosed consent form.

If you do not consent to participate in this research, you are free to leave now. We thank you for your time and interest.

A4.2 Consent Form

Participant identification number where applicable

<div align="center">

CONSENT FORM

</div>

Project Title: Research on Decision-Making N.20

Name of Researcher: Gianluca Grimalda / Francesco Farina
(to be completed by participant)

I confirm that I have read and understood the information sheet dated………………. For the above project which I may keep for my records and have had the opportunity to ask any questions I may have.

I agree to take part in the above study and am willing to:

- Make decisions with other people. These decisions will involve allocating money across different options. The money will be provided for by the researchers.
- Answer some attitudinal questions from a questionnaire

I understand that my information will be held and processed for the following purposes:

The information will be analysed with the sole purpose of producing scientific research on decision-making behaviour. No mention will be made of individuals who participated in this research, if not as a group – e.g. Warwick University students. No commercial use will be made of the data.

I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason without being penalised or disadvantaged in any way.

_____   _____   _____
Name of Participant   **Date**   **Signature**

_____ _____   _____
Name of person taking Date   **Signature**
consent if different
from Researcher

_____ _____   _____
Researcher   **Date**   **Signature**

5. Consideration of gender aspects

The institutions involved in the project all have policies to promote equal opportunities. They all have arrangements in place, such as part-time and flexible working, to facilitate the involvement of people of both sexes who have obligations to look after young children. The issue of gender discrimination is explicitly studied in WP A3.

6. References

Acemoglu, D. (1997). Training and innovation in an imperfect labour market, *Review of Economic Studies* 64, 445-464.

Acemoglu, D. and J.-S. Pischke (1999a). The Structure of Wages and Investment in General Training, *Journal of Political Economy* 107, 539-572.

Acemoglu, D. and J.-S. Pischke (1999b). Beyond Becker: Training in Imperfect Labour Markets, *The Economic Journal* 109, 112-142.

Acheson, D., D. Barker, J. Chambers, H. Graham, M. G. Marmot, and M. Whitehead (1998). *Independent Inquiry into Inequalities in Health*. London: The Stationary Office.

Aigner, D.J, F. Schneider and D. Ghosh (1988). Me and my shadow: estimating the size of the hidden economy from time series data. In: Barnett, W. A. et al. (Eds.), *Dynamic econometric modelling: proceedings of the third international symposium in economic theory and econometrics*. Cambridge: Cambridge University Press, 297-334.

Alesina, A. and E. la Ferrara (2000). Participation in Heterogeneous Communities, *Quarterly Journal of Economics* 115, 847-904.

Alesina, A., R. Di Tella, R. MacCulloch (2001). Inequality and Happiness: Are Americans and Europeans Different?, *National Bureau of Economic Research Working Paper* 8198.

Alesina, A., R. Di Tella and R. MacCulloch (2004). Inequality and happiness: are Europeans and Americans different?, *Journal of Public Economics* 88, 2009-2042.

Alesina A. and E. Glaeser (2004). *Fighting poverty in the US and Europe: a world of difference*. Oxford: Oxford University Press.

Alesina, A. and N. Fuchs-Schündeln (2005). Good Bye Lenin (or not?): The Effect of Communism on People's Preferences, *NBER Working Paper* 11700.

Alesina, A. and E. La Ferrara (2005). Preferences for redistribution in the land of opportunities, *Journal of Public Economics* 89, 897-931.

Alesina, A. and G.-M. Angeletos (2005). Fairness and redistribution: US vs. Europe. *American Economic Review* 95, 913-935.

Allingham, M. G. and A. Sandmo (1972). Income Tax Evasion: A Theoretical Analysis, *Journal of Public Economics* 1, 323-338.

Alm, J., R. Bahl, and M.N. Murray (1991). Tax Base Erosion in Developing Countries, *Economic Development and Cultural Change* 39, 849-872.

Altonji, J. G., and R.M. Blank (1999). Race and gender in the labor market. In: Ashenfelter, O. and D. Card (Eds.), *Handbook of Labor Economics* 3. North-Holland: Elsevier, 3143-3259.

Amiel, Y., J. Creedy and S. Hurn (1999). Measuring attitudes towards inequality, *Scandianvian Journal of Economics* 101, 83-96

Ariga, K. and G. Brunelli (2006). Are Education and Training Always Complements? Evidence from Thailand, *Industrial and Labor Relations Review* 59, 613-29.

Arneson, R. (1989). Equality and equal opportunity of welfare, *Philosophical Studies* 56, 77-93.

Arulampalam, W., M.L. Bryan and A.L. Booth (2004). Training in Europe, *Journal of the European Economic Association* 2, 346-60.

Atkinson, A. B. (1970). On the measurement of inequality, *Journal of Economic Theory* 2, 244-263.

Atkinson, A. (1999). Is rising inequality inevitable? A critique of the Transatlantic Consensus, *WIDER Annual lecture*.

Atkinson, A.B. (2000). The changing distribution of income: evidence and explanations, *German Economic Review* 1, 3-18.

Atkinson, A. B. and F. Bourguignon (2000): *Handbook of income distribution*. North-Holland: Elsevier.

Atkinson, A.B.and A. Brandolini. (2001). Promise and Pitfalls in the Use of "Secondary" Data-Sets: Income Inequality in OECD Countries as a Case Study, *Journal of Economic Literature* 39, 771-799.

Atkinson, A.B. (2003). Income inequality in OECD countries: Data and explanations, *CESifo Working Paper* 881.

Atkinson, A. B. and T. Piketty (2007). *Top Incomes over the Twentieth Century: A Contrast between Continental European and English-speaking Countries*. Oxford: Oxford University Press.

Atkinson, A.B. and T. Piketty (2009). *Top Incomes over the Twentieth Century: Volume II - A Global Perspective.* Oxford: Oxford University Press, forthcoming.

Banks, J., R. Blundell and A. Lewbel. (1997). Quadratic Engel Curves and Consumer Demand, *Review of Economics and Statistics* LXXIX, 527-539.

Barker, D. J. P., P. D. Winter, C. Osmond, B. Margetts and S. J. Simmonds (1989). Weight in Infancy and Death from Ischaemic Heart Disease, *Lancet* ii, 577-580.

Barker, D. J. P. (1992). *Fetal and Infant Origins of Adult Disease.* London: British Medical Journal Publishing Group.

Barker, D. J. P. (1994). *Mothers, Babies and Disease in Later Life.* London: British Medical Journal Publishing Group.

Barry, U., F. Bettio, H. Figueiredo, D. Grimshaw, F. Maier, and R. Plasman (2001). Indicators on gender gaps in pay and income. In: J. Rubery, C. Fagan, D. Grimshaw, H. Figueiredo and M. Smith, *Indicators on gender equality in the European Employment Strategy*. Manchester: EWERC, 74-100.

Bartley, M., D. Blane, D. and Montgomery (1997). Socio-Economic Determinants of Health: Health and the Life Course: Why Safety Nets Matter, *British Medical Journal* 314, 1194-1196.

Bassanini, A., A. Booth, G. Brunello, M. De Paola and E. Leuven (2005). Workplace Training in Europe, *IZA Discussion Paper* 1640.

Beblo, M., D. Beninger, A. Heinze, and F. Laisney (2003). Measuring Selectivity-Corrected Gender Wage Gaps in the EU, *ZEW Discussion Papers* 03-74.

Becker, D. and E. Gundlach (2007). Factor Price Equality and Biased Technical Change in a Two-Cone Trade Model, *Review of Development Economics* 11, 685-98.

Becker, G. S. (1962). Investment in Human Capital: A Theoretical Analysis, *Journal of Political Economy* 70, 9-49.

Benabou, R. (2000). Unequal Societies: Income Distribution and the Social Contract, *American Economic Review* 90, 96-129.

Bénabou, R. and E.A. Ok (2001). Social Mobility and the Demand for Redistribution: The Poum Hypothesis, *Quarterly Journal of Economics* 116, 447-487.

Bénabou, R. (2004). Inequality, technology, and the social contract. In P. Aghion and S. Durlauf (Eds.), *Handbook of Economic Growth*. Amsterdam: North-Holland.

Benhabib, J. and A. Rustichini (1996). Social Conflict and Growth, *Journal of Economic Growth* 1, 129-146.

Bennett, G. and Nevison (1992). Investing in skill: to stay or not to stay on?, *Oxford Review of Economic Policy* 8, 130-145.

Bertola, G., F. Blau and L. Kahn (2002). Comparative analysis of labor market outcomes: lessons for the United States from international long–run evidence. In: A. Krueger and R. Solow (Eds.), *The Roaring Nineties: Can Full Employment be Sustained?*. New York: Russell Sage Foundation, 159-218.

Beugelsdijk, S., H. de Groot, and A. van Schaik (2004). Trust and economic growth: a robustness analysis, *Oxford Economic Papers* 56, 118-134.

Bishop, J. A., K. V. Chow, J. P. Formby and C. C. Ho (1994). The redistributive effects of noncompliance and tax evasion in the US. In: Creedy J. (Eds.) *Taxation, poverty, and income distribution*. Aldershot, UK: Edward Elgar.

Bishop, J., J. Formby and P. Lambert (2000). Redistribution through the income tax: the vertical and horizontal effects of non compliance and tax evasion, *Public Finance Review* 28, 335-350.

Bjornskov, C. (2005). The growth-inequality association: Government ideology matters, *Journal of Development Economics* 87, 300-308.

Bjørnskov, C. (2007). Determinants of generalized trust: A cross-country comparison, *Public Choice* 130, 1-21.

Bjørnskov, C. (2008). Social trust and fractionalization: a possible reinterpretation, *European Sociological Review* 24, 271-283.

Bjørnskov, C., A. Dreher and J.A.V. Fischer (2007). The relation between inequality and happiness – do subjective perceptions matter? In: *Values and Economy. Proceedings of the 32nd IAREP Conference*. Ljubljana: Filozofska Fakulteta, 471-477.

Blane, D., M. Bartley, and G. Davey-Smith (1997). Disease Etymology and Materialist Explanations of Socio-Economic Mortality Differentials, *European Journal of Public Health* 7, 385-391.

Blau, F. D., and L. M. Kahn (1996). Wage Structure and Gender Earnings Differentials: An International Comparison, *Economica* 63, 29-62.

Blau, F. D., and L. M. Kahn (2000). Gender differences in pay, *Journal of Economic Perspectives*, 14, 75-99.

Blau, F. D. and L. M. Kahn (2003). Understanding international differences in the gender pay gap, *Journal of Labor Economics* 21, 106-144.

Blau, P. M. and O. D. Duncan (1967). *The American Occupational Structure*. New York: Wiley.

Blinder, A. S. (1973). Wage discrimination: Reduced form and structural estimates, *Journal of Human Resources* 8, 436-455.

Blundell, R., L. Dearden and C. Meghir (1999). *Work-related training and earnings*. Mimeo, Institute of Fiscal Studies.

Boeri, T. (2002). Let Social Policy Models Compete and Europe Will Win, *John F. Kennedy School of Government. April 11-12, Conference Draft.*

Boeri, T. and A. Brandolini (2004). The puzzling evolution of poverty in Italy, *Mimeo, November 24, 2004.*

Bolton, G. and A. Ockenfels (2000). A theory of equity, reciprocity and competition, *American Economic Review* 90, 166-93.

Bolton, G. E., J. Brandts and A. Ockenfels (2005). Fair Procedures: Evidence from Games Involving Lotteries, *Economic Journal* 115, 1054-1076.

Boone, J. and J.C. van Ours (2004). Effective Active Labor Market Policies, *IZA DP* 1335.

Booth, A. (1991). Job-related formal training: who receives it and what is it worth?, *Oxford Bulletin of Economics and Statistics* 53, 281-294.

Borck, R. (2007). Voting, inequality and redistribution, *Journal of Economic Surveys* 21, 90-109.

Brady, D. (2005). The welfare state and relative poverty in rich Western democracies, 1967-1997, *Social Forces* 83, 1329-1364.

Brainerd, E. (2000). Women in Transition: Changes in Gender Wage Differentials in Eastern Europe and the Former Soviet Union, *Industrial and Labor Relations Review* 54,138-162.

Brandolini, A. and T. Smeeding (2007). Inequality Patterns in Western-Type Democracies: Cross-Country Differences and Time Changes, *Luxembourg Income Study Working Paper* 458.

Bratsberg, B., K. Røed, O. Raaum, R. Naylor, M. Jäntti, T. Eriksson, E. Österbacka and A. Björklund (2006). American Exceptionalism in a New Light: A Comparison of Intergenerational Earnings Mobility in the Nordic Countries, the United Kingdom and the United States, *IZA Discussion Paper No. 1938*.

Breen R. (2004). *Social mobility in Europe*. Oxford: Oxford University Press.

Breen, R. and J.H. Goldthorpe. (1997). Explaining Education Differentials - towards a Formal Rational Action Theory, *Rationality and Society* 9, 275-305.

Brehm, J. and W. Rahn. (1997). Individual-Level Evidence for the Causes and Consequences of Social Capital, *American Journal of Political Science* 41, 999-1023.

Breen, R. and C. T. Whelan (1999) Social Mobility: A Comparative Analysis. In: A. Heath, R. Breen, & C. T. Whelan (eds.), *Ireland North and South: Perspectives from Social Science*, Oxford: Oxford University Press.

Brown, A. J. G., Merkl, C. and D. J. Snower (2006). Comparing the Effectiveness of Employment Subsidies, *Kiel Working Paper* 1302.

Brown, M. and E.M. Uslaner (2005). Inequality, Trust, and Civic Engagement, *American Politics Research* 31, 868-894.

Budria, S. and P. Telhado-Pereira (2005). Educational Qualifications and Wage Inequality: Evidence for Europe, *Munich Personal RePEc Archive paper* 91.

Burniaux, J.-M., F. Padrini, N. Brandt (2006). Labour Market Performance, income Inequality and Poverty in OECD countries, *OECD Economics Dept. Working Papers* 500. Paris: OECD Publishing.

Cantarero, D., M. Pascual, and J. M. Sarabia (2005). Effects of Income Inequality on Population Health: New Evidence from the European Community Household Panel, A*pplied Economics* 37, 87-91.

Carneiro, F. and J. Heckman (2003). Human Capital Policy, *NBER Working Paper* 9495.

Checchi, D. and C. Garcia-Penalosa (2008). Labour Market Institutions and Income Inequality, *Economic Policy* 23, 601-649.

Checchi D, A. Ichino, A. Rustichini (1999). More equal but less mobile? Education financing and intergenerational mobility in Italy and US, *Journal of Public Economics* 74, 351-393.

Checchi D., C. Fiorio C. and M. Leonardi (2007). Intergenerational persistence in educational attainment in Italy, *Paper presented at XIX Conferenza Siep on Economia del capitale umano, Istituzioni, incentivi e valutazioni, Pavia, 13-14 September.*

Chevalier A., K. Denny, D. McMahon (2005). A multi-country study of inter-generational educational mobility, *Mimeo*.

Chinhui, J., K. M. Murphy, and B. Pierce (1993). Wage Inequality and the Rise in Returns to Skill, *Journal of Political Economy* 101, 410-42.

Christofides, L.N. and C. Vrachimis (2007). The Gender Wage Gap in Cyprus, *Economic Analysis Papers 10-07*, Economics Research Centre, University of Cyprus.

Cohen, G. (1989). On the currency of egalitarian justice, *Ethics* 99, 906-944.

Coleman, J. (1990). *Foundations of Social Theory,* Cambridge, MA, and London: Belknap Press of Harvard University Press.

Corak M. (2004). *Generational income mobility in North America and Europe*, Cambridge: Cambridge University Press.

Crawford, I. and J.P. Neary (2008). Testing for a Reference Consumer in International Comparisons of Living Standards, *American Economic Review* 98, 1731-1732.

Cunha, F. and J. Heckman (2007). The Technology of Skill Formation, *American Economic Review* 97, 31-47.

Cunha, F., J. Heckman, L. Lochner and D.V. Masterov (2005). Interpreting the Evidence on Life Cycle Skill Formation, *IZA Discussion Paper 1675*.

Dahl, R. A. (2006). *On Political Equality*. Yale, New Haven, CT: Yale University Press.

Davey S. G., D. Blane, and M. Bartley (1994). Explanations for Socio-Economic Differentials in Mortality: Evidence from Britain and Elsewhere, *European Journal of Public Health* 4, 132-144.

Davey-Smith, G. (2003). *Health Inequalities: Lifecourse Approaches*. Bristol: Policy Press.

Davey-Smith, G., C. Hart, D. Blane, C. Gillis and V. Hawthorne (1997). Lifetime Socio-economic Position and Mortality: Prospective Observational Study, *British Medical Journal* 314, 547-552.

Davies, R., E. Heinesen and A. Holm. (2002). The Relative Risk Aversion Hypothesis of Educational Choice, *Journal of Population Economics* 15, 683-713.

De Broucker P. and K. Underwood (1998). La mobilitè intergénérationnelle du niveau di scolarità: comparaison internazionale axée sur les études postsecondairés, *Revue trimestrelle de l'éducation* 5.

De Werfhorst, H.G. and S. Hofstede. (2007). Cultural Capital or Relative Risk Aversion? Two Mechanisms for Educational Inequality Compared, *British Journal of Sociology* 58, 391-415.

Deaton, A. (2002). Policy Implications of the Gradient of Health and Wealth, *Health Affairs* 21, 13-30.

Delhey, J. and K. Newton (2005). Predicting Cross-National Levels of Social Trust: Global Pattern or Nordic Exceptionalism?, *European Sociological Review* 21, 311-327.

Diamon, P. and B. Koszegi (2003). Quasi-hypoerbolic Discounting and Retirement, *Journal of Public Economics* 87, 1839-1872.

Drazen, A. (2000). *Political Economy in Macroeconomics*. Princeton, NJ: Princeton University Press.

Duesenberry, J. (1949). Income*, Savings and the Theory of Consumer Behavior*. Cambridge: Harvard University Press.

Durante, R. and L. Putterman, (2008). Preferences for Redistribution and Perception of Fairness: An Experimental Study, *Mimeo*.

Dworkin, R. (1981). What is equality? Part 1: Equality of welfare*, Philosophy and Public Affairs* 10, 185-246.

Esarey, J., T. Salmon and C. Barrilleaux. (2006). What Motivates Political Preferences? Self-Interest, Ideology, and Fairness in a Laboratory Democracy, *Mimeo*.

Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism.* Cambridge: Polity Press and Princeton, NJ: Princeton University Press.

European Commission (2004). *Report of the High Level Group on the Future of Social Policy in an enlarged European Union*. Directorate General for Employment, Social Affairs and Equal Opportunities.

European Commission (2005). Communication from the Commission on the Social Agenda. *Com(2005)33 final*.

European Commission (2006): *Employment in Europe 2006*. Directorate General for Employment, Social Affairs and Equal Opportunities.

European Commission (2007). *Towards Common Principles of Flexicurity: More and Better Jobs through Flexibility and Security*, European Commission.

Feige, L. (1979). How Big is the Irregular Economy?, *Challenge* 22, 5-13.

Findlay, R. and H. Grubert (1959). Factor Intensities, Technological Progress, and the Terms of Trade, *Oxford Economic Papers* 11, 111–21.

Findlay, R. and R. W. Jones (2000). Factor Bias and Technical Progress, *Economics Letters* 68, 303-308.

Fleming, J.S. and J. Micklewright (1999). Income Distribution, Economic Systems and Transition. In: Atkinson, A.B. and F. Bourguignon (Eds.), *Handbook of Income Distribution*. North-Holland: Elsevier Science.

Fong, C. (2001). Social Preferences, Self-interest, and the Demand for Redistribution, *Journal of Public Economics* 82, 225-246.

Förster, M. and M. Mira d'Ercole (2005). Income distribution and poverty in OECD countries in the second half of the 1990s, *OECD Social, Employment and Migration Working Papers*. Paris: OECD.

Fox, K.J. (2003). An Economic Justification for the EKS Multilateral Index, *Review of Income and Wealth* 49, 407-414.

Franzini M. and M. Raitano (2009). Persistence of inequality: fathers' income and sons achievements. Theoretical problems and new evidence on European countries, *International Review of Applied Economics*, forthcoming (already published as CRISS working paper 39).

Freire-Serén, M. J. and J. Panadés (2008). Does tax evasion modify the redistributive effect of tax progressivity?, *The Economic Record*, forthcoming

French, E. (2005). The Effects of Health, Wealth and Wages on Labour Supply and Retirement Behaviour, *Review of Economic Studies* 72, 395-427.

Frey, B. and A. Stutzer (2005). Beyond outcomes: measuring procedural utility, *Oxford Economic Papers* 57, 90-111.

Frey, B. and H. Weck-Hannemann (1984). The hidden economy as an unobserved variable, *European Economic Review* 26, 33–53.

Fry, V.C. and P. Pashardes (1985). Constructing the True Cost of Living Index from the Engel Curves of the PIGLOG Demand System, *Journal of Applied Econometrics* 4, 41-56.

Fry, V.C. and P. Pashardes (1985). Distributional Aspects of Inflation. Who has Suffered Most?, *Fiscal Studies* 6, 21-29.

Gabriel, O.W., V. Kunz, S. Roßteuscher and J. W. Van Deth (2002). *Sozialkapital und Demokratie— Zivilgesellschaftliche Ressourcen im Vergleich.* Wien: WUV Universitätsverlag.

Gabriele S. and M. Raitano (2007). Incentivi ad accumulare capitale umano e background familiare, l'evidenza italiana, *ISAE Quartely Report, October, 2007, presented at XIX Conferenza Siep* on *Economia del capitale umano, Istituzioni, incentivi e valutazioni, Pavia, 13-14 September.*

Gabriele S. and M. Raitano (2008). La trasmissione intergenerazionale dei titoli di studio nell'Unione Europea, *La Rivista delle politiche sociali* (Italian Journal of Social Policy) 2.

Garfinkel, I., L. Rainwater, and T.M. Smeeding (2006). A Reexamination of Welfare State and Inequality in Rich Nations: How In-Kind Transfers and Indirect Taxes Change the Story, *Journal of Policy Analysis and Management* 25, 855-919.

Gijsberts, M. (2002). The Legitimation of Income Inequality in State-socialist and Market Societies, *Acta Sociologica* 45, 269–285.

Glaeser, E. L. (2005). Inequality, *HIER Discussion Paper Number 2078*, http://post.economics.harvard.edu/hier/2005papers/HIER2078.pdf.

Globescan (2008). *Erosion of Support for Free Market system: Global Poll,* http://www.globescan.com/news_archives/free_enterprise/.

Goldthorpe, J. H., C. Llewellyn. and C. Payne (1980). *Social Mobility and Class Structure in Modern Britain*. Oxford: Clarendon Press.

Gottschalk, P. and T. M. Smeeding (1997). Cross-national comparisons of earnings and income inequality, *Journal of Economic Literature* XXXV, 663-687.

Gottschalk, P. and T. M. Smeeding (2000). Empirical evidence on income inequality in indudstrialized countries. In: Atkinson, A. and F. Bourguignon (Eds.), *Handbook of Income Distribution*. North-Holland: Elsevier Science.

Gourinchas, P and J. Parker (2002). Consumption over the Life Cycle, *Econometrica* 70, 47-89.

Gruen, C. and S. Klasen. (2001). Growth, Inequality, and Well-Being in Transition Countries, *Economics of Transition* 9, 359-394.

Gruen, C. and S. Klasen (2003). Growth, Inequality, and Well-Being: Intertemporal and Global Comparisons, *CESifo Economic Studies* 49, 617-659.

Gruen, C. and S. Klasen (2005). Has transition improved well-being?, *Economic Research South Africa Working Paper* 4.

Gruen, C. and S. Klasen. (2008). Growth, inequality, and welfare: Comparisons across space and time, *Oxford Economic Papers* 60, 212-236.

Gustavsson, M. and H. Jordahl (2008). Inequality and trust in Sweden: Some inequalities are more harmful than others, *Journal of Public Economics* 92, 348-365.

Gutmann, P. M. (1977). The Subterranean Economy, *Financial Analysts Journal* 33, 26-34.

Harris, C. and D. Laibson. (2001). Dynamic Choices of Hyperbolic Consumers, *Econometrica* 69, 935-957.

Heckman, J. (1979). Sample Selection Bias as a Specification Error, *Econometrica* 47, 153-163.

Heinemann, F. and B. Tanz (2008). The Impact of Trust on reforms, *ZEW Discussion Paper* 08-053.

Hertz T., T. Jayasundera, P. Piraino, S. Selcuk, N. Smith, A. Veraschangina (2007). The inheritance of education inequality: international comparisons and fifty-year trends, *B.E. Journal of Economic Analysis and Policy* 7.

Hirschman, A. O. (1973). Changing Tolerance for Income Inequality in the Course of Economic Development, *Quarterly Journal of Economics* 87, 544–66.

Hoffman, E., K. McCabe, K. Shachat and V. L. Smith (1994). Preferences, property rights, anonymity in bargaining games, *Games and Economic Behavior* 7, 346–380.

Jannti M., B. Bratsberg, K. Roed, O. Raaum, R. Naylor, E. Osterbacka, A. Bjorklund and T. Eriksson (2006). American exceptionalism in a new light, *IZA discussion paper* 1938.

Jenkins, S. P. (1997). Trends in real income in Britain: a microeconomic analysis, *Empirical Economics* 22, 483-500.

Jolliffe, D. (2002). The Gender Wage Gap in Bulgaria: A Semiparametric Estimation of Discrimination, *Journal of Comparative Economics* 30, 276-295.

Jordahl, H. (2008). Inequality and trust. In: G.T. Svendsen and G.L.H. Svendsen (Eds.), *Handbook of Social Capital*. London: Edward Elgar.

Kakwani , N. C. and P. Lambert (1998). On measuring inequity in taxation: a new approach, *European Journal of Political Economy* 14, 369-380.

Kakwani, N. C. (1981). Welfare measures: an international comparison, *Journal of Development Economics* 8, 21-45

Kaltenthaler K., S. Ceccoli and R. Gelleny (2008). Attitudes toward eliminating income inequality in Europe, *European Union Politics* 9, 217-241.

Kaufmann, D., A. Kraay and M. Mastruzzi (2008). Governance Matters VII: Aggregate and Individual Governance Indicators, 1996-2007, *World Bank Policy Research Working Paper 4654*.

Kehoe, T., Levine, D. and P. Romer (1990). Determinacy of Equilibria in Dynamic Models with Finitely Many Consumers, *Journal of Economic Theory* 50, 1-21.

Kelley, J. and K. Zagorski (2004). Economic Change and the Legitimation of Inequality: The Transition from Socialism to the Free Market in Central-East Europe, *Research in Social Stratification and Mobility* 22, 321-366.

Kidd, M. P. and M. Shannon (1996). The Gender Wage Gap: A Comparison of Australia and Canada, *The Canadian Journal of Economics*, Special Issue: Part 1, 121-125.

Kim, M. K. and S. W. Polachek (1994). Panel Estimates of Male-Female Earnings Functions, *Journal of Human Resources* 29, 406–428.

Klasen, S. (1994). Inequality and Growth: Introducing Distribution-Weighted Growth Rates to Reassess US Post-war Economic Performance, *Review of Income and Wealth* 40, 251-272.

Klasen, S. (2001). Social Exclusion, Children, and Education: Implications of a Rights-based. Approach, *European Societies* 3, 413-445.

Klasen, S. (2008). The Efficiency of Equity, *Review of Political Economy* 20, 257-274.

Kluve, J. (2006). *The Effectiveness of European Active Labor Market Policy*, *IZA DP 2018*.

Knack, S. (1992). Civic norms, social sanctions, and voter turnout, *Rationality and Society* 4, 133-156.

Knack, S. and P. Keefer (1997). Does Social Capital have an Economic Pay-Off? A Cross-Country Investigation, *Quarterly Journal of Economics* 112, 1251–1288.

Kornüs, A. (1939). The Problem of the True Index of the Cost of Living, *Econometrica* 7, 10-29.

Krugman, P. R. (2000). Technology, Trade, and Factor Prices, *Journal of International Economics* 50, 51–71.

Kuckulenz, A. and T. Zwick (2003). The impact of training on earnings – differences between participant groups and training forms. *Mimeo, ZEW Mannheim.*

Kuh, D. J. L. and Y. Ben Shlomo (1997). *Lifecourse Approach to Chronic Disease Epidemiology.* Oxford: Oxford University Press.

Kunze, A. (2000). The Determination of Wages and the Gender Wage Gap: A Survey, *Research in Social Stratification and Mobility* 22, 319-364.

Layte, R. (2007). Equity in the Utilisation of Hospital Inpatient Services in Ireland? An Improved Approach to the Measurement of Health Need, *Economic and Social Review* 38, 191-210.

Leamer, E. E. (1998). In search of Stolper-Samuelson linkages between international trade and lower wages. In: Collins, S.M. (Eds.), *Imports, Exports, and the American Worker, Brookings Institution.* Washington, DC, 141-203.

Lechthaler, W. and D. Snower (2007). Institutions and Training Inequality, *Kiel Working Papers* 1372.

Lechthaler, W. and D. Snower (2008). Minimum Wages and Firm Training, *Labour Economics*, forthcoming.

Leigh, A. (2006). Trust, Inequality and Ethnic Heterogeneity, *Economic Record* 82, 268-280.

Leuven, E. (2004). A Review of the Wage Returns to Private Sector Training. *Paper presented at the joint EC-OECD Seminar on "Human Capital and Labour and Market Performance", Brussels, December.*

Lewbel, A. (2002). Selection Model and Conditional Treatment Effects, Including Endogenous Regressors, *Mimeo, Boston College.*

Lipset, S. M. and R. Bendix (1959). *Social Mobility in Industrial Society.* Berkeley, CA: University of California Press

Logan, T.D. (2008). Are Engel Curve Estimates of CPI Bias Biased?, *NBER Working Paper* 13870.

Lübker, M. (2007). Inequality and the demand for redistribution: are the assumptions of the new growth theory valid?, *Socio-Economic Review* 5, 117-148;

Luhmann, N. (2000). *Vertrauen.* Stuttgart: Lucius and Lucius.

Lynch, L. (1992). Private sector training and the earnings of young workers, *American Economic Review* 82, 299–312.

Lyssiotou, P., P. Pashardes, and T. Stengos (2004). Estimates of the Black Economy Based on Consumer Demand Approaches, *Economic Journal* 114, 622-640.

Mackenbach, J. (2006): Health Inequalities: Europe in Profile. An independent expert report, *commissioned by the UK Presidency of the EU*

Mackenbach, J. P. and M. Bakker (2002). *Reducing Inequalities in Health: A European Perspective.* London: Routledge.

Manski, C. (2000). Economic analysis of social interactions, *Journal of Economic Perspectives* 14, 115-136.

Meltzer, A. H. and S. F. Richard (1981). A rational theory of the size of government, *Journal of Political Economy* 5, 914-927.

Merton. R. K. (1968). *Social theory and social structure.* Glencoe, IL: The Free Press.

Mincer, J., and S. Polachek (1974). Family Investment in Human Capital: Earnings of Women, *Journal of Political Economy* 82, 76-108.

Misztal, B.A. (1996). *Trust in Modern Societies – The Search for the Bases of Social Order.* Cambridge: Polity Press.

Mocetti (2007a) Scelte post-obbligo e dispersione scolastica nella scuola secondaria, *Paper presented at XIX Conferenza Siep on Economia del capitale umano, Istituzioni, incentivi e valutazioni, Pavia, 13-14 September 2007.*

Moene, K. O. and M. Wallerstein (2001). Inequality, social insurance, and redistribution. T*he American Political Science Review* 95, 859–874.

Moller, S., D. Bradley, E. Huber and F. Nielsen (2003). <u>Determinants of relative poverty in advanced capitalist democracies</u>, *American Sociological Review* 68, 22-51.

Mortensen, D. T. and C. A. Pissarides (1994). Job Creation and Job Desctruction in the Theory of Unemployment, *Review of Economic Studies* 61, 397-415.

Murthi M and E. R. Tiongson (2008). Attitudes to Equality: The "Socialist Legacy" Revisited, *The World Bank Policy Research Working Paper* 4529.

Nannestad, P. (2008). New Work on Trust: What Have We Learnt, if Anything?, *Annual Review of Political Science* 11, 413-436.

Neary, J.P. (2004). Rationalising the Penn World Table: True Multilateral Indices for International Comparisons of Real Income, *American Economic Review* 94, 1411-1428.

Newton, K. (1997). Social Capital and Democracy, *American Behavioral Scientist* 40, 575-586.

Nickell W. (2006). The CEP-OECD Institutions Data Set (1960-2004), *CEP Discussion Paper* 759.

Nickell, S., L. Nunziata and W. Ochel (2005). Unemployment in the OECD since the 1960s: What do we know?, *Economic Journal* 115, 1–27.

Oaxaca, R., (1973). Male-female wage differentials in urban labour markets, *International Economic Review* 14(3), 693-709.

OECD (1994). *The OECD Jobs Study: facts, analysis, strategy.* Paris: OECD

OECD (2004a). *Learning form tomorrow's world. First results from Pisa 2003*. Paris: OECD.

OECD (2004b). *OECD Employment Outlook.* Paris: OECD.

OECD (2006). *OECD Employment Outlook*. Paris: OECD.

OECD (2007). *PPPs and Real Expenditures. 2005 Benchmark year*. Paris: OECD.

OECD (2008). *Growing Unequal? Income Distribution and Poverty in OECD Countries*. Paris: OECD.

Offe, C. and F. Susanne (2001). Schwund des Sozialkapitals? Der Fall Deutschland , in Putnam, Robert (ed.): *Gesellschaft und Gemeinsinn*. Gütersloh: Verlag Bertelsmann Stiftung. , 417-506.

Olivetti, C. and B. Rongolo (2008).Unequal Pay or Unequal employment? A Cross-Country Analysis of Gender Gaps, *Journal of Labour Economics* 26, 621-653.

Osberg, L. and T. Smeeding (2006). "Fair" Inequality? Attitudes toward pay Differentials: The United States in Comparative Perspective, *American Sociological Review* 71, 450-473.

Paes, R., J. Molinas, F. Ferreira and J. Saavedra, (2009). *Measuring Inequality of Opportunities in Latin American and the Caribbean*. Washington D.C.: World Bank.

Paldam, M. (2007). Generalized Trust-The macro perspective, *Article presented at the Workshop and Summer School Social Capital, Corporate Social Responsibility and Sustainable Economic Development at the University of Trento.*

Panayiotou, A. (2006). *The gender pay gap in Cyprus: Origins and policy responses*, External report commissioned by and presented to the EU Directorate-general Employment and Social Affairs, Unit G1 "Equality between women and men".

Parent, D. (1999). Wages and mobility: The impact of employer-provided training, *Journal of Labor Economics* 17, 298–317.

Pashardes, P. and A. Polycarpou (2008). Tax-evasion in Cyprus, *Cyprus Economic Policy Review*, forthcoming.

Paxton, P. (1999). Is Social Capital Declining in the United States-A Multiple Indicator Assessment?, *American Journal of Sociology* 105, 88-127.

Paxton, P. (2002). Social Capital and Democracy: An Interdependent Relationship, *American Sociological Review* 67, 254-277.

Pearson, M. and P.Wissén (1984). Redistributional aspects of tax evasion, *Scandinavian Journal of Economics* 86, 131-149.

Persson, T. and G. Tabellini (1994). Is Inequality Harmful for Growth, *American Economic Review* 84, 600-621.

Persson, T. and G. Tabellini (2000). *Political economics. Explaining Economic policy,* Cambridge, MA: MIT Press.

Pestieau, P. and U. Possen (1991). Tax Evasion and Occupational Choice, *Journal of Public Economics* 45, 107-125.

Piketty, T. (1995). Social Mobility and Redistributive Policies, *Quarterly Journal of Economics* 110, 551-584.

Piketty, T. and E. Saez (2003). Income Inequality in the United States 1913-1998, *Quarterly Journal of Economics* 118, 1-39.

Pischke, J.-S. (2001). Continuous training in Germany, *Journal of Population Economics* 14, 523–548.

Pissarides, C. and G. Weber (1989). An expenditure-based estimate of Britain's black economy, *Journal of Public Economics* 39, 17–32.

Polachek, S. W. (1981). Occupational Self-Selection: A Human Capital Approach to Sex Differences in Occupational Structure, *The Review of Economics and Statistics* 63, 60-69.

Putnam, R.D. (1993). *Making Democracy Work: Civic Traditions in Modern Italy,* Princeton, NJ: Princeton University Press.

Putnam, R.D. (1995). Bowling alone: America's Declining Social Capital, *Journal of Democracy* 6, 65-78.

Putnam, R.D. (2000). *Bowling alone: The Collapse and Revival of American Community,* New York, NY: Simon and Schuster.

Putnam, R.D. (2001a). Social Capital: Measurement and Consequences, *ISUMA* 2, 41-51.

Putnam, R.D. (Ed.) (2001b). *Gesellschaft und Gemeinsinn,* Gütersloh: Verlag Bertelsmann Stiftung:

Rabin, M. (1993). Incorporating Fairness into Game Theory and Economics, *American Economic Review* LXXXIII, 1281-1302.

Ravallion, M and M. Loskhin (2000). Who wants to redistribute? The tunnel effect in 1990s Russia, *Journal of Public Economics* 76, 87–104.

Rice, P. (1999). Gender earnings differentials: the European experience*, Policy Research report on Gender and Development*, Working paper series 8. Washington: The World Bank.

Rinne, U., M. Schneider and A. Uhlendorff (2007). Too Bad to Benefit? Effect Heterogeneity of Public Training Programs, *IZA Discussion Paper* 3240.

Roemer, J. (1993). A pragmatic theory of responsibility for the egalitarian planner, *Philosophy & Public Affairs* 22, 146-166.

Roemer, J. (1998). *Equality of Opportunity*. Cambridge, MA: Harvard University Press.

Roemer, J., R. Aaberge, U. Colombino, J. Fritzell, S. Jenkins, A. Lefranc, I. Marx,, M. Page, E. Pommer, J. Ruiz-Castillo, M. San Segundo, T. Tranaes, A. Trannoy, G. Wagner and I. Zubiri (2003). To what extent do fiscal regimes equalize opportunities for income acquisition among citizens?, *Journal of Public Economics* 87, 539-565.

Roth, F. (2007). Social Capital, Trust and Economic Growth—A Cross-Sectional and Panel Analysis*, Dissertation zur Erlangung des wirtschaftswissenschaftlichen Doktorgrades der Wirtschaftswissenschaftlichen Fakultät der Universität Göttingen,* http://webdoc.sub.gwdg.de/diss/2007/roth/.

Roth, F. (2008). The Welfare State, Social Capital and Trust – A Panel Analysis for 23 OECD Countries, *paper presented at a conference on Europe: With or Without You, University of Vienna, 24 May 20008* (http://cinefogo.cuni.cz/index.php?&l=0&w=15&id_out=520).

Roth, F. (2009). Does too much trust hamper economic growth, *Kyklos* 62, 103-128.

Rothstein, B. and E.M. Uslaner (2005). All for all: Equality and Social Trust, *LSE Health and Social Care Discussion Paper* 15, London School of Economics and Political Science.

Rubery, J., D. Grimshaw and H. Figueiredo (2002). *The gender pay gap and gender mainstreaming pay policy in EU Member States*. Manchester: EWERC.

Runciman, W.G. (1966). *Relative deprivation and social justice.* London: Routledge and Kegan Paul.

Rutkowksi, J. (2001). Earnings Inequality in Transition Economies of Central Europe Trends and Patterns in the 1990s, *Social Protection Discussion Paper Series* 0117, Social Protection Unit, Human Development Network. Washington D.C.: The World Bank.

Sanfay, P. and U. Teksöz. (2007). Does transition make you happy?, *Economics of Transition* 15, 704-731.

Schulz, T.W. (1961). Investment in Human Capital, *American Economic Review* 51, 1–17.

Schulz, T.W. (1963). *The Economic Value of Education.* New York, NY: Columbia University Press.

Sefton J., J. van de Ven and M.R. Weale (2008). Means Testing Retirement Benefits: Fostering Equity or Discouraging Savings?, *Economic Journal* 118, 556-590.

Sen, A. (1976). Real National Income, *Review of Economic Studies* 43, 19-39.

Senik, C. (2005). Income distribution and well-being: what can we learn from subjective data? *Journal of Economic Surveys* 19, 43–63.

Senik, C. (2006). Ambition and Jealousy: Income Interactions in the "Old" Europe versus the "New" Europe and the United States. *IZA Discussion Papers* 2083.

Shavit, Y. and W. Müller (1998). *From School to Work.* Oxford: Oxford University Press.

Shorrocks, A.F. (1982). Inequality Decomposition by Factor Components, *Econometrica* 50, 193-211.

Slemrod, J. B. and S. Yitzhaki (2000). Tax Avoidance, Evasion, and Administration, *NBER Working Paper* W7473.

Smeeding, T. M. (2002). G*lobalization, Inequality, and the Rich Countries of the G-20: Evidence from the Luxembourg Income Study (LIS).* Syracuse, NY: Center for Policy Research Maxwell School of Citizenship and Public Affairs, Syracuse University.

Solon, G. (2002). Cross-country differences in intergenerational income mobility, *Journal of Economic Perspectives* 16, 59-66.

Solow, R. M. (1956). A Contribution to the Theory of Economic Growth, *Quarterly Journal of Economics,* 70, 65–94.

Solt, F. (2008). Economic Inequality and Democratic Political Engagement, *American Journal of Political Science* 52, 48-60.

SSO2007. *Annual Monitoring Report 2007 of the Network on Social Inclusion and income Distribution*, European Observatory on the Social Situation (SSO), Applica, European Centre-ISER-TÁRKI.

Suhrcke, M. (2001). Preferences for Inequality: East vs. West, *UNICEF Innocenti Working Paper* 89.

Svallfors S. (1997). Worlds of welfare and attitudes to redistribution: a comparison of eight western nations, *European Sociological Review* 13, 283-304.

Tanzi, V. (1983). The underground economy in the United States: annual estimates 1930–1980, *IMF Staff Papers* 30, 283-305.

TÁRKI (2008). *European Social Report 2008,* Budapest: TÁRKI.

Thomas, V., Y. Wang and F. Xibo (2002). A New Dataset on Inequality in Education: Gini and Theil Indices of Schooling for 140 countries, 1960-2000. Washington D.C.: Worldbank.

Tóth, I. G. (2007). Tolerance for inequalities and the demand for redistribution in Hungary, 1987-2005, *Draft Revision date: June 2007* http://www.dse.unifi.it/sviluppo/doc/Tóth2_Tóth.pdf

Tóth, I. G. (2003). Jövedelemegyenlőtlenségek: tényleg növekszenek, vagy csak úgy látjuk (Income inequalities: are they or we just see them growing?), *Közgazdasági Szemle* L, 209-234.

Tóth, I. G. (2005). *Jövedelem eloszlás. A gazdasági rendszerváltástól az uniós csatlakozásig* (Income distribution. From economic system change to the joining of the European Union), Budapest: Századvég-ARTT

Tóth, I. G. (2006). Measured and perceived income distribution: tunnel effect, reference group shifts and skill biased transition in Hungary 1987-2005, *Paper presented at the 29th IARIW General Conference, Joensuu, Finland 20 - 26 August, 2006* http://www.iariw.org/papers/2006/Tóth.pdf.

Tóth, I. G. (2008). The demand for redistribution. A test on Hungarian data, *Czech Sociological Review*, forthcoming.

Uslaner, E.M. (2000). Producing and Consuming Trust, *Political Science Quarterly* 115, 569-590.

Uslaner, E.M. (2002). *The Moral Foundations of Trust.* Cambridge: Cambridge University Press.

Uslaner, E. M. (2006). Does Diversity Drive Down Trust?, *Fondazione Eni Enrico Mattei Working Paper* 69.

Vågerô, D. and R. Illsley (1995). Explaining Health Inequalities: Beyond Black and Barker, *European Sociological Review* 11, 1-23.

Van Doorslaer, E. and A. M. Jones (2004). Income-related inequality in health and health care in the European Union, *Health Economics* 13, 605-608.

Van Doorslaer, E. and X. Koolman (2004). Explaining the differences in income-related health inequalities across European countries, *Health Economics* 13, 609-628.

Van Veelen, M. and R van der Weide. (2008). A Note on Different Approaches to Index Number Theory, *American Economic Review* 98, 1722-1730.

Voitchovsky, S. (2005). Does the profile of income inequality matter for economic growth?, *Journal of Economic Growth* 10, 273-296.

Wössmann, L. (2007). *Letzte Chance für gute Schulen*. Gütersloh: Verlag Zabert Sandmann.

Xu, B. (2001). Factor Bias, Sector Bias, and the Effects of Technical Progress on Relative Factor Prices, *Journal of International Economics* 54, 5-25.

Yitzhaki, S. (1974). A Note on 'Income Tax Evasion: A Theoretical Analysis', *Journal of Public Economics* 3, 201-202.

Zak, P.J. and S. Knack. (2001). Trust and growth, *Economic Journal* 111, 295-321.