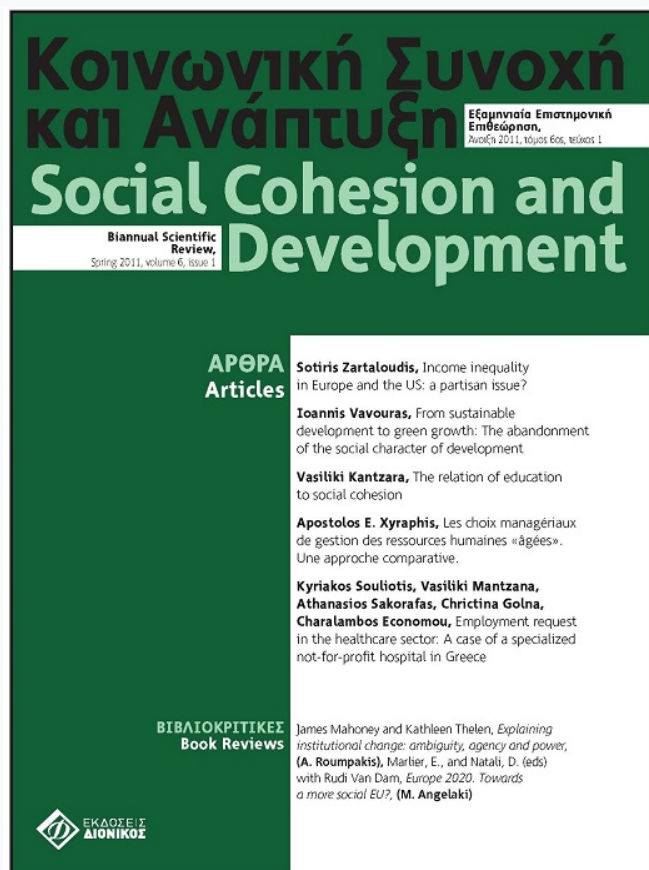


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### Income inequality in Europe and the US: a partisan issue?

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## Income inequality in Europe and the US: a partisan issue?

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### Εισοδηματικές ανισότητες στην Ευρώπη και τις ΗΠΑ. Ένα πολιτικό-ιδεολογικό ζήτημα?

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#### ΠΕΡΙΛΗΨΗ

Αυτό το άρθρο εξετάζει τα επίπεδα, τάσεις και αιτίες της εισοδηματικής ανισότητας στην Ευρώπη και τις ΗΠΑ. Από την μία πλευρά, διαπιστώνεται ότι αν και η ανισότητα του καθαρού εισοδήματος (εισόδημα αγοράς) έχει γενικά αυξηθεί, αυτό συνέβει περισσότερο σε ορισμένες χώρες και λιγότερο σε άλλες. Από την άλλη πλευρά, η ανισότητα διαθέσιμου εισοδήματος έχει μια αινιγματική ιδιόρρυθμη εξέλιξη. Η εν λόγω ανισότητα είναι υψηλότερη στις ΗΠΑ από τον ευρωπαϊκό μέσο όρο, ενώ στην Ευρώπη υπάρχουν τρεις ομάδες χωρών: οι χώρες της Μεσογείου και της Κεντρικής και Ανατολικής Ευρώπης (ΚΑΕ), έχουν την υψηλότερη ανισότητα διαθέσιμου εισοδήματος -με το Ηνωμένο Βασίλειο να είναι η μόνη πλούσια χώρα της ΕΕ που ανήκει σε αυτή την ομάδα. Οι χώρες της ηπειρωτικής Ευρώπης έχουν μέση έως χαμηλή ανισότητα, ενώ η χαμηλότερη βρίσκεται στις Σκανδιναβικές χώρες. Οι μόνες εξαιρέσεις σε αυτή ταξινόμηση είναι κάποιες χώρες της Ανατολικής Ευρώπης που ανήκουν στην ομάδα με την ελάχιστη ανισότητα διαθέσιμου εισοδήματος. Υποστηρίζεται ότι η καλύτερη εξήγηση για αυτή την κατάταξη και την ιστορική εξέλιξη των εθνικών ανισοτήτων διαθέσιμου εισοδήματος, είναι η διαφορετική εθνική δημόσια πολιτική, δηλαδή, οι δημόσιες αναδιανεμητικές πολιτικές, τα διαφορετικά φορολογικά συστήματα και οι εισφορές κοινωνικής ασφάλισης, που απορρέει από την πολιτική ιδεολογία του κυβερνώντος κόμματος, τη συνολική αποτελεσματικότητα και τη γενναιοδωρία των αναδιανεμητικών πολιτικών.

**ΛΕΞΕΙΣ-ΚΛΕΙΔΙΑ:** Εισοδηματικές ανισότητες, Ευρώπη, ΗΠΑ, κόμματα, ιδεολογία, αναδιανομή

#### ABSTRACT

This paper discusses the levels, trends and causes of income inequality in Europe and the US. On the one hand, it finds that although market income inequality has generally risen, it did so more in some countries and less in others. On the other hand, disposable income inequality has had a puzzling irregular development. The latter is higher in the US, whereas in Europe three clusters of countries exist: Mediterranean and Central and Eastern European (CEE) countries have the highest disposable income inequality –with the UK being the only rich EU country belonging to this group. Continental Europe has medium to low inequality while the lowest is found in the Scandinavian ones. The only exceptions to this ranking are some of the CEEs who belong to the group with the lowest disposable income inequality. It is argued that the best explanation for this classification and the national disposable income inequalities' history is the different national public policy, that is, national redistributive policies, different taxation systems and social security contributions, which stems from the political ideology of the ruling party, the overall effectiveness and generosity of redistributive policies.

**KEY WORDS:** Income inequalities, Europe, USA, political parties, ideology, redistribution

## Introduction<sup>1</sup>

**I**ncome inequality is a characteristic of all countries throughout the history. Big gaps in pay resulting in a coexistence of extreme wealth and poverty,<sup>2</sup> not only within a country but also between countries, create an unequal world where the feeling of injustice becomes prevalent. Unsurprisingly, after the beginning of the ‘credit crunch’, that is, the global financial turmoil and the subsequent recession, the issues of poverty and inequality are increasingly becoming a matter of public debate and concern. Especially in the western world (US and EU) there is a growing fear that globalisation increases inequality, primarily through the relocation of economic activity to countries with cheaper labour costs, leading to unemployment and poverty.

The first part of this paper, briefly discusses some conceptual and methodological issues on defining and measuring income inequality. The second critically assesses the popular explanations of inequality. Finally, the third discusses the available empirical evidence regarding income inequality in Europe and proposes that disposable income inequality levels are related to public policy choices of national governments in public policy (namely public transfers, taxes and social security contributions), which stem from the political ideology of the ruling party.

## 1. Multiple and different ‘inequalities’: varying definitions and measurement

**T**he study of inequality faces significant challenges due to the controversial nature of the relevant literature. First, inequality is a multi-faceted notion which refers not only to differences in income but also in education, attainment, health, opportunities, capabilities (Sen, 1992), access to advantage (Cohen, 1993) and wellbeing (Callinicos, 2000). For many of these aspects of inequality, measurement is quite difficult, if not impossible (i.e. equality of capabilities or opportunities). Second, and more importantly, studies of inequality use different definitions of inequality, and concepts of wellbeing. Third, the reference unit varies significantly in the literature as it may be the individual income earner, the tax unit, the related or extended family or the household. The latter is also multi-defined in different databases and studies.<sup>3</sup> Fourth, there is a conceptual disagreement on which type of inequality should one examine: some studies examine market income inequality (income from earnings, self employment, capital and private transfers) while others disposable income inequality (the available income after taxes and transfers).<sup>4</sup> Another significant controversy, furthermore, lies on the data, and method of collection: some studies use national sources (national tax records, statistics, surveys etc) while others rely on international data bases such as the Luxembourg Income Study (LIS),<sup>5</sup> the OECD, and the Eurostat. Both approaches have advantages and disadvantages. On the one hand, national sources provide richer evidence for longer periods. However, the data cannot be used for cross-country comparisons, due to significant differences in data collection, concepts and measurements. On the other hand, international sources provide evidence that is compiled by the same method, the same definitions and measurements, making comparison possible and meaningful. Nonetheless, the data goes back only a few decades, making the study of long term trends impossible.

From the aforementioned, it is clear that reaching widely accepted conclusions is difficult. Rather, a set of methodological choices have to be made that will not be accepted by everyone involved in inequality studies. In this paper, in order to avoid conceptual and methodological

pitfalls, some of the most widely accepted and frequently employed definitions and data in measuring inequality are used. For income, this paper employs one of the most widely accepted concepts of “disposable cash income”.<sup>6</sup> Inequality is measured with three of the most widely used indicators, that is, the Gini coefficient, the income at the bottom and top 10th percentiles, also known as decile ratio (90/10),<sup>7</sup> and the interquintile ratio (S80/S20).<sup>8</sup> The reference unit for all data is the household.<sup>9</sup> Finally, none of the data, figures and estimates includes benefits in kind or indirect taxes.

## 2. Existing explanations: merits and shortcomings

**T**he most prominent<sup>10</sup> explanation for current levels of inequality is that there has been a shift in demand away from unskilled towards skilled labour. This is associated with increased competition from newly industrialising countries as a result of globalisation, technical change biased towards skilled labour, or because both of these factors operate in conjunction. The reduced demand for less skilled labour means that, with relative supplies of the two kinds of worker fixed in the short run, in a free labour market there will be a rise in the premium for skilled workers and a decline in the relative wage of unskilled workers (Atkinson, 2003: 494). Advocates of this hypothesis claim that it explains not only the rising wage dispersion in the US but also the higher unemployment in Europe. This hypothesis has received extended criticism for its assumptions, and it is regarded by some as an oversimplification (ibid: 495). In a nutshell, critics claim that this hypothesis holds only if we assume two parallel universes with two trading regions (in one case the US and NIC, and in the other Europe and NIC); it does not hold when we examine simultaneously the three trading unions because in each possible scenario only one rich region is affected in terms of wage and trade levels.<sup>11</sup>

Moreover, both parts of this textbook hypothesis are problematic even when examined separately. First, the Skill-biased Technical Change hypothesis is time inconsistent as it cannot explain why the sharp rise in investment in information technology in the 1990s was not accompanied by a higher rate of increase in wage inequality – in fact inequality grew faster in the early 1980s. Second, it is almost falsified if applied to the inequality levels between the wages of workers in the middle of the distribution, as they have grown more slowly than the wages of workers at the lower end of the distribution, even though, of the two groups, workers in the middle of the distribution are typically the better educated (Autor, et al., 2006; Autor, et al., 2003; Gordon and Becker, 2007).

The second part of the textbook explanation is the globalisation hypothesis. Under the heading of globalisation a number of variables are grouped. The first is immigration: increased immigration – especially of low-skilled people – means that labour markets have a surplus of workers at the bottom of the distribution. This increases inequality for two main reasons. On the one hand, it leads to an increase in the relative size of the low-wage work force (Lerman, 1999). On the other hand, it enhances competition between low-skilled workers – not only between immigrants and native born (Borjas, 2003; 2006; Borjas and Katz, 2005) but also between immigrants themselves as the flow of new workers continues (Ottaviano and Peri, 2006). Nevertheless, most of these studies are based on insufficient data and can explain only a very small percent of inequality.<sup>12</sup> What is more, according to the US CPS data, the unskilled did better in the 1990s than in the 1980s, although the percentage of foreign-born workers doubled

in the 1990s, and the CPS 50–10 ratio for all workers declined slightly from 1984 to 2004 despite the increased wave of immigration (Mishel et al., 2006).

The second variable under the globalisation hypothesis is international trade, which, on the one hand, has reduced the profitability and hence the demand for labour in a number of industries that employed relatively more low-skilled workers (Borjas et al., 1997; Sachs and Shatz, 1994, and on the other hand, has increased the potential markets for other domestic industries, leading to higher demand and thus higher real wages for workers in those industries. Further, trade has diverted investment from domestic facilities to foreign direct investment through the outsourcing abroad of a number of activities - especially low-skilled manufacturing jobs - leading to lower salaries in the remaining companies and thus increasing market income inequality (Bernanke, 2007). Again, empirical studies challenge this argument, arguing that trade-induced job losses and trade in general had only a marginal effect on the US income distribution (Mishel et al., 2006). Finally, if globalisation was indeed the source of more or less inequality around the world, this would imply common patterns of inequality over time and within countries. However, the opposite is true, since there are very few common inequality trends and levels while the ranking of the countries in terms of their inequality situation remains the same.

A related explanation for the rise of US inequality is the Great Compression (Goldin and Margo, 1992). This hypothesis claims that inequality patterns are explained by three covariant factors: the role of the trade unions, trade and immigration. In short, the Great Compression thesis argues that income inequality remained low during 1940-1970 due to the high degree of unionisation accompanied with decline in trade and immigration. However, as shown above, the last two variables seem not to have an extensive impact on inequality. Moreover, the significance of the unions is debatable as empirical evidence<sup>13</sup> shows that the decline of unionisation can explain only a tiny part of inequality trends – mainly for male workers.

In addition, scholars studying US inequality have suggested that levels of income inequality are related to the level of the minimum wage.<sup>14</sup> Empirical evidence confirms this, not only for the entire labour force, but especially for women (Mishel et al., 2006). However, the real value of the minimum wage and the proportion of the labour force that is unionised has been fairly flat in US the recent years which suggests that these institutional factors have been less important sources of increasing wage inequality recently than they were in the 1970s and 1980s (Bernanke, 2007).

Contrary to the aforementioned, many scholars examine not the bottom but the very top end of the distribution.<sup>15</sup> The main focus is on the pay of CEOs, which rose significantly during the last decades, and on the rise of “superstars”, that is, a small number of the most gifted singers, actors, celebrities and athletes (Rosen, 1981). Recent examples are the TV host Oprah Winfrey (\$275m per year), George Lucas (\$170m per year), Steven Spielberg (\$150m per year) and Madonna along golf player Tiger Woods both earning \$110m per year (Miller et al., 2009). There is a fierce debate as to why the CEOs’ pay rise occurred, but it is definitely a reason for the increase in income inequality. For “superstars”, there seems to be a consensus behind the SBTC and globalisation explanations. In this view, superstars have enormously benefited from recent technological innovations (cable and satellite TV, internet, downloadable music, videos and DVDs) and globalisation, because they can reach a global audience with the same effort as before.

These theories, however, neglect public policies’ role and as they assume them to be constant. In one of the most thorough studies of top incomes, it is argued that, contrary to Kuznets’s U-shape explanation of declining inequality during the first half of the 20th century, inequality declined because capital owners incurred severe shocks to their capital holding during the 1914 to 1945 period because of the two world wars and the Great Depression (Atkinson and Piketty,

2007: 10). As regards to the non-recovery of top capital incomes during the post-1945 period, the authors suggest that the previous capital shocks had a permanent impact because of the introduction of high income and estate tax progressivity.<sup>16</sup> Indeed, there is a significant long-run impact of tax progressivity on wealth concentration – significant enough to explain the magnitude of the observed changes (Piketty, 2003; 2007).

In all countries, furthermore, top-income inequality declined for the most part during the period from 1914 to 1945, and according to the authors most of the decline seems to be due to the fall in top capital incomes. The different trends in top-income inequality levels across countries support Atkinson and Piketty's capital shock and progressive taxation explanation: the 1914 to 1945 drop was larger in countries that were strongly hit by the war (e.g. France and Germany) than in the US, while there was no drop at all in countries relatively immune to the war's impact (e.g. Switzerland). Moreover, wealth concentration seems to have better recovered during the post-war period in countries with less tax progressivity (especially estate tax) such as Germany. Although every country has its own particularities, there is an important distinction to be made between rich countries for the post-1970 period. On the one hand, the Anglo-Saxon block<sup>17</sup> where there was a sudden rise in top wages and top income shares – with the US being the outlier with an enormous increase.<sup>18</sup> On the other hand, in the continental European countries<sup>19</sup> top income shares remained fairly stable (ibid, 2007: 11-12). However, one should not exaggerate the importance of capital income on the overall patterns of inequality. Albeit important for top incomes, for the mass of the population the single most important element is market and disposable income (Atkinson, 2007: 10). This is the focus of the following section.

### 3. The facts of income inequality in Europe and the US

**I**n this section income inequality levels in Europe and the US are discussed. Two crucial aspects of income are examined - market income and disposable income - in order to examine the impact of public policy on inequality levels, whereas both faces of inequality are studied: the snapshot image for the most recent year available, and its 'history' over the last century with a particular focus on the period since the 1960s. For market income and disposable income inequalities we use only the LIS database and measurements because it is the only available source which provides consistent data for many countries. For the snapshot image we use also the Eurostat Union Statistics on Income and Living Conditions database<sup>20</sup> because it provides data for a much more recent year of reference (2007) compared to the LIS (2000 for most countries). For the trends, the analysis is based on data and secondary evidence (such as studies and reports) that use national sources. Hence, inequality trends are not directly comparable across countries. The evidence presented below challenges the dominant and popular explanations of inequality such as globalisation, information and communication technologies or skill-biased technical change, since inequality trends are consistent with each country's public policy which is determined by the partisan choices of national governments. In other words, it will be argued that current levels of disposable income inequality are not related primarily with some external or internal socio-economic factors, but with the national public policies' efficiency, goals and orientation. In countries where national governments aimed at designing public policy in order to reduce income inequality and successfully implemented their policies, disposable income inequality is low; on the contrary, in countries where either national governments did not promote redistributive policies, and/or they were unable to implement such policies inequality is high.

### 3.1. Cross-national differences in disposable income inequality

According to the EU-SILC database for 2007, the most unequal country in the EU is Romania and the least unequal Slovenia. Overall, this 'static' picture paints a rather clustered image in regard to Europe's income inequality: at the top end we find the latest EU entrants (Romania and Bulgaria), the Baltic countries (Latvia, Lithuania, and Estonia), and the big four South European Countries (SECs) (Portugal, Greece, Spain and Italy); around or just below the EU-27 average we find the Continental European countries (CEEs) whereas at the bottom end of the inequality ladder we find the Scandinavian countries and most of the Central and Eastern European countries. Of course, as in any clustering effort, there are some exceptions: Cyprus and Malta are grouped along with the Continental European countries; Poland and Germany have higher inequality than their geographical 'group'; finally, the UK is a 'double outlier': first, the UK interquintile ratio is much higher than the Irish one, which places Ireland among the Continental countries; second, the UK is the only rich EU country with a higher than average 80/20 ratio even though Germany is rapidly approaching similar levels of income inequality.

**Table 1: 2007 EU Countries' Ranking (descending order) according to their S80/S20 ratio of disposable income inequality**

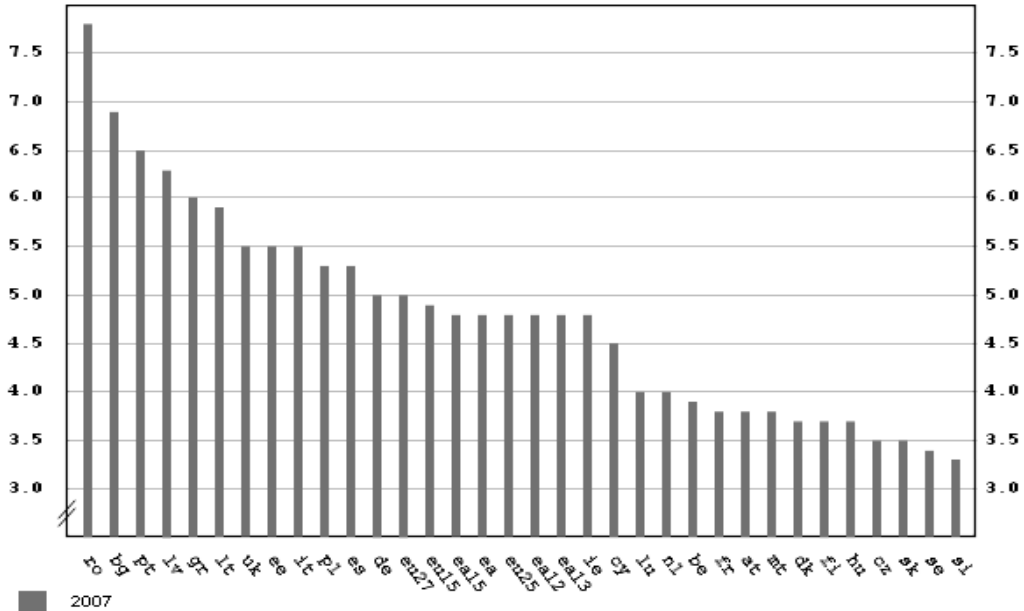
Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Romania	:	:	:	:	:	4,5	4,6	4,7	4,6	4,8	4,9	5,3	7,8 <sup>(b)</sup>
Bulgaria	:	:	:	:	:	3,7	3,8	3,8	3,6	4	3,7 <sup>(i)</sup>	5,1	6,9 <sup>(b)</sup>
Portugal	7,4	6,7	6,7	6,8	6,4	6,4	6,5	7,3 <sup>(p)</sup>	7,4 <sup>(p)</sup>	7,2 <sup>(p)</sup>	6,9	6,8 <sup>(p)</sup>	6,5 <sup>(p)</sup>
Latvia	:	:	:	:	:	5,5	:	:	:	:	6,7 <sup>(b)</sup>	7,9	6,3
Greece	6,5	6,3	6,6	6,5	6,2	5,8	5,7	:	6,4 <sup>(b)</sup>	5,9	5,8	6,1	6
Lithuania	:	:	:	:	:	5	4,9	:	:	:	6,9 <sup>(b)</sup>	6,3	5,9
Estonia	:	:	:	:	:	6,3	6,1	6,1	5,9	7,2 <sup>(b)</sup>	5,9	5,5	5,5
Italy	5,9	5,6	5,3	5,1	4,9	4,8	4,8	:	:	5,6 <sup>(b)</sup>	5,7	5,5	5,5
U. K.	5,2	5	4,7	5,2	5,2	5,2 <sup>(b)</sup>	5,4	5,5	5,3	:	5,5 <sup>(b)</sup>	5,4	5,5
Poland	:	:	:	:	:	4,7	4,7	:	:	:	6,6 <sup>(b)</sup>	5,6	5,3
Spain	5,9	6	6,5	5,9	5,7	5,4	5,5	5,1 <sup>(b)</sup>	5,1	5,1 <sup>(b)</sup>	5,4	5,3	5,3
EU – (27)	:	:	:	:	:	:	:	:	:	:	4,9 <sup>(s)</sup>	4,8 <sup>(s)</sup>	5
Germany	4,6	4	3,7	3,6	3,6	3,5	3,6	:	:	:	3,8 <sup>(b)</sup>	4,1	5
EU – (15)	5,1 <sup>(s)</sup>	4,8 <sup>(s)</sup>	4,7 <sup>(s)</sup>	4,6 <sup>(s)</sup>	4,6 <sup>(s)</sup>	4,5 <sup>(s)</sup>	4,5 <sup>(s)</sup>	:	4,6 <sup>(s)</sup>	4,8 <sup>(s)</sup>	4,8 <sup>(s)</sup>	4,7	4,9
Ireland	5,1	5,1	5	5,2	4,9	4,7	4,5	:	5 <sup>(b)</sup>	5	5	4,9	4,8
EU – (25)	:	:	:	4,6 <sup>(s)</sup>	4,6 <sup>(s)</sup>	4,5 <sup>(s)</sup>	4,5 <sup>(s)</sup>	:	4,6 <sup>(s)</sup>	4,8 <sup>(s)</sup>	4,9 <sup>(s)</sup>	4,8 <sup>(s)</sup>	4,8
Euro area – (12)	5,1 <sup>(s)</sup>	4,8 <sup>(s)</sup>	4,7 <sup>(s)</sup>	4,5 <sup>(s)</sup>	4,5 <sup>(s)</sup>	4,4 <sup>(s)</sup>	4,4 <sup>(s)</sup>	:	4,5 <sup>(s)</sup>	4,8 <sup>(s)</sup>	4,6 <sup>(s)</sup>	4,6	4,8





## Inequality of income distribution

### Income quintile share ratio



GRAPH 1: Income Inequality in descending order for 2007; reproduced from the EU-SILC database.

Even though the EU-SILC database provides the most recent snapshot image regarding disposable income inequality it cannot be used for the study of trends because on the one hand, the data is available only for the last decade but also because there are many 'breaks' or inconsistencies throughout the years and countries. In addition, the EU-SILC database does not include data for non-European industrialised (OECD) countries such as Japan and USA. For these reasons the LIS database is also used because it provides a wider snapshot image since it includes the aforementioned non-EU countries. Moreover, the LIS is used also for Europe as it includes data which have been calculated with the same methodology for the countries included. Finally, the LIS provides information on two types of inequality: market income inequality (income inequality before public transfers, taxation, etc.) and disposable income inequality (inequality after taxation and public transfers). Nevertheless, the main caveat of LIS is that most recent year of reference is not the same for all countries making direct comparison difficult.

According to the LIS data, the US is an outlier among rich nations with a decile (90/10) ratio of disposable income inequality of 5.7 and a Gini coefficient of 37%. Moreover, while a low-income American in the 10th percentile has an income that is only 37% of the median income (P10), in most northern, central and eastern European countries the income of the poor exceeds 50% of the income of a middle-income person. However, not all European countries are above 50%: the UK, Ireland and the SECs are below the 50% threshold but above 40%. Likewise, Greece, Portugal, Spain, and the UK are similar to the US with regard to the distance of the top from the median income: those in the 90th percentile earn more than twice the national median incomes (P90) (Brandolini and Smeeding, 2007: 5). Overall, with some exceptions, the

EU-SILC clustering is more or less reproduced in the LIS data: after the US, the SECs, the UK, and a Baltic country are at the top of the inequality ladder, the Continentals are in the middle and the Scandinavians at the bottom end with the lowest disposable income inequality. The CEEs are distributed around the middle and low end with the same ranking for Poland (higher than the rest), and Slovakia (among the Scandinavians).

**Table 3: The distribution of equivalent disposable income<sup>21</sup> in Europe and the US; countries are ranked by their values in the Gini coefficient**

<b>Counties</b>	<b>P10 (Low income)</b>	<b>P90 (High income)</b>	<b>P90/P10<sup>22</sup> (Decile ratio)</b>	<b>Gini index (percent)</b>
USA 2000	37	212	5,7	37
Estonia 2000	46	234	5,1	36,1
UK 1999	47	215	4,6	34,3
Spain 2000	44	209	4,8	34
Greece 2000	43	207	4,8	33,8
Italy 2000	45	199	4,5	33,3
Ireland 2000	41	189	4,6	32,3
Hungary 1999	54	194	3,6	29,5
Poland 1999	52	188	3,6	29,3
Switzerland 2000	55	182	3,3	28
France 2000	55	188	3,4	27,8
Belgium 2000	53	174	3,3	27,7
Romania 1997	53	180	3,4	27,7
Germany 2000	54	180	3,4	27,5
Austria 2000	55	173	3,2	26
Luxembourg 2000	57	184	3,2	26
Czech Republic 1996	59	179	3	25,9
Sweden 2000	57	168	3	25,2
Norway 2000	57	159	2,8	25,1
Slovenia 1999	53	167	3,2	24,9
Netherlands 1999	56	167	3	24,8
Finland 2000	57	164	2,9	24,7
Slovakia 1996	56	162	2,9	24,1
Denmark 2000	57	155	2,8	22,5

SOURCE: Brandolini's and Smeeding's, 2007 calculations from the Luxembourg Income Study database, as of 10 March 2007.

In order to examine the impact of the national public policy on disposable income inequality we will examine the market income inequality and compare it with the disposable income

inequality. In this way the role and the importance of public intervention will become evident. A common measure of the level of redistribution is represented by the difference between the Gini indices for market incomes, that is, before public transfers are added, taxes and social security contributions are deducted, and the Gini index for disposable incomes.<sup>23</sup> Table 4 uses the LIS data to compare inequality in market and disposable incomes in 16 nations using the Gini coefficient.

**Table 4: Gini indices of market income and disposable income<sup>24</sup> in Europe and the US (percent); countries are ranked by their values in the reduction in Gini index column**

<i>Country</i>	<i>Gini index (market income)</i>	<i>Gini index (disposable income)</i>	<i>Reduction in Gini index<sup>25</sup></i>
Denmark 2000	42	23	47
Sweden 2000	46	25	45
Germany 2000	48	28	43
Czech R. 1995	44	26	41
Poland 1999	50	29	41
Norway 2000	41	25	39
Finland 2000	38	25	36
Netherlands 1999	39	25	36
U.K. 1999	52	35	33
Romania 1997	36	28	27
Switzerland 2000	35	28	22
US 2000	48	37	23

Source: Brandolini's and Smeeding, 2007.

The results are quite startling and it is argued that they reveal a very strong role for public policy in defining disposable income inequality. First, in all countries disposable incomes are more equally distributed than market incomes, suggesting that the tax and benefit system narrows the overall distribution (Brandolini and Smeeding 2007: 11-12). On average, inequality falls by about a third, from a Gini index of 44% to one of 29%. Cross-country variation in original inequality is wider than after redistribution: the Gini index ranges from 33% to 52% for market incomes, and from 23% to 37% for disposable incomes. The US has the highest inequality of disposable incomes, but although the dispersion of market incomes is on the high side it is not far from most other countries.

Second, "these percentage reductions are very consistent with the patterns of aggregate public expenditure" (ibid; see also Smeeding, 2005 on non-elderly spending). High-spending northern and central European nations have the highest degree of inequality reduction, from 47% to 36%; the UK and Ireland are in the middle, whereas the US and Switzerland are at the bottom of the scale. The degree of redistribution in SECs is lower than in Ireland and the United Kingdom, especially if public pensions are not included among transfers (Immervoll et al., 2005). However, it does not change significantly even when the role of public pensions is included; as Lefévre, 2007 has calculated the Mediterranean countries and Ireland obtained the worst results in terms

of poverty alleviation and inequality reduction due to public pension transfers with UK the only rich EU country belonging to the smallest effect on poverty alleviation.

Third, disposable income inequality is not the result of market income inequality or even affected by it. Contrary to the critique that countries may have low disposable income inequality because their pre-public policy market income inequality is also low, the degree of redistribution across countries is not related with the degree of market income inequality.<sup>26</sup> Surprisingly, when comparing the Gini index of market and disposable income inequality we see that countries with some of the highest rates of market income inequality, such as the UK, Poland and the Scandinavian countries end up having lower levels of disposable income inequality than the US.

The aforementioned, can be summarized as follows. First, disposable income inequality is not a mirror image of market income inequality; countries with higher market income inequality reduce disposable income inequality to a greater extent than other countries with lower market income inequality. Second, the US has higher disposable income inequality than the European average, whereas in Europe three clusters of countries exist: SECs, the Baltics and some of the CEE countries have the highest disposable income inequality –with the UK being the only rich EU country belonging to this group. Continental Europe has medium to low inequality while the lowest is found in the Scandinavian ones. The only exceptions to this ranking are some of the CEEs who belong to the group with the lowest inequality.

This clustering of nations is analogous to the classification of welfare states and overall social and public policy (for a review on the welfare typology see Sapir 2006; Arts and Gelissen, 2002): countries with weak and inefficient welfare states (SECs, Baltics) or countries with low degree of redistributive public policies (USA, the UK,) are on the top of the disposable income inequality rankings; countries with strong and efficient welfare states and highly redistributive taxation systems (Scandinavians) are at the bottom end whereas countries with average welfare protection and redistributive taxation (Continental) in middle. The only exceptions to this rule are some of the CEECs where despite their weak welfare states and their non-redistributive taxation, show very low disposable income inequality levels. These exceptions invite further research and indeed should be examined in detail in order to highlight the reasons behind their deviant inequality ratios.

### 3.2. Inequality's history: Episodes of change

Studying the “history” of inequality<sup>27</sup> is also crucial to understanding the causes behind its current levels and the reasons for any upward or downward trend in the past. In this section, inequality levels during the last century are examined focusing on the US and to a selection of European countries, due to the restrictions in data availability for other countries/regions. It is argued that, despite the methodological and empirical restrictions, instead of inequality trends there are “episodes of change” which divide different time periods of inequality patterns. Contrary to the dominant explanations of income inequality (discussed in section 2), furthermore, it will be argued that these episodes are not related with some external or internal economic/societal factors, but with changes in government and, in particular, with governments’ partisan choices. In particular, it is argued that left wing or centre left governments either kept stable or decreased disposable income inequality whereas right wing or centre-right increased it.

The main source of data in this endeavour is national household surveys. This choice offers both drawbacks and benefits: on the one hand, direct comparisons are treacherous and rather impossible since different countries use different definitions, measurements and units of analysis; on the other hand, the main advantage is that we can go back in time much easier than any

international databases. Indeed, national databases provide the best source of information for the study of the history of inequality, since the only international comparison is made by the OECD (2005) with data up to 1975. However, these data can be comparable only after 1985. Unsurprisingly, therefore, the OECD does not reach definite conclusions on the historical development of income inequality. In particular, the OECD distinguishes three inequality periods in Europe. From 1975 to 1985 there is little comparable evidence, and its members show mixed results;<sup>28</sup> from 1985 to 1995 there is a clear trend of increased inequality only for some countries;<sup>29</sup> these trends continued in the following period (1995 to 2000).<sup>30</sup> Nevertheless, inequality remained broadly stable in some countries<sup>31</sup> while it continued to increase in others.<sup>32</sup> The OECD reaches an interesting conclusion: the overall pattern has not changed dramatically: low inequality in the Nordic countries and the Netherlands, medium to Continental and higher inequality in the Anglo-Saxon and the southern European countries (Pestieau, 2006: 15).

During the last few decades, contrary to the period between the 1950s and the early 1970s, disposable income inequality in the rich countries rose. This trend has been characterised as the "great U-turn" (Harrison and Bluestone, 1988) – a conclusion that turns around the classic and famous "inverse U-turn" thesis or "Kuznets curve".<sup>33</sup> The argument is that this reversal occurred not only in the US<sup>34</sup> but also internationally in a number of countries.<sup>35</sup> In contrast, a number of scholars argue that there has been little distributional change within countries over time (see among others Gustaffson and Johansson, 1999; Melchior et al., 2000). The reasons for this disagreement are in sum the problems already highlighted in the field of inequality: dissimilar data, broken series, different definitions, etc. In addition, comparisons between different countries may be impossible (how meaningful is it to compare the US with, for instance, the Netherlands, in order to examine whether there is a U-turn or not?). Hence, the best option for examining the inequality history is to go country by country. In the following, empirical evidence regarding the 'history' of inequality is going to be discussed, arguing that there has been no stable trend in inequality levels: neither a U or reverse U turn, nor a constant process of increasing/decreasing inequality.

Starting with the US, evidence supports the U-turn hypothesis (Brandolini and Smeeding, 2007). However, Atkinson (2003) concludes that it is not possible to verify the U-turn hypothesis since inequality fell only during 1961 to 1968. Before this period there is no trend, and the break in the CPS series in 1993 makes it difficult to draw firm conclusions. Likewise, in a more recent study, he finds that in the period 1929-1944, the available data is not sufficient enough since it is covered only by a small number of data points (Atkinson, 2007: 6). However, when examining European trends of disposable income inequality per household, we find that some countries provide support to the U-turn hypothesis, namely the UK and the Scandinavian countries. What is more, even if some countries support the U-turn thesis, it is for different reasons than originally argued. In the following, I argue that it was public policies and governmental political decisions that determined the history of inequality in most European countries than a structural transformation of their economies.

In particular, Swedish levels of inequality decreased significantly during 1967-1982 –much more dramatically during 1967-1975 and more moderately afterwards. After 1982, however, an upward trend began which continued up to the 1990s.<sup>36</sup> Nonetheless, it wasn't an internal structural reason as the U-turn or inverse U-turn scholars would argue neither an external one (globalization, trade, etc). Rather, for the period 1967 to 1975, both transfers and direct taxes contributed to the decrease in inequality in the first period, with the former the major factor (Gustafsson and Palmer, 1997). Likewise, inequality rose in 1980s due to tax reforms, and increased capital gains in the 1990s. Overall, the Scandinavian countries provide some evidence

of “the great U-turn” thesis even though for the downward trend data is scarce and for the upward trend it is concentrated mainly in the 1990s.

The UK shows one of the most puzzling cases. Until the 1960s, similarly to the US, there is little overall change in inequality levels. In the 1970s, unlike the US, inequality is reduced by 3 percentage points. This fall is radically reversed in the 1980s with a great rise of the Gini coefficient<sup>37</sup> (Atkinson, 2003: 487). None of the existing theories (see next section) can explain why the UK was twice as severely affected as the US.<sup>38</sup> The second feature is that the 1990s do not show a continuing upward trend: the 2000 Gini coefficient is the same as that for 1990 whereas the one of 2005 below the 1990 Gini. So, contrary to the U-turn hypothesis, we have an episode of rising inequality in the 1980s, not a continuing upward trend. In other words, income inequality in the UK almost doubled compared to the US during the 1984 to 1990 period, showing a rather episodic rise; thereafter, contrary to the US, it remained stable or decreased. Hence, it seems rather problematic to indicate a common external process as the cause of these puzzling and contradictory inequality patterns. The best explanation for the UK trend is respective governments’ public policy and welfare reforms for each period. In particular, the 1980s was dominated by the Thatcher government which aimed to reduce welfare support and promoted reforms that decreased the re-distributional character of a number of public policies and taxation. In contrast, during the 1990s there was a change of government, with New Labour taking office in 1997 and aiming to reduce inequalities and to provide at least equality of opportunities.<sup>39</sup>

Contrary to the Nordic countries and the UK, continental Europe provides no support for a U or inverse U turn. For Germany, France and Italy inequality remained roughly stable –with France being the only country that showed no rise of income inequality at all. The most interesting case is the Netherlands which demonstrates a very similar trend to the UK: there was an episode of rising inequality in the 1980s which did not continue into the 1990s (Atkinson, 2003: 490). And as in UK, the 1980s were dominated by the rightwing and neo-liberal CDA<sup>40</sup> -VVD<sup>41</sup> governmental coalition which under the leadership of Ruud Lubbers implemented a program of radical reform of the welfare state. It should be noted that Lubbers who was the Dutch Prime Minister from 1982 until 1994 had as one of his campaign slogans the call for ‘meer markt, minder overheid’, that is, more market and less government. Unsurprisingly he is regarded as an ideological heir to Margaret Thatcher and –as Baroness Thatcher did in the UK- his welfare state reforms led to a sharp increase of disposable income inequality. This rise ended in the 1990s when Lubbers had to share power with the Dutch Labour Party (PvdA) which despite not altering the reforms and policies of the previous period did not proceed in further deregulation of the welfare state.

Overall, in most countries disposable income inequality per household decreased during the 1930s and 1940s, increased during the 1950s and 1960s, decreased after the early 1970s and increased after the mid-1980s. Hence, if disposable inequality started to rise in 1950 rather than 1980, then the ICT explanation and the impact of globalisation become even weaker (Atkinson, 2007: 13). In addition, despite the variations over time of inequality levels within countries, the comparative ranking of most countries has not changed. In other words, membership in one of the three categories of high, medium and low inequality is very consistent –a result that confirms OECD’s study. This finding poses some crucial constraints in the globalisation thesis or any other hypothesis that implies that inequality levels are determined by externally imposed variables that bypass the nation state. In the same vein, as it was analysed above, it is rather difficult to accept both the “inverse U” and the “great U” theses for the US and Europe. Thus, the most adequate explanation cannot be a common external or internal process such as globalisation or de-industrialisation; some countries experienced an increase in inequality while others did not.

Is the history of disposable income inequality affected by the respective levels of market income inequality or by the national welfare and taxation policies? In section 3.1., we saw that it was the latter which determined disposable income inequality's snapshot image. What about inequality over time? In the following, it is argued that the same applies for inequality's 'history'.

To begin with, when comparing the absolute difference between the Gini index for market income and that for disposable income, it becomes evident that the trend in the redistributive impact of tax-and-transfer systems may vary considerably. However, there is a general pattern, suggesting that the redistributive impact of taxes and transfers initially increased and then stabilised or dropped in all countries except for the United States, where it remained quite stable over time (but the series starts only in 1979). The UK stands out for having the most dramatic switch of regime, as in the early 1980s it apparently shifted from a situation not too different from the two Nordic countries to a model closer to that of the US (Brandolini and Smeeding, 2007). In any case, a widening of the market income distribution need not result in a drastic increase in the inequality of disposable incomes. Rising levels of redistribution in Finland and Sweden, where policies have been increasingly targeted to the poor, have been more effective in muting increasing market income inequality than have stable but low levels of redistribution in the United States (*ibid*: 21-22). Consequently, empirical evidence (sections 3.1. - snapshot image and 3.2. - inequality over time) clearly demonstrate that whatever the market income inequality, the inequality of disposable income is not affected by the market forces and the levels of market income inequality but by public policies, namely public transfers, taxes and social security contributions.

In this respect, the study of Brady and Leicht, 2007 regarding the relationship between income inequality and the ideology of the incumbent government is very illuminating. Using the LIS data, the authors examine the impact of right-wing party power on three measures of disposable income inequality for 16 affluent western democracies<sup>42</sup> from 1969 to 2000. According to their findings, the cumulative effect of right-wing party power significantly increases inequality through three main mechanisms: legislative action, administrative office-holding and ideological influence. In addition, the authors find that left-wing party power has less influence than the right on the Gini coefficient and the 90/50 ratio, but a larger influence on the 90/10 ratio, whereas union density is insignificant after controlling for right-wing party power. Moreover, they find that right-wing parties became more influential after 1989, while left-wing parties became less effective. Finally, the authors argue that their results do not depend on the inclusion of the US in the sample.

To sum up, this section has shown that the 'history' of inequality is characterised by episodes of change than of any common or continuous trends. These episodes are defined by the changes in government at the national level and their partisan policies in national public policy with regard to the orientation, generosity and the overall redistributive nature of public transfers, taxes and social security contributions current inequality levels.

## 4. Conclusions and discussion

**T**he evidence presented above challenges the dominant and popular explanations of inequality such as globalisation, information and communication technologies or skill-biased technical change, since inequality trends are consistent with each country's political developments. In other words, inequality is not determined by any external or internal economic or societal processes but by the political actors' choices in each country embodied in the content of public transfers, taxes and social security contributions. The more redistributive the taxation and public benefits system



is, the lower the levels of inequality. In other words, it is a matter of public policy, not of external or internal economic and societal processes that are beyond the control of policymakers.

The aforementioned have significant implications for Greece -a country with the fifth highest disposable income inequality in the EU-27. The main problem for Greece seems to be the inefficiency of public policies: even though it spends 24.2% of GDP on social expenditure, which is quite close to the EU-27 average of 26.9%, it fails to reach the expected results in reducing inequality (and of course poverty). In addition, the tax and benefit systems have to be more selective and more means tested in order to achieve greater redistribution of income. Finally, the chronic problem of the unofficial economy and the unregistered workforce and incomes has to be eradicated. This paper has shown that whatever the global and domestic conditions, it is up to national policy makers to reduce disposable income inequality levels; they just have to choose to do so.

## Notes

1. This paper draws extensively on Zartaloudis, 2007. However, this version is not only shorter but it has also been updated with the most recent data available. Thus, many of the evidence presented here are completely new.
2. Alcock (1993: 255) argues that 'poverty is the unacceptable face of inequality.'
3. Although total household income depends on the earnings of individual members, it is not possible to interpret directly from the distribution of individual earnings to the distribution of household incomes (Atkinson, 2007: 3). For a concise discussion of the methodological considerations with regards to the reference unit and its impact on results, see Atkinson, 2003; 2007 and Smeeding, 2007).
4. Another suggestion is to include in the calculation of income assets such as housing ownership (Orton and Rowlingson, 2007).
5. The LIS database is the most important international data archive providing access to micro data. It includes household income surveys of 30 countries on four continents. These surveys provide income, demographic, labour market and expenditure information on three different levels: household, person and child. Its main advantage compared to other sources of data (especially from the OECD database) is that it is not drawn from national sources but uses a harmonised set of concepts, methodology and variables. Thus, the LIS database is one of the most reliable for international comparisons (see Smeeding, 2002; 2004; 2006).
6. The 'disposable cash income' concept is used not only by the Luxembourg Income Study, but also Eurostat, UNICEF and OECD have independently made comparisons of income poverty and inequality across nations using identical or very similar measures of net disposable income (Smeeding, 2007: 73). It includes all types of money income minus direct income and payroll taxes, and includes all cash and near-cash transfers such as food stamps and cash housing allowances, as well as refundable tax credits such as the earned income tax credit in the United States. It excludes capital gains, imputed rents, other unrealised types of capital income, home production and in-kind income. These items may account for an important share of the economic resources at a household's disposal, and their inclusion in the income definition may affect measured inequality (Brandolini and Smeeding, 2007: 5). See Atkinson, Rainwater and Smeeding, 1995 and the Canberra Group, 2001 for more on this income definition and its robustness across nations.
7. The LIS uses the decile ratio.

8. The interquintile ratio is the indicator used by Eurostat to evaluate the income inequality within the European Union. Although, there is little difference between Gini indicators coming from the OECD and LIS, the quintile ratios are different between the LIS and Eurostat as they are higher in later estimates. However, Lefévre, 2007 has calculated that the correlation coefficient between both is high (0.739), which confirms that both give about the same ranking.
9. For international comparisons of poverty and inequality, the "household" is the only comparable income-sharing unit available for almost all nations. While the household is the unit used for aggregating income, the person is the unit of analysis. Household income is assumed to be equally shared among individuals within a household (Smeeding and Munzi, 2005: 9).
10. Or the "textbook" explanation (Atkinson, 2003)
11. For a detailed explanation see Atkinson, 2003: 495).
12. For a detailed discussion of the literature on the impact of immigration on US inequality, see Gordon and Becker, 2007.
13. See Card et al., 2004; Mishel et al., 2006.
14. The hypothesis is that the erosion of the real minimum wage after the late 1970s accounts for much of the increase of the 90/10 inequality ratio.
15. For one of the most detailed studies regarding the historic development of the trends of the top-income distribution see Atkinson and Piketty, 2007; for a succinct discussion of the contemporary debate (superstars, CEOs), see, among others, Gordon and Becker, 2007: 16-25.
16. The latter was almost non-existent prior to 1914, and as a result, top income rates increased massively during the period 1914 to 1945
17. Canada, Ireland, New Zealand, the UK and the US.
18. The share of the top 1% doubled in the US (and the UK).
19. France, Germany and the Netherlands.
20. The EU-SILC provides cross-country comparable data for all EU-25 countries, as well as Norway and Iceland. However, this database exists only from 2005. Until 2001 (in certain cases, until 2000), data is obtained from ECHP data source for EU-15 countries, except Denmark and Sweden. For the remaining countries and years, data is obtained from national sources which are not fully comparable with the EU-SILC. Trends in transition years cannot be interpreted reliably. In order to measure inequality EU-SILC uses the S80/S20 ratio while income is understood 'as equivalised disposable income'.
21. Observations are bottom-coded at 1% of the mean of equivalent disposable income and top-coded at 10-times the median of unadjusted disposable income. Incomes are adjusted for household size by the square-root equivalence scale.
22. P10 and P90 are the ratios to the median of the 10th and 90th percentiles, respectively.
23. This difference provides only a first estimate of the actual impact of public redistribution, as it ignores how market income inequality would be different if there were no taxes and benefits.
24. Observations for disposable income are bottom-coded at 1% of the mean of equivalent disposable income and top-coded at 10-times the median of unadjusted disposable income. Changes in disposable incomes due to bottom- and top-coding are entirely attributed to market incomes. Both market and disposable incomes are adjusted for household size by the square-root equivalence scale.
25. Difference between the Gini index for market income and the Gini index for disposable income, are expressed as a percentage of the former.
26. Schwabish et al., 2006 find almost no correlation between the P10 value for market income and the level of social spending.

27. As in the previous section, we focus on disposable income inequality and the unit of analysis is the household.
28. There is a decline in Greece, Finland and Sweden, and an increase in the Netherlands and the UK
29. Austria, Denmark, Greece, the UK, Finland and Sweden – only France and Ireland demonstrate a slight decrease.
30. With the main difference that the Netherlands joins France and Ireland in the decreasing camp.
31. Germany, Italy and Portugal.
32. Austria, Denmark, Greece and the UK, with a much more significant rise in Sweden and Finland.
33. According to Kuznets curve, as an economy goes through a structural transformation, income inequality follows an inverse U-shape, inequality first rising and then falling as labour is transferred from low-productivity agriculture into high-productivity industry.
34. See Alderson and Nielsen, 2002.
35. See Cornia and Court, 2001.
36. It should be stressed that there is a significant problem of data comparability (Atkinson, 2003: 488).
37. From 1984 to 1990: the Gini coefficient in the UK rose by more than one percentage point a year. Overall, there was an increase in the Gini coefficient of 10 percentage points. Even if part of the rise was reversing the fall in the 1970s, the 1990 figure was 6.7 points higher than the highest value recorded in the 1960s.
38. For Atkinson (2003) any theory must be able to explain this trend.
39. For a further analysis of New Labour's positions on inequality, see Orton and Rowlingson, 2007.
40. The Christian Democratic Appeal (CDA) is a Christian-democratic political formation composed of KVP (Catholic People's Party), CHU (Christian Historical Union) and ARP (Anti Revolutionary Party).
41. The People's Party for Freedom and Democracy (VVD) is the most liberal party in the Netherlands and even though originally was a supporter –at least in principle- of the welfare state, after 1971 became more sceptical towards the welfare state, advocating reform of the welfare state and lower taxes in order to increase economic growth. In other words, from a liberal party it became a neo-liberal one (Andeweg and Irwin, 2002: 49).
42. The countries were: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Sweden, Switzerland, the UK and the US.

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