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THE LONG GOODBYE: WEALTH CONCENTRATION IN ITALY 2002-2012

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1. Introduction

In his masterly 1914 essay (Gini, 1914), Corrado Gini warned that the harshening or the decreasing of the inequality of distribution may have a meaning and an impact completely different, as it is matched by a growth or by a decrease of national wealth (Gini, 1914, p. 5)[2]. The analysis of changes in distribution and concentration of wealth (as well as incomes) must be framed within a wider-ranging analysis of the social-economic developments in Italy in the last fifteen years. In the next pages, after this preliminary introduction, we are going to illustrate the changes in families assets between 2002 and 2012; to measure changes in the degree of inequality; and to identify which social groups (or classes) have gained by these changes, using the decomposition procedure of the Gini concentration ratio proposed by Dagum (1997). Ultimately, our aim is to improve our knowledge about the determinants of income and wealth concentration.

The aim of the paper is however not merely descriptive. Even if the majority of the literature on economic inequality has considered families income as the key variable (Davies 2013), actually the personal (and familial) distribution of wealth constitutes the key issue of economic and social inequality in contemporary societies. As Gini already clarified more than a century ago (1914, p. 5) the issue of inequality is, ultimately, a political question. This issue is reflected also in issues surrounding its measurement (for example, Kolm (1969) declares the

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[2] It is worthy to remember that in his essay on wealth Gini used Pareto α as measure of concentration, and not his famous Gini index. Likely, the reason likely is that the essay on wealth, published in 1914, is a modification of a previous essay of 1909 (Gini 1909), while the Gini index was published in 1912 (Gini 1912). He gave an interpretation on the values of α so that the higher the values the less unequal the distribution.

predominantly normative character of various measurements of degree of income inequality). In the last decade, the attention of scholars and commentators has emphasised the increasing degree of economic inequality with a spirit that could be characterised as worried about the consequences brought about by an increase in levels of inequality (see, for example, Davies et al. (2008), Goda and Lysandrou (2011); OCSE (2008) and (2012); Piketty (2000), (2006) and (2014); Turner (2010); Wolff (2010)). In particular, these scholars focus on two fundamental problems: the prospects of economic growth, and the democratic order.

During the last two decades, a number of theoretical studies have postulated a negative link between inequality and growth (Galor and Zeira, 1993), a theory supported by various empirical calculations (Easterly, 2001). More recently, Stockhammer (2012) and van Treck and Sturn (2012) argue that reducing inequality is crucial for macroeconomic stability, as poorer income groups have high marginal propensity to consume. On the other hand, empirical studies have pointed to a positive relationship between economic inequality and growth for underdeveloped countries and a negative link for developing countries (Barro, 2000). Yet other reports have shown a non-linear relationship between income inequality and economic growth (Banerjee and Duflo, 1993). In the case of Italy, the latest studies (Vecchi, 2011) show that the Kuznets curve, construed as a long-term relationship, is not supported by empirical evidence. Addressing the problem of variations in income and wealth and the resulting variations in the level of economic inequality, conventional economic theory starts with the aggregate distribution of the value added to production factors (land, labour, capital) to then relate primary income distribution to the productivity (or remuneration) of such factors. Lastly, the standard theory links variations in rate of remuneration to variations in marginal productivity, which in turn is determined by technology, scale economies and composition of demand.

Alongside the work on income distribution, there has been a growing interest about other variables that contribute to individual wellbeing, especially health status, but also education, environment, personal security, etc. (Davies et al. (2008); Saez and Zucman (2014)). Household wealth is another dimension of human wellbeing, for it raises long term consumption, helps to protect households against adverse events and helps to finance informal sector. Despite its importance, relatively few studies have investigated household wealth distribution, because data limitations have handicapped research on this topics (Davies 2011).

More recently, a consistent stream of literature has underlined the role of wealth concentration in causing the Great Recession (Fernandez et al. (2008); Wade (2009); Palma (2009) and (2011)); Stockhammer (2009); Goda and Lysandrou (2011); Lysandrou (2011)). These researches argue that poverty and low incomes were among the supply-push factors in the growth of Collateralised Debt Obligations (CDOs), while mortgage loans constituted the raw material, and wealth concentration was one of the demand-pull factors. According to this literature, wealth concentration plays a great role in preventing economic growth and in favouring the explosion of financial crises. Last but not least a growing stream of literature points out the dangers of inequality (especially wealth inequality) for representative democracy, i.e. the transition to the so-called post-democracy

(Crouch, 2010) is connected with more and more concentration of income and wealth (see also, among others, Bollen and Jackman 1995), Acemoglu and Robinson 2000 and 2006, Przerworski 2000, Berti 2004, Fitoussi 2004). The evidence seems to be not conclusive, and a relatively large body of academic literature has not reached a consensus on the relationship between inequality and democracy.

The paper is structured as follows. The next section presents a brief sketch of the economic trends in Italy during the period under study and section 3 discusses data sources and methodology (Gini index decomposition according to Dagum (1997)), while section 4 presents the main results of the exercise. Brief conclusions are drawn in section 5.

2. The sad decade

Starting with the terrorist attacks on the Twin Towers, the first decade of the new century ended with Europe ravaged by the worst economic crisis since the Great Depression of the 1930s, a downturn that saw widening income inequality. The recession that started in 2008, basically caused by iperfinancialization and underconsumption (Brancaccio 2010), was tackled in most European Union countries by austerity policies of public spending cuts and wage deflation to relaunch competition and profits. Since 2010, the crisis is mainly characterized as sovereign debt crisis (Armingeon and Baccaro, 2010), which has had, as we saw before, a major role in determining The Great Recession. The macroeconomic scenario in the main EU member states in the first decade of the 2000s is summarized in Table 1, which highlights the slow pace of growth during the decade and the downturn starting in the 2008. At the same time, unemployment sharply increased from 2008 (with the exception of Germany) while inflation rate seems to be the only variable on which economic policy marked some success.

In terms of personal income distribution (Table 2) in the 15 Eurozone countries as a whole, Ginis concentration ratios remained substantially stable. There was a substantial increase in Germany and France in the period 2005-2010, whereas the temporal trend in the inequality of income distribution remained stationary in Spain until 2008, with a sharp rise starting in 2010. A similar trend emerges examining the ratio between total income shares for the highest and lowest quintiles. The overall temporal trend is therefore in line with other reports, e.g. the OECD (2011).

3. Data and method

The availability of data on individual households, including longitudinal figures, sheds light on the dynamic aspects of income and wealth distribution, disclosing how changes in the distribution of income and wealth are linked to families social and economic characteristics. This paper uses the data of a Bank of Italy survey on household income, savings and wealth to analyze the dynamics of income and wealth distribution in Italian households in the period 2002-2012. The definition of

TABLE 1
Rates of GDP growth, inflation and unemployment, EU and Europes largest economies, 2002-2012

Member states	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
						Real GDP growth rate					
EU18	0.9	0.7	2.2	1.7	3.2	3	0.5	-4.5	2	1.6	-0.8
Italy	0.5	0.2	1.6	0.9	2	1.5	-1	-5.5	1.7	0.6	-2.8
Germany	0.0	-0.7	1.2	0.7	3.7	3.3	1.1	-5.6	4.1	3.7	0.4
France	0.9	0.8	2.8	1.6	2.4	2.4	0.2	-2.9	2	2.1	0.2
Spain	2.7	3.2	3.2	3.7	4.2	3.8	1.1	-3.6	0	-0.6	-2.1
						Unemployment rate					
EU18	8.5	9	9.3	9.1	8.4	7.5	7.6	9.6	10.1	10.1	11.4
Italy	8.5	8.4	8	7.7	6.8	6.1	6.7	7.7	8.4	8.4	10.7
Germany	8.6	9.7	10.4	11.2	10.1	8.5	7.4	7.6	7	5.8	5.4
France	7.9	8.5	8.9	8.9	8.8	8	7.4	9.1	9.3	9.2	9.8
Spain	11.5	11.5	11	9.2	8.5	8.2	11.3	17.9	19.9	21.4	24.8
						Inflation rate					
EU18	2.1	2.2	2.2	2.2	2.2	3.3	0.3	1.6	2.7	2.5	2.1
Italy	2.8	2.3	2.2	2.2	2	3.5	0.8	1.6	2.9	3.3	2.8
Germany	1	1.8	1.9	1.8	2.3	2.8	0.2	1.2	2.5	2.1	1
France	2.2	2.3	1.9	1.9	1.6	3.2	0.1	1.7	2.3	2.2	2.2
Spain	3.1	3.1	3.4	3.6	2.8	4.1	-0.2	2	3.1	2.4	3.1

Source: Eurostat

TABLE 2
Indicators of inequality in income distribution, EU and Europes largest economies, 2002-2012

Member states	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
						Gini ratio					
EU18	:	:	:29.3	29.3	30.0	30.4	30.2	30.2	30.5	30.3	
Italy	:	:	33.2	32.8	32.1	32.2	31.0	31.5	31.2	31.9	31.9
Germany	:	:	:	26.1	26.8	30.4	30.2	29.1	29.3	29.0	28.3
France	27	27	28.2	27.7	27.3	26.6	29.8	29.9	29.8	30.8	30.5
Spain	31	31	31.0	32.2	31.9	31.9	31.9	32.9	33.5	34.0	34.2
						80/20 income shares					
EU18	:	:	:	4.7	4.8	4.9	5.0	4.9	5.0	5.2	5.2
Italy	:	:	6.1	5.8	5.7	5.7	5.3	5.4	5.5	6.0	5.9
Germany	:	:	:	3.8	4.2	5.1	4.9	4.7	4.7	4.6	4.4
France	:	:	4.2	3.9	4.0	3.9	4.4	4.3	4.4	4.6	4.5
Spain	:	:	5.3	5.7	5.6	5.7	5.9	6.1	6.5	6.7	7.0

Source: Eurostat-EU SILC

household wealth used in Bank of Italy survey does not include pensions wealth[3]. The classification of households according to the main source of income and the evolutionary trajectories of the social groupings thereby identified are emphasized to highlight which groups have gained the most advantages from the economic events of the last decade and which have been most penalized.

Usually, the decomposition of inequality in between groups and within groups is performed with a Theil index or similar decomposable inequality measure, as the Gini index[4] has not a perfect decomposition (Pyatt 1976). In what follows, we try to fill the gap by using Dagums decomposition of Ginis concentration index. It is well-known (Lambert and Aronson, 1993; Dagum, 1997) that decomposition of the Gini ratio into the contribution due to the inequality between groups and that due to the inequality within groups gives rise to a residual term due to the possible overlap of the variation fields of the variable of interest between groups. This is a point of major interest in using Gini index, as we are able to analyze the transvariation among sub-distributions. Here we shall follow Dagums approach to decomposition of the Gini income inequality ratio (1997, pp 524 et seq.) demonstrating that the Gini ratio of a population divided into k subgroups of amplitude nj, j = 1,2,, k can be decomposed as follows[5]:

$$G \;=\; G_w \;+\; G_{nb} \;+\; G_t$$

with

$$G_{nb} \;+\; G_t \;=\; G_{gb}$$

so that

$$G_w \;=\; \sum_{j=1}^{k} G_{jj}\; p_j\; s_j$$

where pj stands for the weight of the j-mo subgroup out of the total and sj stands for the corresponding weight out of the total intensity of the character, measures the contribution of the inequality distribution according to Gini within the subpopulations to the total value of the G ratio;

$$G_{nb} \;=\; \sum_{j=2}^{k}\sum_{h=1}^{j-1} G_{jh}(p_j s_h \;+\; p_h s_j) D_{jh}$$

where

$$G_{jh} \;=\; \sum_{i=1}^{nj}\sum_{r=1}^{nh} \frac{|y_{hi} \;-\; y_{jr}|}{n_j n_h(\bar{Y}_j \;-\; \bar{Y}_h)}$$

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[3] See Banca dItalia (2015)

[4] Theil index is usually weighted by income or wealth shares. As it is an absolute measure of concentration (it depends by the total number of units in the sample), the comparisons along time or among countries or subpopulation are not possible.

[5] Another kind of decomposition has been proposed by Yithzaki (1994) and recently applied by Liberati (2015). This method relies on the assumption that the distribution of the variable of interest is log-normal. As Liberati states (2015, pag. 249) countries surveys are a better representation of true income.

is the extended Gini distribution ratio between j-th subpopulation and h-th subpopulation;

$$D_{jh} = \frac{d_{jh} - p_{jh}}{\Delta_{jh}}$$

is the relative economic affluence between subpopulations j-th and h-th, with $\bar{Y_j} > \bar{Y_h}$, in which d_{jh} is is the weighted average of the differences between the values of character $y_{ji} - y_{hr}$ for all y_{ji} values of the members belonging to the j-th subpopulation with values greater than y_{hr} of the members belonging to the h-th subpopulation, p_{jh} is the weighted average of the differences $y_{hr} \; y_{ji}$ for all unit pairs, one taken from subpopulation h-th and the other from subpopulation j-th such that $y_{hr} > y_{ji}$ and $\bar{Y_j} > \bar{Y_r}$. When the two averages are equal D_{jh} is equal to zero and assumes the value one when the two distributions do not intersect; in other cases it is between zero and one. G_{nb} measures the net contribution of extended Gini inequality to the total value of the G ratio. Lastly,

$$G_t = \sum_{j=2}^{k} \sum_{h=1}^{j-1} G_{jh}(p_j s_h + p_h s_j)$$

measures the gross contribution of extended Gini inequality between subpopulations.

Therefore, between groups inequality (G_{gb}) is decomposed to net inequality between groups (G_{nb}) and inequality due to transvariation. As this term grows, we are allowed to think that the respective distributions are more and more confused.

In our exercise the subpopulations are built according to the main source of current income of the household (at least 40%) and are as follows: dependent workers (Employed), independent workers and entrepreneurs (Self-Employed), retired (Retired) and others (Mixed). In this way we try to build a bridge between functional income distribution and personal income distribution and to observe if this segmentation has any explicative power in accounting for changes in wealth distribution.

4. Farewell my lovely

On a long term basis, academic studies on income and wealth inequality show how in many European countries these have become less equal since the 1970s (Davies et al. (2008); Piketty and Saez (2003 e 2006); Turner (2010); Saez and Zucman (2014)), while in the previous period (grossly from the end of Second World War to the Yom Kippur War) concentration of income and wealth has been decreasing in most countries. An important exception to this pattern is China (Ward 2014), where wealth concentration has declined from 2000, while income concentration has increased. One of the more widespread explanations (Turner 2010) for the wide decrease of economic concentration in western countries between the end of the Second World War until the end of 70s is the extension the political franchise, which resulted in progressive taxation and redistribution (Acemoglu and Robinson (2000 and 2006); Piketty at al. (2006)). Similarly Kopzuk and Saez (2004) find that the decline in wealth inequality in United States during the first half of the

TABLE 3
Average wealth by prevailing household source of income, 2002-2012, Euro

Prevailing income	2002	2004	2006	2008	2010	2012
Self-Employed	347 481	461 515	512 665	468 643	496 321	517 680
Employee	144 872	163 363	194 029	200 246	210 025	175 557
Mixed	312 537	330 996	461 497	421 266	446 783	451 342
Retired	150 572	187 650	227 990	238 838	254 263	211 032
Total	179 998	213 815	252 221	253 111	269 970	261 190

Source: Bank of Italy

20th century can be attributed to shocks that affect permanently capital income. The same shape is found by Turner (2010) for Ireland, and by Saez and Zucman (2014) for the United States, while Wolff (2010) finds a modest increase in wealth concentration (measured by the Gini coefficient) from 1989 to 2007.

For what concerns Italy, our calculations give results that are consistent with other studies (Brandolini et. al., 2004; Davies 2013, pag. 131). The amount of total household wealth, in nominal value, had an increase of about 63% from 2002 to 2012 (from 1443 to 2362 billions of Euro at nominal prices), but the rate of increase nearly stopped after 2008.

If we look at average wealth (Table 3) over the whole decade the inequality in distribution of wealth is quite clear: the average wealth pertaining to the Self-employed and Mixed show is much more than the double of that of employees and pensioner and such inequality tends to increase in the decade. As a consequence, about the 70% of the family wealth is concentrated in the above categories of earners (Table 4).

The rates of changes show that the disparities have deepened in the decade, mainly during the recession period (2008-2012) (Table 5). While with respect to 2002 all group show an increment of wealth exceeding 40% (with the important exception of Employees, only 21%), starting from 2008 the rate of changes are very different: positive (albeit lower) for Self-employed and Mixed, and negative for Retired and Employees. So that it is evident that the crisis has hit hardest the fixed-income categories.

The growth in total wealth is driven by buildings (Table 6), whose nominal values grew by 61%, while total wealth grew of 55%. Given our data, it is difficult to say what part of this increase is due to variations in building prices and what part is due to investments in new buildings [6]. Looking at the other types of assets, the value of firms falls strongly in the 2010-2012 period (and this is consistent with the economic cycle). Surprisingly, the value of household financial wealth does not

[6] Data from national accounts emphasise (holding prices constant to 2010 level) a decrease in investments in residential buildings of 21.8% between 2008 and 2012, against a variation in the whole period under consideration of 7.8%.

TABLE 4
Total wealth composition by prevailing household source of income, 2002-2012

Prevailing income	2002	2004	2006	2008	2010	2012
Self- Employed	36%	40%	37%	35%	35%	38%
Employed	15%	14%	14%	15%	15%	13%
Mixed	33%	29%	33%	32%	32%	33%
Retired	16%	16%	16%	18%	18%	16%
Total	100%	100%	100%	100%	100%	100%

Source: Bank of Italy

grow so much over the whole period (its share declines from 13% to 10%)[7].

For what concerns wealth inequality, we see that the onset of the Great Recession brings about a pronounced increase in the concentration of private wealth in Italy (Table 8). The Gini index grows from 0,36 in 2006 (the last pre-crisis year for which data is available) to 0,46 in 2008, and in the following four years reaches the value of 0,59. This amounts to a very significant increase in concentration, which has few parallels in other industrialised countries. Given that the total amount of private wealth in the period under analysis grows relatively modestly in ral terms (whilst growing by 16.7% between 2008 and 2012 in nominal terms), the increase in the Gini index signals an operation of wealth redistribution which privileges the wealthy over the poor and that, furthermore, operates in favour of certain specific classes of income recipients[8]. The same trend of a deepening of economic concentration is showed by the 80/20 decile ratio in income distribution (Table 2).

As for the income variable (Drudi and Tassinari, 2014), so for assets the incidence of the component between groups is over double that of the component within groups. That means that inequality in the distribution of assets between different groups is higher than that within the single groups. This element has a peculiar meaning due to the type of grouping of family units which we have adopted, which attempts, even if in an imperfect and approximate manner, to relate assets with the main source of family income, and thus making a link with the functional distribution of income. It must however be observed that over time, the increase of the 'within' component is much stronger than that of the 'between' component. Indeed, the first grows from 0,10 to 0,21, thus doubling its value, whilst the latter grows by about 50%[9]. The decomposition of the Gini index

[7] The price effect seems anyway prevalent in determining the growth in the value of buildings, which experiences a net slowing down after 2006.

[8] According to Brandolini et al., there was also a strong increase in wealth concentration also during the 90.

[9] As is showed in Drudi and Tassinari (2014) the increase of the within concentration is strongly connected with major changes in labor market. See also Picot and Tassinari (2014).

TABLE 5
Average wealth by prevailing source of income, 2002-2012, percentage change

Prevailing income	2004/2002	2006/2004	2008/2006	2010/2008	2012/2010	2012/2002	2012/2008
Self-Employed	33%	11%	-9%	6%	4%	49%	10%
Employee	13%	19%	3%	5%	-16%	21%	-12%
Mixed	6%	39%	-9%	6%	1%	44%	7%
Retired	25%	21%	5%	6%	-17%	40%	-12%
Total	19%	18%	0%	7%	-3%	45%	3%

Source: Bank of Italy

TABLE 6
Average wealth by type of asset in nominal prices, 2002-2012, (euro)

Year	Real estate	Firms	Valuables	Deposits	State Bonds	Securities and Share	Credits	Gross Assets	Debts	Net Wealth
					Absolute values					
2002	138 772	16 629	6 030	12 943	2 715	7 447	1 142	185 680	-5 682	179 998
2004	173 342	20 790	4 988	11 454	2 639	7 815	1 488	222 515	-8 701	213 814
2006	204 853	23 194	5 842	13 454	2 988	9 156	2 372	261 861	-9 640	252 221
2008	211 445	21 089	4 794	13 719	3 613	7 055	859	262 573	-9 462	253 111
2010	222 531	22 859	4 773	13 827	3 548	10 623	1 391	279 551	-9 582	269 970
2012	220 148	17 721	4 075	13 801	3 546	11 367	1 160	271 816	-10 626	261 190
					Percentage values					
2002	75%	9%	3%	7%	1%	4%	1%	100%	-3%	97%
2004	78%	9%	2%	5%	1%	4%	1%	100%	-4%	96%
2006	78%	9%	2%	5%	1%	3%	1%	100%	-4%	96%
2008	81%	8%	2%	5%	1%	3%	0%	100%	-4%	96%
2010	80%	8%	2%	5%	1%	4%	0%	100%	-3%	97%
2012	81%	7%	1%	5%	1%	4%	0%	100%	-4%	96%

Source: Bank of Italy

TABLE 7
Average wealth by type of asset in nominal prices, 2002-2012, (euro), percentage changes

Year	Real estate	Firms	Valuables	Deposits	State Bonds	Securities and Share	Credits	Gross Assets	Debts	Net Wealth
2002/2004	25%	25%	-17%	-12%	-3%	5%	30%	20%	53%	19%
2006/2004	18%	12%	17%	17%	13%	17%	59%	18%	11%	18%
2008/2006	3%	-9%	-18%	2%	21%	-23%	-64%	0%	-2%	0%
2010/2008	5%	8%	0%	1%	-2%	51%	62%	6%	1%	7%
2012/2010	-1%	-22%	-15%	0%	0%	7%	-17%	-3%	11%	-3%
2012/2002	59%	7%	-32%	7%	31%	53%	2%	46%	87%	45%

Source: Bank of Italy

TABLE 8
Gini index decomposition of wealth (2002-2012)

Year	G	Gw	Ggb	Gnb	Gt
2002	0.33040	0.09997	0.23043	0.08472	0.14570
2004	0.29262	0.09139	0.20124	0.08612	0.11512
2006	0.35594	0.11214	0.24380	0.09615	0.14765
2008	0.45705	0.15102	0.30603	0.10766	0.19838
2010	0.50951	0.16487	0.34464	0.12361	0.22103
2012	0.59459	0.21146	0.38313	0.03203	0.35111

Source: authors elaborations on Bank of Italys data.

for the asset variable allows for the analysis of net inequality 'between' groups, and thus to ascetain how much of the 'between' inequality can be attributed to transvariation. In this case, the G_t component has higher values than G_{nb} in all the years under consideration, and its value grows very strongly between 2008 and 2012. The 'net' 'between' concentration fluctuates, and in the last year for which data is available reaches the lowest value. Its worth to say that G_{nb} is particularly high just in 2012, so 9t is wise not to overemphasize this circumstance, as our data come from a probabilistic sample.

It is possible, using Dagum's decomposition of Gini index, to decompose between inequality among groups, deriving from transvariation (G_t) into pairwise inequality (i. e. the values of G_{jh}) for each year (Table 9). The order of magnitude of the component is influences by the value of G_t, the inequality deriving from transvariation. This grows regularly between 2002 and 2012, to then explode in 2012. In this last year the component G_{jh} is very high between the Self-employed and the Employed group, which means that the two Lorenz curves are 'intertwined', i.e. that there is transvariation in the sense meant by Gini (1916). In the previous years, the values of the 'between' inequality component caused by transvariation are less great, although it must be noted that the highest value is always found in the comparison between the Employed and the Self-Employed group.

5. Conclusive remarks

We can summarize the key findings as follows:

1. The effect of the Great Recession on economic inequality has mainly manifested itself as an increase in the concentration of family assets, which grows much more than income concentration. It seems to us that, from this point of view, the consequences of the Great Recession on Italian society have considerable long-term implications. This is because the family assets variables is slower in its changes in comparison to the income variable, as it requires considerable fiscal interventions. Furthermore, we must keep in mind that inequality of assets increases (if in presence of positive real interest rates)

TABLE 9
Not inequality among groups (2002-2012)

	2002				2004			
	G2	G4	G3	G1	G2	G4	G3	G1
G2	0				0			
G4	0.0030	0			0.0101	0		
G3	0.0100	0.0100	0		0.0057	0.0050	0	
G1	0.0304	0.0307	0.0006	0	0.0330	0.0311	0.0012	0

	2006				2008			
	G2	G4	G3	G1	G2	G4	G3	G1
G2	0				0			
G4	0.0144	0			0.0216	0		
G3	0.0101	0.0091	0		0.0119	0.0107	0	
G1	0.0323	0.0298	0.0298	0	0.0326	0.0303	0.0006	0

	2010				2012			
	G2	G4	G3	G1	G2	G4	G3	G1
G2	0				0			
G4	0.0216	0			0.0093	0		
G3	0.0119	0.0107	0		0.0370	0.0505	0	
G1	0.0326	0.0303	0.0006	0	0.0280	0.0382	0.1880	0

Source: our elaborations on Bank of Italy data.
Legenda: G1 Employed; G2 Self-Employee; G3 Retired; G4 Mixed

income inequality, through income received from capital, and thus also the concentration of disposable income;

2. the dispersion of value of assets within social groups has increased (as the significant increase of the 'within' concentration shows), and at the same time so has the transvariation between distributions. We cannot exclude that this may partly be a 'spurious effect', which can be attributed to the type of segmentation which has been adopted here. Differently put, other segmentation schemes could provide decompositions of 'between' inequality in which the component due to transvariation is more modest;

3. given the intergenerational transferability of family assets, a high degree of concentration affects almost permanently the other dimensions of social inequality, such as health status, life expectancy, number of years spent in education and so on (Krueger 2012; Franzini and Raitano 2009);

4. as wealth is the key variable in modern economic process (Piketty 2014,) it is obvious to say that many research paths are still open. From our point of view, to identify the social groups who won the race of accumulation, it is essential to determine the shares of household wealth that is due, respectively, to capitalization of savings, to changes in nominal prices of real capital, to financial gains (losses) and to inheritance.

6. Nota

It is worthy to remember that in his essay on wealth Gini used Pareto α as measure of concentration, and not his famous Gini index. Likely, the reason likely is that the essay on wealth, published in 1914, is a reelaboration of a previous essay of 1909 (Gini 1909), while the Gini index was published in 1912 (Gini 1912). He gave an interpretation on the values of α so that the higher the values the less inequal the distribution.

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Summary

The paper illustrates the changes in family assets between 2002 and 2012, and measures the changes in the degree of inequality using Gini coefficient. Futhermore we try to identify which social groups (classes) have gained by these changes, using the decomposition procedure of the Gini concentration ratio proposed by Dagum. The results show that the Great Recession has mainly manifested itself as an increase in the concentration of family assets, whch grows much more than income concentration. The dispersion of values of the assets within social groups has increased, and at the same time so has the transvariation between distributions.

Keywords: Household wealth; inequality; Great Recession