Gender, Class and the Crisis

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Introduction

In the economic literature, several scholars have addressed the narrative of a two-stage

European crisis. In a first stage, the so-called "he-cession", men would have been hit the

most by the economic recession induced by the financial crisis. Shortly thereafter, in the

"she-austerity" stage, women would have suffered the heaviest burdens of the fiscal

retrenchment measures. If that were the case, the policy response to the crisis would be

producing an increase in the – already high pre-existing – gender inequality.

In this work we analyse the most recent micro-data available at the European level, the

European Union Statistics on Income and Living Conditions (EU-SILC), containing information

on European men's and women's incomes in 2012. As it turns out, the crisis and the policy

response to it have impoverished several European households and increased income

inequality in Europe. However, there is no strong evidence to support or reject the

abovementioned narrative on the gendered impact of the crisis yet. As a consequence, it

may be necessary to wait for further evidence before taking the two-stage narrative for

granted, while stronger emphasis on pre-existing structural gender equality may be

warranted.

Gender and the crisis

The gender of the crisis has been the focus of an intense debate both in the academic

literature and the media.

According to a report published by the European Commission (Bettio et al. 2012) it is

necessary to distinguish two phases of the European crisis. During a first phase, of financially

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induced economic crisis, men have suffered higher income reductions and job losses than women. Then, with the implementation of 'austerity' measures (after 2010), a second phase of the crisis started. According to this periodization, since austerity in Europe is characterized by downsizing of the public sector and cuts to social spending in particular, the second phase of the crisis would be now producing a higher impact on women's employment and incomes. This narrative departs from the observation that, beginning in 2007/2008, the financial difficulties of banks and other monetary and financial intermediaries produced a serious impact on the real economy through deleveraging along with the 'credit crunch'. These phenomena would have disproportionally impacted on men because they have mostly affected men-dominated industries (i.e. finance and construction) and because men were overrepresented among workers in the more cyclically sensitive sectors (such as exportoriented manufacturing). Indeed, already Milkman (1976) noted that in general genderbased employment segregation makes women's employment a complement, rather than substitute, for men's. As a consequence, the hypothesis (suggested by economic theories of the sexual division of labour within the household) of women's employment acting as a buffer during crises should be rejected. Cho and Newhouse (2013) attested a similar trend outside Europe, suggesting that the negative impact of gender segregation on men's employment during crises is empirically more relevant than the so-called added worker effect.

However, the most recent available data (arguably not yet updated enough to be deemed as conclusive) suggest a more complicated story. Table 1 reports the trends in European employment in the 2008-2013 period for men and women, separately considering the European Union (EU27),¹ the Eurozone (EZ, i.e. the countries that adopt the euro as their currency) and the GIPSI countries (Greece, Ireland, Portugal, Spain and Italy, where the crisis hit hardest). As expected, in all three areas men were hit more than women, and only for temporary employees in the EU27 a slightly higher reduction of women's employment is observed. However, even when considering NACE sectors in which women are more represented (e.g. health and social work activities, and household activities, where women represent 80% and 89% of employees respectively), with few exceptions men's employment fell more than women's. In other words, men's employment seems to have been hit hardest by the crisis, even if marginally, in women-dominated industries too.

Table 1. Trends in European employment: Compound Annual Growth Rate (2008-2013, %)

	Emplo	yees	Temporary	Employees				
	Women	Men	Women	Men				
	All	economi	c activities					
EU27	-0.07	-0.85	-1.02	-0.99				
EZ17	0.02	-1.11	-1.53	-1.82				
GIPSI	-0.96	-2.77	-4.11	-4.56				
	Pu	blic admi	nistration					
EU27	-0.62	-0.96	-2.73	-1.23				
EZ17	-0.75	-1.14	-3.41	-2.56				
GIPSI	-1.07	-1.35	-8.14	-5.66				
	Education							
EU27	0.68	0.03	-0.17	0.76				
EZ17	0.56	-0.67	-0.63	0.31				
GIPSI	-0.40	-1.65	-3.85	-2.75				
	I uman heal	th and so	cial work act	ivities				
EU27	1.32	1.38	0.56	1.38				
EZ17	1.55	1.51	0.28	1.74				
GIPSI	1.01	1.04	-2.16	-0.81				
	Activities o	f househ	olds as emplo	yers				
EU27	0.40	-0.15	-2.97	-2.70				
EZ17	0.39	0.58	-3.37	-3.33				
GIPSI	1.61	7.67	-4.62	3.03				

Source: Eurostat, Labour Force Survey (LFS), 15-64 age cohort.

Note: Sector "Public administration and defence; compulsory social security" (Section O, NACE Rev.2) includes activities of governmental nature carried out by the public administration such as general administration, activities of providing health care and other social services, foreign affairs, defence, public order and compulsory social security activities. "Education" (Section P, NACE Rev.2) includes public and private education at any level or for any profession. "Human health and social work activities" (Section Q, NACE Rev.2) include a wide range of health activities performed by hospitals, medical doctors, dentists or other providers, and a variety of social assistance directly to clients (for elderly, disabled and child-day care). "Activities of Households as Employers; Undifferentiated Goods- and Services-producing Activities of Households for own use" (Section T, NACE Rev.2) includes activities of domestic personnel consumed by the employing household and undifferentiated goods- and services-producing activities of private households for own use.

The reduction of men's employment has implied a levelling down of gender employment and pay gaps, which came to be labelled as "man-cession" (Sierminska and Takhtamanova 2011, Perry 2010, Wall 2009, Thompson 2009). Indeed, this trend is not specific of the euro crisis. As has been noted, it is often the case that the initial burden of an economic downturn tends to be borne by men workers (McKay et al. 2013). However, according to Signorelli et al. (2012) when considering a longer time span (1980-2005), an analysis of past financial crises highlights a greater impact on women's participation and unemployment rates, especially in high-income countries.2

What characterizes the current recession in the EU is that it has been simultaneously dominated in all countries by the implementation of gender blind fiscal consolidation programs aimed at tackling financial speculation on sovereign debts. The crisis years have seen a gender equality perspective deprioritized within the EU policy process – as is clearly evident in the lack of a stipulation for sex-disaggregated data in the targets selected for the "Europe 2020" strategy. Across the whole strategy, the hard fought for attention to gender equality in the 1990s and 2000s has almost disappeared, leaving little trace even in the gender-related themes of poverty and social inclusion (Villa and Smith 2012). Accordingly, Karamessini and Rubery (2014a) warn that the observed short-term decrease in the gender employment gap may turn into long-term harmful implications for gender equality when the implementation of fiscal consolidation plans is completed, and refer to this scenario as "sheausterity".

Austerity policies have the potential to generate greater challenges to women than men due to the associated downsizing of the public sector, because (i) women are relatively more represented and concentrated in terms of public sector employment (Rubery 2013, Karamessini and Rubery 2014a);3 (ii) gender equality policies are threatened by spending retrenchment; and (iii) women are more affected by the loss of social benefits that form a higher share of their incomes (Bettio et al. 2012).

Some country-level evidence raises preliminary evidence of a possible reversal of the hecession: Périvier (2014) reports a "seesaw effect" in Spain, the UK and in Denmark, i.e. a worsening of employment in female dominated sectors and an improvement in male dominated ones; according to McKay et al. (2013) in the UK between 2011 and 2013 job loss in the public sector increased for women by 61,000 and fell for men by 31,000 while 73% of public sector pay freezes affected women threating an expected widening of an already significant gender pay gap (20% in 2012; WBG 2010). However, in general it seems too early to assess the gendered impacts of austerity, given the still on-going and differentiated developments in fiscal consolidation plans by EU countries (Karamessini and Rubery 2014b) and above all the lack of updated data on men's and women's incomes.

Class, inequality and the crisis

Since the crisis, political and academic concern over inequality has considerably increased. Economists, sociologists and political scientists have investigated the role of increasing income inequality as a cause of the 2007-2008 crisis (and in some cases of the euro crisis too) as well as the distributional impact of the crisis and of the policy responses to it.

On the one hand, Bazillier and Héricourt (2014) point out that the economic literature is substantially unanimous on the identification of a causal nexus from income inequality to the growth of debit. This is associated to the empirical finding that credit booms are the prime determinant of financial crises, including the 2007-2008 US crisis. Todorova (2009) explicitly links such inequality-induced credit bubbles to gender inequality, defined both as labour market discrimination and sexual division of labour in the household. Post-Keynesian economists have explicitly linked also the euro crisis with the accumulation of macroeconomic imbalances in the real sector. In particular Hein (2012) and Hein (2013) pointed out growing income inequality and the lower share of national income accruing to labour as a cause of increasing balance-of-payments imbalances, which are in turn considered in this literature as the trigger of the sovereign debt crisis after 2009.

On the other hand, the distributional impact of financial crises is less clear-cut. According to Bazillier and Héricourt (2014), the economic literature has so far found an obvious causal link from crises to poverty, while mixed results are found concerning the link from crises to inequality. However, austerity policy has been explicitly linked to a further growth in inequality (e.g. by Green and Lavery, 2014), in particular due to the peculiar mix of restrictive fiscal policies (which reduce the size of the public sector and thus the redistribution of income) and expansionary monetary policies (which are likely to produce asset price inflation and thus disproportionally benefit the owners of financial assets).

In the study of inequality, mainstream economics typically focuses on the distribution of individual or household incomes. Statistical offices and research institutions in the EU and the USA are currently working on improving the instruments to collect and analyse data on wealth inequality at the individual or household level too (Atkinson and Brandolini, 2008; 2011; OECD, 2008; OECD, 2011; Jenkins et al., 2013).

By contrast, functional income distribution, i.e. the shares of national income accruing to labour and capital, is relatively understudied in mainstream economics. When economists speak of social classes, they normally refer to loosely defined groups of people who belong to a certain quintile of the income distribution. For example Palley (2013) presents a three class model encompassing "workers", "middle management middle class" and "top management capitalist class". In this model, the author identifies the existence of three

classes on the base of three cut points in the income distribution, corresponding to the 1%, 19% and 80% percentiles. In some cases the definition is even looser: for example Summers and Balls (2015) write "The term 'middle class' is used interchangeably throughout this report with 'low and middle income'" (p. 1).

Concerning functional income distribution, a recent body of literature has documented a structural change in factor shares during the second half of the XX century, towards higher profit incomes (Schlenker and Schmid, 2015; Arpaia et al., 2009; Checchi and Garcia-Penalosa, 2010; ILO, 2013, van der Hoeven, 2014). Some works linked the increasing share of capital incomes to the observed increase in personal or household income inequality (Adler and Schmid, 2013; Atkinson, 2009; Glyn, 2009). Schlenker and Schmid (2015) study the effect of changing capital income shares upon inequality of gross household income showing how the transmission of a shift in capital income shares into the personal distribution of income depends on the concentration of capital income in an economy.

However, usually these works do not consider the relation between the two concepts at the micro level. For example, Stockhammer (2013) investigates the determinants of a declining wage shares in OECD countries focusing on macroeconomic factors such as financialisation, globalisation, welfare state retrenchment and technological change. While macro factors are certainly relevant, a micro analysis is useful too, because the two perspectives convene different information: while personal or household income distribution concerns the relative "position" of the individual (or household) in his or her society, functional distribution refers to people's roles in the production process and, accordingly, the type of income that they receive. A crucial consequence of the macro perspective is that - it is almost needless to remark - the economics literature on functional income distribution (and vast part of that on personal income distribution) adopted a gender blind approach.

In this work, we link the analysis of household and functional income distribution in light of gender inequality, during the European crisis. As explained in the next section, the nature of the data available at the international level imposes strict limitations to any empirical analysis of these topics. Yet, reference to quantitative data available to day provides an irreplaceable complement to the gender analyses reviewed above which, in some cases, seem to require certain qualifications.

Data and methodology

Our empirical investigation is based on the "European Union Statistics on Income and Living Conditions" (EU-SILC) database provided by Eurostat. EU-SILC contains data on sources of income at the household level, distinguishing incomes from rent, labour, dividends and profits. We employ the cross-sectional version of the database containing data for the years 2007, 2010 and 2012, containing a representative sample of European households before the crisis and at different stages through it.4

A crucial limitation for quantitative analyses that try to include a gender perspective is the lack of adequate data. Within the European institutions it is common practice to sum up incomes and assets of all household members and of the household as a whole, and to notionally attribute an equal share of this sum to each household member. In the European context, such putative income becomes the equivalent income through the adoption of an equivalence scale aimed at allowing for economies of scale in consumption. A major drawback of this approach is that the underlying assumptions of equal contribution to the household's resources and of equal sharing of the household's means are criticized by the scientific literature.

The alternative, as recently done for example by Bárcena-Martín and Moro-Egido (2013), is to let gender gaps emerge by limiting the analysis to a minority of the population, such as single-adult households, which satisfies the condition of exhibiting a different number of adult men and women for each household. However, the generalizability of the ensuing results is unclear, as specific trends may characterize these parts of the population (in our case, concerning poverty). To overcome this limitation, we consider the whole population and, with the to remove any hypothesis on intra-household sharing of resources, we limit the analysis to household as collective entities. Accordingly, we define as men-headed (MH) households those in which a man declares earning the highest income, and women-headed (MH) households those in which it is a woman to earn most.

EU SILC database is also characterized by some errors deriving from conceptual and measurement (collection and processing) sources leading to patterns differing across countries. Due to the violation of the normality assumption of income variables required by the standard Grubbs test (Grubbs, 1969 and Stefansky, 1972), we apply the absolute deviation around the median criterion (Leys et al., 2013) to detect and eliminate outliers in the database. Compared to the standard deviation, the choice of the median as central

tendency indicator does not assume a normal distribution of the data; furthermore, while the mean and standard deviation are strongly impacted by outliers, the median is insensitive to the presence of outliers (Hampel, 1974; Huber, 1981).5 This procedure permits to eliminate extreme values, but we still allow for the possibility of negative incomes deriving from self-employment, capital or net income after taxes.6 However, outliers, defined as observations greater than 5 times the median absolute deviation, have been removed. 620,017 households in 27 European countries compose the final database for three years (2007, 2010, 2012).7 We define the different sources of households' incomes as shown in table 2.

Table 2. Households' budget composition by source of income

Wage

(sum for all household members of gross employee cash or near cash income) [1]

Labour Income

(sum of cash benefits or losses from self-employment and wage)[2]

Income from capital (restricted)

(interests, dividends, profit from capital investments in unincorporated business, income from rental of a property or land, pensions received by individual private plans)

Income from capital

(interests, dividends, profit from capital investments in unincorporated business, income from rental of a property or land, imputed rent, pensions received by individual private plans) [3]

State transfers

(sum of family/children related allowances, social exclusion not elsewhere classified, housing allowances, regular inter-household cash transfers received, unemployment benefits, old-age benefits, survivor' benefits, sickness benefits, disability benefit

Gender and class during the crisis

In the EU-SILC database, income from capital includes also money from rent of properties and imputed rent being a sort of in-kind house advantage impacting on household well being. Even if the inclusion of imputed rent produces effects of income re-ranking among households, it represents an indirect income from property. In our analysis, we consider the indirect income from housing property as a source of capital income in order to define the functional "positioning" of the household between capital and labour, however the family position in the income distribution will be defined without the inclusion of the imputed rent.12 Household budget shares are computed as ratios of real yearly quantities of wage, capital and state transfer on the total gross household income.13

Table 3 shows the composition of the sample in terms of typology of households and individuals.

Table 3. Distribution of individuals and households by gender over years 14

	2007		2010		2012	
Gender	Individuals (%)	Households (%)	Individuals (%)	Households (%)	Individuals (%)	Households (%)
Men / Men headed households Women / Women headed	47.85	61.46	47.77	60.78	47.89	60.52
households	52.15	36.74	52.23	38.25	52.11	38.5
Zero income		1.8		0.97		0.98

Source: elaboration on EU-SILC 2007, 2010, 2012 cross sectional data.

As expected, over time the percentage of women-headed households has increased probably due to "forced" women participation to the labour market in consequence of massive job cuts experienced by male-concentrated sectors such as manufacturing. In our sample, more than 60% are men-headed households where the earner (in case of single) or major income earner (in case of households with more adults) is a man. The gender of households based on the "bread-winner hypothesis" introduces a bias in the sample, namely it changes the proportion of women and men in the sample. In terms of individuals, we have an equal distribution between men and women. As stated before, the focus of our analysis on sources of income requires a household approach leading to a different gender proportion in the sample.

Table 4. Distribution of households by source of exclusive or prevailing source of income

	Exclusive source of income						Prevail	ing source of i	income	
	Wage	Labour income	Capital restricted	Capital	State transfers	Wage	Labour income	Capital restricted	Capital	State transfers
2007	1.57%	1.95%	0.09%	0.44%	2.91%	44.04%	55.98%	0.85%	3.80%	40.13%
2010	3.00%	3.60%	0.13%	0.40%	4.63%	43.82%	54.52%	1.14%	3.49%	41.87%
2012	2.87%	3.42%	0.16%	0.42%	4.84%	43.16%	54.10%	1.15%	3.29%	42.43%

Source: elaboration on EU-SILC 2007, 2010, 2012 cross sectional data.

At European level more than 50% of households depend on labour income as prevailing source, 40% on wages (dependent work); while the so-called "capitalist" households represent a small proportion of the sample, less than 4% including imputed rent and private

pensions. However, 0.1% of households exclusively rely on profit and rent becoming 1% if we consider profits and capital as the prevailing source of income.

Looking at the distribution of households according to the exclusive source of income, we detect an increasing proportion of "wage" and "labour income" households over time. Labour income households whose income exclusively comes from dependent jobs and self-employment are about 2% of European households in 2007 and 3.4% in 2012. The same increasing pattern has been verified for "wage" households shifting from 1.5% in 2007 to 2.8% in 2012. The proportion of State dependent households has been increasing over the period too, almost doubling. Overall, while pure-income households - defined as those households depending on one typology of income - have been increasing over the period 2007-2012, the proportion of mixed-income households decrease with the exception of households depending on State transfers. A smooth trend towards polarization of sources of income arises, mostly for State transfers and labour income.

Table 5. Sources of income by household type in euro (EU SILC, 2007, 2010, 2012)

			Wage	Labour income	Capital restricted	Capital	State transfer
		mean	15957.5	18562.0	977.7	4979.5	8683.2
	Men- headed	median	8422.3	12177.5	7.0	4257.6	3481.0
	households	CV	1.2	1.1	3.5	1.1	1.4
2007	nouscholus	Gini index	0.433	0.426	0.747	0.479	0.54
70	Women-	mean	11232.8	12601.3	757.9	4234.4	8274.7
	women- headed	median	2687.0	4280.0	0.8	3131.7	4987.8
	households	CV	1.4	1.4	3.8	1.2	1.2
	nouscholus	Gini index	0.457	0.459	0.772	0.503	0.477
		mean	14632.5	16732.1	1122.2	3640.7	8996.0
	Men- headed households	median	7799.8	11085.8	5.7	1713.3	3962.3
		CV	1.2	1.1	3.7	1.5	1.3
2010		Gini index	0.422	0.415	0.758	0.577	0.527
70	14/	mean	10582.0	11767.0	904.8	3274.1	8147.8
	Women- headed	median	3048.0	4506.6	0.0	1332.8	5110.4
	households	CV	1.4	1.3	3.7	1.6	1.2
	nouscholus	Gini index	0.44	0.442	0.784	0.589	0.47
		mean	14029.6	16164.2	1036.6	3430.0	8905.0
	Men- headed	median	6984.6	10295.4	0.0	1602.8	3873.0
	households	CV	1.2	1.1	3.5	1.5	1.3
2012	nousenolus	Gini index	0.428	0.421	0.772	0.582	0.526
50	Women	mean	10333.9	11480.9	836.9	3086.0	8209.1
	Women- headed	median	2898.6	4382.4	0.0	1239.4	5029.8
	households	CV	1.4	1.3	3.8	1.5	1.2
	nousenoids	Gini index	0.444	0.445	0.793	0.592	0.467

Source: elaboration on EU-SILC 2007, 2010, 2012 cross sectional data.

Table 5 allows comparing mean and median income by source and gender. A consistent divergence between men-headed and women-headed households arises. Women-headed households earn on average less than men-headed households.16 This pattern is consistent over time, however the difference in wage and labour income between typologies of households seems to decrease over 2007-2012, probably due to job losses in male oriented sectors. Men-headed households earn higher wages compared to women households, even if the absolute wage has declined over the period (2007-2012), the "wage-gap" between households is still verified. The same pattern has been detected for capital income, which is systematically higher for men-headed households over the period and for State transfers.

The analysis of median values suggests further insights on the distribution of earnings between households over the period. From this point of view, the median value of wage, labour income, capital and State transfers is always below the mean underling a major concentration of households in the lower part of the distribution. Most households receive wages, capitals and State transfers below the average value. This pattern is more evident for women-headed households.

Capital income is characterized by a higher level of dispersion compared to wage or labour income, namely few households register a high amount of capital, but the median value is equal to zero. This pattern of capital concentration is particularly evident for women-headed households compared to men-headed ones. The distribution of incomes for women-headed households is more unequal compared to men-headed ones for each source of income, with the only exception of State transfers. Finally, in terms of inter-temporal dynamics, we register a decrease in the median and mean value of wage for both households counterbalancing the increase in 2007-2010 of the mean value of capital (without imputed rent) for both households.

Table 6. Shares of income by household type (EU SILC, 2007, 2010, 2012)

			Share Wage	Share Labour income	Share Capital restricted	Share Capital	Share State transfer
	Man booded	mean	45.3%	53.0%	2.2%	13.6%	33.3%
	Men-headed households	median	51.7%	67.6%	0.0%	11.7%	15.8%
2007		CV	0.86	0.72	2.88	0.97	1.08
20	Women-headed	mean	36.3%	40.6%	2.1%	15.9%	43.4%
	households	median	24.9%	37.9%	0.0%	13.0%	41.9%
	nousenoius	CV	1.05	0.96	3.01	0.99	0.85
2010	Men-headed	mean	44.8%	51.6%	2.6%	12.6%	35.8%
70	households	median	48.3%	64.3%	0.0%	9.1%	19.9%

		CV	0.89	0.76	2.97	1.15	1.03
	Women-headed households	mean	37.1%	41.2%	2.7%	14.7%	43.9%
		median	25.8%	37.5%	0.0%	10.1%	42.2%
		CV	1.05	0.97	3.18	1.15	0.85
	Men-headed households	mean	44.3%	51.4%	2.5%	12.5%	36.1%
		median	46.4%	64.7%	0.0%	8.9%	19.4%
2012	ilouseilolus	CV	0.90	0.77	3.15	1.18	1.04
20	Women-headed	mean	37.2%	41.3%	2.5%	14.3%	44.3%
	households	median	25.7%	37.0%	0.0%	9.6%	43.2%
	nousenoias	CV	1.05	0.97	3.32	1.17	0.86

Source: elaboration on EU-SILC 2007, 2010, 2012 cross sectional data.

If we look at the budget composition, men-headed households depend more on income from work compared to women households, which are surprisingly more dependent on capital incomes including in our definition both imputed rent and pensions from private plans. As expected, although women-headed households receive a lower amount of income from State compared to men headed households, their budget is composed by almost 40% by transfers from State. Systematic differences arise between both typologies of households in terms of budget composition, mostly for wage, labour income and State transfers. Surprisingly the share of capital covers 2% of income for both households with a higher dispersion for women headed households. Overall, households budget composition does not change very much over 2007-2012, namely crisis does not reshape households budget. From this point of view, given a household budget that is stable over time, we aim to investigate the typology of income and households more hit during the crisis. Hence, different patterns of household budget shares can be related to household characteristics in terms of occupation, education, age and civil status of the principal earner.

Tables A1 and A2 in annex synthetize main features by source of income. As expected, elderly people, with educational level lower than secondary school, mainly compose households receiving State transfers. Over 35% are widowed. In this group we found both men and women headed households. "Capital-income" households are headed both by women and men, mainly professionals (over 20%) both married or single. In this group we find an higher concentration of secondary and third educational level corresponding to the major proportion of managerial occupations (ISCO88COM 1, 2, 3). The "labour group" is the most heterogeneous both for education and professional levels. Compared to the "capital group", labour-income households are headed mostly by men. A more nuanced picture emerges from the analysis of household characteristics matched with the prevailing source of income. Still wage and labour income households are the most heterogeneous for

education and professions, but they are more uniform in terms of gender. While both women and men head households relying on capital and State transfers income, men head those households mostly depending on self-employment and wage.

Finally, we analyse changes in income by typology of households and geographical areas. The wage and labour incomes have been the most hit over 2007-2012, mostly in Southern Europe. Capital income keeps growing at least in terms of profits and rents for both women and men headed households in central Europe. Conversely, with the exception of State transfers for men headed households, Southern Europe register a decrease for all income sources. State transfers have increased mostly for men-headed households.

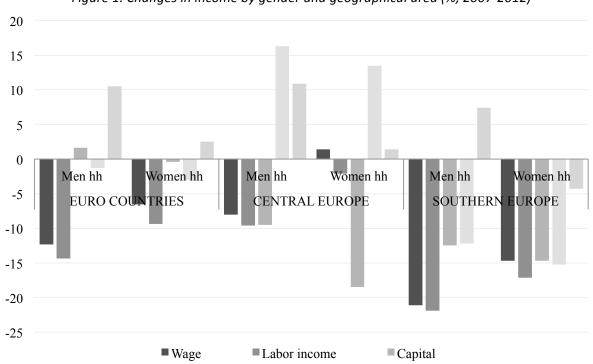


Figure 1. Changes in income by gender and geographical area (%, 2007-2012)

Note: Euro countries: BE, DE, EE, IE, GR, ES, FR, IT, CY, LU, NL, AT, PT, SI, SK, FI. Central Europe: DE, NL, AT, FI. Southern countries: IE, GR, ES, IT, PT.

In terms of shares of income, we detect an overall stability of capital share, with the exception of Southern Europe where the share of capital has decreased on average at household level by 2 percentage points. Southern Europe registers the highest increase in State transfers share by almost 6 percentage points, while the wage share uniformly decreases by 3 percentage points across Europe. Overall, in terms of gender, men-headed

households register major reduction in wage and labour share compared to women-headed households.

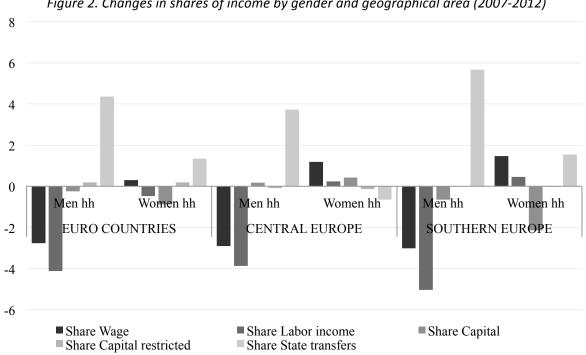


Figure 2. Changes in shares of income by gender and geographical area (2007-2012)

Note: Euro countries: BE, DE, EE, IE, GR, ES, FR, IT, CY, LU, NL, AT, PT, SI, SK, FI. Central Europe: DE, NL, AT, FI. Southern countries: IE, GR, ES, IT, PT.

From the descriptive analysis above, we can conclude that major differences in terms of income exist between men-headed and women-headed households, namely the latter register on average a lower amount of wage, capital, labour income and State transfers over the entire period. These differences are evident over the entire period consolidating the income gap existing between households. However, in terms of dependence, womenheaded households present lower shares of wages and labour suggesting a major dependence from State transfers than men headed households. In aggregate terms, both wage and capital distributions shifted over the period 2007-2012 suggesting a decrease in the average amount of capital and wage earned by households. The decrease in the mean and median wage (and labour income) is bigger than the capital one impacting mostly on men-headed households being more dependent on labour income that women ones.

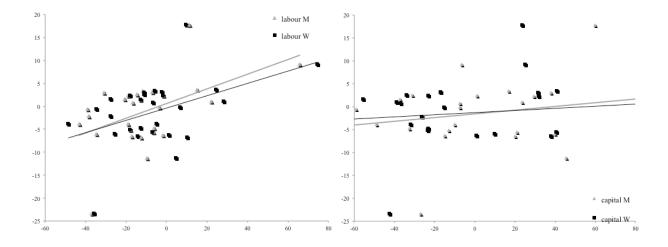
Conclusions: a need to re-examine gender and the crisis?

We have computed percentage changes of average incomes for men-headed and women-headed households over the period 2007-2012, as well as for households' capital and labour incomes separately. To approximate the impact of economic recession and of austerity for 27 European countries17 we have computed the cumulative rate of change of GDP and a measure of fiscal consolidation (the average yearly rate of change of the General Government primary surplus/deficit).

As shown in figure 3, the correlation between GDP growth (or recession) and households' incomes growth in the period considered is obviously positive. Furthermore, the relation is remarkably similar for MH and WH households, with a simple correlation of 0.5 for MH and 0.46 for WH (both statistically significant at the 5% confidence level). No significant differences emerge between the relation of GDP growth and men-headed's versus womenheaded's labour and capital incomes (for both WH and MH households, labour income only is significantly correlated to GDP growth). On the contrary, for both MH and WH households' labour incomes are significantly correlated with GDP growth (0.49 for MH and 0.44 for WH households), whereas capital incomes are not.

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Figure 3. Cumulative GDP change and changes in average incomes by EU country (%, 2007-2012)



Source: elaboration on EU-SILC 2007, 2010, 2012 cross sectional data and European Commission, AMECO database.

Austerity measures seem to be correlated in a similar way with the average incomes of menheaded and women-headed households. Similarly to the impact of GDP growth, marked differences arise, both for men and women, in their correlation with labour and capital incomes.18 As shown in fig. 4, fiscal consolidation seems to exhibit a negative correlation with both average total incomes and average labour incomes of MH and WH households. However, due to the high variability between countries, none of these correlations is statistically significant. By contrast, the only statistically significant correlation (with value 0.45) is that between fiscal consolidation and the capital incomes of women-headed households. For men-headed households, the international heterogeneity seems of a comparable size to WH households', but the estimated coefficient is smaller (0.29) and thus at the 95% confidence level it cannot be excluded that the apparent negative correlation is not in fact nil. Evidently, given the significantly smaller mean and median values of menheaded households' capital incomes (and their higher variability) than men-headed households', it cannot be said that women stand to profit more (or loose less) from austerity than men. However, what can be said is that, especially as owners of capital assets, not all women are net losers in the period considered.

≜ Capital income M Labour 400 300 200 100 500 ■ labour W 400 300 200 200 100 100 -100 -100

Figure 4. Fiscal consolidation and changes in average incomes by EU country (%, 2007-2012)

Note: fiscal consolidation is measured by the average yearly percentage change in the primary surplus (+) or deficit (-) of General Government.

Notes

¹ Croatia is not considered here because it only joined the EU in 2014.

⁶ Given to the high incidence of negative values for Denmark, about half of the sample, we eliminate Denmark from the analysis. However, as underlined by Verma et al. (2010), even if

² Similarly for the USA, Grown and Tas (2010) show that in the case of the Great Recession a basic comparison of unemployment rates for men and women adopted in the "man-cession representation" of the crisis led to partial results and biased policy responses. By exploring a collection of different labour market indicators, job loss for women was over 10 times higher in the current recession than in the previous 1990-91 and 2000-01 recessions, compared to a 2.3 times higher job loss for men.

³ Public administration, education, health and social work activities are the NACE sectors proposed by Rubery (2013) as a proxy for the public sector.

⁴ Monetary values are expressed in euro and deflated with the Consumer Price Index (CPI) provided by Eurostat. All values are expressed in euros 2007.

⁵ After computing the median absolute deviation (MAD), we drop those incomes greater or lower than five times the MAD, two times more than the rejection criterion suggested by Miller (1991).

in Denmark half of capital income values are negative, this component accounts for around 20% of total income of households, which is equivalent to the average value of capital share over EU countries. The large number of negative values in Denmark is in fact made up of numerous small amounts because register countries tend to record small values exhaustively, while in personal interviews only larger amounts are likely to be recorded (Verma and Betti, 2010, p. 62).

⁷ The original sample is composed by 651,210 households.

⁸ Wage is given by the sum of individual income from dependent job (py010g).

⁹ Income from self-employment corresponds to variable *py050g*, which is defined as the income received, during the income reference period, by individuals, for themselves or in respect of their family members, as a result of their current or former involvement in self-employment jobs.

¹⁰ Income for capital is the sum of the following variables: *hy090g*, *hy030g*, *hy040g*, *py080g*. Income from capital includes also money from rent of properties and imputed rent being a sort of in-kind house advantage impacting on household well-being. Even if the inclusion of imputed rent produces effects of income re-ranking among households, it represents an indirect income from property. In our analysis, we consider the indirect income from housing property as a source of capital income in order to define the functional "positioning" of the household between capital and labour. For a detailed discussion on the effect of the inclusion of the imputed rent in the income distribution with EU SILC data, make reference to Maestri (2012). A potential re-ranking bias can emerge including income from imputed rent due to the diversity of estimation methods applied among countries.

¹¹ State transfers is the sum of *py090g*, *py100g*, *py110g*, *py120g*, *py130g*, *py140g*, *hy060g*, *hy070g*, *hy080g*.

For a detailed discussion on the effect of the inclusion of the imputed rent in the income distribution with EU SILC data, make reference to Maestri (2012). A potential re-ranking bias can emerge including income from imputed rent due to the diversity of estimation methods applied among countries.

¹³ In Eurostat the gross household total income is defined as the sum for all household members of gross personal income components (gross employee cash or near cash income), gross non-cash employee income, employers' social insurance contributions, gross cash benefits or losses from self-employment (including royalties), value of goods produced for own consumption, pensions received from individual private plans, unemployment benefits, old-age benefits, survivor' benefits, sickness benefits, disability benefits and education-related allowances, income from rental of a property or land, family/children related allowances, social exclusion, housing allowances, regular inter-household cash transfers received, interests, dividends, profit from capital investments in unincorporated business, and imputed rent.

¹⁴ Only adults have been considered.

¹⁵ Zero income is referred to households with zero income for which the max income criterion cannot be applied. These households cannot be classified in terms of gender.

We can reject the null of equality of mean and median values for all incomes between men and women headed households at 5% of significance level (T test analysis allowing for unequal variance). Results available upon request.

¹⁷ Iceland, Norway and 25 EU member states, excluding Croatia, Malta and Denmark due to the lack of adequate microdata in the EU-SILC dataset.

The results are not qualitatively different using alternative definitions of fiscal consolidation. The use here of the percentage change in primary surpluses, rather than e.g. the sum of primary surpluses/deficits expressed as a percentage of GDP, is aimed at capturing the impact of the policy change only, rather than the compound impact of fiscal policy and its impact on the size of the national economy. Further details are available from the authors upon request.

References

Adler, M. and Schmid, K. D. (2013) Factor Shares and Income Inequality - Evidence from Germany 2002-2008. Journal of Applied Social Science Studies, 2 (133), pp. 121–132.

Arpaia, A., Perez, E., Pichelmann, K. (2009) Understanding Labour Income Share Dynamics in Europe. Economic Papers, 379, European Commission.

Atkinson, A. B. (2009) Factor Shares: The Principal Problem of Political Economy? Oxford Review of Economic Policy, 25 (1), pp. 3–16.

Atkinson, A. B. and Brandolini, A. (2008) On analysing the world distribution of income, Working Papers, 97, ECINEQ, Society for the Study of Economic Inequality.

Atkinson, A. B. and Brandolini, A. (2011) On the identification of the "middle class". Working Papers 217, ECINEQ, Society for the Study of Economic Inequality.

Bárcena-Martín, E. and Moro-Egido, A. I. (2013) Gender and Poverty Risk in Europe. Feminist Economics, Taylor & Francis Journals, vol. 19(2), pp. 69-99, April.

Bazillier, R. and Héricourt, J. (2014) The Circular Relationship between Inequality, Leverage, and Financial Crises: Intertwined Mechanisms and Competing Evidence. CEPII Working Paper, No. 2014-22, Paris.

Bettio, F., Corsi, M, D'Ippoliti, C., Lyberaki, A., Lodovici, M. S. and Verashchagina, A. (2012) The impact of the economic crisis on the situation of women and men and on gender equality policies. European Commission, FGB- Fondazione Giacomo Brodolini IRS- Istituto per la Ricerca Sociale, December 2012.

Checchi, D., Garcia-Penalosa, C. (2010) Labour Market Institutions and the Personal Distribution of Income in the OECD. Economica 77 (307), pp. 413-450.

Cho, Y. and Newhouse, D. (2013) How Did the Great Recession Affect Different Types of Workers? Evidence from 17 Middle-Income Countries. World Development, vol. 41, pp. 31-50.

Glyn, A., (2009) Functional Distribution and Inequality. In: W. Salverda, B. N., Smeeding, T. M. (Eds.), Oxford Handbook of Economic Inequality. Oxford University Press.

Green, J. and Lavery, S. (2014) Britain's Post-Crisis Political Economy: A 'Recovery' through Regressive Redistribution. SPERI Paper, No. 11, The University of Sheffield.

Grown, C. and Tas, E. (2010) Gender Equality in the US Labor Markets in the Great Recession of 2007-2010. Working Papers 2010-15, American University, Department of Economics.

Grubbs, F. (1969) Procedures for Detecting Outlying Observations in Samples. Technometrics, 11(1), 1-21.

Mckay, A., Campbell, J., Thomson, E. and Ross, S. (2013) Economic recession and recovery in the UK: What's gender got to do with it?. Feminist Economics, 19(3), pp.108-123.

Milkman, R. (1976) Women's Work and Economic Crisis: Some Lessons of the Great Depression. Review of Radical Political Economics, vol. 8, n.1, pp.71-97.

Hampel, F. R. (1974) The influence curve and its role in robust estimation. Journal of the American Statistical Association, 69(346), 383–393, http://dx.doi.org/10.1080/01621459.1974.10482962.

Hein, E. (2012) The Crisis of Finance-dominated Capitalism in the Euro Area: Deficiencies in the Economic Policy Architecture and Deflationary Stagnation Policies. Economics Working Paper Archive wp 734, Levy Economics Institute.

Hein, E. (2013) The crisis of finance-dominated capitalism in the euro area, deficiencies in the economic policy architecture, and deflationary stagnation policies. Journal of Post Keynesian Economics, M.E. Sharpe, Inc., vol. 36(2), pp. 325-354, January.

Huber, P. J. (1981) Robust statistics. New York: John Wiley.

ILO (2013) Global Wage Report 2012/13: Wage and Equitable Growth.

Jenkins, S. P., Brandolini, A., Micklewright, J., Nolan, B. (2013) The Great Recession and the Distribution of Household Income. Oxford University Press.

Karamessini, M. and Rubery, J. (2014a) The challenge of austerity for equality a consideration of eight European countries in the crisis. In Eydoux, A., Math, A. and Perivier H. (eds.) European Labour Markets InTimes Of Crisis. A Gender perspective. Debate and policies 133, Revue de l'OFCE, Revue de l'OFCE http://www.ofce.sciences-po.fr/publications/revue.htm

Karamessini, M. and Rubery, J. (2014b) Women and Austerity. The Economic Crisis and the Future for Gender Equality. London and New York: Routledge.

Leys, C., Klein, O., Bernard, P., Licataet, L. (2013) Detecting outliers: Do not use standard deviation around the mean, use absolute deviation around the median. Journal of Experimental Social Psychology, http://dx.doi.org/10.1016/j.jesp.2013.03.013

Maestri, V. (2012) Imputed rent and income re-ranking. Evidence from EU-SILC data. GINI Discussion Papers 29, AIAS, Amsterdam Institute for Advanced Labour Studies.

Mckay, A., Campbell, J., Thomson, E. and Ross, S. (2013) Economic recession and recovery in the UK: What's gender got to do with it? Feminist Economics, 19(3), pp.108-123.

Miller, J. (1991) Reaction time analysis with outlier exclusion: Bias varies with sample size. The Quarterly Journal of Experimental Psychology, 43(4), pp. 907–912.

OECD (2008) Growing Unequal? Income Distribution and Poverty in OECD Countries. ISBN 978-92-64-044180-0 – OECD 2008.

OECD (2011) Divided We Stand. Why Inequality Keeps Rising. ISBN: 9789264119536 - OECD 2011.

Palley, T. (2013) Cambridge and neo-Kaleckian growth and distribution theory: comparison with an application to fiscal policy. Review of Keynesian Economics, Edward Elgar Publishing, vol. 1(1), pp. 79-104, January.

Périvier, H. (2014) Men and women during the economic crisis Employment trends in eight European countries. Revue de l'OFCE/Debates and policies—133 (2014).

Perry, M. J. (2010) The Great Mancession of 2008-2009. Paper presented at the Statement before the House Ways and Means Committee Subcommittee on Income Security and Family Support On Responsible Fatherhood Programs, American Enterprise Institute for Public Policy Research, June.

Rubery, J. (2013) Public sector adjustment and the threat to gender equality In D. Vaughan-Whitehead (ed.) Public Sector Shock. ILO and Edward Elgar.

Schlenker, E. and Schmid, K. (2015) Capital income shares and income inequality in 16 EU member countries, *Empirica*, Springer, vol. 42(2), pages 241-268, May.

Sierminska, E. and Takhtamanova, E. (2011) "Job Flows, Demographics, and the Great Recession" in H. Immervoll, A. Peichl and K.Tatsiramos (eds) Who Loses in the Downturn? Economic Crisis, Employment and Income Distribution, Emerald Group Publishing Limited.

Signorelli, M., Choudhry, M. and Marelli, E. (2012) The Impact of Financial Crises on Female Labour. European Journal of Development Research, 24, pp. 413–433.

Stefansky, W. (1972) Rejecting Outliers in Factorial Designs. Technometrics, 14, pp.469-479. Stockhammer, E. (2013) Why have wage shares fallen? A panel analysis of the determinants of functional income distribution. Conditions of Work and Employment Series No. 35. Geneva: International Labour Organization.

Summers, L.H. and Balls, E. (2015) Report of the Commission on Inclusive Prosperity. Center for American Progress. Washington (DC).

Thompson, D. (2009) It's Not Just a Recession. It's a Man-cession! The Atlantic. July 9.

Todorova, Z. (2009) Money and Households in a Capitalist Economy. Edward Elgar, Cheltenham.

Van der Hoeven, R. (2014) Profits without labour benefits. The impact of financial globalization on work. http://www.thebrokeronline.eu/Articles/Profits-without-labour-benefits

Verma, V., Betti, G., Gagliardi, F. (2010) An assessment of survey errors in EU-SILC, Eurostat. Methodologies and Working Papers, Eurostat, Luxembourg.

Villa, P. and Smith, M. (2012) Gender Equality, Employment Policies and the Crisis in EU Member States. EGGE Report for the European Commission, DG Employment, Social Affairs, and Equal Opportunities, Brussels 2010.

Wall, H. (2009) The" Man-Cession" of 2008-2009: It's Big, but It's Not Great. The Regional Economist, 18(4),pp. 4-9.

Women Budget Group (2010) The Impact on Women of the Coalition Spending Review. Available on-line: www.wbg.org.uk/RRB Reports 4 1653541019.pdf

ANNEX

Table A1. Households' characteristics by exclusive income source

		- autorite in a decenter autorite and a decenter autorite autor					
		2007	2010	2012			
	gender	69% (men headed) -	64.68% (men headed) -	64.66% (men headed) -			
	gender	31% (women headed)	35.32% (women headed)	35.34% (women headed)			
	age	42	43	43			
		less than secondary edu (20.93%) -	less than secondary edu (15.81%) -	less than secondary edu (13.94%) -			
	education	secondary edu (42.02%) -	secondary edu (41.29%) -	secondary edu (42.06%) -			
		third level edu (37.05%)	third level edu (42.89%)	third level edu (44%)			
		Married or consensual union (48.75%) -	Married or consensual union (39.38%) -	Married or consensual union (39.92%) -			
	Marital	Separated (2.34%)-	Separated (2.35%)-	Separated (2.54%)-			
		Divorced (9.73%) -	Divorced (11.98%) -	Divorced (11.74%) -			
	status	Widowed(1.45%)-	Widowed(1.52%)-	Widowed(1.5%)-			
Labor		Never married (37.72%)	Never married (44.78%)	Never married (44.31%)			
income		Legislators, senior off. and managers	Legislators, senior off. and managers	Legislators, senior off. and managers			
		(9.44%) -	(8.87%) -	(6.51%) -			
		Professionals(18.21%)	Professionals(20.05%)	Professionals(21.65%)			
		Tech. and ass. professionals (17.61%) -	Tech. and ass. professionals (21.62%) -	Tech. and ass. professionals (23.34%) -			
	Occupation	Clerks (10.35%) -	Clerks (10.98%) -	Clerks (7.35%) -			
	Occupation	Workers and Shop assistant (9.02%) -	Workers and Shop assistant (9.56%) -	Workers and Shop assistant (9.75%) -			
		Skilled agr. (2.67%)-	Skilled agr. (2.19%)-	Skilled agr. (2.77%)-			
		Craft w. (16.03%)	Craft w. (13.42%)	Craft w. (13.96%)			
		Plant and machine operators (9.54%)	Plant and machine operators (8.02%)	Plant and machine operators (9.72%)			
		Elementary occupations (7.13%)	Elementary occupations (5.29%)	Elementary occupations (4.95%)			
	Dual earners	44.4%	40.7%	42.5%			
	gender	36.21% (men headed) -	44.27% (men headed) -	52.95% (men headed) -			
Capital	gender	63.79% (women headed)	55.73% (women headed)	47.05% (women headed)			
	age	46	45	44			

I		less than secondary edu (33.53%) -	less than secondary edu (23.77%) -	less than secondary edu (15.46%) -
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	education	secondary edu (40.4%) -	secondary edu (44.26%) -	secondary edu (48.44%) -
		third level edu (26.07%)	third level edu (31.96%)	third level edu (36.11%)
		Married or consensual union (28.22%) -	Married or consensual union (36.04%) -	Married or consensual union (36.46%) -
	Marital	Divorced (13.02%) -	Divorced (27.04%) -	Divorced (17.5%) -
		Widowed (19.59%) -	Separated (0.47%)-	Separated (10.27%)-
	status	, ,	Widowed (7.37%) -	• • • • • • • • • • • • • • • • • • • •
		Never married (39.16%)	Never married (29.08%)	Never married (35.77%)
			Legislators, senior off. and managers	Legislators, senior off. and managers
		Legislators, senior off. and managers	(13.21%) -	(6.35%) –
		(8.82%) -	Professionals (20.74%) -	Professionals (23.49%) -
		Professionals (56.21%) -	Tech. and ass. professionals (18.53%) -	Tech. and ass. professionals (17.65%) -
		Tech. and ass. professionals (5.71%) -	Clerks (7.02%) -	Clerks (16.49%) -
	Occupation	, , , , , , , , , , , , , , , , , , , ,	Workers and Shop assistant (8.01%)	Workers and Shop assistant (10.70%) -
		Clerks (8.71%) -	, , ,	Skilled agr. (2.5%)-
		Workers and Shop assistant (0.8%) -	Skilled agr. (1.68%)-	ō , ,
		Craft w. (1.5%) -	Craft w. (19.29%) -	Craft w. (14.2%) -
		Plant and machine operators (18.24%)	Plant and machine operators (3.42%)	Plant and machine operators (3.4%)
			Elementary occupations (8.12%)	- Elementary occupations (5.22%)
	Dual earners	0.5%	0.3%	0.8%
	gender	62.03% (men headed) -	47.47% (men headed) -	56.8% (men headed) -
	gender	37.97% (women headed)	52.53% (women headed)	43.2% (women headed)
	age	41	39	38
		less than secondary edu (9.68%) -	less than secondary edu (4.55%) -	less than secondary edu (4.60%) -
	education	secondary edu (61.97%) -	secondary edu (56.56%) -	secondary edu (54.56%) -
		third level edu (28.36%)	third level edu (38.89%)	third level edu (40.84%)
		Married or consensual union (0.51%) -		· ·
	Marital	Separated (42.96%)-	Married or consensual union (25.56%) -	Married or consensual union (35.49%) -
	status	Divorced (23.31%) -	Divorced (36.51%) -	Divorced (23.24%) -
		Never married (33.22%)	Never married (37.93%)	Never married (41.27%)
Capital		Never married (33.2270)		Legislators, senior off. and managers
restricted			Logislators, conjugate and managers	(2.81%) –
	Occupation	1:-l-+:#	Legislators, senior off. and managers	
		Legislators, senior off. and managers	(13.81%) -	Professionals (31.58%) -
		(48.39%) -	Professionals (28.70%) -	Tech. and ass. professionals (20.97%) -
		Tech. and ass. professionals (20.76%) -	Tech. and ass. professionals (26.84%) -	Clerks (20.99%) -
		Clerks (13.55%) -	Clerks (8.07%) -	Workers and Shop assistant (7.90%)
		Workers and Shop assistant (0.46%)	Workers and Shop assistant (1.86%)	Skilled agr. (1.57%)-
		Elementary occupations (16.84%)	Craft w. (15.64%) -	Craft w. (12.83%) -
			 Elementary occupations (5.08%) 	Plant and machine operators (0.67%)
				Elementary occupations (0.70%)
	Dual earners	0.1%	0.9%	0.9%
	gender	51.86% (men headed) -	53.73% (men headed) -	54.45% (men headed) -
	gender	48.14% (femen headed)	46.27% (femen headed)	45.55% (femen headed)
	age	69	70	70
		less than secondary edu (58.13%) -	less than secondary edu (49.29%) -	less than secondary edu (47.44%) -
	education	secondary edu (28.01%) -	secondary edu (31.56%) -	secondary edu (32.35%) -
		third level edu (13.86%)	third level edu (19.20%)	third level edu (20.21%)
		Married or consensual union (39.80%) -	Married or consensual union (38.54%) -	Married or consensual union (39.67%) -
		Separated (1.68%)-	Separated (1.71%)-	Separated (1.78%)-
	Marital	Divorced (8.37%) -	Divorced (9.82%) -	Divorced (9.95%) -
	status	Widowed(38.74%)-	Widowed(37.58%)-	Widowed(36.7%)-
State				
_		Never married (11.4%)	Never married (12.34%)	Never married (11.9%)
transfers		Never married (11.4%)	Never married (12.34%)	Never married (11.9%) Legislators, senior off, and managers
transfers		Legislators, senior off. and managers	Legislators, senior off. and managers	Legislators, senior off. and managers
transfers		Legislators, senior off. and managers (7.6%) -	Legislators, senior off. and managers (8.95%) -	Legislators, senior off. and managers (6.63%) -
transfers		Legislators, senior off. and managers (7.6%) - Professionals(8.08%)	Legislators, senior off. and managers (8.95%) - Professionals(11.18%)	Legislators, senior off. and managers (6.63%) - Professionals(12.69%)
transfers		Legislators, senior off. and managers (7.6%) - Professionals(8.08%) Tech. and ass. professionals (10.15%) -	Legislators, senior off. and managers (8.95%) - Professionals(11.18%) Tech. and ass. professionals (13.6%) -	Legislators, senior off. and managers (6.63%) - Professionals(12.69%) Tech. and ass. professionals (16.93%) -
transfers	Occupation	Legislators, senior off. and managers (7.6%) - Professionals(8.08%) Tech. and ass. professionals (10.15%) - Clerks (10.27%) -	Legislators, senior off. and managers (8.95%) - Professionals(11.18%) Tech. and ass. professionals (13.6%) - Clerks (11.28%) -	Legislators, senior off. and managers (6.63%) - Professionals(12.69%) Tech. and ass. professionals (16.93%) - Clerks (7.53%) -
transfers	Occupation	Legislators, senior off. and managers (7.6%) - Professionals(8.08%) Tech. and ass. professionals (10.15%) - Clerks (10.27%) - Workers and Shop assistant (9.72%)	Legislators, senior off. and managers (8.95%) - Professionals(11.18%) Tech. and ass. professionals (13.6%) - Clerks (11.28%) - Workers and Shop assistant (8.62%)	Legislators, senior off. and managers (6.63%) - Professionals(12.69%) Tech. and ass. professionals (16.93%) - Clerks (7.53%) - Workers and Shop assistant (9.80%)
transfers	Occupation	Legislators, senior off. and managers (7.6%) - (7.6%) - Professionals(8.08%) Tech. and ass. professionals (10.15%) - Clerks (10.27%) - Workers and Shop assistant (9.72%) Skilled agr. (8.34%)-	Legislators, senior off. and managers (8.95%) - Professionals(11.18%) Tech. and ass. professionals (13.6%) - Clerks (11.28%) - Workers and Shop assistant (8.62%) Skilled agr. (6.24%)-	Legislators, senior off. and managers (6.63%) - Professionals (12.69%) Tech. and ass. professionals (16.93%) - Clerks (7.53%) - Workers and Shop assistant (9.80%) Skilled agr. (7.07%)-
transfers	Occupation	Legislators, senior off. and managers (7.6%) - Professionals(8.08%) Tech. and ass. professionals (10.15%) - Clerks (10.27%) - Workers and Shop assistant (9.72%) Skilled agr. (8.34%)- Craft w. (17.21%)	Legislators, senior off. and managers (8.95%) - Professionals(11.18%) Tech. and ass. professionals (13.6%) - Clerks (11.28%) - Workers and Shop assistant (8.62%) Skilled agr. (6.24%)- Craft w. (16.71%)	Legislators, senior off. and managers (6.63%) - (6.63%) - Professionals(12.69%) Tech. and ass. professionals (16.93%) - Clerks (7.53%) - Workers and Shop assistant (9.80%) Skilled agr. (7.07%)- Craft w. (14.61%)
transfers	Occupation	Legislators, senior off. and managers (7.6%) - Professionals (8.08%) Tech. and ass. professionals (10.15%) - Clerks (10.27%) - Workers and Shop assistant (9.72%) Skilled agr. (8.34%)- Craft w. (17.21%) Plant and machine operators (12.01%)	Legislators, senior off. and managers (8.95%) - Professionals(11.18%) Tech. and ass. professionals (13.6%) - Clerks (11.28%) - Workers and Shop assistant (8.62%) Skilled agr. (6.24%)- Craft w. (16.71%) Plant and machine operators (10.48%)	Legislators, senior off. and managers (6.63%) - Professionals(12.69%) Tech. and ass. professionals (16.93%) - Clerks (7.53%) - Workers and Shop assistant (9.80%) Skilled agr. (7.07%)- Craft w. (14.61%) Plant and machine operators (11.28%)
transfers	Occupation Dual earners	Legislators, senior off. and managers (7.6%) - Professionals(8.08%) Tech. and ass. professionals (10.15%) - Clerks (10.27%) - Workers and Shop assistant (9.72%) Skilled agr. (8.34%)- Craft w. (17.21%)	Legislators, senior off. and managers (8.95%) - Professionals(11.18%) Tech. and ass. professionals (13.6%) - Clerks (11.28%) - Workers and Shop assistant (8.62%) Skilled agr. (6.24%)- Craft w. (16.71%)	Legislators, senior off. and managers (6.63%) - (6.63%) - Professionals(12.69%) Tech. and ass. professionals (16.93%) - Clerks (7.53%) - Workers and Shop assistant (9.80%) Skilled agr. (7.07%)- Craft w. (14.61%)

Source: elaboration on EU-SILC 2007, 2010, 2012 cross sectional data.

Table A2. Households' characteristics by prevailing income source

	Tuble Az. Households Characteristics by prevailing income source								
	gender	68.13% (men headed) -	66.13% (men headed) -	65.56% (men headed) -					
	gender	31.87% (femen headed)	33.87% (femen headed)	34.44% (femen headed)					
	age	41	42	42					
		less than secondary edu (18.94%) -	less than secondary edu (17.67%) -	less than secondary edu (15.46%) -					
Wage	education	secondary edu (44.92%) -	secondary edu (45.1%) -	secondary edu (45.7%) -					
wage		third level edu (36.14%)	third level edu (37.23%)	third level edu (38.84%)					
		Married or consensual union	Married or consensual union	Married or consensual union					
	Marital	(52.43%) -	(47.45%) -	(46.62%) -					
	status	Separated (2%)-	Separated (1.88%)-	Separated (2.31%)-					
		Divorced (10.25%) -	Divorced (11.31%) -	Divorced (11.17%) -					

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		Widowed(1.91%)-	Widowed(2.14%)-	Widowed(2.14%)-
		Never married (33.41%)	Never married (37.22%)	Never married (37.76%)
		Legislators, senior off. and	Legislators, senior off. and	Legislators, senior off. and
		managers (6.29%) -	managers (6.62%) -	managers (5.18%) -
		Professionals(15.74%)	Professionals(15.69%)	Professionals(18.13%)
		Tech. and ass. professionals	Tech. and ass. professionals	Tech. and ass. professionals
		(19.68%) -	(19.66%) -	(22.74%) -
		Clerks (11.13%) -	Clerks (11.74%) -	Clerks (7.44%) -
	Occupation	Workers and Shop assistant (9.70%)	Workers and Shop assistant	Workers and Shop assistant (9.73%)
		Skilled agr. (1.12%)-	(10.89%) -	Skilled agr. (1%)-
		Craft w. (16.84%)	Skilled agr. (1.13%)-	Craft w. (15.62%)
		Plant and machine operators	Craft w. (15.35%)	Plant and machine operators
		(11.12%)	Plant and machine operators	(12.46%)
		Elementary occupations (8.38%)	(10.84%)	Elementary occupations (7.70%)
	Dual		Elementary occupations (8.09%)	
	earners	50.9%	50.5%	50.2%
	carriers	68.92% (men headed) -	66.8% (men headed) -	66.43% (men headed) -
	gender	31.08% (femen headed)	33.2% (femen headed)	33.57% (femen headed)
	age	42	42	43
	3-	less than secondary edu (20.17%) -	less than secondary edu (18.65%) -	less than secondary edu (16.30%) -
	education	secondary edu (44.51%) -	secondary edu (44.81%) -	secondary edu (45.40%) -
		third level edu (35.32%)	third level edu (36.55%)	third level edu (38.20%)
		Married or consensual union	Married or consensual union	Married or consensual union
		(54.74%) -	(49.7%) -	(49.05%) -
	Marital	Separated (2%)-	Separated (1.9%)-	Separated (2.26%)-
	status	Divorced (9.43%) -	Divorced (10.6%) -	Divorced (10.54%) -
		Widowed(1.99%)-	Widowed(2.20%)-	Widowed(2.14%)-
		Never married (31.81%)	Never married (35.61%)	Never married (36.01%)
Labor			Legislators, senior off. and	Legislators, senior off. and
income		Legislators, senior off. and	managers (8.04%) -	managers (5.57%) -
income		managers (7.65%) -	Professionals(15.88%)	Professionals (17.93%)
		Professionals(15.72%)	Tech. and ass. professionals	Tech. and ass. professionals
		Tech. and ass. professionals (18.7%)	(19.11%) -	(21.58%) -
		Clerks (10%) -	Clerks (10.58%) -	Clerks (6.85%) -
	Occupation	Workers and Shop assistant (9.42%)	Workers and Shop assistant	Workers and Shop assistant
		Skilled agr. (2.92%)-	(10.51%)	(10.13%) -
		Craft w. (17.31%)	Skilled agr. (2.34%)-	Skilled agr. (2.97%)-
		Plant and machine operators	Craft w. (16.03%)	Craft w. (16.3%)
		(10.35%)	Plant and machine operators	Plant and machine operators
		Elementary occupations (7.92%)	(10.02%)	(11.6%)
			Elementary occupations (7.5%)	Elementary occupations (7.09%)
	Dual	F2 C0/	F2 20/	F2 20/
	earners	52.6%	52.3%	52.2%
	gender	46.36% (men headed) -	50.19% (men headed) -	51.65% (men headed) -
		53.64% (femen headed) 56	49.81% (femen headed) 55	48.35% (femen headed) 56
	age	less than secondary edu (42.67%) -	less than secondary edu (38.9%) -	less than secondary edu (35.11%) -
	education	secondary edu (42.07%) -	secondary edu (35.31%) -	secondary edu (37.62%) -
	caacation	third level edu (22.64%)	third level edu (25.79%)	third level edu (27.27%)
		Married or consensual union	Married or consensual union	Married or consensual union
		(30.47%) -	(34.36%) -	(33.8%) -
	Marital	Separated (3.59%)-	Separated (2.99%)-	Separated (3.38%)-
	status	Divorced (10.95%) -	Divorced (11.72%) -	Divorced (13.35%) -
	5.0.5	Widowed(29%)-	Widowed(22.77%)-	Widowed(22.4%)-
		Never married (26%)	Never married (28.15%)	Never married (27.07%)
Capital		Legislators, senior off. and	Legislators, senior off. and	· · ·
income		managers (11.53%)	managers (14.78%) -	Legislators, senior off. and
		Professionals(9.92%)	Professionals(10.44%)	managers (6.17%) -
		Tech. and ass. professionals	Tech. and ass. professionals	Professionals(13.06%)
		(12.12%)	(13.88%) -	Tech. and ass. professionals
		Clerks (11.26%) -	Clerks (9.44%) -	(14.64%) -
	Occupation	Workers and Shop assistant	Workers and Shop assistant	Clerks (8.09%) -
		(12.93%) -	(12.24%) -	Workers and Shop assistant (17.50%) -
		Skilled agr. (5.96%)-	Skilled agr. (7.65%)-	
		Craft w. (13.62%)	Craft w. (14.05%)	Skilled agr. (8%)- Craft w. (11.52%)
		Plant and machine operators	Plant and machine operators	Plant and machine operators (7.2%)
	i l	(6.99%)	(6.89%)	
			, , ,	Flementary occupations (13 81%)
		Elementary occupations (15.67%)	Elementary occupations (10.68%)	Elementary occupations (13.81%)
	Dual		, , ,	Elementary occupations (13.81%) 20.8%

	earners			
		58.43% (men headed) -	53.85% (men headed) -	54.64% (men headed) -
	gender	41.57% (femen headed)	46.15% (femen headed)	45.36% (femen headed)
	age	58	59	59
		less than secondary edu (27.68%) -	less than secondary edu (33.01%) -	less than secondary edu (30.87%) -
	education	secondary edu (37.90%) -	secondary edu (37.32%) -	secondary edu (39.17%) -
		third level edu (34.42%)	third level edu (29.67%)	third level edu (29.96%)
		Married or consensual union	Married or consensual union	Married or consensual union
		(44.46%) -	(40.67%) -	(36.45%) -
	Marital	Separated (2.63%)-	Separated (1.35%)-	Separated (1.56%)-
	status	Divorced (9.22%) -	Divorced (12.39%) - Widowed(24.77%)-	Divorced (13.07%) -
		Widowed(21.65%)- Never married (22.03%)	Never married (20.82%)	Widowed(26.25%)- Never married (22.67%)
Capital		Never married (22.03%)	Never married (20.82%)	Legislators, senior off. and
income		Legislators, senior off. and	Legislators, senior off. and	managers (7.61%) -
restricted		managers (21.35%) -	managers (21.32%) -	Professionals(14.38%)
		Professionals(15.25%)	Professionals(13.61%)	Tech. and ass. professionals
		Tech. and ass. professionals	Tech. and ass. professionals	(17.49%) -
		(14.16%) -	(16.01%) -	Clerks (10.11%) -
	Occupation	Clerks (11.73%) -	Clerks (8.99%) -	Workers and Shop assistant
		Workers and Shop assistant (8.85%)	Workers and Shop assistant (7.7%) -	(17.76%) -
		Skilled agr. (6.36%)-	Skilled agr. (10.2%)-	Skilled agr. (10.13%)-
		Craft w. (11.52%)	Craft w. (11.9%)	Craft w. (9.11%)
		Plant and machine operators	Plant and machine operators	Plant and machine operators
		(3.36%)	(5.64%)	(5.06%)
		Elementary occupations (7.42%)	Elementary occupations (4.62%)	Elementary occupations (8.33%)
	Dual			, , ,
	earners	22.1%	27.2%	23.7%
	gender	54.99% (men headed) -	55.15% (men headed) -	54.97% (men headed) -
	gender	45.01% (femen headed)	44.85% (femen headed)	45.03% (femen headed)
	age	64	64	64
		less than secondary edu (45.45%) -	less than secondary edu (45.81%) -	less than secondary edu (43.22%) -
	education	secondary edu (34.22%) -	secondary edu (34.74%) -	secondary edu (36.14%) -
		third level edu (20.33%)	third level edu (19.45%)	third level edu (20.64%)
		Married or consensual union	Married or consensual union (38%) -	Married or consensual union
	Non-stant	(41.67%) -	Separated (1.92%)-	(38.56%) -
	Marital	Separated (1.75%)-	Divorced (12.01%) -	Separated (1.98%)-
	status	Divorced (10.8%) - Widowed(28.96%)-	Widowed(29.77%)-	Divorced (12.45%) - Widowed(29.16%)-
		Never married (16.82%)	Never married (18.31%)	Never married (17.85%)
		Legislators, senior off. and	Legislators, senior off. and	Legislators, senior off. and
State		managers (6.51%) -	managers (7.41%) -	managers (5.32%) -
transfers		Professionals(9.9%)	Professionals(10.16%)	Professionals(11.78%)
		Tech. and ass. professionals	Tech. and ass. professionals	Tech. and ass. professionals
		(13.42%) -	(13.33%) -	(16.28%) -
		Clerks (11.41%) -	Clerks (11.12%) -	Clerks (7.47%) -
	Occupation	Workers and Shop assistant	Workers and Shop assistant	Workers and Shop assistant
	-	(10.37%) -	(10.86%) -	(11.41%) -
		Skilled agr. (6.88%)-	Skilled agr. (5.63%)-	Skilled agr. (6.30%)-
		Craft w. (16.22%)	Craft w. (16.21%)	Craft w. (14.34%)
		Plant and machine operators	Plant and machine operators	Plant and machine operators
		(10.49%)	(10.66%)	(12.19%)
		Elementary occupations (14.8%)	Elementary occupations (14.61%)	Elementary occupations (14.91%)
	Dual			
			II	

Source: elaboration on EU-SILC 2007, 2010, 2012 cross sectional data.