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Self-employment Incidence, Overall Income Inequality and Wage Compression

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Abstract

This paper uses the European Community Household Panel (ECHP) to analyse the impact of self-employment incidence on income inequality in the European countries (EU15). We show that on average self-employed workers earn more than employees in most countries but that this result is reversed once we control for workers personal characteristics and working time. Our analysis confirms that self-employed worker and households whose main source of income is self-employment are characterized by higher income inequality and by a slightly higher income volatility over time. We show that greater income variability together with significant cross-country differences in its incidence make self employment responsible for a significant part of the observed cross-country differences in income inequality.

Moreover we find evidence of under-representation of self-employment in the ECHP relative to the Eurostat Labour Force Survey, with a significant impact on measured inequality.

Last we test the hypothesis that the incidence of self-employment might partially depend on the distribution of income among employees. Namely we test the hypothesis that a compressed wage distribution might create incentives to quit paid employment at the top of the distribution and to underbid high minimum wages at the bottom by offering services as self-employed. Some preliminary supportive evidence for such hypothesis was found by means of country-panel regressions.

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1. Introduction: the relevance of self-employment in studying income inequality

In spite of a resurgence of interest in the last decade, self-employment remains a largely unexplored aspect of the labour market. Lack of appropriate data, extreme heterogeneity of self-employment activities and possibly some shortfalls in the available theories make indeed quite hard to pin down the role of self-employment in the labour market. In the field of income inequality analysis, these problems are exacerbated by the quality of the information on income and unsolved problems of definition due to the multiple roles of self-employed workers as entrepreneurs, investors and workers in their own business.

Yet, self-employment rates show great cross-country variation with potentially important effects on the actual functioning of the labour market and on the determination of the distribution of income across workers and households. Attempts to explain such marked cross-country differences have been only partially successful (Parker and Robson 2004, Torrini, 2005). Several papers have observed that cross-country differences are related to the level of development of different countries, with a clear negative association between self-employment and per capita GDP. However per capita GDP cannot explain the entire observed variability, which also likely depends on institutional factors that affect a worker's choice between paid employment and self-employment: taxation and tax law enforcement, together with the size of the public sector seem to be important factors in determining self-employment incidence.

Whatever their determinants, given that self-employment income tends to be much more dispersed than paid-employment earnings, differences in self-employment incidence likely explain part of the differences observed in cross-country comparisons of income inequality.

Following this simple idea, the limited objective of this paper is to assess its empirical relevance by analysing the impact of self-employment on the distribution of income across EU15 European countries. In the last part of the paper we also investigate the link between the self-employment incidence and the distribution of income among employees: the hypothesis we test is that a compressed wage distribution could induce workers at the top of earning distribution to leave paid employment and those at the bottom to underbid high minimum wages by offering their services as self-employed.

For convenience the analysis is conducted with the data of the European Community Households Panel.

In section 2 we present a brief discussion of the differences observed in self-employment incidence across European countries, contrasting Eurostat Labour Force Survey and ECHP data, showing how the ECHP tends to under-represent the incidence of self-employment, in a particularly severe way in some countries. In section 3 we describe the incidence of self-employment income in the ECHP survey both for workers and families. In section 4 we analyse differences in mean and median income and income inequality between employees and self-employed individuals. We also compare households whose main source of income is paid employment and households whose main source is self-employment. In this section we show how observable characteristics of workers entirely explain the observed higher earnings of self-employed workers in most countries, and we confirm previous evidence showing that the inequality of income among workers and household living on self employment is higher than that of employees and households living with predominantly wage or salary income. In section 5 we assess the relevance of self-employment incidence in determining income inequality differences across European countries by a counter-factual experiment where we contrast the mean log deviation computed on actual data with the same indicator computed by modifying the incidence of self-employment. In this way we are able to assess both the relevance of the under-representation of self-employment in the ECHP survey and the impact of the actual differences in self-employment rates across countries. We find sizeable effects in both cases, showing the critical role self-employment plays as a determinant of income inequality and the importance of accurately measuring self-employment in income surveys. In section 6 we explore the hypothesis that self-employment incidence might be related to the degree of wage compression among employees, finding some supportive evidence from panel analysis of data across countries. Section 7 concludes.

2. Self-employment rates in Europe

Self-employment rates in EU-15 show great cross-country variability, only partially explained by the still sizable differences in per-capita GDP² and in the size of the

² The negative correlation between self-employment rates and per capita GDP is a robust one, although its interpretation is not clear-cut. It has been argued that it is a proxy for capital intensity, but it could also reflect other economic characteristics linked to the degree of development.

agriculture sector, where self-employment plays everywhere an important role. Tab. 1 shows that southern European countries, especially Greece, Italy and Portugal have the higher rates, while northern and continental European countries like Denmark, France, Luxembourg and Sweden show the lowest self-employment rates.

Differences in industry composition cannot explain the remarkable variability that remains once we restrict the analysis to the non-agriculture sector. Table 2 from Torrini (2005) compares actual and theoretical self-employment rates computed assuming the same industry composition across countries (the EU15 composition). Differences between the two measures are indeed small and do not contribute to a reduction in the cross-country variability.

In the ECHP dataset differences are of course as big as in the Labour Force Survey, however self-employment is definitely under-represented in many countries. Defining self-employment according to workers' main source of income and comparing data for the 2001 wave with Eurostat Labour Force Survey it is apparent that in many countries the self-employment rate computed from the ECHP is much lower than that computed from the Labour force survey.

Differences are particularly high in some central and northern European countries like Belgium, the Netherlands, Luxembourg and Sweden and, to a lesser extent, Portugal and Ireland. In some countries self-employment incidence measured with Labour Force Survey data is twice or even three times as much as in the ECHP.

At this stage we do not know what might be the explanation for such discrepancies, but they can be of major importance in determining cross-country differences in income inequality.

3. Incidence of self-employment earnings on households income

As shown in Table 4, according to the ECHP panel, self-employment in 2001 was the main source of income for a large share of households in Greece (20 per cent), Italy (14 per cent) and Ireland, Spain and Portugal (from 10 to 12 per cent). In another group of countries this share was in a range from 5 to 6 per cent (Finland, France, Germany, UK, Austria) and it was 3 per cent or less in another group (Sweden, the Netherlands, Luxembourg, Belgium).

Table 5 shows that the share of income of these households is generally larger than their incidence on total households; this is not the case however for Greece, the Netherlands,

Portugal and Sweden, where average income of self-employed workers is much lower than that of employees.

Restricting the sample to households living on labour income, self-employment is the main source of income for one third of Greek households, almost one-fifth of the Italian households and 17 per cent of Spanish and Portuguese households. These data are more or less in line with the self-employment rates computed over individual workers reported in previous section.

A much larger share of households report some self-employment income. Only in the Netherlands and Luxembourg households with some self-employment income represent less than 10 per cent of total households.

4. Description of individual and household income inequality

It is quite well known from country specific studies and cross-country analysis that cross-sectional income dispersion tends to be higher for self-employed workers than for employees (Hamilton 2000, Moore, 2004 and Sullivan and Smeeding, 1997). The ECHP database largely confirms this evidence for all of the 15 European countries included in the dataset.

We analyse the annual labour income distribution of the two kinds of workers, defining them according to the main source of annual personal income.

Average annual income tends to be higher for both male and female self-employed workers (Tables 7, 8). In 2001 mean income was higher for self-employed men than for employees in 12 out of 15 countries . For women this holds true in 10 of the countries. There are a few cases for men, and much more for women, in which the ranking according to the mean and the median do not coincide due to fatter right tails in the income distributions of self-employed income.

The apparent positive income differential in favour of self-employed workers is however largely explained by greater hours worked and personal characteristics. Running country specific log-income regressions on potential experience, education level dummies, months worked and usual hours, a dummy denoting self-employment condition turns to be negative in each country, both for men and women (Table 9). Running quantile regressions (Table 9), the same results holds for the median and 25th percentile (the parameter is larger in this case) but it is reversed in a number of countries for the 75th percentiles. These results are consistent with previous findings showing that

self-employed workers are over-represented both at the top and the bottom of the unconditional income distribution. We have shown here that this holds true conditioning on their personal characteristics.

At this stage it is hard to say if the negative mean income differential for self-employed workers is a statistical phenomenon due to problems of income under-reporting or a true economic fact.

In Tables 10, 11, 12 and 13 we report a set of indicators both for male and female workers for the entire economy and for the non-agricultural sector, measuring income inequality in the two groups. It turns out that for both male and female workers the earnings distribution of self-employed workers is more unequal than that of employees. In 2001 the simple cross-country mean of the Gini coefficient was equal to 43 for self-employed male workers and equal to 30 for paid male employment. Similar results are obtained for female workers (48 versus 33). In every single country the Gini coefficient for employees is lower than that for self-employed, both for men and women. These findings hold true when we restrict the analysis to the non agricultural sector.

Decile ratios show that self-employed earnings are much less compressed than employees' income: the 10-to-50 ratios in most countries tends to be higher for employees whereas the 90-to-50 ratio is on average much higher for self-employed workers, both for male and female workers.

Some of the differences in income inequality between employees and self-employed workers may be the result of higher self-employment income volatility instead of the outcome of more unequal permanent income. Exploiting the panel dimension of the ECHP we test this hypothesis by comparing measures of income inequality for men computed on a single year to the same measures computed on average income over the period 1999-2001 (Table 14). Although differences are not large, the ratio of the Gini index of self-employed to employees computed on average income is lower than the ratio of the means of the index computed in each year for most countries. Similar indications can be drawn by comparing the percentile ratios.

Moving to the income of households whose main source is labour income, the results are quite similar. In most countries mean equivalent income is higher for self-employment, both considering only labour income and total income (Tables 15 and 16). Turning to earnings dispersion, household income follows the same patterns we observed for individuals (Tables 17 and 18). Family earnings are more dispersed for households with self-employed income as main source. The differences in Gini

coefficients between self-employment and paid employment are of similar magnitude for households and individuals. Considering household total income, the Gini coefficient is lower, but differences between self-employment and paid employment are similar to those computed by analysing work income.

5 Counter-factual analysis

In previous sections we have documented significant cross-country differences in self-employment rates and sizeable differences in earnings inequality between employment sectors. The difference by sector hold both for self-employed workers versus employees and for households whose main source of income is wages and salaries versus those with primarily self-employment income.

Moreover we have detected significant negative differences in the incidence of self-employment between the ECHP survey and the Labour Force Survey, which could affect the estimates of inequality based on the ECHP.

In this section we carry out counter-factual experiments aimed at evaluating the relevance of these factors in determining differences in overall income inequality.

Two exercises are conducted. In the first we examine the downward bias in measured income inequality due to the under-representation of self-employment in the ECHP survey. In the second, we measure the impact on income inequality of differences in the self-employment incidence by comparing the actual mean log wage deviation with that computed assuming the same self-employment rate across countries.

The measure of inequality we choose in this exercise is the mean logarithmic deviation:

$$(1) \quad L = -\frac{1}{n} \sum_{i=1}^n \log(y_i / \mu),$$

where y indicates income of unit i , μ is the average income and n is the number of units. Considering a population composed of several groups, this indicator can be exactly decomposed into a “within” component measuring inequality inside each group, L^W , and a “between” component, L^B , which measures the distance between the groups. Namely:

$$(2) \quad L = L^W + L^B = \sum_{k=1}^K w_k L_k - \sum_{k=1}^K w_k \log(\mu_k / \mu),$$

where w_k , μ_k , L_k are the share in population, the average income, and the mean logarithmic deviation of each group k , respectively.

This property of the mean-log deviation allows us to simulate the impact of changes in the workers and household composition on wage inequality³. In doing this we assume that the within inequality and the mean income in each group is not affected by the changes in composition⁴. This is a strong assumption, especially if we believe that the composition of employment might react to changes in income distribution within and across groups, a possibility we examine later.

5.1 Individual income inequality

We first look at the individuals' inequality considering only those whose main source of income is labour, distinguishing between individuals in paid employment and individuals in self-employment.

Column one of table 19 reports the actual values of the indicator; in column two we report the value of the indicator obtained by replacing the weights w_k , computed with the ECHP data, with the weights computed with the Labour Force Survey, w_k^l , and by replacing the total mean μ with $\mu^l = \sum_{k=1}^K w_k^l \mu_k$, namely we compute:

$$(3) \quad L_2 = \sum_{k=1}^K w_k^l L_K - \sum_{k=1}^K w_k^l \log(\mu_k / \mu^l)$$

In column 3 we report the indicator obtained assuming for each country the average self-employment rate in the Labour Force Survey data, \bar{w} , and replacing the mean income with $\mu^{l2} = \sum_{k=1}^K \bar{w} \mu_k$. Namely:

$$(4) \quad L_3 = \sum_{k=1}^K \bar{w} L_K - \sum_{k=1}^K \bar{w} \log(\mu_k / \mu^{l2})$$

From this exercise it turns out that employment composition is quite an important factor in determining cross country inequality differences.

³ This approach was followed by Brandolini and D'Alessio (2003) to analyse the impact of changing household demographic structure on income inequality in Italy.

⁴ It should be noticed however that the overall mean is affected by the employee-self-employed composition.

We first analyse the impact of the under-representation of self-employment in the ECHP survey by comparing L in column one (the actual indicator) with L2 in column two (the indicator computed by assuming the labour force survey self-employment rates). In Figure 1 we plot these deviations on the actual values of the indicator. The highest deviation from the actual one is for Belgium (18.8 per cent), where the under representation is particularly important (actually Belgium seems to be an outlier). We also find sizeable deviations for other countries: 8-9 per cent for Portugal and Sweden, 5 per cent for Denmark, Ireland and the Netherlands. From this exercise we thus conclude that the estimate of individual income inequality is seriously affected by the under-representation of self-employment in the ECHP survey.

Taking the Labour Force Survey as the correct benchmark, we then move to evaluate the impact of cross-country differences in employment composition on individuals' income inequality. Thus we compare L2, the indicators computed assuming the country specific composition as estimated in the Labour Force Survey with L3, obtained by imputing to every country the average EU employment composition. As shown in column 6, the impact is sizable for southern European countries, where this would reduce the indicator by about 10 per cent in Italy and Portugal, and by 6.6 per cent in Greece; the impact is somewhat smaller for northern European countries, where the indicator would rise by 4-6 per cent in Sweden, the Netherlands, Denmark and Austria. Comparing L3 to L, namely the mean log deviation obtained by imposing the EU average employment composition with the original one obtained from ECHP we cumulate the impact of self-employment under-representation in ECHP and genuine cross-country differences in the self-employment rates. In Figure 3 we plot the percentage differences between the two $((L3/L-1)*100)$ on L. Apart from the case of Belgium, Italy and Greece, this correction tends to reduce the cross country differences in income inequality.

5.2 Household income

A similar exercise can be conducted on household income. The household is indeed the standard observation unit for income inequality analysis. Following this literature we consider total income for both households living on work earnings, "labour households", and for households whose main source are pension and benefits earnings,

“pension households”. Figure 4 shows that total household income inequality and self-employment incidence are strongly correlated indeed.

The Labour Force Survey does not provide us with a measure of self-employment incidence for households. However to conduct our counter-factual analysis we can obtain an estimate of it by the following procedure. First with the ECHP data we compute for each country the ratio of the share of households with self-employment as main source to the share of individuals in self-employment, S^f/S^i , then we multiply it by the self-employment rate estimated with the Labour Force Survey data. Thus the counter factual shares of households with self-employment as the main source of income are given by :

$$(4) \quad \phi_k^f = \left(\frac{S^f}{S^i} \right)_k (\zeta_k),$$

where ζ is the self-employment rate computed with Labour Force Survey data.

The average self-employment incidence for the EU15 is computed as a weighted average of the above measure:

$$(5) \quad \bar{\phi}^f = \phi_k^f p_k,$$

where p is the weight of country k .

Once we obtain the counter-factual shares of households whose main source of income is self-employment, we correct the mean log deviations as we did above for individuals. However, we only change the composition between “self-employment households” and “paid-employment households”, leaving unchanged the some of their shares of total households. Namely we do not change the composition between “labour households” and “pension and subsidies households”.

Table 20 reports the results of these exercises. In interpreting the results it is important to bear in mind that over one-fourth of households in all countries live on public transfers, either pensions or subsidies, so that the role of labour income is much lower than in the previous exercise. Moreover we are only able to change the employment composition as we do not have information to correct the composition of retired people whose income and income inequality depends on the distribution of income they earned when they were active in the labour market. In spite of that our counter-factual exercises show that the employment composition has a quite relevant impact on overall household income inequality. Changing the self-employment incidence according to equation (4) drives a rise of the indicator in all countries. Apart from the outlying case of Belgium,

the largest impact are observed for Portugal (9 per cent rise) and Ireland, Denmark and Sweden (4-5 per cent rise).

If we impute to each country the same EU average self-employment incidence, correcting for both self-employment under-representation and genuine differences in the self-employment rates, we observe positive changes of around 14 per cent in Denmark and Sweden and negative changes of 5-6 per cent in Italy and Greece.

These are sizeable changes in the income inequality index; however the correlation between overall households inequality and self-employment rates observed in Figure 4 remains, although weaker, even after correcting for differences in the incidence of self-employment (Figure 8). This could be just a spurious correlation or the result of some correlation between self-employment incidences and income inequality among retirees. The last however is not apparent in the data.

6 Self-employment and wage compression

In the previous sections we have implicitly assumed that there is no correlation between the distribution of income and the incidence of self-employment. In our counter-factual experiments we have altered the composition of individuals and households living on labour income, leaving the mean income and its distribution within each group unchanged. However, there are reasons to believe that the share of self-employed people could react to the structure of the earnings distribution.

In particular we now examine the hypothesis that a compression employees' earnings distribution, possibly due to institutional arrangements like the minimum wage or to trade unions' wage setting policy, could spur self-employment. At the bottom of earning distribution unemployed workers may want to underbid too high minimum wages by offering their services as self-employed; at the top of the earning distribution talented workers may want to earn more by quitting paid employment if top wages are lower than what they can earn in their own business.

These are more than theoretical hypotheses: in Italy where self-employment represents more than one fourth of total employment, in the policy debate it has been argued that some forms of self-employment arrangements are just disguised forms of paid employment conceived to pay lower social contributions and lower minimum wages.

In principle this hypothesis can be tested by correlating measures of wage inequality and self-employment rates across countries. This is what we try in this section although

we already know from the studies on cross-country analysis of self-employment that, apart from the strong negative correlation with per-capita GDP, it is particularly difficult to pin down robust correlations between self-employment rates and explanatory factors. Multicollinearity problems and potentially complex relations between institutional factors make this kind of analysis particularly challenging. In Torrini (2005), for instance, we hypothesized that the relationship between self-employment and tax rates could be negative in country where the tax legislation is firmly enforced and positive in countries where tax evasion is more tolerated. In this context, similar mechanisms could apply.

In any case we have considered the correlation between self-employment rates and employees income inequality, limiting our analysis to male workers in the non-agricultural sector in order to prevent trends in women participation and agricultural sector decline from affecting our results. Although from cross-country analysis it was not possible to find any meaningful relation between the two variables we have obtained some encouraging results in country panel regressions, where we exploit the time dimension to control for country fixed effects.

In Table 21 we report the results of the within regression of the log of the male self-employment rate on several measures of income inequality among employees, controlling for time effects and the unemployment rate. Consistent with our hypothesis, the self-employment rate tends to decline when employees income distribution becomes less compressed. The Gini coefficient for monthly wages of employees based on questions on yearly earnings and months worked turn out to be more significant than that computed for hourly wages based on questions on usual monthly wages and hours worked. When the self-employment rate is regressed on the percentile ratios (10 to 50 and 90 to 50) the results have the expected positive sign for the 10 to 50 ratio and the expected negative one for 90 to 50 ratio, but only the last one turns out to be significant. This seems to indicate that our results are driven by the right tail of the income distribution, supporting the hypothesis that self-employment is spurred by people looking for higher earnings when the employee wage distribution is too compressed.

The same kind of results are obtained when we replace the self-employment rate with the incidence of relatively rich and relatively poor self-employed workers on total employment. The thresholds to define poor and rich self-employed are set at the 25th and 75th percentiles of the self-employed income distribution (monthly earnings). Tables 22, 23, and 24 confirm the relation we found between self-employment incidence and

measures of employees wage inequality. The explicative power of the regressors is also quite similar. The incidence of both the rich and poor self-employed seems to react to the Gini coefficient for employees, but the 10 to 50 employees ratio is never significant, although it is of the right sign.

These results are far from conclusive as they could be the result of an accidental time co-movement of the dependent and explicative variables, not fully removed by our controls. However we consider them quite encouraging for future research.

7. Conclusions

From the analysis conducted on the ECHP database, self-employed workers and households whose main source of income is self-employment tend to earn more than workers and households whose main source is paid employment. This holds true for most countries, however, once we control for hours worked and measured personal characteristics it turns out that in all EU15 countries self-employed workers earn less than employees. This differential is reversed in some countries for the right tail of the distribution; it essentially eliminated for several other countries. This result could be due to compensating differentials, given that a risk premium effect should operate in the opposite direction. This evidence could also depend on income under-reporting, a notorious problem in the measurement of self-employed earnings.

Confirming the existing literature, self-employed workers also show greater income inequality in all EU15 countries; this holds true for both workers and households. This evidence together with the great variability of self-employment incidence across countries implies that some of the cross-country variability in income inequality can be attributed to differences in self-employment rates. To assess the relevance of this factor in explaining differences in income inequality we have carried out several counterfactual experiments where we compared the actual mean log deviation index with the index computed by modifying the incidence of self-employment. Our results show that changes in self-employment rates can prompt relevant changes in income inequality. As a by-product of this analysis, we have also shown that the under-representation of self-employment in the ECHP database is responsible for a significant downward bias in measures of income inequality in a number of countries.

Last, our attempts to find a link between the structure of wage distribution and the incidence of self-employment found some empirical support from panel regressions

where the incidence of self-employed turns out to be negatively linked to income dispersion among employees.

References

Brandolini A. G. D'Alessio (2003), *Household Structure and Income Inequality* in Del-Boca and M. Repetto-Alaia (editors), *Women's Work, the Family & Social Policy*, Peter Lang..

Hamilton, B. (2000), *Does Entrepreneurship Pay? An Empirical Analysis of the Returns to Self-employment*, *Journal of Political economy*, 108, pp. 604-6032.

Moore K. (2004), *Comparing the Earnings of Employees and the Self-employed*, paper presented at the SOLE (2005) conference in S. Francisco.

Parker S. C., M. T. Robson (2004), *Explaining International Variations in Self-employment*, *Southern Economic Journal*, 71, pp. 287-301

Sullivan D., T. Smeeding (1997), *All the World's Entrepreneurs: the Role of Self-employment in Nineteen Nations*, Luxembourg income studies working paper n. 163.

Torrini R. (2005), *Cross-country Differences in Self-employment Rates: the Role of Institutions*, *Labour economics*, 12, pp. 661-683.

Table 1: Self-employment rates
(whole economy)

Countries	Rates
Austria	13.1
Belgium	15.0
Denmark	9.0
Finland	12.5
France	10.7
Germany	12.3
Greece	36.4
Ireland	17.4
Italy	27.1
Luxembourg	8.0
Portugal	25.7
Spain	18.1
Sweden	10.6
The Netherlands	12.6
United Kingdom	13.0

Source: Eurostat, *Labour Force Survey*

Table 2: Actual and theoretical self-employment rates in non farm-sectors

	Self-employment rate 1998	Theoretical self-employment rate ¹	Difference
EU-15	14.2	14.2	0.0
EUR-11	14.5	14.7	-0.1
AUT	8.8	8.5	0.3
BEL	16.0	16.7	-0.7
DEU	9.9	10.4	-0.5
DNK	7.9	8.0	-0.1
ESP	19.7	18.1	1.7
FIN	9.9	10.2	-0.3
FRA	9.8	10.3	-0.5
GBR	12.0	11.7	0.3
GRC	32.1	30.1	2.0
IRL	14.1	13.2	0.9
ITA	26.6	27.1	-0.4
LUX	7.8	7.8	0.0
NLD	10.1	8.8	1.3
PRT	20.1	19.1	1.0
SWE	9.6	10.1	-0.5

Sources: Eurostat, own calculations.

¹Theoretical values are computed assuming the European average employment sector composition according to the following:

$$SS_{.j} = \sum_i \frac{S_{ij}}{E_{ij}} \frac{E_{ie}}{E_{.e}}$$

where i , is the sector, j the country, e is the European average, S is the number of self-employed, E is total employment, SS is the self-employment rate.

Table 3: Self-employment rates
(whole economy net of unpaid family workers)

Country	ECHP	Eurostat	Difference
Austria	9.6	10.8	1.2
Belgium	5.8	14	8.2
Denmark	4.5	8.2	3.7
Finland	8.2	12.9	4.7
France	8.2	10.1	1.9
Germany	9.6	10.1	0.5
Greece	30.7	32.4	1.7
Ireland	11.5	17.6	6.1
Italy	22.0	24.2	2.2
Luxembourg	4.8	8.9	4.1
Portugal	15.9	23.7	7.8
Spain	16.1	18.3	2.2
Sweden	4.4	10.6	6.2
The Netherlands	4.0	10.4	6.4
United Kingdom	9.2	11.3	2.1

Table 4: Household composition according to the main source of income in 2001

	Paid employment	Self-employment	Other private sources	Pensions and subsidies
Austria	60.7	4.9	1.6	32.8
Belgium	54.8	2.6	2.6	40.0
Denmark	65.3	3.2	0.7	30.7
Finland	59.2	4.9	1.2	34.6
France	56.9	5.6	1.8	35.8
Germany	52.9	6.0	2.1	39.0
Greece	40.5	20.1	3.0	36.4
Ireland	57.9	10.1	1.2	30.8
Italy	46.7	14.2	2.1	37.0
Luxembourg	62.9	2.8	1.3	33.0
Portugal	57.6	11.9	1.1	29.3
Spain	54.7	11.4	2.8	31.1
Sweden	58.8	1.8	0.4	38.9
The Netherlands	60.8	2.5	1.6	35.0
United Kingdom	52.3	5.4	2.5	39.8

Table 5: Equivalent income share of households classified according to the main source of income, 2001

	Paid employment	Self-employment	Other private sources	Pensions and subsidies
Austria	65.5	5.5	0.9	28.1
Belgium	58.0	6.5	5.4	30.1
Denmark	71.0	3.4	0.6	23.4
Finland	65.2	6.0	2.5	26.2
France	60.3	6.0	1.3	32.4
Germany	53.5	10.5	2.3	33.6
Greece	47.8	19.3	3.4	29.5
Ireland	65.6	14.0	1.2	19.2
Italy	49.1	16.1	1.9	32.9
Luxembourg	65.1	4.1	3.1	27.7
Portugal	62.9	11.8	1.9	23.4
Spain	60.2	12.9	3.0	23.8
Sweden	65.7	1.2	0.7	32.4
The Netherlands	63.2	0.6	1.5	31.9
UK	59.2	9.0	2.8	29.0

Table 6: Income share of households classified according to the main source of income, 2001

	Paid employment	Self-employment	Other private sources	Pensions and subsidies
Austria	72.7	6.2	0.7	20.4
Belgium	65.5	5.9	4.9	23.7
Denmark	76.2	3.7	0.5	18.1
Finland	69.6	7.2	2.5	20.8
France	66.1	7.1	1.0	25.8
Germany	61.5	9.6	2.1	26.8
Greece	52.5	22.3	2.7	22.5
Ireland	71.1	14.6	0.8	13.5
Italy	55.5	16.8	1.6	26.1
Luxembourg	70.6	4.4	2.2	22.7
Portugal	68.6	12.5	1.6	17.4
Spain	62.7	14.9	4.4	18.0
Sweden	70.6	1.3	0.7	27.4
The Netherlands	69.5	0.5	1.1	25.6
UK	65.3	8.5	2.4	23.8

Table 7: Men's mean and median income, in purchasing power parity terms

	Mean			Median		
	(1) Employees	(2) Self-emp.	Ratio 1/2	(1) Employees	(2) Self-emp.	Ratio 1/2
Austria	20018	19401	1.03	18057	14834	1.22
Belgium	21166	41140	0.51	19142	15631	1.22
Denmark	17561	21661	0.81	17133	17759	0.96
Finland	21447	23474	0.91	19796	17365	1.14
France	20334	25797	0.79	16967	18509	0.92
Germany	20137	31117	0.65	18784	21074	0.89
Greece	14385	13752	1.05	12698	10901	1.16
Ireland	16939	24973	0.68	15725	18281	0.86
Italy	15673	16959	0.92	14540	13809	1.05
Luxembourg	34440	46165	0.75	30388	44283	0.69
Portugal	12137	12671	0.96	8951	10841	0.83
Spain	16379	20554	0.80	13821	14309	0.97
Sweden	14586	7263	2.01	13771	5847	2.36
The Netherlands	19550	26298	0.74	18606	21493	0.87
United Kingdom	21127	21793	0.97	18703	17556	1.07

Table 8: Women's mean and median income, in purchasing power parity terms

	Mean			Median		
	(1) Employees	(2) Self-emp.	Ratio 1/2	(1) Employees	(2) Self-emp.	Ratio 1/2
Austria	13387	8463	1.58	12572	6192	2.03
Belgium	14047	20042	0.70	13382	12594	1.06
Denmark	13720	21998	0.62	14197	14325	0.99
Finland	16473	15019	1.10	16555	11547	1.43
France	14337	15568	0.92	13234	12821	1.03
Germany	12114	16016	0.76	11797	12441	0.95
Greece	9876	8722	1.13	9524	6561	1.45
Ireland	11007	12590	0.87	10577	8376	1.26
Italy	11735	12164	0.96	12173	9729	1.25
Luxembourg	20029	32068	0.62	17090	29939	0.57
Portugal	9650	6189	1.56	7029	2109	3.33
Spain	11238	12129	0.93	9640	9112	1.06
Sweden	10651	5076	2.10	10639	4791	2.22
The Netherlands	11301	14227	0.79	10641	9171	1.16
United Kingdom	13085	24935	0.52	11660	9295	1.25

Table 9: Parameter estimates of a dummy variable denoting self-employment in log-income regressions and log income quantile regressions

	Regression		Quantile reg. p50		Quantile reg. p25		Quantile reg. p75	
	Men	Women	Men	Women	Men	Women	Men	Women
Austria	-0.58	-1.00	-0.58	-0.99	-0.91	-1.62	-0.28	-0.54
Belgium	-0.25	-0.34	-0.20	-0.30	-0.50	-0.65	0.11	0.07
Denmark	-0.19	-0.29	-0.11	-0.16	-0.36	-0.61	0.17	0.15
Finland	-0.29	-0.47	-0.31	-0.44	-0.56	-0.83	-0.07	-0.17
France	-0.16	-0.32	-0.17	-0.30	-0.37	-0.73	0.06	-0.02
Germany	-0.03	-0.23	-0.03	-0.21	-0.16	-0.54	0.12	0.04
Greece	-0.29	-0.50	-0.24	-0.41	-0.44	-0.78	-0.09	-0.15
Ireland	-0.14	-0.23	-0.12	-0.25	-0.42	-0.64	0.11	0.14
Italy	-0.46	-0.75	-0.18	-0.35	-0.41	-0.86	-0.01	-0.09
Luxembourg	-0.17	-0.29	-0.16	-0.16	-0.36	-0.56	0.03	-0.06
Portugal	-0.45	-1.23	-0.04	-1.49	-0.34	-2.28	0.07	-0.15
Spain	-0.35	-0.78	-0.13	-0.48	-0.37	-1.15	0.00	-0.17
Sweden	-1.12	-1.10	-1.07	-1.05	-1.38	-1.47	-0.89	-0.68
The Netherlands	-0.21	-0.48	-0.15	-0.34	-0.40	-1.14	0.08	0.25
UK	-0.25	-0.25	-0.17	-0.24	-0.35	-0.64	-0.05	0.01

Table 10: Inequality and polarization indexes, Men

Country	100*p10/P50		100*p90/p50		p90/p10		Gini		Mean Log dev.		Wolfson	
	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.
Austria	53	23	175	285	3	12	26	44	14	44	14	16
Belgium	54	36	174	403	3	11	28	66	22	87	15	8
Denmark	38	26	152	240	4	9	25	38	16	30	18	23
Finland	22	41	180	264	8	6	36	39	32	28	23	21
France	43	32	209	267	5	8	33	46	22	37	18	17
Germany	33	46	179	286	5	6	30	44	21	35	20	16
Greece	43	40	179	221	4	5	31	38	19	27	18	20
Ireland	34	29	189	263	6	9	32	46	22	40	22	23
Italy	50	30	163	224	3	7	26	40	16	37	14	20
Luxembourg	51	34	191	191	4	6	30	33	16	22	21	23
Portugal	57	8	243	212	4	27	37	40	24	45	15	21
Spain	38	36	211	251	6	7	34	46	24	45	17	17
Sweden	38	39	163	170	4	4	29	40	20	32	16	17
The Netherlands.	39	39	165	213	4	5	27	37	19	27	17	22
U. K.	44	31	189	223	4	7	31	41	20	38	19	20
Simple Mean	42	33	184	248	5	9	30	43	21	38	18	19

Table 11: Inequality and polarization indexes: Men non-agricultural sector

Country	100*p10/P50		100*p90/p50		p90/p10		Gini		Mean Log dev.		Wolfson	
	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.
Austria	53	32	176	289	3	9	26	44	14	39	15	21
Belgium	53	33	173	333	3	10	28	61	22	67	16	11
Denmark	39	15	153	244	4	16	25	39	16	35	17	24
Finland	22	40	179	259	8	6	36	39	32	27	23	20
France	42	30	214	275	5	9	34	46	23	37	18	20
Germany	32	44	180	263	6	6	30	44	21	36	20	17
Greece	43	42	175	210	4	5	31	36	19	25	15	15
Ireland	33	27	189	243	6	9	32	43	22	37	21	23
Italy	51	26	163	220	3	9	26	40	15	37	10	21
Luxembourg	51	44	191	208	4	5	30	31	16	21	21	8
Portugal	57	17	248	200	4	12	37	37	24	35	14	20
Spain	39	37	215	226	6	6	34	44	24	43	16	18
Sweden	38	36	164	168	4	5	29	40	20	32	16	16
The Netherlands.	40	35	165	200	4	6	27	38	19	27	17	19
U. K.	43	30	189	227	4	8	31	42	20	39	19	20
Simple Mean	42	33	185	238	5	8	30	41	20	36	17	18

Table 12: Inequality and polarization indexes; Women

Country	100*p10/P50		100*p90/p50		p90/p10		Gini		Mean log dev.		Wolfson	
	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.
Austria	42	14	174	257	4	18	28	48	17	62	20	25
Belgium	31	41	166	366	5	9	31	44	26	43	21	21
Denmark	39	28	140	222	4	8	24	49	15	46	18	4
Finland	25	42	161	260	6	6	32	42	27	34	24	20
France	29	29	189	217	6	8	34	42	26	38	24	24
Germany	23	14	180	276	8	19	34	49	26	60	28	32
Greece	29	27	177	275	6	10	32	45	23	40	25	24
Ireland	22	14	180	312	8	23	35	58	28	70	27	21
Italy	33	6	144	231	4	38	25	45	18	53	20	22
Luxembourg	28	15	225	200	8	13	37	34	29	30	26	8
Portugal	44	15	278	743	6	49	38	62	28	104	16	19
Spain	25	5	229	266	9	58	39	51	32	67	27	22
Sweden	36	19	156	193	4	10	26	35	17	31	20	19
The Netherlands.	19	17	185	352	10	21	37	53	34	68	27	29
U. K.	33	27	201	350	6	13	35	68	24	92	24	9
Simple Mean	31	21	186	301	6	20	33	48	25	56	23	20

Table 13: Inequality and polarization indexes: Women, non-agricultural sector

Country	100*p10/P50		100*p90/p50		p90/p10		Gini		Mean log dev.		Wolfson	
	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.
Austria	42	13	174	256	4	20	28	47	17	65	20	19
Belgium	31	41	167	366	5	9	31	44	27	44	20	23
Denmark	39	28	140	222	4	8	24	49	16	46	18	4
Finland	25	43	161	256	6	6	32	42	27	34	23	20
France	30	27	188	238	6	9	34	42	26	39	23	21
Germany	23	13	180	247	8	19	34	47	26	54	28	31
Greece	30	28	177	236	6	8	32	42	23	34	25	23
Ireland	22	21	180	516	8	24	35	63	28	83	27	14
Italy	35	6	143	230	4	38	25	46	18	55	18	21
Luxembourg	28	14	224	200	8	15	37	32	29	29	26	24
Portugal	44	7	278	287	6	43	38	54	27	82	16	35
Spain	25	5	229	302	9	67	39	53	31	73	27	21
Sweden	36	19	156	194	4	10	26	36	17	34	20	19
The Netherlands.	19	16	184	340	10	21	37	53	34	68	26	30
U. K.	34	27	202	346	6	13	35	68	24	91	24	9
Simple Mean	31	20	186	282	6	21	32	48	25	55	23	21

Table 14: Comparisons of inequality indicators for employees and self-employed workers, taking the mean income over the period 1999-2001 and the mean of the indicators computed in each year

Country	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Gini	Mean Gini	1-2	p10/p50	Mean p10/p50	4-5	p90/p50	Mean p90/p50	7-8
	1999-2001 Self/Dip	1999-2001 Self/Dip		1999-2001 Self/Dip	1999-2001 Self/Dip		1999-2001 Self/Dip	1999-2001 Self/Dip	
Austria	2.02	2.11	-0.08	0.65	0.58	0.07	2.54	1.90	0.64
Belgium	3.25	3.26	-0.01	0.60	0.66	-0.06	2.39	2.17	0.22
Denmark	2.30	2.34	-0.04	0.53	0.65	-0.12	1.57	1.87	-0.29
Finland	1.21	1.30	-0.08	1.19	0.30	0.89	1.39	1.64	-0.25
France	1.56	1.56	0.00	0.74	0.53	0.21	1.31	1.22	0.09
Germany	1.27	1.33	-0.06	0.92	0.48	0.44	1.21	1.37	-0.16
Greece	1.36	1.40	-0.03	0.82	0.52	0.30	1.20	1.27	-0.07
Ireland	1.71	1.77	-0.07	0.80	0.44	0.35	1.72	1.78	-0.06
Italy	1.48	1.54	-0.06	0.79	0.62	0.17	1.31	1.29	0.02
Luxembourg	1.09	1.18	-0.10	0.85	0.51	0.34	1.06	1.12	-0.06
Portugal	1.01	1.06	-0.04	0.47	0.62	-0.15	0.76	0.86	-0.10
Spain	1.16	1.24	-0.08	0.87	0.51	0.36	1.09	1.25	-0.16
The Netherlands	1.49	1.53	-0.04	0.90	0.60	0.30	1.56	1.43	0.13
United Kingdom	1.33	1.26	0.08	0.72	0.51	0.21	1.13	1.02	0.11

Table 15: Households mean equivalent labour income

Country	Mean			Median		
	(1) Employees	(2) Self-emp.	Ratio 1/2	(1) Employees	(2) Self-emp.	Ratio 1/2
Austria	14330	14433	0.99	12567	9038	1.39
Belgium	14125	35064	0.40	12879	15684	0.82
Denmark	14119	19424	0.73	13555	15515	0.87
Finland	16636	16704	1.00	15150	12557	1.21
France	14684	15603	0.94	12956	12282	1.05
Germany	13775	24549	0.56	12650	16132	0.78
Greece	9092	7265	1.25	7948	5786	1.37
Ireland	11215	14116	0.79	9714	10880	0.89
Italy	10181	10927	0.93	9150	8426	1.09
Luxembourg	22688	30980	0.73	19959	27721	0.72
Portugal	8715	7840	1.11	6740	6256	1.08
Spain	10624	10600	1.00	8699	8357	1.04
Sweden	11233	5954	1.89	10411	4437	2.35
The Netherlands	13737	17744	0.77	12398	14988	0.83
United Kingdom	14898	22395	0.67	12809	13483	0.95

Table 16: Households mean equivalent total income

Country	Mean			Median		
	(1) Employees	(2) Self-emp.	Ratio 1/2	(1) Employees	(2) Self-emp.	Ratio 1/2
Austria	16353	16970	0.96	12567	13351	0.94
Belgium	16500	39316	0.42	12879	16708	0.77
Denmark	15870	22380	0.71	13555	17066	0.79
Finland	13048	14477	0.90	15150	12270	1.23
France	15465	15652	0.99	12956	12895	1.00
Germany	15949	27562	0.58	12650	18804	0.67
Greece	10093	8190	1.23	7948	6331	1.26
Ireland	12907	15824	0.82	9714	12835	0.76
Italy	11477	12407	0.93	9150	9852	0.93
Luxembourg	25294	35764	0.71	19959	30342	0.66
Portugal	9692	8792	1.10	6740	6978	0.97
Spain	11902	12285	0.97	8699	9687	0.90
Sweden	13054	7817	1.67	10411	5794	1.80
The Netherlands	15129	19315	0.78	12398	17425	0.71
United Kingdom	17626	26131	0.67	12809	16096	0.80

Table 17: Inequality and polarization indexes; equivalent labour income

Country	100*p10/P50		100*p90/p50		p90/p10		Gini		Log-mean diff.		Wolfson	
	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.
Austria	53	44	189	355	4	8	28	45	13	36	19	15
Belgium	50	28	175	425	3	15	27	63	12	79	18	11
Denmark	49	59	160	206	3	3	25	35	11	20	18	10
Finland	41	41	186	255	5	6	32	38	19	25	22	22
France	44	40	190	231	4	6	31	39	17	28	18	22
Germany	49	48	179	261	4	6	27	45	13	35	19	15
Greece	47	38	196	231	4	6	31	40	16	28	20	21
Ireland	47	37	196	229	4	6	31	40	16	29	20	20
Italy	48	33	184	229	4	7	29	41	15	34	21	20
Luxembourg	45	42	198	206	4	5	31	33	16	19	22	23
Portugal	42	40	248	219	6	6	38	39	24	30	20	21
Spain	47	35	221	251	5	7	34	42	19	33	20	20
Sweden	46	48	172	221	4	5	28	38	14	25	20	14
The Netherlands.	45	40	181	216	4	5	30	35	16	22	21	23
U. K.	40	48	203	246	5	5	33	51	21	49	21	11
Simple Mean	46	41	192	252	4	6	30	42	16	33	20	18

Table 18: Inequality and polarization indexes; equivalent total income

Country	100*p10/P50		100*p90/p50		p90/p10		Gini		Log-mean diff.		Wolfson	
	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.	Emp.	Self-E.
Austria	61	44	169	253	3	6	23	39	9	27	16	19
Belgium	64	38	169	486	3	13	22	62	8	69	15	10
Denmark	60	61	154	225	3	4	21	33	8	19	14	12
Finland	56	53	157	190	3	4	23	31	10	17	16	17
France	56	47	176	222	3	5	26	34	11	21	16	19
Germany	61	54	172	257	3	5	23	41	9	29	16	13
Greece	51	40	190	236	4	6	29	39	15	26	19	19
Ireland	52	46	172	212	3	5	26	38	11	26	16	19
Italy	48	34	170	217	4	6	27	41	13	34	19	21
Luxembourg	52	45	185	202	4	5	28	31	13	16	20	19
Portugal	49	43	237	204	5	5	35	38	20	28	17	20
Spain	50	39	206	217	4	6	31	40	16	31	19	18
Sweden	59	47	159	234	3	5	23	38	10	26	15	11
The Netherlands.	55	43	171	187	3	4	26	33	12	19	18	22
U. K.	52	51	187	233	4	5	28	48	14	42	18	12
Simple Mean	55	46	178	238	3	5	26	39	12	29	17	17

Table 19: Mean logarithmic deviation, individual labour income

	(1)	(2)	(3)	(4)	(5)	(6)
Country	L (Actual indicator)	L2 (Labour force survey composition)	L3 (Average Labour force survey composition for EU)	$(L2/L-1)*100$	$(L3/L-1)*100$	$(L3/L2-1)*100$
Austria	210	214	228	2.3	8.8	6.3
Belgium	304	362	362	18.8	19	0.2
Denmark	174	183	192	4.9	9.9	4.8
Finland	304	304	305	0.1	0.3	0.2
France	271	274	281	1.2	3.6	2.4
Germany	291	293	305	0.5	4.6	4.1
Greece	254	256	239	0.6	-6.1	-6.6
Ireland	309	326	316	5.4	2.4	-2.9
Italy	229	235	210	2.4	-8.4	-10.5
Luxembourg	251	254	258	1.3	2.7	1.4
Portugal	327	357	320	9.4	-2.1	-10.6
Spain	332	332	327	0.1	-1.5	-1.7
Sweden	213	230	239	8.1	12.4	4
The Netherlands	306	320	328	4.5	7.1	2.5
United Kingdom	275	281	289	2.2	5.2	2.9

Note: L is the actual indicator, L2 is computed assuming Labour force survey self-employment rates; L3 is computed assuming the EU average self-employment rate in the Labour force survey.

Figure 1: Percentage change in the mean log deviation obtained imputing Labour Force Survey's self-employment rates (L2) on the value of the indicator directly obtained from ECHP, L

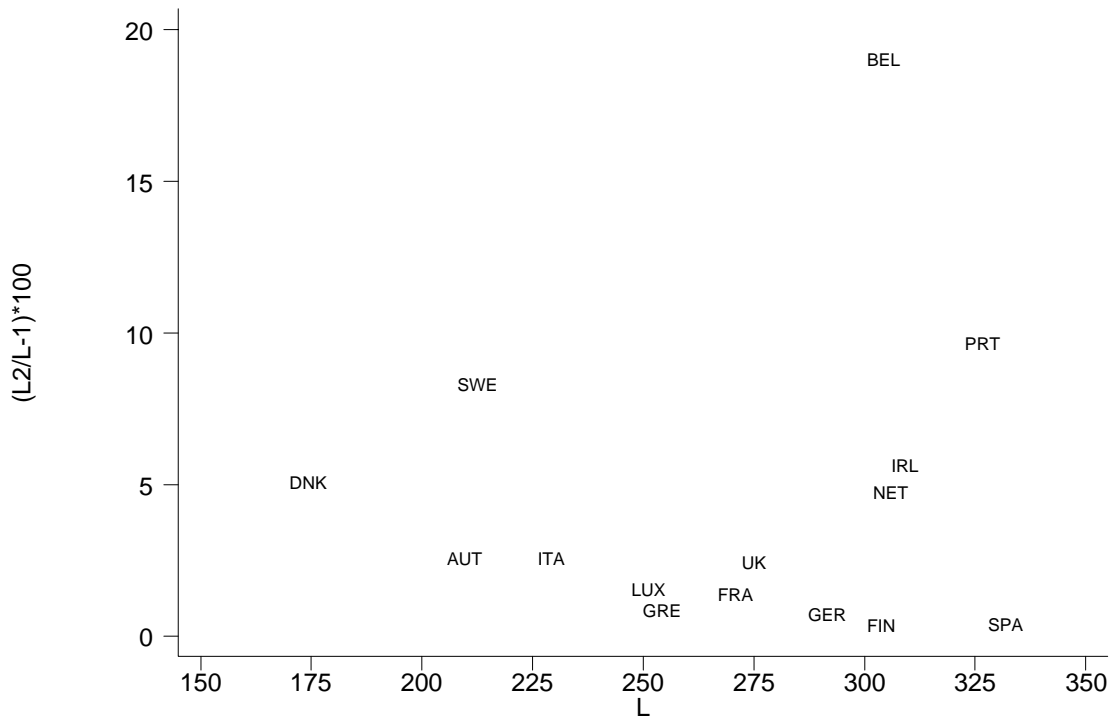


Figure 2: Percentage change in the mean log deviation moving from L2, obtained by imputing Labour Force Survey self-employment rates, to L3, obtained by imputing EU average self-employment, on L2

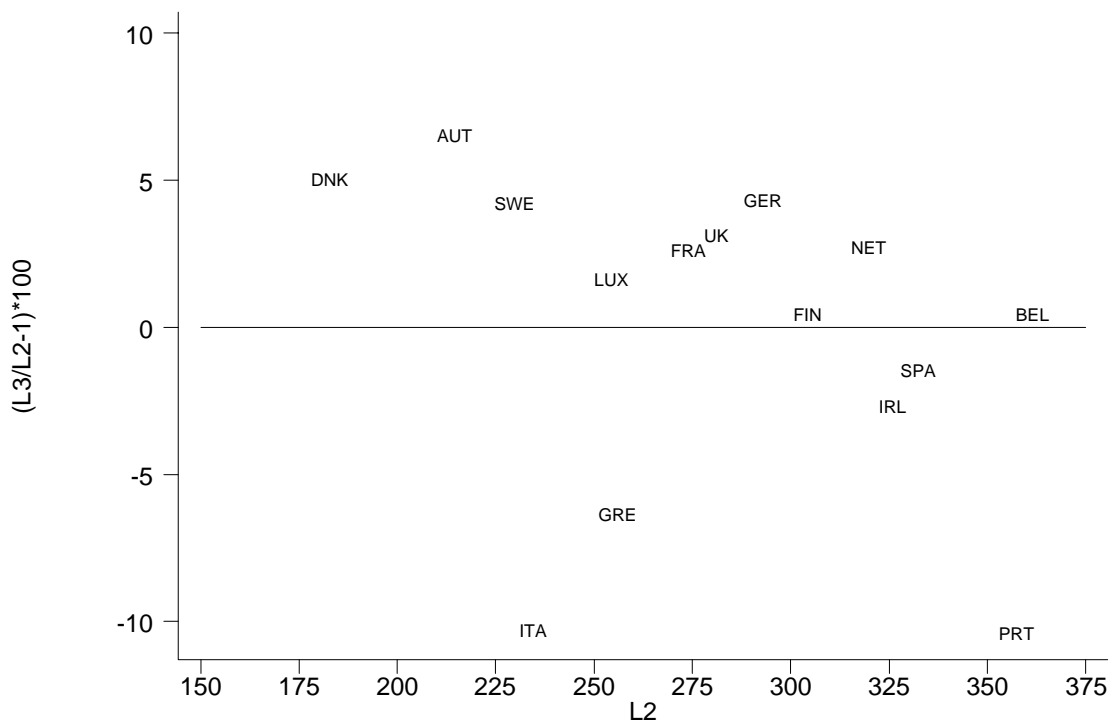
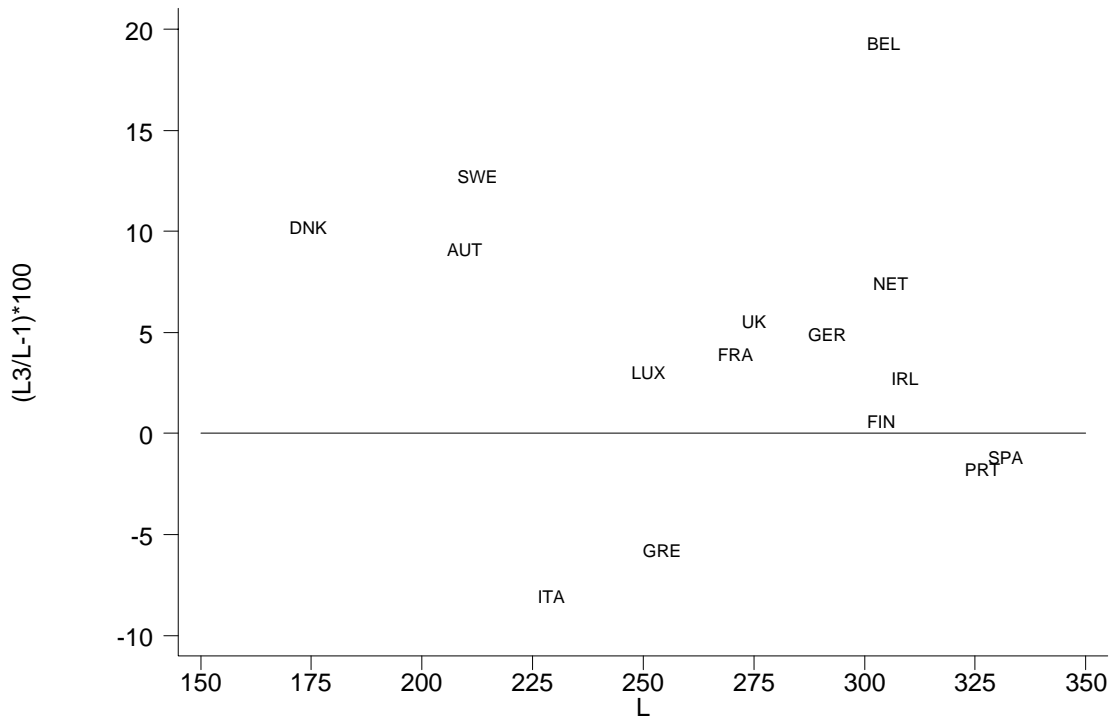


Figure 3: Percentage change in the mean log deviation obtained imputing EU average self-employment rates (L3) on the mean log deviation obtained from ECHP survey (L)



Note: L is the mean log deviation from ECHP data, L2 is mean log deviation obtained by imputing to each country the Labour force survey self-employment rate, L3 is mean log deviation obtained by imputing to each country the EU average self-employment rate obtained from the Labour force survey.

Table 20: Mean logarithmic deviation, household equivalent income

Country	(1) L (Actual indicator)	(2) L2 (Labour force survey self-employment rates)	(3) L3 (Average composition)	(4) $(L2/L-1)*100$	(5) $(L3/L-1)*100$	(6) $(L3/L2-1)*100$
Austria	131	132	140	0.9	6.9	5.9
Belgium	161	204	230	26.6	43.1	13.0
Denmark	104	110	119	5.3	14	8.2
Finland	124	126	128	2.1	3.5	1.4
France	149	150	150	0.8	0.8	0.0
Germany	138	139	149	0.8	7.9	7.1
Greece	218	219	206	0.6	-5.4	-5.9
Ireland	178	189	179	5.9	0.2	-5.4
Italy	172	175	161	1.8	-6.1	-7.8
Luxembourg	129	132	136	2.2	5.9	3.7
Portugal	248	253	247	1.8	-0.4	-2.2
Spain	226	228	224	1.1	-0.9	-2.0
Sweden	121	127	137	4.9	13.5	8.2
The Netherlands	143	147	150	3.0	5.1	2.1
UK	200	205	214	2.6	7.1	4.4

Figure 4: Households income mean log deviation on self-employment rate

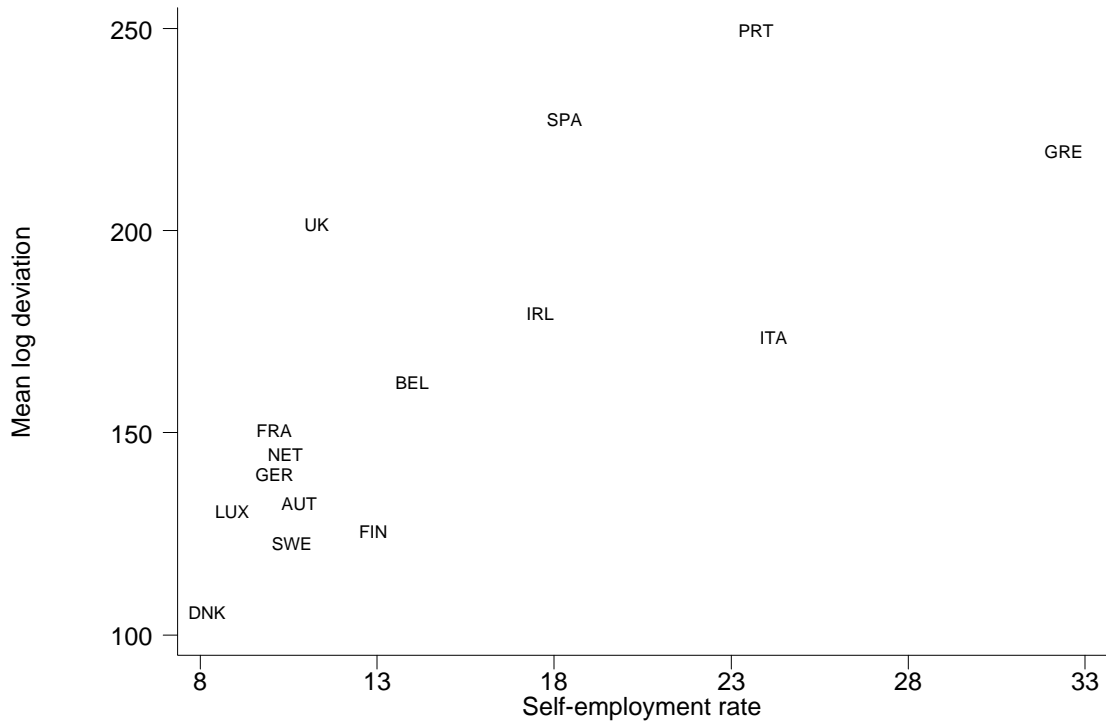
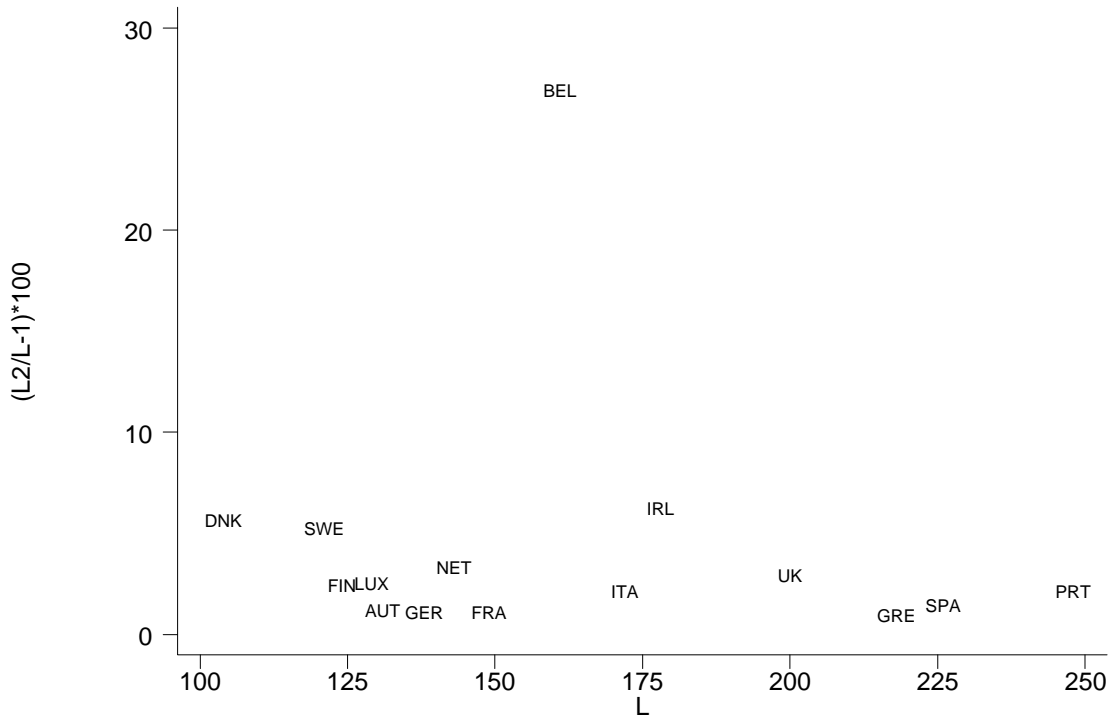
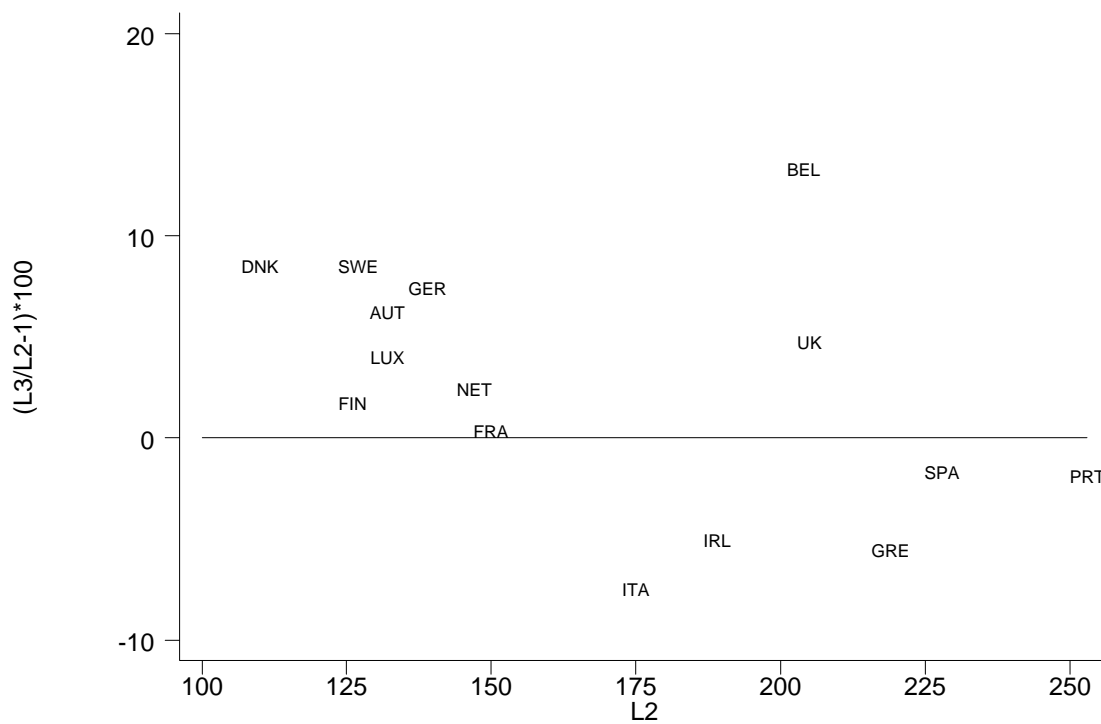


Figure 5: Percentage change in the indicator moving from L to L2 on L (Households)



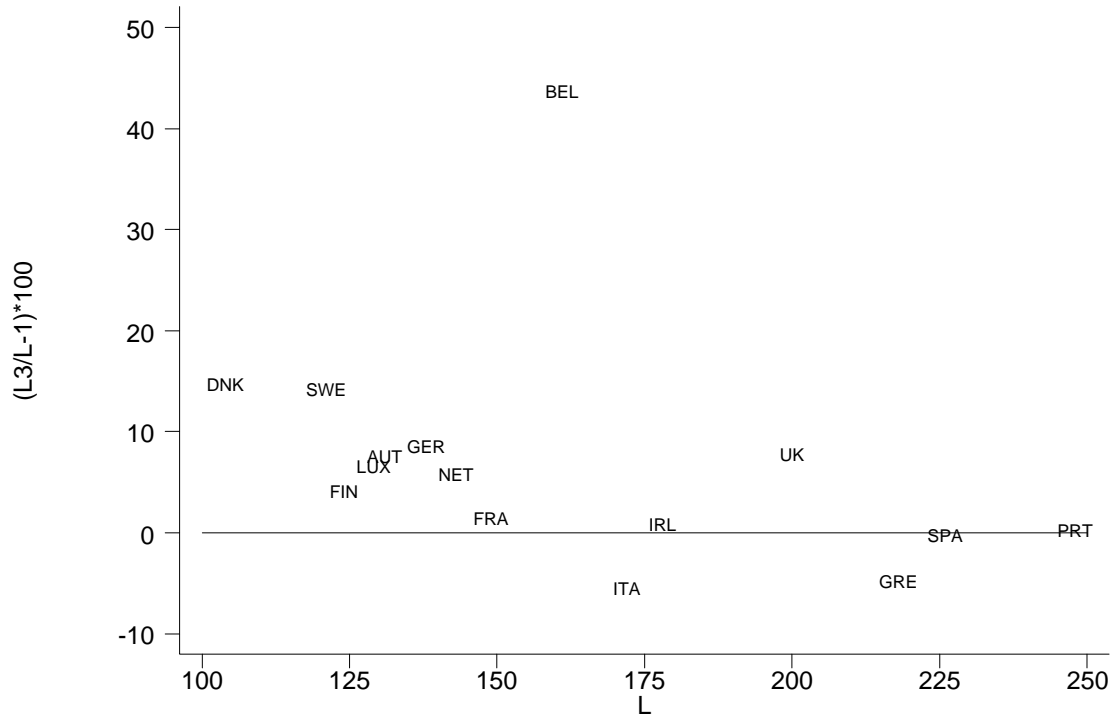
Note: L is the mean log deviation from ECHP data, L2 is mean log deviation obtained by imputing to each country the Labour force survey self-employment rate, L3 is mean log deviation obtained by imputing to each country the EU average self-employment rate obtained from the Labour force survey.

Figure 6 : Percentage change in the indicator moving form L2 to L3 on L2 (households)



Note: L is the mean log deviation from ECHP data, L2 is mean log deviation obtained by imputing to each country the Labour force survey self-employment rate, L3 is mean log deviation obtained by imputing to each country the EU average self-employment rate obtained from the Labour force survey.

Figure 7: Percentage change in the indicator moving from L to L3 on L (households)



Note: L is the mean log deviation from ECHP data, L2 is mean log deviation obtained by imputing to each country the Labour force survey self-employment rate, L3 is mean log deviation obtained by imputing to each country the EU average self-employment rate obtained from the Labour force survey.

Figure 8: Households income mean log deviation computed imputing the average EU incidence of family living on self-employment on self-employment rate (Labour Force Survey)

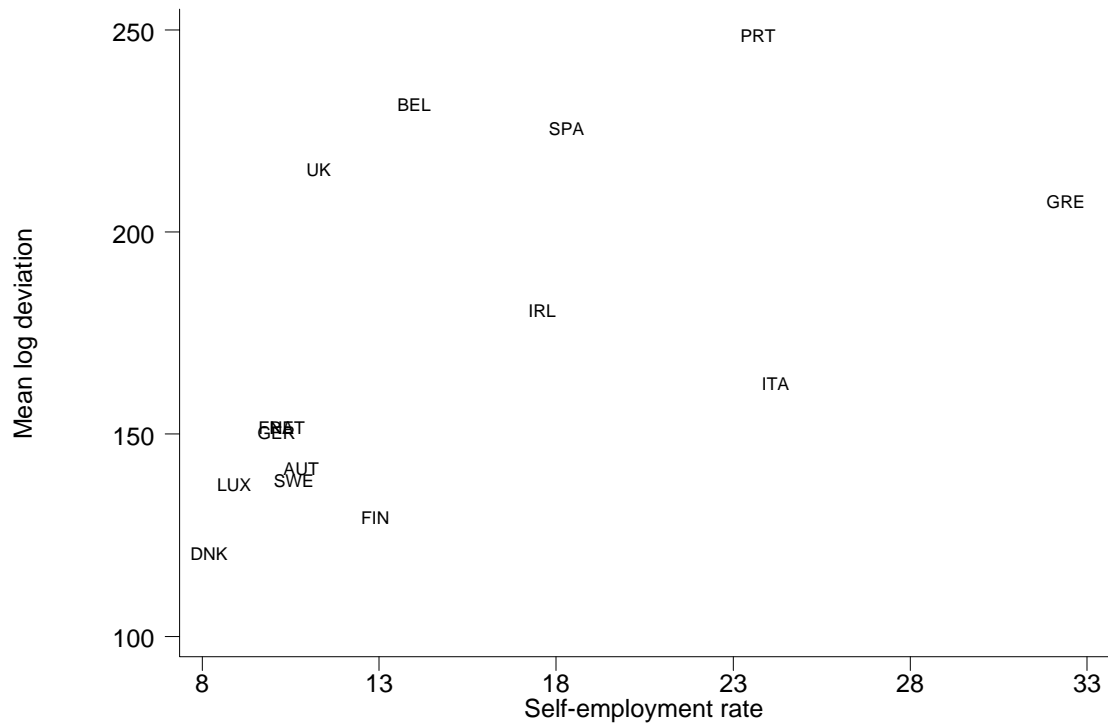


Table 21: Fixed effects regressions over the period 1994-2001

Dependent variable: log of male self-employment rate in the non agricultural sector

Gini (male employees monthly wage)	-3.34** (1.21)	-3.59** (1.21)			
Gini (male employees hourly wage)			-2.32* (1.35)	-2.15 (1.46)	
p10/p50 hourly wage male employees				-	0.66 (0.64)
p90/p50 hourly wage male employees				-	-0.77** (0.25)
Unemployment rate	-	-0.01 (0.008)		-0.003 (0.009)	0.002 (0.009)
Year dummies	Yes	Yes	Yes	Yes	Yes
Within R2	0.19	0.21	0.14	0.15	0.22
Number of observations	100	100	100	100	100

Note: Standard errors in parenthesis. * significant at the 10 per cent threshold; ** significant at the 5 per cent threshold. Sweden and The Netherlands are not included in the regressions due to data limitation

Table 22: Fixed effects regressions over the period 1994-2001

Dependent variable: log of the ratio of self-employed whose earnings are below the 25th or above the 75th percentile of the self-employed income distribution to total employment (men in non agricultural sector).

Gini (male employees monthly wage)	-4.30** (1.35)		
Gini (male employees hourly wage)		-2.56 (1.65)	
p10/p50 hourly wage		-	0.87 (0.72)
p90/p50 hourly wage male employees		-	-0.86** (0.29)
Unemployment rate	-0.02* (0.09)	-0.08 (0.01)	0.000 (0.01)
Year dummies	Yes	Yes	Yes
Within R2	0.22	0.14	0.23
Number o observations	100	100	100

Note: Standard errors in parenthesis. * significant at the 10 per cent threshold; ** significant at the 5 per cent threshold. Sweden and The Netherlands are not included in the regressions due to data limitation

Table 23: Fixed effects regressions over the period 1994-2001

Dependent variable: log of the ratio of self-employed whose earnings are below the 25th percentile of self-employed income distribution to total employment (men in non agricultural sector)

Gini (monthly wage male employees)	-4.16** (1.61)		
Gini (hourly wage male employees)		-1.88 (1.93)	
p10/p50 hourly wage male employees		-	0.56 (0.89)
Unemployment rate	-0.02** (0.01)	-0.016 (0.012)	0.017 (0.013)
Year dummies	Yes	Yes	Yes
Within R2	0.22	0.16	0.16
Number o observations	100	100	100

Note: Standard errors in parenthesis. * significant at the 10 per cent threshold; ** significant at the 5 per cent threshold. Sweden and The Netherlands are not included in the regressions due to data limitations.

Table 24: Fixed effects regressions over the period 1994-2001

Dependent variable: log of the ratio of self-employed whose earnings are above the 75th percentile of self-employed income distribution to total employment (men in non agricultural sector).

Gini (male employees monthly wage)	-4.41** (1.43)		
Gini (male employees hourly wage)		-4.00** (1.71)	
p90/p50 hourly wage male employees		-	-0.87** (0.31)
Unemployment rate	-0.007 (0.01)	-0.006 (0.01)	0.004 (0.01)
Year dummies	Yes	Yes	Yes
Within R2	0.17	0.14	0.16
Number o observations	100	100	100

Note: Standard errors in parenthesis. * significant at the 10 per cent threshold; ** significant at the 5 per cent threshold. Sweden and The Netherlands are not included in the regressions due to data limitations.