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Inequality and Employment in OECD Countries after the Financial Crisis

Abstract

This article analyzes the impact of the 2008-2009 financial crisis on employment and inequality in OECD countries.

While the impact of the crisis has been quite heterogeneous, several OECD economies exhibit similar effects. In many countries employment declined, especially in construction and manufacturing industries, affecting mainly men and young workers.

In terms of income distribution, the crisis broke out after a period of increasing inequality. While recessions generally are retained to increase inequality, as they impact the most on already disadvantaged households, the 2008-2009 crisis, given its financial nature, had a greater impact on capital income, with a potentially equalizing effect; however, labour income is the main component of household income.

During the years of the crisis no clear trend in inequality is reported, thanks to the policies enacted to contrast the recession. However, after the crisis, many governments have introduced austerity measures to reduce the large public deficits accumulated, thus the political tools chosen will be crucial in determining the distributional effects.

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For most OECD countries the financial crisis that developed during 2008 and 2009 has been the worst economic downturn since the Second World War. However, extensive heterogeneity across countries following the impact of the financial crisis has been reported: while countries such as Australia and Poland did not suffer a recession and some countries, such as New Zealand, Korea and Israel, witnessed only a small reduction in real GDP in 2009, other economies experienced large reductions in real GDP during 2008 and 2009.

The same heterogeneity can be observed looking at the consequences of the economic crisis on the labour market. Considering the unemployment rate, this increased between 2007 and 2010 in almost all countries as a consequence of the fall in output. However, in some OECD economies, such as Austria, Israel and Germany, the unemployment rate decreased in the same period. On the other hand, in other countries the rise in the unemployment rate was disproportionately high with respect to the change in real GDP: for example, in Spain the unemployment rate rose by almost 12 percentage points during the period, with a fall in real GDP in 2009 of about 3.7%.

The type of macroeconomic shock that mainly hit the economy, provoking a reduction in real GDP, is the determinant of this heterogeneity following the impact of the crisis. In fact, in some countries the fall in output has been mainly concentrated in the construction sector after of the bursting of the housing bubble, as for example in Ireland and Spain, while in other economies the manufacturing sector has suffered the most, and the fall in output has been determined by a fall in exports and domestic demand.

The aim of this article is to investigate the effects of the financial crisis on employment and inequality in OECD countries.

The traditional literature analyzing the effect of economic crises on labour markets, and in particular on inequality, concludes that beyond increasing unemployment and decreasing employment, recessions generally generate a more unequal distribution of income across individuals and households. In fact, historically downturns have been associated with a greater negative impact on already disadvantaged individuals, such as youth, low-skilled workers and temporary workers, who generally rely more on labour income with respect to other income sources, exacerbating pre-crisis inequalities.

Even in light of past evidence on the distributional impact of an economic downturn, consideration of the peculiar features of the crisis is needed in order to understand the impact of the financial crisis in OECD countries. In particular, the key to understanding the impact of a recession on inequality is the acknowledgement of who is hit most by the downturn.

One element in particular that characterizes this recession compared to the past is its financial nature: a financial crisis is in fact more likely to erode capital income than labour income and, as low-income individuals tend to have a larger share of labour earnings on total income, this feature can have an equalizing effect in terms of income distribution.

Moreover, this economic crisis is different from past ones in OECD countries in terms of labour market outcomes. We can observe a stronger impact on men's employment compared with women's, as the crisis hit mainly the construction and manufacturing sectors which are characterized by a higher share of male workers in total employment. Moreover, while youths are strongly affected by the downturn, older workers (55-64 years) suffered the least from the crisis, and in many countries the employment rate for this cohort of workers actually increased.

Another relevant factor to consider in determining the distributional impact of the economic crisis is the role of government policies during and after the crisis. During the crisis, the potential negative impact of a fall in output on inequality may have been potentially offset by public policies to support income of disadvantaged individuals and households, or underemployed or unemployed workers.

Moreover, after the downturn of 2008-2009 and the consequent increase in public deficits in many countries, austerity policies have been applied after the crisis to reduce the deficit. The magnitude of this adjustment and the policy tools chosen to reduce public budget deficits can play an important role in determining the distributional impact of the crisis: for example, reductions in welfare expenditure can reduce the provision of services such as health-care and education, thus worsening the economic conditions of disadvantaged families.

A major difficulty in analyzing the effect of the financial crisis on inequality in OECD countries is related to the lack of up-to-date data on income distribution: firstly, comparable data on income distribution and inequality are released with a certain lag, and for many countries information is available only until 2008-2009; secondly, the effect on inequality can be stronger in the medium to longer term.

Thus, after a review of the main characteristics of income distribution evolution in OECD countries, this article investigates the potential impact of the financial crisis on inequality considering labour income, as the main component of gross income for OECD individuals, and the dynamics in the labour market.

Inequality in OECD countries

The economic crisis followed a period of generalized increase in inequality in many OECD countries, with the exception of the middle-income ones.

Income inequality started to increase in the late 1970s and early 1980s in some English-speaking countries, followed by a more widespread increase from the 80s onwards.

In the last few years an increase in inequality has been registered not only in some countries that already evidenced high gaps between the rich and the poor, such as the United States and Israel, but also in countries which have traditionally been characterized by low levels of inequality, such as the Nordic countries and Germany. On the contrary, some countries, mainly middle-income OECD ones such as Mexico, Chile and Turkey, have registered a reduction in inequality in the last decades.

The picture offered by the data is quite heterogeneous: at present, across OECD countries the average income of the richest 10% of the population is about 9 times that of the poorest 10%. While this ratio is somewhat lower in the Nordic and many continental European countries, inequality is about 14 to 1 in Israel, Turkey and the US, and 27 to 1 in Chile and Mexico. Moreover, during the two decades before the crisis, household incomes of the top 10% grew faster than those of the poorest 10%, leading to a larger income gap. In some countries, however, the trend is the opposite, as for example in Spain, France and middle-income OECD countries such as Chile and Turkey[1].

When measuring the distribution of income using the Gini index, the increase during the last decades before the crisis appears just as evident: the average Gini coefficient in OECD countries stood at 0.28 in the mid-1980s, while by the later years of the first decade of 2000 it had increased by some 10% to 0.31. According to this index also, the pattern of inequality, considering income before taxes and benefits, is heterogeneous among OECD countries, with some countries in which the index increased between the mid and late years of the first decade of 2000 and others in which it reduced. Inequality is lower when considering income after taxes and benefits: this demonstrates the equalizing effect of social policies.

Analysing the effect of the crisis on disposable household income, the equalizing effect of government transfers emerges. Gross disposable household income has in fact increased during the crisis, however part of this increase is due to the effect of the extensive tax and benefit systems in many OECD countries. Notably, when gross disposable household income is measured considering taxes and benefits at the pre-crisis level (2007), the variation is in fact negative[2]. Thus, the welfare system in many OECD countries has contributed to reducing the negative impact of the crisis on households, and this may also have reduced the effect on inequality, thanks to benefits provided to more disadvantaged families.

Household income is composed of incomes from different sources. The financial crisis may have mostly impacted on capital income and self-employment income, which are generally more relevant among richer individuals. However, while the dispersion of self-employment and capital income is much wider than that of labour earnings, their contribution to household market income inequality is low, as their income shares are small in most, though not all, countries. On the other hand, the main driver of household income is individual labour income.

When considering the most important source of income of OECD households, labour income, we observe that countries differ widely in terms of inequality among individuals of working age. The differences in labour income arise crucially from the changes in labour markets due to the economic downturn: in particular, they are determined by differences in wage rates, hours worked and inactivity rates.

In terms of wages, overall earnings inequality tended to increase among the English-speaking and Nordic countries (with the exception of Sweden), to display little overall change in Western Europe (with the exception of a slight rise in Switzerland) and to fall or remain unchanged in Southern Europe.

For many OECD countries, data on the distribution of wages extend only to 2008, so we can capture only the early effects of the crisis on wage distribution.

The distributional consequences of the great recession will outlast the period of recession itself. To predict the effects on inequality, we also need to take into account the impact of changes in govern-

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[1] I. KOSKE - J. FOURNIER - I. WANNER, *Less Income Inequality and More Growth – Are They Compatible?, Part 2 - The Distribution of Labour Income*, OECD Economics Department Working papers, 925, 2012.
[2] S.P. JENKINS - A. BRANDOLINI - J. MICKLEWRIGHT - B. NOLAN, *The Great Recession and the Distribution of Household Income*, Report for the XIII Fondazione Rodolfo DeBenedetti Conference, Palermo, 10 September 2011.

ment spending and taxation that are in progress or are likely in the coming years and which can reasonably be viewed as a consequence of the recession.

In general, during the crisis welfare state benefits and taxation played a major role in reducing the negative distributional impact of the downturn, but at the same time these policies provoked an increase in the budget deficit, which many countries need to reduce after the crisis. The medium to longer term effect of this adjustment depends on how the consolidation of finances is achieved, as well as on the speed at which it takes place, besides of course the pace of economic recovery.

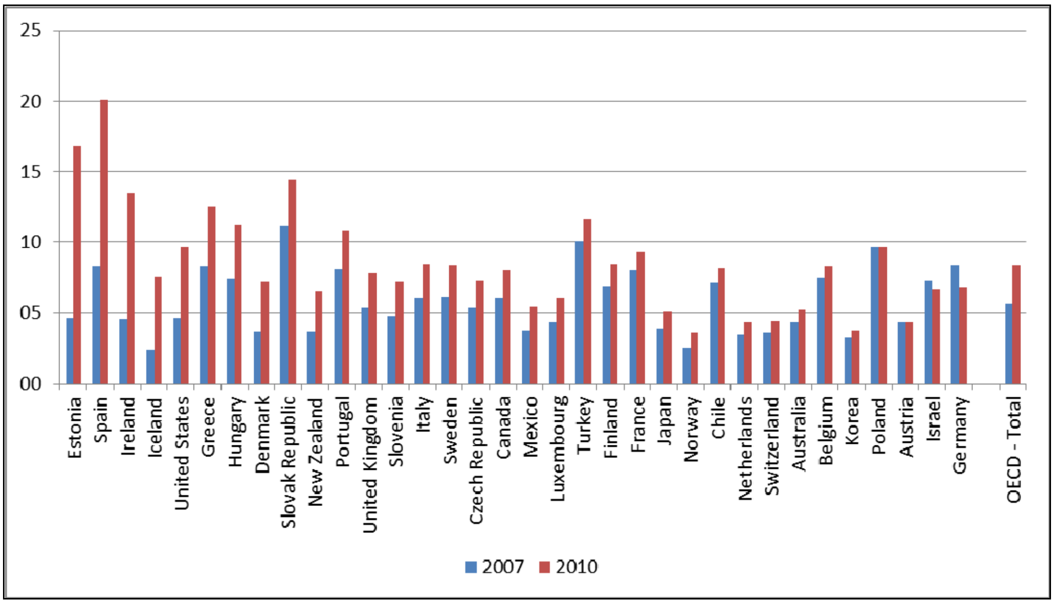
Labour markets in the financial crisis and inequality

As labour income is the main component of gross domestic household income, the impact of the crisis on labour markets can tell us how inequality in OECD countries can be impacted by the slowdown.

In fact, some groups are much more likely to face difficulties in the labour market.

The labour market impact of the crisis and early recovery periods has differed greatly across countries. In the OECD area the unemployment rate has risen from an average of 5.7 per cent in the first quarter of 2008 to an 8.8 per cent peak in the last quarter of 2009, thus by an increase of 3.3 percentage points[3].

Fig. 1 - Harmonised unemployment rate in OECD countries: 2007 - 2010[4]



Source: *OECD Main Economic Indicators.*

If we limit the analysis to the euro countries only, the increase is a little lower as the unemployment rate was about 7.3 per cent with a 10.2 per cent peak in the second quarter of 2010.

Average unemployment rates, however, hide a different pattern across countries: while in Australia, Austria, Belgium, Japan, Korea, Norway, Netherlands and Switzerland the increase in the unem-

[3] OECD, *OECD Employment Outlook 2010, Moving Beyond the Jobs Crisis*, 2010.
[4] Countries are ordered from the country with the highest positive variation in the unemployment rate to the country with the lowest positive or highest negative change.

ployment rate has been under 1.5% and in Germany and Israel actually decreased, in other countries such as Estonia, Ireland and Spain the increase is higher than 10 percentage points.

The employment rate is another aspect which deserves attention when investigating the impact of the crisis on labour and inequality. We have compared the employment rate in 2010 with the same indicator in 2007, considering the time lag between the output fall and the effects on the labour market. The employment rate among people of working age varied greatly across OECD countries. In some cases we note an increase in the employment rate e.g. in Austria, Chile, Germany, Israel, Luxembourg, the Netherlands, Poland, and Turkey.

At the other extreme, some countries such as Estonia, Iceland, Ireland, Spain and the US, experienced a significant reduction in the employment rate, with a fall of more than 5 percentage points.

The great variation in the change in the employment rate can be only partially explained by the magnitude of variation in real GDP. In particular, in some countries, especially those in which the recession has been mainly caused by the bursting of the housing-bubble, notably Spain, the United States and to some extent Ireland, the reduction in employment has been unusually high compared with the fall in output. By contrast, the employment response to declining output has been unusually muted in a larger number of countries, including Germany, Japan, Mexico, the Netherlands and the Slovak Republic, where a sharp decline in exports was a major driver of the downturn.

Job losses have been disproportionately high for certain workforce groups and industries. In most cases these differences conform to past recessions (e.g. employment losses have been far above average for construction, temporary and low-skilled workers and youths, see Table 1). However, the 2008-2009 recession has been unusual in that employment has fallen significantly more for men than for women, due to the sectoral profile of the recession. Continued employment growth for older workers during the recession is also a break with the past.

A common feature of the economic crisis of 2008-2009 is that the employment rate reduction is far more relevant for young workers (15-24 years) with respect to the entire population of working age individuals (see Table 1). Particularly striking is the reduction of employment across young workers in Spain (-15%), Sweden and the United States (-8%).

Table 1 - Percentage change in employment by groups

Employment by workforce groups (% change)[5] 2008 Q4 to 2009 Q4		
Gender	Total	-2.2
	Men	-3.0
	Women	-1.2
Age	Youth (15-24)	-8.4
	Prime-age (25-54)	-2.2
	Older workers (55+)	1.7
Education	Low-skilled	-6.4
	Medium-skilled	-3.1
	High-skilled	1.1

Source: *OECD Employment Outlook 2010: Moving Beyond the Job Crisis*, OECD, 2010.

[5] Un-weighted averages of Australia, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Korea, the Netherlands, Portugal, Spain, Sweden and the UK for gender and age; Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Spain, Sweden, the UK and the US for education.

The greater impact on the young has followed the pattern of earlier recessions, while increases in employment rates among older people is a new pattern, which may reflect a labour supply response to losses in retirement savings and/or lower availability of early retirement options compared to previous recessions.

Another labour market reaction following a production contraction is a reduction in hours worked: a reduction in the number of hours worked for the same hourly wage represents a fall in labour income. In countries where reductions in total labour input during the recession took place more through reductions in hours worked than through lay-offs or reductions in hiring, we might expect a more muted impact on the distribution of household incomes. With very few exceptions there has been a reduction in both employment and in hours worked during the downturn. Large reductions in hours worked are reported in Ireland and Iceland, while the most relevant exception is Spain where average hours increased coupled with a strong reduction in employment.

The effect of the economic slowdown on inequality in the medium term crucially depends on the dynamics of the labour market in the aftermath of the crisis. In particular, recent financial crises have been characterized by the so called ‘jobless recovery’, a situation in which, while economies return to growth, employment does not increase. In cases of extreme labour hoarding, for example preserving jobs through a reduction of worked hours during the crisis, the risk of a jobless recovery, worsening economic disparities, is higher.

Earnings inequality also depends on the type of jobs people hold and the work arrangements. A shift from full-time to part-time work is a related reaction in the labour market to reduce average hours of work. The part-time share of total employment rose on average between 2007 and 2010 for men by 1.3 percentage points, while for women it fell by about the same amount. The typical pattern was therefore for full-time employment to fall by more than total employment. Two of the largest rises in the part-time share were in those countries where total employment fell the most: the USA and Ireland.

It is important to note that the rich and the poor are not symmetrically affected by changes in working-time arrangements: average annual hours worked per person in dependent employment fell slightly in most OECD countries; however most working hours were lost among low-wage rather than among high-wage earners, thus contributing to the increase in inequality.

Finally, the third source of difference in labour income is participation in the labour force. Considering male workers, this decreased from 2007 to 2010 in Austria, Estonia, Finland, Hungary, Iceland, Ireland, Italy and Spain. The reduction in the participation rate captures the increase in discouraged workers; the increase in individuals out of the workforce is a contributing factor to inequality.

Conclusion

Beyond its negative impact on labour, the financial crisis of 2008-2009, which represented a significant downturn in many OECD countries, may potentially increase income inequality.

Government intervention to support income during the years of the crisis has been crucial in limiting the distributional effects of the crisis, however welfare state generosity has produced large budget deficits in many OECD countries. To avoid an unsustainable further expansion of public debt, many OECD countries have started to reduce their public budget deficits by increasing taxation and/or reducing expenditure. The implications of these fiscal policies on inequality depend on the measures introduced and the period of time predicted for the adjustment.

Given the nature of the crisis, the component of income most likely to be affected is capital income, which is more relevant for richer individuals; thus the downturn, contrary to past recessions, can have an equalizing effect. However, the share of capital income in household income represents only about 7% of total income[6]; thus the dynamics of inequality are mainly driven by the distribution of labour earnings. Evidence shows that changes in labour income are important drivers for inequality, thus the loss of millions of jobs is likely to have contributed to an increase in inequality, at least temporarily, as the effect of the crisis on labour market is particularly painful for already disadvantaged groups.

The economic crisis has increased unemployment, decreased employment and reduced participation rates, with extensive differences across countries. Generally, those jobs most affected by the downturn have been those in the manufacturing and construction sectors, with a particularly negative effect on low-wage and young workers. Thus, the negative effect on employment can induce an increase in income dispersion.

The distributional impact of output reduction depends on the type of the adjustment in the labour market: when firms face a reduction in production which reduces hours worked instead of jobs, the impact on inequality is likely to be lower. However, in case of stronger labour hoarding during the downturn, a jobless recovery after the crisis is more likely, worsening income distribution.

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[6] S.P. JENKINS - A. BRANDOLINI - J. MICKLEWRIGHT - B. NOLAN, *The Great Recession and...*, cit.