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The impact of the crisis on the labour market: A new appraisal

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Abstract

We present in this paper a new approach to evaluate labour market structures. A labour market structure is a distribution of the labour force into different categories of employed and unemployed, depending on the nature of the labour contract (permanent or temporary) and the duration of unemployment (short or long term). The comparison is made in terms of the probability of getting better results in the labour market for a representative worker. This idea corresponds to the application to this environment of the notion of the balanced worth (Herrero & Villar 2018). We provide two applications to illustrate the working of this evaluation protocol, both comparing the evolution of labour market structures between 2007 and 2017. The first application refers to the OECD countries and the second to the different age groups in the Spanish labour market.

1 Introduction

The economic changes that many countries have experienced with the financial crisis make it clear that unemployment rates are very poor measures of the impact of the cycle on the labour market. This is so because the crisis has involved not only changes in the aggregate levels of occupation but also has modified the structure of the labour market, in terms of the average duration of unemployment and the nature of the job contracts.

There have been different proposals that provide measures of the state of the labour market that go beyond the conventional unemployment rates. Nowadays the US Bureau of Labour Statistics (BLS) supplies six alternative unemployment indicators, from U-1 to U-6, that derive from using different levels of comprehensiveness in the definition of the unemployed, following a strategy that mimics the alternative definitions of the money supply. The U-3 indicator corresponds to the conventional unemployment rate (the ratio between unemployed and the labour force). The U-4 measure includes also the discouraged workers whereas the U-5 rate also adds those who are able to work and are not discouraged but have not been looking actively for a job in the last four weeks, for some other reason. Finally the U-6 unemployment rate also incorporates to the former those part-time workers who would like to have a full-time job.

A different approach appears in the works of Sengupta (2009) and Shorrocks (2009a, b) that introduce duration as an essential part of the unemployment measurement, translating to this context some conventional poverty measures. Following an axiomatic approach they show that one can measure the impact of unemployment by means of an index that can be factorised into three different elements: incidence (the unemployment rate), intensity (the average duration of unemployment), and inequality (the dispersion of unemployment spells). See also Goerlich & Miñano (2018).

Another contribution along this line is that of Gorjón, de la Rica & Villar (2018, 2019), who provide a measure of the social cost of unemployment that is obtained by aggregating the disutility of the unemployed. Such a measure involves eventually three different aspects of the unemployment: incidence (the

conventional unemployment rate), severity (that takes into account both duration and income losses), and hysteresis (the probability of remaining unemployed for one additional month).

García-Pérez & Villar (2019) analyse the effect of duration in employment in Spain and show that it enhances the existing differences between types of workers when compared with employment rates.

Our work here shares the concern of those contributions but has a broader scope and applies a new approach to evaluate the situation of the labour market. To start with we aim at evaluating the whole structure of the labour market rather than that of the employed or the unemployed. We propose an evaluation protocol for labour market structures that compares the distribution of the active population in different categories of employed and unemployed. Our measure takes into account the shares of employed workers depending on the quality of their contracts as well as the distribution of the unemployed depending on duration. In the reference model employed workers are divided between those with permanent jobs and those with temporary jobs, whereas unemployed will be grouped in the two standard categories of short and long-term unemployed. Needless to say the model does not depend on having just four categories but this simplified scenario provides a sufficiently rich representation of the structure of the labour market.

The evaluation protocol provides a cardinal measure of the relative goodness of labour market structures, which are identified with distributions of the labour force into the four categories just mentioned: workers with permanent jobs, workers with temporary jobs, short term unemployed, and long term unemployed. The way of comparing the distributions of the labour force into those four categories is by computing the probability that a representative worker belongs to a higher category. This procedure to compare distributions is known as the *balanced worth* (Herrero & Villar, 2018) and has been applied to a number of different scenarios involving categorical variables (see, in particular, Herrero, Soler & Villar 2018).

The type of evaluation we propose has some friendly traits worth noticing. First, it permits comparing whole labour market structures and not only employment or unemployment rates. Second, it is based on an intuitive

and tested procedure. Third, it operates over statistical data that are readily available. And last, but not least, the evaluation can be immediately obtained through a free online algorithm.

The paper is organised as follows. Section 2 is devoted to the explanation of the evaluation protocol. Section 3 provides two applications of the way of approaching the labour market, both referred to the period 2007-2017. The first application compares the evolution of the market structures in the set of OECD country members for which we have homogeneous data. The second application focuses on the Spanish labour market and illustrates how this approach also helps analysing the evolution of the labour market for different types of workers. A few final comments in Section 4 close the paper.

2 The evaluation protocol

The reference problem consists of evaluating the relative performance of the labour market of a collection of societies (e.g. countries, regions), G = {1, 2, …, g}, whose achievements are described by distributions of the active population into a given set of ordered categories of employment and unemployment. In our reference model we consider two categories of employed, depending on the type of contract (permanent and temporary) and two categories of unemployed, depending on duration (short-term and long-term).[1] We assume that being employed is better than being unemployed, having a permanent job is better than having a temporary one, and the shorter the unemployment spell, the better.

The ***labour market structure*** of a society i is thus described by a vector $\mathbf{a}(i) = \left(a_{i1}, a_{i2}, a_{i3}, a_{i4}\right)$, where $a_{ir} = n_{ir} / n_i$ is the fraction of workers of i who belong to category r (here n_{ir} is the number of workers in population i within category r and n_i is the size of the corresponding active population). Clearly, $a_{ir} \geq 0$, $\sum_{r=1}^{4} a_{ir} = 1$.

[1] The empirical application is actually computed considering five categories of unemployed: less than 1 month, between 1 and 3 months, between 6 months and 1 year, and more than 1 year. Yet the differences with respect to the four-category case are negligible (less than 0.3%) so that we keep the discussion taking the simplest case as our reference model.

Our aim is comparing the relative goodness of those labour market structures for the different societies under consideration, i = 1, 2, …, g. The basic principle for such a comparison is analysing the probability of getting better outcomes. Let p_{ij} denote the probability of a worker chosen at random from population i to have a better status (i.e. a safer job or a shorter unemployment spell) than a worker chosen at random from population j. As those categories are ordered from best to worst, we can calculate scuh a probability as follows:

$$p_{ij} = a_{i1}\left(a_{j2} + a_{j3} + a_{j4}\right) + a_{i2}\left(a_{j3} + a_{j4}\right) + a_{i3}a_{j4}$$

Let $e_{ij} = e_{ji}$ stand for the probability of a worker in i exhibiting the same status than a worker in j.

$$e_{ij} = a_{i1}a_{j1} + a_{i2}a_{j2} + a_{i3}a_{j3} + a_{i4}a_{j4}$$

By construction, we have: $1 = p_{ij} + p_{ji} + e_{ij}$.

In order to compare the relative goodness of the job market in the case of two societies, i and j, we consider the following protocol. Take two individuals at random, one from society i and the other one from society j, and compare their situation in the labour market. If the individual extracted from i is in a better situation that the individual extracted from j we declare that society i *beats* society j in this pairwise confrontation. And vice-versa. When both individuals are in the same situation, we decide the winner by flipping a coin.

Needless to say the outcome of this confrontation depends on the specific individuals that the chance has selected. To avoid this bias we substitute this one-shot confrontation by repeating the procedure infinitely many times and computing how often an individual from i is in a better situation than an individual from j when confronted in those random matchings. Let us call w_i the fraction of times that society i is the winner and w_j the fraction of times that j is the winner, with $w_i + w_j = 1$. Those numbers are proportional to $p_{ij} + \left(e_{ij}/2\right)$ and $p_{ji} + \left(e_{ji}/2\right)$, respectively, so that we can write:

$$\frac{w_i}{w_j} = \frac{p_{ij} + \left(e_{ij}/2\right)}{p_{ji} + \left(e_{ij}/2\right)}$$

Hence,

$$w_i = \frac{\left[p_{ij} + (e_{ij}/2) \right] w_j}{p_{ji} + (e_{ij}/2)} \qquad [1]$$

When there are more than two societies involved, we can extend previous protocol in a natural way as follows. Take any two societies at random, select randomly one member from each society and compare their situation. As before, we say that one society beats the other if the chosen individual is in a better situation. Let the winning society keep the floor and apply the same procedure for another pairwise competition with a random member of another society randomly selected. By repeating indefinitely this procedure we can calculate the fraction of times that each society is declared the winner in those tournaments. Here again it is easy to compute how often each society is declared the winner, as it is simply the expected value of the corresponding confrontations. Formally,

$$w_i = \frac{\frac{1}{g-1}\sum_{j \neq i} \left(p_{ij} + (e_{ij}/2) \right) w_j}{\frac{1}{g-1}\sum_{j \neq i} \left(p_{ji} + (e_{ji}/2) \right)}, \qquad i, j = 1,2,...., g \qquad [2]$$

with $\sum_{i=1}^{g} w_i = 1$. Trivially, Equation [2] collapses to Equation [1] when there are only two populations.

The vector or those w_i values is called the *balanced worth* (see Herrero & Villar, 2018). It provides a *relative evaluation* of the different societies, as each individual value depends on the data of all the groups. It can be shown that the balanced worth vector, $(w_1, \ldots, w_g)$ always exists and it is unique except for the choice of units (it has one degree of freedom). It is also interesting to note that balanced worth is *monotonic*. That is, if the distribution of group *j* shifts to the upper levels of performance, then the balanced worth of group *j* will increase (a property that implies *stochastic dominance*).[2]

[2] The computation of the balanced worth can be directly obtained through a friendly and freely available algorithm, hosted on the website of the *Instituto Valenciano de Investigaciones Económicas* (Ivie) at http://www.ivie.es/balanced-worth/.

3. Two applications

We now apply this evaluation protocol into two different scenarios, both involving the evaluation of labour market structures in three points in time: 2007, which corresponds to the beginning of the crisis, 2013, which is for most societies the worst year of the crisis, and 2017, which is a year in which the economy has already recovered.

In the first application we compare labour market structures for different OECD countries and provide an assessment on how the crisis has hit those societies, by comparing each society on its own in the three different periods, and how each society has evolved relatively to OECD's average.

The second application refers to a single country, Spain, and analyses the performance of the labour market for different age groups. This illustrates how the evaluation protocol can be used to deal with heterogeneous populations. Here we analyse the evolution of market structures for different types of Spanish workers, both with respect to the initial period and for each type with respect to the others.

3.1 The evaluation of the labour market in the OECD (2007-2017)

We now apply the evaluation described in Section 2 to the analysis of labour market structures in OECD countries in 2007, 2013 and 2017. There are some OECD countries that are not among those analysed because of lack of data for some categories at some period. The change between 2007 and 2013 illustrates on how deep the crisis affected the labour market. The change between 2013 and 2017 tells us how the country has recovered.

The data describing the labour market structures for each country and each period are presented in the Appendix with a higher level of detail than that in the reference model. In particular, unemployed workers are divided into five categories (less than 1 month, between 1 and 3 months, between 3 and 6 months, between 6 and 12 months, and more than 12 months). As already mentioned the synthetic description of the labour market structure in terms of four categories (i.e. gathering unemployed workers into the two conventional categories of short-term

and long-term unemployed) produces practically the same results. All changes are below 0.3% of the richer scenario.

Table 1 provides the evaluation of each country separately by comparing the situation in 2013 and 2017 relative to 2007, which is normalised by setting the balanced worth value equal to 100. The OECD as a whole has performed rather well, with only a decrease of 2.7 points in 2013 relative to 2007 and a better situation in 2017 than the one before the crisis. This global outcome, however, corresponds to very different changes in the labour market structures of the country members. The countries in which the crisis has hit harder are Greece (-31.7%), Spain (-22.9%), Italy (-21.7%), Ireland (-18.5%), Portugal (-14.3%), Netherlands (-11.7%), and Hungary (-11%). Of all those countries Greece, Italy, Netherlands and Spain, together with Denmark, are in 2017 still far away from where they were in 2007. On the other side, Germany, Japan and Poland were in 2013 better than in 2007, and have improved still further in 2017.

Table 1: Evaluation of the labour market in the OECD countries relative to 2007

Country	Year	Relative BW
Australia	2007	100
	2013	99,8
	2017	99,0
Austria	2007	100
	2013	99,2
	2017	99,3
Belgium	2007	100
	2013	99,4
	2017	97,7
Canada	2007	100
	2013	94,5
	2017	98,1
Czeck Republic	2007	100
	2013	94,8
	2017	102,4

Denmark	2007	100
	2013	94,2
	2017	89,7
Finland	2007	100
	2013	98,1
	2017	96,3
France	2007	100
	2013	94,1
	2017	93,6
Germany	2007	100,0
	2013	109,7
	2017	114,0
Greece	2007	100
	2013	68,3
	2017	75,5
Hungary	2007	100
	2013	89,0
	2017	104,1
Ireland	2007	100
	2013	81,5
	2017	95,4
Italy	2007	100,0
	2013	88,3
	2017	86,9
Japan	2007	100
	2013	110,2
	2017	116,0
Netherlands	2007	100
	2013	88,3
	2017	90,4
Norway	2007	100

	2013	100,4
	2017	98,8
Poland	2007	100
	2013	100,8
	2017	114,0
Portugal	2007	100
	2013	85,7
	2017	98,6
Slovakia	2007	100
	2013	91,3
	2017	99,0
Spain	2007	100,0
	2013	77,1
	2017	89,0
Sweden	2007	100
	2013	97,2
	2017	99,8
Switzerland	2007	100
	2013	100,1
	2017	99,2
Turkey	2007	100
	2013	100,3
	2017	94,2
UK	2007	100,0
	2013	94,8
	2017	102,1
OECD	2007	100,0
	2013	97,3
	2017	101,9

Figure 1 provides a graphical comparison of the type of evaluation provided by the balanced worth and that corresponding to the employment rate and permanent employment rate in 2017. To do so we normalise the values of those

three variables by setting the figure of 2007 equal to 100, so that the picture describes the relative changes in the period 2007-2017. The coefficients of variation of all three variables are low, but the balanced worth exhibits a higher discrimination power (the coefficient of variation of the employment rate, permanent employment rate, and balanced worth are 0.042, 0.054 and 0.089, respectively).

Figure 1: Relative values of Balanced Worth, Employment rate and Permanent Employment rate in 2017 (2007 = 100)

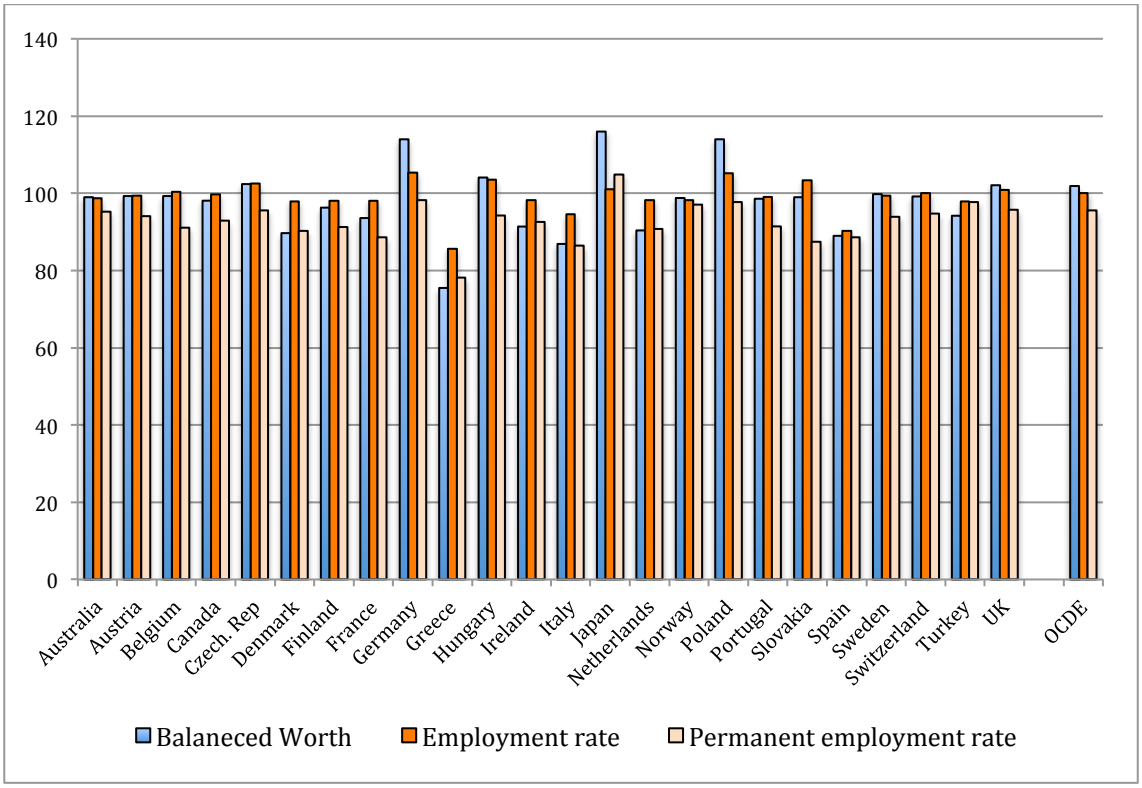

Table 2 provides the relative evaluation of the OECD countries comparing the situation of the labour market in 2007, 2013 and 2017. We normalise the value of the OECD within each year equal to 100 so that the evaluation now tells us how far is each country from the average OECD value in each of those years. We obtain in this way an estimate of the changes experienced by country members relative to the mean value of each year. Denmark, Greece, Italy, Netherlands, Spain and Turkey exhibit in 2017 a substantial worsening of their relative positions with respect to the OECD. Germany, Japan and Poland show the opposite behaviour.

Table 2: Balanced Worth of the labour market in OECD countries within each year, relative to the OECD average

Countries	2007	2013	2017	**Change 07/17**
Australia	114	116	111	-3,1%
Austria	108	109	104	-3,9%
Belgium	102	104	98	-4,2%
Canada	98	96	94	-3,7%
Czeck Republic	107	104	108	0,7%
Denmark	110	106	97	-12,0%
Finland	91	92	86	-5,3%
France	91	88	84	-8,1%
Germany	90	101	101	11,9%
Greece	96	67	71	-26,3%
Hungary	105	95	107	2,4%
Ireland	108	90	101	-6,6%
Italy	97	88	83	-14,9%
Japan	100	113	114	13,5%
Netherlands	94	86	84	-11,0%
Norway	112	115	108	-3,2%
Poland	70	73	78	11,0%
Portugal	80	72	77	-3,0%
Slovakia	100	93	97	-3,0%
Spain	68	58	61	-9,2%
Sweden	90	91	89	-1,9%
Switzerland	100	103	98	-2,6%
Turkey	94	97	87	-7,7%
United Kingdom	113	109	113	0,2%
OECD	100	100	100	0,0%

3.2 The Spanish labour market by age groups

An interesting feature of this evaluation protocol is that it can also be applied for the analysis of heterogeneous populations. To illustrate this aspect we shall consider now a specific country, Spain, and compare the evolution of the market structures for different age groups in the labour force. More specifically, we consider three cohorts: workers between 16 and 30 years old, those between 31 and 50; and workers over 50 years old. As in the OECD analysis, we take as reference the years 2007, 2013, and 2017. Table 3 provides an estimate of the relative situation of the labour market for each of those age groups, with respect to

their situation in 2007. In this way we have a picture of the deterioration and recovery experienced between 2007 and 2017.

Table 3: Balanced worth of the labour market of the different Spanish cohorts with respect to 2007

Ages	2007	2013	2017
16-30	100	51,2	64,3
31-50	100	71,6	83,5
Over 50	100	72,9	80,5

Table 3 shows that the deterioration of the job market during the crisis was especially hard for the younger cohort. Their working possibilities in 2013 were half of those in 2007, and they only recovered slightly in 2017. The intermediate and the old generations also suffered during the crisis but much less so. For the intermediate generation in 2017 they are about 17% below the situation in 2007, and the old generation about 20% below.

Table 4 describes the relative situation of the labour market for each of those three age groups, in the three reference years, with respect to the group over 50 years old, to figure out the relative performance of the labour market for the different age groups during the crisis.

Table 4: Balanced worth of the labour market of the different Spanish cohorts with respect to the old one.

Ages	2007	2013	2017
16-30	55,0	51,3	50,6
31-50	87,6	90,4	93,8
Over 50	100	100	100

Table 4 states a fact well known about the situation of the Spanish job market: the bad situation of the younger cohort with respect to the remaining age groups. The cohort with best conditions along the full period is the one formed by workers over 50 years old, in spite of the tremendous increase in unemployment they experienced. The intermediate cohort has worse conditions than the old one, but in 2017 the difference is about 6%, whereas the situation of the young generation stays systematically around 50% of the old one across the full period.

If we want to offer a picture of the relative situation of the three worker's generations across the three years considered, we can compute the relative

valuation of all the generations simultaneously for the years 2007, 2013 and 2017. This is done in Table 5, where we normalise the values with respect to the older cohort in 2007.

Table 5: Balanced worth of the labour market of the different Spanish cohorts with respect to the old one in 2007.

Ages	2007	2013	2017
16-30	57,91	32,83	39
31-50	88,62	62,06	73,15
Over 50	100	69,72	78,11

Table 5 permits one to visualize the change in the job market conditions of the different generations relative to the best case in 2007. Here again we observe the disadvantaged situation of the younger generation from a different perspective. The worth of labour market structure of the young represented in 2013 about 33% of the old generation in 2007, and in 2017 is still below 40%.

5. Final comments

We have proposed here a protocol to evaluate labour market structures, with an application to OECD countries in the period 2007-2017. Our approach has the advantage of being able to deal with the full distribution of the labour force in ordered categories in a natural way, involving simultaneously employed and unemployed workers. This, to the best of our understanding, is a new way to address the evaluation and dynamics of the labour market.

It is interesting to notice that this same protocol can be applied to the case of heterogeneous populations (gender, age groups, education achievements, etc.). As a way of showing how it may work in the heterogeneous case we presented an application to the case of Spain, considering different cohorts of workers, showing the deterioration and partial recovery of the labour conditions across the period, but also the situation of the young generation of workers with respect to the old one.

Taking another example, if we consider, for instance gender differences, the same approach permits one evaluating how women fare relative to men within

each country, or the women's situations in different countries. In this way, one can keep track of differences between population subgroups that are relevant for the analysis, as well as whether the crisis has affected differently different population subgroups.

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Appendix

Country		Permanent	Temporary	< 1 month	1 to 3 months	3 to 6 months	6 to 12 months	More than 1 year
Australia	2007	0,8958	0,0604	0,0130	0,0120	0,0070	0,0051	0,0067
	2013	0,8943	0,0491	0,0126	0,0150	0,0074	0,0085	0,0108
	2017	0,8924	0,0496	0,0118	0,0138	0,0097	0,0092	0,0136
Austria	2007	0,8676	0,0838	0,0053	0,0118	0,0099	0,0084	0,0132
	2013	0,8636	0,0878	0,0044	0,0123	0,0106	0,0093	0,0120
	2017	0,8641	0,0873	0,0047	0,0109	0,0083	0,0084	0,0162
Belgium	2007	0,8454	0,0800	0,0045	0,0120	0,0096	0,0109	0,0376
	2013	0,8405	0,0752	0,0026	0,0136	0,0121	0,0139	0,0388
	2017	0,8322	0,0969	0,0040	0,0110	0,0095	0,0109	0,0355
Canada	2007	0,8176	0,1219	0,0257	0,0173	0,0089	0,0044	0,0043
	2013	0,7927	0,1230	0,0293	0,0228	0,0135	0,0079	0,0108
	2017	0,8084	0,1282	0,0228	0,0168	0,0100	0,0062	0,0077
Czeck Republic	2007	0,8655	0,0813	0,0033	0,0048	0,0070	0,0097	0,0284
	2013	0,8396	0,0896	0,0046	0,0087	0,0111	0,0146	0,0318
	2017	0,8738	0,0973	0,0030	0,0045	0,0050	0,0060	0,0104
Denmark	2007	0,8749	0,0871	0,0111	0,0097	0,0062	0,0049	0,0061
	2013	0,8490	0,0815	0,0122	0,0149	0,0132	0,0114	0,0177
	2017	0,8211	0,1215	0,0103	0,0139	0,0110	0,0090	0,0131
Finland	2007	0,7828	0,1487	0,0096	0,0193	0,0137	0,0102	0,0157
	2013	0,7753	0,1428	0,0101	0,0261	0,0162	0,0121	0,0174
	2017	0,7668	0,1469	0,0122	0,0256	0,0155	0,0115	0,0215
France	2007	0,7842	0,1392	0,0036	0,0155	0,0130	0,0139	0,0306
	2013	0,7567	0,1441	0,0046	0,0178	0,0176	0,0191	0,0402
	2017	0,7530	0,1530	0,0047	0,0160	0,0153	0,0167	0,0414
Germany	2007	0,7797	0,1337	0,0054	0,0109	0,0098	0,0114	0,0490
	2013	0,8217	0,1260	0,0049	0,0084	0,0075	0,0081	0,0234
	2017	0,8388	0,1237	0,0044	0,0063	0,0053	0,0058	0,0157

Greece	2007	0,8154	0,1006	0,0047	0,0115	0,0126	0,0135	0,0417
	2013	0,6518	0,0735	0,0085	0,0190	0,0252	0,0376	0,1843
	2017	0,6954	0,0897	0,0061	0,0125	0,0169	0,0229	0,1565
Hungary	2007	0,8581	0,0679	0,0036	0,0085	0,0108	0,0160	0,0351
	2013	0,7999	0,0982	0,0118	0,0078	0,0116	0,0200	0,0507
	2017	0,8740	0,0844	0,0057	0,0047	0,0058	0,0082	0,0172
Ireland	2007	0,8694	0,0808	0,0045	0,0120	0,0094	0,0089	0,0150
	2013	0,7764	0,0861	0,0060	0,0139	0,0146	0,0197	0,0833
	2017	0,8475	0,0854	0,0057	0,0103	0,0089	0,0107	0,0316
Italy	2007	0,8156	0,1236	0,0051	0,0095	0,0092	0,0082	0,0289
	2013	0,7627	0,1158	0,0058	0,0131	0,0158	0,0176	0,0692
	2017	0,7512	0,1367	0,0067	0,0122	0,0132	0,0141	0,0659
Japan	2007	0,8283	0,1333	0,0061	0,0081	0,0058	0,0062	0,0123
	2013	0,8790	0,0808	0,0045	0,0075	0,0056	0,0059	0,0166
	2017	0,9040	0,0679	0,0035	0,0062	0,0043	0,0038	0,0103
Netherlands	2007	0,7931	0,1751	0,0016	0,0071	0,0053	0,0052	0,0125
	2013	0,7378	0,1898	0,0049	0,0142	0,0136	0,0139	0,0258
	2017	0,7441	0,2075	0,0036	0,0105	0,0074	0,0072	0,0197
Norway	2007	0,8820	0,0930	0,0082	0,0065	0,0038	0,0043	0,0022
	2013	0,8853	0,0805	0,0091	0,0092	0,0061	0,0067	0,0031
	2017	0,8779	0,0805	0,0093	0,0092	0,0073	0,0093	0,0065
Poland	2007	0,6490	0,2549	0,0079	0,0118	0,0146	0,0177	0,0441
	2013	0,6551	0,2416	0,0113	0,0158	0,0180	0,0205	0,0377
	2017	0,7021	0,2490	0,0079	0,0065	0,0108	0,0085	0,0152
Portugal	2007	0,7153	0,2051	0,0050	0,0111	0,0116	0,0143	0,0376
	2013	0,6588	0,1794	0,0051	0,0184	0,0198	0,0273	0,0912
	2017	0,7109	0,2004	0,0050	0,0139	0,0120	0,0136	0,0443
Slovakia	2007	0,8435	0,0451	0,0062	0,0060	0,0075	0,0128	0,0789
	2013	0,7981	0,0597	0,0088	0,0083	0,0113	0,0191	0,0947
	2017	0,8304	0,0883	0,0072	0,0066	0,0076	0,0121	0,0478
Spain	2007	0,6282	0,2895	0,0153	0,0234	0,0149	0,0119	0,0168
	2013	0,5681	0,1710	0,0150	0,0347	0,0363	0,0453	0,1296
	2017	0,6070	0,2208	0,0150	0,0305	0,0251	0,0250	0,0766

Sweden	2007	0,7746	0,1638	0,0190	0,0154	0,0107	0,0087	0,0079
	2013	0,7643	0,1552	0,0205	0,0195	0,0140	0,0129	0,0137
	2017	0,7754	0,1574	0,0196	0,0148	0,0113	0,0101	0,0113
Switzerland	2007	0,8292	0,1227	0,0038	0,0074	0,0097	0,0076	0,0196
	2013	0,8296	0,1229	0,0040	0,0092	0,0086	0,0097	0,0160
	2017	0,8248	0,1272	0,0045	0,0095	0,0081	0,0077	0,0182
Turkey	2007	0,8031	0,1080	0,0024	0,0232	0,0221	0,0142	0,0270
	2013	0,8035	0,1091	0,0038	0,0257	0,0229	0,0137	0,0213
	2017	0,7734	0,1183	0,0051	0,0383	0,0248	0,0164	0,0237
UK	2007	0,8921	0,0553	0,0087	0,0133	0,0096	0,0085	0,0125
	2013	0,8671	0,0576	0,0083	0,0146	0,0123	0,0129	0,0272
	2017	0,9019	0,0547	0,0076	0,0105	0,0070	0,0069	0,0113
OECD	2007	0,8287	0,1153	0,0106	0,0135	0,0089	0,0072	0,0158
	2013	0,8190	0,1020	0,0110	0,0163	0,0125	0,0114	0,0278
	2017	0,8388	0,1062	0,0092	0,0130	0,0087	0,0072	0,0170

	Spain.							
		Permanent	Temporary	<3month	3-6 months	6m-1year	1-2years	>2years
2007	16-30	0,4257175	0,4504566	0,0696361	0,0198047	0,0148785	0,0116269	0,0078799
	31-50	0,6504736	0,2816496	0,0316127	0,0101169	0,0091921	0,0077862	0,0091685
	>50	0,7186992	0,2214213	0,0187861	0,0063047	0,0075092	0,0109304	0,0163488
2013	16-30	0,2731671	0,3200120	0,0862520	0,0463436	0,0655777	0,0962636	0,1123836
	31-50	0,5412975	0,2259871	0,0393389	0,0228607	0,0333527	0,0518423	0,0853205
	>50	0,5971427	0,2029892	0,0227152	0,0144992	0,0223654	0,0403321	0,0999560
2017	16-30	0,2908165	0,4276787	0,0938216	0,0374453	0,0409502	0,0437060	0,0655815
	31-50	0,5883356	0,2637756	0,0371513	0,0157680	0,0160836	0,0211539	0,0577317
	>50	0,6339938	0,2166460	0,0232039	0,0098247	0,0136235	0,0181569	0,0845509