

Economically Active Population Flow Statistics (EAPFS)

Gross flow. Series 2005-2013

As a novelty and in accordance to what is set out in Royal Decree 1017/2013, of 20 December, which approves the 2014 Annual Program of the National Statistical Plan 2013-2016, as of the first quarter of 2014, the National Statistics Institute will start publishing quarterly results regarding the Economically Active Population Flow Statistics, expressed in gross terms. The information will be incorporated into the Economically Active Population Survey (EAPS) press release.

Gross Flow Statistics were presented for the judgment of the High Council on Statistics¹ on 26 June 2013 and it was favourably notified by the Permanent Commission of this organisation on 9 October 2013.

Economically Active Population Flow Statistics provide further information on the dynamics of the labour market, since it allows monitoring the population or specific groups that are part of it over time, regarding their relationship with the labour market.

To date, the only information on the transitions carried out by the INE was presented as probabilities of transition or origin between two labour situations during different moments in time. The big difference is that the new Economically Active Population Flow Statistics present level estimates, that is, absolute figures of persons that flow to and from situations in which they are employed, unemployed and economically inactive from one quarter to the next. This information may not be obtained from the simple difference among the quarterly results of the Economically Active Population Survey (EAPS), that provides net variations but not the transfers between each situation.

Economically Active Flow Statistics take the EAPS as a base, which is quarterly continuous sampling research conducted by the INE. It uses the common part of the sample between two EAPS quarters, which allows linking the common registers (the data of each person), this way carrying out a longitudinal study, which involves a very low production cost. Additionally, it avoids a greater burden on respondents, this way complying with the principles of the Law on the Public Statistical Function and the European Statistics Code of Practice. All information is calculated with the new population base of the Population and Housing Census 2011.

¹ The High Council on Statistics is an advisory body of the state statistical services and of social involvement of respondents, producers and users of official statistics.

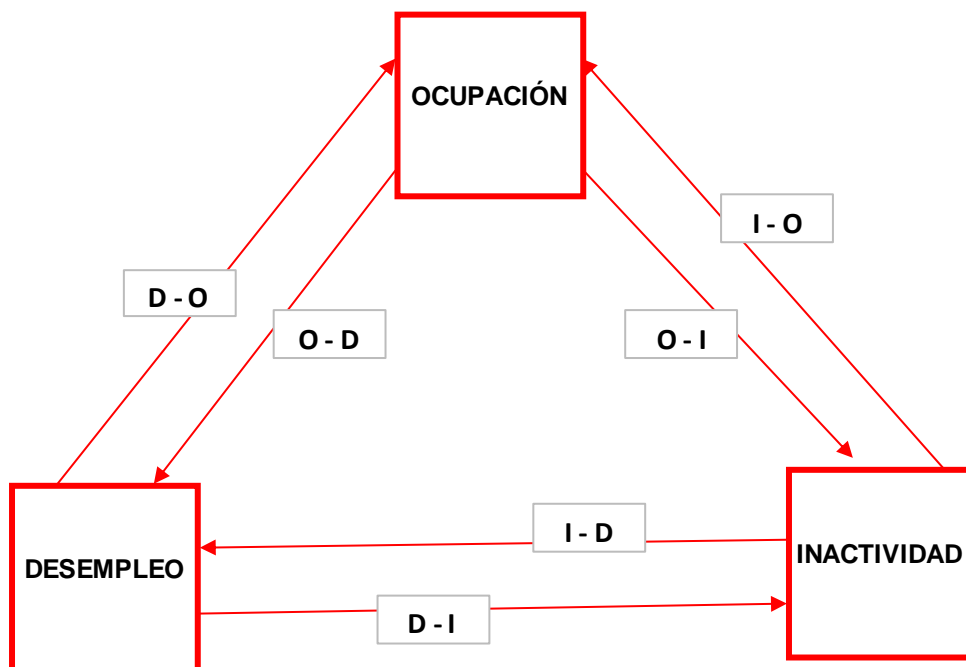
Diagram of gross flows BETWEEN consecutive quarters

The following diagram shows all the flows between two consecutive quarters, which illustrate all the movements that have taken place regarding employment, unemployment and economically inactive situations in a more descriptive way than just the net quarterly variation of these magnitudes.

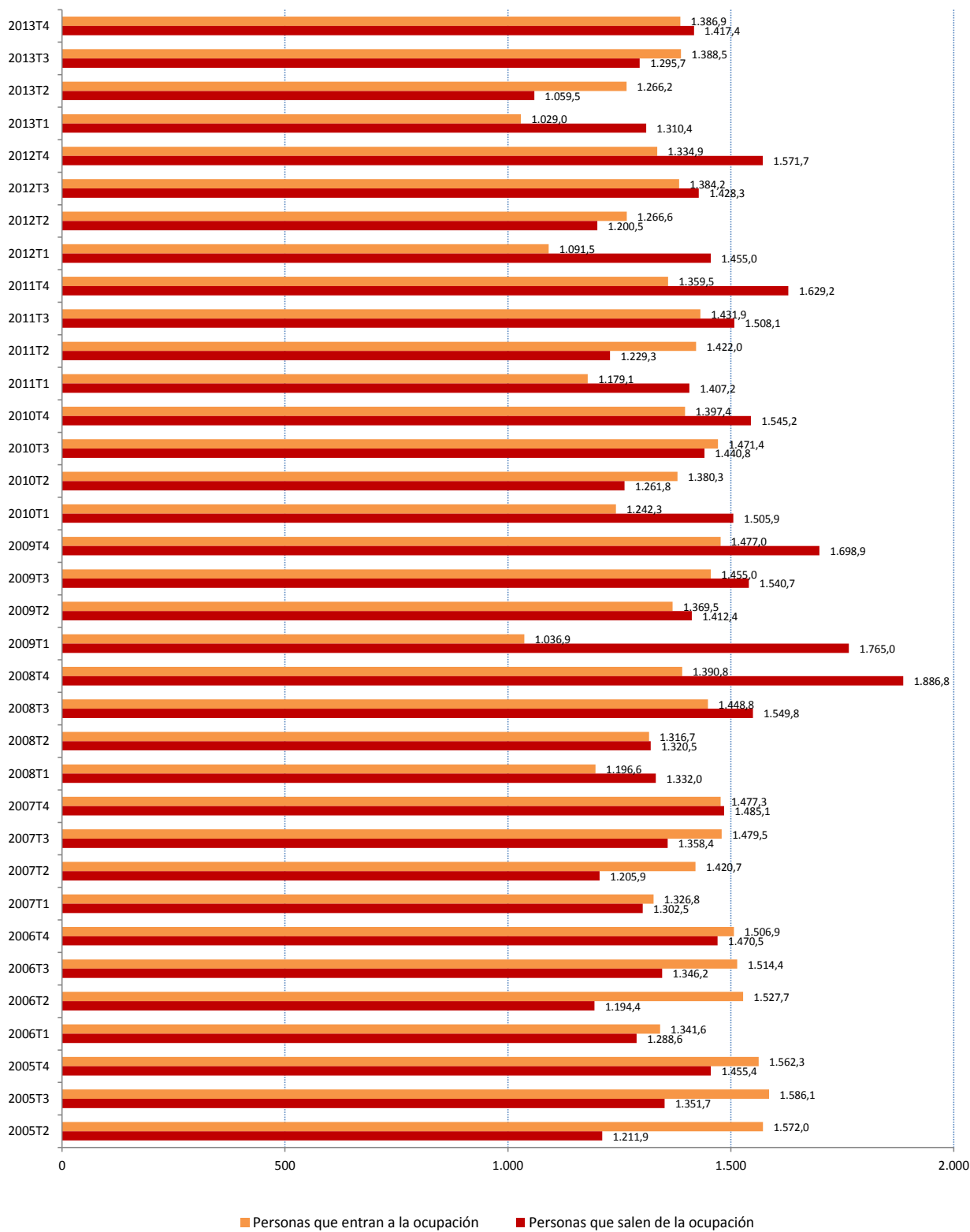
They are called:

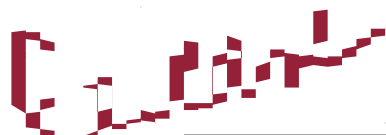
- *Persons who have become employed:* number of persons who are employed during the reference quarter but were not employed during the previous one. During the previous quarter they could be unemployed (from unemployed to employed, (U-E) or economically inactive (from economically inactive to employed, EI-E)
- *Persons who have become unemployed:* number of persons who are unemployed during the reference quarter but were not unemployed during the previous one. During the previous quarter they could be employed (from employed to unemployed, E-U) or economically inactive (from economically inactive to unemployed, EI-U)
- *Persons who become economically inactive:* number of persons who are economically inactive during the reference quarter but were not economically inactive during the previous one. During the previous quarter they could be unemployed (from unemployed to economically inactive, U-EI) or employed (from employed to economically inactive, E-EI)

DIAGRAMA DE FLUJOS BRUTOS ENTRE TRIMESTRES CONSECUTIVOS



Flujos brutos de personas (en miles) que entran y salen de la ocupación cada trimestre



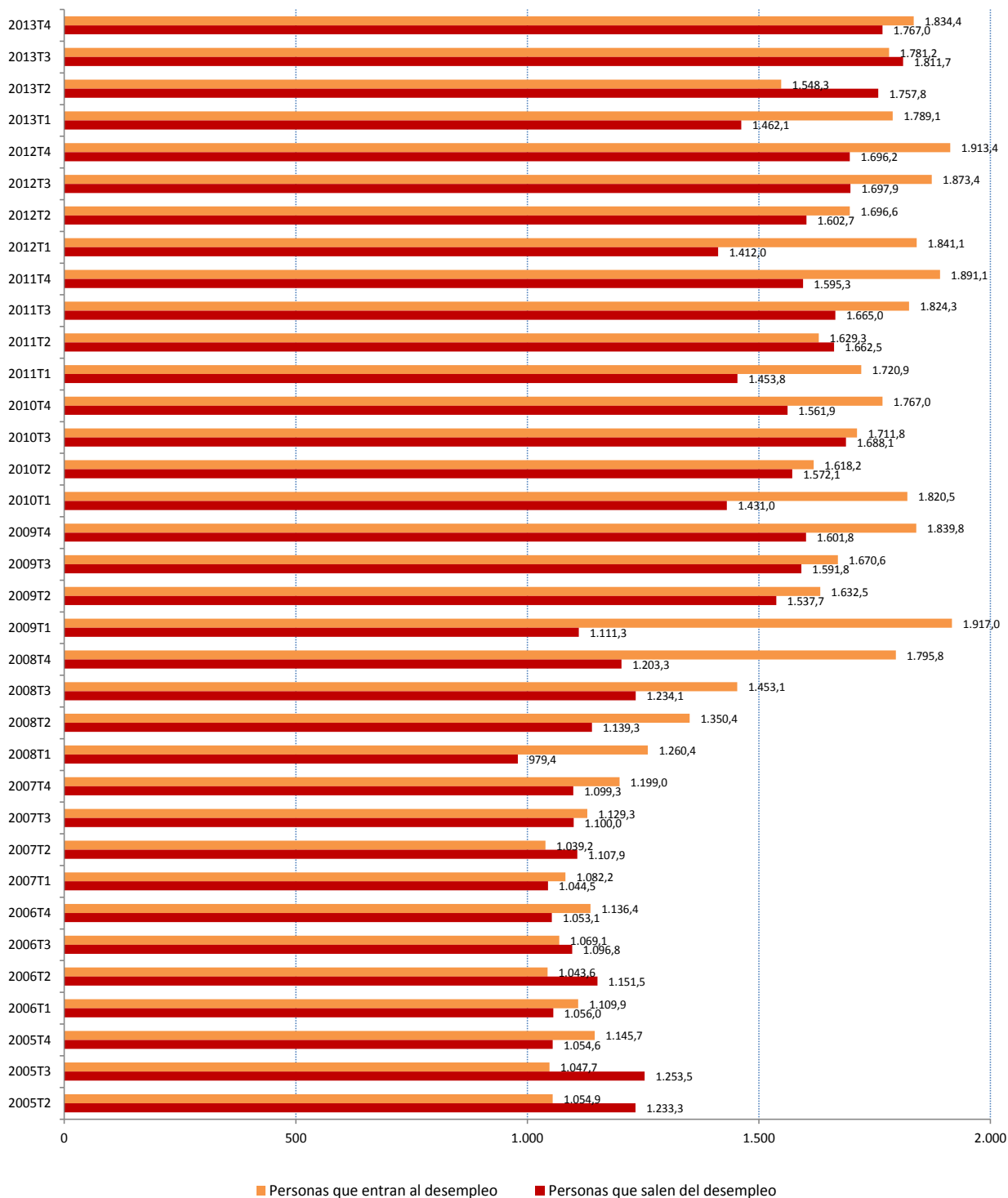


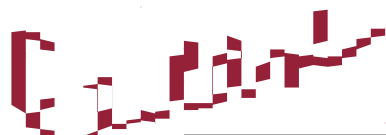
Flujos brutos de personas (en miles) que entran y salen de la ocupación cada trimestre

TRIMESTRE	Personas que entran a la ocupación			Personas que salen de la ocupación		
	Desde el	Desde la	Total (*)	A la		Total
	desempleo	inactividad		Al desempleo	inactividad	
D-O	I-O	O-D	O-I			
2013T4	964,7	421,9	1.386,9	919,2	498,2	1.417,4
2013T3	1.004,3	382,5	1.388,5	797,7	498,0	1.295,7
2013T2	943,3	322,8	1.266,2	672,5	387,0	1.059,5
2013T1	733,2	294,8	1.029,0	882,7	427,7	1.310,4
2012T4	891,5	440,9	1.334,9	1.010,7	561,0	1.571,7
2012T3	953,5	430,6	1.384,2	891,1	537,3	1.428,3
2012T2	888,8	375,4	1.266,6	809,4	391,1	1.200,5
2012T1	723,4	365,8	1.091,5	983,5	471,5	1.455,0
2011T4	877,3	481,7	1.359,5	1.026,6	602,6	1.629,2
2011T3	938,4	489,6	1.431,9	887,3	620,8	1.508,1
2011T2	987,7	431,9	1.422,0	773,4	455,9	1.229,3
2011T1	793,9	385,0	1.179,1	906,1	501,0	1.407,2
2010T4	877,2	520,2	1.397,4	915,9	629,3	1.545,2
2010T3	949,2	520,2	1.471,4	845,3	595,5	1.440,8
2010T2	938,2	442,0	1.380,3	768,2	493,7	1.261,8
2010T1	804,4	435,2	1.242,3	934,1	571,7	1.505,9
2009T4	907,5	568,6	1.477,0	970,3	728,5	1.698,9
2009T3	911,7	540,3	1.455,0	849,1	691,6	1.540,7
2009T2	900,9	465,1	1.369,5	853,7	558,7	1.412,4
2009T1	624,2	404,3	1.036,9	1.111,1	653,8	1.765,0
2008T4	730,4	656,2	1.390,8	1.047,5	839,3	1.886,8
2008T3	730,8	697,5	1.448,8	789,9	759,8	1.549,8
2008T2	698,4	608,0	1.316,7	704,4	616,1	1.320,5
2008T1	562,6	622,9	1.196,6	651,5	680,5	1.332,0
2007T4	663,3	799,8	1.477,3	608,3	876,8	1.485,1
2007T3	621,6	840,9	1.479,5	549,6	808,8	1.358,4
2007T2	681,7	718,5	1.420,7	500,9	705,0	1.205,9
2007T1	620,9	691,0	1.326,8	547,1	755,4	1.302,5
2006T4	638,1	843,1	1.506,9	569,5	900,9	1.470,5
2006T3	629,7	865,0	1.514,4	503,8	842,4	1.346,2
2006T2	696,3	793,8	1.527,7	481,1	713,3	1.194,4
2006T1	602,3	717,3	1.341,6	569,7	718,9	1.288,6
2005T4	640,3	910,1	1.562,3	530,0	925,4	1.455,4
2005T3	692,0	871,4	1.586,1	477,9	873,8	1.351,7
2005T2	755,2	810,3	1.572,0	448,3	763,5	1.211,9

(*) El total puede no ser igual a la suma de las partes pues incluye un 'no consta', que corresponde a las personas de las que no se conoce su situación de actividad en el trimestre anterior

Flujos brutos de personas (en miles) que entran y salen del desempleo cada trimestre



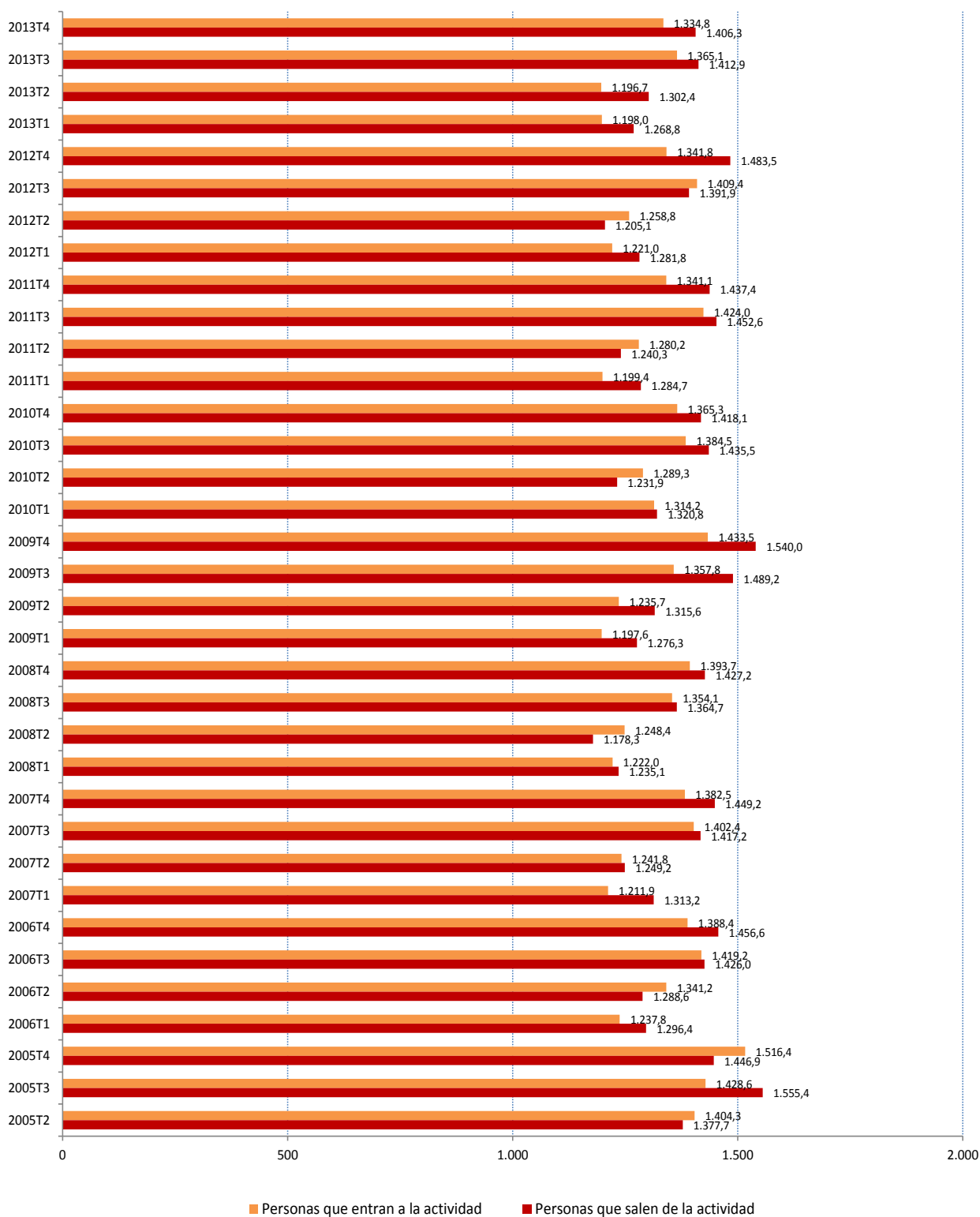


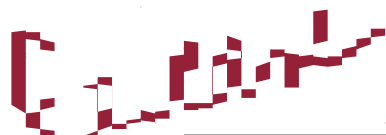
Flujos brutos de personas (en miles) que entran y salen del desempleo cada trimestre

TRIMESTRE	Personas que entran al desempleo			Personas que salen del desempleo		
	Desde la	Desde la	Total (*)	A la	A la	Total
	ocupación	inactividad		ocupación	inactividad	
O-D	I-D	D-O	D-I			
2013T4	919,2	912,9	1.834,4	964,7	802,3	1.767,0
2013T3	797,7	982,6	1.781,2	1.004,3	807,4	1.811,7
2013T2	672,5	874,0	1.548,3	943,3	814,5	1.757,8
2013T1	882,7	903,2	1.789,1	733,2	728,9	1.462,1
2012T4	1.010,7	900,9	1.913,4	891,5	804,7	1.696,2
2012T3	891,1	978,9	1.873,4	953,5	744,4	1.697,9
2012T2	809,4	883,4	1.696,6	888,8	713,9	1.602,7
2012T1	983,5	855,3	1.841,1	723,4	688,6	1.412,0
2011T4	1.026,6	859,4	1.891,1	877,3	718,0	1.595,3
2011T3	887,3	934,5	1.824,3	938,4	726,6	1.665,0
2011T2	773,4	848,3	1.629,3	987,7	674,7	1.662,5
2011T1	906,1	814,4	1.720,9	793,9	659,9	1.453,8
2010T4	915,9	845,1	1.767,0	877,2	684,7	1.561,9
2010T3	845,3	864,3	1.711,8	949,2	738,8	1.688,1
2010T2	768,2	847,4	1.618,2	938,2	633,9	1.572,1
2010T1	934,1	879,0	1.820,5	804,4	626,6	1.431,0
2009T4	970,3	864,8	1.839,8	907,5	694,3	1.601,8
2009T3	849,1	817,5	1.670,6	911,7	680,1	1.591,8
2009T2	853,7	770,5	1.632,5	900,9	636,8	1.537,7
2009T1	1.111,1	793,3	1.917,0	624,2	487,1	1.111,3
2008T4	1.047,5	737,5	1.795,8	730,4	472,9	1.203,3
2008T3	789,9	656,5	1.453,1	730,8	503,3	1.234,1
2008T2	704,4	640,4	1.350,4	698,4	440,9	1.139,3
2008T1	651,5	599,1	1.260,4	562,6	416,8	979,4
2007T4	608,3	582,7	1.199,0	663,3	436,0	1.099,3
2007T3	549,6	561,5	1.129,3	621,6	478,3	1.100,0
2007T2	500,9	523,2	1.039,2	681,7	426,3	1.107,9
2007T1	547,1	520,9	1.082,2	620,9	423,6	1.044,5
2006T4	569,5	545,3	1.136,4	638,1	414,9	1.053,1
2006T3	503,8	554,2	1.069,1	629,7	467,2	1.096,8
2006T2	481,1	547,5	1.043,6	696,3	455,2	1.151,5
2006T1	569,7	520,4	1.109,9	602,3	453,8	1.056,0
2005T4	530,0	606,3	1.145,7	640,3	414,3	1.054,6
2005T3	477,9	557,2	1.047,7	692,0	561,5	1.253,5
2005T2	448,3	594,0	1.054,9	755,2	478,2	1.233,3

(*) El total puede no ser igual a la suma de las partes pues incluye un 'no consta', que corresponde a las personas de las que no se conoce su situación de actividad en el trimestre anterior

Flujos brutos de personas (en miles) que entran y salen de la actividad cada trimestre





Flujos brutos de personas (en miles) que entran y salen de la actividad cada trimestre

TRIMESTRE	Personas que entran a la actividad			Personas que salen de la actividad		
	A la	Al desempleo	Total	Desde la	Desde el	Total (*)
	ocupación	I-D		ocupación	desempleo	
I-O	I-D	O-I	D-I			
2013T4	421,9	912,9	1.334,8	498,2	802,3	1.406,3
2013T3	382,5	982,6	1.365,1	498,0	807,4	1.412,9
2013T2	322,8	874,0	1.196,7	387,0	814,5	1.302,4
2013T1	294,8	903,2	1.198,0	427,7	728,9	1.268,8
2012T4	440,9	900,9	1.341,8	561,0	804,7	1.483,5
2012T3	430,6	978,9	1.409,4	537,3	744,4	1.391,9
2012T2	375,4	883,4	1.258,8	391,1	713,9	1.205,1
2012T1	365,8	855,3	1.221,0	471,5	688,6	1.281,8
2011T4	481,7	859,4	1.341,1	602,6	718,0	1.437,4
2011T3	489,6	934,5	1.424,0	620,8	726,6	1.452,6
2011T2	431,9	848,3	1.280,2	455,9	674,7	1.240,3
2011T1	385,0	814,4	1.199,4	501,0	659,9	1.284,7
2010T4	520,2	845,1	1.365,3	629,3	684,7	1.418,1
2010T3	520,2	864,3	1.384,5	595,5	738,8	1.435,5
2010T2	442,0	847,4	1.289,3	493,7	633,9	1.231,9
2010T1	435,2	879,0	1.314,2	571,7	626,6	1.320,8
2009T4	568,6	864,8	1.433,5	728,5	694,3	1.540,0
2009T3	540,3	817,5	1.357,8	691,6	680,1	1.489,2
2009T2	465,1	770,5	1.235,7	558,7	636,8	1.315,6
2009T1	404,3	793,3	1.197,6	653,8	487,1	1.276,3
2008T4	656,2	737,5	1.393,7	839,3	472,9	1.427,2
2008T3	697,5	656,5	1.354,1	759,8	503,3	1.364,7
2008T2	608,0	640,4	1.248,4	616,1	440,9	1.178,3
2008T1	622,9	599,1	1.222,0	680,5	416,8	1.235,1
2007T4	799,8	582,7	1.382,5	876,8	436,0	1.449,2
2007T3	840,9	561,5	1.402,4	808,8	478,3	1.417,2
2007T2	718,5	523,2	1.241,8	705,0	426,3	1.249,2
2007T1	691,0	520,9	1.211,9	755,4	423,6	1.313,2
2006T4	843,1	545,3	1.388,4	900,9	414,9	1.456,6
2006T3	865,0	554,2	1.419,2	842,4	467,2	1.426,0
2006T2	793,8	547,5	1.341,2	713,3	455,2	1.288,6
2006T1	717,3	520,4	1.237,8	718,9	453,8	1.296,4
2005T4	910,1	606,3	1.516,4	925,4	414,3	1.446,9
2005T3	871,4	557,2	1.428,6	873,8	561,5	1.555,4
2005T2	810,3	594,0	1.404,3	763,5	478,2	1.377,7

(*) El total puede no ser igual a la suma de las partes pues incluye un 'no consta', que corresponde a las personas de las que no se conoce su situación de actividad en el trimestre anterior

Retrospective series 2005-2013

Principales flujos brutos (miles)

	Relación con la actividad en el trimestre actual											
	OCUPADO				DESEMPLEADO				INACTIVO			
	Relación con la actividad trimestre anterior				Relación con la actividad trimestre anterior				Relación con la actividad trimestre anterior			
	no consta	OCUPADO	DESEMPLEADO	INACTIVO	no consta	OCUPADO	DESEMPLEADO	INACTIVO	no consta	OCUPADO	DESEMPLEADO	INACTIVO
2013T4	0,3	15.748,4	964,7	421,9	2,3	919,2	4.101,3	912,9	105,8	498,2	802,3	14.066,0
2013T3	1,7	15.841,6	1.004,3	382,5	0,9	797,7	4.162,1	982,6	107,5	498,0	807,4	14.011,1
2013T2	0,2	15.894,3	943,3	322,8	1,9	672,5	4.499,0	874,0	100,9	387,0	814,5	14.170,4
2013T1	1,0	16.001,2	733,2	294,8	3,2	882,7	4.489,1	903,2	112,2	427,7	728,9	14.156,1
2012T4	2,4	16.004,5	891,5	440,9	1,8	1.010,7	4.107,6	900,9	117,8	561,0	804,7	13.939,3
2012T3	0,2	16.283,5	953,5	430,6	3,5	891,1	3.950,8	978,9	110,2	537,3	744,4	13.915,3
2012T2	2,4	16.491,9	888,8	375,4	3,7	809,4	4.034,5	883,4	100,1	391,1	713,9	14.129,0
2012T1	2,4	16.673,6	723,4	365,8	2,3	983,5	3.826,8	855,3	121,7	471,5	688,6	14.139,4
2011T4	0,5	16.793,6	877,3	481,7	5,0	1.026,6	3.396,2	859,4	116,8	602,6	718,0	14.004,2
2011T3	4,0	17.052,6	938,4	489,6	2,5	887,3	3.173,7	934,5	105,2	620,8	726,6	13.916,5
2011T2	2,4	17.200,0	987,7	431,9	7,6	773,4	3.214,9	848,3	109,7	455,9	674,7	14.120,7
2011T1	0,1	17.247,1	793,9	385,0	0,4	906,1	3.200,3	814,4	123,9	501,0	659,9	14.176,7
2010T4	0,0	17.277,5	877,2	520,2	6,0	915,9	2.935,1	845,1	104,2	629,3	684,7	14.006,6
2010T3	1,9	17.347,6	949,2	520,2	2,3	845,3	2.873,5	864,3	101,2	595,5	738,8	13.928,8
2010T2	0,2	17.370,8	938,2	442,0	2,7	768,2	3.037,1	847,4	104,3	493,7	633,9	14.106,7
2010T1	2,6	17.410,6	804,4	435,2	7,4	934,1	2.797,2	879,0	122,5	571,7	626,6	14.133,7
2009T4	0,9	17.413,4	907,5	568,6	4,6	970,3	2.495,2	864,8	117,1	728,5	694,3	13.947,5
2009T3	3,0	17.643,4	911,7	540,3	4,0	849,1	2.450,8	817,5	117,5	691,6	680,1	13.961,1
2009T2	3,5	17.784,7	900,9	465,1	8,2	853,7	2.507,1	770,5	120,1	558,7	636,8	14.022,0
2009T1	8,5	18.247,5	624,2	404,3	12,5	1.111,1	2.101,2	793,3	135,3	653,8	487,1	14.010,5
2008T4	4,2	18.664,5	730,4	656,2	10,9	1.047,5	1.411,0	737,5	115,0	839,3	472,9	13.857,2
2008T3	20,6	19.107,6	730,8	697,5	6,7	789,9	1.147,6	656,5	101,6	759,8	503,3	13.926,0
2008T2	10,2	19.330,2	698,4	608,0	5,5	704,4	1.035,3	640,4	121,4	616,1	440,9	14.130,7
2008T1	11,2	19.423,4	562,6	622,9	9,8	651,5	930,1	599,1	137,8	680,5	416,8	14.178,9
2007T4	14,2	19.240,6	663,3	799,8	8,1	608,3	742,9	582,7	136,3	876,8	436,0	13.992,1
2007T3	17,0	19.273,9	621,6	840,9	18,1	549,6	676,9	561,5	130,0	808,8	478,3	13.939,6
2007T2	20,5	19.160,2	681,7	718,5	15,1	500,9	734,0	523,2	118,0	705,0	426,3	14.140,5
2007T1	15,0	18.940,7	620,9	691,0	14,2	547,1	781,0	520,9	134,1	755,4	423,6	14.127,0
2006T4	25,6	18.688,5	638,1	843,1	21,6	569,5	683,0	545,3	140,8	900,9	414,9	13.917,2
2006T3	19,7	18.576,6	629,7	865,0	11,1	503,8	697,7	554,2	116,4	842,4	467,2	13.925,7
2006T2	37,6	18.363,9	696,3	793,8	15,0	481,1	790,8	547,5	120,1	713,3	455,2	14.041,1
2006T1	22,0	18.236,8	602,3	717,3	19,7	569,7	833,0	520,4	123,7	718,9	453,8	14.099,8
2005T4	12,0	17.946,9	640,3	910,1	9,4	530,0	714,6	606,3	107,2	925,4	414,3	13.980,0
2005T3	22,7	17.836,0	692,0	871,4	12,7	477,9	735,8	557,2	120,1	873,8	561,5	13.889,5
2005T2	6,6	17.588,6	755,2	810,3	12,5	448,3	914,3	594,0	136,0	763,5	478,2	14.011,7

NOTA.- El 'no consta' corresponde a las personas de las que no se conoce su situación de actividad en el trimestre anterior

Methodological note

Economically Active Population Flow Statistics provide further information on the dynamics of the labour market, since it allows monitoring the population or specific groups that are part of it over time, regarding their relationship with the labour market. It takes the Economically Active Population Survey (EAPS) as a base, which is quarterly continuous sampling research conducted by the INE.

It uses the common part of the sample between two EAPS quarters, which allows linking the common registers (the data of each person) this way carrying out a longitudinal study, which involves a very low production cost. Additionally, it avoids a greater burden on respondents, this way complying with the principles of the Law on the Public Statistical Function and the European Statistics Code of Practice.

The information on transitions compiled by the INE since 1987 mainly consisted in providing results as probabilities of transition or origin between two labour situations during different moments in time.

It is however necessary to take level estimates into account, that is, in absolute figures. They will reflect the variations among the employment, unemployment and economic inactivity situations from one quarter to the next. The simple difference among quarterly results of the EAPS provides net variations but gives no information on the transfers between each situation which result in these net variations.

Estimating the gross transitions between the employment, unemployment and economic inactivity situations from one quarter to the next is the objective of the substantial methodological change in the Economically Active Population Survey. To this end: the data given by the interviewed persons over time is linked and new elevation factors are calculated.

This process begins with the common sample between the current quarter and the previous one, adding the sample of the persons who have turned 16 years of age during the three months and the sample of the persons who have arrived in Spain from abroad during that same period. This way, a total sample is obtained, which perfectly represents the Spanish population in the current period.

Subsequently, elevation factors are calculated² in the usual way as they are calculated for the quarterly EAPS, but adding an additional measure to the total amount of employed, unemployed and economically inactive persons by Autonomous Community that have been obtained in the current quarterly EAPS, with the intention that both samples (flow and complete EAPS samples) offer the same results for the main magnitudes in the current quarter.

The rotation established by the EAPS, which consists in renovating one-sixth of the households in the sample each quarter, implies that the maximum available sample to calculate the estimates based on the common sample is 5/6. Moreover, incidences regarding information collection in one quarter or the next cause a greater decrease in the proportion of the sample used to estimate flows. Therefore, if the complete sample of a quarter is 140,000 persons, the sample that holds flow estimates is a bit more than 100,000.

² The elevation factor is the number of persons in the population represented by each person in the sample.

This procedure, however, does not allow adjusting EAPS flow estimates with the results of previous quarters. This information must always be used in relation with the EAPS results of the current quarter. Any accounting exercise involving the addition or subtraction of flow figures to/from the current quarter figures will have discrepancies with the results of the previous quarter due to the weighting of the used results and the presence in the current quarter of population that was not considered in the previous one (persons arrived from abroad and persons who have turned 16 years of age in the last three months).