

Research note: Evidence on employment niches in tourism from an intra-regional approach*

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Abstract

This note presents an analysis of tourism employment niches in the Autonomous Community of Aragón. First, a description of the sector at the county level is carried out to explore the differences and similarities across the 33 geographical counties of Aragón. Second, we identify tourism specializations in the local economy to determine whether the sector has potential to provide a stable or growing base for the future. Finally, we identify concrete employment opportunities in each region. Evidence confirms that regions with greater specialization are very active in generating employment and, interestingly, some counties in which the tourist sector is incipient, emerge as employment niches for the most qualified workers.

Keywords: tourism employment niches, intra-regional analysis

*An earlier version of the paper was presented at the 2nd International Conference on the Measurement and Economic Analysis of Regional Tourism. The authors wish to thank the financial support received from the Public Employment Service of Aragón (INAEM).

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Abstract

This note presents an analysis of tourism employment niches in the Autonomous Community of Aragón. First, a description of the sector at the county level is carried out to explore the differences and similarities across the 33 geographical counties of Aragón. Second, we identify tourism specializations in the local economy to determine whether the sector has potential to provide a stable or growing base for the future. Finally, we identify concrete employment opportunities in each region. Evidence confirms that regions with greater specialization are very active in generating employment and, interestingly, some counties in which the tourist sector is incipient emerge as employment niches for the most qualified workers.

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1. Introduction

Spain is a traditional destination for sun and beach tourism. However, in recent years, other types of tourism, such as rural and cultural tourism, have begun to grow and are attracting an important share of the demand. In this context, Aragón has a great deal to offer, but still a long way to go. Located in the northeast of the Iberian Peninsula, its 47,724 square kilometres make up one of the most sparsely populated areas of Spain, 28 person square kilometre. This problem is particularly severe at the south of the region, within the province of Teruel, with some counties with population density as low as 3 person per square kilometre. Industrial activity is concentrated in the city of Zaragoza, while the rest of the Community has a predominantly rural economy that is barely able to sustain the local population economically.

In Aragón, there is an extraordinary natural environment, together with a rich architectural and cultural heritage, which could encourage tourism as a long-term economic growth factor (Balaguer and Cantavella-Jordá, 2002; Proença and Soukiazis, 2008). Furthermore, international evidence shows that tourism is more labour-intensive than other sectors. Therefore, the sector becomes a potential replacement for the loss of employment caused by the recent economic crisis. Indeed, tourism is seen by local planners as a key element that can enable communities devastated by economic restructuring to retain population and regain and enhance their lifestyle. Given the concentration of population in urban sites, leisure activity based on recreational activities in rural and natural environments is an alternative source of employment and may produce enough revenue to complement or replace agricultural activities (García and Grande, 2005; Besteiro, 2006).

The objective of this study is to provide a better understanding of the trends, size, potential and geographic spread of tourism activities in order to identify skills profiles and gaps for employment opportunities. We identify the most necessary occupations that are becoming new niche opportunities for the local task force, and the implications for public policy. An innovative element is the use of a very detail data that allows us to take an intra-regional approach, which allows to deal with the substantial differences across the region. We have data for the 33 geographical counties of Aragón provided by the Statistical Institute of Aragón and administrative records from the Regional Public Employment Service.

This article is organized as follows. Section 2 describes the sector at the county level exploring differences and similarities across the 33 geographical counties of Aragón in terms of tourism employment characteristics. Section 3 provides evidence of the degree of specialization of the region and its local dynamics. Section 4 measures the intra-regional and inter-regional worker flows to analyse whether greater opportunities for employment exist in those regions with greater specialization in tourism. This section also identifies the human capital needs and the most necessary occupations across counties. The final section presents the conclusions and closes with recommendations for public policy.

2. Tourism employment in Aragón

Tourism represents about 8% of GDP and 8.5% of employment in Aragón, percentages that are lower in than in Spain. This is an industry in expansion; however, it shows some signs typical of the earliest stages of tourism. The sector turns out to be a major employer of women, presenting much higher levels of female employment in Aragón than in the rest of Spain: about 56% of tourism employees in Aragón are female. It also appears to offer fewer stable jobs and more part-time jobs than the rest of Spanish labour market.

Besides, the main problem of the sector in Aragón is the low level of qualification of its taskforce, much lower than at the national level. On average, 84% of workers at the national level have secondary or post-secondary education; this percentage is only 31% in Aragón. Why does tourism employment have such a low human capital level in this region? There is a common notion that skills in tourism can be easily learned on the job and, consequently, barriers to entries are low which means that unskilled workers can enter the industry quite easily, particularly in the case of an incipient tourism industry. By contrast, in the stage of maturity the tendency is to professionalize the activity, which generates changes of attitude in the labour force.

The county analysis shows some similarities but also large variations across the territory (see Table 1). Relative weight of tourism employment ranges from about 25% in most of the counties located north of the region, in the Pyrenees Mountains, to 4% in some others. In these counties with the highest relative weight of tourism employment, most job contracts are linked to accommodation activities, whereas in the other counties contracts in the food and beverage service industry prevail. More interestingly, we detect that low human capital levels are more noticeable in counties in which the tourist sector is incipient. In

other words, the degree of development of the sector might be a key factor in explaining employment differences among counties.

On the other hand, DC Zaragoza, Hoya de Huesca, and Comunidad de Teruel contain the three most-populous cities of Aragón, and can be characterized as being more “urban” than other counties. In these three counties self-employment percentages are much lower, around 20%, whereas in Aranda, in the east of the region, is 73.1%, and is over 50% in eight other counties.

[Table 1 about here]

3. The development potential of the tourism activities in Aragón

To determine whether tourism activity represents a strategic advantage for the economy, we calculate a Location Quotient (LQ) to measure its degree of relative implantation in the various counties. The LQ index is defined by the following expression (Klosterman et al., 1993):

$$LQ_{ij} = \frac{E_{ij}}{E_j} \bigg/ \frac{E_{ir}}{E_r}$$

where E_{ij} is the employment in sector i of county j , E_j is the total employment of the county j , E_{ir} is the employment of sector i in the geographic area taken as a reference, in our case, Aragón, and E_r is the total employment in this area. If the LQ for a particular activity is between zero and one, the local area is less specialized than the whole region, while LQs greater than one reveal a greater specialization.

However, a high LQ does not necessarily mean that there will be growth in that industry. To determine whether an activity truly represents a strategic advantage for its economy, the LQ should be viewed in conjunction with the evolution of employment over time. In our analysis, we compare the LQs and the evolution of employment for each of the 33 counties of Aragón, considering two categories: tourist accommodation and the food and beverage serving industry make up the “accommodation and food services” category and the rest of the tourism services are grouped into “other tourism activities”.

Figure 1 presents the counties classified into four clusters:

- Mature: counties that are relatively specialized, $LQ > 1$, and with employment growth below average.

- Stars: counties that are relatively specialized, with $LQ > 1$, and with a high rate of employment growth in that particular activity.
- Transforming: counties that are relatively unspecialized, $LQ < 1$, and with a below average employment growth rate.
- Emerging: counties that are relatively unspecialized, $LQ < 1$, but that are becoming more specialized over time, with an above average employment growth rate.

[Figure 1 about here]

The results show the potential of tourism as an employment generator in most of the counties. Overall employment growth in Aragon over the last decade (1999-2009) was 3.8%, while employment in accommodation and food services grew an average of 5.7% per year, and the increase in other tourism activities was even higher, 15.7%. In fact, the majority of counties can be characterized as emerging, in other words, not really specialized in tourism, but becoming more and more over time. For these counties, tourism can be an important growth generator in the local economy in the future.

As expected, the Pyrenees regions show the highest level of specialization in both categories. Regarding the accommodation and food services category, some of the Pyrenees regions are already mature destinations. This is the case of Jacetania and Ribagorza, which have been traditional tourist destinations for many years. Care should be taken that tourist services standards of quality do not diminish in these counties. However, we observe that Ribagorza seems to have diversified its industry in terms of sports and other recreational activities which is a signal of a dynamic tourism sector. The other two counties in the Pyrenees, Alto Gállego and Sobrarbe, also seem to be encouraging both accommodation and food services and other tourist activities.

Another cluster of active counties is located southeast of Aragón, with lower LQ values in accommodation and food services lower than in the Pyrenees, but still above 1. This group is composed of the counties of Gúdar-Javalambre, Abarracín, Maestrazgo, Andorra-Sierra de Arcos and Matarraña, all located in the province of Teruel. These counties have reached a relatively high degree of specialization in terms of accommodation and food services, behaving as stars in this activity, but exhibit a lag in the development of other tourism activities.

4. Employment niches.

The mobility of workers within Aragón, and to or from other regions, is an important piece of information in identifying employment niches. The results show that tourism in Aragón is a net importer of workers from other regions of Spain, constituting a very dynamic sector. However, this is not the case when considering every county separately. Figure 2 summarizes this information in a map: counties in blue reflect a positive net flow, meaning that more contracts are signed by outsiders of the county than contracts signed by residents outside of the county, while counties in red are net senders of workers to other counties.

[Figure 2 about here]

Counties located north of the region are net receivers of workers, as a consequence of its tourism activities. Alto Gallego and Sobrabe are receiving the highest flows, followed by Gúdar-Javalambre. This last county has experienced a significant increase in the number of visitors in recent years thanks to development of new winter resorts. These findings confirm that the majority of the counties demanding workers are also those that are found to be specialized in tourism activities.

On the other hand, we find that the three most populous counties, DC Zaragoza, Comunidad de Teruel and Hoya de Huesca, have the highest negative balances of contracts, indicating that are supplying workers to the nearest counties or to other regions. In fact, Ribera Alta del Ebro, Campo de Cariñena and Campo de Belchite, three counties bordering on Zaragoza, are net importers. Some other counties also have positive net flows of workers, most of them neighboring other regions of Spain: Cinco Villas, Aranda, Calatayud, Sierra de Albarracín, Maestrazgo, Bajo Cinca and La Litera.

However, a positive net flow indicates a net flow of workers in the tourist sector as a whole, but it does not explain what happens in each subsector of the industry. At the same time, counties revealed as net exporters could be demanding workers in certain activities, providing a market niche for local residents. We use two-digit level NACE codes to select eight subsectors related to tourism activities: storage and transport services, accommodation services, food and beverage, information services, arts activities and spectacles, libraries and museums, games and lotteries, and sports and other recreational activities. Table 2 shows the net flows for each of these activities.

[Table 2 about here]

Counties with positive net flows, such as the Pyrenees, are mostly demanding workers in accommodation and in the food and beverage industry: cooks, waitresses, cleaning or maintenance staff, receptionists and other related occupations. Ribagorza and Alto Gállego are also demanding workers for sports and entertainment and for games and lotteries. Even if there are some activities with negative flows, the numbers are not high enough to be significant. Gúdar-Javalambre follows exactly the same pattern of behaviour as the counties of the Pyrenees. There is one county that deserves some special attention, this is Bajo Cinca, the largest demander of workers related to arts activities and spectacles, in particular bouncers and personnel for security of events, due to the presence of an electro-dance music club famous at national and international level.

The three urban sites, DC Zaragoza, Comunidad de Teruel and Hoya de Huesca, behave in just the opposite way, exporting personnel mainly related to the accommodation and the food and beverage industry. DC Zaragoza also has a negative flow of workers in sports and recreation, while demanding workers for arts activities and spectacles, the same as Hoya de Huesca. There are also certain other counties that are net senders of workers but with niches in some activities. This is the case of arts and spectacles in Bajo Aragón, and sports and other recreational activities in Somontano or Bajo Aragón-Caspe.

It is also convenient to analyse the requirements of each county in terms of skills. In general, as Table 3 shows, most of the contracts are signed by low-skill workers with low levels of formal education. However, some counties are also demanding more qualified workers. This is the case of the specialised counties of Alto Gállego, Sobrarbe, Ribagorza and Gudar-Javalambre. In addition, there are other less specialized counties demanding qualified workers too: Cinco Villas, Bajo Cinca, and Sierra de Albarracín. These counties are employment niches for medium and high-skilled workers.

Conclusions

The objective of this study is to provide a better understanding of the trends, size, potential and geographic spread of tourism activities in order to identify skills profiles and gaps for employment opportunities. This paper identifies concrete tourism employment niches in the 33 geographical regions of Aragon. It also classifies counties in terms of its specialization and prospects of growth. In fact, the majority of counties can be characterized as emerging, in other words, not really specialized but becoming

more and more over time. For these counties, tourism can be an important growth generator in the local economy in the future.

The results confirm that tourism is a very active industry in Aragon, growing faster than other sectors of the economy. Expectedly, we find that greater opportunities for employment exist in those regions with greater specialization in tourism, particularly in the Pyrenees, since they are attracting workers from both inside and outside of Aragon. More interestingly, some other lesser-known counties that exhibit a low degree of specialization are emerging as employment niches for high-skilled workers.

The industry shows some similarities but also large differences across the region. Therefore, for public policies to be effective they should be taken at the local level, empowering local communities and promoting social cohesion and cultural identity. In order to avoid population drift, actions should be focused on strengthen local sourcing of labour, offering life long learning programmes to rise career profiles of tourism. In fact, the low level of qualification of the labour force is one the main problems in Aragon. Being a relatively new activity in some counties, it is operating in an environment that is unfamiliar with the service sector and needs to be professionalized. Human resource development is of vital importance in a customer-oriented industry such as tourism. The availability of skilled employees is fundamental to offering a quality service to visitors.

Tourism in Aragon employs a high proportion of women, higher than other regions of Spain. Even though this may be a positive statement, working conditions are frequently poor and irregular in the sector. Therefore, careful attention needs to be given to gender patterns and segregation by job category to avoid discrimination and to reduce disparities between women and men.

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Table 1: Tourism Employment Characteristics in Aragón (2009). Source: own elaboration from administrative records of the Regional Public Employment Service

	Workers	% of total employment	% of females	Age (mode)	Self-employed workers	Temporary work	Part-time work	Primary or less	Education Secondary	Post-secondary
Jacetania	1145	21.1%	58.0%	35-39	31.8%	34.1%	37.9%	61.1%	30.9%	8.0%
Alto Gállego	1326	26.9%	48.1%	30-34	22.0%	30.7%	34.6%	76.2%	19.1%	4.7%
Sobrarbe	812	32.8%	61.9%	35-39	30.7%	45.9%	30.2%	75.1%	18.3%	6.6%
Ribagorza	897	20.3%	50.1%	30-34	29.3%	47.7%	37.5%	70.7%	24.9%	4.4%
Cinco Villas	577	5.6%	61.1%	35-39	50.2%	35.6%	41.5%	61.0%	22.8%	16.2%
Hoya de Huesca	1978	7.2%	55.8%	25-29	28.5%	31.6%	29.4%	68.8%	19.3%	12.0%
Somontano de Barbastro	675	8.0%	61.0%	35-39	33.5%	45.2%	35.4%	74.0%	18.2%	7.8%
Cinca Medio	483	5.8%	61.2%	35-39	35.0%	40.5%	38.2%	71.4%	15.2%	13.4%
La Litera	296	4.4%	60.1%	30-34	45.0%	44.6%	47.0%	80.0%	5.8%	14.2%
Monegros	378	6.4%	64.3%	35-39	43.1%	23.7%	34.8%	62.6%	30.1%	7.3%
Bajo Cinca	511	6.2%	59.0%	40-44	37.2%	41.1%	51.8%	47.9%	45.0%	7.2%
Tarazona y Moncayo	305	8.0%	54.8%	40-44	41.6%	31.1%	30.9%	71.6%	20.3%	8.1%
Campo de Borja	231	5.6%	59.3%	45-49	50.1%	39.9%	33.1%	89.0%	9.6%	1.4%
Aranda	80	3.9%	44.5%	35-39/40-44	73.1%	31.8%	36.0%	88.9%	7.1%	4.0%
Ribera Alta del Ebro	661	3.6%	59.9%	30-34	30.6%	28.6%	22.1%	76.4%	18.9%	4.8%
Valdejalón	663	6.1%	61.2%	25-29	32.7%	29.8%	34.0%	70.6%	25.3%	4.2%
D. C. Zaragoza	23317	8.2%	54.0%	30-34	23.2%	33.0%	40.6%	68.4%	25.3%	6.4%
Ribera Baja del Ebro	168	5.4%	59.9%	30-34	39.6%	28.6%	22.1%	76.4%	18.9%	4.8%
Bajo Aragón-Caspe	241	6.3%	57.7%	30-34	55.5%	43.1%	55.1%	92.7%	5.7%	1.6%
Comunidad de Calatayud	1243	11.8%	57.5%	35-39	30.5%	26.9%	33.0%	78.8%	19.5%	1.7%
Campo de Cariñena	181	5.1%	70.7%	25-29	50.4%	32.5%	24.3%	57.1%	41.8%	1.1%
Campo de Belchite	79	7.4%	64.2%	35-39	57.4%	38.5%	45.8%	83.8%	4.4%	11.8%
Bajo Martín	98	4.8%	60.2%	45-49	52.9%	28.1%	21.9%	68.6%	19.6%	11.8%
Campo de Daroca	104	6.0%	60.4%	25-29/45-49	41.8%	27.0%	20.2%	78.3%	16.9%	4.8%
Jiloca	242	6.4%	57.3%	25-29	48.0%	34.0%	22.1%	80.1%	13.5%	6.4%
Cuencas Mineras	131	7.1%	65.0%	40-44	58.0%	31.4%	44.5%	76.3%	18.8%	5.0%
Andorra-Sierra de Arcos	299	11.9%	73.0%	40-44	25.8%	28.5%	54.0%	95.2%	2.7%	2.1%
Bajo Aragón	746	7.8%	58.9%	30-34	32.9%	34.5%	36.2%	80.2%	13.4%	6.5%
Comunidad de Teruel	1549	7.6%	56.1%	30-34	25.8%	32.2%	26.1%	58.8%	36.8%	4.4%
Maestrazgo	130	12.6%	72.1%	45-49	46.1%	21.4%	35.7%	80.7%	13.3%	6.0%
Sierra de Albarracín	245	20.7%	67.7%	50-54	50.2%	46.5%	46.8%	59.7%	33.0%	7.4%
Gúdar-Javalambre	441	16.5%	64.1%	30-34	34.0%	38.6%	32.5%	87.9%	10.4%	1.7%
Matarraña	284	9.3%	69.4%	40-44	41.6%	45.2%	61.6%	75.7%	17.7%	6.7%

Table 2: Net flow of workers by economic activity. 2009.

	52	55	56	63	90	91	92	93
Jacetania	-3	273	29	-3	-17	5	-21	-15
Alto Gállego	-1	415	222	-1	8	-4	132	292
Sobrarbe	1	272	530	0	6	-17	-14	62
Ribagorza	-5	264	106	0	-9	0	56	67
Cinco Villas	-18	133	-88	-1	3	5	-16	51
Hoya de Huesca	7	-183	-36	-13	33	-7	16	70
Som. de Barbastro	-1	6	-21	0	-52	-1	-10	18
Cinca Medio	-3	-57	-76	-2	56	11	4	-23
La Litera/La Llitera	-14	-14	-28	0	143	-3	6	8
Monegros	-24	-15	-54	-1	-1	1	-4	-4
Bajo Cinca	-2	-19	153	0	409	-8	15	41
Taraz. y el Moncayo	-7	-31	-25	-2	-13	-2	-9	-3
Campo de Borja	-12	-39	-6	-2	-9	0	-10	-9
Aranda	0	-2	28	0	2	1	1	6
Ribera Alta del Ebro	169	-77	-158	47	85	-1	49	-30
Valdejalón	-20	-5	-147	-3	-178	0	-48	1
Zaragoza	-182	-499	-187	-39	285	-24	-19	-366
Ribera Baja del Ebro	-7	4	-10	-1	-9	0	-7	-5
Bajo Aragón-Caspe	-3	-24	-75	0	1	0	-1	11
Calatayud	-1	111	-65	0	-8	0	2	2
Campo de Cariñena	0	-7	-8	-5	33	-1	-1	-9
Campo de Belchite	1	8	-7	-4	-9	0	-3	31
Bajo Martín	-1	-11	-41	0	7	0	0	-1
Campo de Daroca	-3	0	-16	0	2	0	1	7
Jiloca	-3	-15	-38	0	0	0	0	1
Cuencas Mineras	-1	-15	-10	-1	-2	0	-1	-9
Andorra-S. de Arcos	0	-4	5	0	-4	-1	-1	-19
Bajo Aragón	-2	-5	-91	-1	11	-1	-5	1
Teruel	-14	-166	-164	-8	-86	-24	-200	-169
Maestrazgo	0	28	3	0	1	0	-1	-5
Sierra de Albarracín	0	13	5	-1	2	36	-1	-13
Gúdar-Javalambre	-2	220	129	-1	18	-4	210	233
Matarraña	-1	-43	6	-1	3	2	-1	-4

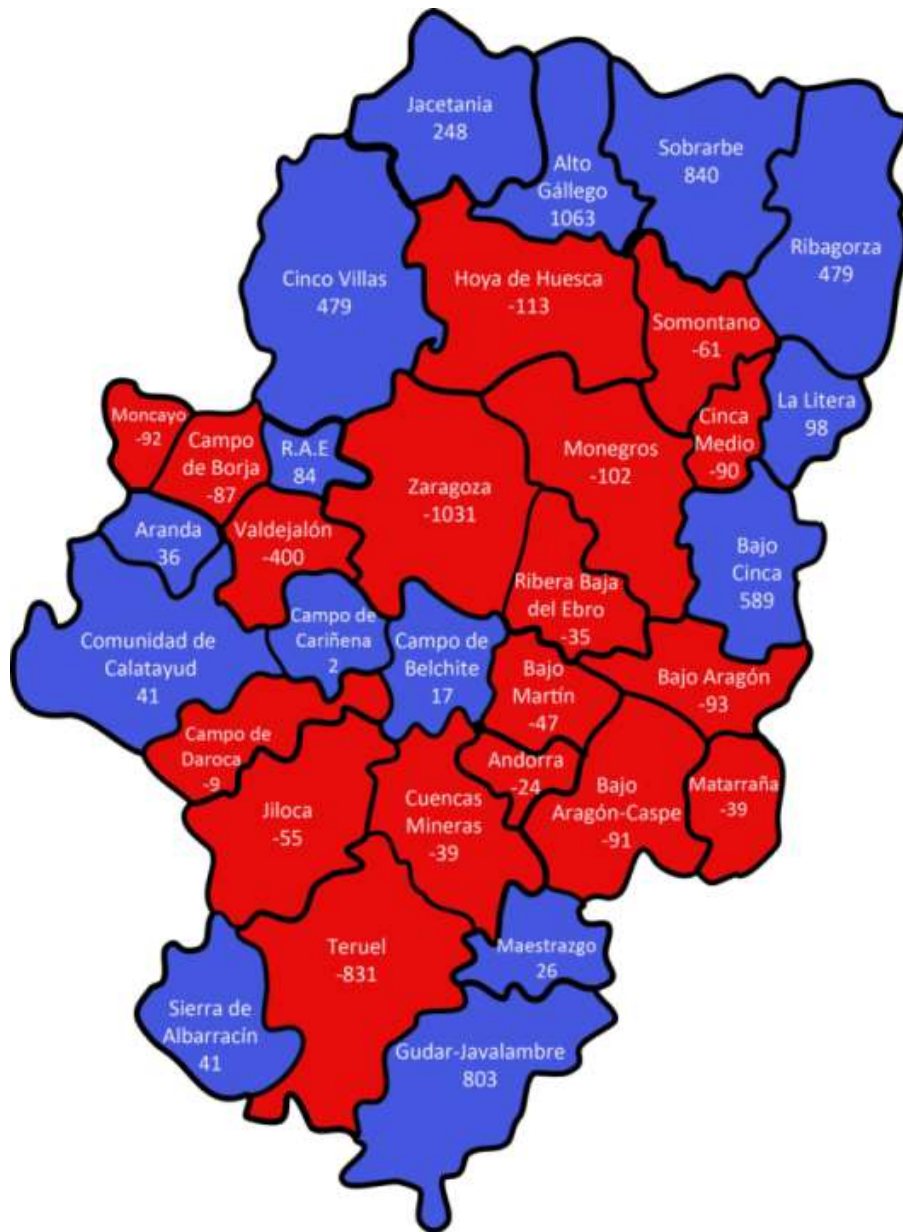
Source: own elaboration from administrative records from the Regional Public Employment Service

Table 3: Net flows of workers by skills, 2009.

	Low-skilled workers	Medium- skilled workers	High-skilled workers	Total
Jacetania	171	86	-9	248
Alto Gállego	798	220	45	1063
Sobrarbe	648	162	30	840
Ribagorza	309	169	1	479
Cinco Villas	-31	15	85	69
Hoya de Huesca	-33	-120	40	-113
Som. de Barbastro	-41	-38	18	-61
Cinca Medio	-102	7	5	-90
La Litera/La Llitera	69	-19	48	98
Monegros	-84	-16	-2	-102
Bajo Cinca	201	370	18	589
Taraz. y el Moncayo	-80	-14	2	-92
Campo de Borja	-55	-17	-15	-87
Aranda	34	2	0	36
Ribera Alta del Ebro	129	-32	-13	84
Valdejalón	-305	-91	-4	-400
Zaragoza	-522	-261	-248	-1031
Ribera Baja del Ebro	-48	13	0	-35
Bajo Aragón-Caspe	-75	-14	-2	-91
Cmdad. de Calatayud	12	32	-3	41
Campo de Cariñena	-8	15	-5	2
Campo de Belchite	26	-16	7	17
Bajo Martín	-47	-5	5	-47
Campo de Daroca	-4	-4	-1	-9
Jiloca	-30	-26	1	-55
Cuencas Mineras	-21	-13	-5	-39
Andorra-S. de Arcos	-5	-17	-2	-24
Bajo Aragón	-71	-44	22	-93
Teruel	-693	-103	-35	-831
Maestrazgo	20	4	2	26
Sierra de Albarracín	-6	32	15	41
Gúdar-Javalambre	736	64	3	803
Matarraña	-50	7	4	-39

Source: own elaboration from administrative records from the Regional Public Employment Service

Figure 2.- Net flow of workers, 2009.



Source: own elaboration from administrative records from the Regional Public Employment Service