Mediterranean Crossroads: Determinants of circular migration in Spain, 1955-1973[1]

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Abstract

In this paper, I study the determinants of circular migration in Spain during the rural exodus, 1955-1973. I use a unique and novel employer-employee micro-dataset of 10,761 observations of men and women working in the Balearic tourism industry during the period. The Spanish tourism boom in the Balearics constitutes an intense process of migrant assimilation based on circular migration. This case study allows me to analyse the factors explaining circular migration in Spain and shed light on the migrant location choice during the Spanish rural exodus. My results show that the socio-economic structure of the origin communities, skill requirements and migrant networks were key predictors of location choices. Migrants were more likely to migrate from rural towns where the labour demand peaks were complementary to the tourism season. These municipalities also characterised by more accessible and distributed land ownership. By contrast, migrant networks were crucial in determining migrant location choices in the areas where the levels of attachment to the source area were lower. Moreover, my findings also suggest abrupt adverse shocks in labour demand and lower literacy and disposable household income in the municipality of origin were strong predictors. These differential incentives played an important role in the heterogeneity of migrant location choices during the Spanish rural exodus. In these areas, higher investment and seasonal work opportunities in origin, and lower skill requirements and migrant networks in destination made more optimal migrating to Spanish tourism areas to the detriment of European countries and Spanish industrial hubs.

Keywords: Circular migration, Determinants of migration, Spanish rural exodus, Migrant networks, Spanish tourism boom, Balearic Islands.

1. Introduction

Circular and repeated migration constitutes an important feature of historical and contemporary migrant flows. According to estimates, 20 to 50 per cent of migrants leave host countries within five years of arrival. Circular migration plays a key role in many source and host countries, such as Germany, where reaches 60 per cent(Constant & Zimmermann, 2011), the *hukou* system in China, one of the largest flows of internal migration in the world (Hu, Xu, & Chen, 2011) or the Mexico-US

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corridor (Lindstrom, 2013). Historically, circular migration represents an essential part of international and internal migrations. The Bracero Program between the US and Mexico and the guest workers programs in Europe were crucial in shaping international migration after the II World War (Constant, Nottmeyer, & Zimmermann, 2013; Massey & Liang, 1989). In Spain, temporary migrations are considered an important factor of the migratory system in the past and present. Temporary migrations were a key feature of the labour markets between 1900 and 1930 (Silvestre, 2007). During the sixties, 30 per cent of migrants of the Spanish guest workers in Europe migrants were circular (Babiano & Farré, 2002)[3].

Circular migration represents a differential pattern of location choice, migrant self-selection and migrant behaviour. Recent research has shown that temporary migrants have differential investment and consumption preferences compared to more permanent migrants. They can behave as "target earners", selecting their areas of destination based on their remigration initial plans and having lower incentives to invest in host-specific human, social and physical capital (Adda, Dustmann, & Gorlach, 2020; Chabé-Ferret, Machado, & Wahba, 2018; Dustmann & Görlach, 2016).

Thus, understanding the explanatory factors of circular migration is important for three reasons. Firstly, geographic choices are a crucial source of heterogeneity of upward mobility among migrants. Some researchers have shown that a critical driver of migrant intergenerational mobility is the migration to host labour markets with lower competition and higher prospects of promotion. Studying three cohorts of migrants in the United States and their children, Abramitzky et al.(2019) have shown that migrant geographical choices mainly explain intergenerational upward mobility rates. Those migrants who climbed the social ladder were more likely to settle in areas with higher mobility prospects for their children. Similarly, Pérez(2019), in his analysis about location choices during the Age of Mass Migration, noted that similar migrants found large differences in their chances of social promotion depending on whether they migrated to Argentina or moved to the United States.

Secondly, the planned, intended length of the stay significantly impacts the earnings profile of the migrants. The mentioned differential incentives to invest in host-specific capital and lower reservation wages can have ramifications on occupational upgrading and social integration. Temporary migrants could report lower income growth than permanent migrants with negative consequences if remigration intentions do not materialise (Adda et al., 2020; Chabé-Ferret et al., 2018). Although there is little evidence about this respect, this adverse situation could suppose that more temporary migrants can end up trapped into low-wage occupations and sectors in the host country(Constant et al., 2013).

[3] In 1988 a total of 108,384 Andalusian workers had worked as internal circular migrants in the agricultural harvests and during the tourism season in Spain (Tabares, 1990).

Thirdly, from the source countries' point of view, circular migration can have differential economic and social impact. On the one hand, circular migration can lead to a higher rate of remittances and become a mechanism to overcome financial constraints, fostering consumption and investment in origin (Dustmann & Mestres, 2010). However, on the other hand, some migrants can suffer occupational downgrading if years spent abroad do not materialise in the accumulation of skills or these skills are not transferable to the source country (Lindstrom, 2013).

Therefore, the capacity to predict circular migrant flows is crucial for policies addressed to improve the integration and labour market outcomes of the migrants in source and host societies. However, as some authors have argued (Constant et al., 2013; Dustmann & Görlach, 2016), circular migration have received little attention by the researchers in great part because of the lack of available and suitable data. In this paper, I want to contribute to understanding the determinants of circular migration by studying a relevant historical case study, the Spanish tourism boom in the Balearic Islands, 1955-1973. It provides an analysis of an intense process of migrant assimilation based on an archetypical circular migrant flow between rural towns specialised in agricultural activities and tourism-related urban areas (Constant et al., 2013). Through analysing circular migration, I can shed light on the determinants of location choice during the Spanish rural exodus, a field of study scantily explored from an empirical perspective (Sánchez Alonso, 2010). More specifically, this paper attempts to explain why some regions of southern Spain were more likely to migrate to internal destinations based on seasonal labour demand to the detriment of European countries or Spanish industrial hubs.

The Spanish tourism boom took place during the rural exodus in Spain, 1955-1973. During this period, Spain registered its higher rates of internal migration and reached an intense migrant flow to European countries. More than 15% of the Spanish population changed of residence, moving predominantly from rural agricultural areas to urban industrial centres (Ródenas, 2008), and approximately 2 million Spanish citizens emigrated to European countries. The effect of tourism expenditure was also an important driver of structural change. Between 1955 and 1975, the tourism industry became a key engine of the Spanish economy(Balaguer & Cantavella-Jordá, 2002). In the Balearic Islands, this process was characterised by an intense transformation of tourism infrastructure and coastal landscapes. Resultantly, the archipelago witnessed the arrival of circular migrants attracted by seasonal labour opportunities in the tourism industry. Drawn by seasonal work, most went on to remain permanently. Thus, the proportion of non-natives increased from eight to 26 per cent of the population between 1950 and 1973

To do so, I rely on rich and novel retrospective employer-employee micro-data of 10,761 observations of men and women working in the Balearic Tourism industry of 1969. The data includes 6,500 individual observations of mainland Spanish migrant, allowing to differentiate between

permanent and circular migrants. I study determinants of circular migration by implementing OLS regressions to capture the influence of push and pull economic and social factors in explaining the direction of the migrant flows. I pay special attention to the socio-economic structure of the communities of origin to examine the elements that influenced the engagement into circular flows instead of more permanent migratory trajectories.

My results suggest that notwithstanding wage and unemployment differentials, investment and seasonal work opportunities in origin, skill requirements and migrant networks in destination played a crucial in determining the engagement into circular flows and migration to the Balearic Islands. Migrants tended to migrate from areas specialised in agricultural activities with peaks of labour demand complementary to the tourist season. Furthermore, migrants were more likely to come from rural towns where land ownership was more distributed and more accessible. Thus, higher attachment to the source area, in the form of labour demand and investment opportunities, was associated with a higher likelihood of migrating to the Balearics and engaging in circular flows.

Further, in the absence of these factors in origin, the influence of migrant networks was crucial by reducing the costs of information and job searching of circular migrants. Migrants established during the pre-tourism era in the archipelago constituted a complementary key source of attraction to the Balearic Islands and an incentive to carry out both permanent and circular migration. I also find that migrants responded to abrupt sharp negatives shocks in labour demand, such as the inauguration of dams of high capacity in their municipalities in origin. The intense decline in labour demand and the displacement of population caused by these events stimulated strong migration to the Balearic Islands.

Skill requirements in the destination were also crucial in the process of decision making. The low skill requirements of the tourism and construction sector in a labour market facing intense, although mostly seasonal, labour shortages meant higher access to work opportunities for low-skilled migrants. My findings show that circular and permanent migrants migrating to tourism destinations during the period came from the districts with the higher shares of illiteracy and low-income households within the different areas of southern Spain.

These findings remark the importance of the origin communities' characteristics as a predictor of the migratory strategy developed by the migrants. In this regard, this study contributes to explain why location choices differed widely among regions during the Spanish rural exodus. The socio-economic characteristics of the areas of origin, lower skill requirements and the role of migrant networks could incline migrant households to engage their members into circular flows and migrate to an internal destination, apparently more optimal in the short-run.

This paper is structured as follows. Section 2 discusses the theoretical background and findings. Section 3 describes the data and methodology implemented. In Section 4, I present a brief historical

background and qualitative evidence about circular migration during the period. Section 5 provides the empirical approach and econometric results. Section 6 concludes.

2. Theoretical background on temporary migrations

The literature about migrations provides some key insights into the characteristics of temporary migration flows and their determinants. Researchers have focused on the interaction between the differential behaviour of temporary migrants and the factors that shape initial plans, and the changing investment and consumption preferences during the migration process.

Temporary migration could be part of a planned strategy in search of maximising the time spent abroad. In this case, migrants may have incentives to return even when wage differentials persist over time. The main objective of this migration would be the accumulation of capital to be invested in origin. By contrast, in the host country, the migrant would be less interested in investments in physical capital and host-specific human capital not transferable to the source country. For example, some authors show that temporary migrants in France tend to invest lower in physical and social capital while being more prone to make monetary and non-monetary investments in origin (Chabé-Ferret et al., 2018). Similarly, Dustmann (1999) showed that migrants in Germany intending to return sooner are less likely to learn German. Likewise, these differential preferences would mean lower reservation wage to maximise savings over job searching costs. Temporary migrants would cluster in lower rewarded occupations and attempt to increase daily work hours (Adda et al., 2020). The literature calls this behaviour a "target earner" behaviour, where the migrant prioritises savings while in the host country and postpones consumption and investment until return.

Thus, temporary migration could help overcome budget constraints in the source area. The "target earner" behaviour committed to prioritising savings would lead to entrepreneurial activities, land and real estate investments, and higher consumption (Mesnard, 2004). Furthermore, as a result of this maximisation, these migrants tend to remit more to their relatives in the source country than permanent migrants (Dustmann & Görlach, 2016; Dustmann & Mestres, 2010). In this regard, authors have noted that high purchasing of the host country currency can augment the incentives to migrate temporarily to take advantage of the higher level of consumption in the source country (Kirdar, 2009). Therefore, migrants can respond to the higher purchasing power of the host-country currency, even when wage differentials are zero (Dustmann & Görlach, 2016).

Still, temporary migration can also be the result of changing expectations. Unplanned return can occur if migrants received incorrect information about work opportunities or living costs (Borjas & Bratsberg, 1996). Migrants can also be affected by adverse economic shocks, such as economic crises, that would change the initial plans intended to stay permanently. For example, Ward found that many

returns were unplanned during the early 20th century in the United States (Ward, 2017). By contrast, legal changes can affect drastically location choices incentivising migrants to become permanent migrants or return depending on the new legal framework. This change in the migratory strategy is associated with changes in the emigration costs and the labour markets. An increase in the risk and costs of emigration resulting from a more restrictive migration policy can cause temporary migrants to attempt to stay permanently. For example, during the 1973 oil crisis, Germany restricted migration from southern European countries pushing circular migrants to stop circular migration (Constant & Zimmermann, 2011). Similarly, the introduction of US quotas in the 1920s led to increased length of stay due to the increased cost of remigration and the lower competition in the local labour markets (Greenwood & Ward, 2015).

Initial plans intending to migrate temporarily are related to factors that would increase the utility of return migration over permanent migration. Researchers have pointed out factors associated with the source country's economic opportunities, migrant's household structure, and migrant networks. These variables would operate as mechanisms to overcome budget constraints and as indicators of higher attachment to the source area. For example, land ownership is often portrayed as an explanatory factor of return migration and circular migration in specific. Abramitzky, Boustan and Eriksson (2019) show that the migration of Norwegians to the United States in the Age of Mass Migration allowed poor rural migrants to overcome budget constraints, buy land, and make investments in their places of birth. Following the same argument, explanations based on higher attachment can be found in (Hu et al., 2011). Focusing on Chinese circular migrants under the hukou system, they show that those migrants are more prone to remain circular migrants if they hold land and have children. Similarly, some researchers have found that more temporary migrants are more likely to hold assets in the source country during the migration process (Chabé-Ferret et al., 2018; Dustmann & Mestres, 2010). Access to land can also be related to the possibility of combining two sources of income between source local and host country labour markets, such as seasonal agricultural labour occupations. As noted by Lindstrom (2013), temporary migration and particularly circular migrations can be an optimal option when working abroad is complementary to work in the labour market of the origin or when the skills acquired in the destination have a high level of transferability to the origin labour market.

However, social factors would also matter in the decision-making process. The key role of households and psychological factors in migration decision would also affect destination choices and initial migration plans (Dustmann & Görlach, 2016). A study based on contemporary Canary Islands, Spain, shows that higher attachment to source area is related to more propensity to return. Thus migrants having children, sending remittances, or undertaking previous migrations were more prone to return to the source country and be engaged in circular flows (León & Hernández Alemán, 2016). Other studies

from Albanian migrants in Italy (Vadean & Piracha, 2010) and Mexicans in the United States (Li, 2016) corroborate that marital status and having children can be a predictor of a higher probability of return and repeated migration.

Networks of friends and relatives can have a differential effect in migratory decisions regarding self-selection, location choices, and the intended length of the migration. The migrant network can help their members reducing costs of information and uncertainty before the migration and providing economic, psychological and social support to the newcomers in the destination (Arroyo Abad & Sánchez-Alonso, 2018; Munshi, 2003). Thus, the literature has pointed out the role of chain migration as a major element explaining the geographic and economic location of migrants(Wegge, 2008). These networks would also influence temporary migration and circular migration in particular, as Massey and Aysa-Lastra (2011) demonstrated in their study of migration to the United States from Latin America. Analysing both migration from Mexico, where circular flows comprise a significant share, and from Costa Rica and Peru, usually portrayed as permanent, these authors demonstrated that chain migration and social capital accumulation plays a crucial role in promoting international migration across Latin America.

3. Sources and methodology

The lack of research on circular migration is generally attributed to the difficulties of capturing it in statistical accounts (Constant et al., 2013; Dustmann & Görlach, 2016). To proceed with, I computerised a novel and rich retrospective cross-section micro dataset of a total of 10,761 individuals working in the Balearic Tourism Industry in 1969. A total of 200 hotel, 130 pensions, 200 bar o restaurants, ten discotheques, 13 travel agencies and one transport company were interviewed. The data include an extensive range of economic and demographic variables such as the municipality of birth, age, sex, very disaggregated occupation, yeas of labour experience in the sector, the current address of residence or tenure. Commonly, circular migrants take part in seasonal jobs in agriculture, construction and services, especially tourism-related services. This data allows me to study an archetypical circular migrant flow between rural areas specialised in agriculture, migrating to tourism-related areas.

To study the role of networks in shaping migrant flows, either for permanent or circular purposes, I use two data sources. First, I extracted micro-data from municipal registers from the main tourism areas. Concretely, I use data from 12 coastal tourism-related municipalities to analyse the influence of migrants living in Mallorca in the pre-tourism era in shaping migrant flows. Thus, I selected men and women under ten years old born in mainland Spain already living in the Balearics in 1960 and residing in a coastal tourism-related municipality in 1965. These areas account for 71.7 per cent of the total non-native population included in the Labour census of the Balearic tourism industry of 1969 working in

Mallorca, 4,341 observations. Second, to assess the role of social networks and kinship in shaping circular migration and migrant networks, I use surnames and place of birth from the primary dataset to determine those who have relatives at the workplace.

The analysis of the economic push and pull determinants relies on multiple data. Firstly, in order to include wage and employment differentials, I include the average provincial wage differentials in 1970 and the level of population growth between 1960 and 1970 in the municipality of origin. Secondly, I obtain data about the economic specialisation of the place of birth using the Corine Land Cover database of 1990, a satellite data that uses a minimum mapping unit that shows changes in land cover utilising a scale of 5 hectares. This procedure allows me to differentiate between 44 classes of uses of land. To robust these results, I complement these data with information from olive specialisation in Andalusia in 1962 from Infante-Amate (2014). Thirdly, I use the average size of farms at a municipal level from the Spanish agricultural census of 1962 to study the access and the monopsony effects in the local labour and land markets. Fourthly, to study the impact of human capital in the process of decision making, I include data about the levels of illiteracy and the share of low-income households in the district of origin in 1962 (CPDES, 1963). Although my main dataset and municipality registers include a variable about literacy, very few individuals declare being illiterate in this period. Thus, I employ the sociological characteristics of the social background of the migrants as a proxy of educational attainment. These indicators were recompiled to elaborate the First Development Plan of the Francoist dictatorship (*Primer Plan de Desarrollo Económico y Social, 1964-1967)*. Finally, I include data about abrupt adverse shocks in labour demand using the inauguration of a dam of at least 100,000 cubic hectometres or more in the municipality of origin between 1960 and 1969. Researchers have argued that the construction of these infrastructures during the Francoist dictatorship meant a sudden negative shock of labour demand in the construction and agricultural sector. Furthermore, in some cases, it caused the disappearance of the municipality and the displacement of the population to other bordering towns (Herranz Loncán, 1995).

I proceed with the empirical analysis using OLS regressions with the number of migrants from the same municipality of origin in logarithms as the dependent variable. I alternate the analysis between all the sample and only circular migrants to test the initial hypothesis. Since the data about migrant networks from municipality registers is restricted to only 12 municipalities, when I include the data about migrant networks I use the number of migrants working in the same tourism area from the same municipality. A key element of the data is that I can differentiate between permanent migrants and circular migrants in 1969. To do so, I use the address of residence as an indicator of circularity. I select as a circular all migrant in the data who indicates an address of residence belonging to mainland Spain or indicates receiving accommodation by the firm, pointing out to the lack of initial attachment and

social networks to the host area. Although most permanent migrants migrated initially as circular, this methodology allows comparing the results from those who turned from circular to permanent with those who still are in the process of either continuing as circular or attempting to become permanent. Even though location preferences could change after arrival, incentivising in no small number to try to settle permanently after one or couple years of circular migration, initial plans determined the engagement into circular flows and the Balearics as a destination.

The impossibility to capture outmigration in the data is a key and characteristic shortcoming of single cross-section data with two important ramifications in this study (Abramitzky & Boustan, 2017; Lubotsky, 2007). First, if a considerable share of migrants returned to their areas of origin or circular migrants change location preferences once returned to their home area, the data would only show migration determinants of stayers. To avoid these biases partially, I alternate the analysis between all the migrants included in data and circular migrants registered in 1969 who would comprise future stayers, circular migrants and potential outmigration. Still, outmigration was unlikely to occur until the economic crisis of 1973 since the Balearics registered a sustained high economic growth prior to this year. However, another potential shortcoming could appear if the pool of recent migrants in the data differ from previous migrant arrivals. In this regard, I argue that this period is characterised by the homogeneity of the labour demand and skills requirements. The stock of circular migrants in 1969 is expected to do not differ substantially from those in 1960 or 1972. Furthermore, it is important to note that other comparable and available data, such as census of population or municipality registers (*padrones de población*), have higher biases for studying circular migration in Spain. In these sources, information is recollected in December when circular migrants have returned, and permanent migrants can report being unemployed or working in other occupations (Silvestre, 2007). Furthermore, as some authors have noted, women's labour force participation can be undercounted (Humphries & Sarasúa, 2012).

4. The characteristics of circular migration during the Spanish tourism boom in the Balearic Islands, 1955-1973

Between the mid-1950 and the oil crisis of 1973, the Spanish economy completed its structural change process. More than 15% of the total Spanish population changed of residence, moving from rural agrarian areas to urban industrial centres (Ródenas, 2008), and approximately 2 million emigrated to European countries (Ródenas, 1997). The primary destinations were the industrial hubs in Madrid, Barcelona, Bilbao and Valencia. In Europe, Germany, Switzerland and Frances attracted higher numbers of migrants. However, an additional engine of internal migration was the tourism expenditure. As it is well known, the country experienced a tourism boom between 1959 and 1973. In more than a

decade, the Spanish tourism infrastructure changed from 2,200 hotels to 9,200 and 115,000 hotel beds to reach 700,000, becoming a key engine of the Spanish economy and social transformation (Balaguer & Cantavella-Jordá, 2002; Manera & Navinés, 2018).

The Spanish tourism boom in the Balearics involved intense economic growth driven by a large increase in the tourism supply (Manera, 2001). Tables 1 and 2 show the main variables of the tourism boom. As we see, the tourism industry's capacity grew sharply during the period. The rising labour shortages quickly increased the migration from mainland Spain intensively. As a result, the non-native population increased by 26.6 per cent. By 1973 hospitality workers accounted for 37.5 per cent of the workforce during the summer season.

Table 1: *Main economic indicators of the tourism boom, 1955-1973*

Indicators	1955	1959	1963	1967	1970	1973
Tourists (th)	188	321	677	1,402	2,271	3,571
Hotel beds	6,022	11,496	39,699	81,983	157,050	216,113
Hotels and pensions	112	215	697	1,1089	1,498	1,534
Tourism workers	7,215	17,190	24,342	38,550	57,304	59,405

Table 2: *Main demographic indicators of the tourism boom, 1950-1981*

Indicators	1950	1960	1970	1981
Total population	422,089	439,465	532,947	655,945
Non-natives (%)	8.94	13.0	21.5	26.6

Sources table 1 and 2: Own calculations from Spanish Population Censuses, 1950-1981; INE. Anuario/s Estadístico/s de España. 1955-1973; Fundación BBV: "Renta Nacional de España y su distribución provincial: serie homogénea años 1955 a 1993 y avances 1994 a 1997. Vol II".

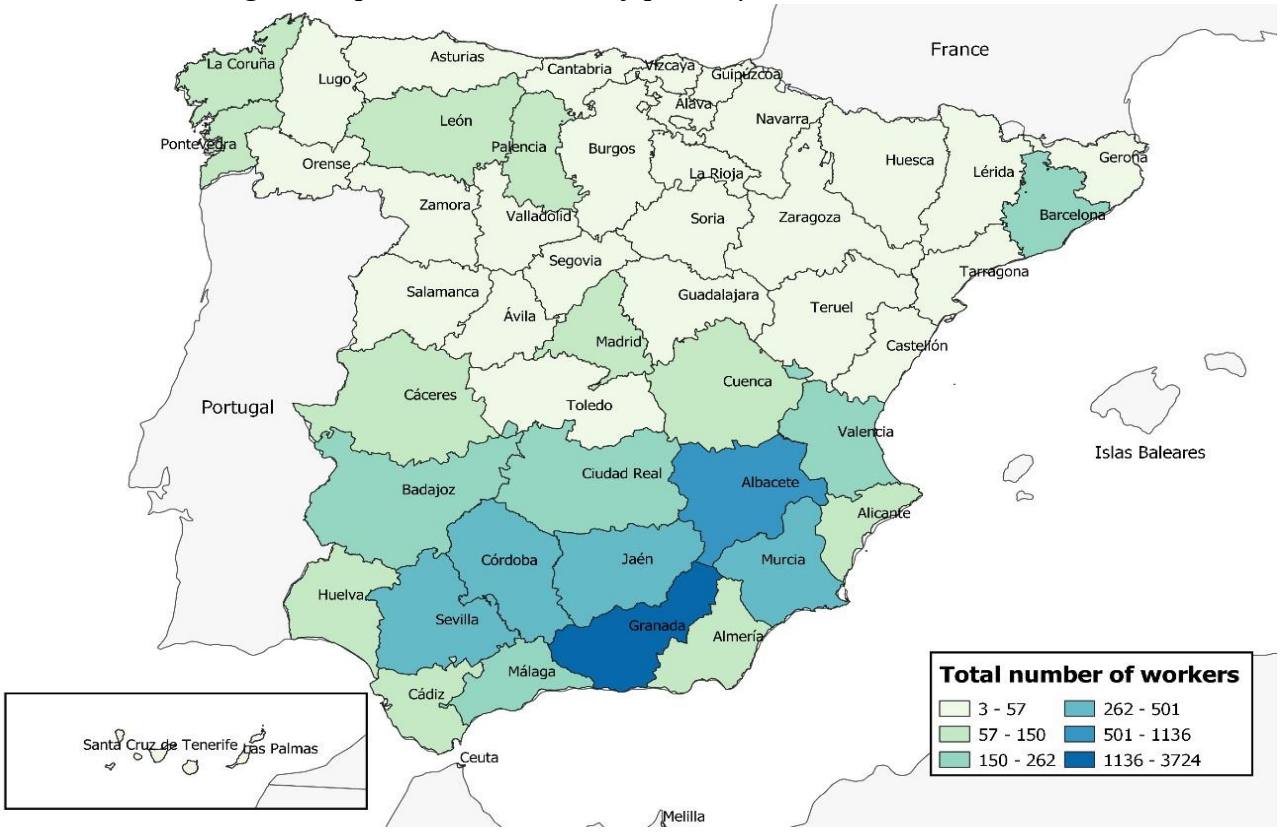
These migrants entered fundamentally into the tourism sector. According to the Census of 1969, they reached 64.1 per cent of the total tourism labour market. In Figure 1, we can see the geographical distribution of the Spanish non-native migrants. Significantly, southern Spain workers were the most numerous group, with a higher share of women and youth among all the migrants. Among them, the two major groups were the Andalusians, and those from the Southeast, comprising the old region of Murcia, both from predominately rural Spain. Other important groups were the migrants from Extremadura, Galicia and Leon and Palencia, and Catalonia.

Initially, migrants arrived at the Balearic Islands predominantly as circular migrants. The seasonality of the labour demand and housing shortages played a crucial role in shaping circular migration between the archipelago and mainland Spain. The main dataset shows that 41 per cent of migrants with at least one year of labour experience in the sector received accommodation from the

firms by 1969. As regional planners claimed in 1966, housing shortages were a critical element that hindered the transition from circular to permanent migration (Ginard, 1998, 59-60):

> "Probably, more than half of the workers from mainland Spain and the Canary Islands are circular migrants between the months of April and October, returning to their places of origin and facing severe accommodation problems. However, this problematic scenario becomes more critical when these migrants attempt to settle permanently in the province, due to the serious housing shortage."

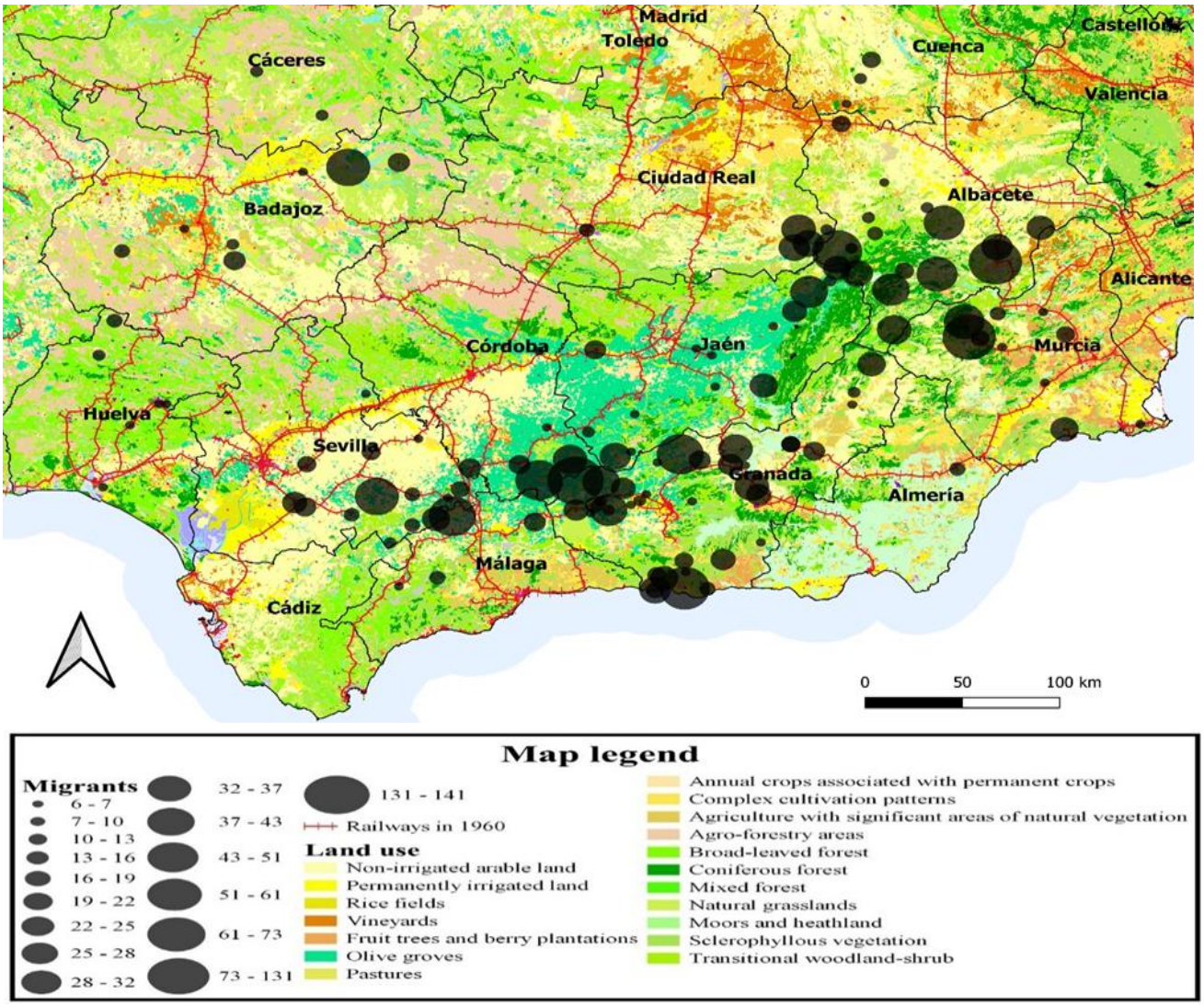
Figure 1: *Spanish non-natives by place of birth in the dataset, 1969*



Furthermore, the economic structure of the areas of origin meant considerable incentives for the engagement into circular flows. These incentives could play a key role in determining the decision to migrate to tourism-related areas to the detriment of the industrial hubs, such as Madrid and Barcelona, and the European countries. A qualitative analysis of the uses of the land of the municipalities of origin shows a predominant pattern of specialisation in olive groves (Figure 2). This preponderance is particularly significant in the case of the rural towns of Andalusia[4]. These crops were also important in some other southern Spain areas, such as some rural towns from Albacete and Ciudad Real.

[4] We also have anecdotal evidence indicating that circular migration to the Balearics became a major feature of specific areas of southern mainland Spain. As the priest of Iznalloz, Granada, Andalusia, declared in 1974: "We have another type

Figure 2: *Land use in 1990 and place of birth of rural southern Spain migrants in the dataset*



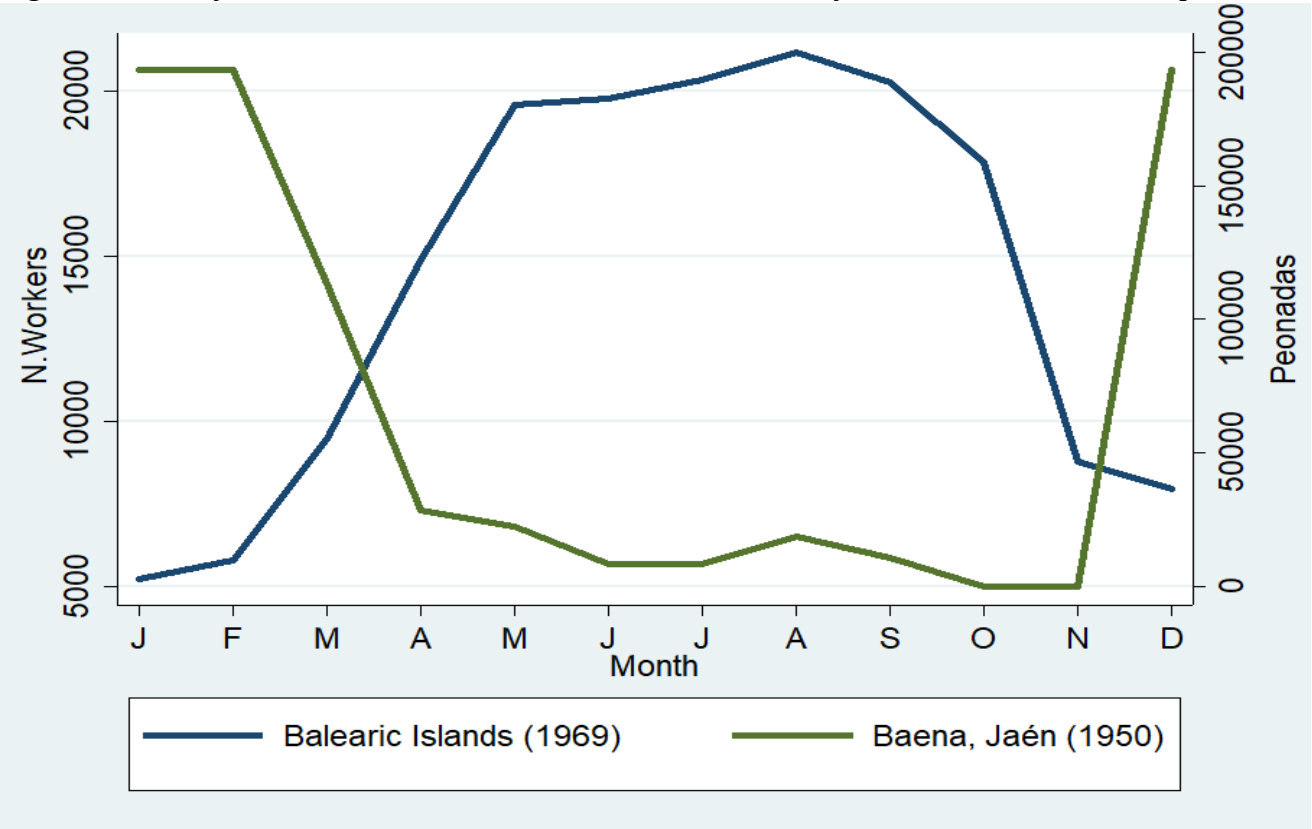
Source: CORINE LAND COVER DATABASE 1990.

The economic structure of these rural towns implied strong incentives for the development of channels of circular migration. The peaks of labour demand occur during the winter associated with harvesting tasks, making it possible to migrate circularly by combining the olive harvest and working in tourism for the rest of the year (see Figure 3). The decline of other work opportunities during the summer deteriorated the possibility of migrating seasonally to other rural towns in the same area of origin. As Infante has shown(2014b), migrants from these areas used to migrate to the south in summer to work in the wheat harvest. However, since the mid-fifties, the progressive mechanisation of recollection tasks had resulted in an intense decline in seasonal labour demand. Another important feature that shaped circular migration was land ownership structure with significant ramifications on

of emigration, the migration to Mallorca, a lot of people went in the last years. This year, instead, few have emigrated due to the tourism crisis. In all these rural towns around, many people usually migrate to work seasonally in tourism and construction"(Lara Sánchez, 1977, p. 179).

local land and labour markets. The main areas of origin of the migrants were characterised by a higher average number of landowners than the rest of the rural towns of southern Spain. This pattern implies higher access to land ownership and a more dynamic local land market. Similarly, the absence of large state ownership, *latifundios*, reduced monopsony effects on labour demand, increasing work opportunities in the municipality of origin of the migrant, especially during the peaks of labour demand (Infante-Amate, 2014a).

Figure 3: *Monthly labour demand in the Balearic tourism industry and Andalusian olive crops*



Sources: INE. Estadística del movimiento de viajeros en alojamientos hoteleros y campamentos turísticos. 1966-1970; and data from Juan Infante-Amate (Infante-Amate, 2014). "Peonadas" is a unit of measure of the hours worked by one agricultural worker in one day. I am grateful for the help of Juan Infante-Amate, who very kindly shared with me the data related to the hours of work in the Andalusian olive crops.

The active recruitment by the employers also determined migrant location choices. The intense labour shortages and their subsequent rising labour costs incentivised firms to recruit at the origin, intending to hire a considerable share of their workforce. These recruitment management strategies consisted of seeking workers in the source municipalities and establishing seasonal migration channels annually. Seasonal migration allowed to avoid rising labour costs and housing shortages, especially in areas far away from the main economic hubs and sparsely populated (García-Barrero & Manera, 2021). As some oral sources seem to note, the municipalities that specialised in olive crops were areas of recruitment by the Balearic employers (Capellà, 1977):

"My first salary, which seemed marvellous, was offered to me in Mallorca: two thousand pesetas. My neighbours had come to Sóller to the olive harvest, and an employer from the hospitality approached them and offered them work for him in the next summer season. Moreover, they came to Filiana with the assignment of hire all the relatives, neighbours and acquaintances who wanted to come, the more, the better."

Table 3: *Characteristics of circular migrants from mainland Spain*

Circular migrants (permanent migrants)	LOGIT	LOGIT	LOGIT
	(1)	(2)	(3)
Age (+30)			
0-17	-0.0154	-0.343*	-0.343*
	(0.109)	(0.177)	(0.177)
18-25	0.341***	0.304**	0.184
	(0.0822)	(0.154)	(0.131)
26-30	0.282***	0.173	0.318**
	(0.0968)	(0.131)	(0.154)
Women (men)	0.080	0.066	0.053
	(0.061)	(0.093)	(0.094)
Marital status (married)			
Single	0.748***	0.840***	0.842***
	(0.078)	(0.124)	(0.124)
Windowed	0.591***	0.678*	0.676*
	(0.220)	(0.351)	(0.351)
Population in 1960	-0.0344	-0.0820	-0.078
	(0.0349)	(0.0539)	(0.054)
Relatives at a firm-level	0.562***	0.610***	0.607***
	(0.0685)	(0.103)	(0.103)
Foreign language			-0.146
			(-0.146)
Cohort of arrival	N	Y	Y
Obs.	5,546	2,402	2,402
R-squared	0.050	0.057	0.057

In Table 3, I show the sociodemographic profile of these circular migrants. This table shows the demographic characteristics, where I use a Logit regression to compare circular migrants with permanent migrants in the dataset. Importantly, circular migrant tended to be younger than permanent migrants, being particularly prone to be single individuals between 18 and 30 years old. Furthermore, they were more likely to be clustered at the same firms with relatives from the same municipalities of origin, suggesting that circular migration supposed the join migration of members of the same family and other relatives, either residents in origin or the destination. These results are in line with theoretical arguments made by some authors about the importance of the household structure in the configuration of the migratory strategy (Sarasúa 2000).

5. Determinants of circular migration and location choice

Table 4, 5 and 6 present the results of estimating the determinants of migration by regressing the number of migrants from the same municipality in logarithms as the dependent variable. Table 4 employs all the mainland Spain migrants in the dataset. Column 1 reports the baseline specification, which does not include migrant networks data from municipality registers. In table 5, I implement the same exercise, although focusing only on southern migrants and including two additional columns to analyse circular migrants in 1969. In table 6, I analyse only Andalusian migrants using data about olive crops from 1962 to robust my results. All specifications include source area fixed effects, controlling by the urban-rural status of the municipality of birth and the contemporary autonomous community.

Table 4. *Determinants of migration among mainland Spain migrants*

ln number of migrants from the same municipality	OLS	OLS
	(1)	(2)
Fruits and berries at a municipal level (Olive groves)	-0.403***	-0.269***
	(0.034)	(0.039)
Vineyard at a municipal level (Olive groves)	-0.446***	-0.290***
	(0.031)	(0.034)
Cereals and annual crops at a municipal level (Olive groves)	-0.206***	-0.165***
	(0.016)	(0.018)
Average farm size in the municipality (*ln*)	0.032**	-0.061***
	(0.015)	(0.018)
Provincial average wage differential	0.232***	-0.136*
	(0.064)	(0.074)
Inaugurated dam of more than 100,000 hm^3 (1960 – 1969)	0.719***	0.660***
	(0.035)	(0.037)
Relatives in the tourism area of destination in 1960		0.012***
		(0.000)
Mountainous area (non-mountainous)	0.317***	0.303***
	(0.015)	(0.016)
Level of unemployment in the municipality of origin	-0.0943***	-0.087**
	(0.029)	(0.034)
Distance (Km x 100)	-0.012***	0.007**
	(0.003)	(0.003)
Relatives at a firm-level	0.290***	0.351***
	(0.014)	(0.015)
Source area fixed effects	Y	Y
Obs.	6,358	4,278
R-squared	0.532	0.547

Table 4 analyses all the Spanish non-natives of the sample revealing important insights about the decision-making process of the migrant households. We can see that migrants tended to migrate more

from areas specialised in olives groves than other places with economies more specialised in other crops, such as vineyard, fruit and berries or cereals. Thus, higher chances of combining the peaks of labour demand in origin and destination were important to the detriment of other crops with harvests seasons that take place during the rest of the year or have lower seasonality of the labour demand.

The strong correlation between olive groves and migration to the archipelago can be found in Table 5. This table shows that ten units increase in the share of olive groves in the municipality of origin's total surface increases the log number of migrants from southern Spain from the same municipality in the Balearic Islands by 7 per cent. Significantly, if these migrants are circular, it increases by 9 per cent, remarking the crucial role of the level of labour demand in return. The specialisation in cereals and permanent crops is reported positive in almost all the specifications, although with lower coefficients. However, when I include migrant networks in the equations, the coefficients seem to reduce significatively, indicating the key influence of relatives from these areas in shaping migration. It is important to note that in some Andalusian towns with high levels of specialisation in cereal production was common to carry out circular migrations to olive-related towns to work during the harvest(Infante-Amate, 2014b). Therefore, migrants from these areas could also migrate to the Balearic Islands, attempting to combine olive labour demand in the bordering regions and tourism work opportunities in the destination.

The key role of the level of attachment level is also reported when we look at the influence of the municipality's average farm size. Once I control the effect of migrant networks on the number of migrants in the archipelago, results suggest that a higher average size of the farms in the municipality of origin lower migration. Notably, among circular migrants, these coefficients are considerably strong. In column 4 of Table 5, we can see that one unit log increase in the farms' average size reduces the number of circular migrants by 13 per cent. Similar results can be found in Table 6 when I focus particularly on migrants from Andalusia. These results show that lower monopsony effects on the labour and land market, resulting from a higher number of employers and landowners, are associated with more chances of engaging in circular migration. Thus, higher access to labour and land market correlates with higher migration to the Balearics.

In this regard, Table 4, 5 and 6 also show that migrants tended to migrate from mountainous areas. This characteristic could be related to historical migratory traditions based on circular migration and the lack of influence of previously established migrant networks in the Spanish industrial hubs. Some authors have argued that mountain communities in Europe, particularly those from southern Spain, had a long tradition of circular migrations (Silvestre, 2007). Therefore, they could be more prone

to substitute previous migratory patterns for new destinations involving circular flows. Similarly, the absence of relatives in these industrial areas would increase the economic and psychological costs of more permanent migratory movements to these destinations. As Collantes noted (Collantes, 2004), prior to 1950, geography made more expensive permanent migration in these areas. Furthermore, high levels of illiteracy had penalised access to information and the formalisation of a migratory strategy.

Table 5: *Determinants of migration among southern mainland Spain migrants*

	All		Circular	
ln number of migrants from the same municipality	OLS	OLS	OLS	OLS
	(1)	(2)	(3)	(4)
Olive groves at a municipal level (%)	0.007***	0.006***	0.009***	0.009***
	(0.000)	(0.000)	(0.000)	(0.000)
Fruits and berries at a municipal level (%)	0.006***	0.001	0.001	-0.004***
	(0.000)	(0.001)	(0.001)	(0.001)
Vineyard at a municipal level (%)	-0.001	-0.001	-0.004**	-0.003*
	(0.001)	(0.001)	(0.001)	(0.002)
Cereals and annual crops at a municipal level (%)	0.004***	0.002***	0.003***	0.006
	(0.000)	(0.000)	(0.000)	(0.000)
Average farm size in the municipality (*ln*)	0.099***	-0.0445	0.0200	-0.130***
	(0.023)	(0.0273)	(0.032)	(0.036)
Provincial average wage differential	0.246*	0.074	1.353***	1.252***
	(0.135)	(0.158)	(0.198)	(0.21)
Inaugurated dam of more than 100,000 hm^3 (1960 – 1969)	0.853***	0.775***	0.579***	0.553***
	(0.040)	(0.044)	(0.056)	(0.060)
Relatives in the tourism area of destination in 1960		0.012***		0.007***
		(0.000)		(0.000)
Mountainous area (non-mountainous)	0.310***	0.281***	0.327***	0.414***
	(0.0181)	(0.020)	(0.025)	(0.027)
Level of unemployment in the municipality of origin	0.213***	-0.003	0.212***	0.001
	(0.0411)	(0.0096)	(0.061)	(0.065)
Distance (Km x 100)	-0.063***	0.022***	-0.0360***	0.015
	(0.008)	(0.007)	(0.0113)	(0.012)
Proximity to an industrial hub	0.124***	0.048***	0.113***	0.037
	(0.013)	(0.016)	(0.020)	(0.023)
Low-income households in the district of origin (%)	0.010***	0.010***	0.007***	0.008***
	(0.000)	(0.000)	(0.001)	(0.001)
Illiteracy in the district of origin (%)	0.006***	0.012***	0.014***	0.016***
	(0.001)	(0.000)	(0.002)	(0.002)
Relatives at a firm-level	0.211***	0.323***	0.237***	0.297***
	(0.015)	(0.017)	(0.020)	(0.022)
Source area fixed effects	Y	Y	Y	Y
Obs.	4,694	3,258	2,121	1,630
R-squared	0.492	0.545	0.496	0.559

Migrant networks built in the pre-tourism era also shaped migration to Balearics and circular migration in specific. I use two variables to capture the effects of social relationships and kinship: first, a dummy variable that captures if the migrant has at least one relative working at the same firm (Llonch, 1994) and, second, the number of migrants already living in the tourism area of destination in the pre-tourism era. Both variables show a strong effect of social networks determining migration to this labour market. Among southern Spanish migrants, an increase of 10 individuals from the same municipality in the tourism area of destination increases by 12 per cent the total number of migrants and 7 per cent the number of circular migrants. Similarly, having at least one relative at the same firm is associated with a 30 per cent increase in either the total number of migrants or circular migrants. These results suggest that migrant networks could be crucial in decision-making by providing cheaper information and job searching. Thus, these networks could expand the geography of migration to areas with no complementary labour demand and where the local land market was less accessible. They should also increase migration from areas offering work opportunities and investment in origin through the same mechanisms. On the other hand, these results also indicate that location choices were part of the household strategies devoted to taking advantage of higher wages and work opportunities offered by the archipelago.

Human capital requirements in destination were also crucial in location choices. Some authors have noted that one possible explicative factor that southern migrants preferred internal destinations instead of migrating to European countries was the lower skill requirements in Spanish labour markets(Sánchez Alonso, 2010). According to Babiano (Babiano, 2004), 64.3 per cent of Spanish migrants in Europe were industrial workers. By contrast, Spanish tourism areas characterised by the low skill requirements in labour markets facing intense labour shortages during the high season. Therefore, migrants from areas registering lower human capital attainment could find higher work opportunities in tourism labour markets. My results corroborate this hypothesis showing that circular and permanent migrants migrating to tourism destinations during the period came from the districts of southern Spain with the higher shares of illiteracy and low-income households. More specifically, a 10 per cent increase in the percentage of illiteracy and low-income households in the district of origin augments the number of circular migrants from the municipality of origin by 21% and 9%, respectively. Importantly, in table 6, we can see this pattern remains at the same level of prediction when I study only Andalusian migrants.

Even though the level of attachment, human capital requirements and migrant networks were crucial variables, wages and unemployment rates in origin and destination still mattered, as researchers have demonstrated in the macro-level analysis (Ródenas, 1994, 2008). Firstly, intense shocks on labour

demand affected the rate of migration and decision making. An abrupt negative shock in labour demand, such as the inauguration of a dam in the municipality of origin, could mean a strong response even in the absence of migrant networks or attachment. A sharp decline of labour demand and the displacement of a large share of the population to other areas could suppose the configuration of a large migrant flow searching for a very dynamic labour market offering a vast number of low-skill vacancies. The results in Table 4 and 5 suggest that these adverse shocks are also significant predictors of both circular and permanent migration. During the period, the inauguration of a dam correlates to a 50-60 per cent increase in the number of migrants. Secondly, among circular migrants, the average wage differential between origin and destination shows key explicative value. One unit increase of the average wage differential accounts for a 70 per cent increase in the number of migrants from the same municipality.

Table 6: *Determinants of migration among migrants from Andalusia*

ln number of migrants from the same municipality	OLS All	OLS Circular
	(1)	(2)
Olive groves hectares per capita at a municipal level in 1962 (log)	0.121***	0.193***
	(0.013)	(0.020)
Average farm size in the municipality (*ln*)	-0.145***	-0.288***
	(0.039)	(0.060)
Provincial average wage differential	0.029	1.261***
	(0.321)	(0.485)
Inaugurated dam of more than 100,000 hm^3 (1960 – 1969)	0.538***	0.133
	(0.069)	(0.112)
Relatives in the tourism area of destination in 1960	0.009***	0.005***
	(0.000)	(0.000)
Mountainous area (non-mountainous)	0.383***	0.394***
	(0.029)	(0.042)
Level of unemployment in the municipality of origin	0.215***	0.118
	(0.074)	(0.112)
Distance (Km x 100)	0.009	-0.0953***
	(0.024)	(0.0319)
Proximity to an industrial hub	0.064**	0.110**
	(0.028)	(0.044)
Low-income households in the district of origin (%)	0.007***	0.009***
	(0.001)	(0.001)
Illiteracy in the district of origin (%)	0.017***	0.021***
	(0.002)	(0.004)
Relatives at a firm-level	0.349***	0.354***
	(0.023)	(0.033)
Source area fixed effects	Y	Y
Obs.	1,757	893
R-squared	0.467	0.513

Secondly, these results suggest that circular migrants responded to higher wages and work opportunities as long as they also allowed to combine income sources and chances of investment in origin or easy access to occupation and shelter from migrant networks. Thus, circular migration allowed postponing consumption and investment until return, where migrants enjoyed higher purchasing power. Therefore, in light of recent research (Connor, 2019), although wages differentials influenced migrant location choices, the characteristics of the communities of origin and their migrant networks were crucial in selecting the migratory path and the chosen destination. Migrants selected from areas with higher chances to combine income sources in origin and destination and invest in the source area. Similarly, they migrated from municipalities where built migrant networks in destination reduced costs of information, shelter and job searching. Simultaneously, the lower levels of human capital attainment in origin undermined the incentives to migrates to other destinations where skill requirements could be higher.

6. Conclusion

This paper analyses determinants of circular migration during the rural exodus in Spain, 1955-1973. Using a novel and unique employer-employee micro-dataset, I examine the factors that would explain the decision to engage in a characteristic circular migrant flow based on agricultural work in origin and tourism-related activities in the destination. This approach allowed me to put particular focus on migrant's initial plans of circular workers regardless if they finally returned o settled permanently. My main findings suggest that notwithstanding wage and unemployment differentials, investment and seasonal work opportunities in origin, human capital requirements and migrant networks in destination played a crucial in determining the engagement into circular flows and migration to the Balearic Islands. Thus, although wage and unemployment differentials mattered, these other factors were key in the characteristics of the migrant flows and the location choice.

My results are consistent with the literature showing levels of attachment to source societies play an important role in shaping temporary migration flows. I contribute to this literature by adding evidence about the important role of the local labour markets and land ownership structure of the communities of origin in shaping circular migration. I find a strong correlation between higher access to agricultural labour demand complementary to seasonal tourism labour demand and higher migration rates to Balearics and circular flows in specific. Migrants tended to migrate from rural towns specialised in olive groves and with a higher number of landowners. Combining these factors implied that peaks of local labour demand concentrated in winter and the absence of large landowners reduced monopsony effects on the labour markets and augmented the likelihood to invest or already own land. This socio-

economic structure meant that migrants from these rural towns could be more prone to engage in circular flows to combine two income sources in origin and destination, prioritising savings in the destination to be invested in return.

Social capital was also a strong factor of migrant heterogeneity. The role of migrant networks and kinship was important in decision-making in origin and destination. First, migrant networks were a key explanatory factor for understanding the planned length of migration and location choices. My results suggest that relatives settled in the pre-tourism era attracted a large share of migrants from their municipalities of origin. Thus, these networks expanded the geography of migration to places where attachment levels to the origin were lower. The lack of work and investment opportunities in source towns was compensated by the lower costs of information and job searching offered by the migrant networks. Second, I find that households were key in the configuration of the migratory strategy. Circular migrations had an important social component where relatives used to migrate with relatives and acquaintances. Furthermore, circular migrants tended to respond to the information of relatives already working in the firms. These migrants were more likely to be young, single or widowed and have relatives at the same firms than permanent migrants. Therefore, their location choices were primarily part of the decisions taken at a household level. Interestingly, circular migrants often came from areas where households had a long tradition of circular migrations within the provinces of origin, as the mountainous areas.

The level of human capital requirements also determined the decision of migrating to the Balearics. The Spanish tourism boom offered a high number of low-skilled job vacancies in labour markets facing intense labour shortages. Thus, migrants from areas with lower levels of human capital found more optimal migration to these areas instead of moving to European countries or Spanish industrial hubs where skill requirements could be higher. My results corroborate this view by showing that circular migrants arriving at the Balearics were more likely to come from the districts with the largest shares of illiteracy and low-income households within southern Spain.

Other factors also were important in the configuration of the migrant pool. On the one hand, abrupt adverse shocks in labour demand in the municipalities of origin were strong predictors of increasing migration from specific places. I show that the inauguration of a dam of high capacity is associated with higher migration to the Balearic Islands. The large number of low-skilled vacancies offered by the tourism boom could explain the decision to migrate to the archipelago. On the other hand, I also show qualitative evidence that suggests that migratory patterns were reinforced and increase complexity by

the employers' active recruitment in search to avoid the effect of labour and housing shortages in labour costs.

This study also highlights the important role of the characteristics of the communities of origin in decision-making, shaping circular migration patterns among provinces and regions. In this regard, they provide new insights to explain why location choices differed widely during the Spanish rural exodus among provinces, as some authors have noted (Sánchez Alonso, 2010). While other areas of Spain migrated intensively to European countries, Southern migrants prioritised internal destinations. My results show that, in some areas, this pattern could result from the socio-economic structure of the rural towns of origin and migrant networks. Thus, in these areas, households could find it more preferable to send their members to migrate circularly to tourism areas than migrate to European countries or the Spanish industrial hubs. Still, in light of recent research (Abramitzky, Boustan, Jácome, et al., 2019; Adda et al., 2020), the incentives to return and be engaged in circular migration during the crucial years of the professional life could diminish the occupational mobility of these migrants. Similarly, these differential location choices could have a considerable impact on the mid-and long-term social mobility of the migrants and their children.

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8. Annexe

Table 7: *Dependent and independent variables*

Variable	**Description**	**Source**
Dependent variable	*ln* Number of migrants from the same municipality	Census of the Balearic tourism industry of 1969
Crops at a municipal level (%)	Share of surface dedicated to the crop in the municipality	Corinne Land Cover 1990 database. Data extracted with QGIS.
Average farm size in the municipality	Total agrarian surface/Number of farms	Agrarian Census of 1962
Provincial average wage differential	Cost of labour/Number of workers in each province	(Alcaide, 2003)
Level of unemployment in the municipality	Proxy using the rate of population growth in the municipality of origin between 1960 and 1970	Population censuses
Inaugurated dam of more than 100,000 hm^3 (1960 – 1969)	Dummy variable registering the influence of large irrigation projects in the municipality	Inventario de Presas y Embalses de España. MAPA.
Mountainous area	Dummy variable registering if the municipality belongs to a mountains area	(Collantes, 2004)
Distance (KM x 100)	Distance between the Balearic Islands and each province of origin	Calculated distance with QGIS
Relatives in the municipality of destination in 1960	Number of individuals living since at least 1960 still residents in 1965 in the municipality of workplace destination of the migrant	Padrones de población of 1965 for Andratx, Alcúdia, Calvià, Capdepera, Deià, Felanitx, Llucmajor, Manacor, Santa Margalida and Son Servera

Relatives at a firm-level	Dummy variable registering if the migrant has a person from the same municipality and at least shares one surname in his/her workplace	Census of the Balearic tourism of 1969
Illiteracy in the district of origin (%)	Share of illiteracy in the district of origin	(CPDES, 1963)
Low-income households in the district of origin (%)	Share of households earning annual income under 40,000 pesetas	(CPDES, 1963)
Proximity to an industrial hub	Shortest distance to either Barcelona, Madrid, Valencia or Bilbao.	Calculated distance with QGIS