

## Study on the Local Purchasing Power 2019

### PURCHASING POWER ABOVE THE NATIONAL AVERAGE IN 32 OUT OF THE 308 MUNICIPALITIES

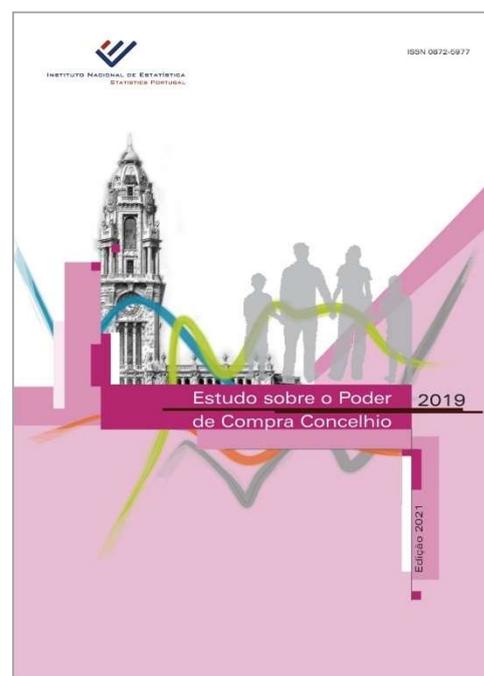
In 2019, the *per capita* purchasing power revealed in municipalities in Portugal was higher than the national average in about 10% of Portuguese municipalities, mostly located in the two metropolitan areas of Lisboa (10 out of 18 municipalities) and Porto (6 out of 17) or coinciding with capitals of administrative districts.

Only 22 municipalities concentrated 50% of the national purchasing power. Overall, the two metropolitan areas concentrated more than half (52%) of the purchasing power, despite comprising 45% of the country's population.

Statistics Portugal releases the 14<sup>th</sup> edition of the Study on the Local Purchasing Power referred to 2019 (EPCC 2019), which aims to provide information at municipality level on the purchasing power revealed in these territories.

In this edition, based on 16 *per capita* variables and a principal component factor analysis model, three indicators are disseminated:

- Per Capita Indicator
- Proportion of Purchasing Power
- Dynamism Relative Factor



### Per Capita Purchasing Power Indicator

The Per Capita purchasing power Indicator (IpC) aims to capture the purchasing power revealed, in *per capita* terms, in the different municipalities or regions, having the national value as a reference (Portugal = 100).

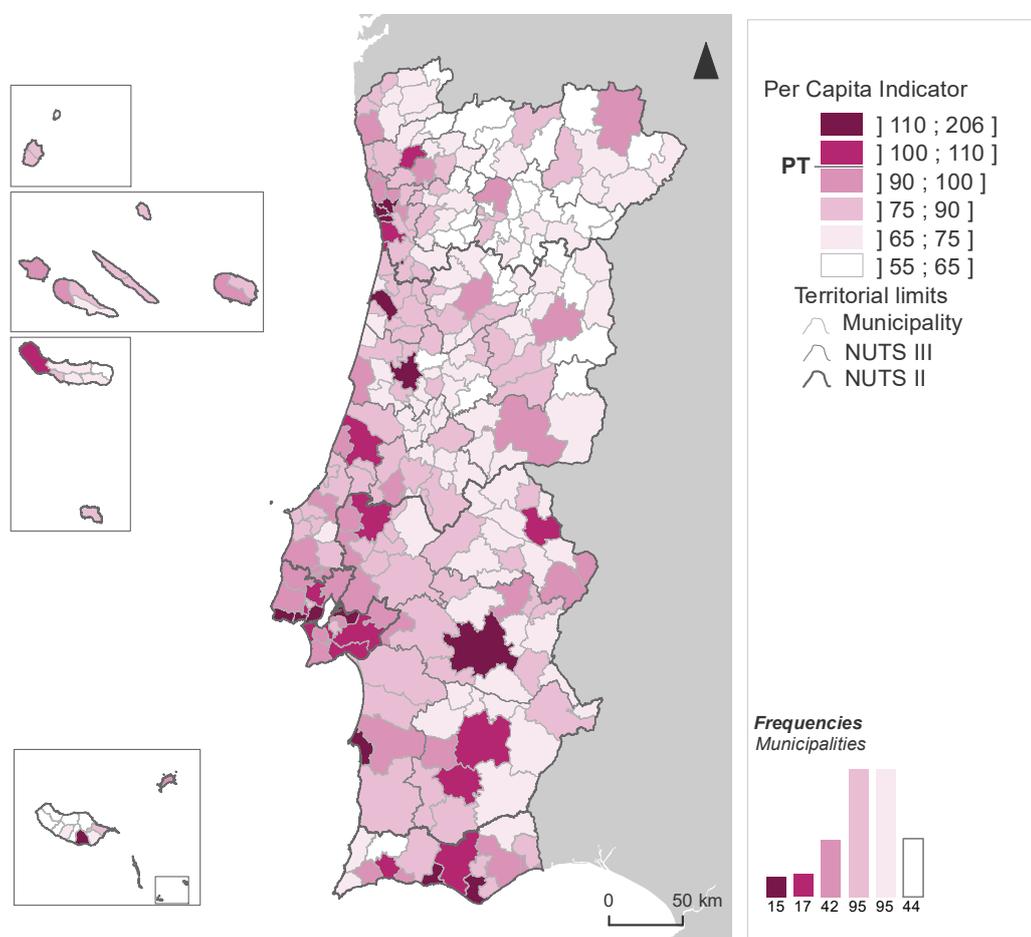
IpC results for 2019 show that purchasing power is higher in Portugal's mainland territory than in the two Portuguese autonomous regions: it was 100.6 for Portugal's mainland and 88.0 and 87.7 respectively, for the autonomous regions of Açores and Madeira. The Área Metropolitana de Lisboa (121.8) and the Algarve (100.8) were the only NUTS 2 region scoring above the national average.

In 2019, in 32 out of the 308 Portuguese municipalities, the *per capita* purchasing power stood above the national average, with higher values of IpC associated with the metropolitan areas of Lisboa and Porto [Figure 1]. The municipality of Lisboa scored the highest IpC (205.62), more than doubling the national reference value. In the first 15 positions, corresponding to an IpC higher than 110, three additional municipalities from Área Metropolitana de Lisboa could also be found – Oeiras (153.13), Alcochete (119,79) and Cascais (117,95) – and four from Área Metropolitana do Porto: Porto (154.02), Matosinhos (130.63), São João da Madeira (130.55) and Maia (110.64).

Besides the two metropolitan areas, capitals of administrative district also scored a *per capita* purchasing power above the national average – Faro (130.57), Coimbra (126.28), Aveiro (121.75), Évora (117.78), Braga (108.78), Beja (105.28), Leiria (103.21), Portalegre (101.83) and Santarém (100.41) –, with Funchal (115.71) in the Região Autónoma da Madeira and Ponta Delgada (107.96) in the Região Autónoma dos Açores also standing out. The municipalities of Sines (127.63), in Alentejo Litoral, Albufeira (114.05), Loulé (109.34) and Portimão (105.61) in Algarve and Castro Verde (105.45) in Baixo Alentejo also stand out.

In the national territory, 139 municipalities (45% of the total of municipalities) scored IpC values lower than 75. From the 10 municipalities with the lowest *per capita* purchasing power values, six were from the Interior of the Norte region, three from Região Autónoma da Madeira and one from the Centro region.

**Figure 1. Per Capita Purchasing Power Indicator by municipality, 2019**

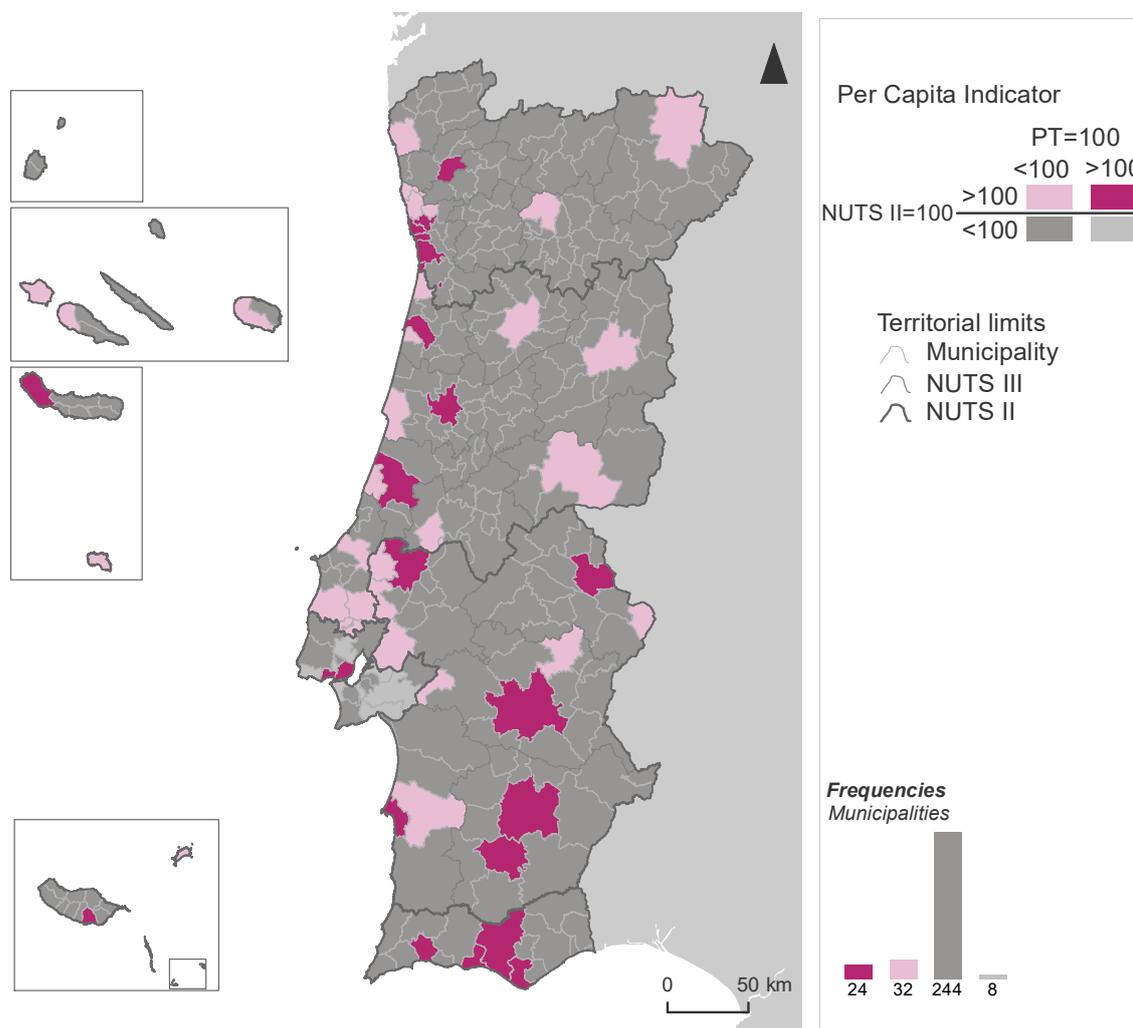


Having, simultaneously, the national and regional contexts as a reference to analyse the IpC, makes it possible to assess the level of intra-regional cohesion and to identify the municipalities that stand out in these contexts [Figure 2].

In this vein, in 2019 the 308 Portuguese municipalities were distributed as follows:

- 24 municipalities scored an IpC, simultaneously, above the national and regional *per capita* purchasing power values – corresponding mainly to municipalities from the two metropolitan areas (Lisboa, Porto, Oeiras, Matosinhos, São João da Madeira, Maia, Espinho and Vila Nova de Gaia) or to average-sized cities, mostly coincident with capitals of administrative districts (Faro, Coimbra, Aveiro, Évora, Braga, Beja, Leiria, Portalegre e Santarém), Funchal, in the Região Autónoma da Madeira, and Ponta Delgada, in the Região Autónoma dos Açores;
- in 32 municipalities, the *per capita* purchasing power revealed in 2019 stood below the national average, but above the regional average – mainly municipalities of Portugal’s mainland coastal area, mostly from the Centro region (14 municipalities out of the total 100), but also from Alentejo (7 out of 58), Norte (6 out of 86), Região Autónoma dos Açores (4 out of 19) and Região Autónoma da Madeira (1 out of 11);
- around 80% of Portugal’s municipalities (244 out of 308) had a *per capita* purchasing power, simultaneously, below the national average and the respective regional average (NUTS 2) – this proportion varied between 44% in Área Metropolitana de Lisboa, and 85%, in the Norte region;
- lastly, it is possible to identify the specific situation of eight municipalities from Área Metropolitana de Lisboa that scored a *per capita* purchasing power above the national average, but below the respective regional average (121.77): Amadora, Barreiro, Palmela, Loures, Setúbal, Almada, Cascais and Alcochete.

**Figure 2. Per Capita Indicator by municipality in the context of the corresponding NUTS 2 regions, 2019**



### Proportion of Purchasing Power

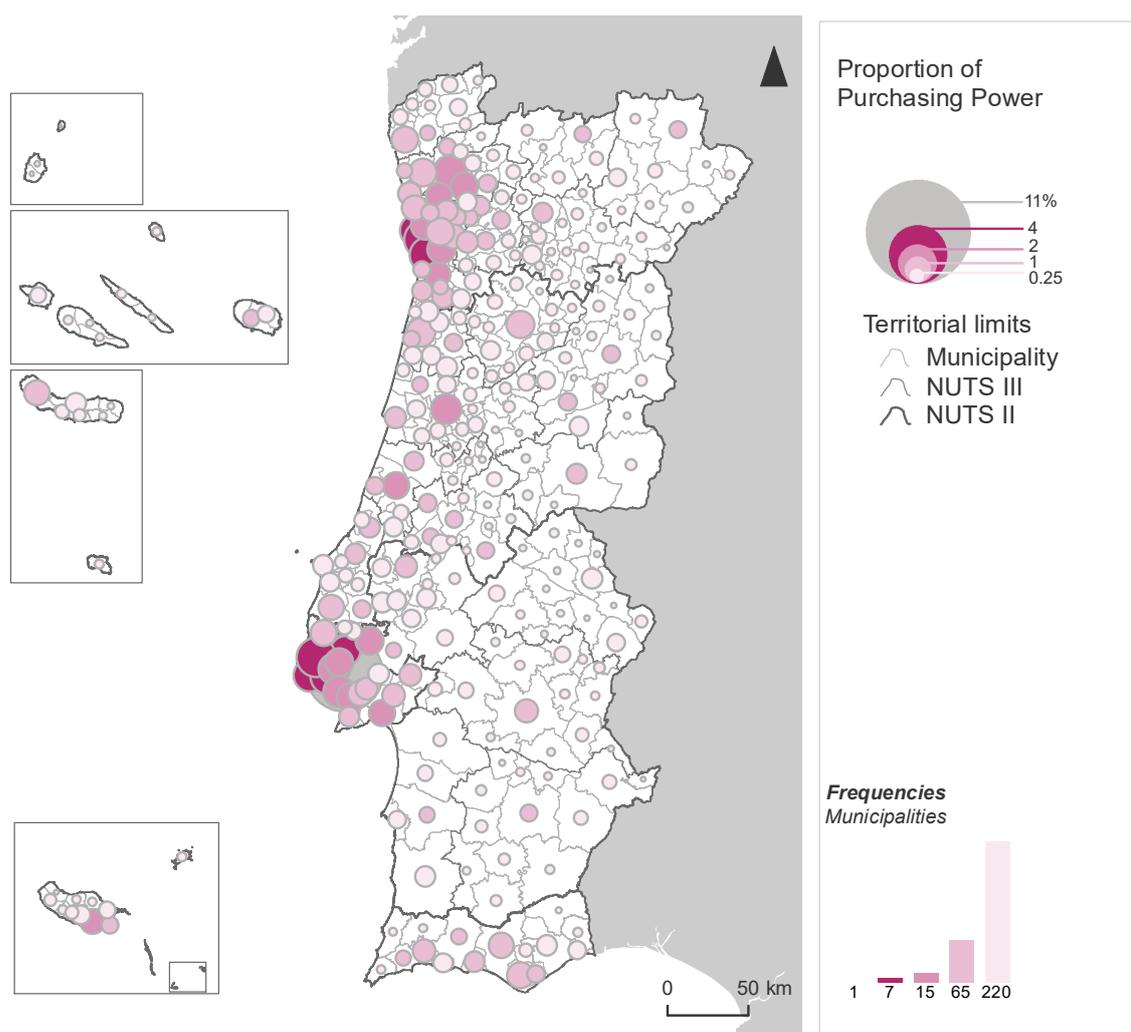
The Proportion of Purchasing Power (PPC) is an indicator derived from the Per Capita Indicator (IpC) to assess the degree of concentration of purchasing power in the different territories, having in mind that areas with more or less purchasing power in the national territory depend not only from the *per capita* purchasing power distribution across the country, but also from the spatial distribution of resident population.

The regional structure of the PPC in 2019 revealed that the NUTS 2 regions Área Metropolitana de Lisboa and Norte concentrated two thirds (66.1%) of the purchasing power revealed regularly in the country [Figure 3]. For this result, Área Metropolitana de Lisboa (34%), simultaneously a NUTS level 2 and 3 region, and Área Metropolitana do Porto (18%) were the main contributors. Taken together, the two metropolitan areas accounted for more than half (51.5%) of the purchasing power in the national territory. However, the two metropolitan territories brought together, in 2019, 44.6% of the country's population (27.8% in Área Metropolitana de Lisboa and 16.8% in Área Metropolitana do Porto).

On the other hand, the sub-regions that concentrated less purchasing power were in the Interior of Norte and Centro regions: in ascending order, Alto Tâmega, Beira Baixa and Terras de Trás-os-Montes. Besides these, the sub-regions of Alentejo Litoral, Alto Alentejo and Baixo Alentejo also contributed individually with less than 1% to the national purchasing power.

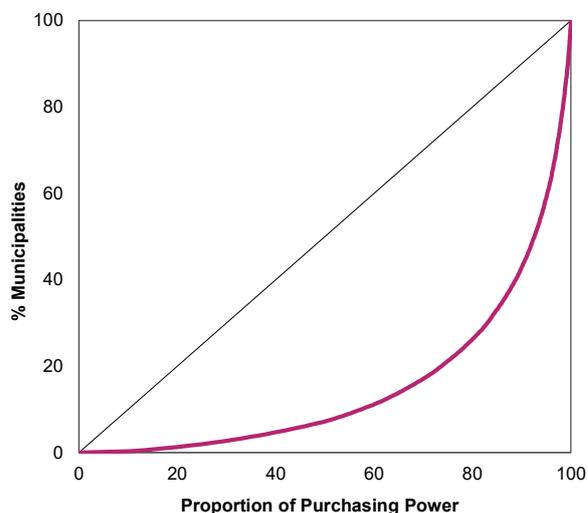
At the municipal level, Lisboa stood out by accounting for 10% of total purchasing power. In 2019, only 22 other municipalities concentrated individually more than 1% of the national purchasing power. This set corresponded to municipalities in the metropolitan areas of Lisboa (Sintra, which was the second municipality to concentrate the most purchasing power, with 3.6%, and also Oeiras, Cascais, Loures, Almada, Amadora, Seixal, Odivelas, Vila Franca de Xira and Setúbal) and Porto (Porto, Vila Nova de Gaia, Matosinhos, Maia, Gondomar and Santa Maria da Feira), as well as to municipalities corresponding to capitals of administrative districts (Braga, Coimbra, Leiria) and Funchal in Região Autónoma da Madeira. The municipalities of Guimarães and Vila Nova de Famalicão (both in the Ave sub-region) were also part of this set.

**Figure 3. Proportion of Purchasing Power by municipality, 2019**



**Figure 4. Concentration of the Proportion of Purchasing Power in municipalities, 2019**

The concentration analysis of the purchasing power in the 308 Portuguese municipalities [Figure 4] shows that, in 2019, around 7% (22) and 21% (64) of the municipalities concentrated, respectively, 50% and 75% of the national purchasing power. These results suggest that the purchasing power is associated with the urban dimension of the municipalities and is, therefore, territorially very concentrated.

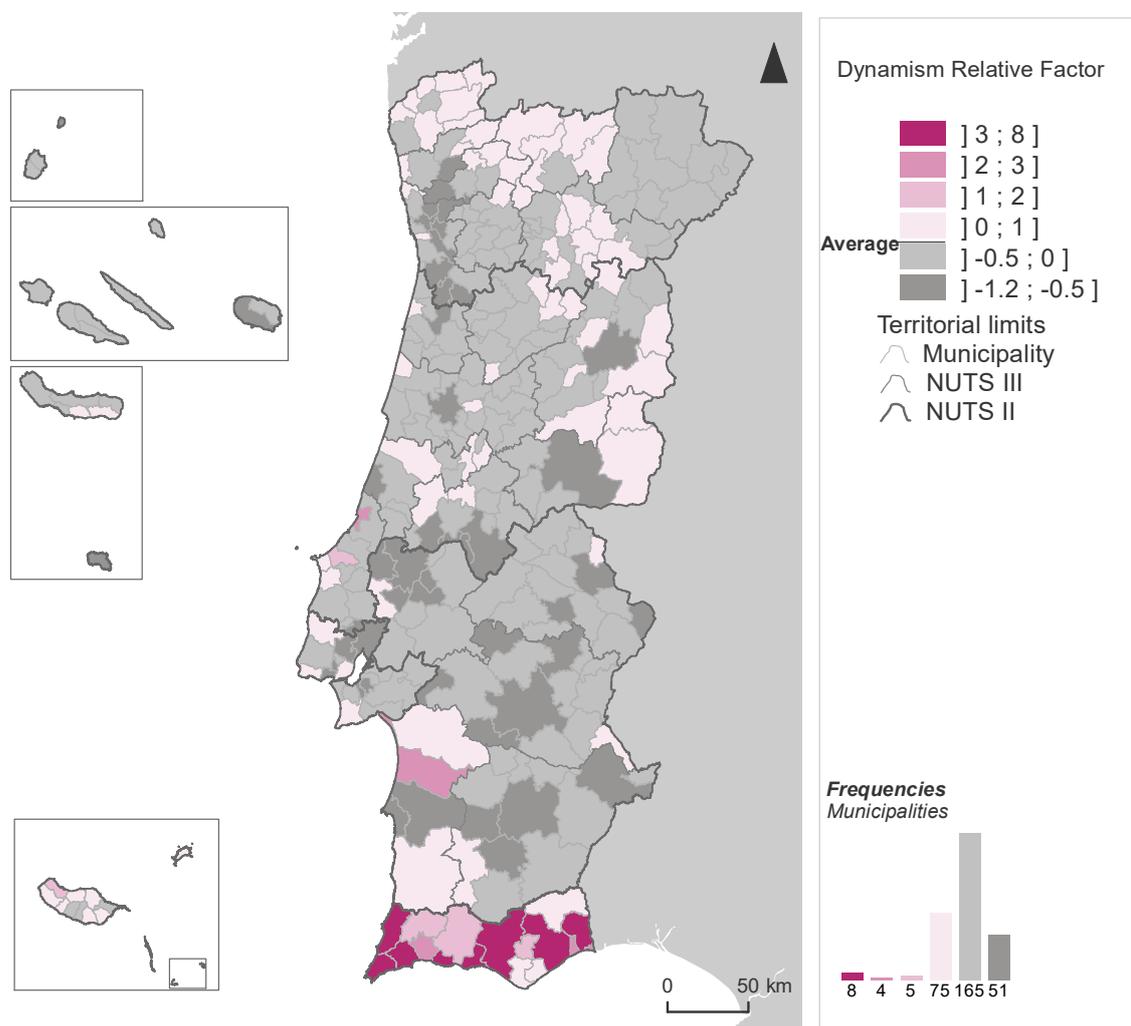


### Dynamism Relative Factor

The Dynamism Relative Factor (FDR) aims at capturing the irregular purchasing power, usually of a seasonal nature, and that is associated with population flows induced by tourism activity, thus reflecting the remaining dynamic in the input variables besides the one reflected in the first factor extracted from the factor analysis – the *per capita* purchasing power revealed in the territories.

In this vein, the Algarve region stands out in the context of this indicator [Figure 5]. In fact, in 2019, of the 17 municipalities with an FDR higher than 1 standard deviation of distribution, 13 municipalities were in that region: Vila do Bispo, Albufeira, Lagos, Loulé, Aljezur, Lagoa, Tavira, Castro Marim, Portimão, Vila Real de Santo António, Silves, Monchique and São Brás de Alportel. Among these municipalities, Vila do Bispo, Albufeira and Lagos stood out with an FDR higher than 6 standard deviations. The municipalities of Grândola (2.692), in Alentejo Litoral, Nazaré (2.048) and Óbidos (1.920), both in the Oeste sub-region, and Porto Moniz (1.261), in Região Autónoma da Madeira, completed the group of 17 municipalities with an FDR greater than 1 in 2019.

**Figure 5. Dynamism Relative Factor by municipality, 2019**



At the other end of the distribution, there was a group of 51 municipalities with an FDR in 2019 lower than -0.5. This group included some large urban centres, including municipalities of the metropolitan areas of Lisboa (Oeiras and Vila Franca de Xira) and Porto (São João da Madeira and Valongo), some capitals of administrative districts, such as Beja, Portalegre and Coimbra, and municipalities of Alentejo (Campo Maior, Castro Verde and Vendas Novas), Médio Tejo (Entroncamento) and Região Autónoma dos Açores (Corvo). The latter group of 12 municipalities scored values below -0.7.

It is important to underline the existence of municipalities with simultaneously high IpC and FDR values in 2019. In this perspective, the municipalities of the Algarve should be highlighted, especially Albufeira, Faro, Loulé and Portimão, as well as Lisboa, Cascais and Porto. These seven municipalities are in the top 10% of the IpC and FDR distributions, simultaneously.

## Technical note

The Local Purchasing Power analysis (EPCC) is a statistical study of biennial frequency and national coverage. The observed statistical unit is the municipality, data collection is indirect, and the variables used to compute the study result from administrative procedures and from statistical operations carried out within the National Statistical System.

In this edition, 16 *per capita* (using the resident estimated population by Statistics Portugal for 31 December 2019 - Annual Provisional Resident Population Estimates series, begun in 2011, including the final 2011 Census results) and standardized (with an average equal to 0 and a standard deviation equal to 1) variables mainly referenced to 2019 were considered:

- [Personal income paid tax paid, according to the taxpayer's municipality of residence, per capita, 2019](#) (Source: Statistics Portugal, Income Statistics at local level produced by Ministry of Finance - Tax and Customs Authority)
- [Gross reported income for tax purposes, according to the taxpayer's municipality of residence, per capita, 2019](#) (Source: Statistics Portugal, Income Statistics at local level produced by Ministry of Finance - Tax and Customs Authority)
- [Value of national purchases using points of sale \(POS\), according to the location of the POS, per capita, 2019](#) (Source: SIBS, Credit institutions and financial corporations survey)<sup>1</sup>
- Value of payment transactions (services and special services) at Automated Teller Machines (ATMs), by location of the ATM, *per capita*, 2019 (Source: SIBS, Credit institutions and financial corporations survey)
- [Value of national withdrawals from Automated Teller Machines \(ATMs\), by location of the ATM, per capita, 2019](#) (Source: SIBS, Credit institutions and financial corporations survey)<sup>1</sup>
- [Credit conceded to clients for housing, per capita, 2019](#) (Source: Statistics Portugal, Credit institutions and financial corporations survey)
- Monthly earnings of full-time employees with full earning, by municipality of establishment, *per capita*, 2019 (Source: Ministry of Labour, Solidarity and Social Security, Lists of personnel; based on information from the indicators [Average monthly earnings](#) and [Employees](#))
- [Resident population in census localities with 5 000 or more inhabitants as a proportion of the total resident population, 2011](#) (Source: Statistics Portugal, Census 2011)
- Number of passenger cars sold, according to the place of residence of the owners, *per capita*, 2019 (Source: Portuguese Automobile Commerce Association and Institute of Registries and Notaries; variable available in the [Regional Statistical Yearbooks](#), Subchapter Transports, Table III.9.2 - Sales and register of new vehicles by municipality)
- [Turnover of active establishments in CAE Rev.3 division 47 \(Retail trade, except of motor vehicles and motorcycles\), with the exception of group 473 \(Fuel retail trade for motor vehicles in specialised establishments\), according to the municipality of the establishment, per capita, 2019](#) (Source: Statistics Portugal, Integrated Business Accounts System)
- [Value of international withdrawals from Automated Teller Machines \(ATMs\), by location of the ATM, per capita, 2019](#) (Source: SIBS, Credit institutions and financial corporations survey)
- [Value of international purchases using points of sale \(POS\), according to the location of the POS, per capita, 2019](#) (Source: SIBS, Credit institutions and financial corporations survey)
- [Local tax for onerous transfer of real estate, according to the municipality of the estate, per capita, 2019](#) (Source: Directorate-General of Local Authorities)
- [Value of purchase and sale contracts of urban estates, according to the location of the estate, per capita, 2019](#) (Source: Directorate-General for Justice Policy, Operations over real states)
- [Local tax on real estate, according to the municipality of the estate, per capita, 2019](#) (Source: Directorate-General of Local Authorities)
- [Turnover of active establishments in CAE Rev.3 division 56 \(Food services\), according to the municipality of the establishment, per capita, 2019](#) (Source: Statistics Portugal, Integrated Business Accounts System)

<sup>1</sup> For the calculation of this variable, due to seasonal effects, the annual movements were considered from the aggregation of monthly data, and for the months of June to September the average value of 12 months (average of the real values registered between January and December) was imputed.

Based on this set of 16 variables and using a principal component factor analysis model, the EPCC provides three indicators:

- the **Per Capita Indicator (IpC)** on purchasing power which is derived from the first factor determined by the factor analysis and explains, after rotation, 45.61% of the total variance of the input variables. The coefficient of variation of the *Gross income declared for tax purposes per capita* was considered for the final calculation of this indicator, which is presented referenced to the national value (Portugal = 100);

[Per capita purchasing power by Geographic localization \(NUTS - 2013\); Biennial](#)

- the **Proportion of Purchasing Power (PPC)**, which is an indicator derived from the first factor determined by the factor analysis – IpC – and reflects the share of purchasing power revealed regularly in each municipality or region in reference to the national value (for which the PPC assumes the value of 100%). Hence, with this indicator, the study aims to assess the concentration of purchasing power in the different territories, having in mind that areas with more or less purchasing power in the national territory depend not only from the *per capita* purchasing power distribution across the country, but also from the spatial distribution of the resident population. In summary, the PPC indicator is not a direct result from the factor analysis, but it is derived from the IpC and the demographic weight of each territorial unit in the national context;

[Proportion of purchasing power \(% - in the total of Country\) by Geographic localization \(NUTS - 2013\); Biennial](#)

- the **Dynamism Relative Factor (FDR)**, which corresponds to the second factor extracted from the factor analysis, explaining, after rotation, 26.85% of the total variance of the input variables. The main objective in obtaining the FDR indicator is to exempt the main indicator, the IpC, from the effect of the irregular purchasing power (mainly induced by tourists) hence, the two factors should capture different dynamics from each other. In this vein, it is important to highlight that a low FDR value in a given territorial unit does not mean that tourism activity is not relevant in that territory, but rather that this activity becomes less evident in comparison with higher values of purchasing power revealed in that territory. The FDR indicator is presented as a standardized variable (with an average equal to 0 and a standard deviation equal to 1), and the unit of measure used for dissemination purposes corresponds to the standard deviation of the distribution by municipalities.

[Dynamism relative factor of purchasing power by Geographic localization \(NUTS - 2013\); Biennial](#)

These indicators are computed at municipality level, and values for NUTS 1, 2 and 3, and for the country, are calculated based on the weighting values at municipality level by the resident population in the different territorial levels. The present edition is based on the Common Classification of Territorial Units for Statistics (NUTS 2013) set by the Commission Regulation (EU) No. 868/2014.

The conceptual and computational methodological options of the study are presented in the methodological document *Estudo sobre o Poder de Compra Concelhio, código 335 / versão 1.6, INE* (available at [smi.ine.pt](http://smi.ine.pt), in Methodological documentation). The need for updating the previous 1.5 version of the methodological document results from changes in the input data and in the coefficients, which are determined by the model and allow the computation of the factors as linear combinations of the input variables.