7 November 2023
STUDY ON THE LOCAL PURCHASING POWER
2021

PURCHASING POWER ABOVE THE NATIONAL AVERAGE IN 31 OUT OF THE 308 MUNICIPALITIES

In 2021, the per capita purchasing power revealed in municipalities in Portugal was higher than the national average in 31 out of the 308 municipalities. Most of these 31 municipalities were in the two metropolitan areas of Lisboa (10 out of 18 municipalities) and Porto (5 out of 17). Lisboa, Oeiras e Porto registered the highest values. Besides these municipalities, also those coinciding with capitals of administrative districts stood out, namely, Coimbra, Aveiro, Faro e Évora.

Only 23 municipalities concentrated 50% of the national purchasing power. Overall, the two metropolitan areas concentrated more than half (51%) of the purchasing power, despite comprising 44,5% of the country's population.

Statistics Portugal releases the 15th edition of the Study on the Local Purchasing Power referred to 2021 (EPCC 2021), 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 (see Technical Note at the end of this press release), three indicators are disseminated:

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

1. Per Capita Indicator

Figure 1. Per Capita Purchasing Power Indicator by municipality, 2021

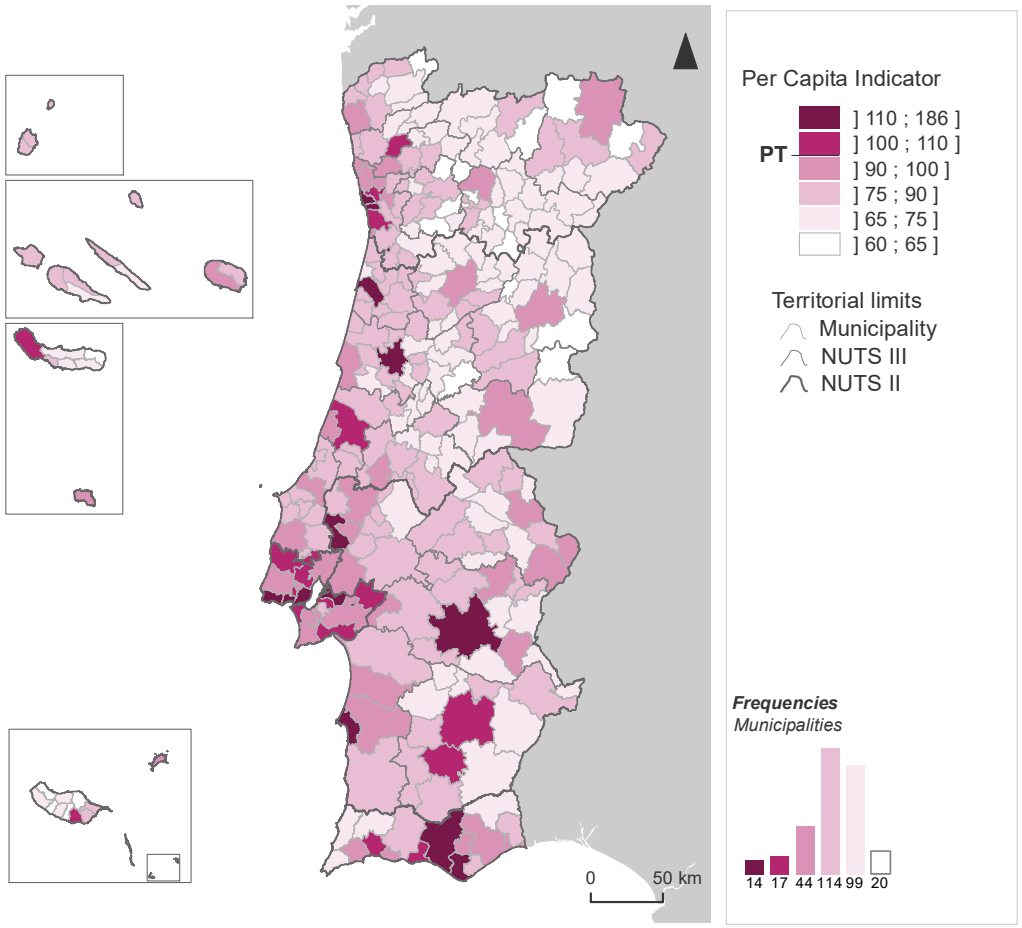
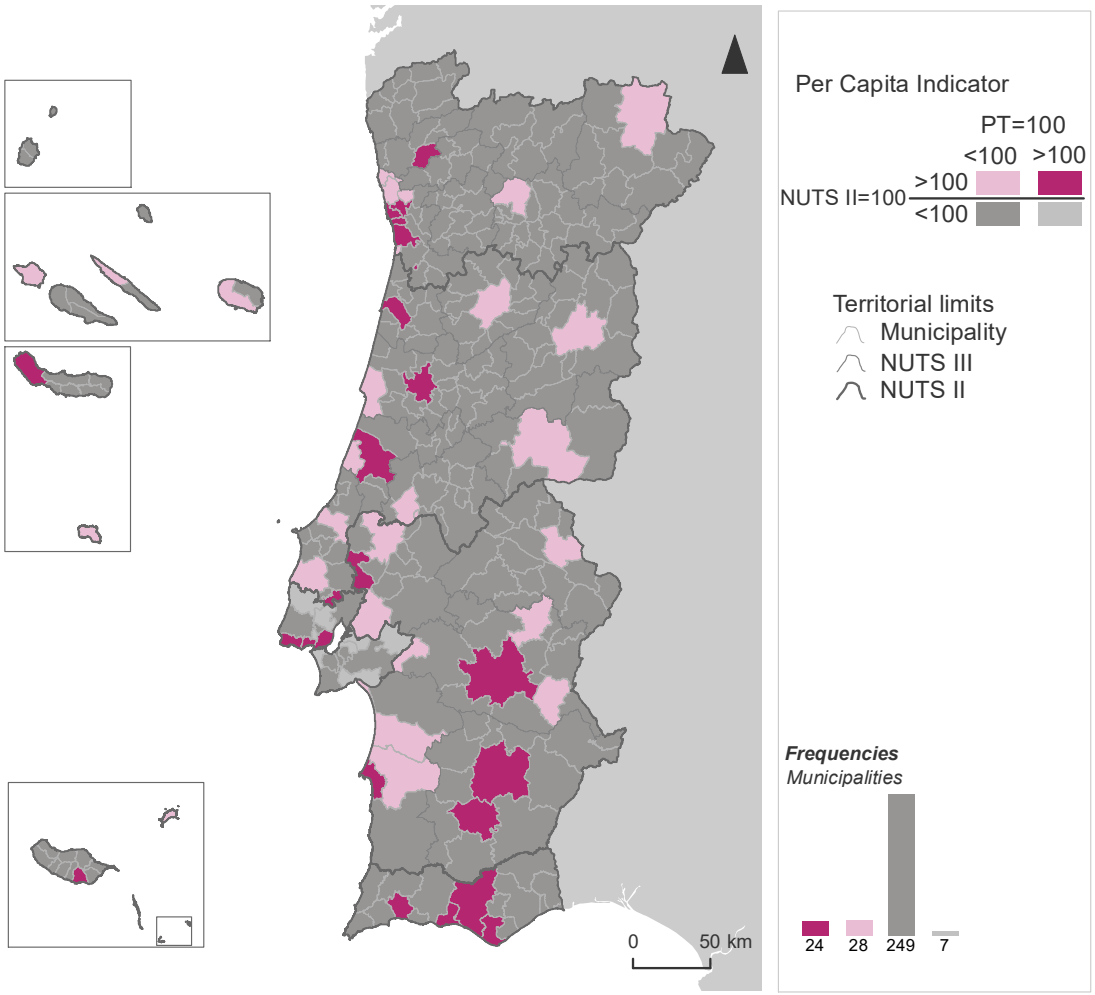


Figure 2. Per Capita Indicator by municipality in the context of the corresponding NUTS 2 regions, 2021



2. Proportion of Purchasing Power

Figure 3. Proportion of Purchasing Power by municipality, 2021

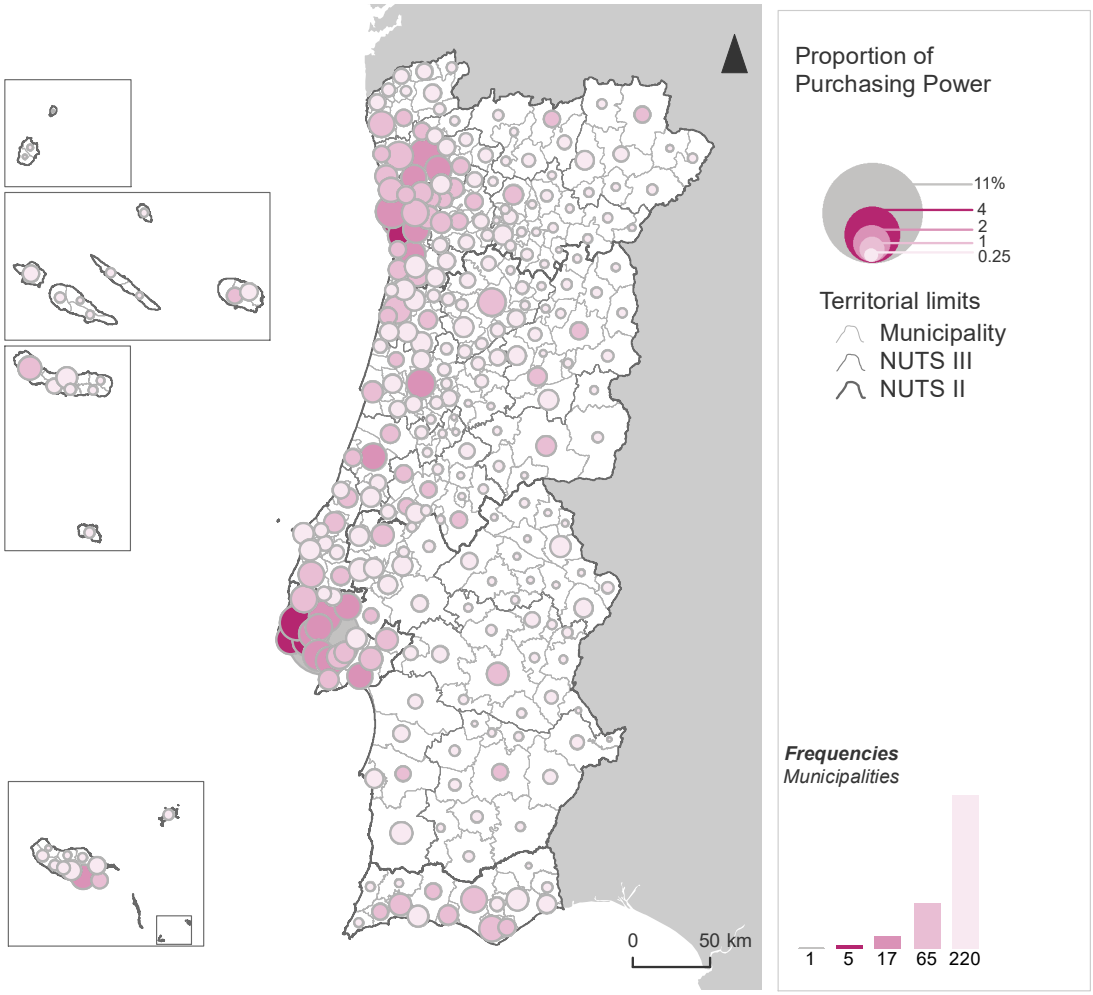
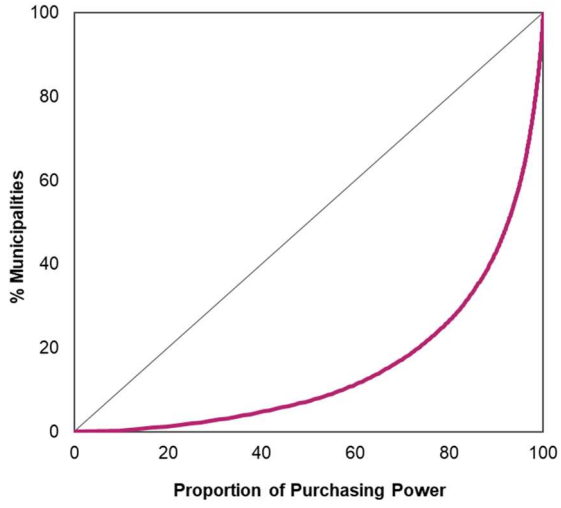
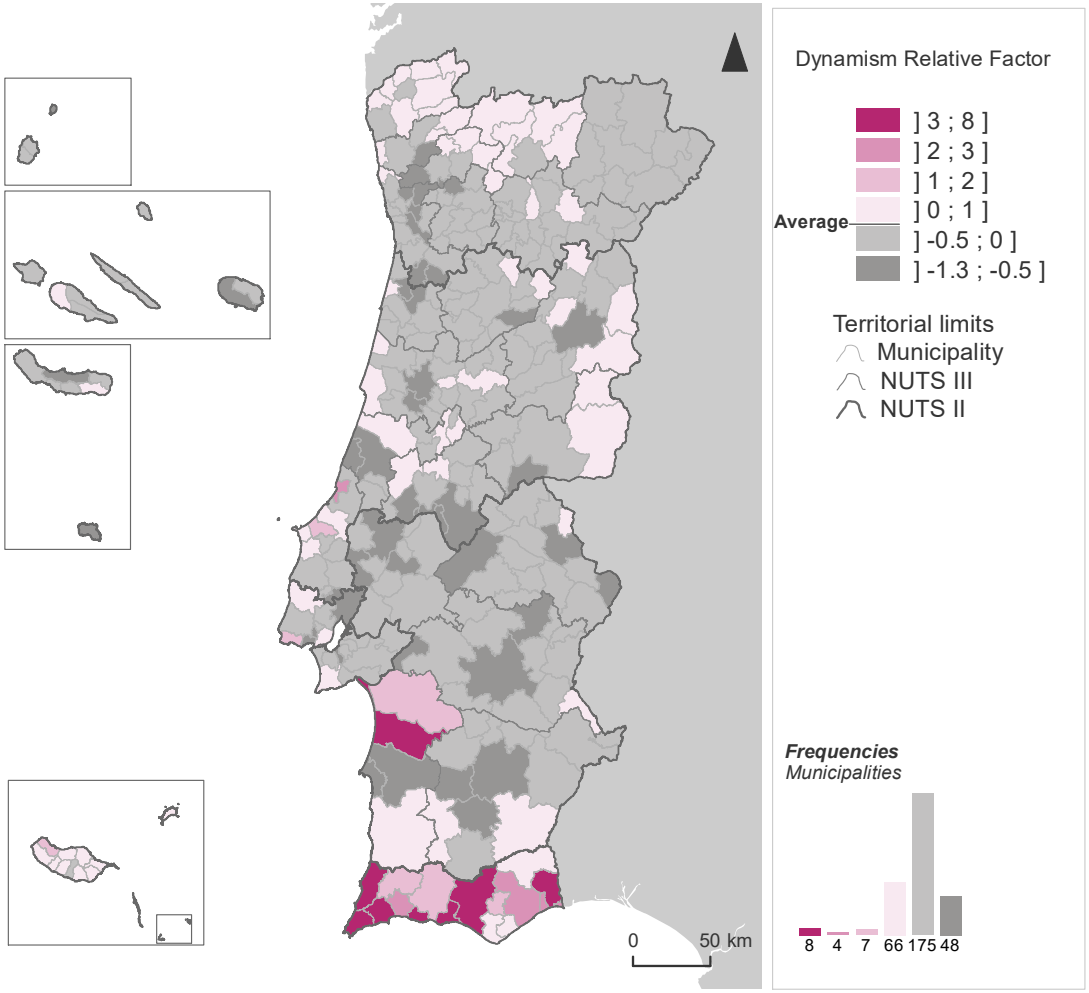


Figure 4. Concentration of the Proportion of Purchasing Power in municipalities, 2021



3. Dynamism Relative Factor

Figure 5. Dynamism Relative Factor by municipality, 2021



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, were considered 16 variables reported for the year 2021, relativized by the resident population estimated by INE for December 31, 2021 (series of Annual Resident Population Estimates that incorporate the final 2021 Census results):

- CREHABT: Credit conceded to clients for housing, *per capita*, 2021 (Source: Statistics Portugal, Credit institutions and financial corporations survey)
- GANHTCO: Monthly earnings of full-time employees with full earning, according to the municipality of establishment, *per capita*, 2021 (Source: Ministry of Labour, Solidarity and Social Security, Lists of personnel; based on information from the indicators Average monthly earnings and Employees)
- IUC: Single circulation tax according to the municipality of owner's residence, *per capita*, 2021 (Source: Directorate General of Local Authorities)
- IMT: Local tax for onerous transfer of real estate, according to the municipality of the estate, *per capita*, 2021 (Source: Directorate-General of Local Authorities)
- IMI: Local tax on real estate, according to the municipality of the estate, *per capita*, 2021 (Source: Directorate-General of Local Authorities)
- IRS: Personal income paid tax paid, according to the taxpayer's municipality of residence, *per capita*, 2021 (Source: Statistics Portugal, Income Statistics at local level produced by Ministry of Finance - Tax and Customs Authority)
- RDECLIRS: Gross reported income for tax purposes, according to the taxpayer's municipality of residence, *per capita*, 2021 (Source: Statistics Portugal, Income Statistics at local level produced by Ministry of Finance - Tax and Customs Authority)
- LEVMULINT: Value of international withdrawals from Automated Teller Machines (ATMs), according to the location of the ATM, *per capita*, 2021 (Source: SIBS, Credit institutions and financial corporations survey)
- COMTPNAC: Value of national purchases using points of sale (POS), according to the location of the POS, *per capita*, 2021 (Source: SIBS, Credit institutions and financial corporations survey)[1]
- COMTPINT: Value of international purchases using points of sale (POS), according to the location of the POS, *per capita*, 2021 (Source: SIBS, Credit institutions and financial corporations survey)
- VVNECOM: 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*, 2021 (Source: Statistics Portugal, Integrated Business Accounts System)
- VVNEREST: Turnover of active establishments in CAE Rev.3 division 56 (Food services), according to the municipality of the establishment, *per capita*, 2021 (Source: Statistics Portugal, Integrated Business Accounts System)
- TXURB5: Resident population in census localities with 5 000 or more inhabitants as a proportion of the total resident population, 2021 (Source: Statistics Portugal, final 2021 Census results)

[1] 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.

- VRALOC: House rental value of new lease agreements of dwellings, according to the municipality of housing unit, per capita, 2021 (Source: Statistics Portugal, House rental statistics at local level).
- VTVALOC: Value of dwellings sales, according to the municipality of the estate, *per capita*, 2021 (Source: Statistics Portugal, Statistics on house prices at local level)
- VOPRPAG: Value of payment transactions (services and special services) at Automated Teller Machines (ATMs), according to the location of the ATM, *per capita*, 2021 (Source: SIBS, Credit institutions and financial corporations survey)

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, 44.19% 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, 26.17% 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 1.7, INE* (available in Methodological documentation at https://smi.ine.pt/DocumentacaoMetodologica/Detalhes/1781). The need for updating the previous 1.6 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.

Matrix of correlations between indicators[2]

	IpC	FDR	VTVALOC	VOPRPAG	CREHABT	GANHTCO	IUC	IMT	IMI	IRS	RDECLIRS	LEVMULINT	COMTPNAC	COMTPINT	VVNECOM	VVNEREST	TXURB5	VRALOC
IpC	1																	
FDR	0,00	1																
VTVALOC	0,48	0,80	1															
VOPRPAG	0,72	0,30	0,60	1														
CREHABT	0,76	0,00	0,29	0,51	1													
GANHTCO	0,77	-0,04	0,28	0,48	0,63	1												
IUC	0,62	0,23	0,45	0,45	0,41	0,57	1											
IMT	0,41	0,79	0,89	0,55	0,33	0,28	0,38	1										
IMI	0,46	0,75	0,86	0,61	0,25	0,29	0,44	0,74	1									
IRS	0,93	-0,01	0,46	0,65	0,67	0,67	0,55	0,42	0,42	1								
RDECLIRS	0,91	-0,09	0,39	0,61	0,61	0,63	0,49	0,32	0,37	0,94	1							
LEVMULINT	-0,08	0,85	0,54	0,15	0,02	-0,03	0,19	0,54	0,52	-0,08	-0,17	1						
COMTPNAC	0,83	0,11	0,47	0,57	0,60	0,57	0,42	0,38	0,45	0,71	0,74	0,04	1					
COMTPINT	0,19	0,90	0,75	0,33	0,20	0,16	0,27	0,76	0,67	0,15	0,10	0,75	0,30	1				
VVNECOM	0,66	0,18	0,40	0,44	0,41	0,51	0,60	0,32	0,41	0,48	0,47	0,15	0,62	0,33	1			
VVNEREST	0,53	0,75	0,82	0,57	0,45	0,41	0,46	0,78	0,77	0,48	0,44	0,57	0,54	0,79	0,43	1		
TXURB5	0,71	-0,03	0,36	0,49	0,45	0,39	0,26	0,27	0,32	0,62	0,59	-0,08	0,59	0,13	0,46	0,32	1	
VRALOC	0,87	0,28	0,66	0,67	0,68	0,59	0,54	0,57	0,59	0,82	0,74	0,19	0,74	0,39	0,56	0,66	0,64	1

[2] The results of the Pearson correlation coefficient > 0.7 were marked in gray in the matrix. No Pearson correlation coefficients < -0.7 were registered.