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MULTIPLE DISPARITIES: EARNING INEQUALITIES IN LISBON

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Abstract
The aim of this article is to analyse the way in which unequal salaries are related to spatial disparities within the city of Lisbon in a context of economic globalization. It will therefore compare the pay levels of the Lisbon's working population in the different parishes. Lisbon municipality stands out from the rest of Portugal because of workers' higher earnings there. However, the municipality has higher inequality levels than those of the country as a whole. These inequalities are not evenly distributed in the municipality's parishes.

Introduction: globalisation and spatial disparities

A number of analyses have been conducted on the impact of globalisation in the different sectors of the economy and society in the last two decades (Carmo et al, 2008). Theories have abounded, like that of the "network society", in an effort to conceptualise and characterise the different phenomena of global dynamics.

The world has become increasingly interdependent due to the generalisation of information networks and an increase in spatial mobility and migratory flows. Nonetheless, this greater interdependence has not resulted in better integration of social and spatial processes. In fact, in many cases, globalisation has generated new discontinuities and fragmentations. Perhaps the most prominent paradox of globalisation is that the intensification of interdependencies has not necessarily generated greater continuity in social dynamics. In other words, the development of connectivity between people resulting in easier access to networks and electronic flows has no corresponding increase in proximity and social equality, at least not to the same extent. The world is more interconnected, but no less unequal because of that.

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One of the dimensions where this paradox is most evident is in spatial dynamics. In fact, globalisation processes have not manifested themselves only on the 'space of flows' that Manuel Castells (2000) characterised so well. On the contrary, as he says in his work on the network society, it not only interacts differently with the different territories but also produces considerable socio-spatial asymmetries. Castells upholds that the network society tends to be organised on the basis of a system of interconnected nodes in which the most important cities (world cities, such as New York, London, Berlin, Tokyo, Peking...) hold a more dominant position in several sectors: financial markets, scientific research centres, multinational companies etc.

These cities and their growing metropolitan areas develop attraction mechanisms in a wide variety of sectors. This is reflected most in the degree of concentration of economic and financial flows, it is true, but also in material and human resources. For example, a considerable part of the world's migratory flows circulate between the most dynamic nodes in the geography of the network society (Sassen, 2000).

According to Castells (2000) approach in these cities the specialised knowledge and high qualifications are an increasingly decisive resource in differentiating between classes and social groups. Indeed, it is the most qualified occupational categories (managers, directors, members of the professions) that tend to have the highest earnings and this helps to increase social inequalities and asymmetries.

Nonetheless, other factors of discontinuity that are apparent in growing levels of social and spatial inequality have been accentuated in association with this dynamic of metropolitan cities. It is no coincidence that some authors draw attention to the dual nature of the social structure of cities like New York or London (Mollenkopf and Castells, 1992; Massey, 2007), where the asymmetry between the most privileged and disadvantaged tends to increase. Particularly interesting is a study by Doreen Massey (2007) on the development of London and its impact not only on the overall reticular system but also and mainly on the national context. Massey believes that the inequalities not only shot up within the metropolitan area, but also increased in relation to other cities and regions in Britain. In other words, the effects of this global-scale urbanisation process were not limited to intensification in London's social polarization; they were also reflected in an increase in inter-regional disparities, in detriment to the rest of the country.

Although Lisbon is not as globalized city as London, it is interesting to find some similarities in trends towards the concentration of population and economic resources that is characteristic of large cities, to which a substantial part of the circuits in the global economy gravitate. Here, Lisbon and its metropolitan area hold a prominent position. This centrality of the capital in relation to the rest of the country is nothing new. It would, however, be important to understand whether this disparity (which seems to be a given) is still increasing. Lisbon and its metropolitan

area account for a considerable part of the country's economic annual growth and therefore play a decisive role in internationalisation: “The Lisbon metropolitan area is responsible for around 30% of Portuguese exports (…), and more than half the goods whose competitiveness depends on large economies of scale and for 45% of goods with knowledge-based competitiveness” (MAOTDR, 2007: 125). Nonetheless, the price to pay for this penetration and expansion in the global economy may be greater inequality.

The aim of this article is to analyse the way in which unequal salaries are related to spatial disparities within the municipality of Lisbon. It will therefore compare the pay levels of the Lisbon's working population in the different parishes. Our starting hypothesis is that the difference between territories (parishes) has a multiplying effect on deepening the already considerable inequalities. In other words, the data will show that income inequalities not only persist but even increase and become more complex when one considers the spatial differentiation. We will find, on the one hand, that average salaries are higher in Lisbon than in the rest of the country and, on the other hand, that Lisbon is the city with the wider uneven distribution of salaries among its workforce that affect a number of variables (gender, school attainment, place of work and type of establishment).

Our analysis uses data from 2009 “Quadros de Pessoal” (payrolls). Based on a cluster analysis, a typology will be drawn up to distinguish between the parishes on the basis of size of establishment, activity and pay level. This typology will be used to identify the degrees of asymmetry between the different territories in Lisbon municipality.

The “Quadros de Pessoal” database is compiled annually by the Strategy and Planning Office at the Ministry of Labour and Social Solidarity (GEP/MTSS). It is the result of a survey of all Portuguese companies and collects information about their establishments and workers[1]. The parish in which the establishment is located has been one of the items of information included since 2003. The possibility of conducting an analysis at parish level gives a more comprehensive view of what happens inside municipalities[2].

There are already some works about socio-spatial differentiation between residents in Lisbon (Salgueiro 2001; INE, 2004). However, considering the city's importance as an employer hub, it is also essential to differentiate between the populations working there, whether or not they live there. The labour market in the municipality has distinct economic patterns.

[1] It covers a considerable part of the active population: all workers employed in the private sector and those working in the public sector with individual employment contracts.

[2] This study was based on the project “Wage gap in the “freguesias” of Lisbon (2003-2009)”, conducted by the Inequality Observatory for Observatório Luta Contra Pobreza na Cidade de Lisboa (Observatory for the Fight Against Poverty in Lisbon).

Table 1. Average monthly earning in Lisbon municipality and in Portugal (Euros), total, by sex and school attainment (2009); and difference (in Euros and %) between Lisbon municipality and Portugal

		Lisbon municipality	Portugal	Difference (Lisbon - Portugal)	
				Euros	%
Total		1.508	1.034	474	31,4
Sex	Men	1.718	1.139	579	33,7
	Women	1.284	899	385	30,0
School attainment	ISCED 0	714	658	55	7,7
	ISCED 2	975	789	186	19,1
	ISCED 3 / 4	1.378	1.093	285	20,7
	ISCED 5 / 6	2.332	1.935	397	17,0

Source: Quadros de Pessoal 2009 (GEP/MTSS).
Note: full-time and fully paid employees.
Note: ISCED 0: pre-primary education; ISCED 2: lower secondary education; ISCED 3-4: secondary education and post-secondary non-tertiary education; ISCED 5-6: upper secondary education.

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Earning inequalities in the parishes of Lisbon

In 2009 Lisbon municipality had 408,837 workers[3], who were employed at 35,376 establishments[4]. The average monthly earning[5] in the municipality was 1,508 euros, 500 euros more than the national average that year (Table 1).

A look at the average monthly earnings by sex shows that, on average, men who work in Lisbon earn 33.7% more than the national average and women 30.0% more. By national average, we mean all workers and municipalities in the country, including Lisbon.

Considering workers' school attainment, and comparing Lisbon municipality with Portugal average, we see that workers with ISCED 3/4 earn more 20.7% in Lisbon municipality. This share is lower among workers with ISCED 0: in Lisbon municipality these workers earn more 7.7% than the national average.

However, these higher earnings in Lisbon than in the rest of the country coexist with high inequality levels. Table 2 shows for Lisbon and for Portugal, the S80/S20 ratio, an indicator calculated as a ratio of total income received by the 20% of workers with the highest income (the top quintile) to that received by the 20% with the lowest income (the bottom quintile). It also shows the share of the total income received by each quintile.

[3] These workers do not necessarily live in Lisbon municipality. What we are referring to is to individuals whose professional activity is carried out in this municipality.
[4] These establishments are private or public with employees with individual employment contracts.
[5] Average monthly earnings: the monthly earnings include workers' basic pay and regular and extraordinary benefits.

Table 2. Share of the total earning received by each quintile and S80/S20 ratio in Lisbon municipality and in Portugal (2009)

	Lisbon municipality	Portugal
S80/S20	6.7	4.8
1st Quintile (20% poorest)	7.1	9.4
2nd Quintile	9.8	11.5
3rd Quintile	14.3	14.4
4th Quintile	21.6	20.0
5th Quintile (20% richest)	47.2	44.7

Source: Quadros de Pessoal 2009 (GEP/MTSS).
Note: full-time and fully paid employees.

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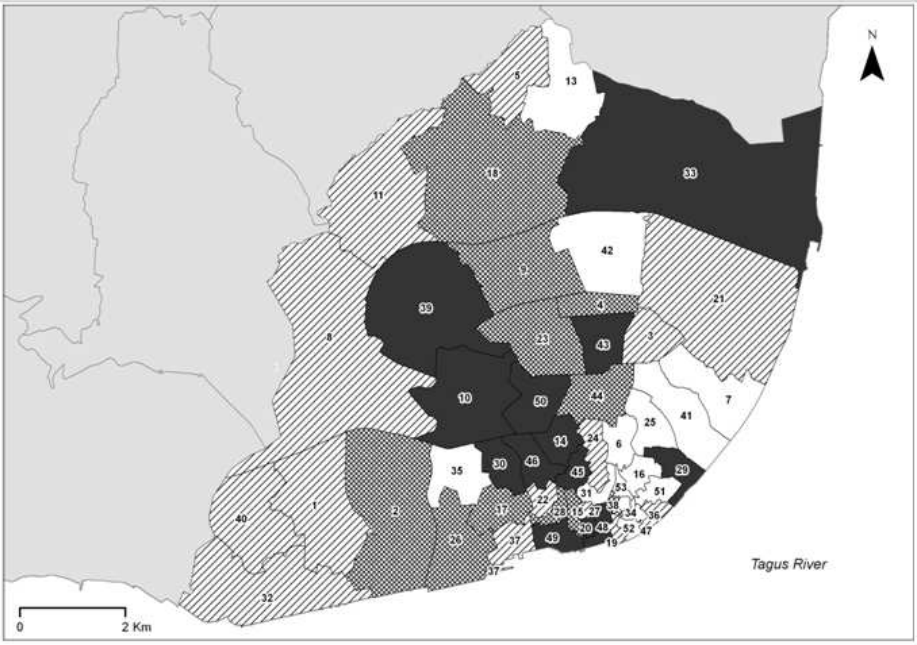
The S80/S20 ratio in Lisbon is 6.7. This means that the earnings of the 20% best paid are almost seven times higher than those of the bottom 20%. This indicator is 4.8 for Portugal as a whole. In Lisbon, the 20% with the highest earnings receive 47.2% of the total earned income. This share is also high when we consider Portugal as a whole (44.7%).

Considering, the higher earnings in Lisbon than in the country as a whole, on the one hand, and the municipality's higher levels of inequality on the other hand, we tried to understand these apparent contradictions using a cluster analysis, in which the parish is the unit. The variables “average monthly earning”, “establishment’s economic activity classification” and “size of the establishment” used in this cluster analysis enabled us to define four types of economic establishment in the Lisbon parishes. Map 1 shows the distribution of the four profiles identified.

The first profile, called “Larger size; predominance of administrative and financial activities; high earnings” includes thirteen parishes: Campolide, Coração de Jesus, Mártires, Santa Engrácia, Santa Isabel, Santa Maria dos Olivais, São Domingos de Benfica, São João de Deus, São José, São Mamede, São Nicolau, São Paulo and São Sebastião da Pedreira. These are the parishes where the establishments are the largest, with an average of 13.3 workers (higher than the municipality's average of 11.5 workers). In this cluster 19.1% of the establishments engage in administrative and support service activities and 13.6% in financial and insurance activities. There is also an important share of information and communication activities in this cluster: 8.4% (a higher percentage than in the municipality – 6.8%).

Map 1. Type of establishments in the parishes of Lisbon municipality (2009)



Type of establishments

- Larger size; predominance of administrative and financial activities; high earnings
- Average size; predominance of administrative and financial activities; average earnings
- Average size; predominance of trade and administrative activities; average earnings
- Small size; predominance of trade activities and food services; low earnings

Legend:
1 - Ajuda; **2** - Alcântara; **3** - Alto Do Pina; **4** - Alvalade; **5** - Ameixoeira; **6** - Anjos; **7** - Beato; **8** - Benfica; **9** - Campo Grande; **10** - Campolide; **11** - Carnide; **12** - Castelo; **13** - Charneca; **14** - Coração De Jesus; **15** - Encarnação; **16** - Graça; **17** -Lapa; **18** - Lumiar; **19** - Madalena; **20** - Mártires; **21** - Marvila; **22** - Mercês; **23** - Nossa Senhora De Fátima; **24** - Pena; **25** - Penha De França; **26** - Prazeres; **27** - Sacramento; **28** - Santa Catarina; **29** - Santa Engrácia; **30** - Santa Isabel; **31** - Santa Justa; **32** - Santa Maria De Belém; **33** - Santa Maria Dos Olivais; **34** - Santiago; **35** - Santo Condestável; **36** - Santo Estêvão; **37** - Santos-O-Velho; **38** - São Cristóvão E São Lourenço; **39** - São Domingos De Benfica; **40** - São Francisco Xavier; **41** - São João; **42** - São João De Brito; **43** - São João De Deus; **44** - São Jorge De Arroios; **45** - São José; **46** - São Mamede; **47** - São Miguel; **48** - São Nicolau; **49** - São Paulo; **50** - São Sebastião Da Pedreira; **51** - São Vicente De Fora; **52** - Sé; **53** - Socorro.

Source: Quadros de Pessoal 2009 (GEP/MTSS).

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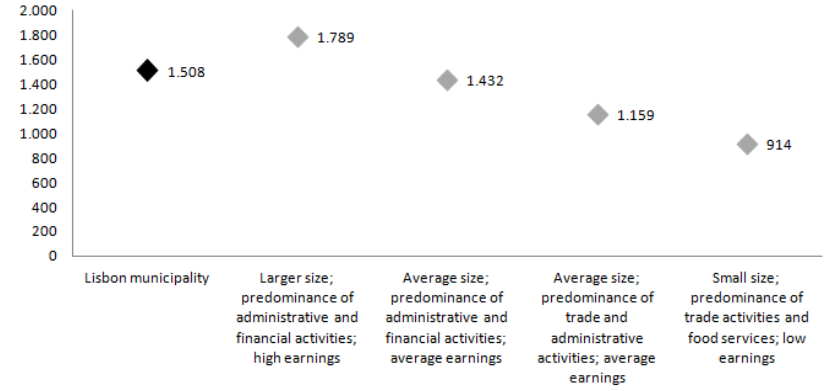
The following eleven parishes are in the second profile, "Average size; predominance of administrative and financial activities; average earnings": Alcântara, Alvalade, Campo Grande, Encarnação, Lapa, Lumiar, Nossa Senhora de Fátima, Prazeres, Santa Catarina, São Cristóvão e São Lourenço and São Jorge de Arroios. Here the establishments have an average of 9.5 workers. Administrative and support service activities account for 24.2% of the establishments.

The profile “Average size; predominance of trade and administrative activities; average earnings” fits fourteen parishes: Ajuda, Alto do Pina, Ameixoeira, Benfica, Carnide, Madalena, Marvila, Mercês, Pena, Sacramento, Santa Maria de Belém, Santo Estêvão, Santos-o-Velho and São Francisco Xavier. On average, the establishments in this cluster have 9.1 workers. The wholesale and retail trade, motor vehicle and motorcycle repairs category makes up 18.8% of the establishments (the percentage for this activity in the municipality is 13.2%) and administrative and support service activities correspond to 25.0% of the establishments in this cluster.

Finally, “Small size; predominance of trade activities and food services; low earnings” constitutes the profile of fifteen parishes: Anjos, Beato, Castelo, Charneca, Graça, Penha de França, Santa Justa, Santiago, Santo Condestável, São João, São João de Brito, São Miguel, São Vicente de Fora, Sé and Socorro. As the name of the cluster indicates, the establishments here have the lowest number of workers, an average of 6.2 workers per establishment. The wholesale and retail trade and motor vehicle and motorcycle repair establishments account for 18.9% and accommodation and food service activities for 25.3% (the percentage in the municipality is 10.5%).

Figure 1. Average monthly earning in the clusters and in Lisbon municipality (Euros) (2009)



Source: Quadros de Pessoal 2009 (GEP/MTSS).
Note: full-time and fully paid employees.

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Figure 1 shows the average earnings in the four clusters and in Lisbon as a whole. The cluster “Larger size; predominance of administrative and financial activities; high earnings” is the only one with earnings higher than the municipality's average. In the cluster “Small size; predominance of trade activities and food services; low earnings” the monthly earning is about half of the figure for the high earnings cluster.

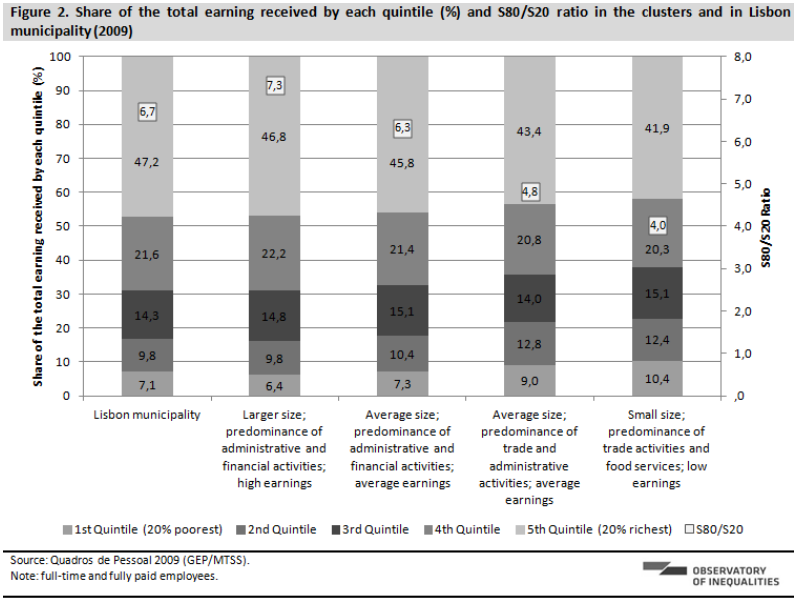


Figure 2 shows the share of the total earnings received by each quintile of workers and the S80/S20 ratio in Lisbon and in each cluster. As it is possible to see, the cluster "Larger size; predominance of administrative and financial activities; high earnings" has the highest S80/S20 ratio, at 7.3. This means that the share received by the 20% of workers with the highest income is seven times higher than that received by the 20% of workers with the lowest income. The 20% of the workers with the highest income account for 46.8% of the total income in this cluster.

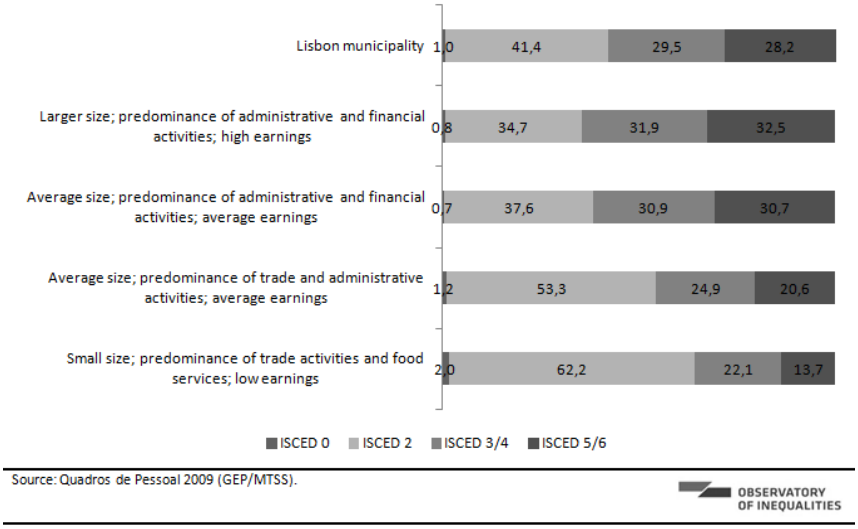
The cluster where the S80/S20 ratio is the lowest is "Small size; predominance of trade activities and food services; low earnings", at 4.0. In this cluster the 20% poorest have 10.4% of the total income, the highest percentage in the four clusters. In other words, although this is the cluster with the lowest average monthly earnings, it is also the one with the lowest earnings inequality among workers.

A look to the school attainment of the workers in each cluster reveals clear differentiations (Figure 3). In the cluster "Small size; predominance of trade activities and food services; low earnings" workers with ISCED 2 are in the majority (62.2%), while those with ISCED 5/6 represent only 13.7%.

About five percentage points above the average in the municipality, the cluster "Larger size; predominance of administrative and financial activities; high earnings" has 32.5% of workers with ISCED 5/6. In this cluster workers with ISCED 2 are fewer than 35%, the lowest percentage in this typology.

The cluster "Average size; predominance of administrative and financial activities; average earnings" has a school attainment profile similar to "Larger size; predominance of administrative and financial activities; high earnings".

Figure 3. Workers' school attainment in the clusters and in Lisbon municipality (2009)



Conclusion

Where workers' earnings are concerned, Lisbon is at an advantage in relation to the rest of the country. The average monthly salary in the municipality in 2009 was 458 Euros higher than the national average. A comparison of the sexes shows that the gap is wider among men than women. Men earned 579 Euros (33.7%) more in Lisbon than nationally, while women earned 385 Euros (30.0%) more. Nevertheless, the average monthly salary of women working in Lisbon was higher than men's at national level.

In an analysis of workers' average earnings according to their school attainment, Lisbon also stands out from the rest of the country. Regardless of the workers' school attainment, the average earning in Lisbon is higher than the national average (although the difference is not very significant among workers with ISCED 0).

Moreover, discrepancies between Lisbon and Portugal associated with workers' school attainment appear not only in wage levels but also in schooling profiles. The percentages of workers with ISCED 5/6 and ISCED 3/4 in the municipality are substantially higher, while the importance of those with ISCED 2 or ISCED 0 is lower.

However, the apparently privileged position of Lisbon compared to the rest of the country conceals situations of great inequality and wage disparity. The S80/S20 ratio in the municipality is 6.7, but 4.8 for the whole country. This means that, although the average monthly earning in Lisbon is higher than in the country as a whole, there is a greater disparity in earnings. This data proves that there is a strong relationship between income inequalities and spatial disparities.

The cluster analysis conducted here, using parishes as the unit, showed the spatial distribution of inequalities in Lisbon. We identified four groups of parishes, where the one with the highest average earnings was also the one with the highest level of inequality. On the contrary, the group of parishes where the average monthly earning was the lowest was also the one where inequalities among workers' earnings were the least pronounced.

The cluster with the highest average monthly earnings and the most accentuated inequality levels was the one where workers' school attainment was highest. In the least unequal cluster with the lowest average earnings, the workers' school attainment was the lowest of the municipality. Thus by looking at the labour market's composition in an analysis of earning inequalities, one can conclude that Lisbon, which is the most globalized city of Portugal, is composed, simultaneously by internal inequalities within the labour force working in the different parishes, and also by external asymmetries. Thus regarding Massey's conclusions about the city of London (Massey, 2007), we can say that in Lisbon the impact of globalization process was not limited to the escalation of a polarized social structure, but, at the same time, it was revealed in the amplification of inter-regional disparities.

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