

The Purpose of Social and Economic Development Versus the Reality of its Asymmetries: the Case of Alcoutim

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1. From the need for economic growth to the development ef- forts

In the second half of the 20th century, one of the main concerns of the most developed societies was to promote social development (in its multiple dimensions) towards social progress to a better society. The economic growth, usually expressed by a continuous growth of the GNP (Gross National Product), is an essential feature to encourage social development. It cuts across the economic issues by promoting justice, independency, culture and other human dimensions that will contribute to increase the life standard and happiness. (Dufour, 1973).

According to Professor S. Lopes (1984), the Portuguese Constitution comprises this multidimensional view of development. It points out global and specific goals towards increasing the standard of living and development in general, through a concern for just and evenly balanced societies. Focusing on these issues would allow, as a final objective, the reduction of asymme-

Abstract

By benefiting from the EU financial support, Portugal has made significant progress to come closer to the average development level achieved by the other EU Member States. However, we notice a persistent territorial duality: the coastline and the hinterland. These are the development asymmetries, caused by the present economic model, which emphasises and values aggregate economies and urban societies. This model exerts a powerful effect of attraction, which we call "eucalyptus effect" because, as the tree, so the model tends to "dry out" all the territories that have no means of accompanying this tendency. The Algarve is a small region in which the consumer purchasing power is higher than the national average. Nevertheless, there is Alcoutim, the objective of our research, a municipality located at only 30 km (measured in a straight line) from the coastline, which shows index dependency and purchasing power rates reflecting problematic performances. This will lead to the human desertification of the territory and, if this tendency is not inverted, the population will eventually be in danger of extinction (as we try to demonstrate further). Considering this, the authors do not intend to contradict the present development model, which is mainly based on tourism. We stand for the extension of this model to the less developed inland areas. In our view this would be the best way to preserve what still remains of traditional and cultural values, which would doubtless be lost if this depopulation rate is maintained.

Résumé

Grâce à l'appui financier de l'UE, le Portugal a réalisé des progrès énormes pour se rapprocher du niveau de développement des autres pays de l'UE. Néanmoins, une dualité territoriale persiste entre le littoral et l'arrière-pays. Le modèle économique actuel qui valorise les économies d'agglomération et les sociétés urbaines est responsable de ces asymétries. Ce modèle exerce un effet d'attraction important appelé l'«effet d'eucalyptus» car, comme cela arrive avec l'arbre, ce modèle tend à assécher les territoires ne disposant pas des moyens nécessaires pour accompagner cette tendance. L'Algarve est une petite région où le pouvoir d'achat du consommateur est supérieur à la moyenne nationale. Cependant, l'objet de notre recherche est Alcoutim, une municipalité située à 30 km à vol d'oiseau de la côte. On peut y observer des indices de dépendance et des taux de pouvoir d'achat révélateurs de faibles «performances» qui entraîneront, si cette tendance ne s'inverse pas, une désertification humaine du territoire (comme nous allons essayer de le démontrer). Dans ce contexte, nous ne cherchons pas à contredire le modèle de développement actuel, fondé sur l'activité touristique. Nous proposons, en revanche, son extension à l'arrière-pays moins développé. A notre avis, celle-ci serait la meilleure façon de préserver ce qui reste des valeurs traditionnelles et culturelles qui vont indubitablement disparaître si ce taux d'exode de la population se maintient.

ance has really been achieved.

2. Asymmetries and Human Development Index

In spite of global positive results, the above efforts prove not to be sufficient to hamper the urban tendency of socie-

tries. In the Portuguese Constitution some guidelines on the territorial organisational base of society are emphasised, such as the need to create means to provide people with health and educational benefits. Mention should also be made of the need for territorial planning in order to promote a sustainable environment and a rational use of natural resources, preserving their renewable capacity and economic sustainability.

These intentions were implemented through a framework which includes the local and central administration, and by structural measures mainly supported by the European Union (EU) funds. There is a wide range of indicators that corroborate the success of this policy. Furthermore, the approach to the EU average GNPpc level is currently used to prove this as shown in Table 1. Thus, in a global context, one can state that a progressive and positive perform-

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Table 1. *Approach to the European Union average (GNP pc; EU 15 = 100)*

| | 1986 | 1988 | 1990 | 1992 | 1994 | 1996 | 1998 | 2000 |
|----------|------|------|------|------|------|------|------|------|
| Portugal | 53 | 54 | 56 | 67 | 70 | 70 | 72 | 68 |
| Algarve | -- | 54 | -- | 59 | -- | 71 | 76 | 70 |

Sources: Portugal - A Europa em Números, 5ª ed, 2002; Algarve O Algarve em Números, CCRA; Valor de 2000 in in Eurostat, Statistiques Générales, theme 1-2003 Regions.

ty. As a result, 3/4 of the Portuguese population is concentrated in the coastal area, which represents 1/4 of the country territory, and makes up 4/5 of the national GNP¹. As a consequence, and because without population the inland infrastructure (such as postal services, courts of law, schools and health care centres) will become useless, there are strong reasons to question the existence of some municipalities that are nowadays facing depopulation. In this way, it seems logical to point out that a considerable part of the investment of the last quarter of the 20th century will be lost. At the same time, in the areas where the population is concentrated, it is necessary to continue to build more schools, hospitals and roads (the roads being currently affected by regular traffic jams). These are the diseconomies of scale presenting inefficiency costs.

This situation can also be observed in the Algarve where 82.87% of the population lives in the coastal area. In this paper we will focus on Alcoutim, an Algarvian municipality, in order to better understand the Algarvian reality, using the municipality of Faro as a comparison term where necessary.

An alternative way of measuring the population development level is to use the Human Development Index (HDI), created by the United Nations (U.N.) in 1990 through its United Nations Development Programme (UNDP). This makes it possible to obtain a global and comprehensive framework, through an accurate comparison between several countries regarding their development levels. The HDI embraces some essential dimensions of the human life, which helps characterise the development, by using three relevant components as essential to a social and economic

evaluation:

- The first component - the population longevity - is calculated using life expectancy at birth (LE);
- The second component - knowledge - is measured using the adult literacy rate and combines primary, secondary and tertiary gross enrolment ratio;
- The third component is calculated using the adjusted per capita GDP (PPP US\$) which reveals the economic status of the country.

Quantifying HDI² allows placing countries in a world performance ranking: those presenting a performance average higher than 0.800 are included in high HDI level; between 0.500 and 0.799 they will present a medium HDI level. The lowest HDI level includes those countries with a performance average lower than 0.500. In this paper we apply the methodology described by Chaves (2000), using data from both Faro and Alcoutim municipalities, reported in Table 2.

Table 2. *The Human Development Index of the municipalities of Alcoutim and Faro*

| <i>Calculating the Human Development Index</i> | |
|---|---|
| Faro | Alcoutim |
| $HDI = \frac{0,815 + 0,896 + 0,923}{3} = 0,878$ | $HDI = \frac{0,749 + 0,716 + 0,715}{3} = 0,726$ |

Source: elaborated by the authors.

Based on the methodology applied and on the results obtained (Table 2), we aim at classifying these two municipalities in an international context considering, on the one hand, the HD performance, and on the other the per capita GDP performance.

Table 3 shows that Faro achieved a high HDI level compared to the level of the developed countries (nevertheless, lower than the national HDI overall figures) while the performance of Alcoutim is situated at the medium HDI level compared to the HDI level of Cape Verde.

Concerning the real GDPpc, the results obtained with the data from Faro municipality clearly indicate a higher performance than the national average level³, while Alcoutim's real GDPpc performance can be compared to the Brazilian

¹ A study carried out by Professor Vasconcelos e Sá states that, in 2005, 2/3 of the Portuguese population will occupy 1/5 of the Portuguese territory, while 80% of the manufactures' wealth will be concentrated in Lisbon, Oporto, Aveiro, Setúbal and Coimbra, in "Portugal daqui por dez 10 anos" pp. 112. As stated in the study "Perspectivas de Urbanização no Mundo" undertaken by Departamento de Assuntos Económicos e Sociais of the UNO, in 2015, 45.3% (4 544 000) of the Portuguese population will live in the Big Urban area of Lisbon, in Expresso Economia, 13.09.03.

² $HDI = \frac{I^{LE} + I^{EI} + I^{GDPpc}}{3}$, according to Sen's methodology (1994).

³ In INE's study: "Poder de Compra Concelhio", carried out in 2002, which determines the purchasing power of municipalities in Portugal, Faro is ranked seventh in the national ranking with an average value of 139.05, while Algarve's average value was 108.78 (national average = 100). Alcoutim performance average value was only 40.13%, almost at the end of this ranking. Supposing that Alcoutim purchasing power grows by 1.68% per year and the Algarve purchasing power by 0.462% (between 1997 and 2002 these figures were verified), it would take the first 135 years to level the average of its purchasing power with the average of the region in general. These remarks are the result of the equation that follows

$Y_A(1+a)^n = Y_A(1+A)^n$

Table 3. Ranking of countries according to HDI and real GDPpc

| The Human Development Index Ranking | | | The real per capita Growth Development Product (USD) | | |
|-------------------------------------|---------------|-------|--|-------------------|--------|
| 1 | Norway | 0,944 | 1 | Luxembourg | 53 780 |
| 2 | Iceland | 0,942 | 2 | The United States | 34 320 |
| 3 | Sweden | 0,941 | 3 | Ireland | 32 410 |
| (...) | ... | ... | (...) | ... | ... |
| 23 | Portugal | 0,896 | 13 | Germany | 25 350 |
| 30 | Rep. of Korea | 0,879 | 14 | Faro | 25 229 |
| 31 | Faro | 0,878 | 30 | Portugal | 18 150 |
| 103 | Cape Verde | 0,727 | 64 | Brazil | 7 360 |
| 103 | Alcoutim | 0,727 | 65 | Alcoutim | 7 260 |
| 164 | Angola | 0,377 | 132 | Angola | 2 040 |

Source: The UNDP 2003 Report; Authors' calculations on Faro and Alcoutim

figures (Alcoutim's real GDPpc makes up 28.8% of Faro average). We would now like to emphasise that the specific position of Alcoutim's HDI rate is clearly lower than its real GDPpc rate, which is punitive to the standard of living of the population.

Having these issues in mind, our purpose is to develop a closer approach to the reality of Alcoutim, (under a HDI perspective which leads us to the above figures), and to clarify that there is an evident and growing asymmetry between this municipality and Faro and the South Algarvian coastline in general.

3. Characteristics of the Hinterland

3.1. Accessibilities and geographical features

Alcoutim exhibits some peculiar characteristics of the hinterland, especially if we consider that this village is situated at only 55 km from Faro and 33 km from the coast (measured in a straight line). This is, however, an illusory situation, because in spite of the country's recent revolution concerning accessibilities, only the asphalt quality has been improved. The mountainous territory contributes to the existence of curving roads that hamper the accesses throughout the municipality. Take, for example, as shown in Figure 1, a driving along the 100 km between Faro and Alcoutim, through E.N. 2 and then through E.N. 124. For this itinerary, one has to cope with 379 curves. There is another option to this journey, which is driving along E.N. 122 between Alcoutim and Via do Infante (a coastline motorway): the roads curve 175 times along 40 km. Finally, it is also possible to choose another road, along the right bank of the Guadiana River throughout E.M. 507. In this case the situation is not much different, for one has to drive through 186 curves. The recent building of the IC 27 along 20 km, however, allows to cut out 65 curves in these last two

routes.

The building of a bridge between Alcoutim and San Lúcar on the other side of the Spanish border, remains just a postponed promise, in spite of the clear-cut advantages of such a project, not only for this municipality, but also for the whole Eastern hinterland of the Algarve and for Southern Alentejo.

We also have to consider some geographical characteristics of the territory of Alcoutim, such as the barren soil and the scarce water resources. This is why it is included in 35% of the Portuguese soil with a high potential level of desertification, according to "Carta de Solos do País" (Soil Map of the Country). The human occupation and the soil exploitation, based on small parcels of land in subsistence farming, also contribute to its geographical marginalisation and its periphery represents the main barrier that hampers its development.

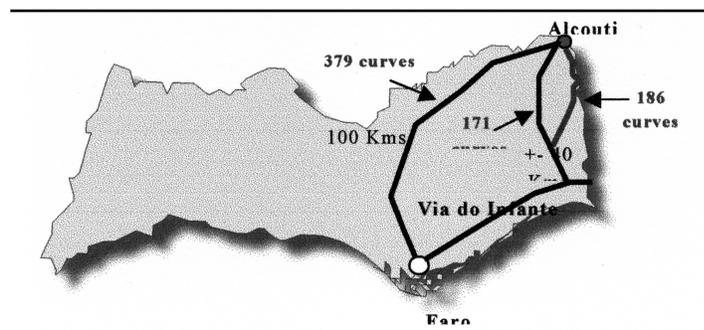
3.2. Private and public investment

Under these circumstances, it is easy to perceive that the private economic sector is facing considerable difficulties in order to develop further or even maintain itself. The primary sector has to handle several problems:

- its devaluation in terms of social and professional status. This can be associated to the significant differences in the salaries the workers earn, if compared to those paid for the tertiary services in the coastal area. Consequently, the primary industries are undervalued by young people;
- with the exception of bakery, the manufacturing industry hardly exists;
- considering that tourism is the main economic force of the region and that INE estimates null figures in 2004⁴ for accommodation capacity, the service industry is mainly based on the public sector.

In this framework, the number of existing enterprises account for only 0.64% of Algarve's average⁵. The region has benefited from considerable EU financial support through

Figure 1. The accessibilities to the municipality of Alcoutim



Source: elaborated by the authors.

⁴ in site of "Ministério da Economia", Delegação do Algarve, 22.01.2004

⁵ in Região do Algarve em Números, INE, 2002, p.p. 18.

⁶ SIR - Regional Financial Support to the industry, commerce, tourism and services; RIME - Financial Support to the Small Enterprises (industry, commerce, tourism, services and handicraft).

SIR (Sistemas de Incentivo Regional) and RIME (Regime de Incentivo às Micro Empresas)⁶ but, nevertheless, only two projects were approved in Alcoutim as against forty in Faro. Alcoutim's population age average (about 53) and its illiteracy rate, (which was 29.4% in 2001) have also to be considered. All this leads to some behavioural patterns that preclude the innovation capability.

Considering the incapacity so far displayed by the private sector, further responsibilities should be taken by the public sector. Therefore, on the one hand, the central administration tends to concentrate the main structural policies in the areas where population is also more concentrated, excluding the others, like Alcoutim, from benefiting from their economic and social returns. On the other hand, the action guidelines of the local administration are limited by its own financial incapacity, which seriously hampers the type of initiatives to be implemented (the income of the municipality of Alcoutim represents 36.5% of Algarve's general average).

If the population characteristics (e.g. Aging Index Rate) are taken into account, it is no wonder that the majority of the investment made by the central administration is managed for Health Care and social support. Thus, the kind of initiatives that could foster productive activities and promote economic growth and employment remain limited.

3.3. Decrease in Population

Amongst the Algarvian municipalities, Alcoutim showed the highest population decrease rate from 1981 to 2001: 28.35%. Its population chart, shown below, reveals the existence of an aged population (over 60 years). The Aging Index Rate between 1981 and 2001 increased from 44.7% to 467.6% (Algarve's average increased from 75.2%

to 127.7% in the same period). Also from 1981 to 2001, the dependency rate increased from 72.3% to 94.6% (Algarve's average decreased from 58.4 to 49.8), which includes Algarve's equivalent indicators subdividing "Serra"(mountainous region), "Barrocal" (inland, a region of transition between Serra and the coastline) and the Coastline areas - see Appendix I.

Chart 1 shows the population characteristics as for the age groups, indicating a situation that will probably be damaging to the future of the municipality. The non-existence of economic activities or of other activities considered attractive by the working population is an enormous risk that currently affects the municipality, which faces population extinction, as shown in the following chart.

Chart 2. Evolution of the population in the municipality of Alcoutim

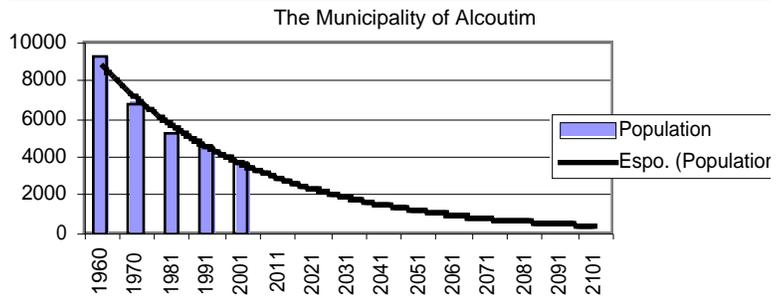
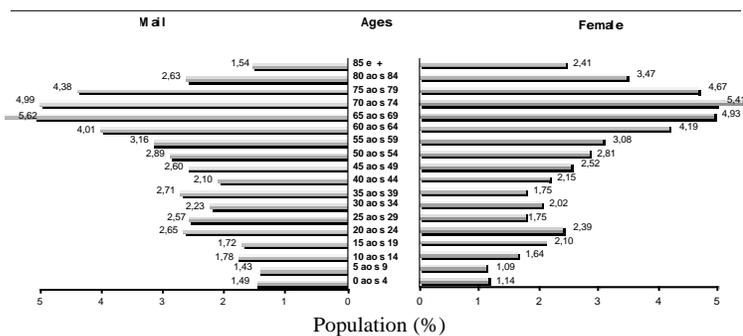


Chart 2 shows the population evolution, based on figures from the last forty years and according to the methodology⁷ described below. Considering this, we can foresee an average of 418 inhabitants in 2101. Therefore, given the present tendency, the remaining population will be completely dependent and old.

Chart 1. Population chart from Alcoutim



Source: elaborated by the authors; Data from "Recenseamento Geral da População", INE, 2001

4. A prospective diagnosis and development intentions

After consulting several "Planos de Desenvolvimento Regional" (PDR) -regional development plans - focusing on the Algarvian region, it is clear that the whole present context represents a situation that could easily have been predicted. All those plans highlighted the need for reducing the territorial duality between the coastline and the hinterland.

All PDR propose policies that share the same objectives:

- the implementation of various infra-structure and basic equipment, aiming at preserving social equity;
- the protection and the valuing of natural and cultural

⁷ With this study, we aim at demonstrating the decrease in population that affects Alcoutim. If this tendency is not inverted there will be population extinction. The results are based on the exponential model ($X_t = e^{R.K}$) after calculating the continuous growing rate (R).

⁸ Prof. D. Bessa who was the head investigator of Programa de Recuperação de Áreas e Sectores Deprimidos, refers the higher fragility of "Pinhal Interior" area (this is a transitional area between the hinterland and the coastline), which is mainly a forest without a considerable number of institutions. Over the last years evolution has been almost unnoticed. The urbanisation rate is null (in Expresso Economia, 04.10.2003). We point out that "Pinhal Interior" shows a GDPpc value of 55.6% of the national average while this value for Alcoutim is only 40.13% (INE, 2002 -the above-mentioned INE study).

resources;
-social and economic development.

A closer analysis of the last point allows to group the proposals into two main areas:

- a) The first admits the diversification of the Algarvian economic model from tourism dependency; the consolidation of tourism in the coastline and its extension to less urban areas as Alcoutim (“T” function defined in “Plano Regional do Ordenamento do Território do Algarve” -regional territorial planning report pp 48); the development of its natural potential, aiming at the landscape preservation, within the way of living and the typical subsistence economy of the hinterland. There are usually some references to forest extension, hunting, handicraft and the development of agricultural activities .
- b) The second is not a contradiction in terms with the aforementioned preservation of resources, but it assumes tourism as the main force of regional development. At the same time, it strengthens the diversification of the supply by implementing complementary activities in order to establish a relevant sectoral cluster. It also states the need for implementing a first-level urban area (at national/Iberian level) in order to allow the access to some big urban concentration equipment. Taking into account the present tendency, this option, which remains active, exerts a powerful effect of attraction, which we call eucalyptus effect, because as the tree, so this economic model tends to “dry out” all the adjoining territories that have no means of accompanying this tendency. Consequently, if some strategies are not defined to contradict this tendency and to extend the model to inland areas, we will observe the eucalyptus effect “drying out” everything around.

The present economic model produces a GNP which is distributed by the various industries as follows: agriculture, hunting, forestry and fishing, and aquaculture: 8.2%; manufacturing industry (including energy sector) and construction: 14.1%; tertiary services: 77.6%⁹.

5. The occupation of the territory and the development model

Among these conditions, one seems to be especially important: the significant relation that exists between the economic activities and the territory planning. In fact, the location of the economic activities is submitted to a decision-making process aiming at optimising the cost-benefit balance, regardless of what kind of methodology or scale is used. Nowadays, the present economic model emphasises and values aggregated economies and urban societies (in which the main economic resource is the specialisation and organisation of the labour market). These stand in contrast to the rural model, because the need for optimising the soil

exploitation contributes to a much effective and equitable territory occupation that reduces the production effort.

Aggregate economies offer a wide range of opportunities to find a job. The opposite is true in the less developed inland or frontier areas, where these opportunities are very scarce. Thus, we can observe a growing number of people moving to big cities (urban areas) expecting to improve their standard of living.

There is, however, a fundamental condition to maintain the competitiveness of companies: to permanently try and optimise innovation and production processes. Considering that innovation and technological development are usually concentrated in big urban areas, and that the need for obtaining real time data is an essential and powerful driver, it is easy to conclude that the present tendency will be the concentration of the economies (production inclusive) on the periphery of big cities.

In the present framework, we believe that Alcoutim and the hinterland, in general, are the victims of a process which emphasises the so-called endogenous development. This model is translated into a dynamic local production, based on small enterprises and focusing on non-economic relations within the local communities (cultural, social or even political identity) according to Becatinni's (1987) thesis. As a result, the existence of old human resources:

- leads to certain behavioural patterns that hamper changes in technological development and flexibility of the labour market;
- penalises the capability to deal with the growing complexity of production techniques and processes and simultaneously represents a weakness in the fundamental client-supplier interface¹⁰.

In contrast, there are urban economies (A. Scott, 1986), characterised by an industrial organisation and a growing urbanisation, as described earlier. In between are the planning decisions, surely based upon sound general economic principles, but proving not to be appropriate to the local social and economic context. They can seriously constrain the development and conversion of the territory. In fact, “sempre que se verificam transformações de base ao nível dos regimes de produção e das formas de actividade económica, podemos contar com alterações correlativas nos modelos de urbanização e de desenvolvimento” (Moulaert e Swyngedouw, 1989), a quotation which emphasises our point of view on this matter.

Considering that Algarve is a small region, there is no need to waste potential investment in the tourist sector to develop this activity in the inland area (which, obviously, includes Alcoutim). An additional supply can be generated to strengthen tourism in general and this would probably be the most appropriate way to preserve the multiple inland cultural tradition. To this end, it would be necessary to

⁹ INE, Anuário Estatístico da Região do Algarve, 2002, p.p 53 (regional accounting).

¹⁰ There may be an exception if a specific good with local characteristics is produced and promoted in a professional way as “Serra da Estrela” cheese, “Barrancos” ham or “alheiras de Mirandela” (a kind of smoked sausage). Should Martinlongo’s bread be also considered an exception?

make populations settle where they live and contradict the ongoing tendency towards urbanisation.

6. Conclusions

Under these circumstances and observing the present constraints on the available budget to implement structural measures, and the policies needed to benefit the inland areas, we believe that specific conditions should be created in order to allow the extension of the current economic model to the less developed inland areas. Having tourism as the main economic force could favour private investment towards job creation, thus attracting and making populations settle in these areas. There is an urgent need to overcome the barriers set by territorial planning, which could eventually hamper the implementation of projects that would preserve the territorial features.

Maintaining the present conditions would lead to human desertification and eventually to population extinction, to the loss of the equipment already set up to achieve social equity, and possibly also to the extinction of this municipality. In this specific case, Alcoutim is located near a "fluvial-highway" - Guadiana River. Therefore, it would be a regrettable loss if the current century, during which the municipality celebrated seven hundred years after the Foral (Royal Chart), would eventually be the century of its extinction.

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Appendix - Demographic analysis

Table 4. *Comparative evolution of the population according to age groups.*

| | Population under 15 years | | | Population between 15 and 64 years | | | Population over 65 years | | |
|-------------------|---------------------------|--------|--------|------------------------------------|---------|---------|--------------------------|--------|--------|
| | 1981 | 1991 | 2001 | 1981 | 1991 | 2001 | 1981 | 1991 | 2001 |
| Algarve | 68 121 | 60 964 | 57 830 | 204 216 | 221 376 | 264 396 | 51 397 | 59 095 | 73 826 |
| Alcoutim | 844 | 583 | 323 | 3 054 | 2 522 | 1 937 | 1 364 | 1 466 | 1 510 |
| Coastline | -- | 43 866 | 43 050 | -- | 152 137 | 191 085 | -- | 33 285 | 44 194 |
| Barrocal (inland) | -- | 12 094 | 11 146 | -- | 46 201 | 52 433 | -- | 15 022 | 17 797 |
| Serra (mountains) | -- | 4 984 | 3 536 | -- | 23 028 | 20 355 | -- | 10 788 | 11 578 |

Data from INE in 1991 and 2001 and CCRA in 1997.

Table 5. *Comparative evolution of Dependency Index, Aging Index and Population Density.*

| | Dependency index | | | Aging index | | | Population density | | |
|----------|------------------|-------|-------|-------------|--------|--------|--------------------|-------|-------|
| | 1981 | 1991 | 2001 | 1981 | 1991 | 2001 | 1981 | 1991 | 2001 |
| Algarve | 58,4% | 54,2% | 49,8% | 75,2% | 96,9% | 127,7% | 64,8 | 68,4 | 79,3 |
| Alcoutim | 72,3% | 81,2% | 94,6% | 44,7% | 251,5% | 467,7% | 9,1 | 7,9 | 6,5 |
| Litoral | -- | 50,7% | 45,7% | -- | 75,9% | 102,7% | 186,2 | 204,1 | 247,7 |
| Barrocal | -- | 58,7% | 55,2% | -- | 124,2% | 159,7% | 55,2 | 58,7 | 65,1 |
| Serra | -- | 68,5% | 74,3% | -- | 216,5% | 327,4% | 17,3 | 14,8 | 13,5 |

Data from INE in 1991 and 2001 and CCRA in 1997.

Note: Data from CCRA, Evolução demográfica da região do Algarve, May 1997, was used to calculate Alcoutim's and Algarve's aging index and dependency index in 1981.