Pharmacies and the Economic Crisis in Portugal: A Case-Study

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Structured Abstract

Purpose: The aim of this paper is to unveil the reasons that have led to the recent deterioration of the economic situation of pharmacies in Portugal, using as the metric of analysis the characteristics in the management of these units. **Methodology**: The paper opted for a comparison of economic indicators adopted by pharmacies which hold the official SME Excellence distinction and the pharmacies which do not. The strategy applied compares some management ratios, of pharmacies classified as Small and Medium Enterprises (SME) of Excellence in 2011 **Findings**: Pharmacies with SME classification register a net profit, in terms of sales, higher than Pharmacies with non SME classification. The net profit and the EBITDA of sales prove to be higher, in pharmacies with SME classification than the sales which pharmacies with non SME classification registered. **Value of paper:** This paper fulfils an identified need to study how pharmacies could be better managed, considering the economic changes that several countries are facing. The study highlight the quality of management practiced as the main differentiating factor in the operational results achieved by pharmacies.

Keywords: Economic and financial indicators of pharmacies, SME Excellence, Pharmaceutical market, Management of Pharmacies

Introduction

Pharmacies have undergone a debilitating economic period, more conspicuous in recent years. This seems to occur as a result of political measures with a significant influence on the evolution of the market and the resulting performance of the pharmaceutical sector. Political changes have occurred, mainly since 2007 and includes: the ownership of pharmacies, that are no longer exclusively owned by a pharmacist (which can be seen as a relevant factor if one takes into consideration the crucial balance between technical and commercial interest usually assumed by pharmacists); profit margins (2007, 2009 and 2011); administrative price reduction of generic and non-generic products (2007, 2008 , 2010); amendment of the rules for pricing of medicinal products (2007, 2012). Previously, in 2003, was introduced a system for competitive pricing of generic drugs, called reference price ([i], which in practice has generated a progressive lowering of the price that is fully subsidized, as per the reimbursement system. This is exclusive to the five drugs with the lowest prices in the market, which makes Portugal one of the countries with the most competitive system in Europe, considering the decrease of generic prices in this period (19,88€ in Jan 2006 to 8,79 € in Dec 2011) [ii] In addition to all these legal changes, and also due to significant rise in health spends on the last decade, the state has been increasing the use of generic medicines in Portugal, which are currently at least 50% less expensive than the original, via either the increase in the subsidizing of these (2006 to 2010) or including the full subsidizing (100%) for benefactors under the special regime (pensioners) in 2009.

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With these changes the average price of medicines sold to the National Health Service, per package, altered from 16.77 € (2006) to € 15.02 (2011) [3]. These have contributed towards a debilitated business structure, leading to unsound management indicators, like return of sales, when compared with other differentiated sectors of the economic retail activity [4], such as non medicine health products or private health care. In fact, the current economic environment is in itself, which is particularly difficult, driven by austerity measures imposed by the international financial crisis and the Memorandum of Understanding with the TROIKA, under the redemption request of Portugal to the international community. Moreover, changes in the regulatory framework have dictated a significant increase in terms of competition between pharmacies and other health products stores authorized by the government in 2009 [5] as well as structural changes in the politics and economics of the pharmaceutical sector [6]. In this period occurs a significant depreciation of the economic results of pharmacies (net profit decreased from 5, 5% of turnover in 2006 to 1, 5% in 2011) achieved by pharmacies. During the 2006-2011 period analyzed, the market conditions of pharmaceutical drugs, underwent a significant change, by means of new government measures and the economic environment. [7]. There was a decline in public costs with this as well. Note that this is one of the sectors that historically generated greater expenses for the state, in proportion systematically higher than the wealth created (GDP growth). The study sought to unravel the impact of these changes on the economy of the pharmacy, using an analysis based on factors that influence the result achieved. It assessed management ratios by different pharmacies. The basis of this analysis is a program which focuses on the comparison between pharmacies awarded the Excellence SME status, an assessment carried out by official entities according to pre-established economic and financial ratios and the pharmacies with results published from 2006 to 2011, which were unable to meet or were not distinguished with the same status. Bear in mind that in 2011 there were 2901 pharmacies in existence, in Portugal, we use a sample which represents 43% of this total, with the same features. Thus the importance in understanding how management affected the economic performance of each pharmacy, in order to target the results required for the pharmaceutical retail sector to prosper.

Methodology

The field of analysis set corresponds to all pharmacies in Portugal providing legal accounts of Business Income Tax (IRC). The Information used was on a database of statements for the 2011 financial year, the Simplified Business Information (IES), from the Dun & Bradstreet Company (D & B). This database, called WinAb, made it possible to obtain the data of 1261 pharmacies, anonymously, without any identification and performs an analysis of the Business Ethics Code (BEC) 4773. We support the standard of our analysis on a comparative approach between the indicators obtained from the universe of pharmacies operating in our country and in the conditions described above, with the same indicators as other pharmacies classified as SME for Excellence. The analysis performed was based on the production of three financial and economical ratios, namely sales per employee, net profit in terms of sales and EBITDA (earnings before interest, taxes, depreciation and amortization) related to sales. The arithmetic average is the method used in both circumstances, for data aggregation and the test groups in any of our analysis. The calculation of averages, shown for the years indicated, relate to data extracted from the source referenced information. The software used was Windows Excel 2007 version.

The analysis of performance management took into account the standard indicators defined as a criterion [2] for evaluating SME Excellence companies, for the year 2011, i.e.:

-Financial Autonomy (equity / assets)> 35%
-Growth in turnover compared to the previous year> 5%
-Return on equity (net income results / equity)> 10%
-Return on assets (net income results / net assets)> 3%
There were in 2011, 25 pharmacy ranked as "SME Excellence", in Portugal.

After defining the selection criteria, that would enable a coherent research, and from the referenced database, there was the forming of samples, designated by analogy with the criteria expressed above. The two samples used pharmacies grouped in accordance with the existence or non-existence of the SME Excellence classification.

The first sample is named "Total pharmacies", in which there is a grouping of the data related to all existing pharmacies in the information source used which are not classified as SME Excellence. The other sample group is that of the pharmacies officially classified with the SME Excellence classification. The samples used data sourced from independent pharmacies only (not included in groups, holding companies or similar entities for tax purposes).

The traditional query sources used in this sector provided the remaining data, these being market research companies, authorities and corporate sector entities.

Findings

The economic indicators analyzed in recent years reveal, from 2006 to 2009, progress in the pharmaceutical market (+4, 5%), higher than the macroeconomic GDP indicators and private consumption. As well as a sharp decline from the same year, accentuated in 2011, as seen from the table 1, which shows the comparison between GDP in public and private consumption evolution and the performance of the pharmaceutical market:

Table 1: The Evolution of Different Macroeconomic Indicators and Sectors

Evolution %	2006	2007	2008	2009	2010	2011
Gross Domestic Product (GDP)	1,3	1,8	-0,1	-2,6	1,4	-1,5
Private Consumption (in GDP %)	0,8	0,5	2,0	-2,8	1,6	1,3
Public Consumption (in GDP%)	-0,6	-0,7	0,2	2	-0,5	-1,6
Public Debt (in GDP %)	67,4	63,6	66,4	76,8	83,2	112,8
NHS Costs with Outpatients	-1,6	-1,8	4,9	6,3	7,3	-19,2
Evolution of Outpatients' Pharmaceutical Market	1,8	4	2	-0,9	-2,5	-9,1

Source: Infarmed, The Bank of Portugal, The National Institute of Statistics, IMS (International Marketing Systems)
The tables 2 and 3 summarize the data obtained in the study conducted, showing a visible degradation of the overall value of the ratios calculated from 2010, which reflects the beginning of a cycle of economic downturn in the sector [7] [8].

Table: 2: Indicators for the Sample of Total Pharmacies in the Study

"Total Pharmacies"	2006	2007	2008	2009	2010	2011
Sales and Services Provided	1.159.987,16	1.277.557,09	1.370.483,20	1.422.167,11	1.446.795,57	1.290.634,07
Number of Balance Sheets	1.161	1.239	1.239	1.239	1.240	1.192
Employees	6	7	7	7	7	7
Sales per employee	184.082,16	195.660,47	200.428,32	203.049,67	200.651,66	177.341,30
Profit for the period	53.599,56	51.880,98	44.454,76	56.482,47	55.693,84	36.779,72
Net results versus sales	4,6%	4,1%	3,2%	4,0%	3,8%	2,8%
EBITDA	90.748,04	94.183,43	89.401,63	116.027,53	116.345,23	94.240,49
EBITDA versus sales	7,8%	7,4%	6,5%	8,2%	8,0%	7,3%
Financial Autonomy	45,18	45,39	44,33	43,54	44,71	45,58
Return on Capital	12,39	10,75	8,72	10,38	9,41	6,15
Return on Assets	5,60	4,88	3,86	4,52	4,21	2,80

Table 3: Indicators for the Sample of Pharmacies Classified as SME Excellence

"SME Excelence"	2006	2007	2008	2009	2010	2011
Sales and Services Provided	2.127.276,71	2.286.047,22	2.363.729,47	2.444.030,35	2.547.042,53	2.198.924,60
Number of Balance Sheets	22	22	22	22	22	20
Employees	10	11	11	12	12	12
Sales per employee	208.928,96	210.431,12	209.685,68	210.033,82	206.770,98	185.563,26
Profit for the period	152.788,58	137.831,97	143.290,03	144.774,64	156.347,33	116.717,29
Net Results versus Sales	7,2%	6,0%	6,1%	5,9%	6,1%	5,3%
EBITDA	227.393,15	206.892,20	208.235,91	245.405,86	266.107,47	208.312,77
EBITDA versus Sales	10,7%	9,1%	8,8%	10,0%	10,4%	9,5%
Financial Autonomy	45,81	51,43	51,30	54,58	58,14	58,98
Return on Capital	26,43	21,56	20,37	18,62	18,78	12,81
Return on Assets	12,11	11,09	10,45	10,16	10,92	7,55

The two samples analyzed had a sustainable growth in sales and services provided over this period until 2010 and a significant decrease in 2011. Despite the increase in sales value ratios 2010 registered an inflection in the case of the "Total pharmacies" sample, i.e.: lower values in 2009. In 2010 the "SME Excellence" sample calculated for all ratios higher values had a smaller decrease; a direct relation to the indicators of profit of capital and assets, as well as financial autonomy, so remaining more robust. In 2010 results degraded more in the "Total pharmacies," sample than in the "SME Excellence", sample. The first sample decreased 34% in net sales, compared with 26% of the second sample. Yet, the analysis of the EBITDA reveals a similar decrease in both samples, by about 19%. The "SME Excellence" sample presents for all the calculated ratios, higher absolute values, except for the "sales per employee" parameter that remains higher in terms of absolute value.

Discussion

An analysis in sequence sought to understand the issues which could have generated the sharp decline in economic performance in pharmacies, both the macroeconomic indicators relevant to the sector as well as the microeconomic, resulting from the management performances achieved. The goal was to attempt to identify critical success factors. In the last two years of the analysis (2010-2011) there was a strong impact on the economy of the pharmacy which had a consolidated growth by 2009, generated by environmental factors (external) and in sectors as presented above.

- A decrease in the value of the pharmaceutical market of 9.1%;
- The consumer lost purchasing power (private consumption); it decreased 1.9%;,
- The increase in the amount that consumer pays to buy reimbursed medicines. In Portugal in 2011 the State pays 63.1% of the total market value of medicines, supplied by pharmacies for the National Health System (NHS). This makes the consumer responsible for the remaining 36.9% of the cost. In 2010 consumers paid 30.2%. Note, the NHS market for outpatients represents 71.3% of the total pharmaceutical market.
- The value per unit of sold medicines depreciated (the average sales price of € 16.77 for the public in 2010, decreased to € 15.02 in 2011, or -10.2%)
- A substantial increase in the costs for the pharmacy due to the increase in human resources; in 6 years there was an average increase from 6.3 employees per pharmacy to 7.3 (+15.9 %).

Note, in this context the number of pharmacists employed, 5727 in 2006, increased to 7672 in 2011, representing a 33.9% increase. A 4.8% in the last two years despite the decrease of results. According to the results, it is necessary to assess the factors that have a greater impact on degrading of the economic situation of pharmacies. The study reveals that pharmacies are not all similarly affected. These can depend on the economic disparities that exist in the purchasing power of consumers in the various geographical regions of the country. Pharmacies theoretically serve a number of consumers, depending on the population of each geographical region. This can alter the economic success. The "SME Excellence" sample of pharmacies presents indicators that support the reading of a more robust management, than that achieved by the sample of "Total pharmacies." This assumes the "SME Excellence" pharmacies not only have more solid results in the period before the year of economic inflection, 2010, but also maintain the best performances in the transition to 2011. Thus, there is the belief that management strategies and perhaps preparing managers who have a direct involvement, is crucial. It seems legitimate to emphasize how many pharmacies, in most cases family run micro businesses, denote a structural weakness to withstand the impacts of successive measures to cut the costs in medicines.

The evidence presented and analyzed by the existing current degradation of the economic and financial relationship with key suppliers, proves this. It is evident since 2010 that, out of almost 2800 pharmacies, in 844 pharmacies (30%) at least one wholesaler suspended supply, 385 (13%) are in a process of ongoing court cases and 596 (21%) agreed on debt settlement to wholesale companies. With this scenario, what seems to stand out in terms of performance is the level of managerial preparation of the owners, considering their involvement in two distinct areas, the economic activity and providing health care. Pharmacies may struggle to reconcile these with the purpose of making the units viable private companies. The evolution of this sector emphasizes the need for a full discussion of the social role of the pharmacies in the society and the eventual state intervention or subsidization to pharmacies in order to assure the proper access of medicines to the Portuguese population.

Conclusion

The research is conclusive in revealing that the economy of the pharmacies shows a decreasing trend of the economic strength of their management companies, conclusive according to the ratios presented throughout the analysis period, which implies a lower profitability and existing operating costs that affect viability in the short to medium term. If we analyse the environmental factors, particularly the policy measures already mentioned, we understand that these will have a very similar impact on all of the pharmacies by the simultaneous changes identified in the indicators established in the empirical study. Pharmacies with a management performance classified by official entities as more solid (status) SME Excellence, have better economic and financial indicators than other pharmacies in the area, and show less degradation results in the analyzed years. Despite the difficult economic environment, they reveal a better management capacity and economic survival for the future. The characteristics of the study reinforce the fact that performance management is in terms of the difficult economic situation one critical factor. In fact, the existence of proper skills by the owners or managers of pharmacies seems to conduct as least, for less financial vulnerability at pharmacies, therefore with less impact on the viability achieved in the short to medium term. It is also perfectly clear that with lower operational results and higher investment in structure to improve service results, the professional model pursued to individualize and high technical differentiation in service, conditions the future. It is therefore important to reposition the economic activity of pharmacies and the pharmacist as a qualified professional.

Research Limitations

The study was conducted on the legal basis of 3500 inhabitants per pharmacy. Nevertheless, in two extreme districts in Portugal, the number of inhabitants varies from 2040 to 4788 inhabitants per pharmacy. Another limitation is the existence of significant differences in the technical skills of pharmacy managers which could be critical to the performance achieved.

Funding

End Notes

[i] The Price Reference System (PRS) covers subsidized medicines, prescribed under the National Health Service, for which there are already authorized, subsidized and marketed generic drugs. The PRS establishes the maximum amount of the subsidy, related to the reference price or equal to the retail sale price (RSP) of the drug, whichever is less, for each set of drugs with the same qualitative and quantitative composition in active substances, dosage form, dosage and administration route, which includes at least one generic product on the market.

[2] Defined *by IAPMEI* – Agency for Competitiveness and Innovation

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