Krzysztof Łobos*, Mirosława Szewczyk**

*Opole School of Banking, Poland, **Opole University of Technology, Poland

THE FINANCIAL PERFORMANCE OF MANUFACTURERS MUSHROOM COMPOST MANUFACTURERS IN POLAND

WYNIKI FINANSOWE PRODUCENTÓW PODŁOŻA DO PRODUKCJI PIECZAREK W POLSCE

Key words: manufacturers of mushroom compost, financial performance, Poland

Słowa kluczowe: producenci podłoża pod uprawę pieczarek, wyniki finansowe, Polska

Abstract. The article examines the financial performance of the six largest manufacturers of mushroom compost in Poland. The main contribution of the paper is empirical, based on financial data published in Official Journal of the Republic of Poland "Monitor Polski B". The financial ratios used are the return on assets (ROA), return on equity (ROE), and return on sales (ROS). The mushroom compost manufacturing sector, given the very good profitability indexes and recorded sales increases, can be considered a very attractive domain of business activity.

Introduction

Since the 60's of XX century, the world mushroom industry has been developing rapidly and mushroom production has increased significantly. From 1961 to 2005, the world's mushroom production increased from 0.30 million tonnes to 3.29 million tonnes. The main reasons were improved production facilities and the improvement of cultivation techniques in the major producing countries (United States and Netherlands). Important reason for the increase in world mushroom production was the opening of China to economic reform, which facilitated the rapid development of the mushroom industry. China is the largest producer of mushrooms in the world [Mushrooms. Industry... 2010].

The production of mushrooms in the whole European Union amounts to about 1 million tonnes. EU countries with the greatest production in 2010 were Poland, Netherlands, Spain, France, and Italy, with Poland accounting for nearly one-fourth of total EU production in 2010. It is estimated that 0.2 million tonnes of mushrooms were produced in Poland in 2010. The mushroom industry in Poland is composed of more than 3 thousand mushroom farms, ranging in size from many small family-run farms to some large operations. It is the 100 biggest producers that provide 90% of the whole production. The profitability of the branch is estimated at 7-8 percent [Grogan 2008, Polska największym... 2011, W Unii Europejskie]

... 2011]. The mushrooms produced are of high quality and the production facilities are technologically advanced. The costs of labor, energy, and supplies are less than those in some EU member countries, and the capital investment by Polish growers, especially in their composting operations, is high. The combination of high-quality product and low production costs has enabled mushroom growers in Poland to ship mushrooms to some EU and non-EU member countries. The main importers of the Polish mushrooms in the European Union are the following countries: Germany, Holland, France, Austria, Denmark, Great Britain, Sweden and Ireland [Smoleński 2008].

Poland is the biggest mushroom producer in Europe. The mushroom industry encompasses firms engaged in the manufacturing of compost, growing, processing, marketing, and distribution of mushrooms. The manufacturing process for producing mushrooms begins with the manufacture of compost. Production of mushrooms cannot develop without proper compost, since it is the basic material which is decisive as regards the yield and quality of mushrooms, as well as competitiveness of this sector of the Polish agriculture on the world's markets. The aim of the paper is to analyze the financial performance of the six biggest manufacturers of phase III¹ mushroom compost in Poland. This study uses data from the Central Statistics Office. The financial data for the years 2008-2010, relating to the companies, were taken from the successive issues of Official Journal of the Republic of Poland "Monitor Polski B".

¹ Phase III compost is fully colonised by mushroom mycelium, and when dispatched to the customer is immediately ready for casing and the start of the professional mushroom growing cycle.

Material and methods

The data relating to the financial performance of the subjects dealing in manufacture of mushroom compost in Poland were analyzed. The main contribution of the paper is empirical, based on a data source consisting of financial information on documents published in Official Journal of the Republic of Poland "Monitor Polski B". On the basis of the data published in the successive issues of "Monitor Polski B" [2009, 2010, 2011], a database² was created concerning the following companies – subjects dealing in manufacture of compost for growing mushrooms: Hajduk Podłoże do Pieczarek Sp. z o.o., Produkcja Podłoża Pod Uprawę Pieczarek Ryszard Wrona, Karol Kania i Synowie Sp. z o.o., Fungis Sp. z o.o., Mykogen Kompost Michał i Piotr Małuszyńscy, Unikost Spółka Jawna U. Sztandera & A. Gajowniczek.

The selected sample was purposive. It includes all the entities dealing in manufacture of phase III mushroom compost, which operated in the Polish market, and which met at least two of the conditions listed below:

- the average annual employment per full time posts was at least 50 people,
- the total assets at the end of a fiscal year were equal, rendered in the Polish currency, to at least euro 2,500,000,
- net revenues from sales of goods and products and from financial operations at the end of a fiscal year were equal, as in the Polish currency, to at least Euro 5,000,000.

It is generally recognized that company financial statements provide information on a company's performance. Analysis and interpretation of financial statements using various ratios and studies of trends do provide a shareholder, creditor, banker or potential investors valuable information about a company's financial status. This study investigates the selected financial ratios (ROS, ROA, ROE). The return on assets (ROA) measures the percentage of net income to total assets. The return on equity (ROE) focuses on the equity component of the investment. It relates the earnings left over for equity investors after debt service costs have been factored in to the equity invested in the asset. The return on sales is important measure of sales performance and shows the relation of net income to the sales revenue. The high values of ROS mean more efficient sales policy and operations.

Results and discussion

The mushroom production in Poland has increased (Tab. 1). Since its entry into the EU, Poland has become the EU's largest-volume producer of mushrooms. Total button mushrooms production was 213.1 thousand tonnes in 2010 [Skup i ceny... 2011]. Production has increased 101.9 thousand tonnes (91.6 percent) since 2005. The value of production is estimated at 873 million PLN (220 million EUR) in 2010 (Tab. 2).

Labor, energy and supplies were and, in some components of costs, still are far less expensive in Poland. The Polish companies made a big capital investments for finished Phase III compost. They use the newest equipment and have farms that are technologically advanced in many ways. Quality in combination with lower costs than the Dutch mushroom growers has allowed the Polish companies to expand their markets [Growers visit... 2006]. This has led to an increase in composting facilities revenues (Tab. 2).

The aim of the paper is to analyze the financial performance of the six biggest manufacturers of mushroom compost in Poland. This paper aims to contribute to the analysis of within industry inter-firm variety. Tables 3-5 presents sales revenues, net profits and assets for the examined enterprises. Analyzing financial data can help create a picture of where company stands within its industry.

The companies are experiencing high sales growth and still gain high amount of profit (Tab. 3-4). The examined companies invest in their own domain of activity, perceiving it – apparently – as a strategically appropriate choice. They expand their assets base (i.g. Kania, Fungis) (Tab. 5). In March 2009 Kania opened a brand new plant in Debowa Kłoda. During 2010 Fungis extended tunnel facility with 11 more phase – 2/3 tunnels of 200 tonnes.

The table 6 shows the profitability of companies. They consistently attain high rate of profit. Profitability in the sector has been rising in recent years. The compost mushroom sector has achieved good results in recent years, with most relevant economic indicators, such as ROS, ROA, ROE, demonstrating its continued overall good health (Tab. 6).

The weakest company in view of measures of profitability in our juxtaposition is Wrona (ROS at the level of 4-8%, ROA at the level of 4-9%, ROE at the level of 12-20%). Despite that, this company gains profits in years 2008-2010. We have to remember, that 2009 is the year of crisis and reduction of expenses on market of mushrooms (Tab. 2).

The most profitable company is Mykogen (ROS at the level of 20-30%, ROA at the level of 30%, ROE at the level of 60-80%). What is interesting, this company didn't broad its assets base in Poland in

² In the case of three of the examined companies there is a lack of data for 2010.

| Tabla 1. 1 | The profiles of the examined subjects |
|------------|---------------------------------------|
| Tabela 1. | Charakterystyka badanych podmiotów |

| Company name/ Nazwa podmiotu | Profile/ Charakterystyka |
|--|--|
| Hajduk Podłoże do Pieczarek Sp. z o.o. | Compost manufacturer since the 1980s (phase I); since the end of the 1990s manufacturer of phase III compost, and since 2005 – phase IV compost; employment – about 150 people/ <i>Producent podloża od lat 1980. w fazie I, zas od konca lat 1990. Producent podloża w fazie III, zaś od 2005r. w fazie IV. Zatrudnienie 150 osób</i> |
| Produkcja Podłoża Pod Uprawę Pieczarek Ryszard Wrona | Mr Ryszard Wrona began the activity as a producer of mushrooms; he started manufacturing of compost in 1989; since 2004 – has manufactured phase III compost; production lines: Pszczyna – phase II in cubes and phase III – cube and loose, Patoka-Panoszów – phase III – loose and cube; employment – about 100 people/ Pan Ryszard Wrona rozpoczął działalnośc gospodarczą jako producent grzybów. W 1989 zainicjował produkcję podłoża, zaś od roku 2004 produkuje podoże w fazie III. Posiada następujące linie produkcyjne: w Pszczynie – faza II i III w kostkach i luzem, Patoka-Panoszów w fazie II w kosztkach i luzem. Zatrudneinie ok. 100 osób |
| Karol Kania i Synowie | Mr Karol Kania started growing mushrooms and manufacturing compost in 1967; in 1988, he established Karol Kania Manufacturer of Mushrooms Compost, which was transformed into Karol Kania and Sons in 2001; production lines: Piasek, Pawłowiczki, Debowa Kłoda; employment – about 400 people/Pan Karol Kania rozpoczął uprawę grzybów oraz produkcję kompostu w roku 1967. W 1988 założył firmę Wytwórnia Podłoża pod Uprawę Pieczarek Karol Kania, która w 2001r. przekształciła się na Koarol Kania i Synowie. Linie produkcyjne zlokalizowane sa w Piasku, Pawłowiczkach, Dębowiej Kłodzie. Zatrudnia 400 osób. |
| Fungis Sp. z o.o. | Fungis began the business activity in 1991; employment – about 100 people/ Firma rozpoczęła działalność w 1991r., obecnie zatrudnia ok. 100 osób |
| Mykogen Kompost Michał i Piotr Małuszyńscy | Mr Piotr Małuszyński set up the first mushroom plant in 1970; in 1982, the Małuszyński brothers (Piotr and Jerzy) opened their compost manufacturing plant; since 2004 Mykogen Kraszew has manufactured phase III compost/ <i>Pan</i> <i>Piotr małaszyński założył swoją pierwszą wytwórnie pieczarek w 1970 r., zaś w</i> <i>1982r. wraz z bratem Jerzym założyli wytwórnię podłoża. Od roku 2004 firma</i> <i>produkuje podłoże w fazie III.</i> |
| Unikost Spółka Jawna U. Sztandera & A. Gajowniczek | Unikost began the activity in 1995; employment – about 100 people/Firma rozpoczęła działalność w 1995r., obecnie zatrudnia ok. 100 osób |

Source: own study Źródło: opracowanie własne

Table 2. The mushroom production in Poland,2005-2010.

Tabela 2. Produkcja pieczarek w Polsce w latach 2005-2010

| Year/ Lata | Production [thous. t]/ Produkcja [tys. t] | Production value [thous. PLN]/Wartość produkcji [tys. PLN] |
|---------------|---|--|
| 2005 | 111.2 | 404,784.6 |
| 2006 | 136.7 | 493,933.3 |
| 2007 | 143.3 | 549,584.7 |
| 2008 | 153.4 | 585,744.2 |
| 2009 | 112.2 | 476,917.2 |
| 2010 | 213.1 | 872,882.2 |

Source/Źródło: Skup i ceny... 2006-2011

Table 3. Sales revenues of six compost producers between2008 and 2010

Tabela 3. Przychody ze sprzedaży w latach 2005-2010

| Company name/ <i>Wyszczególnienie</i> | | | | | |
|--|---------|---------|--------|--|--|
| | 2008 | 2010 | | | |
| Kania | 141,516 | 122,922 | 32,441 | | |
| Hajduk | 43,362 | 56,347 | - | | |
| Wrona | 31,845 | 29,063 | - | | |
| Unikost | 25,439 | 27,195 | 6,056 | | |
| Fungis | 26,850 | 29,859 | 7,467 | | |
| Mykogen | 37,177 | 38,336 | - | | |

- not available/brak danych

Source: own study based on Monitor Polski B 2008-2011 Źródło: opracowanie własne na podstawie Monitor Polski B 2008-2011

2008-2009. It is worth mentioning that in 2006 Mykogen Ukraina has been established. Mykogen gave the know-how essential to produce the compost abroad.

The example of very consistent and balanced and stable growth is Kania. This company is also the bigger manufacturer on Polish market. Kania has got three plants (Piasek, Pawłowiczki, Dębowa Kłoda). The plant in Dębowa Kłoda was opened in 2009. Kania's book value grows together with sales revenues and net incomes. It seems to be the indicator of good management and conditions on market.

Table 4. The net profits six compost producers between 2008 and 2010 Tabela 4, Zvsk netto w latach 2005-2010

| Company name/ Wyszczególnienie | Net profits [thous. PLN]/ Zysk netto [tys. zł] | | | | |
|-----------------------------------|---|--------|--------|--|--|
| | 2008 | 2010 | | | |
| Kania | 19,963 | 19,930 | 22,411 | | |
| Hajduk | 5,085 | 15,288 | - | | |
| Wrona | 2,492 | 1,123 | - | | |
| Unikost | 1,607 | 3,093 | 2,989 | | |
| Fungis | 2,343 | 3,038 | 3,076 | | |
| Mykogen | 9,059 | 11,439 | - | | |

Table 5. Assets six compost producers between 2008 and 2010 7 n

| Tabela | 5. | Aktywa | w | latach | 2005 | -201 | 0 |
|--------|----|--------|---|--------|------|------|---|
|--------|----|--------|---|--------|------|------|---|

| Company name/ | Assets [thous. PLN]/Aktywa [tys. zł] | | | | | |
|------------------|--------------------------------------|---------|---------|--|--|--|
| Wyszczególnienie | 2008 | 2009 | 2010 | | | |
| Kania | 133,288 | 158,038 | 170,556 | | | |
| Hajduk | 67,356 | 81,931 | - | | | |
| Wrona | 27,629 | 25,276 | - | | | |
| Unikost | 27,844 | 25,717 | 25,429 | | | |
| Fungis | 27,003 | 28,417 | 36,814 | | | |
| Mykogen | 27,557 | 29,716 | - | | | |

- not available/brak danych

Source: see tab. 3 Źródło: jak w tab. 3 - not available/brak danvch

Source: see tab. 3

Źródło: jak w tab. 3

| Table 6. Selected financial ratios six compost producers between 2008 and 2010 | |
|--|--|
| Tabela 6. Wybrane wskaźniki finansowe w latach 2005-2010 | |

| Company name/ | | ROS | | ROA | | | ROE | | |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Wyszczególnienie | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Kania | 14.11 | 16.21 | 16.53 | 14.98 | 16.21 | 13.14 | 19.59 | 17.68 | 17.54 |
| Hajduk | 11.73 | 27.13 | - | 7.55 | 27.13 | - | 9.07 | 21.42 | - |
| Wrona | 7.83 | 3.86 | - | 9.02 | 3.86 | - | 16.21 | 7.40 | - |
| Unikost | 6.32 | 11.37 | 11.81 | 5.77 | 11.37 | 11.75 | 12.03 | 20.74 | 18.39 |
| Fungis | 8.73 | 10.17 | 9.85 | 8.68 | 10.17 | 8.36 | 21.97 | 23.01 | 19.25 |
| Mykogen | 24.37 | 29.84 | - | 32.87 | 29.84 | - | 63.60 | 83.43 | - |

- not available/brak danych Source: see tab. 3

Źródło: jak w tab. 3

Unikost and Fungis belong to the group of competitors, which could be described as average in view of financial performance, but are characterised also by stability of results in period of analysis. They have valued in business feature of predictability and related to that low risk of market activities. In 2010 Fungis extended their production line of 200 tonnes.

Conclusions

On the basis of the available financial data with reference to the six biggest manufacturers of phase III mushroom compost in Poland, it is possible to advance a few conclusions, which are as follows:

- 1. During the examined period, despite the general financial crisis and reduction in expenses by target purchasers, one cannot talk about a slump affecting this particular branch. On the contrary, there has been observed a continuing process of the economic effectiveness indexes consolidation.
- 2. The companies are experiencing high sales growth and still recovering high amount of profit.
- 3. A considerable part of the companies under examination seem to make intensive efforts to attain a higher level of economic effectiveness, which can be proved by the fact that in the majority of cases the values of profit increase outweigh those of sales.
- 4. The compost mushroom sector has performed strongly over recent years, with most relevant economic indicators, such as ROS, ROA, ROE, demonstrating its continued overall good health . In the years 2008-2010, all the examined companies were profitable, and part of them attained indexes that should be regarded as very good.
- 5. The examined companies invest in their own domain of activity, perceiving it apparently as a strategically appropriate choice. They expand their assets base (i.g. Kania, Fungis).
- 6. The sector can be considered a very attractive domain of business activity.
- 7. Facing the threat of China in a form of cheap yet decent quality mushrooms, constant quest for better quality and efficient organization is a must.

Bibliography

Grogan H.M. 2008: Challenges Facing Mushroom Disease Control in the 21st Century. Proceedings of the 6th International Conference on Mushroom Biology and Mushroom Prodicts, [www.wsmbmp.org/proceedings/6th%20 international%20conference/Proceedings.pdf], accessed February 2012

Growers visit Polish farms 2006. [www.indarticles.com/p/articles/mi m0ZQQ/is 8 54/ai n24993075], accessed February 2012.

Monitor Polski B 2009: No. 730, No. 772, No. 797, No. 934, No. 991, No. 1023. Monitor Polski B 2010: No. 766, No. 837, No. 856, No. 903, No. 2326.

Monitor Polski B 2011: No. 839, No. 1026, No. 1238, No. 2338.

Mushrooms. Industry&Trade Summary. 2010: United States International Trade Commission. Office of Industries. Publication ITS-07, Control No. 2010002.

Polska największym producentem pieczarek w UE 2011: [www.europarlament.pap.pl/palio/html.run? Instance-=cms ep.pap.pl& PageID=1& menuId=17& nrDep=27081& CheckSum=276929006], accessed February 2012. Sakson N. 2007: Produkcja podłoża do uprawy pieczarek. PWRiL. Poznań.

Sakson N. 2008: Produkcja pieczarki na podłożu fazy III. PWRiL. Poznań. Sierpińska M., Jachna T. 1994: Ocena przedsiębiorstwa według standardów światowych. PWN. Warszawa.

Skup i ceny produktów rolnych w 2005 r. 2006: GUS. Warszawa.

Skup i ceny produktów rolnych w 2006 r. 2007: GUS. Warszawa.

Skup i ceny produktów rolnych w 2007 r. 2008: GUS. Warszawa.

Skup i ceny produktów rolnych w 2008 r. 2009: GUS. Warszawa.

Skup i ceny produktów rolnych w 2009 r. 2010: GUS. Warszawa.

Skup i ceny produktów rolnych w 2010 r. 2011: GUS. Warszawa.

- Smoleński T. 2008: The Development of Polish Mushroom Exports. Proceedings of the 6th International Conference on Mushroom Biology and Mushroom Prodicts, 298-304. [www.wsmbmp.org/proceedings/6th%20international%20conference/Proceedings.pdf], accessed February 2012.
- W Unii Europejskiej jesteśmy pieczarkowym hegemonem 2011: [www.gazetaprawna.pl/grafika/572385.86180.w unii europejskiej jestesmy pieczarkowym hegemonem.html], accessed February 2012.

Summary

Celem pracy była analiza i ocena wyników finansowych sześciu największych producentów podłoża pod uprawę pieczarek w Polsce. Praca miała głównie charakter empiryczny. Na podstawie danych finansowych opublikowanych w Dzienniku Urzędowym Rzeczypospolitej Polskiej "Monitor Polski B" wyznaczono następujące wskaźniki finansowe: rentowności aktywów (ROA), rentowności kapitału własnego (ROE) i rentowności sprzedaży (ROS). Sektor producentów podłoża pod uprawę pieczarek, ze wzgledu na bardzo dobre wskaźniki rentowności i wzrost przychodów ze sprzedaży, można uznać za bardzo atrakcyjną domenę działalności gospodarczej.

Correspondence address:

Dr hab. prof. WSB Krzysztof Łobos Opole School of Banking Faculty of Economics, Department of Management Augustyna Kośnego Str. 72 45-372 Opole, Poland e-mail: krzysztof.lobos@wsb.wroclaw.pl

Dr eng. Mirosława Szewczyk Opole University of Technology Faculty of Economics and Management, Department of Economics and Regional Research Waryńskiego Str. 4 45-271 Opole, Poland phone: +48 77 454 35 33 e-mail: m.szewczyk@po.opole.pl