

Economic Validity of Organic Ajvar (Vegetable Caviar) Production in Serbia

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Abstract

The focus of this paper is economic viability of organic ajvar (vegetable caviar) production in Serbia. Ajvar (vegetable caviar) is a relish or spread, a specialty of the Balkans, which is becoming increasingly popular in many markets with the growing demand for vegan, ethnic and organic food. This paper shows an organic market overview and a thorough case study based on data gathered by desk research and a two-phase survey. In the case study the focus was on static and dynamic financial indicators of economic viability of organic ajvar production. Based on the results of financial indicators it is proven that production of organic ajvar is very profitable, but the key prerequisite for profitability as was determined after the analysis of the break-even point – is large scale production. Profitability is achieved at around 24 tons, which requires organized industrial production. Although the Serbian market has potential for this type of production, shortcomings such as fragmented market with a lot of small farms and farmers' mistrust in both the cooperation and the financial institutions have led to slow market development. Conclusions are summarized in the end with the aim of providing practical guidelines for the improvement of the organic market.

Keywords: *economic viability; organic production; organic food; ajvar (vegetable caviar); soulfood*

JEL Classification: *M10; M13; Q10; Q12; Q13.*

Introduction

In the modern market economy, all the basic paradigms of business change and the only constant is that market players must adjust to changes in order to survive. Greedy economic nature of business and the pursuit of power and profits without any limitation in conventional farming led to deterioration of natural resources and negative ecological consequences. However, this is not unpunished by consumers - more and more people are becoming conscious consumers who prefer organic products. (Vlahović, et al., 2011) This is a great opportunity to change the mindset of farmers and producers. They should seek new opportunities and find solutions that use limited natural resources in the best possible way, without negative consequences for the environment. (Sredojević Z, 2002, pp. 67-68)

The purpose of this paper is to analyze economic viability of organic *ajvar* (vegetable caviar) production. *Ajvar* is a relish (spread), a specialty of the Balkans, which is becoming increasingly popular in many markets with the growing demand for vegan, ethnic and organic food. Agricultural producers in Serbia have the traditional "know how" and natural resources that are great triggers for starting up serious production of *ajvar* and similar products, but the fact is that there are few market players. In order to reveal what the reason is for market underdevelopment, and to suggest guidelines for improvement –customer habits research was conducted as the first step of analysis. Sociological and economic factors which have led to an increase in demand for organic processed foods have been presented. Furthermore, Serbian organic market is analyzed in comparison to European market, which emphasized Serbian market's opportunities and limitations. In the third part of this paper, a thorough case study was created, which evaluates startup investment in production of *ajvar*. Financial indicators, both static and dynamic, which were calculated as a part of the case study, have shown that this investment would be very profitable, but the key requirement for financial viability as was revealed by break-even point analysis - is large scale production. Finally, a situation analysis was carried out using the SWOT method summarizing the results of the survey and the case study. Conclusions are summarized in the end with the aim of providing practical guidelines for the improvement of the organic market.

Material and Methods

The methods used in this paper are desk research, field research (survey), financial analysis and case study analysis. The desk research is based on a review of the relevant literature in this field. Cited references include books, scientific and research papers in journals and collections, articles and websites of relevant institutions. The field research (survey) in this paper consists of a two-phase survey. The first phase was an online survey conducted in 2014, which had 200 respondents from Serbia, Croatia, Greece and Slovenia. The second phase was an e-mail and a telephone survey conducted in 2018, which questioned 30 *ajvar* producers from Serbia. A case study is a method in social sciences in which the study of social phenomena is conducted through analysis of individual cases. Case studies explore phenomenon through detailed contextual analysis of a small number of events or conditions, and their mutual relationships. (Zainal, 2007) This case study is based on the real data, which allows the generalization, so the results can be used for economic analysis of *ajvar* production. (Lazić, 2014) The method of financial analysis was used in the case study in order to explore concrete financial benefits in the production of organic *ajvar*.

Results and Discussion

Factors that led to increased demand for organic food

Starting point in studying any market phenomenon is consumers and their preferences, needs and taste as the main reason for the existence of products and services. It is a fact that with the change in the lifestyle, there is a lack of fresh agricultural products on the market, and the demand and price for these products have risen due to their scarcity and importance for consumers. Most research on this topic deal with demographic data, so it has now been established that women, who today make the majority of the purchasing population in Europe, are increasingly buying organic food. Furthermore, the person with higher personal income and higher education level is more likely to buy organic products. A significant segment of customers are young married couples with small children, and people with health problems. Interest in organic food is also shown among young people who are mainly environmentalists. (Dahm, et al., 2009)

A lot of sociological factors have led to changes of lifestyle and diet - an increased number of women in workforce, a less and less family meals, and the increased use of snacks are some of them. (Redman, 1980) Economic and environmental factors also have a significant role in changing consumer behavior. Natural environment has been polluted to that extent, that it cannot be reproduced independently, so it requires a lot of additional help in form of energy and chemicals. A large number of plants and animals species that played a very important role in the maintenance and reproduction of natural systems have been extinguished. (Sredojević Z, 2002, pp. 65-68) Consumers now do not have the opportunity or time to find ingredients for healthy, fresh dishes and they are in the constant pursuit for food products that would compensate the lack of fresh homemade food. Because the consumption of industrial, junk and unhealthy food has already shown a negative impact on human health, consumers are focused on food safety and quality, so the awareness of organic food has risen.

Modern consumers are used to spending most of their days next to computers, which does not stimulate all senses - therefore, the desire for food is growing as another way of stimulation. Detachment from the natural environment, encourages curiosity for "story behind food" and this is especially present among millennials. They are very interested in the story behind their food and they want to learn more about what is in it and how it was made: 80% of millennials said that they like "behind the scenes" commercials for food they consume, they want to know more about how their food is produced, and they think companies do not disclose enough about their food products. Representatives of Generation X are less interested, while baby boom generation is behind the millennials by about 15 points on each question. (Fromm & Read, 2012) People have always sought a way to express themselves through fashion, the status symbols they own, or the music they listen to, but the millennials have found something new - today they show their identity through food they consume. Food has become another platform for self-promotion and branding, for both consumers and food producers. (Williams, 2016) These consumers are more informed and educated than the previous ones, since they are aware of the impact agriculture has on the environment. They were born, raised and educated in a society that highly values ecology and health. This change in consumers' tastes reveals the great opportunity for various ways of food branding and creating food with added value for customers. Modern consumers perceive organic agriculture as a common well-known brand – as a guarantee which ensures the satisfaction of their needs for natural, responsibly made, healthy food. Because of this added value that consumers appreciate, they are willing to pay a higher price for organic products.

Serbian organic market in comparison to EU

Organic products are particularly important in terms of market volume and the number of employees in this industry, which is a result of high demand for this specific food. The organic food market in 2016 (the last year that can be estimated) is estimated at 89.7 \$ billion. (Willer&Lernoud, 2018) In order to get a clear overview of the general market situation, we will look at world market data. The US market is estimated at 38.9 billion euros, which makes it the world leader. It is followed by the German market, worth 9.5 billion euros, and by French and Chinese markets estimated at 6.7 billion and 5.9 billion euros, respectively. European organic market had a high growth of 11.4% and reached 33 billion euros. These results are due to the fact that most of European countries have double digit growths, which are particularly significant in French market - 22%. The biggest amount of money for organic food per capita is spent in Switzerland, 274 euros, while in Denmark organic food occupied 10% of each consumer basket. (Research Institute of Organic Agriculture, 2018)

Although Serbia has potential for organic agriculture, the market is still underdeveloped. Arable land is taken as a first indicator of market potential, and the second one is access to developed markets. To see the downsides of the Serbian organic market we also considered the structure of farms and producers market orientation. Serbia has over 3.8 million hectares of agricultural

land, of which 3.5 million hectares (almost 90%) is arable land. This area represents 44% of the total area of the country. However, the average size of the farm is 5.4 hectares, which is almost 3 times smaller than the European average. Most rural areas in Serbia are characterized by fragmented farms with small sized crops, low productivity rates and low income of the households. Smaller farms tend to reduce income risk and diversify their income, so they usually have side jobs in other sectors. (Sredojević, et al., 2017)

Thus, when comparing the average size of a farm in Serbia (5.4 ha) with the average size of a European farm (16 ha), let alone the average size of an organic farm in the EU, which is on average as big as 41 hectares, it is clear that farmers who produce organic food in Serbia can expect problems typical for small farms in fragmented markets. (eurostat, 2017) Small farms have higher costs due to small economy of scale, they are less efficient and can have a problem with delivering because they cannot provide continuous supply. Small producers of organic food could also have a problem with their suppliers. (Kalentić, et al., 2014).

Despite the clear growth trend of the total arable land under organic crops in Serbia, which has increased by 261.3% in the last 5 years, it still amounts to only 0.44% of the total arable land. This can also be seen from Chart 1 which shows the percentage of arable land engaged in organic production up to 2015. On the other hand, research has shown that 87% of consumers in Serbia are aware of the existence of organic food. But they are insufficiently informed about the importance of consuming these products (74%), and because of that, only 18% of consumers in Serbia regularly and 28% occasionally buy these products. (Vlahović, et al., 2011). Although there are several modalities (independent and cooperative)¹ for starting up the organic production and a clear positive trend of organic production growth, however, domestic producers seem to have doubt regarding the potential of organic production.

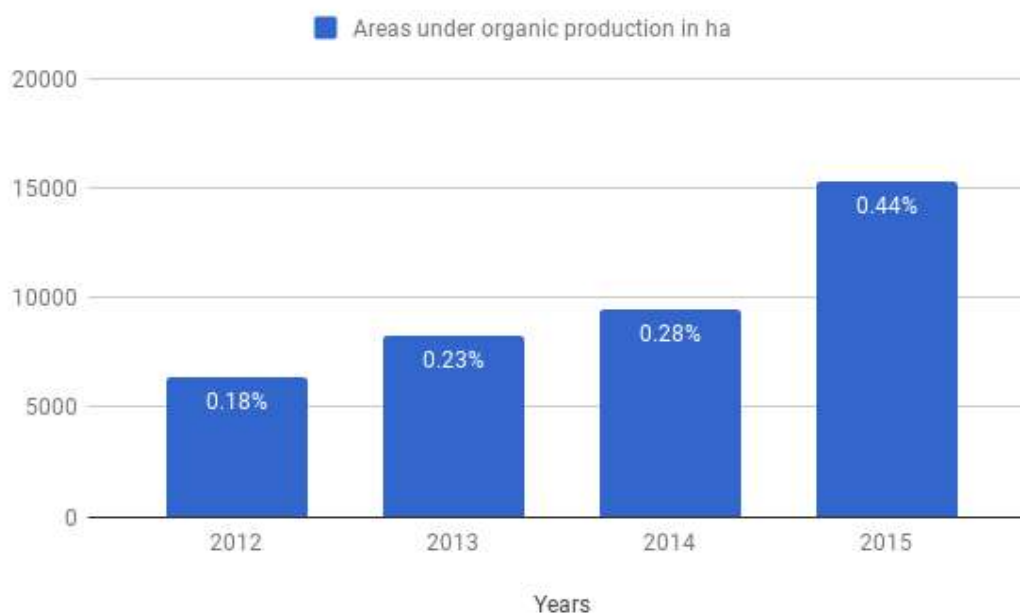


Chart 1. Areas under organic production in Serbia, from 2012 to 2015

Source: Simić, 2017.

¹ Independent producers organize entire production and marketing on their own. The cooperative producers are in cooperation with one of the companies that buy their entire production and provides them with support: input supplies, education, certification, etc.

Economic analysis of organic vegetable caviar (*ajvar*) production

Definition, characteristics and technological process of organic *ajvar* production

Ajvar is a relish or spread made from sweet pepper, which is especially popular in the Balkans in Serbia, Macedonia (FYROM), Bulgaria, Bosnia and Croatia. For a long time, it was known as a “Serbian salad” or “Serbian caviar”. (Barer-Stein, (1979)) The name comes from the Turkish word *hajvar* which means salted fish eggs or caviar. How important this product on Balkan Peninsula is, can be seen from results of an online survey conducted in 2014, which included 200 respondents from Serbia, Croatia, Greece and Slovenia. Apart from *šljivovica* (plum brandy) and grill, *ajvar* is one of top three mentioned products, when respondents were asked: “Which product reminds you of Serbia?” Respondents from Slovenia also mentioned that *ajvar* reminded them of Croatia (3%) and Macedonia (FYROM) (47%). (Đorđević, 2014) It is used in everyday diet of people as a vegetarian relish or spread and it is usually homemade. However, due to socio-economic changes in society mentioned in the first part of this paper, it is very challenging for household to find the proper paprika and other inputs needed for *ajvar*. Even bigger challenge for modern consumer is lack of time for preparation of *ajvar* at home. Therefore, there is a rising demand for professionally processed *ajvar*, which can replace the domestic one.

Original *ajvar* is red in color, as well as paprika of *kurtovska kapija* type from which *ajvar* is traditionally made of. *Ajvar* has specific taste and aroma of smoked paprika, and it should be without other smells or tastes, it can be made with the addition of hot paprika, when it is spicy. (Association for Leskovac *ajvar*, 2011) The minimum content of dry matter should be 15%. Apart from paprika, the product can contain maximum of 7% of edible oil, up to 3% of vinegar and 2% of salt. *Ajvar* should have uniform density without fluid extraction. The product should not contain preservatives, because conservation is achieved by thermal treatment. Table 1 shows nutritional values of *ajvar*.

Table 1. Nutritional values for *ajvar*.

Nutritional features	Ajvar
Moisture %	79.74
Ash %	2.48
Proteins %	1.85
Fat %	2.8
Zn (mg/kg)	3.44
Cu (mg/kg)	0.96
Mn (mg/kg)	1.42
Fe (mg/kg) ²⁶	5.4

Source : Popović, et al., 2011.

Technological process of production of *ajvar* begins with manual or machine washing of paprika. The following activity is thermal treatment - baking or boiling up to 11% of dry matter. For traditional and organic *ajvar*, it is not recommended to use flavor enhancers other than vinegar and salt. Usually it is packed in 720ml glass containers (jars) with twist off caps, while the net weight of the container is 650 g. Pasteurization is achieved by warming up the jar and filling it while the product is still warm. *Ajvar* is served as a salad, spread or relish and is very commonly added to grilled or roasted meat. It is usually prepared during autumn and it is safe to consume during the next year. *Ajvar* is used throughout the year as a spread or relish, as a supplement to other dishes or as an appetizer.

Due to the characteristics of this technological process, use of paprika that makes the process easier is highly recommended – for example, thin pericarp of *kurtovska kapija* type of paprika facilitates peeling. Two types of paprika, *kurtovska kapija* and *slonovo uvo* both have suitable characteristics, but producers that participated in the survey answered that they preferred *kurtovska kapija*. Paprika of *kurtovska kapija* sort has flat fruit, which is 13 cm long and 4 cm wide, pericarp thickness is about 3 mm, fruit weight about 60g with as much as 83% of the useful part of the fruit. *Kurtovska kapija* paprika also has a high residue of dry matter with little pectin, low acidity and vitamin C in comparison to other sorts of paprika. (Gvozdenović, 2009)

Economic viability of organic *ajvar* production in Serbia

Customers are more and more interested in “food with a story”. Organic and biologically valuable food is especially attractive as well as food originating from some special region, produced in a certain ethical way, etc. The market for such products except of Balkans is Europe, Turkey, USA and Russia, so it is big enough and very lucrative. Products like *ajvar* owe their popularity to large number of emigrants from Balkan region, who introduced it to the whole world. Western customers now prefer experimenting with foreign cuisines, and there is growing demand for ethnic food from all over the world.

Despite all these positive incentives, there are few market players in *ajvar* production. In Serbia, where yearly production of paprika amounts 227,645 tons, (Development Agency of Serbia, 2017) there is only one certified producer of organic *ajvar*.

Based on the answers of the surveyed producers, it was concluded that the main obstacle for entering the organic market is distrust in the economic profitability of organic *ajvar* production and the poor financial situation of the producers. In order to answer the following question: “Is the trend for such products and food economically viable for both producers and the wider social community?” a thorough case study was created, based on real market data. Furthermore, with an aim of getting detailed answers, a detailed investment analysis was conducted in the case study.

In this analysis the focus was on financial effects of the startup investment in processing organic paprika into organic *ajvar*. When evaluating the economic viability of investment projects, it is possible to use different methods. All these methods can be classified as static or dynamic, based on whether they honor time value of money. Static methods do not take into account time value of money, while dynamic methods do rely on the fact that money loses value over time. Representatives of the first group are: payback period, average payback period and payback reciprocal. Most important representatives of the second, dynamics methods are: net present value, internal rate of return, profitability index and discounted payback method. Considering that the evaluation of investment projects using dynamic methods is carried out on the basis of discounting cash flows, they are often called discounting methods. (Đuričin , et al., 2013) In this paper the focus will be on dynamic methods of investment evaluation.

Case study - an example of startup for organic *ajvar* production and its investment analysis

The subject of this case study is the startup for organic *ajvar* production; the investment includes equipment, premises for processing and storage of final product, employment of ten workers, as well as branding, marketing and certification. For its production, startup uses organic inputs and makes *ajvar* according to the original recipe that is presented in Table 2.

Table 2. Ajvar recipe

Recipe for 1 kg of <i>ajvar</i>	Inputs/kg
Paprika	3.00
Spices (vinegar and salt)	0.05
Oil	0.07

Source: Association for Leskovac ajvar, 2011.

In the first three years of startups life, projected sales are 50, 70 and 100 tons, which represents approximately 10% of total market. (Serbian Investment and Export Promotion Agency, 2010) Projected sales with real market prices are shown in Table 3.

Table 3. Projected sales and prices

Product	Sales in units	Price per unit €
Organic <i>ajvar</i>	50,000.00	7.60
Organic <i>ajvar</i>	75,000.00	9.00
Organic <i>ajvar</i>	100,000.00	8.00

Source: Case Study

Since Profit and loss statement is the basic financial statement that shows in detail the revenues, expenditures and the result achieved by the project over a specific period of time. Depending on the difference in total income and expenses, gross profit or loss is reported. (Brill, et al., 2007) Table 4 shows the most comprehensive overview of investment elements and its effects. In this case study for production of organic *ajvar*, even in the first year a positive net income is generated (81,792.50€).

Table 4. Overview of investment elements and its effects

Profit and Loss Statement	2016	2017	2018-2025
Revenue from the sale of a product	380,000.00	600,000.00	800,000.00
TOTAL EXPENSES	380,000.00	600,000.00	800,000.00
Costs of raw materials	289,119.44	372,157.19	469,724.52
Packaging costs	160,350.00	240,525.00	320,700.00
Dependent procurement costs	10,150.00	15,225.00	20,300.00
Salary expenses	11,000.00	14,000.00	24,000.00
Depreciation	67,200.00	67,200.00	67,200.00
Energy costs	2,049.00	2,049.00	2,049.00
Investment maintenance	15,500.00	8,750.00	10,000.00
Insurance costs	636.90	636.90	636.90
Marketing Costs	209.39	209.39	209.39
Costs of payment transactions	7,900.00	7,900.00	7,900.00
Taxes	3,022.45	4,683.68	6,244.90
Other expenses	1,620.00	1,620.00	1,620.00
Interest	8,000.00	8,000.00	8,000.00
GROSS INCOME	1,481.70	1,358.23	864.33
Income tax	90,880.56	227,842.81	330,275.48
NET PROFIT	9,088.06	22,784.28	33,027.55
Revenue from the sales	81,792.50	205,058.53	297,247.93

Source: Case study

Therefore, the basic assumption in this paper is that indicators of economic viability of investments are relevant for evaluating the viability of organic *ajvar* production. Indicators, depending on whether they honor the time value of money, are divided into dynamic and static.

Regardless which one is applied, it may be appropriate for evaluation the investment depending on the situation. Usually, the combination of indicators is used for analysis, as it will be applied in this case study, also.

So, as mentioned above, the basic static method is *payback period*. This method is very useful when time is the key factor for investor, because payback period indicates how much time is needed for entire amount of investment to be compensated from cash flow. In the case study, the company started investing in the end of 2015, in order to start operations in 2016. The absolute amount of investment is 185,825.78 €. The entire invested money will be reimbursed from the net cash inflow within the year and 180 days from the activation of the investment. Since the organic *ajvar* production project is planned to last at least 10 years, with a possibility of turning into a going concern this indicates a very short return period. Therefore, it can be said that the organic *ajvar* production project is economically very viable, since it has a quick return of investment.

The first step towards dynamic indicators that honor time value of money is famous basic dynamic method *net present value*. Net present value is the difference between the present value of cash inflows and the present value of cash outflows over a period of time. Net present value is used in capital budgeting to analyze the profitability of a projected investment or project.

When considering independent projects, the one that have net present value higher than initial investment would be accepted. The criterion is that NPV should be greater than 0. Because investing in the project that has a net present value greater than zero should logically increase a shareholder's earnings. NPV is difference between present (discounted) value of expected net incomes from project, and present value of initial investment. (Ivanišević, 2009) It could also be defined as the difference expressed in monetary units between the cumulative net inflow of the specific investment and the cumulative net inflow of an alternative investment that achieves a yield at the discount rate level, which is 10% in this paper. There are several ways to choose the discount rate. If capital needed for the project could earn 10% if invested in an alternative venture, then 10% discount rate should be used in NPV calculation. Another way to calculate a company's discount rate is through weighted average cost of capital after tax (WACC). (Lumen Learning, 2018) When analyzing projects in Serbia, the discount rate is usually 10%. This rate was chosen based on the convention, primarily due to the risk of investing in this country in general. (SFRJ - udruženje banaka Jugoslavije, 1987) In the case of organic *ajvar* NPV is as high as 1,435,962 €. It can be concluded that, by investing in *ajvar*, the project would have earned 1,435,962 euros more than the investment in a project that has a yield of 10% or saving in a bank with an interest rate of 10%.

Profitability index is an investment evaluation technique calculated by dividing the present value of future cash flows of a project by the initial investment required for the project. (Jan, 2017) In other words, profitability index indicates, which percent of initially invested money could be invested in another project at the end of the lifetime of this project. In this case study profitability index is 773%, so it could be concluded that in the end of this project, seven other projects that require same level of investment, could be financed.

Table 5. Dynamic indicators, Source: Calculations based on case study data

Dynamic Indicators	Criteria	Calculated case study value
Net present value	NSV > 0	€ 1,435,961.56
Profitability index	ISV > 1	7.73
Internal rate of return	R > Rmin	93%

Internal rate of return is the discount rate that makes net present value equal to zero. In other words, the internal rate of return makes equal a present value of the expected benefit (or cash

flow) from the economic flow of the project with the present value of the investment expenses (or project cost). In the case of independent projects, a project with internal rate of return higher than the interest rate, i.e. the price of capital, is accepted. In the case of organic *ajvar* production internal rate of return is 93%, which is clearly higher than an interest rate in Serbia.

The discounted payback period shows the time needed to break even from an investment. In other words, with this technique the amount of time necessary for initial cost of project to be equal to discounted value of expected cash flows. In the case of organic *ajvar* production discounted payback period is 235 days long, which is exceptional, considering the industry. Therefore, according to all dynamic indicators, the project of organic *ajvar* production is very profitable and viable. According to these techniques, the investment is economically very efficient, and the initial investment is very quickly paid off.

Break-even point – a critical aspect for the success of the project

When analyzing the efficiency of investing in the organic *ajvar* in this paper, startlingly positive results were found. So, the question remains: why does this industry not have more market players? However, by analyzing the break-even point, one side of the answer to this question emerged.

The break-even point can be expressed in value (price or revenue) or in the capacity where it represents the quantity at which the enterprise exits the zone of loss and enters the profit zone. In this case study, the project becomes profitable at production level of 24074.60 kg. which is far below the planned production in this case study. The calculated results for break-even point in production of organic *ajvar* are shown in Table 6.

Table 6. Break-even point

Break-even point (value)	192,596.81	€
Break-even point (quantity)	24,074.60	kg
Break-even point (price)	4.46	€

Source: Calculations based on case study data

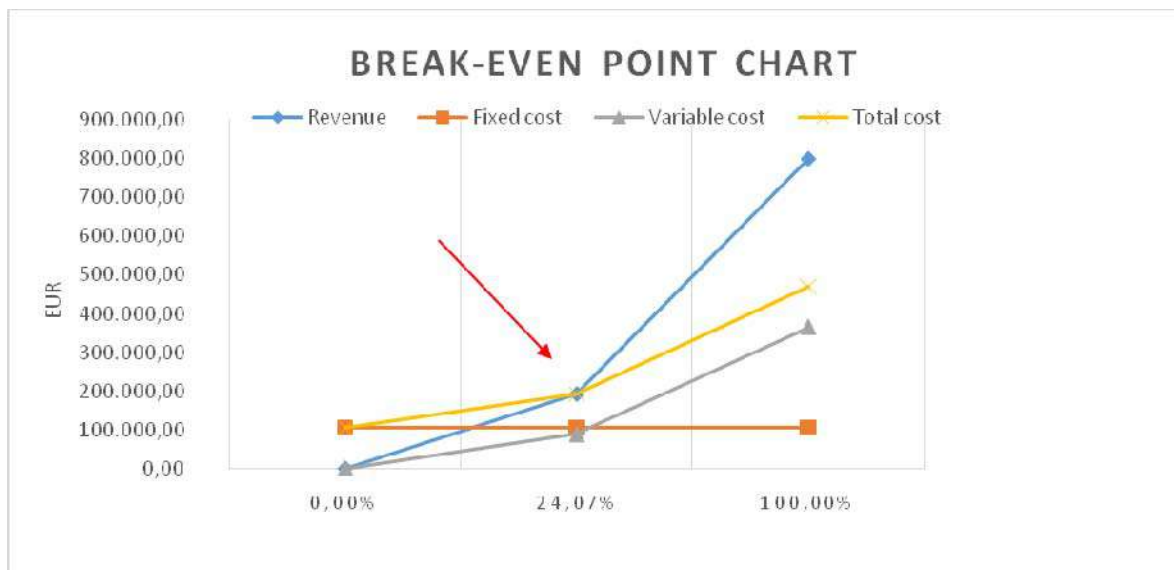


Chart 2. Break-even point

Source: Calculations based on case study data

In this case study, at 24% capacity usage or at revenue level of 192,596.81 euros, the project already becomes profitable. Considering that it would be achieved at price level of 4,46€ and amount of 24,074.6kg, one can get a real picture of profitability of this project. Key factor for profitability and success of organic *ajvar* production is in production on a larger scale. However, there are very few producers in Serbia who would be able to carry out such production. With the exception of one producer, the rest of respondents produce 3-4 tons per season, they sell their product on the black market and have no ambition to improve their business. This result is in line with the fragmented production in Serbia, which comes from small-sized farms. Producers report that they are discouraged to enter the market, due to numerous reasons, such as: small own funds, lack of trust in financial services, insufficient marketing knowledge. Thus, the key aspects for improvement of the market situation are: increasing capacities for the production of raw materials, empowering entrepreneurial spirit and creating healthy business environment. The only right way to approach the production of products with added value for consumers is by satisfying these conditions.

1.1.1 SWOT situational analysis of organic spreads market in Serbia

Beside the financial indicators, one of the most important steps when evaluating a business project is market situation analysis, because it sublimates the current market situation and anticipates the future, while giving guidelines for achieving goals in ever altering business environment. One of the most widely used methods for situational analysis is the SWOT technique, because it is focused on identifying opportunities and threats which are analyzed with the respect to immanent strengths of the project. Thus, we will here use SWOT analysis to sublime the results of the surveys and financial evaluation of the case study project. The results of SWOT analysis can be seen in Table 7.

Table 7. SWOT analysis

<i>STRENGTHS</i>	<i>WEAKNESSES</i>
<ul style="list-style-type: none"> • unique recipe • easy input market access • simple technology • protected geographical origin • the price they can achieve • a differentiated product on the market 	<ul style="list-style-type: none"> • fragmented agricultural production - small capacities of producers • insufficient support state support to the organic sector • no marketing know-how • lack of knowledge funding opportunities • lack of financial funds • lack of trust in financial services • bad financing conditions by commercial banks • unfriendly conditions of cooperation with large retailers
<i>OPPORTUNITIES</i>	<i>THREATS</i>
<ul style="list-style-type: none"> • high demand for ethnic organic foods • lucrative market niche • possible expansion to EU, Russia and other markets • cooperation with large retailers • low price input supply • positive impact on gastro-tourism development • positive impact on local community development 	<ul style="list-style-type: none"> • large foreign direct investment could satisfy whole market • unfair competition - uncertified production of home-made <i>ajvar</i> • a market with a high level of economic and political risk • problems with cash flow

However, the greatest business successes are achieved when weaknesses are turned into strengths, or threats to opportunities, so for the producers and investors in Serbia the underdevelopment of local market and high demand for organic products in European and Russian market is a great opportunity. (Organic news, 2015)

Conclusion

The basic assumption in this paper is that organic production, and especially the production of organic food, traditional *soulfood*, such as *ajvar*, is one of the best ways to increase the value of agricultural products in Serbia and for the best possible use of the natural potential of this country. Nevertheless, the real situation is that there are few market players. In order to reveal the real cause of the problem and to give concrete recommendations for further market development, in the first part of this paper, consumers and their behavior changes were analyzed. Since the basis of every business strategy are customers and their behavior, in the second part, sociological and economic factors which have led to an increase in demand for organic processed foods have been presented, such as: more women in workforce, less and less homemade family meals, increased need for snacks, curiosity about “the story behind the food”, the need for a guarantee regarding the quality of food etc. In the third part, the ever-growing European market was analyzed with a comparison to Serbian market and its opportunities – such as high percent of arable land, but market flaws were not omitted. The biggest downside of the Serbian market is fragmented production which is a consequence of a small average farm size. In the fourth part, a comprehensive case study was created in order to analyze the economic viability of a startup investment in the production of organic *ajvar*. Financial statements, dynamic and static project evaluation techniques have shown that this project would be very profitable. The net present value exceeds 0 by far, the profitability index shows that after this project, another 7 projects of the same risk level could be financed, and the discounted payback period indicates that the investment returns in only 235 days. However, further analysis with break-even point technique has revealed that the key for economic viability of this project is large scale production – above 24 tons. Finally, situation analysis was carried out using the SWOT method, summarizing the results of the survey and the case study. The SWOT analysis clearly pointed out that weaknesses such as fragmented market, mistrust in financial institutions and poor government support must be transformed into strengths, also threats must be anticipated and turned into development opportunities. The research in this paper indicates that the production of organic *ajvar* in Serbia has a great potential and it can be a driver of the economic development in this region. Nonetheless, if some potential is to be used as leverage for development, it must be stimulated, first of all, through the improvement of human resources and also by enabling a good business environment for the development of a market economy.

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