



IMPACT ASSESSMENT OF EU FUNDS ON COMPANY'S PERFORMANCE IN THE FISH PROCESSING INDUSTRY: THE CASE OF CROATIA

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ABSTRACT

IPARD is a pre-accession Programme that was implemented in the Republic of Croatia in the pre-accession period. Its main objectives were to assist candidate countries and potential candidate countries in their harmonization and implementation of the EU acquis, as well as preparation for utilization of the future EU funds. Given that IPARD pre-funding resources of the European Union enabled the financing of the modernization of the production plants of the fish processing industry, this paper analyzed the impact of the used funds on the a) business performance and b) business (organizational) capacity of IPARD users from the fish processing industry. The research was conducted in a non-experimental way divided into two parts: (1) an analysis of a set of indicators of business performance of companies from the sample (users of pre-accession EU funds) and (2) through a survey that examined the impact of using these resources on improving business (organizational) capacity. The results show that the profitability indicators of most users were not increased two years after the funds were received. But it is expected that the improved technical and technological conditions will help businesses in the future to increase the competitiveness of their products. When it comes to the results of the impact on business ability, it is evident that management has improved its capacities in terms of acquiring and developing the skills of preparing and running projects, investment planning or strengthening the willingness to use similar means in the future.

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INTRODUCTION

Small and Medium Enterprises (SMEs) represent a major asset in the development of the European Union's economy because they represent approximately 99% of all enterprises, they are one of the main sources of new jobs and are responsible for more than half of the total

added value achieved by companies in the EU (European Parliament, 2017). In order to foster their development, the European Union has developed a number of programs to support the development of this sector. Such instruments are grants, loans and guarantees (Grubišić Šeba, 2013). Structural Funds (European Regional Development Fund and European Social Fund) are the instruments

aimed to support investments in SME and improve their competitiveness (European Commission, 2015). The Republic of Croatia became a full member of the European Union in 2013, thus gaining access to Structural funds and Cohesion Fund, and the adoption of the Partnership Agreement provided a framework to use 80,297 billion euro for the period 2014-2020 (Republic of Croatia, 2014). Prior to joining the European Union, the Instrument for Pre-Accession Assistance (IPA) was available to the Republic of Croatia, which was used as a preparation for the use of the European Structural and Cohesion Funds by the Republic of Croatia. Although IPA funds were mostly intended to finance public sector institutions, the possibility of using IPAs was also provided to private sector members (Dujmović et al., 2012; Novoselec and Bubanović Devčić, 2014). One of these instruments was Instrument for Pre-Accession Assistance for Rural Development (IPARD) whose main aim was to contribute to the sustainable modernization of the agricultural sector (including processing) through targeted investments. Measure 103 (Investments in processing and marketing of agricultural and fishery products for the purpose of restructuring these activities and achieving Community standards) of IPARD programme enabled investment in the fishery processing industry (Republic of Croatia, Ministry of Agriculture, 2012). More precisely, it enabled investments in construction, reconstruction and equipping of fish, mussels and shellfish processing plants. Apart from the investment in fisheries sector, this measure also enabled investments in other sectors, such as milk and dairy sector, olive oil, meat, fruit and vegetable processing sector. The given public support to the beneficiaries from the Measure 103 amounted to 50% of the total value of the investments. The European Union contributed 75% of this amount, while the rest of the support (25%) was financed by the own contribution of the Republic of Croatia (Regulation on the Implementation of Measure 103 "Investment in the processing and marketing of agriculture and fishery products to restructure those activities and to upgrade them to Community standards" within the IPARD programme, NN 36/2014).

Fish processing industry in the Republic of Croatia

The fish processing industry has had a great importance for the coastal and the island population of the Republic of Croatia (Dujmišić, 2000) and nowadays represents one of the rare segments of the agri-food industry in Croatia with a positive export-import balance (Ministry of Agriculture, 2012). Despite its historical significance, its development is dealing with many problems at present. The number of 59 factories that existed before the Second World War (Starc et al, 1997) has been reduced to only 18 companies registered for fish-processing (Scientific, Technical and Economic Committee for Fisheries, 2014).

The lack of investments in modern technology, diversification of fish processing products (Jovanović et al., 2010) as well as the lack of production of products with a higher added value (Eurofish, 2016) is causing low competitiveness of fish processing industry.

The total amount of employees recorded in this industry is approximately 1,500. Compared to other EU member states, Croatia is placed 12th in terms of the number of employees in the processing industry, while in terms of the value it is in the 9th place (Scientific, Technical and Economic Committee for Fisheries, 2014).

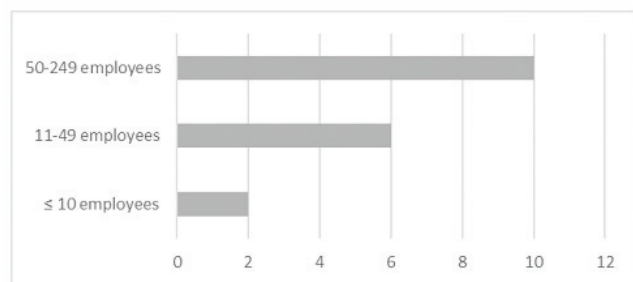


Fig 1. Number of enterprises registered for fish processing activity (2011)

According to the data from 2011, the fish processing industry is divided in three segments. The segment with the most enterprises is the one with 50-249 employees (Fig. 1). This size category is the most important segment in the Croatian fish industry. It contains the largest number of total value of assets, full time employment and FTE. Small enterprises with 1-10 employees do not have a big economic influence in the Croatian fish processing industry. According to the geographical location, the size category between 11 and 49 employees belongs to the Istria peninsula and Zadar area. Size category between 50 and 249 employees geographically belongs to Zadar area, while some enterprises are placed in Southern Dalmatia and in the continental parts of Croatia.

Apart from the assumption that IPARD financial assistance contributes to the development and improvement of business performance, it is also assumed that the IPARD application, as well as the implementation of the project, can contribute to the strengthening of the business (operational) managerial capacity in terms of acquiring and developing skills of preparation and project management, investment planning or strengthening the preparedness and readiness to utilize similar resources in the future. In view of these assumptions, two aims of research are set:

1. To identify the impact of the pre-accession EU funds on the business performance of companies that received the support from the fish processing industry.
2. To identify the impact of the pre-accession EU funds on the business (organizational) capacity of companies that

received the support in the fish processing industry.

Definition of the term impact assessment and review of recent studies

The term impact assessment is based on an empirical assessment that helps decision makers and regulators to evaluate if the programme or policy has achieved the desired goals. In order to help decision-makers, evaluators quantify the effects of different policies, design the best intervention steps, contribute to changing policies to better fit the set goals and to optimize insufficient resource use and understand the underlying mechanisms (López-Acevedo and Tan, 2011). When implementing the impact evaluation, it is important to estimate the average impact of the program rather than the impact on each firm. One way to do that is to compare the average impact on the group that has participated in the program (also known as the “treatment” group) with an outcome for a similar group that has not (the “comparison” or “control” group) (Ruiz, 2012). There are two approaches used in impact evaluation: the experimental and nonexperimental. Experimental evaluations need to be set up before the policy or program is put in place, while nonexperimental approaches are commonly used to evaluate policies when an evaluation was not planned in advance. Some of the well know non-experimental methodologies are difference-in-differences, instrumental variables, regression discontinuity and propensity score matching. Thus, these methods rely on identifying a control group and then using statistical techniques to ensure the impact estimate is properly measured (Ruiz and Love, 2012).

It is also important to mention that there are two types of impact outcomes of the programme: short-term intermediate outcomes that programme seeks to affect directly and longer-term solid performance measures that programme may affect indirectly through intermediate outcomes. Intermediate outcomes include increased R&D expenditures, spending on worker training, new management practices, introduction of new production processes and quality control practices, networking with other firms, and increased access to different sources of information and funding. Performance impacts include growth in sales (or output), exports, investment, a probability of survival, employment, labour productivity or total factor productivity (López-Acevedo and Tan, 2011). Given that small and medium-sized enterprises have a very important role in economic growth and greatly contribute to employment rates, as well as that there are a number of programmes or policies aimed at contributing to the better development of small and medium-sized enterprises, a large number of studies have been carried out to assess the impact of these interventions on growth and the development of small and medium entrepreneurship.

Lot of studies found positive treatment effects on intermediate outcomes, but mixed results for firm performance indicators. For example, Aerts and Czarnitzki (2004) in their study found positive impacts of evaluated programme on gains on training, technology adoption, but no impacts on sales and productivity growth. Alvarez & Crespi (2000) found positive impacts of evaluated programme on gains in technology use, training, organization but no impact on export sales. Chudnovsky et al. (2006) found improvement in innovation intensity but no impacts on new product sales or on labor productivity growth. Benavente et al. (2007) found positive impact on intermediate results like gains in R&D, new processes and networking, positive effects but no impact on export intensity and labor productivity.

Material and methods

This paper evaluates the impact of the IPARD pre-accession program on the entrepreneurial sector, more precisely on fish processing industry. Proposed steps according to Gertler et al. (2011) in the evaluation process are pre-evaluation assessment, evaluation design, data collection and analysis of results.

Table 1. Roadmap for impact evaluation (Gertler et al., 2011)

Pre-evaluation assessment	Have a clear understanding of the characteristics of the intervention Identify objectives of the intervention Identify the outcomes/indicators to evaluate
Evaluation design	Review data available to perform evaluation and determine whether new data is needed Select an impact evaluation method
Data collection (if needed)	Design survey Pilot questionnaires Conduct fieldwork Process and validate data
Analysis of results	Produce findings of the evaluation

Pre-evaluation assessment

In the pre-evaluation phase of this research, it was defined that the research will be carried out through the non-experimental approach. The main goal of the research is to identify the impact of the pre-accession EU funds on the business performance and business (operational) capacity of the beneficiaries that received the funds.

The research is divided into two parts: 1) Analysis of a set of business success performance indicators using financial statements of the sample (beneficiaries of EU pre-accession funds) and 2) Preparation and conducting an enterprise management survey to assess the impact of used resources on business (organizational) capacity. The selection of indicators was based on literature review.

A. BUSINESS PERFORMANCE

The term business performance is defined by many authors: Duran and Cozac (2015) consider that performance analysis of a company is realized by using both indicators of profitability and return. Greuning (2005) defines it as making an interpretation of International Financial Reporting Standards and highlights five classifications of indicators which are: liquidity, solvency, operational efficiency, growth and profitability. Connection of *success* and *performance* of small business is confirmed by authors like Brush and Wanderwerf (1992), Brooksbank et al. (2003), Perren (2000), Jarvis (2000), and Jennings and Beaver (1997). Usual and most used measures for the performance are the profitability and growth (number of employees). In the first part of the research, business performance is measured through financial indicators of profitability and liquidity (Table 2).

Table 2. Selected business performance indicators

Profitability	Net Profit Margin indicators
	Net Return on Assets
	Net Return on Capital
Liquidity	Financial stability

B. BUSINESS (ORGANIZATIONAL) CAPACITY

Capacity development is considered an endogenous dynamic process that relies on one's motivation, effort and perseverance to learn and progress, which enables organizations to change and grow (Lopes and Theisohn, 2003). New skills, competencies and training of human resources are important features to be acquired in an organization for capacity development (Fowler and Ubels, 2010). Considering mentioned theory, the second part of the research seeks to analyze the improvement of business (organizational) capacity through the acquired knowledge and experience of human resources (especially management) in terms of enhancing or developing new skills in project preparation, investment planning or strengthening of readiness and preference utilizing resources of similar features in the future (Table 3).

Table 3. Selected business (organizational) capacity indicators

Business (organizational) capacity development	<ul style="list-style-type: none"> The degree of the involvement of managers, directors, consultants and employees in the process of IPARD project
	<ul style="list-style-type: none"> Attitudes of the respondents related to the percentage of time spent by the owners / managers
	<ul style="list-style-type: none"> Attitudes of the IPARD program respondents about the possibility of re-applying for EU funds

Evaluation design

In order to define the necessary data used in the research, the investigation to determine eligible beneficiaries of the measure 103 of the fishery sector was conducted. In the evaluation design phase, it was assessed whether the necessary indicators, in this case the list of beneficiaries, the year of receipt of funds and the financial statements used in the company's performance analysis, would be available. Through Internet research conducted, it was found that the necessary data were available. From the reports published by the Paying Agency for Agriculture, Fisheries and Rural Development, it was possible to define beneficiaries who received the funds.

Data collection

Data on the year when the grant was received were obtained through Internet Articles, while Companies' Financial Reports were obtained through the Amadeus database and Registry of Publicly Available Annual Financial Statements. From the available data on beneficiaries, it was found that a total of 17 beneficiaries received funding, and 13 of them belonged to the region of Adriatic Croatia. The reason for limiting the number of users to the area of Adriatic Croatia comes from the fact that the companies with the highest economic importance were situated in this area (Scientific, Technical and Economic Committee for Fisheries, 2014). Given that the payment of the funds to the companies Teši tunolov d.o.o., Canicula d.o.o. and Padrele riba d.o.o. was in 2016, and to Mišlov d.o.o. in 2015, it was not possible to get the information from the financial statements two years after the funds were received. Financial statement reports of targeted beneficiaries in observed period (2 years before and 2 years after the funds received) were available for only 7 users. Therefore, the companies which were selected for the analysis are the following: Sardina d.o.o., Conex Trade d.o.o., Marikomerc d.o.o., Olasagasti d.o.o., Fishermen Cooperative Omega 3, Arbacommerce d.o.o. and Ostrea d.o.o.

Table 4. Beneficiaries of IPARD funds profile (source <http://www.biznet.hr/>)

Number	Beneficiary name	The year of establishment	Town	Size of the company
1	Sardina d.o.o.	1907	Postira	Large
2	Conex trade d.o.o.	2003	Čaprice	Middle
3	Marikomerc d.o.o.	1990	Poličnik	Small
4	Olasagasti d.o.o.	2009	Sinj	Small
5	RZ Omega 3	2008	Kali	n/a
6	Arbacommerce d.o.o.	1992	Zadar	Middle
7	Ostrea d.o.o.	2002	Stankovci	Middle

Analysis of results

Descriptive statistics was used for processing data from financial statements for selected companies. Since there are only 18 companies in the Republic of Croatia registered in the fish processing industry and 17 of them received the IPARD grants, the control group was not taken into account while analyzing the data.

The second part of the study was conducted using the questionnaire as the main research tool. The survey was conducted on all business entities that received IPARD support, and respondents were surveyed via the Internet. Of the 10 business entities that received the survey questionnaire, 6 filled out a questionnaire. Fulfilment of the survey questionnaire was intended for the owner/manager of the business entity. Processing of data from the questionnaires was implemented using descriptive statistics.

Results

The total EU allocation for IPARD programme for the period from 2007 to 2013 was 1,082,127,600 HRK (Law on Confirmation of the Agreement between the European Commission on behalf of the European Union and the Government of the Republic of Croatia amending the Multi-Annual Financing Agreement 2007-2012 Closed on 4 November 2013, NN 7/2014). Under the Measure 103, ten calls for proposals were published, to which 136 projects were submitted, out of which only 69 projects were contracted with total amount of 213,725,577 HRK paid to selected beneficiaries (Paying Agency for Agriculture, Fisheries and Rural Development, 2017). Of the above measures for the fisheries sector, 17 projects were contracted (Paying Agency for Agriculture, Fisheries and Rural Development, 2017). Most contracted projects financed investments in the construction and / or reconstruction of facilities for processing fish, crabs, mollusks and other water invertebrates and / or investments in equipping the same facilities. For these 17 projects, a total of about 83,172,012 HRK (Paying Agency for Agriculture, Fisheries and Rural Development, 2017) in EU grants were paid to final beneficiaries.

The impact of used EU funds to business performance

Comparison of Net Profit Margin indicators (Fig. 2) of all beneficiaries shows that in five users – Ostrea d.o.o., Arbacommerce d.o.o., Conex Trade d.o.o., Marikomerc d.o.o. and Sardina d.o.o. – the value of this indicator decreased after receiving the aid, and only two beneficiaries (Olasagasti d.o.o. and RZ “Omega 3”) increased the value of this indicator after receiving funds.

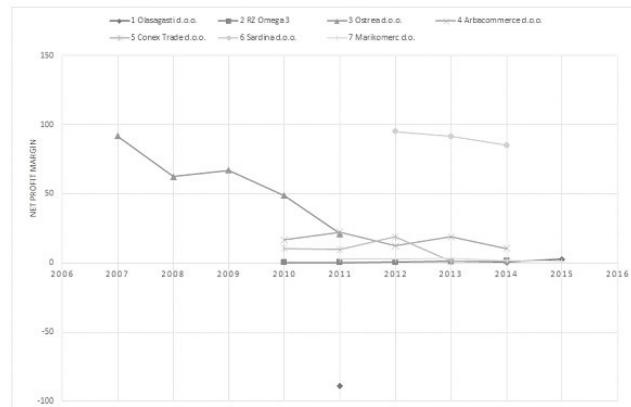


Fig 2. Comparison of the Net Profit Margin of all users in the observed period

By comparing the Net Return on Assets, it is apparent (Fig. 3) that three business entities – Olasagasti d.o.o., RZ Omega 3 and Sardina d.o.o. – increased this indicator after receiving funds. Arbacommerce d.o.o. had the highest value of this indicator in 2013 compared to the whole observed period, but this value fell significantly in 2014, namely 2 years after they received the assistance. Similar circumstances appeared with Ostrea d.o.o. whose value of the indicator increased one year after they had received the fund, but decreased again two years after. Two beneficiaries (Marikomerc d.o.o. and Conex Trade d.o.o.) showed a drop in this indicator after receiving the funds.

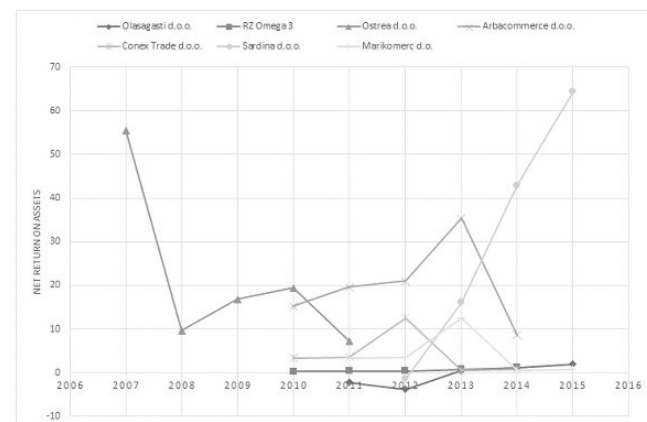


Fig 3. Comparison of the Net Return on Assets of all users' assets before and after IPARD funds received

Comparison of Net Return on Capital (Fig. 4) shows that the indicator in three beneficiaries (Olasagasti d.o.o., RZ Omega 3 and Sardina d.o.o.) increased after receiving the fund. The drop in this indicator is visible with four beneficiaries, among which are Conex Trade d.o.o. and Marikomerc d.o.o. A growth indicator is visible one year after the funds were received in the relation to the year of receipt of the funds at Ostrea d.o.o. and Arbacommerce d.o.o., however, their value drastically reduced two years after receiving the funds compared to the whole observed period.

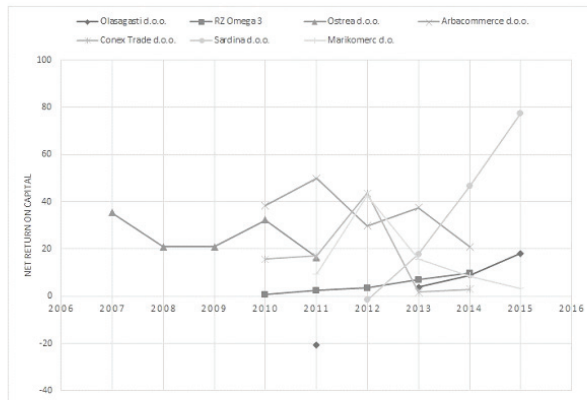


Fig 4. Comparison of Net Return on Capital of all users before and after IPARD funds received

By comparing the values of financial stability indicators (Fig. 5) in the given period to all beneficiaries who received IPARD support, it can be concluded that the indicator varies with different users of IPARD funds. For Conex trade d.o.o., Marikomerc d.o.o., Arbacommerce d.o.o., Olasagasti d.o.o. and RZ Omega 3, this indicator decreased after receiving funds. For Sardina d.o.o., Arbacommerce d.o.o and Ostrea d.o.o., the value of this indicator increased after receiving the funds. Since the value of indicators for most business entities (4 out of 7) reduced after receiving funds, it can be said that the funds received have contributed to increasing the financial stability of users using IPARD funds.

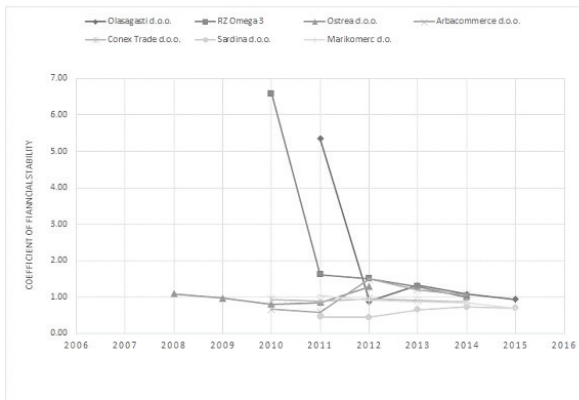


Fig 5. Comparison of financial stability indicators of all users before and after IPARD funds received

Elements of building the company's business capacity

Degree of the involvement of managers, directors, consultants and employees in the process of IPARD project was analyzed by using a Likert scale questionnaire where respondents needed to specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements related to their involvement in the IPARD project.

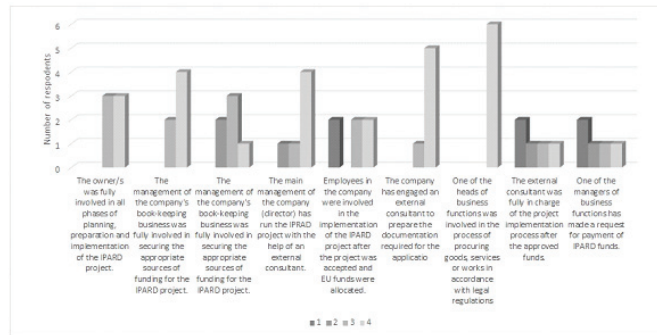


Fig 6. Degree of the involvement of managers, directors, consultants and employees in the process of IPARD project

- The owners were fully involved in all phases of planning, preparation and implementation of the IPARD project (50% of respondents agreed completely, 50% agreed), but majority of firms outsourced an external consultant for the purpose of applying for the funds (83% fully agreed) (Fig. 6).
- Management responsible for the technical and technological company's business was fully involved in defining the technical-technological solution of the IPARD project (66.7% of the respondents agreed totally, while 33.3% respondents agreed with the stated statement).
- The company's accounting and financial management was fully involved in providing the appropriate sources of funding for the IPARD project (50% respondents agreed and 16.7% fully agreed).
- The main management of the company (director) implemented the IPARD project with the help of an external consultant (66.7% respondents fully agreed).
- 83% of respondents agreed that a business manager was involved in the process of procuring goods, services or works in accordance with legal regulations.
- The employees were involved in the implementation process of IPARD project (66.7% respondents agreed with the statement).
- Working time spent by the owner on individual phases of the IPARD project varies in individual business entities. The owner spent 100% of the working time in two companies, while in two other companies the owner spent only 20% of the working time.
- The largest number of respondents stated that management of certain business functions used 50% of their working time on the IPARD project.
- The largest number of respondents (3) stated that employees were involved with 10% of working time in the IPARD project.
- The results of the questionnaires showed a large involvement of a consultant in the IPARD project (67% of respondents believed that the consultant spent between 70% and 100% of their working time on the IPARD project) (Fig. 7).

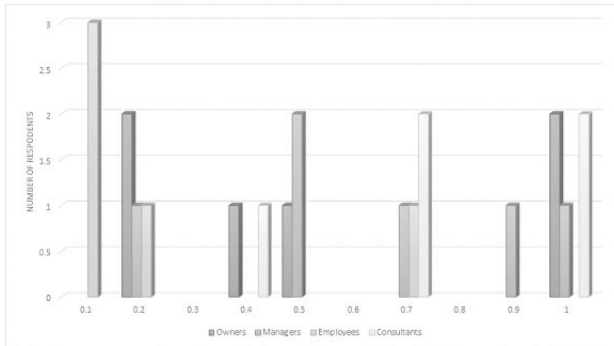


Fig 7. Attitudes of the respondents related to the percentage of time spent by the owners / managers / employees on the planning, preparation and implementation of the IPARD project

The IPARD programme gave the possibility of investing in the fisheries sector with the aim of improving the overall performance in the processing of primary fishery products, facilitating the competition on the domestic market by the introduction of new technologies and innovation, opening new market opportunities for agricultural products. One of the objectives of IPARD was to prepare Croatian entrepreneurs for utilization of the future EU funds, such as the European Maritime and Fisheries Fund 2014-2020. The attitudes toward applying for EU funds in the future have been explored by a questionnaire as shown in the Fig. 8 which shows very good results regarding the possibility of re-applying for EU funds. It seems that 57% of responders have already participated in getting the EU Structural funds and the rest is planning to apply for future funds.

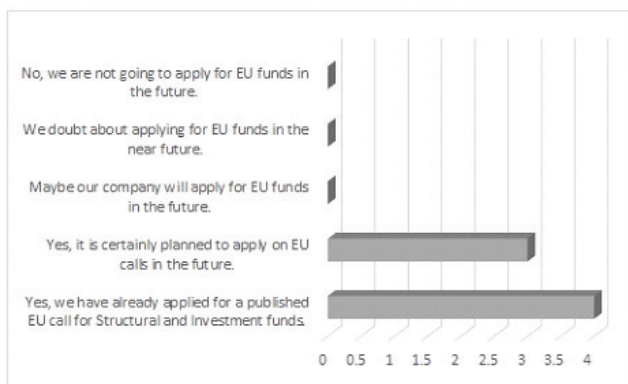


Fig 8. Attitudes of the IPARD program respondents about the possibility of re-applying for EU funds

DISCUSSION

Fish processing industry has had a great importance traditionally for the coastal and the island population of the Republic of Croatia. Despite its historical significance and favorable environmental conditions, its development is dealing with many problems at present. The lack of investments

in modern technology and diversification of fish processing products is causing low competitiveness of fish processing industry. The significant amount of EUR 144,283,680 was allocated to the Republic of Croatia from IPARD programme but the evaluation of Programme effectiveness on small and medium enterprises sector in the Republic of Croatia has not yet been evaluated. Since the pre-accession programme IPARD co-financed investments in small and medium-sized enterprises from the fish-processing sector, this paper examined whether the Programme contributed to the sector in terms of improving its development. It has been demonstrated that 17 beneficiaries, of 18 existing companies registered for fish processing activity, received the IPARD support. It can be concluded that 94% of the existing factories used Programme's support, which indicates that the Programme has helped them take important steps in the modernization of this industry.

The research results do not show a positive impact of used pre-accession funds on business performance expressed by the financial indicators of profitability (net return on assets, equity and net profit margin). The only positive impact of the received funds can be seen through increased financial stability of most beneficiaries. This fact suggests that business entities that used the funds for investing in long-term assets of the company in just two years failed to increase their net income or revenues. However, it is expected that the improvement of technical and technological conditions of these companies will surely reach larger and more competitive production in the near future. Therefore, it can be assumed that the short period for impact observation can be the main reason for such results, as confirmed by the previously conducted studies of the impact of the EU's assistance to small and medium-sized enterprises (Lopez-Acevedo and Tan, 2011).

In addition, the impact of the funds used on the business (organizational) capacity of the users was also observed. The results of the research show a positive impact of EU funds on intermediate results such as the increased ability of managers and owners of the companies to implement IPARD projects, which is shown through considerable dedication of their working time to IPARD project. It has been shown that all respondents are either ready to reapply for EU funds, or have applied for them again. New programming period between 2014 and 2020 is giving new opportunities to the fish processing sector. The amount of € 18 954 045 is allocated to the Republic of Croatia from the European Maritime and Fisheries Fund Operational Programme that is going to co-finance activities like marketing and branding of high-quality fish products, setting up new and improved production processes and management systems, technology transfer. The impact of these new measures on long-term performance impacts of the enterprises from the fish processing industry could be a new interesting topic for future research.

CONCLUSION

In Croatia, studies on impact evaluations of SME programs are rare, most of them are analysing impacts of pre-accession assistance on macroeconomic situation. The aim of this research was to detect the impact of pre-accession funds reduced to only one economic activity, namely fish processing industry. This provides the relevance of the research conclusions with respect to entities with similar business conditions as the examined companies. Therefore, this research can have a potential impact on the definition of the methodological framework for future studies of the impact of Structural and Cohesion Funds.

PROCJENA UTJECAJA EU FONDOVA NA UČINAK TVRTKI U INDUSTRIJI PRERADE RIBE: SLUČAJ REPUBLIKE HRVATSKE

SAŽETAK

IPARD je pretpristupni program koji je proveden u Republici Hrvatskoj u fazi pristupanja Europskoj uniji. Glavni ciljevi ovog programa su pružiti pomoć državama kandidatkinjama i državama potencijalnim kandidatkinjama u njihovom usklađivanju i provedbi pravne stečevine Europske unije kao i priprema za korištenje budućih sredstava Europske unije. Budući da su pretpristupna sredstva iz IPARD programa omogućila ulaganje u modernizaciju tvornica za preradu ribe, ovim radom se analizirao utjecaj korištenih sredstava na a) poslovnu uspješnost i b) poslovnu (organizacijsku) sposobnost IPARD korisnika iz riboprerađivačke industrije. Istraživanje je provedeno korištenjem ne-eksperimentalne metode te je podijeljeno je na dva dijela: (1) analiza skupa indikatora poslovne uspješnosti tvrtki iz uzorka (korisnici koji su primili pretpristupna EU sredstva) i (2) analiza pomoću upitnika kojim se ispitivao utjecaj spomenutih sredstava na poboljšanje poslovne (organizacijske) sposobnosti. Istraživanje je pokazalo da se indikatori profitabilnosti kod većine korisnika nisu povećali dvije godine nakon primljenih sredstava. Ipak, očekuje se da će poboljšani tehnički i tehnološki uvjeti tvrtki pomoći u povećanju konkurentnosti njihovih proizvoda u budućnosti. Kada se govori o utjecaju na poslovnu sposobnost, vidljivo je da je došlo do poboljšanja menadžerskih sposobnosti u smislu stjecanja i razvoja novih vještina vezanih za pripremu i provedbu projekata, investicijskog planiranja kao i jačanja spremnosti na korištenje sličnih financijskih sredstava u budućnosti.

Ključne riječi: industrija prerade ribe, MSP, poslovna uspješnost, poslovna (organizacijska) sposobnost, IPARD

REFERENCES

- Aerts, K., Czarnitzki, D., Leuven, K. U., Toegepaste, D., Wetenschappen, E. (2004): Using Innovation Survey Data to Evaluate R & D Policy: The Case of Belgium. Centre for European Economic Research. No. 04-055.
- Alvarez, R., Crespi, G. (2000): Exporter Performance and Promotion Instruments: Chilean Empirical Evidence. University of Chile, Department of Economics, 27, 225-241.
- Basioli, J. (1984): Ribarstvo na Jadranu, Nakladni zavod Znanje, Zagreb, 338-353.
- Benavente, J.M., Crespi, G., Maffioli, A. (2012): Apoio público à inovação empresarial: uma avaliação do Programa FONTEC. Revista Brasileira de Inovação, 11 (esp.), 113-152.
- Brooksbank, R., Kirby, D., Tompson, G., Taylor, D. (2003): Marketing as a Determinant of Long-Run Competitive Success in Medium-Sized U.K. Manufacturing Firms. Small Business Economics, 20, 3, 259-272.
- Brush, C.G., Vanderwerf, P.A.A. (1992): Comparison of Methods and Sources for Obtaining Estimates of New Venture Performance. Journal of Business Venturing, 7, 2, 157-170.
- Chudnovsky, D., López, A., Rossi, M., Ubfal, D. (2006): Evaluating a Program of Public Funding of Scientific Activity. A Case Study of FONCYT in Argentina "OVE Working Papers 1206, Inter-American Development Bank, Office of Evaluation and Oversight (OVE).
- Commission, E. (2012): European Union Support Programmes for SMEs. An Overview of the Main Funding Opportunities Available to European SMEs. Directorate-General Enterprise and Industry – European Commission, Bruxelles.
- Commission, E. (2014): Access to finance for SMEs. Available at: https://ec.europa.eu/growth/access-to-finance_en. Accessed on 20 January 2017.
- Commission, E. (2015): SME competitiveness Available at: http://ec.europa.eu/regional_policy/en/policy/themes/sme-competitiveness/. Accessed on 20 January 2017.
- Dujmović, K. A., Jagić, J., Vela, A. (2012): Praktični vodič za korisnike EU fondova u Hrvatskoj. Hrvatska udruga poslodavaca: Zagreb, Croatia.
- Dujmušić, A. (2000): Hrvatsko ribarstvo ispod površine; Rabus media, Zagreb, Croatia.
- Duran, V., Cozac, A. (2005): The Economic -Financial Analysis., vol I and II.
- Eurofish (2016): Overview of the Croatian fisheries and aquaculture sector. Available at: <http://www.eurofish.dk/croatia>. Accessed on 05 January 2017.
- Ubels, J., Fowler, A. (2010): Multiple Dimensions. In: Capacity Development in Practice. Ubels, J., Acquaye-Baddoo, N. & Fowler, A. (eds.) London: Earthscan.
- Gerther, P. J., Martinez, S., Premand, P., Rawlings, L. B., Ver-

- meersch, C. M. J. (2011): *Impact Evaluation in Practice*. The World Bank, Washington DC, USA.
- Greuning, H. (2006): *Međunarodni standardi financijskog izvješćivanja: praktični vodič*. Zagreb.
- Grubišić Šeba, M. (2013): **The role of EU funds in encouraging entrepreneurship**. *Učenje za Poduzetništvo*, 3, 2, 76-88.
- Jarvis, R., Curran, J., Kitching, J., Lightfoot, G. (2000): *The Use of Quantitative and Qualitative Criteria in the Measurement of Performance in Small Firms*. *Journal of Small Business and Enterprise Development*, 7, 2, 123-134.
- Jenning, P., Beaver, G. (1997): *The Performance and Competitive Advantage of Small Firms: A Management Perspective*. *International Small Business Journal*, 15, 2, 63 - 75.
- Jovanović, J., Galić, J., Mackelworth, P. (2010): *Odras gašenja otočnih pogona za preradu ribe na depopulaciju hrvatskih otoka*. *Naše more*, 57, 153-163.
- López-Acevedo, G., Tan, H.W. (2011): *Impact Evaluation of SME Programs in Latin America and Caribbean*. The World Bank, Washington DC, USA. Available at: <http://documents.worldbank.org/curated/en/319161468337915156/Impact-evaluation-of-SME-programs-in-Latin-America-and-Caribbean>.
- Lopes, C., Theison, T. (2003): *Ownership, leadership, and transformation: can we do better for capacity development?* London: Sterling, VA : Earthscan Publications
- Ministry of Agriculture (2017): *IPARD users*. Available at: <http://www.mps.hr/ipard/default.aspx?id=4408>. Accessed on 15 January 2017.
- Narodne novine, (2014): *Zakon o Potvrđivanju Sporazuma Između Europske Komisije U Ime Europske Unije i Vlade Republike Hrvatske kojim se mijenja i dopunjuje Višegodišnji Sporazum o financiranju 2007. – 2012. Sklopljen 4. Studenoga 2013*. Zagreb: Narodne novine d.d., 82 ,7.
- Novoselec, I., Bubanović Devčić, H. (2014): *Trenutni okvir za korištenje pretpristupnih fondova i mogućnosti za poduzetnike (PowerPoint PPT Presentation)* Available at: <https://www.slideserve.com/tab/ivana-novoselec-i-helga-bubanovi-dev-i>. Accessed on 03 February 2017.
- Özçelik, E., Taymaz, E. (2008): *R&D Support Programs in Developing Countries: The Turkish Experience*. *Research Policy*, 37, 2, 258-275.
- Parliament, E. (2017): *Small and medium-sized enterprises*. Available on: http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuid=FTU_2.4.2.html. Accessed on 01 February 2017.
- Paying Agency for Agriculture, Fisheries and Rural Development (2017): *IPARD korisnici po županijama - ugovoreni i isplaćeni*. Available at: <http://www.apprrr.hr/ipard-31.aspx>. Accessed on 10 January 2017.
- Paying Agency for Agriculture, Fisheries and Rural Development (2017): *Izvješće Agencije nakon provedenih natječaja*, Available at: <http://www.apprrr.hr/ipard-31.aspx>. Accessed on 10 January 2017.
- Paying Agency for Agriculture, Fisheries and Rural Development (2017): *Pregled korisnika IPARD sredstava_isplaćeni korisnici [Cross Ref]*. Accessed on 10 January 2017.
- Paying Agency for Agriculture, Fisheries and Rural Development (2017): *Pregled korisnika IPARD sredstava_ugovoreni korisnici*. Accessed on 10 January 2017.
- Perren, L. (2000): *Factors in the Growth of Micro-Enterprises (Part 2): Exploring the Implications*. *Journal of Small Business and Enterprise Development*, 7 1, 58-68.
- Registar poslovnih subjekata (2017): Accessed on 20 January 2017. Available at: <http://www.biznet.hr/>.
- Regulation on the implementation of Measure 103 (2013): *Narodne novine*, 398, 24, Zagreb.
- Republic of Croatia, Ministry of Agriculture. (2012): *IPARD PROGRAMME Agriculture and Rural Development Plan 2007 – 2013*. Ministry of Agriculture: Zagreb, Croatia.
- Republic of Croatia. (2014): *Partnership Agreement Republic of Croatia (2014HR16M8PA001.1.3)*. European Commission: Bruxelles, Belgium.
- Ruiz, C., Love, I. (2012): *Impact Assessment Framework: SME Finance*. The World Bank, Washington DC, USA. Available at: <http://documents.worldbank.org/curated/en/587831468337221031/Impact-assessment-framework-SME-finance>.
- Scientific, Technical and Economic Committee for Fisheries (2014): *The Economic Performance of the EU Fish Processing Industry-The Economic Performance Report on the EU Fish Processing (STECF-14-21)*. Publications Office of the European Union, Luxembourg.
- Starc, N., Kaštelan-Macan, M., Čulin, S. (1997): *Nacionalni program razvitka otoka, Ministarstvo obnove i razvitka*, Zagreb.