

PERFORMANCE ANALYSIS OF COMPANIES CO-FUNDED BY FITD

September, 2021, Skopje, North Macedonia

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A. FUND FOR INNOVATION AND TECHNOLOGY DEVELOPMENT

The Fund for Innovation and Technology Development (FITD) was founded in December 2013, for the purpose of encouraging innovations by provisioning additional sources for innovation funding and due to the need to build competitive economy based on knowledge.

Fund vision and mission. The mission of the Fund for Innovation and Technology Development is to encourage and support innovation activity in micro, small and medium-sized enterprises in order to ensure hastened technology development based on knowledge transfer, research and development of innovations which will contribute to the creating of new jobs and ensuring economic growth and development and at the same time improving the business environment for development of the competitive abilities of the companies.

PURPOSE OF THE REPORT

The purpose of the report is to analyze the performance and financial results achieved by the companies funded by FITD in the period 2016 – 2020. For the purpose of analysis of the results from the financial support, the companies will be categorized according to their size, department, instrument and programme they applied for and performance analysis before and after receiving the funds, and considering the Macedonian economy in its entirety. The analysis will only refer to companies co-funded by FITD in the period 2015-2020; however, the analyses about the total project values include 2021 companies as well.

Innovations co-funded by FITD under standard circumstances would face with difficult funding by the standard financial institutions which directly suggests to a higher risk of their failure. The placement of risky capital from the aspect of business implies part of the companies which successfully commercialize innovations to experience failure as well; however, the successful companies would realize enough revenues to ensure general success of FITD. In economic terms, the loss of the companies should be less than the profit.

Considering the fact that in 2020 FITD created a special instrument ([Instrument for technology development for overcoming COVID-19 consequences](#)) in order to help companies affected by COVID-19 crisis, and one of its main goals is to determine whether the companies using such funds show any growth and achievements compared to the economy in its entirety. At the time of preparation of the report (September, 2021) there is no possibility to analyze the effects of the funding itself; however, conclusions can be made with regards to the funded companies and the result from the funding achieved in 2020.

Based on the key macroeconomic parameters FITD operation intends to directly affect the overall GDP, Economic Growth, investment level in Research and Development (R&D), employment level and export, and that will be done through funding of innovation projects and projects for technology development with added values and possibility for global placement. Therefore, specifically those economic indicators will be explained hereinafter which will provide comparison with the performance of the companies. Of course, FITD also has qualitative goals, such as keeping the young people in the country and preventing the Brain Drain, supporting the process of creating better paid jobs, increasing the employment and competition of enterprises; however, they cannot be quantified and therefore there is no possibility for processing.

CLARIFICATION OF THE ANALYSIS

The analysis will be done without overanalyzing the financial (commercial) performance of the projects i.e. products and services co-funded by FITD, as well as the investment return for FITD or the reasons for choosing particular project. Also, the nature of the products/services or the business models used by the companies in the course of their development and commercialization will not be taken into consideration.

For that purpose, analysis will be made of the general financial results of the companies per areas, instrument, project and size, starting with the year before funding and ending with the 2nd year after the year of funding. The growth will be measured cumulatively between the year before the funding as a standard year of operation at the companies and two years (or one year) after the funding. Such analysis will ensure analysis and making conclusions at segment level and future optimization of FITD activities and funding. The effect simulation from the revenues (funding) gives additional insight which segments and instruments would be most affected within the companies and from macroeconomic aspect.

Financial data from the companies users of FITD co-funding were submitted for the purpose of analysis. Part of the companies were established solely for the purpose of applying for the “Start-Up/Spin-Off” instrument which indicates that they do not have any financial history, and therefore no possibility to be analyzed before the project. The analysis was done according to the average values per company and average from the average values per employee and generally at the level of the entire portfolio with FITD co-funding. By doing so, comparison can be made of the years before and after funding and comparison of the performances between instruments, projects, size and project area.

Data source: Fund for Innovation and Technology Development, State Statistical Office and Central Registry.

B. MACROECONOMIC PARAMETERS OF THE MACEDONIAN ECONOMY

The general macroeconomic data of Republic of North Macedonia should be displayed before commending the analysis of the data with regards to the projects and the performance of the companies. This will enable comparison between the general result of the economy and the companies co-funded by FITD in the further analysis.

According to the available data, GDP value in the period 2015-2019 was between EUR 9.11 – 11.24 billion with average actual growth rate of 2.78%. According to the 2020 forecast, the economic activity and private consumption significantly reduced due to the COVID-19 pandemic crisis. In the preliminary calculations it is expected the total GDP to reduce by -4.5%. The expectation for 2021 is the positive growth and normalization of economic flows to continue with the same intensity in 2022 as well.

The unemployment rate at the end of 2020 was 16.40% and is reduced by approximately 10% compared to 2015 when it was 26.10%. There is a great possibility the trend of decrease to continue in 2021 as well. The average net salary in the same period increased from EUR 369 to EUR 470 or 27%.

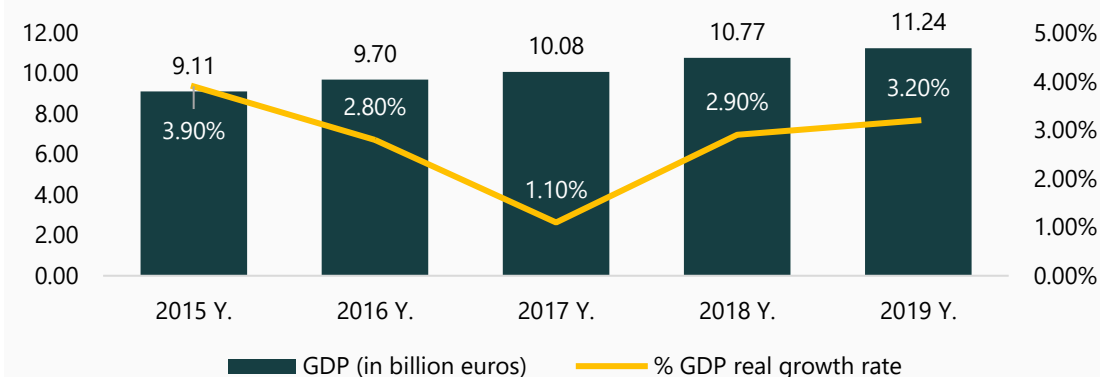
The direct investments in the analyzed period are between 1.80% (2017) and 5.60% (2018) or in absolute amount of EUR 180 – 603 million. The total value of direct investments in the period of 6 years is EUR 1.87 billion or EUR 312 million per year in average.

The last macroeconomic indicators displayed in Table 01 refer to import and export. Both indicators show increase between 2015 – 2019, whereby the export increased from EUR 4.08 to EUR 6.43 billion, while import increased from EUR 5.80 to 8.44 billion. In 2020 year of crisis both indicators reduced compared to 2019; however, in 2021 it is expected for them to return on their value before the period of crisis.

From the MASIT report “ICT industry in North Macedonia” which analyses the performance of IT companies from the aspect of trade exchange, it can be concluded that the department shows significantly positive trade balance i.e. 66% of the total revenues are exported and 23% are imported and the rest belongs to the national companies. There is a possibility the co-funded projects from IT department to realize the same export potential. In fact, one of the biggest benefits of the IT industry (focused on “Computer Programming”) is highly positive trade balance which may affect the decrease of the trade deficit of the entire economy, while the same department represents one of the main departments co-funded by FITD.

CHART 01

GDP rate and rate of GDP actual growth
Value expressed in EUR billion ('000 000 000)



Source: State Statistical Office – Announcement: Gross Domestic Product of Republic of North Macedonia in 2019 ([3.1.20.16 mk.pdf\(stat.gov.mk\)](#)). 2019 value is estimated.

TABLE 01

Key Macroeconomic Indicators

INDICATOR	YEAR					
	2015	2016	2017	2018	2019	2020
1 GDP (% of the growth rate)	3.90	2.80	1.10	2.70	3.2*	-4.5*
2 Inflation (end of the annual period in %)	-0.40	-0.20	2.40	0.90	0.40	2.30
3 Unemployment rate (in %)	26.10	23.70	22.40	20.70	17.30	16.40
4 Export (in EUR billion)	4.08	4.39	5.01	5.86	6.43	5.77
5 Average net salary (in EUR)	369	381	388	419	436	470
6 Import (in EUR billion)	5.80	6.17	6.83	7.67	8.44	7.59
7 Trade balance (in EUR billion)	-1.71	-1.78	-1.81	-1.81	-2.00	-1.81
8 Direct investments (net - as % of GDP)	2.30	3.30	1.80	5.60	3.20	1.90
9 Direct investments (net - in EUR million)	202.80	316.90	180.00	603.70	363.30	205.70

Source: National Bank of Republic of North Macedonia

C. RESEARCH AND DEVELOPMENT IN NORTH MACEDONIA

FITD essentially funds innovation projects in the domain of Research and Development of new products and services and one of the information that needs to be analyzed is the % of GDP annually invested in those activities. According to 2018 data of the World Bank Банка, North Macedonia is on the 82 place according to the participation in research and development in the total GDP of the country.

GDP percentage allocated for R&D in the period 2015-2018 was 0.36% (2018/19) – 0.44% (2015/16) or maximum EUR 42 million per year. According to the official data of the World Bank with regards to the % of GDP invested by the countries for research and development ([World Bank – Research and Development Expenditure %](#)), for the period of 4 years (for which official data exist) are invested EUR 150 – 160 million total from the active companies in North Macedonia. In 2019, according to the estimated investment in research and development the percentage is between both values (0.40%) or approximately EUR 44 million.

In the period of 5 years (for which data are displayed) between EUR 201 – 210 million are invested at national level (including 2019 estimate), whereby projects co-funded by FITD participate with 36%-41% in the total research and development in North Macedonia. Part of the funds co-funded by FITD are not directly used for Research and Development, but for market analysis, salaries, equipment and similar investments which directly affect the increase of innovative activities in the companies.

According to Chart 03, it is noticeable that the amounts invested in “Research and Development” and “Economic Growth” are not mutually correlated. This implies that investments in “Research and Development” (even though they are generally at low level) are continuous and stable, regardless of the variations in the Economic Growth. For example, in 2017 the Economic Growth was 1.10% and Research and Development was 0.36% compared to 3.90% and 0.44% respectively in 2015.

Consultation assessment: The value of the total investments in research and development in the Macedonian economy are lower compared to some of the neighboring countries. As a comparison, in 2018 Serbia invests 0.92% and Bulgaria invests 0.77%. FITD with estimated participation (*direct and indirect effect in innovations*) of 36%-41% through co-funding of innovative projects of the companies is expected to additionally motivate other companies to increase the investments. In fact, one of the FITD recommendations is to educate the existing companies of the importance of innovative activities and increase the cooperation with the private sector with special emphasis on the cooperation between the companies and the start-up segment which will ensure increased growth of both segments.

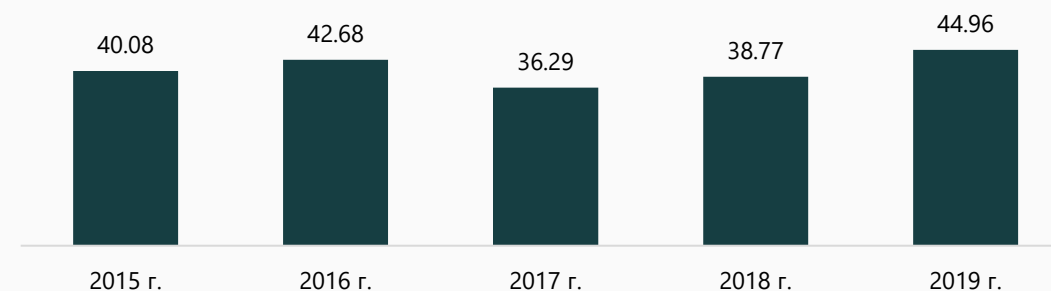
Note: 2019 and 2020 GDP growth values are estimated and not final and the data on Research and development as % of GDP are available until 2018.

CHART 02

Total value of research and development in North Macedonia

Period: 2015 - 2019

Total value for the period: EUR 201 million



Source: State Statistical Office – Announcement: Gross Domestic Product of Republic of North Macedonia in 2019 ([3.1.20.16 mk.pdf\(stat.gov.mk\)](#)).

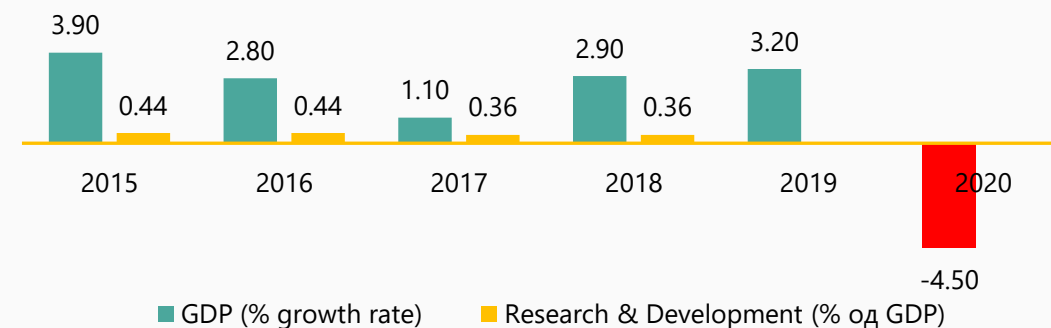
Note: Estimated value for Research and Development in 2019.

CHART 03

GDP Growth and Research and Development

Period GDP: 2015 - 2020

Period R&D: 2015 - 2018



Source: National Bank of Republic of North Macedonia and the World Bank ([World Bank – Research and Development expenditure \(% of GDP\)](#))

C1. PARTICIPATION OF INNOVATIVE PROJECTS IN THE TOTAL REVENUES OF THE COMPANIES

The participation of the project value co-funded by FITD in the total revenues of the companies in the year of funding is analyzed in Table 02. The same is done in order to analyze the participation and to make comparison with the general investment in innovations and development at economy level. Since innovative projects and projects for technological development are funded via FITD, the entire value of EUR 88 million can be classified as investments having significant contribution in Research and Development, regardless of whether it is development of the project/service or expenses directly stimulating innovative products or commercialization thereof.

The total of EUR 88 million for the period of 5 years participate with total 36%-41% in EUR 210 million invested in the research and development from national companies. Of course, significant part of the projects co-funded by FITD are also intended for commercialization of the products and services of the companies, technological improvements/development, and to emphasize the importance of project funding in R&D segment.

The prepared analysis indicates that the innovative projects participate with significant percentage in the total revenues of the companies. In fact, in the majority of start-ups established for the purpose of application of FITD programme the total value of the investments is EUR 6.42 million of which EUR 4.24 million are co-funded by FITD, while EUR 2.17 million are co-funded by the companies. The project value of start-ups (*without employees*) exceeds the total revenues by 2,879%, of which 1,904% are caused by FITD and 976% by the funds of the companies.

Micro and small enterprises (*already established, and the majority belonging to the "Start-Up" segment*) participate in the investments with 85% in the total revenues, of which 52% are co-funded by FITD and 33% are co-funded by the companies. The participation in the funding approximately amounts one year of standard company operation.

In medium-sized companies, the participation of projects in the total revenues is 9.14% of which 3.95% are co-funded by FITD, while the remaining 3.95% are co-funded by the companies. It is noticeable that project participation in medium-sized companies significantly exceeds the average at economy level (0.4%). In large companies, the project participation in total revenues expressed in percentage is approximately at the level of the entire economy with 0.58%; however, there is only one company in the indicated segment.

Note: In the part for programme analysis is defined the growth realized by these companies in the period of several years.

TABLE 02

Participation of the project value in the total revenues of the companies in the **year of funding**
Values expressed in EUR million ('000 000)

CRITERION	Size of the enterprise				
	W/o employees	Micro	Small	Medium	Large
1 Total revenues	0.22	29.86	87.71	106.50	139.70
2 Total expenditures	0.12	27.98	79.01	104.36	123.60
2 Project value	6.42	25.43	20.96	9.73	0.82
2.1 Co-funding by FITD	4.24	15.52	10.78	4.21	0.53
2.2 Co-funding by the company	2.17	9.91	10.18	5.52	0.28
3 Participation of the total investment in the total revenues	2879.08%	85.18%	23.89%	9.14%	0.58%
3.1 Participation of the co-funding by FITD in the total revenues	1904.16%	51.99%	12.29%	3.95%	0.38%
3.2 Participation of the co-funding by the company in the total revenues	974.92%	33.19%	11.61%	5.18%	0.20%

Note: Enterprises without employees are the ones established as start-ups with the main purpose to develop innovative idea (project) and apply to FITD with such project.

D. GENERAL REVIEW OF CO-FUNDED PROJECTS

According to the data on projects co-funded by FITD in the period 2015 – 2021, the total project value is EUR 88.25 million. From the total value, EUR 49.32 million (55%) are co-funded by FITD, while EUR 38.93 million (45%) are funds allocated from the companies. In the respective period, financial support was provided for 669 projects. The average project value is EUR 132,236, of which EUR 73,893 are co-funded by FITD, while the other EUR 58,343 are co-funded by the companies. Financial support was used by 600 companies, of which 533 companies used financial support for 1 project, 65 companies used financial support for 2 projects and 2 companies used financial support for 3 projects (669 projects total).

Project funding programmes have two sources “Plan for Economic Growth” from the Government of Republic of North Macedonia and loan from the “World Bank”. According to the programme, the highest percentage or 398 (59%) of 669 projects are within the “Plan for Economic Growth” with total value of EUR 55.80 million. The second programme is with loan from the “World Bank (WB SDIS)” through which 191 projects were co-funded with total value of EUR 12.99 million. The last is the combined programme created by the “World Bank” and the “Plan for Economic Growth” through which 80 projects were funded with total value of EUR 19.68 million. As analyzed hereinafter in the report, the funds from the “World Bank” are mainly used as financial support of Start-Up enterprises.

Considering the fact that start-ups, micro and small enterprises having average revenues between EUR 100,000 – 1,000,000 per year are mainly funded, the average project value participates with significant percentage ([link](#)) in the total revenues of the companies.

Consultation conclusion: As analyzed in detail hereinafter in the report, the investment activity of the companies co-funded by FITD is significantly higher compared to the average at the level of the entire economy and in ratio with the revenues of the funded companies. Considering the conventional (banks and financial institutions) funding method which requires insurances in type of mortgage, bill of exchange or average project value, there is a possibility that the companies would not invest in research and development without FITD support from the aspect of technology.

Note: The projects funded in 2021 are included in the displayed calculations and charts. They are excluded from the separate analysis of the programmes and instruments, because the fiscal year (2021) has not ended yet and there is no way to make a trend or analyze their performance.

TOTAL 669 CO-FUNDED PROJECTS

TOTAL VALUE	FITD	COMPANIES
88.25 million €	49.32 million € 55%	38.93 million € 45%
AVERAGE VALUE	FITD	COMPANIES
132,236 €	73,893 €	58,343 €

CHART 04

Number of funded projects according to the Programme

Period: 2016 – 2021

Total projects: 669

Values expressed in EUR million ('000 000)



D1. REVIEW OF THE CO-FUNDED PROJECTS ACCORDING TO THE INSTRUMENT

The programme providing the funds is analyzed in the previous part, while the instruments through which company projects are funded are analyzed in this part.

Start-Up/Spin-off: The first instrument through which 171 projects (27%) are co-funded has total project value of EUR 6.17 million, of which EUR 4.73 million are co-funded by FITD. The average project value is EUR 36,000 of which EUR 28,000 are co-funded by FITD. In fact, the majority of projects funded under this instrument per total project value is on the 5th position and after "Technology Development – COVID19" it shows the lowest average value per project.

Improvement of Innovation: The second instrument through which 110 projects (17%) are co-funded has total project value of EUR 21.63 million and is the instrument through which most of the funds i.e. 14.54 are co-funded. The average value per project is EUR 197,000 of which EUR 132,000 are co-funded by FITD.

Technology Development for Accelerated Economic Growth: The third instrument through which 103 projects are funded with total value of EUR 11.01 million, of which EUR 5.72 million are co-funded by FITD. The average project value is EUR 107,000 with average FITD participation of EUR 56,000.

Note: The instrument was launched in 2021, which means the company performances before and after funding cannot be analyzed.

Commercialization: 93 projects (14%) with total value of EUR 21.27 million are funded through the instrument for Commercialization of products/services, of which EUR 14.18 million are co-funded by FITD.

Technology Development – COVID-19: 92 projects (14%) with total value of EUR 2.68 million and average project value of EUR 29,000 are funded through the instrument whose purpose is technological development of the companies in time of the pandemic in 2020. FITD co-funding is EUR 1.64 million or EUR 18,000 per project in average.

Technology Development: 36 projects (6%) with total value of EUR 6.15 million and average project value of EUR 171,000 are funded through the instrument for Technology Development. FITD co-funding is EUR 1.78 million with average project value of EUR 50,000. This instrument is one of the three instruments where the FITD co-funding value is lower than the funding of the companies.

TABLE 03
PROJECT NUMBER AND VALUE ACCORDING TO THE INSTRUMENT

Instrument	Total projects participation	%	VALUE AND ALLOCATION			AVERAGE	
			In EUR million ('000 000)			Project	FITD
			Total	FITD	Comp.		
1 Start-up/Spin-off	171	27%	6.17	4.73	1.44	0.036	0.028
2 Improvement of Innovation	110	17%	21.63	14.54	7.08	0.197	0.132
3 Technology development for economic growth	103	16%	11.01	5.72	5.29	0.107	0.056
4 Commercialization	93	14%	21.27	14.18	7.09	0.229	0.152
5 Technology development COVID19	92	14%	2.68	1.64	1.04	0.029	0.018
6 Technology development	36	6%	6.15	1.78	4.37	0.171	0.050
7 Technology development (fast track)	32	5%	7.11	2.10	5.01	0.222	0.066
8 Technology extension	4	1%	3.23	1.40	1.83	0.808	0.351
9 Business Accelerator	3	0%	1.99	1.44	0.55	0.665	0.481

Note: The instruments are ranked according to the number of funded projects.

Technology Development (fast track): 32 projects (5%) are funded through the seventh instrument with total value of EUR 7.11 million and average project value of EUR 222,000. The FITD co-funding is in the value of EUR 2.10 million or EUR 66,000 per project in average.

Technology Extension и Business Accelerator: 4 projects with total value of EUR 3.23 million and average value of EUR 808,000 per project were funded through "Technology Extension" instrument. This instrument has the second highest average value per project and FITD co-funding of EUR 351,000 per project. The highest average value of the co-funding belongs to the last "Business Accelerator" instrument i.e. EUR 481,000 per project.

Note: In the detailed analysis of the financial performances only the instruments with over 90 companies will be analyzed having historical data that allow proper analysis (e.g. there are no available data for the research on Technology Development for Economic Growth and Technology Development – COVID-19).

D2. REVIEW OF CO-FUNDED PROJECTS PER PROJECT AREA

As analyzed before, the total value of the projects funded in the period by 2021 is EUR 88 million, of which EUR 49 million or 56% are co-funded by FITD, while the remaining EUR 38 million are funds invested by the companies. Projects from 24 different areas presented in TABLE 04 are funded. It is noticeable that FITD co-funding in all industries is bigger than the funding by the companies, and the highest percentage of funds are intended for funding projects in areas related to IT, Mechanical Engineering, Technology or related industries. In fact, the technical and information areas participate with approximately 40% in the total funding. The average project value varies from EUR 30,000 in the area of Veterinary Medicine to EUR 310,000 in the area of Engineering. The value of the majority of projects (areas) varies between EUR 90,000 – 140,000, of which approximately 55% are co-funded by FITD, while the remaining 45% are funded by the companies.

In particular, the highest percentage or 24% of the co-funded projects with total value of the projects of EUR 21 million and 171 projects are from the IT area. This is expected, because the IT industry currently has the highest number of innovations which could be placed on the global market. From all IT funds, EUR 13.48 million are co-funded by FITD and EUR 7.79 million are funded by the companies. The average project value in the IT segment is EUR 120,000.

The majority of projects or over 40 (*without IT*) are in 5 areas i.e. in Health and Medicine, Mechanical Engineering, Construction, Technology, Marketing and Sales. From these areas, the highest average and total project value is from the area of Mechanical Engineering of EUR 210,000 and total investments of EUR 9,67 million.

Areas with the lowest number of projects are Biomedicine, Veterinary Medicine, Engineering and Pharmacy with the total of 6 projects and total investments of approximately EUR 1 million.

Note: The analysis is done according to the funded project and not the industrial activity of the company. In the interest of analysis and making relevant conclusions, part of the areas will be grouped according to the general areas (e.g. Health, Medicine, Biochemistry and Pharmacy or Mechanical Engineering and Engineering). In the analysis described hereinafter in the report, part of the areas will be joined under one name for the purpose of more appropriate analysis and conclusions.

TABLE 04
FUNDING AREA AND VALUE
Values expressed in EUR million ('000 000)

	Project area	Number of projects	PARTICIPATION IN PROJECT FUNDING/VALUE			
			Company	FITD	Total value	Average Participation*
1	IT	171	7.79	13.48	21.27	0.12 24%
2	Health and medicine	55	2.73	2.67	5.40	0.10 6%
3	Mechanical engineering	46	4.51	5.17	9.67	0.21 11%
4	Construction	42	3.28	2.81	6.09	0.14 7%
5	Technology	41	2.01	1.87	3.88	0.09 4%
6	Marketing and sales	41	1.21	1.13	2.34	0.06 3%
7	Textile and leather industry	37	2.33	2.64	4.97	0.13 6%
8	Agriculture	34	2.19	2.48	4.67	0.14 5%
9	Energy and energy sources	29	1.74	2.79	4.52	0.16 5%
10	Education	27	1.02	2.45	3.47	0.13 4%
11	Creative industry	26	1.20	1.44	2.64	0.10 3%
12	Catering	23	1.74	1.01	2.75	0.12 3%
13	Food processing	21	2.43	2.92	5.35	0.25 6%
14	Electronics	21	1.27	1.87	3.14	0.15 4%
15	Ecology	18	1.22	1.61	2.83	0.16 3%
16	Economy	8	0.18	0.27	0.45	0.06 1%
17	Furniture and wood processing	7	0.90	0.84	1.74	0.25 2%
18	Biochemistry	7	0.24	0.53	0.78	0.11 1%
19	Automotive industry	5	0.52	0.62	1.14	0.23 1%
20	Transport	4	0.14	0.34	0.47	0.12 1%
21	Pharmacy	2	0.01	0.06	0.07	0.04 0%
22	Engineering	2	0.32	0.31	0.63	0.31 1%
23	Veterinary medicine	1	0.01	0.02	0.03	0.03 0%
24	Biomedicine	1	0.04	0.10	0.14	0.14 0%
Total		669	39.03	49.43	88.47	100%
		Participation	44%	56%	100%	

***Note:** Participation is calculated as a ratio of the total value of the projects in particular area compared to the total value of the funded projects.

E. KEY FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES

The analysis of the key financial parameters will be done on the total number of companies without segmentation upon any basis whatsoever (*size, department, headcount, etc.*) in order to define the general realization of the co-funded companies. **The important conclusion is that the group of companies in 2020 year of crisis realized an increase in the revenues, expenditures, profit and headcount and increase of the average values accordingly. It is noticeable that the companies in the period between 2019-2020 show an increase of revenues by approximately 8%, increase of the expenditures by 7% and the profit by 21%, compared to the entire economy which decreased by -4.5%.**

According to the key indicators, the total revenues realized by 93 companies co-funded by FITD in 2017 are EUR 278 million, while 125 companies in 2020 realized revenues of EUR 417 million. On the other hand, in the same period the expenditures were EUR 252 million in 2017 and EUR 372 million in 2020. The profit of the companies increased from EUR 24 million to EUR 42 million in the period from 2017 to 2020. The headcount also increased in both groups (2017/18 – 2019/20). According to the data from the last two years, 125 companies employed 8,439 persons in 2020 for which EUR 77 million were allocated.

More suitable comparison and analysis of the trends in the timeframes can be done through the average values per employee and company. It is noticeable that the average for the indicators in the period 2017 – 2020 (parts 5 and 6) has different intensity. The most significant i.e. increase by 17% in the period 2020 – 2017 belongs to the profit of the companies, and then to the average revenues by 0% and the expenditures show decrease by -1%. There is a possibility the cost optimization, processes or the introduction of new product or innovation to affect the net profit. The positive indicator is that there is an increase of the revenues (and expenditures) and of the average expenses for employees per employee by 8% or from EUR 8,516 in 2017 to EUR 9,160 in 2020. In fact, the expenses for employees per employee increased by a higher percentage than the average revenues and expenditures which increased by 4% i.e. by 3%, which indicates that the companies invested more funds for employees than the increased average revenues from the same employees.

The general conclusion is that the companies which are part of the FITD portfolio show positive financial results upon all indicators, including increase of the headcount, revenues, profit, and expenditures in 2020 year of crisis. However, the increase of the average revenues and expenditures per employee falls behind the general increase, which indicates lower optimization of the human capital compared to other processes.

Note: The comparison of the *key indicators* is best reviewed/analyzed in two groups 2017–2018 and 2019–2020, since the number of companies is identical in those years. 2015/16 are left out from the analysis due to the low number of companies and the potential to distort the analysis and to lead to false conclusions.

TABLE 05
KEY FINANCIAL PERFORMANCES OF CO-FUNDED COMPANIES

1KEY INDICATORS	YEAR			
	2017	2018	2019	2020
1.1Total revenues	278,536,479	306,354,621	385,919,356	417,174,352
1.2Total expenditures	252,883,920	281,855,408	348,615,411	372,949,196
1.3Total profit	24,023,344	26,229,925	34,630,849	41,995,373
1.4Participation of expenditures in total revenues	91%	92%	90%	89%
1.5Total funding by FITD	803,908	19,668,554	15,377,305	112,231
1.6Expenses for the employees	50,057,058	54,673,872	71,731,507	77,301,880
1.7Headcount	5,876	6,202	8,231	8,439
2AVERAGE VALUES PER COMPANY	2017	2018	2019	2020
2.1Average revenues per company	1,039,315	1,143,114	962,392	1,040,335
2.2Average expenditures per company	943,597	1,051,699	869,365	930,048
2.3Average profit per company	89,639	97,873	86,361	104,727
2.4Average headcount per company	22	23	21	21
3AVERAGE VALUES PER EMPLOYEE	2017	2018	2019	2020
3.1Average revenues per employee	47,402	49,396	46,886	49,434
3.2Average expenditures per employee	43,037	45,446	42,354	44,194
Average expenses for the employees per employee	8,519	8,816	8,715	9,160
4ADDITIONAL INDICATORS	2017	2018	2019	2020
Participation of expenditures for employees in				
4.1total revenues	18%	18%	19%	19%
Participation of expenditures for employees in				
4.2total expenditures	20%	19%	21%	21%
4.3Net profit margin	9%	9%	9%	10%
5 AVERAGE INCREASE/DECREASE PER COMPANY	2020/2017*			
5.1 Average revenues per company	0%			
5.2Average expenditures per company	-1%			
5.3Average profit per company	17%			
5.4Average headcount per company	-4%			
6 AVERAGE INCREASE/DECREASE PER EMPLOYEE	2020/2017*			
6.1 Average revenues per employee	4%			
6.2Average expenditures per employee	3%			
6.3 Average expenses for employees per employee	8%			

Note: The increase/decrease is calculated as a ratio between the values for 2020 and 2017, whereby 2017 is the base year (n). The calculation is $((n+3)/n)-1 \times 100$.

E1. FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND SIZE

The second part analyzes the performance of the companies according to their size in the year of funding, year before funding and up to two years after funding. The first group of enterprises without employees is integrated with the second group of micro enterprises (1-9 employees), because after the funding they employ minimum 1 person, and by doing so they are transferred in the second group, and therefore it is not possible to analyze their performance if they are analyzed as companies without employees. In the large enterprises segment (250+ employees) there is only one company, which leaves no possibility to analyze this segment. In fact, the company is exempted from all further analyzes because it significantly changes the entire picture of the instruments and programmes through which it was funded.

Most of the funding is aimed at micro enterprises (including ones without employees) with funding value of EUR 25.43 million of which FITD co-funds EUR 15.52 million, while the remaining EUR 9.91 million are funded by the companies. The average value of these projects is EUR 90,000. Most of the projects in small enterprises are co-funded i.e. 317 projects with total value of EUR 20.96 million and average value per project of approximately EUR 70,000. Medium and large enterprises participate with the total of 61 projects and total value of approximately EUR 10,5 million and average project value between EUR 120,000 – 180,000.

TABLE 06

Projects according to the size of the enterprises
Values expressed in EUR million ('000 000)

Project activity/area	FUNDING				
	Total projects	Total value	Company	FITR	Average value
Micro enterprise	291	25.43	9.91	15.52	0.09
Small enterprise	317	20.96	10.18	10.78	0.07
Medium enterprise	54	9.73	5.52	4.21	0.18
Large enterprise	7	0.82	0.28	0.53	0.12

E1.1 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND SIZE: ENTERPRISES WITHOUT EMPLOYEES AND MICRO ENTERPRISES

The first analyzed group according to size are enterprises without employees or micro enterprises consisting of up to 9 employees. Even though these are two categories, both combined are analyzed, since enterprises without employees during the first employment are transferred into the other group which complicates their individual analysis. In the year of funding, the total of 280 projects are funded with value of EUR 31.85 million, of which EUR 19.77 million are co-funded by FITD, while the other EUR 12.08 million are funded by the companies. The total investment in the projects (EUR 31.85 million) in the total revenues realized by the medium-sized enterprises participates with 105.88%.

In general, it can be concluded from the financial data that the performance of the analyzed companies shows improvement in the years before funding and two years after funding the project. The average revenues per company increased by 14% from EUR 114,024 to EUR 130,111, while the average expenditures have identical increase by 14% between EUR 106,149 and EUR 121,176. The average profit increased by 38% i.e. from EUR 9,070 to EUR 12,529. In the group of enterprises without employees and micro enterprises it is expected the risk to be higher, which means that the companies experienced loss. The net profit of the entire segment (profit - loss) is positive which implies that the companies show positive result in general.

With regards to the average values, several conclusions can be made. The average expense for the employees and the headcount increased in the analyzed period. The average expenses for the employees increased from EUR 15,504 to EUR 27,280 or by 76%, while the headcount increased from 2,46 to 3,63 or by 48%. Considering the fact that enterprises without employees and micro enterprises (up to 9 employees) are being analyzed, the increase of 1.5 employees per company is significant. On the other hand, the average revenues, expenditures and profit per employee decreased, i.e. the revenues and expenditures decreased by -23% and the profit by -6%.

Except for the increase of the average headcount, there is also an increase of the average expenses for employees per employee from EUR 6,297 to EUR 7,509 and of the average (monthly) net salary per employee of EUR 355 to EUR 423. The participation of expenses for the employees in the total revenues and expenditures also increased from 14% to 21% (revenues), i.e. from 15% to 23% (expenditures). Apart from the decreased profitability at employee level, the net profit margin is stable between 8% - 10% in the analyzed period.

Consultation conclusion: Quite probably it could be expected that in the future the companies will continue to grow upon all indicators and stabilize their average profit and expenditures per employee. At the same time, the salaries of the current employees will increase, as well as the participation of the expenses for the employees in the total revenues and expenditures of the companies.

TABLE 07
AVERAGE VALUES OF KEY FINANCIAL INDICATORS
SIZE: Enterprises without employees and micro enterprises
Values expressed in EUR

Enterprises without employees and micro companies 0 – 9 employees	Year before funding n-1	Year of funding n	Year after funding n+1	2 years after funding n+2	% increase $[(n+2)/(n-1)-1]*100]$
1 Average revenues	114,024	107,427	126,922	130,111	14%
2 Average expenditures	106,149	100,368	114,663	121,176	14%
3 Average profit	9,070	7,968	14,123	12,529	38%
4 Average loss	2,144	1,560	2,938	4,658	117%
5 Participation of expenditures in total revenues	93%	93%	90%	93%	
6 Average expenses for the employees	15,504	15,160	22,732	27,280	76%
7 Average headcount	2.46	2.58	3.48	3.63	48%
8 Average income per employee	46,314	41,604	36,473	35,813	-23%
9 Average expenditures per employee	43,116	38,870	32,950	33,353	-23%
10 Average profit per employee	3,684	3,086	4,058	3,449	-6%
11 Average expenses for employees per employee	6,297	5,871	6,532	7,509	19%
12 Average (monthly) net salary per employee	355	331	368	423	19%
13 Participation of expenditures for employees in the average revenues	14%	14%	18%	21%	
14 Participation of expenditures for employees in the average expenditures	15%	15%	20%	23%	
15 Net profit margin	8%	7%	11%	10%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last "2 years after funding" and the first "year before funding" i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E1.2 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND SIZE: SMALL ENTERPRISES

The second group are small enterprises with 10 – 50 employees, with projects in total value of EUR 20,96 million of which EUR 10.78 million are co-funded by FITD and EUR 10.18 million are co-funded by the companies. The participation of total investments (20,96) in the total revenues of small enterprises (EUR 87,71 million) is 23,89% and is significantly higher compared to the investments in Research and Development at the level of the entire economy of 0.40%.

Unlike the other two groups analyzed according to their size, small enterprises have quite variable performance analyzed according to the financial indicators. In general, it can be concluded that the companies are stagnant, but considering the average values per company (and employee) from the total values, it is expected that part of them have significantly better result compared to others in the same segment. **If analyzed according to the profit margin and the participation of expenses for employees in the average revenues/growth, and the decrease of the revenues followed by decrease of expenditures with simultaneous significant increase of the net profit, it can be concluded that the companies have continuous and positive performance in general.**

The average revenues per company show a decrease of –7% from EUR 1,01 million to EUR 0.94 million in the period between the first and the fourth year, and simultaneous decrease in expenditures of –10% from EUR 0.93 million to EUR 0,83 million. As a result, the average profit per company increased by 33% from EUR 80,363 to EUR 106,584.

The average expenditures for the employees show a decrease of -3% (*compared to -10% of the average expenditures*), which indicates that the general decrease of the expenditures is not due to the decrease of salaries or employees, but quite probably due to optimization of other processes in the companies. The average number of 24 employees is almost identical for all four years. Also, the average expenses for the employees per employees and the (monthly) net salary is aligned with decrease of -1% or from EUR 430 to EUR 424 in the analyzed period.

To confirm the previous conclusion with regards to the general performance of the small enterprises, the average profit per employee is increased by 34% i.e. from EUR 3,310 to EUR 4,451 in the period between the first and the third year. The net profit margin also increased from 8% to 11%.

TABLE 08
AVERAGE VALUES OF KEY FINANCIAL INDICATORS
SIZE: Small enterprises
Values expressed in EUR

Small enterprises 10 – 50 enterprises	Year before funding	Year of funding	Year after funding	% increase
	n-1	n	n+1	[(n+1)/(n-1)*100]
1 Average revenues	1,015,274	963,897	943,894	-7%
2 Average expenditures	930,501	868,290	833,405	-10%
3 Average profit	80,363	90,249	106,584	33%
4 Average loss	4,270	2,459	5,313	24%
5 Participation of expenditures in total revenues	92%	90%	88%	
6 Average expenses for the employees	185,247	169,094	180,117	-3%
7 Average headcount	24.28	24.11	23.95	-1%
8 Average income per employee	41,822	39,979	39,417	-6%
9 Average expenditures per employee	38,330	36,014	34,803	-9%
10 Average profit per employee	3,310	3,743	4,451	34%
11 Average expenses for employees per employee	7,631	7,013	7,522	-1%
12 Average (monthly) net salary per employee	430	395	424	-1%
13 Participation of expenditures for employees in the average revenues	18%	18%	19%	
14 Participation of expenditures for employees in the average expenditures	20%	19%	22%	
15 Net profit margin	8%	9%	11%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last “1 year after funding” and the first “year before funding” i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E1.3 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND SIZE: MEDIUM-SIZED ENTERPRISES

The third and last analyzed group according to the size are medium-sized enterprises with total headcount between 50 and 250. Usually, these companies have established business model and experience in the specified areas which can be seen from their financial performance. The total financial project value in medium-sized companies is EUR 9.73 of which EUR 4.21 million are co-funded by FITD, while the most part or EUR 5.52 million are co-funded by the companies. The total investment in projects (EUR 9.73 million) in the total revenues realized by medium-sized companies (EUR 106.50 million) participates with 9.14%.

Medium-sized companies show growth upon all financial indicators in the 4 analyzed years. The average revenues increased by 25% or from EUR 3,65 million to EUR 4,54 million, the average expenditures show approximately the same increase by 24% or between EUR 3,38 million to EUR 4,19 million in the same period. The average profit increased from EUR 238,477 to EUR 327,094 or by 37%. The average loss of approximately EUR 4,400 is significantly lower than the average profit, thus concluding that at segment level the companies realize positive performances.

The average expenses for employees increased by 33% i.e. between EUR 712.155 and EUR 944.511. Several conclusions can be made with regards to the indicators per employee. The average number of employees is almost even in the analyzed period with increase by 2% (2 employees); however, the average expense for employee and the average (monthly) net salary per employee is increased by 31%. This indicates that apart from the low number of new (additional) employments, the employees in medium-sized enterprises had higher salary by 1/3 for the period of 4 years in average. The average (monthly) net salary increases from EUR 348 to EUR 455, while the average expense for employees per employee increases from EUR 6,186 to EUR 8,073.

The expenditures for employees in the average revenues are stable between 19% - 21%, while the participation in the average expenditures is between 21% - 23% in the same period. The further increase of the revenues will contribute to additional increase of the salaries of the current employees with lower percentage of new employments. The net profit margin is between 5%-7%, even though the average profit in absolute amount in the same period increased by 37% from EUR 238.000 to EUR 327.000.

The general performance of the medium-sized companies according to the financial indicators is positive and stable. Considering the fact that the financial data also refer to the 2020 year of crisis, the majority of the companies have significantly higher results compared to the economy in its entirety.

TABLE 09
AVERAGE VALUES OF THE KEY FINANCIAL INDICATORS
SIZE: Medium-sized enterprises
Values expressed in EUR

Medium-sized enterprises 50 – 250 employees	Year before funding n-1	Year of funding n	Year after funding n+1	2 years after funding n+2	% increase [(n+2)/(n-1)*100]
1 Average revenues	3,653,953	3,672,399	4,077,358	4,549,521	25%
2 Average expenditures	3,383,700	3,598,786	3,776,879	4,197,706	24%
3 Average profit	238,477	173,797	277,789	327,094	37%
4 Average loss	3,945	115,031	2,327	4,392	11%
5 Participation of expenditures in total revenues	93%	98%	93%	92%	
6 Average expenses for the employees	712,155	732,772	758,960	944,511	33%
7 Average headcount	115.13	112.14	106.41	117.00	2%
8 Average income per employee	31,738	32,749	38,317	38,885	23%
9 Average expenditures per employee	29,390	32,092	35,493	35,878	22%
10 Average profit per employee	2,071	1,550	2,611	2,796	35%
11 Average expenses for employees per employee	6,186	6,535	7,132	8,073	31%
12 Average (monthly) net salary per employee	348	368	402	455	31%
13 Participation of expenditures for employees in the average revenues	19%	20%	19%	21%	
14 Participation of expenditures for employees in the average expenditures	21%	20%	20%	23%	
15 Net profit margin	7%	5%	7%	7%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last "2 years after funding" and the first "year before funding" i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E2. FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND FUNDING PROGRAMME

The first analysis refers to the Programmes for funding company projects. In general, all projects are funded by two Programmes, the first one is the Plan for Economic Growth of the Government of Republic of North Macedonia and the second one is from the World Bank. The third Programme joins the previous two. Therefore, the separated Programmes will be analyzed in order to give the possibility to make proper conclusions for the performances of the companies.

As specified in the beginning of this report, the total of 669 projects are funded, of which 398 (59%) are funded by the Plan for Economic Growth (PEG) with total value of EUR 55.80 million (*including the funding of the companies themselves*). The Programme funds wide range of projects in different areas, size of companies and instruments. Therefore, the companies have significantly different performances compared to the second Programme. The total of 191 projects (29%) are funded through the second i.e. World Bank (SDIS) Programme with total project value of EUR 12,99 million. "Start-Up/Spin-Off" companies or projects in the domain of IT or advanced technology are usually funded with this Programme.

The total of 80 projects (12%) are funded with the combined Programme WB SDIS/PEG with total value of EUR 19,68 million.

CHART 05

Number of funded projects based on the Programme

Period: 2016 – 2021

Total projects: 669

Values expressed in EUR million ('000 000)



E2.1 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND “PLAN FOR ECONOMIC GROWTH” PROGRAMME

First of all, the general performance of the companies needs to be analyzed according to the programme through which they are funded. FITD is the bearer of the third pillar of the Plan for economic growth adopted by the Government of Republic of North Macedonia. The total of 398 were funded through the Programme with total value of EUR 55.80 million. 74 companies were co-funded for different instruments through the same Programme.

The following conclusions can be made from the analyzed financial parameters. The average revenues increased by 24% or from EUR 1,77 million to EUR 2,20 million in the period of one year before funding and two years after funding. Within the same timeframe, the average expenditures increased by 23% or from EUR 1,61 million to EUR 1,97 million. The loss (1 to 2) of the companies is significantly lower in absolute amounts with regards to the realized positive financial result. The profit in the analyzed period is increased from EUR 154,000 to EUR 214,400 or by 38% in the period between the year before funding and two years after funding .

The average expenses for the company employees increased by approximately 30% or from EUR 313,471 to EUR 406,6797. Simultaneously the average number of the headcount also increased by 11% or from 35.67 to 39.66 employees. The actual decrease of the salaries, i.e. the increase of the average expense for the employees per employee is 17%, from EUR 8,776 to EUR 10,254. The average net salary per employee increased (also by 17% same as the gross expense) from EUR 494 to EUR 577 in the analyzed period. The expenditures for the employees participate with 17/18% in the average revenues, i.e. with 18/21% in the average expenditures of the companies. The participation confirms the fact that the funded projects are in industries which are intensive in terms of capital. There is a possibility when the revenue (*and expenditures*) of the companies increase, the salaries of the current employees will also increase with higher intensity , compared to the average increase of new employees, even though in absolute values (4 employments in average/companies) the increase is higher than in the companies funded through WB SDIS Programme (2 employments in average/company).

The general conclusion is that the companies show significant improvement in their operation upon all analyzed criteria after the first year of the investment i.e. co-funding of the project. The loss of the companies compared to their profit is insignificant (*EUR 214,937 profit compared to EUR 4,977 loss*) which indicates that the companies funded via the “Plan for economic growth” have stable business models and revenues. There is a high probability that the majority of the companies funded through the analyzed Programme will continue to growth in the future as well.

TABLE 10
AVERAGE VALUES OF KEY FINANCIAL INDICATORS
INSTRUMENT: “Plan for economic growth”
Values expressed in EUR

Plan for economic growth	Year before funding n-1	Year of funding n	Year after funding n+1	2 years after funding n+2	% increase [(n+2)/(n-1)*100]
1 Average revenues	1,777,342	1,630,708	1,784,452	2,205,796	24%
2 Average expenditures	1,612,064	1,508,012	1,604,472	1,976,568	23%
3 Average profit	153,938	132,019	166,414	214,387	39%
4 Average loss	3,601	19,759	3,604	4,977	38%
5 Participation of expenditures in total revenues	91%	92%	90%	90%	
6 Average expenses for the employees	313,020	277,452	312,807	406,697	30%
7 Average headcount	35.67	33.60	35.02	39.66	11%
8 Average income per employee	49,828	48,535	50,953	55,615	12%
9 Average expenditures per employee	45,195	44,883	45,814	49,836	10%
10 Average profit per employee	4,316	3,929	4,752	5,405	25%
11 Average expenses for employees per employee	8,776	8,258	8,932	10,254	17%
12 Average (monthly) net salary per employee	494	465	503	577	17%
13 the average revenues	18%	17%	18%	18%	
14 the average expenditures	19%	18%	19%	21%	
15 Net profit margin	9%	8%	9%	10%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last “2 years after funding” and the first “year before funding” i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E2.2 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND “WORLD BANK SDIS” PROGRAMME

World Bank (WB SDIS) Programme is the second programme through which funds are obtained for the instruments. 191 projects were funded so far with this Programme in total amount of EUR 12,99 million.

The average revenues realized by the companies co-funded via this Programme increased by 96% or from EUR 43,113 to EUR 84,708 in the period of one year before funding and two years after funding. The expenditures on the other hand show more intensive increase by 114% or from EUR 36,061 to EUR 77,048 in the same period. The companies realize average profit between EUR 7,604 and EUR 10,892 with increase by 43%, as well as loss with increased average from EUR 1,367 to EUR 4,368. Regardless of the fact that part of the companies reported loss, the net value of the Programme is entirely positive, since the profit realized by the companies increased twofold compared to the loss in absolute analyzed values.

The following conclusions can be made with regards to the average values per employee. The average number of employees increased from 2.10 to approximately 4.00. The average expenses for employees show significant increase by 134% i.e. from EUR 13,061 in the year before funding to EUR 30,586 two years after funding. On the other hand, the average revenues per employee stagnate in the same period, even though they show a decrease in the year of funding and one year after funding, but they return to the approximately same level as the one before the project with increase by 4%. The average expenses for employees per employee (11) increased by 24% from EUR 6,206 to EUR 7,669, while the average (monthly) net salary is between EUR 349 and 432. The only negative increase in the analyzed period is the average profit per employee of -24%, i.e. from EUR 3,613 to EUR 2,731 in the 4-year period.

It is noticeable that the participation of the expenditures for employees in the average revenues increases from the first to the last year, while the average expenditures have similar value and at the same time there is a decrease of the average profit between the first and the last year of -24%. This indicates that the salaries for the employees increase with bigger intensity compared to the revenues of the companies and their profit, while they keep the participation of 40% at the level of the average expenditures.

The value of the financial indicators: (average) revenues, expenditures, profit or loss, as well as the average expenses for the employees per employee correspond to the ones analyzed in the “Start-Up/Spin-Off” instrument. This indicates that “Start-Up” businesses are primarily funded with the WB SDIS Programme, i.e. the majority of which are without employees or micro enterprises.

TABLE 11
AVERAGE VALUES OF KEY FINANCIAL INDICATORS
INSTRUMENT: “World Bank SDIS”
Values expressed in EUR

World Bank SDIS	Year before funding n-1	Year of funding n	Year after funding n+1	2 years after funding n+2	% increase [(n+2)/(n-1)*100]
1 Average revenues	43,113	48,289	72,067	84,708	96%
2 Average expenditures	36,061	42,558	61,231	77,048	114%
3 Average profit	7,604	6,162	12,803	10,892	43%
4 Average loss	1,367	1,002	3,035	4,368	219%
5 Participation of expenditures in total revenues	84%	88%	85%	91%	
6 Average expenses for the employees	13,061	16,631	24,338	30,586	134%
7 Average headcount	2.10	2.92	4.28	3.99	89%
8 Average income per employee	20,485	16,536	16,847	21,240	4%
9 Average expenditures per employee	17,134	14,573	14,314	19,319	13%
10 Average profit per employee	3,613	2,110	2,993	2,731	-24%
11 Average expenses for employees per employee	6,206	5,695	5,689	7,669	24%
12 Average (monthly) net salary per employee	349	321	320	432	24%
13 Participation of expenditures for employees in the average revenues	30%	34%	34%	36%	
14 Participation of expenditures for employees in the average expenditures	36%	39%	40%	40%	
15 Net profit margin	18%	13%	18%	13%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last “2 years after funding” and the first “year before funding” i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E3. FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND USED INSTRUMENT

The current part analyzes instruments through which projects were funded. For the purpose of simplifying the analysis and obtaining relevant results, all instruments for Technology Development and Technology Development (fast track) are joined under one general instrument and analyzed as such in the report.

According to the basic data on the instruments, most of the projects are funded in the "Start-Up/Spin-Off" area i.e. 171 projects, but with significantly lower value compared to the remaining EUR 6.17 million, of which 4.73 were co-funded by FITD and the other from the companies with average value per project of approximately EUR 36,000.

In terms of value, the highest funds were allocated for "Improvement of innovation" instrument or EUR 21.63 million for 103 projects with average value of EUR 197,000 per project. Out of those funds, EUR 14.54 million are co-funded by FITD, while the remaining EUR 7.08 million are funded by the companies. The second most valuable instrument is "Commercialization of Innovations" with EUR 21.27 million allocated for 93 projects and average value of EUR 229,000 per project.

Note: 3 accelerators are not analyzed with this report, since different data and structure of the report itself are necessary.

TABLE 12

Analyzed instruments

Values expressed in EUR million (' 000 000)

Instrument	FUNDING				
	Total projects	Total value	Company	FITR	Average value
Start-up/Spin-off	171	6.17	1.44	4.73	0.036
Improvement of Innovation	110	21.63	7.08	14.54	0.197
Technology development for economic growth	103	11.01	5.29	5.72	0.107
Commercialization	93	21.27	7.09	14.18	0.229
Technology development COVID19	92	2.68	1.04	1.64	0.029
Technology development	36	6.15	4.37	1.78	0.171
Technology development (fast track)	32	7.11	5.01	2.10	0.222
Technology extension	4	3.23	1.83	1.40	0.808
Business Accelerator	3	1.99	0.55	1.44	0.665

E3.1 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR OF FUNDING AND “START-UP/SPIN-OFF” INSTRUMENT

The previous analysis of the key financial indicators analyzed the general status of all companies co-funded by FITD. The detailed analysis should ensure making conclusions for the performance of the companies according to their size and the used instrument with special emphasis on “Start-Up/Spin Off” in the period of one year before funding and up to two years after funding (4 years). According to the size, these companies are often without employees or micro companies (1-10 employees), which can be concluded according to the average number of employees which varies from 1.75 to 3.83 employees

The following conclusions can be made from the analyzed financial parameters. The average revenues increased by 197% or from EUR 23,906 to EUR 70,903 in the period of one year before funding and two years after funding. Within the same timeframe, the average expenditures increased by 220% or from EUR 20,253 to EUR 64,746. Part of the co-funded companies show loss from the operation in any of the analyzed years; however, on instrument level the increased profit exceeds the loss of the companies. The general conclusion is that the company show significant improvement in their operation upon all analyzed criteria after the first year of investment i.e. co-funding of the project. There is a high probability that the majority of the companies that use the analyzed instrument will continue to growth in the future as well.

The average expenses for the company employees increased by approximately 200% or from EUR 9,464 to EUR 28,308, but at the same time, the average headcount also increased by 119% or from 1.75 to 3.83 employees. The actual increase of salaries i.e. the increase of the average expense for the employees per employee is by 37% or from EUR 5,398 to EUR 7,385. The only criterion that shows decrease in the analyzed companies from “Start-Up/Spin-Off” instrument by -6% is the average profit per employee, i.e. shows decrease from EUR 2,637 to EUR 2,512 apart from the increase of the average profit by 105%.

The high participation of the expenditures for the employees in the revenues with 40% and expenditures with 44% (2 years after funding) indicates that in the companies that used “Start-Up/Spin-Off” instrument, the employees are the main capital and that they are service oriented. Furthermore, apart from the significant increase of the revenues and expenditure, the expenses for the employees are constant between 38% - 40% in the revenues and 42%-47% in expenditures. There is a high probability that the additional increase of the workload i.e. revenues, expenses for the employees, headcount and the salaries of the employees will increase (items 8 and 11) and will keep the same participation in the revenues and the expenditures as before (items 13 and 14).

Note: In the year of funding, 44% (66) companies that used “Start-Up/Spin-Off” instrument were without employees.

TABLE 13
AVERAGE VALUES OF KEY FINANCIAL INDICATORS
INSTRUMENT: “Start-Up/Spin-off”
Values are expressed in EUR

Start-up/Spin-off	Year before funding n-1	Year of funding n	Year after funding n+1	2 years after funding n+2	% increase $[(n+2)/(n-1)*100]$
1 Average revenues	23,906	39,656	62,185	70,903	197%
2 Average expenditures	20,253	35,124	53,594	64,746	220%
3 Average profit	4,686	5,062	11,061	9,630	105%
4 Average loss	1,485	961	3,248	4,554	205%
5 Participation of expenditures in total revenues	85%	89%	86%	91%	
6 Average expenses for the employees	9,464	14,892	23,520	28,309	199%
7 Average headcount	1.75	2.81	4.23	3.83	119%
8 Average income per employee	13,634	14,096	14,707	18,496	36%
9 Average expenditures per employee	11,551	12,485	12,675	16,890	46%
10 Average profit per employee	5,398	5,293	5,563	7,385	37%
11 Average expenses for employees per employee	304	298	313	416	37%
12 Average (monthly) net salary per employee	2,673	1,799	2,616	2,512	-6%
13 Participation of expenditures for employees in the average revenues	40%	38%	38%	40%	
14 Participation of expenditures for employees in the average expenditures	47%	42%	44%	44%	
15 Net profit margin	20%	13%	18%	14%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last “2 years after funding” and the first “year before funding” i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E3.2 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR OF FUNDING AND “IMPROVEMENT OF INNOVATION” INSTRUMENT

“Improvement of innovation” is the second instrument through which 110 project are co-funded in total amount of EUR 21.63 million. The instrument is used by companies of different size (*micro, small, medium and large*) and in different industrial sectors and is intended for promotion of the already existing innovations.

The following conclusions can be made from the analyzed financial parameters. The average revenues increased by 27% or from EUR 1,95 million to EUR 2,49 million in the period of one year before funding and two years after funding. Within the same timeframe, the average expenditures increased by 26% or from EUR 1,76 million to EUR 2,22 million. Part of the co-funded companies show loss from the operation in any of the analyzed years; however, on instrument level the increased profit exceeds the loss of the companies, which is significantly lower compared to the profit. The profit in the analyzed period increased from EUR 175,000 to EUR 250,134 or by 40% between the year before funding and two years after funding.

The average expenses for the company employees increased by approximately 32% or from EUR 353,471 to EUR 466,257. At the same time, the average headcount also increased by 12% or from 38.26 to 42.90 employees. The actual increase of salaries i.e. the increase of the average expense for the employees per employee is by 18% from EUR 9,239 to EUR 10,867. The average (monthly) net salary per employee also increased from EUR 520 to EUR 612 per employee in the analyzed period.

The expenditures for employees participate with 18% in the average revenues, i.e. 20% in the average expenditures of the companies. The participation confirms the fact that the funded projects are in industries which are intensive in terms of capital. There is a possibility when the revenue (*and expenditures*) of the companies increase, the salaries of the current employees will also increase with higher intensity compared to the average increase of new employees. This is expected, since the users of “Improvement of innovations” are companies which often have established business and potential for increase of the salaries of the current employees.

The general conclusion is that the companies show significant improvement in their operation upon all analyzed criteria in the first year of the investment i.e. co-funding of the project. There is a high probability that the majority of the companies that use the analyzed instrument will continue to growth in the future as well.

TABLE 14
AVERAGE VALUES OF KEY FINANCIAL INDICATORS
INSTRUMENT: “Improvement of Innovation”
Values expressed in EUR

Improvement of Innovation	Year before funding n-1	Year of funding n	Year after funding n+1	2 years after funding n+2	% increase [(n+2)/(n-1)*100]
1 Average revenues	1,956,744	2,167,359	2,363,708	2,490,403	27%
2 Average expenditures	1,764,619	1,993,616	2,112,905	2,222,910	26%
3 Average profit	178,506	191,950	228,227	250,134	40%
4 Average loss	3,807	33,409	3,038	5,725	50%
5 Participation of expenditures in total revenues	90%	92%	89%	89%	
6 Average expenses for the employees	353,471	382,299	438,147	466,257	32%
7 Average headcount	38.26	40.27	42.07	42.90	12%
8 Average income per employee	51,147	53,825	56,190	58,045	13%
9 Average expenditures per employee	46,125	49,510	50,228	51,810	12%
10 Average profit per employee	4,666	4,767	5,425	5,830	25%
11 Average expenses for employees per employee	9,239	9,494	10,416	10,867	18%
12 Average (monthly) net salary per employee	520	535	586	612	18%
13 Participation of expenditures for employees in the average revenues	18%	18%	19%	19%	
14 Participation of expenditures for employees in the average expenditures	20%	19%	21%	21%	
15 Net profit margin	9%	9%	10%	10%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last “2 years after funding” and the first “year before funding” i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E3.3 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR OF FUNDING AND “COMMERCIALIZATION” INSTRUMENT

93 projects for innovations were co-funded via the “Commercialization” instrument, in total amount of EUR 21.27 million. The instrument is used by companies of different size (*micro, small, medium and large*) in different industrial sectors and is intended for promotion of the already existing innovations.

Note: 3 years (instead of 4) will be subject to analysis, since the number of companies with financial data for “two years after funding” (funded in 2019/20) is small and there is a possibility not to show the actual picture.

The following conclusions can be made from the analyzed financial parameters. The average revenues increased by 19% or from EUR 0,82 million to EUR 0,98 million in the period of one year before funding and one year after funding. Within the same timeframe the average expenditures increased by 14%, or from EUR 0,75 million to EUR 0,86 million. Part of the co-funded companies show loss from the operation in any of the analyzed years; however, on instrument level the increased profit exceeds the loss of the companies, which is significantly lower compared to the profit. The profit in the analyzed period increased from EUR 65,066 to EUR 111,252 or by 71% between the year before funding and one year after funding.

The average expenses for the company employees increased by approximately 19% or from EUR 162.597 to EUR 193.007. At the same time, the average headcount also increased by 6% or from 19.00 to 20.08 employees. The actual increase of salaries i.e. the increase of the average expense for the employees per employee is by 12% i.e. from EUR 8,558 to EUR 9,610, while the average net salary per employee increased from EUR 482 to EUR 541. It is noticeable that the average increase of the headcount (6%) is lower than the increase of the average expense for the employees per employee (12%), which indicates that part of the current employees received higher salaries in the analyzed period.

The expenditures for employees participate with 20% in the average revenues, i.e. 21/2% in the average expenditures of the companies. The participation confirms the fact that the funded projects are in industries which are intensive in terms of capital. There is a possibility when the revenue (*and expenditures*) of the companies increase, the salaries of the current employees will also increase with higher intensity compared to the average increase of new employees. This is expected, since the users of “Improvement of innovations” are companies which often have established business and potential for increase of the salaries of the current employees.

TABLE 15
AVERAGE VALUES OF THE KEY FINANCIAL INDICATORS
INSTRUMENT: “Commercialization”
Values expressed in EUR

Commercialization	Year before funding	Year of funding	Year after funding	% increase
	n-1	n	n+1	[(n+1)/(n-1)*100]
1 Average revenues	828,365	887,640	982,368	19%
2 Average expenditures	758,688	800,835	864,487	14%
3 Average profit	65,066	81,438	111,252	71%
4 Average loss	2,987	2,621	3,677	23%
5 Participation of expenditures in total revenues	92%	90%	88%	
6 Average expenses for the employees	162,597	177,252	193,007	19%
7 Average headcount	19.00	20.32	20.08	6%
8 Average income per employee	43,598	43,679	48,911	12%
9 Average expenditures per employee	39,931	39,407	43,042	8%
10 Average profit per employee	3,425	4,007	5,539	62%
11 Average expenses for employees per employee	8,558	8,722	9,610	12%
12 Average (monthly) net salary per employee	482	491	541	12%
13 Participation of expenditures for employees in the average revenues	20%	20%	20%	
14 Participation of expenditures for employees in the average expenditures	21%	22%	22%	
15 Net profit margin	8%	9%	11%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last “1 year after funding” and the first “year before funding” i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E3.4 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR OF FUNDING AND “TECHNOLOGY DEVELOPMENT” INSTRUMENT

The last instrument cumulates data on companies from “Technology development”, “Technology development for economic growth”, “Technology development (fast-track)” and “Technology Extension” instrument in order to ensure more suitable analysis of the companies. “Technology development COVID-19” instrument is independently analyzed, because there are no financial data on the companies which allow preparation of a trend or detailed analysis. The total funds allocated “Technology development” instrument amount in EUR 30.18 million for the total of 267 projects. The current instruments are used by companies in different industries and with different size, which also affects the general performance on instrument level.

According to the financial indicators, there are several noticeable specifics for the companies that used the instrument. The total revenues of the companies shows decrease in the year of funding, but compared with the three years, there is no change (insignificant increase) from EUR 919,288 to EUR 923,351. It is almost identical for expenditures showing decrease by -1% or from EUR 896,685 to EUR 860,534 in the same period. Unlike them, the average profit shows increase by 33% or from EUR 47,989 to EUR 63,778. Part of the companies have loss from their operation, but such loss is significantly lower than the profit, which indicates that the net performance of the department is positive. Even though the profit increased by 1/3, the net profit margin is low in the 5%-7% range.

From the aspect of indicators per employee, the average expenses per employee show insignificant increase by 3% or from EUR 128,413 to EUR 131,900. Also, the average number of employees, the average revenues and expenditures per employee remains the same, and only the profit per employee shows increase by 33%. The participation of expenses related to the employees in the monthly revenues and expenditures is between 14% i.e. 15%. The average (monthly) net salary of the companies is between EUR 324 – 333.

The general conclusion with regards to the companies users of “Technology development” instrument is that they have kept the level of revenues and expenditures without any significant changes or increase upon the financial indicators. However, considering that part of the instruments were used during the pandemic in 2020, the revenues, salaries and headcount were kept on identical level as before the crisis.

TABLE 16
AVERAGE VALUES OF THE KEY FINANCIAL INDICATORS
INSTRUMENT: “Technology Development”
Values expressed in EUR

Technology Development	Year before funding	Year of funding	Year after funding	% increase
	n-1	n	n+1	$[(n+1)/(n-1)*100]$
1 Average revenues	919,288	866,250	923,351	0%
2 Average expenditures	869,685	811,995	860,534	-1%
3 Average profit	47,989	53,257	63,778	33%
4 Average loss	2,440	3,418	5,880	141%
5 Participation of expenditures in total revenues	95%	94%	93%	
6 Average expenses for the employees	128,413	123,284	131,900	3%
7 Average headcount	22.29	21.28	22.31	0%
8 Average income per employee	41,250	40,712	41,378	0%
9 Average expenditures per employee	39,024	38,162	38,563	-1%
10 Average profit per employee	2,153	2,503	2,858	33%
11 Average expenses for employees per employee	5,762	5,794	5,911	3%
12 Average (monthly) net salary per employee	324	326	333	3%
13 Participation of expenditures for employees in the average revenues	14%	14%	14%	
14 Participation of expenditures for employees in the average expenditures	15%	15%	15%	
15 Net profit margin	5%	6%	7%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last “1 year after funding” and the first “year before funding” i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E4. FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND PROJECT SEGMENT

The current part elaborates 7 representative areas (segments) of co-funded projects with higher number of projects and lower dispersion of company performances which ensures proper analysis. The areas of IT, Mechanical Engineering, Energy and Energy Sources, Medicine and Pharmacy, Electronics and Technology, Construction and Engineering, and Agriculture have been analyzed.

Furthermore, the activities/segments with highest number of projects which ensured making of proper conclusions with regards to their performance were analyzed as well. 6 segments were elaborated and integrate multiple project activities. For the purpose of ensuring bigger data precision , large and medium-sized enterprises will be excluded from the analysis, because an enterprise with small number of projects may significantly affect the entire result and increase the values *(and the number of large enterprises is insignificant compared to the micro and small enterprises)*.

The number of analyzed companies (financial statements) and the number of projects in the activities, instruments, projects or the size varies due to the period in which the funds were obtained. For example, if the project was approved in 2021, there is no possibility to prepare financial analysis of the company performance prior and after receiving the funds. However, the same project will be included in the total funded amount in the relevant segment when the general data are presented.

TABLE 17

Analyzed departments and key parameters
Values in EUR million ('000 000)

Project activity/area	FUNDING				
	Total projects	Total value	Company	FITR	Average value
IT (link)	171	21.27	7.79	13.48	0.12
Mechanical Engineering (link)	46	9.67	4.51	5.17	0.21
Energy and Energy Sources (link)	29	4.52	1.74	2.79	0.16
Medicine and Pharmacy (link)	65	6.39	3.03	3.36	0.10
Electronics and Technology (link)	62	7.03	3.28	3.74	0.11
Construction and Engineering (link)	44	6.71	3.60	3.12	0.15
Agriculture (link)	34	4.67	2.19	2.48	0.14

E4.1 FINANCIAL PARAMETERS OF CO-FUNDED COMPANIES PER YEAR AND PROJECT SEGMENT – INFORMATION TECHNOLOGY

The first analyzed segment are the companies with projects in the IT industry domain. As expected, here is considered the global rise of the industry, performances in North Macedonia and, most importantly, on the global market where the products and services of the respective segment can be placed. The total of 171 projects in the amount of EUR 21.27 million were delivered by 2021, of which EUR 13.48 million were co-funded by FITD, while EUR 7.79 million were co-funded by the companies. In general, many companies in the economy redirect their activities towards the IT industry due to the significantly bigger global market and the possibilities it has to offer.

In general, the companies with projects from the IT industry show increase upon the analyzed financial criteria. The profit increases by 35% or from EUR 251,623 to EUR 340,440 between the first and the fourth analyzed year. The revenues have identical increase by 35%, as well as the revenues with value between EUR 220,884 up to EUR 298,360. There is a higher profit from revenues and expenditures i.e. 45% with change from EUR 28,828 to EUR 41,768 in the period of analysis. In the same period, the loss increased from EUR 1,459 to EUR 4,360 (199%; however, compared to the profit, the loss is significantly lower, and therefore the entire segment has positive financial result.

It is promising that the expenses for employees increase with almost the same intensity as the revenues and expenditures i.e. by 31% from EUR 87,291 to EUR 114,753. On the other hand, the average number of employees increased by 12%, which indicates that the salaries of the current employees increased with higher intensity. The average number of employees (9.93) suggests that the majority of the co-funded companies in the IT industry belong in the category of “micro” and “small enterprises”. The average expenses for the employees per employees increased by 18% or from EUR 9,816 to EUR 11,552, while the average (monthly) net salary is between EUR 553 and EUR 650 (*same increase by 18%*). The participation of the expenses for the employees in the expenditures is continuous and stable between 38% - 41% in the entire analyzed period which highlights the fact that the employees significantly affect the entire structure of expenses and between 34%-36% of revenues.

Net profit margin is between 11% - 13% and is stable, apart from the absolute increase of the profit by 45% in the entire period of analysis. It is expected all indicators to continue the trend of increase in the future, while the profit margin and the participation of expenses for employees to remain stable within the same frames.

In general, the companies with projects in IT co-funded by FITD, show solid performance with future potential for increase of the profitability, the revenues, the salaries of the employees and the headcount.

TABLE 18
AVERAGE VALUES OF THE KEY FINANCIAL INDICATORS
PROJECT SEGMENT: IT
Values expressed in EUR

Information Technology (IT)	Year before funding n-1	Year of funding n	Year after funding n+1	2 years after funding n+2	% increase [(n+2)/(n-1)*100]
1 Average revenues	251,623	223,732	284,443	340,440	35%
2 Average expenditures	220,884	196,145	246,713	298,360	35%
3 Average profit	28,828	26,063	36,129	41,768	45%
4 Average loss	1,459	1,211	1,898	4,360	199%
5 Participation of expenditures in total revenues	88%	88%	87%	88%	
6 Average expenses for the employees	87,291	78,915	101,967	114,753	31%
7 Average headcount	8.89	8.26	9.94	9.93	12%
8 Average income per employee	28,296	27,099	28,605	34,272	21%
9 Average expenditures per employee	24,839	23,758	24,810	30,036	21%
10 Average profit per employee	3,242	3,157	3,633	4,205	30%
11 Average expenses for employees per employee	9,816	9,558	10,254	11,552	18%
12 Average (monthly) net salary per employee	553	538	577	650	18%
13 Participation of expenditures for employees in the average revenues	35%	35%	36%	34%	
14 Participation of expenditures for employees in the average expenditures	40%	40%	41%	38%	
15 Net profit margin	11%	12%	13%	12%	

Clarification of the years: Year of funding is the year when the project for funding is accepted by FITD, and not the year of actual payment of the funds.

Clarification of the % increase/decrease: Calculated as ratio between the last “2 years after funding” and the first “year before funding” i.e. cumulative increase/decrease.

Calculation of average (monthly) net salary: The average expenses for employee per employee are divided into 12 months and 1.48 (assuming that the average values of salary and tax contributions are 48% of the net-salary)

E4.2 FINANCIAL PARAMETERS OF THE CO-FINANCED COMPANIES BY YEAR AND SEGMENT OF THE PROJECT – MECHANICAL ENGINEERING

The total number of projects financed in the field of Mechanical Engineering is 46 (*third in number of projects*) with a value of 9.67 million euros, of which 5.17 million euros are co-financed by FITD and the remaining 4.51 million euros by the companies themselves. According to the financial indicators, the projects in Mechanical Engineering show a solid growth of performance as in the field of IT.

The average income per company increased by 58% or from 508,744 euros to 802,119 euros as well as the average expenditures increased by 57% or from 491,141 euros to 771,590 euros in the same period. The profit increased by 48%, but it is noticeable that in the year of financing and one after it there is a stagnation of 31,000 euros (*with a small difference between the two years*). As in the other areas, some of the companies recorded a loss which for Mechanical Engineering in the last year was 4,062 euros. However, the loss is significantly lower than the profit, which indicates that the area of Mechanical Engineering achieves a net positive result.

Analyzed according to the average values per employee, it is noticeable that the average costs per employee have increased by 43%, i.e., from 97,147 euros to 138,773 euros. The average number of employees has increased by 31% or from 15 to 20 employees (in average 5 employees per company). Due to the increased number of employees, the average staff costs per employee have a lower growth of 9% or from 6,358 euros to 6,927 euros with an increase in the monthly net salary from 358 euros to 390 euros. Staff costs account for 18% -20% of average expenditures and 17% -19% of revenues.

The average income and expenditure per employee have an identical increase of 20% where the income increases from 33,295 euros to 40,037 euros and the expenditure from 32,143 euros to 38,513 euros. The average profit per employee have also increased by 13% from 1,371 euros to 1,548 euros in the same period.

The net profit of the companies that have received co-financing in the field of Mechanical Engineering has a low net profit margin which is between 4% -5% (not taking into account the loss). In general, it can be concluded that companies that have co-financing in the field of Mechanical Engineering have significant growth in income, expenditure, staff costs and number of employees. According to future indicators, the goals would be to stabilize the number of employees and increase the salaries of current employees by further optimizing activities to increase the low net profit margin.

TABLE 19
AVERAGE VALUES OF BASIC FINANCIAL INDICATORS PROJECT AREA: Mechanical Engineering

The values are in euros

Mechanical Engineering	Year before funding	Year of funding	Year after funding	% growth
	n-1	n	n+1	[(n+1)/(n-1)*100]
1 Average income	508,744	674,378	802,119	58%
2 Average expenditures	491,141	640,201	771,590	57%
3 Average profit	20,949	31,797	31,014	48%
4 Average loss	5,870	1,165	4,062	-31%
5 Share of expenditures in total income	97%	95%	96%	
6 Average staff costs	97,147	118,496	138,773	43%
7 Average number of employees	15.28	19.48	20.03	31%
8 Average income per employee	33,295	34,614	40,037	20%
9 Average expenditures per employee	32,143	32,860	38,513	20%
10 Average profit per employee	1,371	1,632	1,548	13%
11 Average staff costs per employee	6,358	6,082	6,927	9%
12 Average (monthly) net salary per employee	358	342	390	9%
13 Share of staff expenditures in average income	19%	18%	17%	
14 Share of staff expenditures in average expenditures	20%	19%	18%	
15 Net profit margin	4%	5%	4%	

Explanation of the years: Year of financing is the year in which the project was accepted for financing by FITD and not the year of actual payment of funds.

Explanation of % growth / decline: calculated as the ratio between the last "1 year after financing" and the first "Year before financing" i.e. cumulative growth / decline.

Calculation of average (monthly) net salary: The average employee cost per employee is divided into 12 months and 1.48 (assuming that the average values of salary contributions are 48% of net salary)

E4.3 FINANCIAL PARAMETERS OF THE CO-FINANCED COMPANIES BY YEAR AND SEGMENT OF THE PROJECT – MEDICINE AND PHARMACY

The third area of the projects that is processed is Medicine and Pharmacy in which there are total investments of 6.39 million euros, of which FITD has co-financed 3.36 million euros and the remaining 3.03 are from the companies themselves. A total of 65 projects have been implemented with an average value of approximately 100,000 euros. Under the current segment are processed, Health and Medicine, Pharmacy, Biochemistry and Biomedicine. **Note:** medium and large companies are excluded from the calculations so as not to distort the financial "image" of the segment.

According to the obtained data, it is noticeable that there is a positive growth trend in income, expenditures, profit (and loss) but also the number of employees and costs / salaries for them. The average income per company increased by 141% or from 143,907 euros to 346,149 euros while the expenditure from 132,229 euros to 271,957 euros or 106%. The lower growth of expenditures suggests that the profit is increasing with greater intensity, which is noticeable from 546% growth from 10,663 euros to 68,668 euros. The net profit margin has a significant growth in the year after financing and is in the range between 20% - 28%.

It is also noticeable that the financial performance has significantly improved one year after the financing of the investment, which may be a consequence of the project itself. Significantly lower part of the companies recorded a loss and it is approximately 5% of the average profit, or the net profit of the entire segment is positive in the analyzed period.

Employee performance provides additional conclusions. Average staff costs increased significantly in the period by 412%, i.e. from 15,616 euros to 80,012 euros, as well as the average number of employees from 3.08 to 11.33 with an increase of 268%. On the other hand, average income and expenditures are significantly reduced by -35% or 44%. Income of 46,673 euros decreased to 30,543 euros, while expenditure of 42,885 euros to 23,996 euros. At the same time, the average profit per employee increased by 76% from 3,468 to 6,078 euros. **Subjective remark:** It can be concluded that the values have large oscillations which are likely to be caused by companies that are on the threshold between small and medium and generate significant incomes so that when they are included, the overall financial picture changes.

The average staff costs per employee as well as the average net salary increased by 39% from 5,065 euros to 7,060 euros or the net salary from 285 to approximately 400 euros per month. Staff costs have a continuous value from the year of financing with 29%, i.e. one third of the total expenditures of the companies refer to the employees.

TABLE 20
AVERAGE VALUES OF BASIC FINANCIAL INDICATORS PROJECT AREA: Medicine and Pharmacy

The values are in euros

Medicine and Pharmacy	Year before funding	Year of funding	Year after funding	2 years after funding	% growth
	n-1	n	n+1	n+2	[(n+1)/(n-1)*100]
1 Average income	143,907	132,413	256,012	346,149	141%
2 Average expenditures	132,229	123,877	185,054	271,957	106%
3 Average profit	10,663	7,689	71,716	68,889	546%
4 Average loss	450	218	7,090	3,679	718%
5 Share of expenditures in total income	92%	94%	72%	79%	
6 Average staff costs	15,616	35,968	54,216	80,012	412%
7 Average number of employees	3.08	6.47	8.10	11.33	268%
8 Average income per employee	46,673	20,476	31,593	30,543	-35%
9 Average expenditures per employee	42,885	19,156	22,836	23,996	-44%
10 Average profit per employee	3,458	1,189	8,850	6,078	76%
11 Average staff costs per employee	5,065	5,562	6,690	7,060	39%
12 Average (monthly) net salary per employee	285	313	377	398	39%
13 Share of staff expenditures in average income	11%	27%	21%	23%	
14 Share of staff expenditures in average expenditures	12%	29%	29%	29%	
15 Net profit margin	7%	6%	28%	20%	

Explanation of the years: Year of financing is the year in which the project was accepted for financing by FITD and not the year of actual payment of funds.

Explanation of % growth / decline: calculated as the ratio between the last "1 year after financing" and the first "Year before financing" i.e. cumulative growth / decline.

Calculation of average (monthly) net salary: The average employee cost per employee is divided into 12 months and 1.48 (assuming that the average values of salary contributions are 48% of net salary)

E4.4 FINANCIAL PARAMETERS OF THE CO-FINANCED COMPANIES BY YEAR AND SEGMENT OF THE PROJECT – ELECTRONICS AND TECHNOLOGY

The companies whose projects are in the domain of "Electronics and Technology" (*combination of the areas of Electronics and Technology in the overall list*) according to the financial data show growth for most of the indicators. The total value of the projects in the indicated areas is 7.03 million euros, of which 3.28 million euros are co-financed by companies and 3.73 million euros are from FITD. A total of 88 projects were financed with an average value per project of 110,000 euros. **Note:** medium and large companies are excluded from the calculations so as not to distort the financial "image" of the segment.

According to financial data, the average income per company has increased by 41% or from 358,390 euros to 505,055 euros. Expenditures have lower growth than incomes by 35%, i.e. from 333,623 euros to 449,893 euros in the same period. As incomes grow higher than expenditures, profits are expected to increase significantly. The profit growth according to the calculations is 126% from 22,508 euros to 50,857 euros, while the loss is approximately equal to 0%.

Average financial indicators at the employee level, generally suggest that companies in the field of "Electronics and Technology" have stagnation in the number of employees, costs associated with them and the average monthly net salary paid. The number of employees decreased by -11% or on average by 1 employee per company and at the same time the costs for employees decreased by -11%. On the other hand, incomes and expenditures increased by 58% i.e. 51%, the first from 36,201 euros to 57,093 euros and the second from 33,699 euros to 50,857 euros. The share of expenditures for employees in the average income and expenditures decreases from 21% - 13%, i.e. from 23% to 15% in the analyzed period.

It is noticeable that despite the reduction of staff costs (*average per company*), their total level increases, which is a consequence of other and most likely investment activities (short-term and long-term) in the same period, including the projects themselves. The net profit margin calculated as the ratio between average income and average profit despite the significant increase in income (41%), expenditures (35%) and profit (126%) and decrease in employee expenditures (-11%) is maintained at up to 10%. The same confirms the previous conclusion that the companies increased the expenditures on other grounds (mostly investment activities) in the analyzed period.

TABLE 21
AVERAGE VALUES OF BASIC FINANCIAL INDICATORS PROJECT AREA: Electronics and Technology

The values are in euros

Electronics and Technology	Year before funding	Year of funding	Year after% growth funding	
	n-1	n	n+1	[(n+1)/(n-1)*100]
1 Average income	358,390	405,384	505,055	41%
2 Average expenditures	333,623	366,683	449,893	35%
3 Average profit	22,508	36,242	50,857	126%
4 Average loss	8	862	19	/%
5 Share of expenditures in total income	93%	90%	89%	
6 Average staff costs	75,138	63,622	67,120	-11%
7 Average number of employees	9.90	9.04	8.85	-11%
8 Average income per employee	36,201	44,858	57,093	58%
9 Average expenditures per employee	33,699	40,576	50,857	51%
10 Average profit per employee	2,274	4,010	5,749	153%
11 Average staff costs per employee	7,590	7,040	7,587	0%
12 Average (monthly) net salary per employee	427	396	427	0%
13 Share of staff expenditures in average income	21%	16%	13%	
14 Share of staff expenditures in average expenditures	23%	17%	15%	
15 Net profit margin	6%	9%	10%	

Explanation of the years: Year of financing is the year in which the project was accepted for financing by FITD and not the year of actual payment of funds.

Explanation of% growth / decline: calculated as the ratio between the last "1 year after financing" and the first "Year before financing" i.e. cumulative growth / decline.

Calculation of average (monthly) net salary: The average employee cost per employee is divided into 12 months and 1.48 (assuming that the average values of salary contributions are 48% of net salary)

E4.5 FINANCIAL PARAMETERS OF THE CO-FINANCED COMPANIES BY YEAR AND SEGMENT OF THE PROJECT – ENERGY AND ENERGY SOURCES

The total value of 29 projects co-financed in the areas of "Energy and Energy Sources" is 4.52 million euros, of which 2.79 million euros are co-financed by FITD and 1.74 million by the companies themselves. The average value per project in the analyzed area is approximately 160,000 euros. In the period of one year before and one year after the investment in the project, the financial indicators increased.

The average income increased by 74% from 276,566 euros to 481,120 euros compared to the growth of expenditures of 68% or from 264,519 euros to 444,769 euros. The lower growth of expenditures in relation to incomes suggests an increase in profit, which has a growth of 229% with an average of 11,205 euros to 36,920 euros in the same analyzed period. Expenditures account for between 92% and 96% of total income, indicating that companies that have invested in energy election projects have an overall positive result. The average income per employee increased by 35%, the expenditure by 31% and the profit by 156%.

To some extent, one of the financial indicators that is basically lower than the others is the net profit margin which is between 4% - 8% (average 6%) and remains low despite the significant increase in companies' income.

Results and financial indicators for employees are also growing. Average staff costs per company increased by 37% from 43,135 euros to 59,228 euros with a parallel increase in the average number of employees by 29% or approximately 2 employees per company. The average staff costs per employee increase by 7%, consequently the average monthly net salary which has increased from 364 euros to 389 euros in the analyzed period. In fact, the increase in the average staff cost per company of 37% is a consequence of the increase in the number of employees in a larger percentage than the growth of salaries of current employees.

The share of the average staff expenditures in the average income and expenditures per company shows a decreasing trend from 16% to 12%, i.e. from 16% to 13%. Compared to the growth of expenditures of an average of 68%, the reduction of the share of staff expenditures suggests that companies have increased investments in other segments of operations, but at the same time kept the level of the salaries in absolute terms to remain identical for the entire analyzed period.

TABLE 22
AVERAGE VALUES OF BASIC FINANCIAL INDICATORS PROJECT AREA: Energy and Energy Sources
The values are in euros

Energy and Energy Sources	Year before funding n-1	Year of funding n	Year after funding n+1	% growth [(n+1)/(n-1)*100]
1 Average income	276,566	365,663	481,120	74%
2 Average expenditures	264,519	344,699	444,769	68%
3 Average profit	11,205	19,942	36,920	229%
4 Average loss	569	879	2,386	319%
5 Share of expenditures in total income	96%	94%	92%	
6 Average staff costs	43,135	47,287	59,228	37%
7 Average number of employees	6.67	7.08	8.58	29%
8 Average income per employee	41,485	51,670	56,095	35%
9 Average expenditures per employee	39,678	48,708	51,856	31%
10 Average profit per employee	1,681	2,818	4,305	156%
11 Average staff costs per employee	6,470	6,682	6,905	7%
12 Average (monthly) net salary per employee	364	376	389	7%
13 Share of staff expenditures in average income	16%	13%	12%	
14 Share of staff expenditures in average expenditures	16%	14%	13%	
15 Net profit margin	4%	5%	8%	

Explanation of the years: Year of financing is the year in which the project was accepted for financing by FITD and not the year of actual payment of funds.

Explanation of % growth / decline: calculated as the ratio between the last "1 year after financing" and the first "Year before financing" i.e. cumulative growth / decline.

Calculation of average (monthly) net salary: The average employee cost per employee is divided into 12 months and 1.48 (assuming that the average values of salary contributions are 48% of net salary)

E4.6 FINANCIAL PARAMETERS OF THE CO-FINANCED COMPANIES BY YEAR AND SEGMENT OF THE PROJECT – CONSTRUCTION AND ENGINEERING

In the Construction and Engineering segments, 44 projects were financed with a total value of 6.71 million euros, of which 3.60 million were co-financed by companies and the remaining 3.12 million euros by FITD. The average value per project is approximately 150,000 euros. The overall financial performance of the companies that have invested in projects in the field of Construction and Engineering increased between the 4 analyzed years.

The average income per company increased by 33% or from 359,155 euros to 477,299 euros with a parallel 31% increase in expenditures from 337,281 euros to 441,036 euros. The profit has 59% growth from 23,209 euros to 36,933 euros. Significantly lower average value of loss relative to profit positions the sector on the positive side. Total expenditures participate with 92% - 94% in the total income, so the net profit margin for all analyzed companies in the given area is at the level of 6% - 8%.

Average staff costs increased by 100% from 44,225 euros to 88,526 euros and at the same time the number of employees increased by 86% from approximately 7 to 13 people. Average income, expenditures and profit per employee decreased. The average income per employee decreased by 29% from 51,926 euros to 37,123 euros, the expenditure by 30% from 48,764 euros to 34,303 euros and the profit decreased by 14% from 3,355 euros to 2,873 euros. The decrease in average values per employee suggests that the increase in income is not high enough to "follow" the increase in the number of employees in the industry, a conclusion that is not negative and there is a possibility that in the future there will be a stabilization of the number of employees, at the same time by continuing to increase income, which would increase the average value per employee. It is positive that the share of staff expenditures in the average expenditures and income in the years after the financing significantly increases from 12% / 13% to 19% / 20%, but as previously mentioned, it will stabilize at that limit.

Average staff costs per employee and average monthly net salary increased by 8%. In fact, the increase in staff expenditures is due to the increase in the number of employees to a greater extent than the increase in costs per employee and the average monthly net salary.

TABLE 23

AVERAGE VALUES OF BASIC FINANCIAL INDICATORS PROJECT AREA: Construction and Engineering
The values are in euros

Construction and Engineering	Year before funding n-1	Year of funding n	Year after funding n+1	2 years after funding n+2	% growth [(n+2)/(n-1)*100]
1 Average income	359,155	428,725	421,263	477,299	33%
2 Average expenditures	337,281	395,760	399,687	441,036	31%
3 Average profit	23,209	35,816	30,759	36,933	59%
4 Average loss	2,959	4,071	11,862	2,970	0%
5 Share of expenditures in total income	94%	92%	95%	92%	
6 Average staff costs	44,225	54,493	83,143	88,526	100%
7 Average number of employees	6.92	9.11	13.30	12.86	86%
8 Average income per employee	51,926	47,055	31,674	37,123	-29%
9 Average expenditures per employee	48,764	43,437	30,052	34,303	-30%
10 Average profit per employee	3,355	3,931	2,313	2,873	-14%
11 Average staff costs per employee	6,394	5,981	6,251	6,885	8%
12 Average (monthly) net salary per employee	360	337	352	388	8%
13 Share of staff expenditures in average income	12%	13%	20%	19%	
14 Share of staff expenditures in average expenditures	13%	14%	21%	20%	
15 Net profit margin	6%	8%	7%	8%	

Explanation of the years: Year of financing is the year in which the project was accepted for financing by FITD and not the year of actual payment of funds.

Explanation of % growth / decline: calculated as the ratio between the last "1 year after financing" and the first "Year before financing" i.e. cumulative growth / decline.

Calculation of average (monthly) net salary: The average employee cost per employee is divided into 12 months and 1.48 (assuming that the average values of salary contributions are 48% of net salary)

E4.7 FINANCIAL PARAMETERS OF THE CO-FINANCED COMPANIES BY YEAR AND SEGMENT OF THE PROJECT – AGRICULTURE

The last analyzed segment is a branch that is one of the most important in the Macedonian economy - Agriculture. Most often the projects are in the domain of IT technologies, because advanced solutions are being used for agricultural problems and processes as well as improving the overall production. The total value of the financed 34 projects is 4.67 million euros, of which 2.64 are co-financed by FITD and 2.19 by the companies themselves. The average value of an agricultural project is 140,000 euros. The financial indicators have noticeably high growth from the year before and the year after the project financing.

The average income increased by 294% between 53,870 euros to 212,122 euros, the expenditure by 238% from 54,377 euros to 183,523 euros and the profit by 1.105% growth from 2,463 euros to 29,676 euros. In the year before financing, the total income had a lower value than the total expenditure, i.e. the companies realized a net loss according to the average values. However, the performance improves significantly in the year of financing and after the year of financing, with the companies having a positive net profit.

Average staff costs per company increased by 163%, i.e. from 10,735 euros to 28,271 euros in parallel with an approximately 50% increase in the average number of employees from 3.07 to 4.58 per company. The significant increase in average staff costs relative to the average number of employees suggests that the salaries of current employees are increasing. It confirms a 77% increase in the average staff costs per employee and consequently the average monthly net salary per employee which increases from 197 euros to 348 euros in the analyzed period. If the trend of increase of the staff costs in relation to the employees themselves continues, an increase of the average monthly net salary can be expected in the next period. Despite the significant increase in staff costs and the number of employees, their share decreases in the analyzed period from 20% to 13% share in income and 20% to 15% share in expenditure. It confirms the previous conclusion that it will be necessary to further increase the staff expenditures in the form of new employments and increased salaries for the existing ones.

Average income, expenditure and profit per employee show positive growth. Individually, income per employee increased by 164% or from 17,539 euros to 46,325 euros, expenditures increased by 126% or from 17,704 euros to 40,080 and profit increased by 708% from 802 euros to 6,481 euros.

The net profit margin ranges from 5% to 14% with the fact that in the first analyzed year the net result of the sector as a whole is negative, despite the fact that some of the companies make a profit.

TABLE 24

AVERAGE VALUES OF BASIC FINANCIAL INDICATORS PROJECT AREA: Agriculture
The values are in euros

Agriculture	Year before funding	Year of funding	Year after funding	% growth
	n-1	n	n+1	[(n+1)/(n-1)*100]
1 Average income	53,870	150,984	212,122	294%
2 Average expenditures	54,377	145,039	183,523	238%
3 Average profit	2,463	7,772	29,676	1105%
4 Average loss	3,157	1,929	1,271	-60%
5 Share of expenditures in total income	101%	96%	87%	
6 Average staff costs	10,735	23,167	28,271	163%
7 Average number of employees	3.07	3.84	4.58	49%
8 Average income per employee	17,539	39,297	46,325	164%
9 Average expenditures per employee	17,704	37,750	40,080	126%
10 Average profit per employee	802	2,023	6,481	708%
11 Average staff costs per employee	3,495	6,030	6,174	77%
12 Average (monthly) net salary per employee	197	340	348	77%
13 Share of staff expenditures in average income	20%	15%	13%	
14 Share of staff expenditures in average expenditures	20%	16%	15%	
15 Net profit margin	5%	5%	14%	

Explanation of the years: Year of financing is the year in which the project was accepted for financing by FITD and not the year of actual payment of funds.

Explanation of % growth / decline: calculated as the ratio between the last "1 year after financing" and the first "Year before financing" i.e. cumulative growth / decline.

Calculation of average (monthly) net salary: The average employee cost per employee is divided into 12 months and 1.48 (assuming that the average values of salary contributions are 48% of net salary)

E5. FINANCIAL RESULTS OF THE COMPANIES CO-FINANCED BY FITD IN 2020 COMPARED TO 2019 (COVID-19 CRISIS)

Before starting the simulations, an overall analysis of the financial results of the companies that are co-financed by FITD in 2020 was made. The analysis is important because it defines whether companies (at the portfolio level) by size "closed" the year net financial positive and what was the loss, which was expected given the destructiveness of the crisis caused by COVID-19 for business. According to official data from the NBRM and the State Statistical Office, the Macedonian economy will decline in GDP by -4.5% in 2020.

From TABLE 25.01 we can see that the portfolio of companies financed by FITD have positive results, i.e. growth in the crisis year 2020 compared to 2019 and the decline in GDP. Incomes increased by 8%, expenditures by 7% and profits by 21%. In fact, the crisis has contributed to the optimization of a larger number of processes in companies and business models, which in turn directly affects profitability and its increase. It is noticeable that the companies have increased the number of employees by 3% with a parallel increase in salaries of 5% because the average (monthly) net salary per employee has increased from 491 to 516 euros. Staff costs increased by 8% which is caused by the new additional 218 employments and the increase of salaries for the current employees.

Analyzed in absolute terms, incomes from 385 million euros increased to 417 million euros with a parallel increase in expenditures from 348 million to 372 million euros. Profit has grown from 34 million to approximately 42 million euros between 2019 and 2020. Staff expenditures increased from 77.1 million to 77.3 million euros.

The companies also kept the amount of staff costs in the total expenditure structure of 21% (of expenditures) and the net profit margin which is between 9% - 10%. The loss, which is analyzed in the following table ([link](#)) is significantly lower in terms of profit, which positions the entire portfolio in financial positive. In general, the companies that are part of the FITD portfolio significantly exceed the overall performance of the economy, in the crisis year 2020 achieved better results compared to 2019, as would be the case in a standard business year.

TABLE 25.01
FINANCIAL RESULTS OF THE COMPANIES CO-FINANCED BY FITD IN 2020 COMPARED TO 2019
The values are in euros

NUMBER OF COMPANIES: 401	YEAR		
	2019	2020	Growth 2020/19
1 Average income	385,919,356	417,174,352	8%
2 Average expenditures	348,615,411	372,949,196	7%
3 Average profit	34,630,849	41,995,373	21%
4 Profit tax	3,342,492	3,736,294	12%
5 Expenses for salary taxes and salary contributions	4,088,471	4,174,906	2%
6 Compulsory social security contributions	16,341,902	18,093,757	11%
7 Total budget expenditures	23,772,866	26,004,957	9%
8 Share of expenditures in total income	90%	89%	
9 Average staff costs	71,731,507	77,301,880	8%
10 Average number of employees	8,231	8,439	3%
11 Average income per employee	46,886	49,434	5%
12 Average expenditures per employee	42,354	44,194	4%
13 Average profit per employee	4,207	4,976	18%
14 Average staff costs per employee	8,715	9,160	5%
15 Average (monthly) net salary per employee	491	516	5%
16 Average budget expenditures per company	59,284	64,850	9%
17 Share of staff expenditures in total income	19%	19%	
18 Share of staff expenditures in total expenditures	21%	21%	
19 Net profit margin	9%	10%	

Note: in the previous table only the financial results for 2020 been analyzed of the companies that have been financed by FITD not only in 2020 but also in the previous 3 years in order to measure their result compared to the economy as a whole.

Calculation of average (monthly) net salary: The average employee cost per employee is divided into 12 months and 1.48 (assuming that the average values of salary contributions are 48% of net salary)

E5. FINANCIAL RESULTS OF THE COMPANIES CO-FINANCED BY FITD IN 2020 BY SIZE (COVID-19 CRISIS)

Companies with 0-9 employees (micro and no employees) have achieved a total income of 33.8 million euros, a total expenditure of 30.7 million and a profit of approximately 3.7 million euros in 2020. However, some companies have shown a loss of 0.94 million euros, which indicates that the net profit at the segment level is approximately 1.9 million euros. The same companies have an average staff cost of 6.2 million euros for 838 employees with an average monthly net salary of 421 euros. **The entire segment of micro and no employees enterprises has the overall performance of the economy with the realized realization.**

The second small enterprises (10 - 49 employees) record 95.09 million euros in income, 84.5 million euros in expenditure and 10.10 million euros in profit. On the positive side, the recorded loss is 0.43 million euros and the net profit at the level of the entire small companies segment is approximately 9 million euros or 10% net profit margin. The companies allocate 18.15 million euros for employees (21% of total expenditures and 19% of total income) for which average net salaries in the amount of 429 euros are paid. **The small enterprise sector has also achieved significantly better results compared to the overall macroeconomic indicators.**

The group of medium-sized companies (50 - 250 employees) has achieved a total revenue of 132.1 million euros and expenditures of 121.8 million euros and a profit of 9.57 million euros. A small number of companies have shown a loss and it is quite low at 0.14 million euros compared to total income and profit. For salaries, medium-sized companies set aside 26.19 million euros and the average net salary was on average 424 euros per month. Although the net margin is lower than the others, it is positive and significantly higher than the overall result of the economy.

It is noticeable that some of the companies record a loss which cumulatively amounts to approximately 1.5 million. But compared to the total profit of approximately 41 million euros, it positions the entire portfolio of companies whose projects are co-financed by FITD on the positive side, and significantly better than the GDP which has a decline of -4.5% for 2020. And considered individually by group of companies (by size) each of them has a net positive result in the crisis year.

TABLE 25.02
FINANCIAL RESULTS OF THE COMPANIES CO-FINANCED BY FITD IN 2020
The values are in euro

	COMPANY SIZE			
	No employees and Micro	Small	Medium	Large
1 Number of companies	265	103	32	1
2 Average income	33,853,724	95,092,376	132,163,650	156,064,603
3 Average expenditures	30,778,034	84,506,549	121,892,918	135,771,695
4 Average profit	3,732,233	10,108,438	9,575,012	18,579,690
5 Total loss	940,550	433,454	149,409	0
6 Share of expenditures in total income	91%	89%	92%	87%
7 Staff costs	6,260,121	18,154,556	26,194,474	26,692,729
8 Total number of employees	838.00	2,383.00	3,481.00	1,737.00
9 Average income per employee	40,398	39,904	37,967	89,847
10 Average expenditures per employee	36,728	35,462	35,017	78,164
11 Average profit per employee	4,454	4,242	2,751	10,696
12 Average staff costs per employee	7,470	7,618	7,525	15,367
13 Average (monthly) net salary per employee	421	429	424	865
14 Share of staff expenditures in total income	18%	19%	20%	17%
15 Share of staff expenditures in total expenditures	20%	21%	21%	20%
16 Net profit margin	11%	11%	7%	12%

Note: in the previous table only the financial results for 2020 been analyzed of the companies that have been financed by FITD not only in 2020 but also in the previous 3 years in order to measure their result compared to the economy as a whole.

Calculation of average (monthly) net salary: The average employee cost per employee is divided into 12 months and 1.48 (assuming that the average values of salary contributions are 48% of net salary)

F. PERFORMANCE SIMULATION FROM ADDITIONAL FINANCING USING VARIOUS FITD INSTRUMENTS

The last part of the report is a simulation of the results of additional financing or additional income in the segments. Simply put, the simulation answers the question "What would be the result of the companies if they received additional financing from XY (*in the simulation 1 million euros*) amount of funds?". The result can be analyzed differently, such as number of employees, taxes paid, profit growth, income growth, cost growth etc. For the needs of the analysis in this report, the main indicators will be the expenditures that the companies have towards the state and the number of additional (new) employments caused by the additional income.

In fact, the most important information that the simulation should provide is to determine the areas in which the projects are, the programs they apply for, the instruments they use and the size of the companies that would give the highest results with additional financing. The funds that FITD will use to co-finance projects will have the opportunity to direct them to segments with higher probability of better results.

According to researchers, the segments of greatest interest are those that increase employment, achieve higher financial results and bring the most funds to the state treasury, which can then be used to further finance other projects.

Note: only the last part C. of the tables is interpreted in which the effects of the additional financing / income of 1,000,000 euros in the companies are calculated

EXPLANATION OF THE SIMULATION

The whole calculation is simplified (compared to the number of data from the final accounts of the companies) to provide a comparison between the segments. The shares are calculated as the ratio between the different financial positions (e.g. total expenditure, staff costs, profit tax, etc.) the total income generated by the companies. For example, if IT companies generated total income of 1,000,000 euros and total staff costs were 300,000 euros, the share of salary costs in the total income would be 30%. The indicated calculation is made for several financial positions to enable the calculation of their relative shares in the total income. The following are used as financial positions:

- A1. Total income
- A2. Total expenditures
- A3. Staff costs (214+215+216+217)
- A4. *Salaries and salary contributions (net)(214)*
- A5. *Expenses for salary taxes and salary contributions(215)*
- A6. *Compulsory social security contributions (216)*
- A7. *Other staff costs(217)*
- A8. Profit tax
- A9. Number of employees
- A10. Average staff cost per employee

The item of expected tax income for the state and its institutions is composed of all expenditures that companies have in the form of taxes (personal and profit tax) as well as health, pension insurance and other staff costs to the state.

The division of the companies is made according to industries, projects, instruments and size, i.e. all segments that have been previously processed in the report. The financial data for the companies in the year of financing of the project were used for the calculation of the share, assuming that from that point they will start with the improvement of the operation. Only companies that have received financing from FITD have been analyzed.

F1. PERFORMANCE SIMULATION FROM ADDITIONAL FINANCING BY COMPANY SIZE

The first simulation was made according to the size of the companies that are co-financed by FITD. Companies without employees are excluded from the calculation, because there is no possibility to determine their potential in terms of new employment with additional financing.

With micro companies (up to 9 employees) the additional income / financing of 1 million euros can be expected to cause 937,178 euros of expenditure, of which 142,040 euros is staff related expenditure. The total net salaries and contributions (recourse) would amount to 89,516 euros and if the average salary is 5,866 euros, it is possible to open 24 new jobs. The state would collect a total of 43,002 euros.

With small companies (10 - 49 employees) the income of 1 million euros would cause expenditure of 900,812 euros of which 174,801 euros is staff related expenditure. The total salaries and contributions would amount to 106,653 euros and if the average gross cost per employee is 6,998 euros, 25 new job openings will be possible. The salary of employees in small companies is the second highest just behind that in large companies. The total income for the state and its institutions would be 54,999 euros.

With the third group of **medium companies** (50 - 250 employees) the same income of 1 million euros will cause 979,955 euros of which 199,535 euros are staff costs. The total salaries and contributions are 127,630 euros and the cost of gross salary per employee is 6,535 euros, it would enable the opening of 31 new jobs. The state would collect 61,783 euros through taxes and other expenditures related to employees.

With the last group of **large companies** in which a small amount of data has been processed, the additional income of 1 million euros would cause costs of 884,754 euros, of which 170,679 euros are staff related expenditures. For the current group it is necessary to note that the additional income of 1 million euros, on a total turnover of over 100 million euros is a small amount that will not have a visible impact on the overall income structure. However, the additional income will enable the opening of 13 new jobs if the average salary is 13,617 euros.

In general, there are no significant differences in performance between micro, small and medium-sized companies. To a certain extent, small companies have higher salaries and lower share of expenditures in incomes, which in turn provides higher profits and the opportunity for future financing of future investments and innovative ideas.

TABLE 26
SIMULATION FOR EFFECTS OF ADDITIONAL FINANCING BY COMPANY SIZE
Values in millions of euros - exception number of employees and expected number of employments

A	CRITERIA	Micro	Small	Medium	Large
A1.	Total Income	29,856,642	87,714,642	106,499,570	139,696,182
A2.	Total expenditure	27,980,990	79,014,404	104,364,783	123,596,764
A3.	Staff costs (214+215+216+217)	4,240,831	15,332,616	21,250,391	23,843,274
A4.	Salaries and salary contributions (net) (214)	2,672,649	9,355,046	13,592,551	13,599,940
A5.	Expenses for salary taxes and salary contributions(215)	201,262	1,063,692	1,105,767	1,233,834
A6.	Compulsory social security contributions (216)	900,444	3,049,168	5,043,586	5,346,367
A7.	Other staff costs(217)	466,476	2,001,716	1,508,488	3,663,133
A8.	Profit tax	182,181	711,401	430,562	1,178,509
A9.	Number of employees	723	2,194	3,252	1,751
A10	Average staff cost per employee	5,866	6,988	6,535	13,617
B	PARTICIPATIONS OF PARAMETERS IN TOTAL INCOME				
B1.	Total expenditure	93.7%	90.1%	98.0%	88.5%
B2.	Staff costs	14.2%	17.5%	20.0%	17.1%
B3.	Salaries and salary contributions (net)	9.0%	10.7%	12.8%	9.7%
B4.	Expenses for salary taxes and salary contributions	0.7%	1.2%	1.0%	0.9%
B5.	Compulsory social security contributions	3.0%	3.5%	4.7%	3.8%
B6.	Other staff costs	1.6%	2.3%	1.4%	2.6%
B7.	Profit tax	0.6%	0.8%	0.4%	0.8%
C	EFFECTS OF ADDITIONAL INCOME / FINANCING				
CX	Amount of additional income / financing	1,000,000	1,000,000	1,000,000	1,000,000
CY	Average staff cost per employee	5,866	6,988	6,535	13,617
C1.	Total expenditure	937,178	900,812	979,955	884,754
C2.	Staff costs	142,040	174,801	199,535	170,679
C3.	Salaries and salary contributions (net)	89,516	106,653	127,630	97,354
C4.	Expenses for salary taxes and salary contributions	6,741	12,127	10,383	8,832
C5.	Compulsory social security contributions	30,159	34,762	47,358	38,271
C6.	Other staff costs	15,624	22,821	14,164	26,222
C7.	Profit tax	6,102	8,110	4,043	8,436
C8.	Expected number of new employments (C3/A10)	24	25	31	13
C9.	Income for the state and state institutions(C4+C5+C7)	43,002	54,999	61,783	55,540

F2. PERFORMANCE SIMULATION FROM ADDITIONAL FINANCING ACCORDING TO THE FINANCING PROGRAM

The second simulation is designed to analyze the effects of additional income / financing according to the financing program. As explained in the [part of the report](#), the programs have two sources "Economic Development Plan (PEG)" from the Government of the Republic of North Macedonia and "World Bank (World Bank SDIS)". The performance of the two programs differs significantly, but primarily due to the different structure of the enterprises that use the funds, which can be seen in the total income of the companies. In order to obtain data with higher relevance, large and medium-sized companies are excluded from the calculation due to their low number so as not to affect the general situation.

According to the simulation, additional financing (incomes) of 1 million euros in the **"Economic Development Plan"** will cause expenditures of 922,888 euros (92.3%) of which 157,563 euros (15.8%) are staff related costs. 98,964 euros or 9.9% of the initial 1 million euros are allocated for salaries and contributions (net). It is possible to open 26 new jobs with an average cost per employee (per year) of 6,008 euros. The income generated by the state and its institutions in the form of taxes or expenses for pension, social insurance of the employees.

The second simulation is for companies that have received financing in the **World Bank SDIS program**. The financing / income of 1 million euros will cause 872,592 euros total expenditures of which 319,076 euros are staff related costs. Total salary and contribution expenditures (net) amount to EUR 199,799 or 20% of the initial million euros in financing. It is possible to open 54 new jobs with an average salary of 5,964 euros. The total income for the state would amount to 94,345 euros or 9.4% of the initial value.

Initially, according to the simulation, the additional financing of 1 million euros will cause greater effects with the companies from the "World Bank SDIS" program in terms of number of employees and costs related to taxes and incomes for the state. The higher incomes for the state are primarily due to the contributions and taxes related to the employees. However, the higher total expenditures (and lower staff expenditures) of the companies financed in the "Economic Development Plan" indicate a difference in the nature of activities and business (*those financed through "World Bank SDIS" are in the domain of "Start-Up" and IT*). If the purpose of the additional financing is to enable a larger number of job positions and income for the state program, i.e. the companies financed in the World Bank program with additional financing of 1 million euros will give higher results.

TABLE 27 SIMULATION FOR EFFECTS OF ADDITIONAL FINANCING ACCORDING TO THE PROGRAM Values in millions of euros - exception number of employees and expected number of employments			
A	CRITERIA	Plan for economic growth (PEG)	World bank SDIS
A1.	Total Income	72,415,348	7,289,481
A2.	Total expenditure	66,831,274	6,360,743
A3.	Staff costs (214+215+216+217)	11,409,986	2,325,896
A4.	Salaries and salary contributions (net) (214)	7,166,539	1,456,429
A5.	Expenses for salary taxes and salary contributions(215)	787,602	114,326
A6.	Compulsory social security contributions (216)	2,277,025	480,755
A7.	Other staff costs(217)	1,315,827	274,386
A8.	Profit tax	407,263	92,647
A9.	Number of employees	1,899	390
A10.	Average staff cost per employee	6,008	5,964
B	PARTICIPATIONS OF PARAMETERS IN TOTAL INCOME	Plan for economic growth (PEG)	World bank SDIS
B1.	Total expenditure	92.3%	87.3%
B2.	Staff costs	15.8%	31.9%
B3.	Salaries and salary contributions (net)	9.9%	20.0%
B4.	Expenses for salary taxes and salary contributions	1.1%	1.6%
B5.	Compulsory social security contributions	3.1%	6.6%
B6.	Other staff costs	1.8%	3.8%
B7.	Profit tax	0.6%	1.3%
C	EFFECTS OF ADDITIONAL INCOME / FINANCING	Plan for economic growth (PEG)	World bank SDIS
CX	Amount of additional income / financing	1,000,000	1,000,000
CY	Average staff cost per employee	6,008	5,964
C1.	Total expenditure	922,888	872,592
C2.	Staff costs	157,563	319,076
C3.	Salaries and salary contributions (net)	98,964	199,799
C4.	Expenses for salary taxes and salary contributions	10,876	15,684
C5.	Compulsory social security contributions	31,444	65,952
C6.	Other staff costs	18,171	37,641
C7.	Profit tax	5,624	12,710
C8.	Expected number of new employments (C3/A10)	26	54
C9.	Income for the state and state institutions(C4+C5+C7)	47,944	94,345

E3. PERFORMANCE SIMULATION FROM ADDITIONAL FINANCING ACCORDING TO THE FINANCING INSTRUMENT

The third simulation analyzes the performance of additional financing according to the financing instrument. Large companies are excluded in the calculations in order to avoid distortion of the percentage participations in the different positions and thus the conclusions for the simulation. The projections are made again for additional income / financing of 1 million euros. Again, the type of companies that have applied for the various instruments has influence, but the goal is to determine what type of companies would have the highest results (*which are determined by FITD*) with additional financing.

The additional financing of 1 million euros for the instrument **"Improvement of Innovation"** will cause 975,607 euros (97.6%) expenditures of which 185,466 euros are staff expenditures (gross) (18.5%). 116,245 euros (11.6%) are allocated for net salaries and contributions. With an average gross cost per employee of 6,580 euros, it is possible to open 28 new job positions. The total income for the state and its institutions is 56,738 euros in the form of taxes and staff expenditures.

In the second instrument **"Commercialization"**, the additional financing of 1 million euros will create 902,206 (90.2%) euros of expenditures of which 199,689 euros (20%) are gross staff expenditures with an average gross expenditure per employee of 8,722 euros. For net salaries and contributions would be 120,828 euros. The number of new jobs that would be created is 23, but with the highest monthly salary compared to all other instruments. The income for the state and state institutions would be 66,016 euros.

The third instrument for **"Technology Development"** will create 937,368 euros in expenditures (93.7%) of which 142,319 euros (14.2%) are gross staff expenditures with an average gross cost per employee of 5,794 euros. Approximately 89,000 euros (8.9%) are for salaries and contributions (net) and it is possible to open 25 new job positions. The gross income for the state would amount to 44,425 euros.

The last instrument **"Start-Up / Spin-Off"** records significantly different results in the simulation in comparison to others, due to the very nature of businesses that are usually newly established companies where the most important resource are the employees. The additional financing will be divided into 885,724 euros (88.6%) expenditures, of which 375,522 euros are gross staff costs. The average gross staff cost per employee is 5,293 euros and provides employment for an additional 71 people. Also in a simulation where the staff cost would double from 5,293 euros to 10,586 euros, employment of 35 people and more is provided in comparison to the others. The income for the state is 110,909 euros (approximately 12% of the initial amount of 1 million euros) and is caused by the higher number of employees and their costs.

TABLE 28 SIMULATION FOR EFFECTS OF ADDITIONAL FINANCING ACCORDING TO INSTRUMENT Values in millions of euros - exception number of employees and expected number of employments					
A	CRITERIA	Improvement of Innovation	Commercializ- ation	Technology developmen t	Start- up/Spin-off
A1.	Total Income	87,876,553	52,370,783	46,777,518	5,948,350
A2.	Total expenditure	85,732,941	47,249,258	43,847,730	5,268,599
A3.	Staff costs (214+215+216+217)	16,298,128	10,457,860	6,657,316	2,233,737
A4.	Salaries and salary contributions (net) (214)	10,215,239	6,327,846	4,165,860	1,435,149
A5.	Expenses for salary taxes and salary contributions(215)	1,012,860	611,402	361,902	109,304
A6.	Compulsory social security contributions (216)	3,555,378	2,374,624	1,477,714	485,888
A7.	Other staff costs(217)	1,514,651	1,143,988	651,840	203,396
A8.	Profit tax	417,709	471,301	238,484	64,536
A9.	Number of employees	2,477	1,199	1,149	422
A10	Average staff cost per employee	6,580	8,722	5,794	5,293
B	PARTICIPATIONS OF PARAMETERS IN TOTAL INCOME				
B1.	Total expenditure	97.6%	90.2%	93.7%	88.6%
B2.	Staff costs	18.5%	20.0%	14.2%	37.6%
B3.	Salaries and salary contributions (net)	11.6%	12.1%	8.9%	24.1%
B4.	Expenses for salary taxes and salary contributions	1.2%	1.2%	0.8%	1.8%
B5.	Compulsory social security contributions	4.0%	4.5%	3.2%	8.2%
B6.	Other staff costs	1.7%	2.2%	1.4%	3.4%
B7.	Profit tax	0.5%	0.9%	0.5%	1.1%
C	EFFECTS OF ADDITIONAL INCOME / FINANCING				
CX	Amount of additional income / financing	1,000,000	1,000,000	1,000,000	1,000,000
CY	Average staff cost per employee	6,580	8,722	5,794	5,293
C1.	Total expenditure	975,607	902,206	937,368	885,724
C2.	Staff costs	185,466	199,689	142,319	375,522
C3.	Salaries and salary contributions (net)	116,245	120,828	89,057	241,268
C4.	Expenses for salary taxes and salary contributions	11,526	11,674	7,737	18,376
C5.	Compulsory social security contributions	40,459	45,343	31,590	81,684
C6.	Other staff costs	17,236	21,844	13,935	34,194
C7.	Profit tax	4,753	8,999	5,098	10,849
C8.	Expected number of new employments (C3/A10)	28	23	25	71
C9.	Income for the state and state institutions(C4+C5+C7)	56,738	66,016	44,425	110,909

E4. PERFORMANCE SIMULATION FROM ADDITIONAL FINANCING ACCORDING TO THE AREA OF THE FINANCING PROJECT

The last simulation is made according to the area of the project with which the companies have received the financing. The same sectors as in the analysis "[Financial parameters of co-financed companies by year and project segment](#)" are processed and large companies are excluded again to avoid distortion of results. This analysis completes the conclusion on which segments and what type of companies would cause the best results with additional funding by FITD. The following are the conclusions for all 7 sectors.

The first **IT sector**, which is actually one of the main pillars of innovation and innovative projects and has human capital as the most important resource, has the following performance of 1 million euros of additional financing. Total expenditures of 876,698 euros would be generated, most of which or 352,721 euros are gross staff expenditures with an average cost per employee of 9,558 euros. The number of jobs that would potentially be created is 37 new employees. The total income for the state and its institutions is 114,935 euros or approximately 11% of the total additional financing of 1 million euros.

The second sector **Mechanical Engineering** according to the simulation the income of 1 million euros will cause 949,321 euros of expenditures (94.9%) of which 175,711 euros (are gross staff expenditures and average cost per employee of 6,082 euros. Salaries and contributions(net) would amount to 109,305 euros. The staff costs and the previously mentioned gross cost per employee enable the opening of 29 new job positions. The total income of the state and its institutions would potentially amount to 52,753 euros.

In the third sector **Energy and Energy Sources**, the simulation suggests that expenditures of 958,569 euros (95.9%) would be generated, of which 148,823 euros (14.9%) are gross expenditures related to employees. Of these, 94,315 euros are net salary costs for employees with an average gross cost per employee of 6,873 euros. Potentially 22 new jobs would be created according to the average cost per employee. The total income of the state would be approximately 50,000 euros (5%).

The fourth sector is "**Medicine and Pharmacy**" from which large companies are excluded in order to avoid "distortion" of the image and performance and thus the simulation itself. According to the results, the additional financing of 1,000,000 euros would cause expenditures of 935,537 euros (93.6%) of which 271,633 euros (27.2%) are gross costs related to employees. The total expenditures on the basis of net salaries and contributions amount to 166,807 euros with an average gross cost per employee of 5,562 euros. It is noticeable that the gross staff cost >

<is the second highest (after IT), but the significantly lower average gross cost of 5,562 euros allows the opening of more jobs or 49. Thus the Medicine and Pharmacy sector is attractive for additional financing, but it is necessary to increase the salary expenditures to existing employees to be more (and long-term) attractive. The total income for the state would potentially amount to EUR 83,393 (0.8%) of the total 1 million euros in additional finance.

The fifth sector "**Electronics and Technology**" will divide the income of 1 million euros into 930,655 euros of expenditures, of which 163,333 euros are gross staff expenditures. According to the projection, 102,281 euros are costs for net salaries and salary contributions, with an average staff cost per employee of 6,296 euros. In total, it is possible to open 26 new job positions. Tax and other incomes for the state and its institutions amount to approximately 4.5% of the total financing or 43,875 euros.

Large and medium-sized companies are excluded from the penultimate sector "**Construction and Engineering**", because they significantly change the overall image of the sector and do not allow to draw appropriate conclusions. With 1 million euros of additional finances, an expenditure of 923,109 euros is caused, of which 127,105 euros are gross staff costs. Net salaries and contributions are a total of 81,404 euros with an average gross cost per employee of 5,981 euros. Additional employment of 21 persons is provided. The total income of state institutions is 39,439 euros.

The last sector "Agriculture" has the lowest results in terms of employees compared to the others. The same income causes 927,039 euros of which 64,072 are staff expenditures. Salary costs and salary contributions amount to 40,270 euros with an average gross cost per employee of 5,436 euros. It will enable the opening of 12 new job positions and the state would have a total income of 19,527 euros from the initial 1 million euros.

The simulations do not indicate that one sector is better than another in general, but indicate which of the sectors would have the greatest effects on the economy compared to the others. The contribution can be mostly analyzed according to the number of new employments and the tax to be paid to the state. According to all financial indicators, investing in the IT sector has significantly better performance compared to all others because it employs a significant number of people (47) with the highest average gross salary in the analyzed sectors. Also, the expenditure on taxes and duties to state institutions is the highest for IT companies, with a share of 11.4% in the initial 1 million euros.

E4. PERFORMANCE SIMULATION FROM ADDITIONAL FINANCING ACCORDING TO THE FIELD OF THE FINANCING PROJECT

TABLE 29
SIMULATION FOR EFFECTS OF ADDITIONAL FINANCING BY COMPANY SIZE
Values in millions of euros - exception number of employees and expected number of employments

A	CRITERIA	IT	Mechanical engineering	Energy and Energy Sources	Medicine and Pharmacy	Electronics and Technology	Construction and Engineering	Agriculture
A1.	Total Income	27,966,475	19,556,958	13,716,837	3,972,386	21,546,952	7,717,045	17,985,873
A2.	Total expenditure	24,518,156	18,565,834	13,148,532	3,716,314	20,052,785	7,123,672	16,673,601
A3.	Staff costs (214+215+216+217)	9,864,361	3,436,371	2,041,377	1,079,030	3,519,319	980,878	1,152,383
A4.	Salaries and salary contributions (net) (214)	6,125,986	2,137,682	1,293,707	662,624	2,203,837	628,198	724,295
A5.	Expenses for salary taxes and salary contributions(215)	686,669	242,824	140,577	90,374	132,585	40,390	18,476
A6.	Compulsory social security contributions (216)	2,185,778	686,052	474,359	208,964	711,132	241,978	292,925
A7.	Other staff costs(217)	865,929	369,813	269,740	117,069	471,765	70,311	116,687
A8.	Profit tax	341,893	102,808	61,492	31,931	101,662	21,977	39,813
A9.	Number of employees	1,032	565	297	194	559	164	212
A10	Average staff cost per employee	9,558	6,082	6,873	5,562	6,296	5,981	5,436
B	PARTICIPATIONS OF PARAMETERS IN TOTAL INCOME	27,966,475	19,556,958	13,716,837	3,972,386	21,546,952	22,888,427	17,985,873
B1.	Total expenditure	87.7%	94.9%	95.9%	93.6%	93.1%	92.3%	92.7%
B2.	Staff costs	35.3%	17.6%	14.9%	27.2%	16.3%	12.7%	6.4%
B3.	Salaries and salary contributions (net)	21.9%	10.9%	9.4%	16.7%	10.2%	8.1%	4.0%
B4.	Expenses for salary taxes and salary contributions	2.5%	1.2%	1.0%	2.3%	0.6%	0.5%	0.1%
B5.	Compulsory social security contributions	7.8%	3.5%	3.5%	5.3%	3.3%	3.1%	1.6%
B6.	Other staff costs	3.1%	1.9%	2.0%	2.9%	2.2%	0.9%	0.6%
B7.	Profit tax	1.2%	0.5%	0.4%	0.8%	0.5%	0.3%	0.2%
C	EFFECTS OF ADDITIONAL INCOME / FINANCING							
CX	Amount of additional income / financing	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
CY	Average staff cost per employee	9,558	6,082	6,873	5,562	6,296	5,981	5,436
C1.	Total expenditure	876,698	949,321	958,569	935,537	930,655	923,109	927,039
C2.	Staff costs	352,721	175,711	148,823	271,633	163,333	127,105	64,072
C3.	Salaries and salary contributions (net)	219,047	109,305	94,315	166,807	102,281	81,404	40,270
C4.	Expenses for salary taxes and salary contributions	24,553	12,416	10,249	22,751	6,153	5,234	1,027
C5.	Compulsory social security contributions	78,157	35,080	34,582	52,604	33,004	31,356	16,286
C6.	Other staff costs	30,963	18,910	19,665	29,471	21,895	9,111	6,488
C7.	Profit tax	12,225	5,257	4,483	8,038	4,718	2,848	2,214
C8.	Expected number of new employments (C3/A10)	37	29	22	49	26	21	12
C9.	Income for the state and state institutions(C4+C5+C7)	114,935	52,753	49,314	83,393	43,875	39,438	19,527

E5. SIMULATION OF PERFORMANCE FROM ADDITIONAL FINANCING AND IMPACT ON CONSUMPTION, EMPLOYMENT AND TAXES

As a finalization of the simulation, it is necessary to see how the financing of 1 million euros in various projects, instruments, project area and large enterprises will have an effect on the economy in terms of private consumption (net salaries for employees), number of employees and annual tax. It is safe to assume that the economic multiplier of private consumption (net salaries) will be a minimum of 2, i.e. the initial value of salaries due to their spending in the local economy will be worth at least double.

According to the calculations, it can be unequivocally confirmed that the companies whose project area was in IT and the "Start-Up / Spin-Off" instruments have significantly greater effects on the economy than all the others. IT projects with a multiplier of 2 have a salary value of 438,095 euros or approximately half the value of the additional financing that initially initiated that change or 1 million euros. The same "Start-Up / Spin-Off" instrument with a multiplier of 2 has a salary value of 482,537 euros, again approximately half of the initial value. With a larger multiplier, the effect is even greater, but it is safe to take into account only the one with a value of 2. From other sectors, to a certain extent stands out "Medicine and Pharmacy" where with the same multiplier the value of employees' salaries for the economy would be 333,615 euros and a tax value of 83,393 euros. The sector that has a significantly lower performance than all the others is "Agriculture" where the value of the initial salaries is lower but also the value of the tax.

From the aspect of taxes, the IT sector and the same instrument as expected (due to the value of salaries) with expenditures of 114,935 euros, i.e. 110,909 euros per year from those initial 1 million euros of additional financing. The World Bank SDIS program has moderately lower performance, but if the structure of companies that received financing through that program is analyzed, again we get IT companies and companies part of the "Start-Up / Spin-Off" instrument.

Finally, the number of new jobs that will provide the initial 1 million euros of additional financing are highest in the "Start-Up / Spin-Off" instrument with 71 people and 41 in "Medicine and Pharmacy". However, from the previous analyzes, in the indicated two sectors, the salaries, i.e. the costs per employee are generally lower and therefore employment of more persons is enabled. However, even to double the salaries in the "Start-Up / Spin-Off" instrument (halve the new employees) the number of potential employments is approximately 36 which is again one of the highest. The IT area has the highest salaries compared to all the others and provides employment for 37 people, which again emphasizes that the effects of the additional financing of 1 million euros are the highest for those projects / area.

TABLE 30
ANALYSIS OF THE EFFECTS OF THE ADDITIONAL FINANCING OF 1 MILLION EUROS ON EMPLOYMENT, THE ECONOMIC MULTIPLIER AND THE TAXES
Values in euros

VALUES IN CRORES		ECONOMIC MULTIPLIER				
	NET SALARIES FOR EMPLOYEE S	2	2.5	3	TAXES	NEW EMPLOYM ENTS
COMPANY SIZE						
Micro Enterprise	89,516	179,032	223,790	268,548	43,002	24
Small Enterprise	106,653	213,306	266,633	319,960	54,999	25
Medium Enterprise	127,630	255,260	319,075	382,890	61,783	31
Large Enterprise	97,354	194,707	243,384	292,061	55,540	13
PROJECT AREA						
IT	219,047	438,095	547,619	657,142	114,935	37
Mechanical engineering	109,305	218,611	273,264	327,916	52,753	29
Energy and Energy Sources	94,315	188,631	235,788	282,946	49,314	22
Medicine and Pharmacy	166,807	333,615	417,019	500,422	83,393	49
Electronics and Technology	102,281	204,561	255,702	306,842	43,875	26
Construction and Engineering	81,404	162,808	203,510	244,212	39,438	21
Agriculture	40,270	80,540	100,676	120,811	19,527	12
PROGRAM						
Plan for economic growth (PEG)	98,964	197,929	247,411	296,893	47,944	26
World bank SDIS	199,799	399,597	499,497	599,396	94,345	54
INSTRUMENT						
Improvement of Innovation	116,245	232,491	290,613	348,736	56,738	28
Commercialization	120,828	241,656	302,069	362,483	66,016	23
Technology development	89,057	178,114	222,642	267,171	44,425	25
Start-up/Spin-off	241,268	482,537	603,171	723,805	110,909	71

Explanation of the meaning of a multiplier: when a change in consumption affects a larger change in GDP than the initial change / value. For example, if an employee initially spends 100 euros in a local business, and that additional consumption causes a change in GDP of 200 euros (because the local business further spends the money as its own in the form of salaries and other expenses), the economic multiplier multiplies the value of the 100 Euros with 2.

G1. EXECUTIVE CONCLUSION GENERAL INFORMATION

TOTAL CO-FINANCED 669 PROJECTS

TOTAL VALUE	FITD	COMPANIES
88.25 € millions	49.32 € millions 55%	38.93 € millions 45%
AVERAGE VALUE	FITD	COMPANIES
132,236 €	73,893 €	58,343 €

BASIC FINANCIAL PARAMETERS OF THE PORTFOLIO COMPANIES

	2017	2020
INCOMES	278.32 € millions	417.17 € millions
PROFIT	24.02 € millions	41.99 € millions
NUMBER OF EMPLOYEES	5,876	8,439
BUDGET EXPENDITURES	15.64 € millions	26.00 € millions

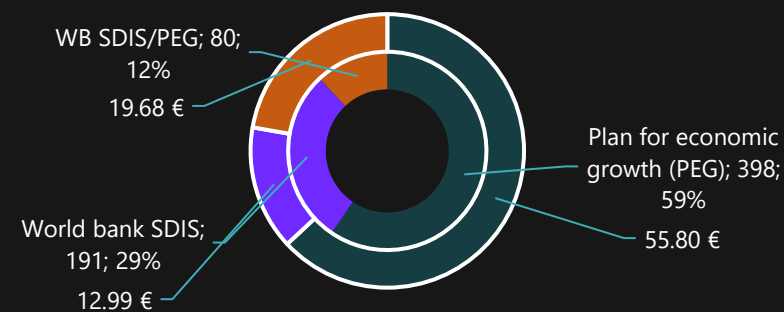
GRAPH G01

Number and value of financed projects by program

Period: 2016 – 2021

Total projects: 669

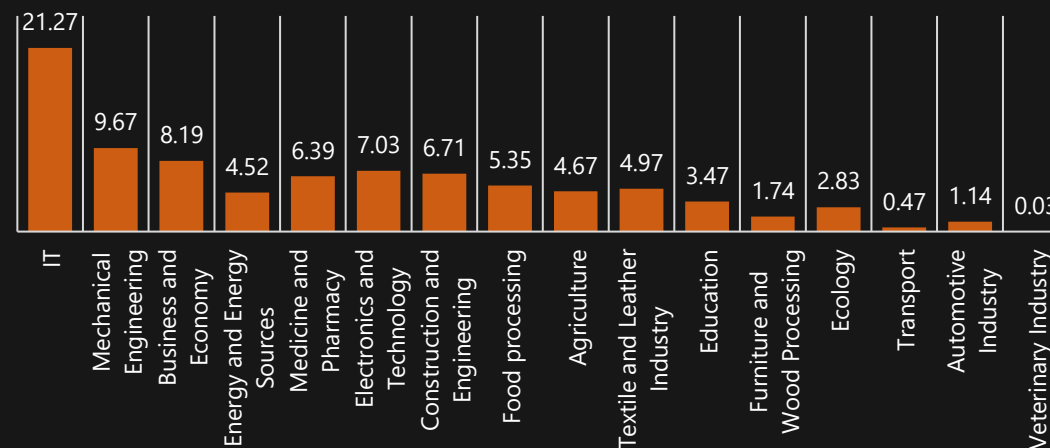
Values in millions ('000 000) euros



GRAPH G02

Total value of financed projects by area

Value in millions ('000 000) euros



G1. FINANCIAL PARAMETERS OF THE CO-FINANCED COMPANIES ACCORDING TO THE INSTRUMENT AND AREA OF THE PROJECT

The current part analyzes the instruments through which the projects were financed. To simplify the analysis and obtain relevant results, all instruments for the purpose of Technological Development (Technology Development, Technology Development (fast track)) are merged under one general instrument and thus analyzed in the report.

According to the basic data for the instruments, most of the projects are financed in the area of "Start-Up / Spin-Off" or 171, but with a significantly lower value compared to the others with 6.17 million euros, of which 4.73 are co-financed by FITD. and the rest by the companies themselves with an average project value of approximately 36,000 euros.

In terms of value, the largest funds were allocated for "Improvement of innovation" or 21.63 million for 103 projects with an average value per project of 197,000 euros. Of those funds 14.54 million euros are co-financed by FITD and the remaining 7.08 million euros are by the companies themselves. The second largest value instrument is the one for Commercialization of Innovations with 21.27 million euros for 93 projects and an average value per project of 229,000 euros.

7 representative areas (segments) of the co-financed projects are processed, which have a larger number of projects and less dispersion of the performance of the companies, which enables appropriate analysis. IT, Mechanical Engineering, Energy and Energy Sources, Medicine and Pharmacy, Electronics and Technology, Construction and Engineering and Agriculture were analyzed.

TABLE 12
Analyzed instruments
Values in millions ('000 000) euros

Instrument	FINANCING				
	Total projects	Total value	Company	FITD	Average value
Start-up/Spin-off	171	6.17	1.44	4.73	0.036
Improvement of Innovation	110	21.63	7.08	14.54	0.197
Technology development for economic growth	103	11.01	5.29	5.72	0.107
Commercialization	93	21.27	7.09	14.18	0.229
Technology development COVID19	92	2.68	1.04	1.64	0.029
Technology development	36	6.15	4.37	1.78	0.171
Technology development (fast track)	32	7.11	5.01	2.10	0.222
Technology extension	4	3.23	1.83	1.40	0.808
Business Accelerator	3	1.99	0.55	1.44	0.665

TABLE 17
Analyzed sectors and basic parameters
Values in millions ('000 000) euros

Project activity / area	FINANCING				
	Total projects	Total value	Company	FITD	Average value
IT (link)	171	21.27	7.79	13.48	0.12
Mechanical Engineering (link)	46	9.67	4.51	5.17	0.21
Energy and Energy Sources (link)	29	4.52	1.74	2.79	0.16
Medicine and Pharmacy (link)	65	6.39	3.03	3.36	0.10
Electronics and Technology (link)	62	7.03	3.28	3.74	0.11
Construction and Engineering (link)	44	6.71	3.60	3.12	0.15
Agriculture (link)	34	4.67	2.19	2.48	0.14

G2. OVERALL CONCLUSION FOR THE BASIC FINANCIAL INDICATORS OF THE CO-FINANCED COMPANIES BY FITD

The companies that were part of the portfolio of FITD or 268 in 2017 have generated 278 million euros in income while 401 companies in 2020 generated 417 million euros. The cumulative income growth for the analyzed period is 50%, while the real average annual growth is between 8% - 10% (if we take it into account). Despite the serious growth of income and the number of employees in the portfolio in general, the average income per employee is between 47,402 euros in 2017 and 49,434 euros in 2020. The portfolio profit in the same period has a cumulative increase of 75% or from 24 million to 42 million euros.

The total number of employees in the portfolio has a cumulative growth of 44% or from 5,876 in 2017 to 8,439 employees in 2020. Total staff costs have increased from 54 million euros to 77 million euros and account for 18% of the total income of the companies in 2020. The cumulative increase in staff costs is 54% between 2017 and 2020. The average net salary for employees who are part of the portfolio is between 480 euros and 516 euros, and throughout the period the average salary is higher compared to the general average at the state level (State Statistical Office) of 466 euros.

Note: The number of companies that were part of the portfolio (*received financing or submitted documentation in the following years*) of FITD in 2017/18 is 268 while in 2019/20 is 401. According to their performance, the analyzes are made in the following graphs and the conclusions are drawn.

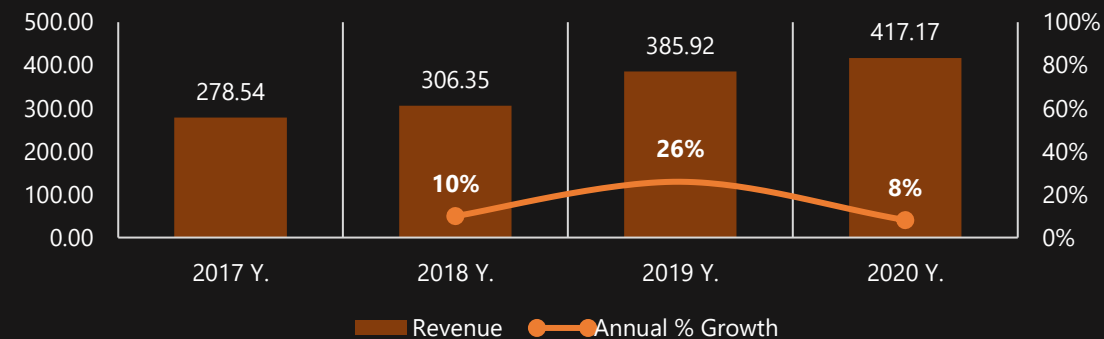
GRAPH G03

Total income of portfolio companies co-financed by FITD

Cumulative portfolio growth 2020/17: 50%

Number of companies: 17/18 - 268; 19/20 - 401

Values in millions ('000 000) euros



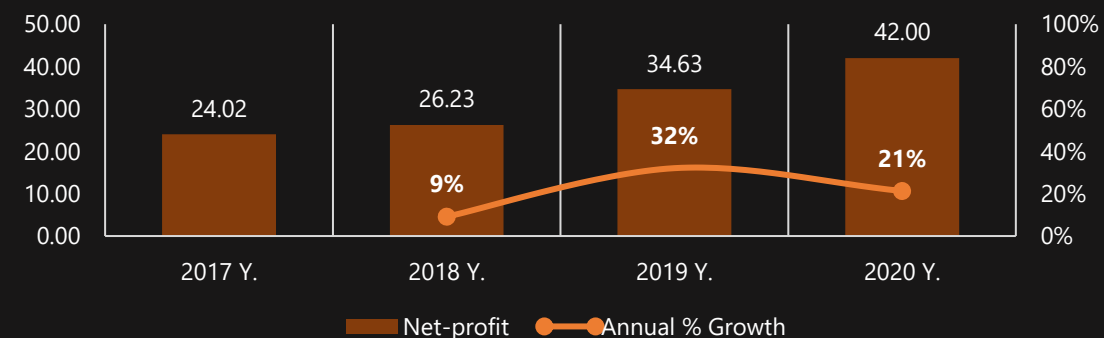
GRAPH G04

Total income of portfolio companies co-financed by FITD

Cumulative portfolio growth 2020/17: 75%

Number of companies: 17/18 - 268; 19/20 - 401

Values in millions ('000 000) euros



G2. OVERALL CONCLUSION FOR THE BASIC FINANCIAL INDICATORS OF THE CO-FINANCED COMPANIES BY FITD

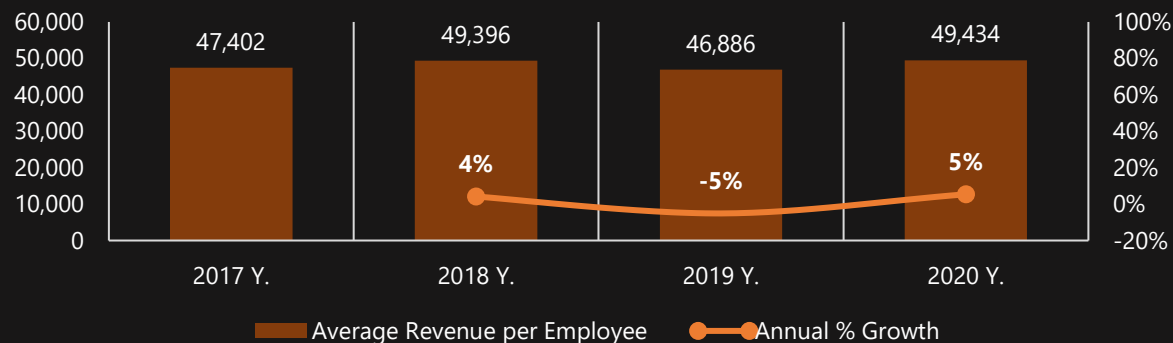
GRAPH G05

Average income per employee in co-financed companies by FITD

Cumulative portfolio growth 2020/17: 4%

Number of companies: 17/18 - 268; 19/20 - 401

Values in euros

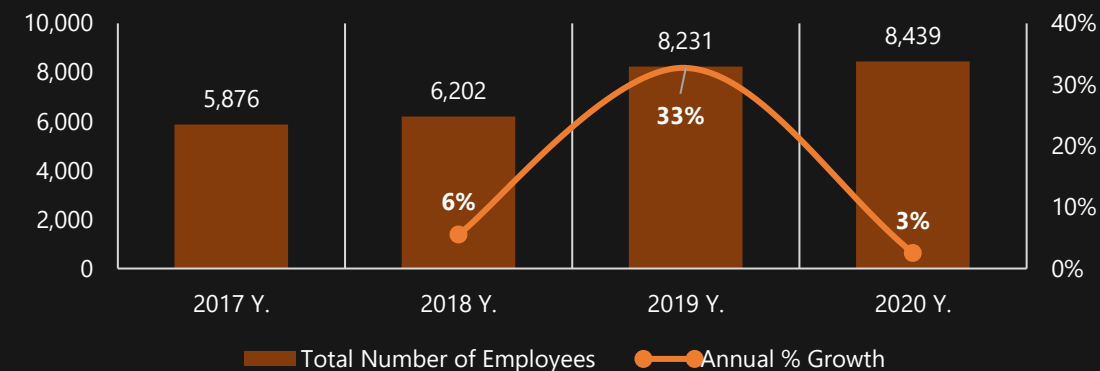


GRAPH G06

Total number of employees of portfolio companies co-financed by FITD

Cumulative portfolio growth 2020/17: 44%

Number of companies: 17/18 - 268; 19/20 - 401



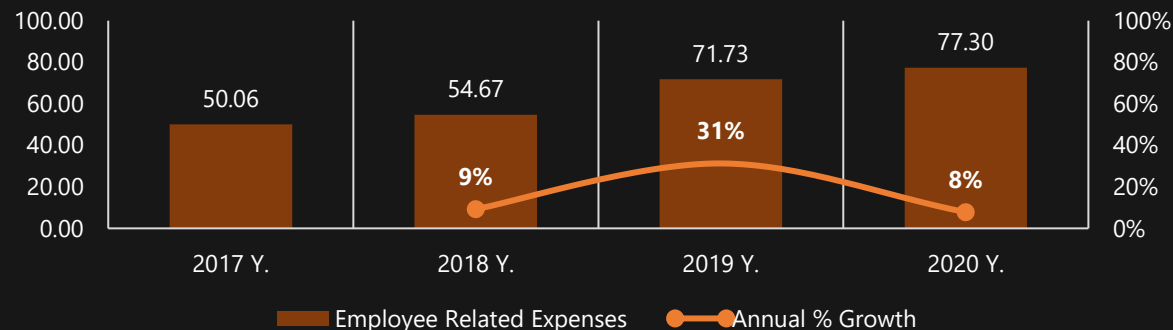
GRAPH G07

Total staff costs of portfolio companies co-financed by FITD

Cumulative portfolio growth 2020/17: 54%

Number of companies: 17/18 - 268; 19/20 - 401

Values in millions (*000 000) euros



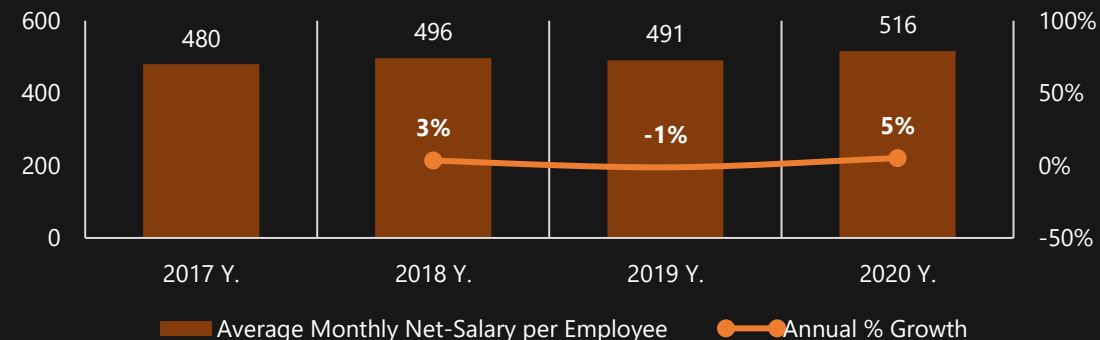
GRAPH G08

Average paid (monthly) net salary of portfolio companies co-financed by FITD

Cumulative portfolio growth 2020/17: 8%

Number of companies: 17/18 - 268; 19/20 - 401

Values in euros



G2. OVERALL CONCLUSION FOR THE BASIC FINANCIAL INDICATORS OF THE CO-FINANCED COMPANIES BY FITD

In general, the portfolio of companies co-financed by FITD is growing according to all analyzed indicators and overall (cumulatively compared to 2020 and 2017) and compared to the average values per company. Cumulative growth in GRAPH 08 indicates the growth of income of all companies in the FITD portfolio in the comparative years, while the growth of average values measures the real average growth of indicators according to average values per company.

The entire portfolio of companies financed by FITD in 2017 compared to 2020 have an increase in income by 50%, expenditure by 47% and profit by 75%. At the same time, the staff costs have increased by 54%, of which the largest is the cost of salaries and contributions by 56%. The number of employees increased by 44% in the same analyzed period. However, the significant increase (cumulative growth) is due to the number of companies that are financed and are part of the FITD portfolio (and analyzed for the report) in 2017 compared to 2020, therefore the growth analysis of average values per company in the same period is more likely. Budget income for the state (*expenditures from companies*) for the FITD portfolio have grown by 66% between the two years.

More appropriate comparison and analysis of trends in time series can be performed through the average values per employee and company. It is noticeable that the average for the indicators between 2017 - 2020 (sections 5 and 6) has different intensity. The most significant growth or 17% between 2020 - 2017 has the profit of companies, followed by average income by 0% and expenditures decreased by -1%. Increasing net profit is likely to be influenced by cost optimization, processes or the introduction of a new product or innovation. The total number of employees has increased over the entire portfolio, has increased by 44% but the average number of employees per company has decreased by -4%. At the same time, the costs of salaries and contributions have increased by 56% while the paid net salary is higher by 9% in 2020 compared to 2017.

Cumulative growth is calculated as the ratio between the last fiscal year 2020 and the results of 2017. The growth is calculated for the entire portfolio financed in the respective year, i.e. the number of companies financed in 2020 is higher than in 2017, but the comparison is on the overall results.

The growth of average values is the growth of average values for financial indicators calculated per company. For example, if the total income is 10 million euros for 10 companies in 2020, the average income is 1 million euros, compared to a total of 5 million for 10 companies in 2017, the average revenue is 0.5 million. Thus, the average income has increased by 100%.

GRAPH G09

Cumulative growth / decline of the core indicators of the portfolio of companies co-financed by FITD

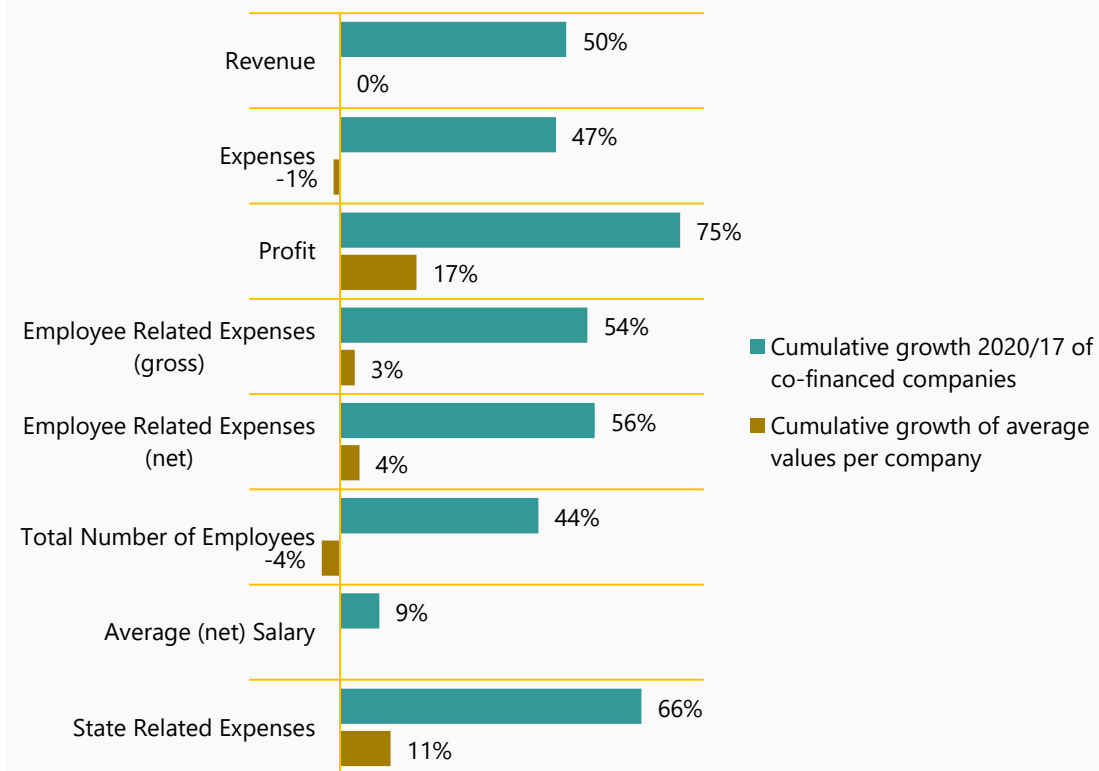
Period: 2020/2017

Total Revenue 2020: 417 million euros

Total Revenue 2017: 278 million euros

Total number of companies 2020: 401

Total number of comp



G3. OVERALL CONCLUSION ON PORTFOLIO PERFORMANCE IN CRISIS (COVID-19)

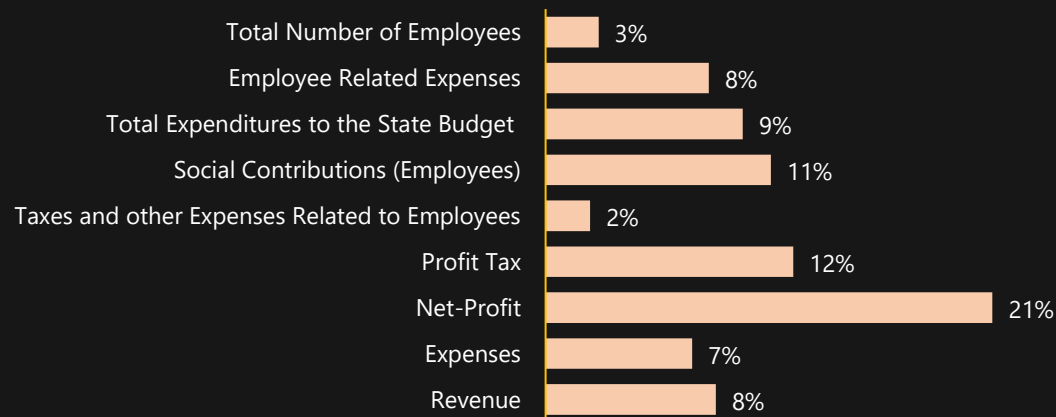
The total income generated by the companies (portfolio) in 2020 is 417 million euros, compared to 385 million in 2019. Profits also rose from 34 million euros to 42 million euros, along with an increase in employees from 8,231 to 8,439. Budget expenditures that include, contributions and social security for employees, profit tax and personal income tax amounted to 26 million euros with an increase of 23.72 million in 2019. Overall, the companies in the FITD portfolio have growth of all indicators, compared to the economy as a whole, which in 2020 has a decline in GDP of -4.5%.

One of the analyzes that have been made is in relation to the performance of the portfolio, i.e. the companies in the period of COVID-19. From TABLE 25.01 we can see that the portfolio of companies financed by FITD have positive results, i.e. growth in the crisis year 2020 compared to 2019 and the decline in GDP. Incomes increased by 8%, expenditures by 7% and profits by 21%. In fact, the crisis has contributed to the optimization of a larger number of processes in companies and business models, which in turn directly affects profitability and its increase. It is noticeable that the companies have increased the number of employees by 3% with a parallel increase in salaries of 5% because the average (monthly) net salary per employee has increased from 491 to 516 euros. Staff costs increased by 8% which is caused by the new additional 218 employments and the increase of salaries for the current employees.

GRAPH G10

Cumulative growth / Decline of core financial portfolio indicators
companies 2020/19

Indicator: relative growth / decline



BASIC FINANCIAL PARAMETERS WITH COVID-19 (2020/19)

	2019	2020
INCOME	385.91 € millions	417.17 € millions
PROFIT	34.63 € millions	41.99 € millions
NUMBER OF EMPLOYEES	8,231	8,439
BUDGET EXPENDITURES	23.72 € millions	26.00 € millions

G4. FINANCIAL INDICATORS OF CO-FINANCED COMPANIES BY FITD

Most of the report covers the achieved financial result of the companies in the year before and 2 years (or 1 year) after the financing of the innovative project (co-financing by FITD). Relative indicators (growth / decline) are calculated based on the average value, for example, income, expenditures or staff costs per company, because this allows a much more appropriate comparison between sectors. Detailed analysis for each of the programs, instruments and project segments is part of the whole report ([more in content](#)).

It is generally noticeable that all sectors, projects and instruments record positive results, i.e. growth in the basic indicators. Analyzed in detail, some of the sectors show higher growth in relative values than others, but the detailed analysis suggests that one of the most stable segments of funding is IT ([link](#)) and the instruments are "Start-Up / Spin-Off" ([link](#)) which preserve most of the companies that are classified as "No employees and Micro". According to the relative values, the area "Agriculture" has high growth rates, especially for profits and income, but in the detailed analysis it is noticeable that the result is a consequence of a small number of companies ([link](#)).

The "World Bank" program ([link](#)) also has high results, through which a number of "Start-Up / Spin-Off" companies are financed. Consequently, there is higher growth among companies, but also higher risk compared to those funded through the "Economic Development Plan", a government program ([link](#)). However, both programs, i.e. the companies that are financed through those programs, show an increase in performance.

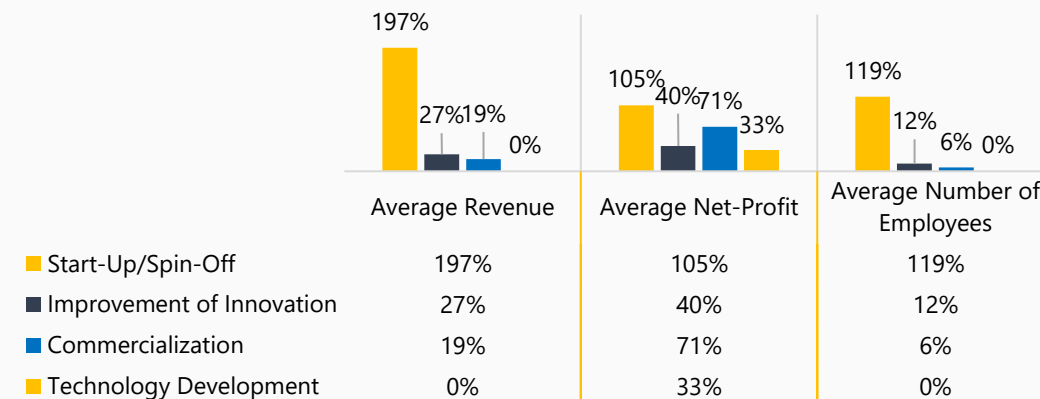
As one of the main goals of FITD for increasing employment, Start-Up companies record significant employee growth of 119% in the analyzed period, given that a significant number of companies are financed through that instrument.

Explanation of the years: Year of financing is the year in which the project was accepted for financing by FITD and not the year of actual payment of funds.

Explanation of % growth / decline: calculated as the ratio between the last "1 year after financing" and the first "year before financing" i.e. cumulative growth / decline.

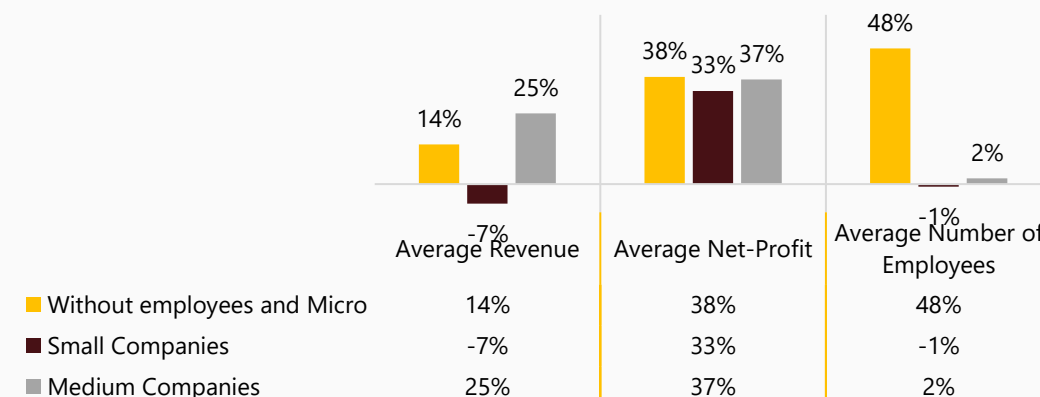
GRAPH G11

Cumulative growth of basic average (per company) financial results between the year before and one / two years after receiving the financing



GRAPH G12

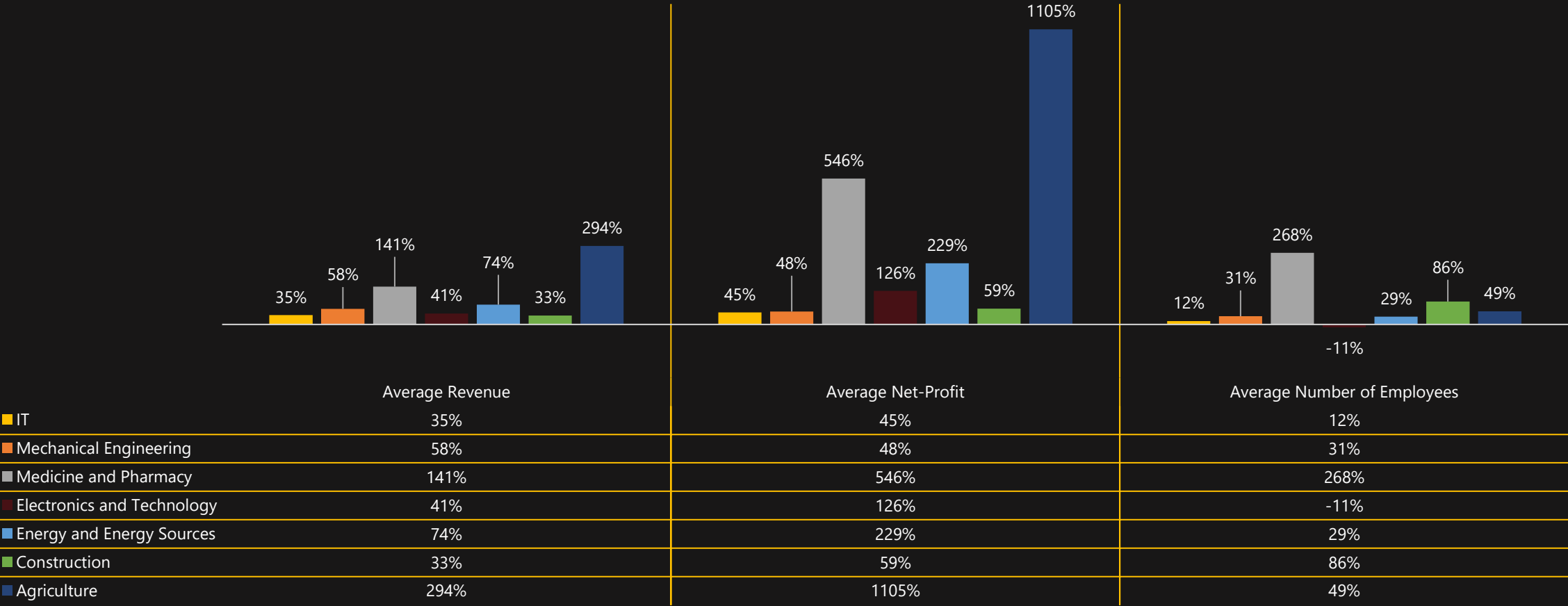
Cumulative growth of basic average (per company) financial results between the year before and one / two years after receiving the financing



G4. FINANCIAL INDICATORS OF CO-FINANCED COMPANIES BY FITD

GRAPH G13

Cumulative growth of basic average (per company) financial results between the year before and one / two years after receiving the financing



G5. PERFORMANCE SIMULATION FROM ADDITIONAL FINANCING ACCORDING TO THE FIELD OF THE FINANCING PROJECT

The last simulation is made according to the area of the project with which the companies have received the financing. The same sectors as in the analysis "[Financial parameters of co-financed companies by year and project segment](#)" are processed and large companies are excluded again to avoid distortion of results. This analysis completes the conclusion on which segments and what type of companies would cause the best results with additional financing by FITD.

The simulations do not indicate that one sector is better than another in general, but indicate which of the sectors would have the greatest effects on the economy compared to the others. The contribution can be mostly analyzed according to the number of new employments and the tax to be paid to the state. According to all financial indicators, investing in the IT sector has significantly better performance compared to all others because it employs a significant number of people (47) with the highest average gross salary in the analyzed sectors. Also, the expenditure on taxes and duties to state institutions is the highest for IT companies, with a share of 11.4% in the initial 1 million euros.

TABLE G14 SIMULATION FOR EFFECTS OF ADDITIONAL FINANCING BY COMPANY SIZE Values in millions of euros - exception number of employees and expected number of employments								
	IT	Mechanical engineering	Energy and Energy Sources	Medicine and Pharmacy	Electronics and Technology	Construction and Engineering	Agriculture	
B	PARTICIPATIONS OF PARAMETERS IN TOTAL INCOME							
B1.	Total expenditure	87.7%	94.9%	95.9%	93.6%	93.1%	92.3%	92.7%
B2.	Staff costs	35.3%	17.6%	14.9%	27.2%	16.3%	12.7%	6.4%
B3.	Salaries and salary contributions (net)	21.9%	10.9%	9.4%	16.7%	10.2%	8.1%	4.0%
B4.	Expenses for salary taxes and salary contributions	2.5%	1.2%	1.0%	2.3%	0.6%	0.5%	0.1%
B5.	Compulsory social security contributions	7.8%	3.5%	3.5%	5.3%	3.3%	3.1%	1.6%
B6.	Other staff costs	3.1%	1.9%	2.0%	2.9%	2.2%	0.9%	0.6%
B7.	Profit tax	1.2%	0.5%	0.4%	0.8%	0.5%	0.3%	0.2%
C	EFFECTS OF ADDITIONAL INCOME / FINANCING							
CX	Amount of additional income / financing	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
CY	Average staff cost per employee	9,558	6,082	6,873	5,562	6,296	5,981	5,436
C1.	Total expenditure	876,698	949,321	958,569	935,537	930,655	923,109	927,039
C2.	Staff costs	352,721	175,711	148,823	271,633	163,333	127,105	64,072
C3.	Salaries and salary contributions (net)	219,047	109,305	94,315	166,807	102,281	81,404	40,270
C4.	Expenses for salary taxes and salary contributions	24,553	12,416	10,249	22,751	6,153	5,234	1,027
C5.	Compulsory social security contributions	78,157	35,080	34,582	52,604	33,004	31,356	16,286
C6.	Other staff costs	30,963	18,910	19,665	29,471	21,895	9,111	6,488
C7.	Profit tax	12,225	5,257	4,483	8,038	4,718	2,848	2,214
C8.	Expected number of new employments (C3/A10)	37	29	22	49	26	21	12
C9.	Income for the state and state institutions(C4+C5+C7)	114,935	52,753	49,314	83,393	43,875	39,438	19,527

H. RECOMMENDATIONS FOR IMPROVING THE EFFECTS OF FINANCING AND INCREASING INNOVATIVE ACTIVITIES IN THE DOMESTIC ECONOMY

In general, all companies divided by sectors, size, instrument and project show positive financial performance before and after the investment in the innovative project. However, the performance differs significantly between them, which in turn allows for recommendations for future financing directions. The recommendations may not be applicable if the fund has an unlimited amount of finances which would maximize the effects for each segment separately, but with limited resources, according to the consultants it is most important to direct them to sectors where the highest performance is provided.

According to the simulations, **most of the funds are appropriate to be invested in the companies that record the highest performance with additional financing, i.e. the largest number of jobs, with solid expenditures for employees and high incomes for the state in the form of taxes to allow further financing of new projects.** Such segments are IT and "Start-Up / Spin-Off" in which the human factor has the greatest importance. This indicates a reduction of financing in industries or companies that depend on expensive production (capital) processes and for which financing by FITD will not have a large impact in terms of overall performance or participate with a small percentage in the total assets of the company. The above does not indicate that capital-intensive companies should be excluded from financing, or that they do not achieve positive results (according to the analysis, they achieve positive results), but to direct more funds to companies where there are more jobs, higher salaries, exports and more taxes.

The second recommendation is to increase the budget used for co-financing of "Start-Up / Spin-Off" companies, because according to different criteria they record significantly higher performance than all the others. As an example, additional financing of 1 million euros in the indicated segment will cause 71 new jobs and 110,000 euros in the form of taxes for the state ([link](#)). Although, as expected, there is a significantly higher risk in financing such companies, those who have received financing have achieved a net positive (deducting the loss from the net profit) profit at the segment level. 4.73 million euros (FITD finances) have been allocated for them for a period of 5 years, an amount that is significantly lower than other instruments.

The third recommendation is from the aspect of project areas, it is noticeable that IT has significantly better performance than all the others. Those companies that have received financing in the IT area, according to the [analysis](#) have the largest share of staff expenditures in the total structure of expenditures (38%) and have the highest average staff cost per employee after the second year of financing with 11,552 euros (approximately>

<650 euros net salary). The net profit margin is also stable and high, which enables additional future financing of other innovative projects. Additionally, according to the simulations, the additional financing of 1 million euros will contribute to 37 new jobs and 114,000 euros (11.4%) in the form of taxes. Therefore, redirecting most of the funds to IT projects will contribute to increasing employment at higher salaries than other segments and at the same time will provide greater income for the state in the form of taxes.

Creating training programs for companies that have not received (or do not need) financing from FITD for research and development. Having in mind that the investment in Research and Development in North Macedonia is significantly low 0.36% of GDP in 2018, significant improvement is needed in the domestic economy in general in research and development of companies that have the capacity but do not use it for innovative solutions. The very fact that the co-financed projects by FITD with a value of 88 million euros participate with 36% - 41% in the total R&D investments of 200-210 million euros ([link to the analysis](#)), indicates that the institution has the capacity to launch innovative processes (projects, products / services) in existing companies and will increase the culture of investing in them. The previous should be realized to a large extent in the companies that according to the size are in the rank of Medium (50 - 250 employees) and Large (250+ employees) have financial and human capacity to realize and create innovative projects, products and services.

The previously mentioned companies that have received co-financing from the "Start-Up / Spin-Off" instrument, although they have high results, some of them record a loss that can be significant for small companies. Therefore, **additional training of entrepreneurs starting a new business and consulting in setting up businesses will increase the likelihood of success and achieving better financial results in a shorter time interval.**

The previous proposals can contribute to increasing the effectiveness and efficiency in the use of funds and co-financing of FITD.