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Analysis of the Employment, Economic and Financial Effects of the Individual Career Guidance and Counselling Programme

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Executive summary

This report analyses the employment, economic and financial effects of the individual counselling programme that was introduced as a part of the Education to Employment (E2E) project in Serbia. Given that the programme has limited duration and scope, the effects can be expected to be moderate compared to interventions that provide direct work experience, such as workplace practice, internships, or subsidized employment placements. Individual counselling is also intended to improve participants' understanding of their educational and career options, meaning that its potential benefits extend beyond employment alone.

To assess the employment effects, in the absence of a control group, the analysis compares participants' labour market status before and after counselling and relies on participants' assessments of the contribution of counselling to obtaining employment. The analysis focuses primarily on participants who identified themselves as job seekers¹ before counselling, as participation in career counselling for this group is most directly related to the intention to find employment. We construct a Participant-Attributed Employment Contribution Index (PAECI), which combines information on employment status after counselling with participants' assessments of the contribution of counselling to obtaining a job.² The index allows us to assess employment outcomes while considering whether participants themselves attribute part of their employment to counselling.

The main results of the analysis can be summarized as follows:

- Approximately **half of the participants who were job seekers before counselling are currently employed**, while 62% of them currently have, or have had, a job within the six months preceding the interview.
- About **half of the participants** who found employment report that **individual counselling helped them obtain a job to some degree**.
- Combining employment outcomes with participants' assessments of the contribution of counselling, the average **PAECI for job seekers is estimated at 11.4%**. This means that the overall employment effect of **the counselling programme is equivalent to 11.4% of participants finding employment that is fully attributable to counselling**. In our sample of 282 participants who were seeking work before counselling, this is equivalent to **32 counselling-attributable jobs**.³

The analysis further indicates that:

- Participants who **attended two or more counselling sessions and who attended longer sessions achieved somewhat better employment outcomes** than those who attended only one session.
- **The vast majority of jobs obtained by participants can be characterized as formal**. About **half of the employed participants signed permanent employment contracts**.

¹ The primary group we analyse are job seekers (based on respondents' self-reported status), as this most closely corresponds to the ILO definition of unemployment. Following the ILO definition, unemployed persons are those who are without work, are actively seeking employment, and are available to start working, whereas inactive persons are outside the labour force because they are not actively seeking employment and/or are unavailable to work. The information on respondents' labour market status prior to entering the survey does not permit a direct application of this classification, as it is based on a series of separate yes/no questions referring to statuses such as "Student", "Unemployed", "Registered at NES", and "Job seeker" (see Section IIIa for details).

² For employed participants, a five-point scale was used to assess the contribution of counselling to obtaining their job, where 1 = "did not help at all" and 5 = "helped very much". Unemployed participants and employed participants reporting no contribution (score 1) were assigned a PAECI value of 0. For other participants, we start from the assumption that participants reporting that counselling "helped very much" (score 5) to their employment attribute 60% of their employment to counselling, while those reporting a partial contribution (scores 2–4) were assigned values of 15, 30, and 45%, respectively. As the value of 60% is arbitrary, we perform robustness checks where score 5 is equated with 40 and 80% of their employment attribution to counselling.

³ This does not mean that 32 participants found a job solely because of counselling; rather, it means that participants' reported contribution of counselling is equivalent to 32 fully counselling-attributed jobs.

- Furthermore, **37% of participants reported career advancement** in jobs they obtained after participating in the programme. In addition, about three quarters of participants who found jobs earned more than the minimum wage, while about one quarter earned more than the median wage.
- Participants report **high satisfaction with the quality of career counselling and counsellor performance**. Satisfaction is more moderate with regard to the labour-market and education information provided, as well as the contribution of counselling to participants' decision-making and clarification of career preferences.

Economic and financial analysis estimates suggest that:

- The **cost per counselling-attributable job** is estimated at **81,046 RSD**.
- **Annual labour income attributable to counselling** is estimated at approximately RSD **23 million** among job seekers. This corresponds to an **estimated economic return of RSD 8.8** for every RSD invested, and a **net economic benefit of about RSD 20 million**.
- **Total estimated fiscal effect**, in terms of annual revenues from taxes and social security contributions, **amounts to 13.1 million RSD**. This corresponds to a **fiscal return of RSD 5.0** for every RSD invested in counselling and a **net fiscal benefit of approximately RSD 10.5 million**.

While the analysis is necessarily sensitive to the assumptions underlying the PAECI indicator, the robustness tests confirm that the programme produces positive employment outcomes under a range of plausible specifications, with economic and fiscal benefits that exceed programme costs several times over.

I. Introduction

Individual counselling programmes are intended to improve beneficiaries' employability and facilitate labour market integration through personalized support. The counselling programme within the E2E programme in Serbia includes a range of measures, such as individual career guidance and counselling (more than 30 minutes), provision of career information (less than 30 minutes), competence assessments, job shadowing, and job matching.

Individual counselling can improve employability by helping beneficiaries to better understand labour market opportunities, strengthen motivation, improve job-search strategies, and address personal barriers to employment. It may also contribute to greater self-confidence, more realistic expectations, and improved alignment between beneficiaries' skills and available job opportunities. The expected impact of individual counselling on employment outcomes is likely to be positive, but relatively moderate compared to interventions that provide direct work experience, such as workplace practice, internships, or subsidized employment placements.

Individual counselling programmes within the E2E programme in Serbia are also intended to improve beneficiaries' understanding of their educational options, as some participants may continue their education. Descriptive statistics indicate that about 80% of participants were aged 22 or younger, while 87% were still in education. Improving understanding of educational options can therefore also be considered an outcome of individual counselling. However, this report focuses on labour-market outcomes.

Available data on the participants do not allow the identification of the causal impact of the programme on employment. Instead, a before–after analysis of participants' labour market transitions following individual counselling is conducted, while at the same time accounting for participants' assessment of how useful the programme was for their employment. At the same time, there are some limitations in the recording of pre- and post-programme labour market statuses that could be strengthened to improve data accuracy and consistency. These limitations are discussed in a separate document called *Inception and Context Analysis*, which also records suggestions for the improvement of future estimations.

The first part of this report reviews potential approaches for estimating employment effects. The second part explains how the existing data can be used to assess the employment outcomes of the counselling programme. The third part applies statistical techniques to identify evidence of programme effectiveness by comparing beneficiaries according to the number of services received, service duration, and other programme characteristics. The fourth part analyses additional indicators, such as the quality of jobs and participant satisfaction with the programme. Finally, the fifth part presents the economic and financial analysis of the counselling programme.

II. Methodology applied to estimate programme effects

a. Strategies for estimation of employment effects of individual counselling

Control group approach

The first group of approaches relies on the use of a control group and the estimation of the so-called treatment effect. In this framework, unemployed individuals who participated in individual counselling sessions are treated as the experimental (treatment) group, while unemployed individuals who did not participate in such sessions serve as the control group. The underlying objective is to estimate the extent to which participation in counselling affects employment-related outcomes, such as the probability of obtaining employment, employment stability, or the duration of unemployment. The key assumption of this approach is that the treatment and control groups are sufficiently comparable in terms of relevant observable and, ideally, unobservable characteristics. If the two groups are completely comparable, differences in outcomes observed after participation can be attributed to the effects of the counselling intervention.

The application of methods that rely on the use of a control group is not feasible with the existing data. According to the administrative data covering 3,155 participants, 99.7% of participants had been involved in individual counselling programmes (Table 1), i.e. only 9 persons had not participated in individual sessions. Among these participants, around 14% additionally took part in one or more group counselling sessions, while only about 0.4% participated in other employment-related services. As a result, the available sample lacks a comparable group of non-participants in individual counselling sessions that could serve as a control group.

Table 1: Shares of participants receiving different services

Variable	
Individual counselling	99.7%
Individual career guidance and counselling, more than 30 minutes	45.7%
Provision of career information, less than 30 minutes	15.6%
Competence assessments	36.5%
Job shadowing	2.2%
Group services	14.0%
Group counselling, more than 60 minutes	5.6%
Provision of career information, less than 60 minutes	5.4%
Gender-related group counselling & workshops/real encounters/trial	5.2%
Other services	0.4%
Participant in a Work Based Learning programme	0.1%
Upskilling	0.3%

Approach without control group – before–after and contribution analysis

Using the available data, a before–after analysis of labour market status is conducted and it provides valuable insights into participants' labour market transitions following individual counselling. A before–after analysis compares the labour market status of programme participants before and after their participation in individual counselling. The objective is to assess whether participants experienced improvements in their labour market outcomes, such as transitions from unemployment to employment. By comparing outcomes at the two

points in time, the analysis provides evidence on the extent to which participants' labour market situation changed following programme participation and the extent to which they attribute this change to individual counselling. Since the analysis does not include a comparison group, the observed changes cannot be attributed solely to the programme, but they nevertheless provide a useful indication of the role that individual counselling had in participants' labour market trajectories.

To account for the lack of a control group, we attempt to use other information to arrive at the best possible indicator of programme effects. Firstly, **we limit the analysis to the sample of persons who, prior to entering the counselling, were job seekers.** For this group we assume that participation in career counselling was primarily motivated by the intention to find employment, rather than to explore educational opportunities, identify personal interests and preferences, or make decisions regarding further education, which are also effects of the counselling.

Secondly, **we rely on participants' perceptions of how important the counselling was for their transition from unemployment to employment.** As a simple transition from unemployment to employment cannot be entirely attributed to the programme, we construct a Participant-Attributed Employment Contribution Index (PAECI), which combines information on before–after employment status with participants' assessments of the contribution of counselling to obtaining employment. This measure can be viewed as a participant-based measure of the employment effects of the counselling programme and interpreted as employment outcomes attributable to counselling according to participants' own assessments. As such, this indicator represents a measure of contribution, rather than an impact analysis.⁴

Finally, in the absence of a suitable control group, valuable evidence can still be generated through internal comparisons between different groups of beneficiaries, employment characteristics, and participants' satisfaction with the programme. Such comparisons make it possible to explore whether outcomes differ according to the type, intensity, duration, or combination of services received. While this approach, like the previous one, cannot establish causal effects, it can provide useful insights into the programme features that appear to be most strongly associated with positive labour market outcomes.

III. Estimation of the employment effects of the individual counselling programme

This chapter assesses the extent to which individual counselling sessions contributed to participants' employment outcomes. The analysis proceeds in four steps. First, using the data collected prior to counselling, we identify participants for whom employment can reasonably be considered a primary objective of counselling, distinguishing them from groups such as students, whose main goals may relate to education and career exploration rather than immediate labour market entry. Second, we examine employment outcomes after participation in counselling. Third, we analyse employed participants' assessments of the extent to which counselling contributed to obtaining a job or choosing an occupation.

⁴ There is an extensive literature on contribution analysis in programme evaluation. Academic papers include papers such as [Delahais, T., & Toulemonde, J. \(2012\)](#) which analyse how contribution analysis has been applied in evaluations done in a range of fields. On the other hand, policy documents such as the British Treasury Magenta Book: Central government guidance on evaluation or the OECD Measure, *Manage and Maximise Your Impact: A Guide for the Social Economy*, list contribution analysis as a measure that should be applied in cases where impact evaluation based on the control group is not possible.

Finally, in the fourth step, we combine these two dimensions – employment outcomes and perceived programme contribution – into a single indicator, the Participant-Attributed Employment Contribution Index (PAECI), which gives the best estimate (given the available data) of the employment outcomes that can be attributed to individual counselling and will serve as an input in the economic and financial analysis of the programme. This approach recognizes that employment outcomes alone do not reveal whether participants perceive counselling as having contributed to their success, while subjective assessments alone do not indicate whether employment was actually achieved. By examining both dimensions, the analysis provides a more comprehensive picture of the employment-related effects of individual counselling sessions, while underlining that the findings reflect participants' perceptions and should not be interpreted as evidence of the programme's causal impact on employment.

a. Sample for the analysis: labour market status prior to individual counselling sessions

As mentioned above, the total number of participants in the programmes includes 3,155 individuals. For the analysis, we restrict the sample to participants aged 19 or older, as younger participants are generally still enrolled in regular secondary education. This reduces the sample to 2,439 individuals. The sample is further restricted to persons who answered the question on employment status, which reduces it to 2,115.

Information on participants' labour market status prior to individual counselling is available from the short interview collected prior to entering the counselling. It collected the information on four status variables: student, unemployed, NES registered and job-seeker as shown in Table 2. It is important to note that these categories can overlap, i.e. that they are not mutually exclusive, so that the person can be, for example, a student and unemployed or unemployed and NES registered at the same time. At the same time, it should be noted that this information is not available for all respondents. Thus, in the analysis we present both 1) shares of individuals for whom the information is available, regardless of the answer, e.g. is information available on student status, regardless of whether the answer is yes or no, and 2) the share of the persons who are of the status, e.g. whether the person is a student, provided that information is available. The findings can be summarized as follows:

- The information on student status is available for 86.5% of participants. Out of participants for whom this information is available, about 86.7% were students and 13.3% were not students.
- The information if the person is unemployed is available in only 54.1% of the cases, and when available about 86.1% of the participants are unemployed.
- The information if the person is registered at the National Employment Service (NES) is available for 48.2% of the cases, and when available only 20.9% of the participants are registered at NES.
- The information if the person is a job seeker is available for about half of the cases (48.7%), and when available about 31.8% of the participants are job seekers.

Table 2: Number and shares of registered statuses prior to individual counselling

Status prior to individual counselling	Total number of participants interviewed	Administrative status available	Percent of status available compared to total interviewed	Total number of participants with the status	Share of the participants with the status
Student	2,115	1,830	86.5%	1,586	86.7%
Unemployed	2,115	1,144	54.1%	985	86.1%
NES Registered	2,115	1,020	48.2%	213	20.9%
Job seeker	2,115	1,031	48.7%	328	31.8%

Based on the available data, the most appropriate population for monitoring programme outcomes consists of job seekers. Given the data constraints, the preferred sample for estimating employment effects consists of participants who report that they are *job seekers*, i.e. that they are actively seeking employment at the time of the interview. For them, we assume that participation in career counselling was primarily motivated by the intention to find employment. This group includes 328 individuals. To assess the robustness of the findings, we also estimate programme effects for two alternative samples: (i) NES Registered – participants who report that they are registered as unemployed at the National Employment Service (NES), including 213 individuals, and (ii) Unemployed – participants who report that they are unemployed, who also stated that they are currently not students, and within this more restrictive definition the sample amounts to 183 individuals. Comparing results across these groups allows us to examine the sensitivity of the estimated employment effects to different definitions of unemployment.⁵ It should be noted that these categories can overlap, i.e. that they are not mutually exclusive, so that the person can be, for example, a job seeker and NES registered at the same time, and in fact, they most frequently are. Similarly to job seekers, we can assume that the main motivation for participation in career counselling for NES registered and unemployed was the intention to find employment.

For other groups, such as students and other inactive persons, objectives to participate in individual counselling sessions could be to explore educational opportunities, identify personal interests and preferences, or make decisions regarding further education. These other objectives would suggest that employment is not the primary goal of counselling and that investigating their employment outcomes leads to underestimated employment outcomes, as they were not seeking employment in the first place. Nevertheless, although employment was not the main goal of individual counselling participation, we will follow the indicators for *all participants* as well, as for some of them, the employment may nevertheless have occurred.

b. Labour market status after individual counselling sessions

Approximately half of the participants who were looking for work were currently employed, while the share of those who currently have or have had a job within six months was 62%. These results are relatively consistent across all three samples we analyse: 48.2% among job seekers, 49.3% among those registered at NES, and 45.4% among unemployed. Furthermore, about 62% of all three groups reported either being employed at the time of the survey or having been employed within the six months preceding the interview.

When the analysis is extended to the overall sample, employment rates are considerably lower. This is expected, as the overall sample is dominated by students (87% of the overall sample), many of whom are not yet actively participating in the labour market. Within this broader sample, about 22% of participants are currently employed, while around 30% report being employed either at the time or within the six months prior to the interview.

⁵ Following the ILO definition, unemployed persons are those who are without work, are actively seeking employment, and are available to start work, whereas inactive persons are outside the labour force because they are not actively seeking employment and/or are unavailable to work. The information on respondents' labour market status prior to entering the survey does not permit a direct application of this classification, as it is based on a series of separate yes/no questions referring to statuses such as "Student", "Unemployed", "Registered at NES", and "Job seeker" (see Section IIIa for details). As a starting point for the analysis, we therefore rely on respondents' self-reported status as job seekers, as this most closely corresponds to the ILO definition of unemployment.

Table 3: Share of participants who are employed now or currently without work, by labour market status prior to entering the programme

Status prior to individual counselling	Employed now or within previous 6 months ¹		Employed now ¹		Currently without work, but were employed within previous 6 months ²	
	Sample	Percent	Sample	Percent	Sample	Percent
Job seekers	328	62.2%	328	48.2%	169	27.2%
NES Registered	213	61.5%	213	49.3%	108	24.1%
Unemployed	183	61.7%	183	45.4%	99	30.3%
All participants	2,115	31.1%	2,115	22.8%	1,626	10.7%

Notes: **Job seekers:** participants who reported actively looking for a job at the time of the interview. **NES registered:** participants who reported they are registered as unemployed with the National Employment Service. **Unemployed:** participants who self-identified as unemployed and reported that they were not currently students.

¹ Sample: participants who have answered the question on whether they are employed now. ² Sample: participants who are unemployed at the time of the interview and have answered the question on employment within 6 months prior to the interview.

c. Contribution of the counselling to employment outcomes

About half of the participants who are currently employed think that counselling helped them to find work or choose an occupation. Among the employed participants, 43.7% of them rated the contribution of career counselling to finding a job or choosing an occupation between 3 and 5 on a five-point scale (1 = "did not help at all", 5 = "helped very much"). These findings suggest that a substantial share of employed participants perceived counselling as meaningful in their employment or career-related decisions. Although subjective, these assessments provide evidence that career counselling was viewed by many participants as a useful support in navigating their transition into employment and their career choices.

Table 4: Share of participants who think individual counselling sessions helped them to find work, by labour market status prior to entering the programme (sample: employed now)

Status prior to individual counselling	Sample ¹	Percent
Job seekers	158	43.7%
NES Registered	104	44.2%
Unemployed	81	46.9%
All	475	47.6%

Notes: **Job seekers:** participants who reported actively looking for a job at the time of the interview. **NES registered:** participants who reported they are registered as unemployed with the National Employment Service. **Unemployed:** participants who self-identified as unemployed and reported that they were not currently students.

¹ Sample: participants employed at the time of the interview who answered the question on counselling.

d. Participant-Attributed Employment Contribution Index (PAECI)

The previous two tables examined two complementary dimensions of programme performance. Table 3 presented employment outcomes following participation in individual counselling sessions, while Table 4 examined employed participants' perceptions of counselling usefulness. While these indicators are informative, each provides only a partial picture of programme effects. Employment outcomes alone do not reveal whether counselling contributed to

employment, as we do not know if these participants would have been employed in the absence of counselling, while perceived usefulness alone does not consider participants who did not obtain employment.

In order to provide a single indicator of the programme's employment-related contribution, we **construct a Participant-Attributed Employment Contribution Index (PAECI)**, which combines information on employment status with participants' assessments of the contribution of counselling to obtaining employment. The rationale of the index is that employment outcomes should be interpreted differently depending on whether participants perceive counselling as having contributed to their employment. By integrating these two dimensions, we provide a single indicator that reflects both observed employment outcomes and participants' subjective assessments of counselling contribution. As such, PAECI can be viewed as a participant-attributed measure of the employment contribution of the counselling programme. Given the available data, it provides the most comprehensive indicator of employment-related programme performance and a more comprehensive indicator than either employment outcomes or perceived usefulness considered separately.

The index is calculated as follows. Participants who were not employed are assigned a value of 0. Among employed participants, those who reported that the individual counselling session "did not help at all" to their employment (score of 1 on the 1 = "did not help at all", 5 = "helped very much" scale) were also assigned a score of 0. For employed participants who rated the contribution of counselling as 2, 3, 4 or 5, we assign employment-contribution weights of 15%, 30%, 45% and 60%, respectively. In other words, we assume that if participants selected that the counselling session "helped very much" (score of 5) to their employment, this is equal to saying that 60% of their employment is due to the individual counselling session. Lower scores then indicate correspondingly lower attributed contribution. Given this definition, the maximum level of PAECI is 60% – equivalent to all workers being employed and attributing the maximum level of contribution to employment ("helped very much").

The 60% benchmark is arbitrary and is used to construct the main specification. To assess the sensitivity of the results to this assumption, we also calculate two alternative indicators, PAECI_low and PAECI_high, in which a score of 5 ("helped very much") is assigned a contribution of 40% and 80%, respectively, with lower scores receiving proportionally lower weights.

PAECI can therefore be interpreted as the average **participant-attributed contribution of counselling to employment** across the full participant sample. For example, a PAECI value of 0.1 means that, under the assumed contribution weights, the employment contribution of the counselling is equivalent to 10% of participants finding employment that is fully attributable to counselling. Importantly, PAECI is not an impact evaluation measure and should not be interpreted as an estimate of the causal effect of counselling on employment. Thus, this interpretation should not be understood as indicating that counselling created 10 jobs.

In the main sample of job seekers, the **average PAECI is 11.4%**, meaning that the overall employment effect of the **counselling programme is equivalent to about 11% of participants finding employment**. Table 5 presents the average value of the PAECI, PAECI_low and PAECI_high across different samples. Among job seekers, about 48.2% of participants are currently employed (Table 3), and when these jobs are weighted by the programme usefulness assessment by participants who found work (Table 4), this results in a PAECI value of 11.4% (Table 5).

We find similar values of PAECI in the sample of NES registered and unemployed (10.7 and 11.4%), suggesting that our assessment is consistent among participants with a clear employment orientation. Lower and higher arbitrary values of PAECI suggest that the number of counselling-attributable jobs ranges between 7 and 15 per 100 participants.

Table 5: The average value of the Participant-Attributed Employment Contribution Index (PAECI)

Status prior to individual counselling	Sample ¹	PAECI	PAECI_low	PAECI_high
Job seekers	282	11.4%	7.6%	15.2%
NES Registered	186	10.7%	7.2%	14.3%
Unemployed	151	11.4%	7.6%	15.2%
All	1,933	5.4%	3.6%	7.3%

Notes: **Job seekers:** participants who reported actively looking for a job at the time of the interview. **NES registered:** participants who reported they are registered as unemployed with the National Employment Service. **Unemployed:** participants who self-identified as unemployed and reported that they were not currently students.

¹ Sample: participants who were employed at the time of the interview and who answered the question on the contribution of counselling to finding a job. Participants who were unemployed at the time of the interview but had been employed within the previous six months are excluded because they were not asked to rate the degree to which individual counselling sessions helped them find work. This causes a reduction in the sample size compared to Table 3. For example, among job seekers the number of unemployed now, but employed at some point within six months from the interview is 46, which reduces the sample from 328 to 282.

The overall sample exhibits substantially lower employment rates (about 22%, Table 3), and thus correspondingly lower PAECI values at about 5.4%. This indicates that for every 100 participants in counselling programmes about 5 employment outcomes are attributable to counselling, with lower and upper bounds of the indicator at 3.6 and 7.3, respectively.

IV. Statistical modelling within beneficiaries

Another way to analyse the effects of individual counselling, given the available data, is to identify which programme characteristics and components are associated with better outcomes. In the absence of a suitable control group, valuable evidence can still be generated through internal comparisons between different groups of beneficiaries and different patterns of programme participation. This approach examines whether outcomes vary according to the level of engagement with the programme, distinguishing between participants with low and high levels of participation. Measures of engagement include the number of counselling sessions attended and the duration of sessions.

While these comparisons cannot establish causal effects with the same level of confidence as experimental or quasi-experimental methods, they can provide useful evidence regarding which programme components appear to be most strongly associated with positive outcomes and can inform future programme design and resource allocation.

a. Number of sessions

Participating in two or more counselling sessions results in somewhat better employment outcomes among those seeking employment.⁶ Specifically, 72.7% of participants attending multiple sessions were employed at the time or within the six months prior to the interview, compared to 66.4% among those attending a single session. Similarly, current employment rates were higher among participants attending multiple sessions, at 54.5% versus 50.0% for those attending only one session. The pattern observed for employment among job seekers is also reflected in the PAECI indicator. Among job seekers attending a single session, about 14

⁶ This result comes with a caveat that the information on the number of sessions was not available for all participants; thus, the sample is significantly reduced (e.g. in the sample of job seekers from 282 to 149). This restriction led to an upward bias, as employment rates and PAECI are significantly higher in both groups than in the overall sample of job seekers.

participants out of 100 found employment that can be attributed to counselling, compared to about 16 participants among those attending two or more sessions. These findings suggest that more sessions may be associated with better labour market outcomes; however, the difference observed is not statistically significant, likely due to the relatively small number of participants attending multiple sessions, and therefore warrants caution in interpreting these differences.⁷

Table 6: Employment outcomes depending on the number of sessions attended

	Number of sessions	Sample	PAECI	Employed now or within previous 6 months	Employed now
Job seekers	1	116	14.5%	66.4%	50.0%
	2+	33	16.1%	72.7%	54.5%
NES Registered	1	86	12.9%	64.0%	47.7%
	2+	18	10.0%	50.0%	33.3%
Unemployed	1	61	16.2%	67.2%	47.5%
	2+	21	11.5%	61.9%	42.9%
All	1	611	7.2%	35.5%	26.2%
	2+	110	15.3%	64.5%	49.1%

Notes: **Job seekers:** participants who reported actively looking for a job at the time of the interview. **NES registered:** participants who reported they are registered as unemployed with the National Employment Service. **Unemployed:** participants who self-identified as unemployed and reported that they were not currently students.

¹ Sample: participants for whom the information on the number of sessions is available.

A much stronger positive association between the number of sessions and employment outcomes is observed when analysing all participants. The share of employed participants in this group is 49.1% among those attending two or more sessions, compared to 26.2% among those with one. Similarly, the proportion of employed now or within previous six months is also significantly higher (64.5% vs. 35.5%). These effects are statistically significant and robust to the inclusion of other characteristics such as gender, age and education, indicating that the higher success may be associated with participation in additional sessions (regression tables available upon request). Furthermore, the PAECI indicator is more than twice as high for those who attended multiple sessions, compared to those who attended only a single session (15.3 vs 7.2%). In this group there is a significantly higher number of participants in multiple sessions, thus making these results more reliable.

These results suggest that participation in multiple counselling sessions may be particularly beneficial for participants who are not actively looking for work. In the overall sample, many participants are students, whose primary aim in attending counselling sessions was likely not to find employment directly through the counselling service. For this group, multiple counselling sessions may therefore have played a more important role in motivating them to start looking for work, representing an important first step towards employment.

b. Session duration

The duration of counselling sessions is associated with more favourable employment outcomes, particularly among participants looking for work. Among job seekers whose counselling session lasted between 15 and 30 minutes, 72.7% were employed at the time of the survey or had been employed within the

⁷ An additional reason why these findings should be interpreted with caution is the result for respondents registered with the National Employment Service (NES) and unemployed. In these groups, employment outcomes are actually less favourable for those who attended two or more sessions than for those who participated in only one session, although the difference again is not significant. However, the number of respondents in these categories is even smaller (18 and 21, respectively), making the estimates sensitive to random variation.

previous six months, compared to 64.0% among those whose session lasted less than 15 minutes. Similarly, current employment rates were higher among participants receiving longer counselling sessions (59.1% versus 44.0%). The PAECI indicator also shows a small increase, from 13.5% to 13.9%, suggesting a slightly higher perceived contribution of counselling among those receiving longer counselling. A similar pattern can be observed among NES Registered and unemployed. In both groups, longer counselling sessions are associated with higher employment rates and higher PAECI values.

However, **these results should be viewed as indicative patterns as, due to small sample size, the differences are not statistically significant.** Overall, the findings suggest that longer counselling sessions may be associated with somewhat better employment outcomes and a greater perceived contribution of the intervention. However, none of the observed differences by session duration are statistically significant, meaning that they may be attributable to sampling variation rather than reflecting a systematic effect of session length.

Table 7: Employment outcomes depending on the duration of session attended

	Duration of sessions	Sample	PAECI	Employed now or within previous 6 months	Employed now
Job seekers	<15 m	25	13.5%	64.0%	44.0%
	15-30m	66	13.9%	72.7%	59.1%
NES Registered	<15 m	21	9.7%	57.1%	38.1%
	15-30m	49	14.0%	67.3%	55.1%
Unemployed	<15 m	17	13.8%	58.8%	29.4%
	15-30m	38	17.3%	71.1%	57.9%
All	<15 m	79	12.4%	62.0%	43.0%
	15-30m	193	13.0%	64.8%	50.3%

Notes: **Job seekers:** participants who reported actively looking for a job at the time of the interview. **NES registered:** participants who reported they are registered as unemployed with the National Employment Service. **Unemployed:** participants who self-identified as unemployed and reported that they were not currently students.

¹ Sample: participants for whom the information on session length is available.

When analysing all participants, the relationship between session duration and outcomes is also positive. Employment rates are somewhat higher among those participating in longer sessions when considering current employment only (50.3 vs 43%) or those employed currently or within 6 months from the interview (64.8 vs 62%). PAECI is also higher for those who attended longer sessions (13.0% compared to 12.4%).

V. Additional characteristics of employment and counselling satisfaction

a. Employment characteristics

The vast majority of jobs obtained by participants are formal. According to the ILO, formal employment refers to a situation in which a worker is employed under a formally recognized employment relationship, typically based on an employment contract, receives regular remuneration for their work, and is covered by the relevant social protection and employment arrangements. Of these elements, the survey covers two: 1) receiving a regular wage and 2) having an employment contract. Among participants who were employed at the time of the survey, about 95% or more reported that they were receiving a regular wage, while over 90% indicated that they had signed an employment contract, with only minor differences across the analysed groups.

About half of the employed participants signed permanent contracts. The share among the job seekers was about 43%, with a similar share in the groups active in the labour market prior to counselling (about 44% among unemployed and NES registered). The corresponding shares were slightly lower in the overall sample (41.8%).

Table 8: Employment characteristics of participants, by labour market status prior to entering the programme (sample: employed now)

	Signed contract		Permanent contract		Regular wage	
Status prior to individual counselling	Sample	Percent	Sample	Percent	Sample	Percent
Job seekers	157	92.4%	143	43.4%	156	96.8%
NES Registered	104	93.3%	96	43.8%	104	97.1%
Unemployed	80	92.5%	72	44.4%	80	98.8%
All	477	91.8%	435	41.8%	472	95.6%

Notes: **Job seekers:** participants who reported actively looking for a job at the time of the interview. **NES registered:** participants who reported they are registered as unemployed with the National Employment Service. **Unemployed:** participants who self-identified as unemployed and reported that they were not currently students.

¹ Sample: participants employed at the time of the interview for whom contract and regular wage information is available.

About three quarters of those who found jobs had wages higher than the minimum wage, while about a quarter had wages higher than the median wage. The distribution of earnings (Table 9) suggests that about 77% of the employed participants, who were looking for jobs prior to counselling, had wages above the minimum wage, which includes all the wages above 50,000 RSD⁸. Furthermore, about 27% of the employed participants earned wages higher than 70,000 RSD, which is the level of the median wage in the first three months of 2024, according to the Statistical Office of the Republic of Serbia⁹. This distribution is similar among the unemployed, while those NES Registered had slightly lower wages on average. The group earning between 40,000 and 50,000 RSD accounts for about 15% of participants, while the share of those earning below 40,000 RSD (i.e. below the minimum wage) is about 8%, and roughly corresponds to shares of informal employment.

In addition to employment and earnings outcomes, a **considerable proportion of participants reported career advancement after programme participation.** About 37% of employed participants indicated that they had been promoted or had received higher earnings during their current employment. Overall, the results indicate that a

⁸ The minimum net hourly wage rate in 2024 stood at 271 RSD, which amounted to a net monthly wage of 49,864 for January and 45,528 for February and March. The survey was conducted in February and March 2024.

⁹ <https://www.stat.gov.rs/en-us/vesti/statisticalrelease/?p=15103>

substantial proportion of participants not only entered employment but also earned wages above the minimum wage and, in many cases, experienced career progression through promotions or wage increases. However, these findings should be interpreted with caution given the relatively modest sample sizes, particularly for the unemployed group.

Table 9: Shares of wage intervals and promotions/higher earnings (in %), by labour market status prior to entering the programme (sample: employed now)

	Status prior to individual counselling			
	Job seekers	NES Registered	Unemployed	All
Less than 40,000 RSD	7.8	10.0	2.6	9.0
40,001–50,000 RSD	15.0	16.0	19.5	15.4
50,001–60,000 RSD	30.7	35.0	31.2	31.2
60,001–70,000 RSD	19.6	23.0	19.4	20.6
More than 70,000 RSD	26.8	16.0	27.2	23.7
Sample	153	100	77	455
Promoted or rewarded with higher earnings	37.2	38.8	44.3	41.6
Sample	156	103	79	473

Notes: **Job seekers:** participants who reported actively looking for a job at the time of the interview. **NES registered:** participants who reported they are registered as unemployed with the National Employment Service. **Unemployed:** participants who self-identified as unemployed and reported that they were not currently students. ¹ Sample: participants employed at the time of the interview for whom wage information is available.

b. Satisfaction with individual counselling programme

The results indicate a very high level of satisfaction with both the career sessions and the counsellors across all respondent groups. On a five-point scale, the average rating of the quality of the career session ranges from 4.5 to 4.6, while the assessment of the career counsellors is even higher, ranging from 4.7 to 4.8. These consistently high scores suggest that participants viewed the services and counsellor support very positively.

Participants were somewhat less positive when assessing the specific outcomes of the sessions. They assessed *relevant information about labour market and educational opportunities* with average scores between 3.8 and 4.1. While still positive, these ratings are noticeably lower than the overall satisfaction scores, indicating that participants valued the sessions and counsellors more highly than the concrete information gained from them.

Table 10: Programme satisfaction, by labour market status prior to entering the programme (sample: individual counselling session participation confirmed)

	Job seekers	NES Registered	Unemployed	All
Your rating of the quality of the career session	4.6	4.5	4.6	4.6
Assessment of the work of a career counsellor	4.7	4.7	4.7	4.8
To what extent did the career session help you get relevant information about labour market opportunities and educational opportunities?	4.0	3.8	3.8	4.1
To what extent did the career session help you define your desires and preferences and make decisions related to education or employment?	3.5	3.4	3.4	3.4
Sample	150	105	83	723

Notes: **Job seekers:** participants who reported actively looking for a job at the time of the interview. **NES registered:** participants who reported they are registered as unemployed with the National Employment Service. **Unemployed:** participants who self-identified as unemployed and reported that they were not currently students.

¹ Sample: participants for whom satisfaction information is available.

The lowest ratings concerned participants' satisfaction with the programme's contribution to their personal career trajectories. This includes the extent to which career sessions helped them define their preferences, clarify their goals, and make decisions related to education or employment. Average scores from 3.4 to 3.5 across groups suggest a moderate rather than strong perceived impact in this area. This may reflect the fact that developing clearer career aspirations and making important education and employment decisions is a complex process that often requires sustained support beyond one or two counselling sessions.

Overall, the findings suggest that career counselling is highly appreciated by participants, particularly in terms of service quality and counsellor performance. At the same time, the results point to a more modest perceived effect on participants' decision-making processes and self-assessment of career preferences, which may represent an area for further development of the service.

VI. Economic and financial analysis of individual counselling services

The economic and financial analysis (EFA) aims to estimate the value generated by individual counselling services relative to the resources invested in their implementation. The analysis combines information on programme costs, employment outcomes, participants' assessment of the programme's usefulness in job finding, earnings, and fiscal revenues.

Since a suitable control group is not available, **the analysis relies on the Participant-Attributed Employment Contribution Index (PAECI) as the central measure of the programme's contribution to employment.** In the absence of an estimate of the employment outcomes participants would have experienced had they not participated in the programme, this index provides the main available measure of the programme's contribution to employment. PAECI combines observed employment outcomes with participants' assessments of the extent to which counselling contributed to obtaining employment. In Section III, the average PAECI among job seekers was estimated at 11.4%. This means that **the overall employment effect attributed to counselling is equivalent to 11.4% of participants finding employment** (see Section III d for more details). This measure is used as the basis for estimating economic and fiscal benefits.

As noted above, the definition of PAECI is arbitrary, while it also posits that the maximum level of PAECI is 60% – equivalent to all workers being employed and attributing the maximum level of contribution to employment ("helped very much"). Thus, in parallel with the EFA analysis for the calculated PAECI 60% indicator, we provide two additional analyses. Firstly, we compare the estimates of the EFA indicators of calculated PAECI and PAECI_max – the case where the programme was fully successful, i.e. in case PAECI would be at its maximum 60%. The EFA indicators based on PAECI_max represent the maximums of the EFA indicators with constant wages and programme costs. Secondly, we provide the analysis with the two alternative PAECI indicators PAECI_low and PAECI_high. Under these specifications, a maximum level of contribution to employment ("helped very much") is assumed to correspond to 40% and 80% of employment contribution.

The analysis proceeds in four stages. First, the number of jobs attributable to counselling is estimated using the PAECI and the number of participants in the analytical sample. Second, the economic benefits of individual counselling are assessed by multiplying the number of attributable jobs by estimated earnings. Third, the fiscal effects are estimated based on the attributable jobs, estimated earnings, and fiscal rules in Serbia as the sum of additional public revenues from taxes and social security contributions. Finally, in the fourth step the estimated economic and fiscal benefits are compared with programme costs in order to assess the financial efficiency of the intervention.

a. Estimation of attributable employment outcomes

The first step is to estimate **the number of jobs which can be attributed to counselling.** Let N be the total number of programme participants and $PAECI$ the average value of the Participant-Attributed Employment Contribution Index. The estimated number of attributable jobs is calculated as:

$$\text{Counselling-attributable jobs} = N \times PAECI$$

It should be noted that this number is not an estimate of total jobs gained by programme participants, but rather an estimate of the number of jobs that participants, on average, attribute to the counselling.

The results indicate that among participants who were seeking work prior to counselling, the **employment contribution attributed to counselling is equivalent to approximately 32 participants finding employment**, i.e. to 32 counselling-attributable jobs. The Participant-Attributed Employment Contribution Index (PAECI) amounted to 11.4%, and applying this index to 282 participants seeking work prior to counselling results in an estimated 32 participants whose employment can be attributed to counselling.

Table 11: Calculation of the employment effect

	Job seekers	All
Participant-Attributed Employment Contribution Index (PAECI)	11.4%	5.4%
Total number of programme participants	282	1,933
Counselling-attributable jobs	32	105

Note: Blue-shaded cells in the table indicate information taken from the survey, while white cells indicate a calculated indicator within the EFA model.

In the overall sample, PAECI is lower, at 5.4%. However, as the total number of programme participants is substantially larger (1,933), the estimated number of attributable employment outcomes reaches 105. This suggests that, while counselling has a stronger perceived contribution to employment among job seekers, it also accounts for a considerable number of attributable employment outcomes across the broader participant population.

b. Estimation of beneficiary income effects

The second step estimates the earnings associated with attributable jobs. In the first step, the average monthly wage (W) is estimated for each group, based on the survey information on earnings among participants who found work after counselling. As wage information was collected in the form of income intervals rather than exact amounts, we first convert the interval data into their midpoints,¹⁰ multiply monthly earnings by 12,¹¹ and then we estimate total annual earnings attributable to counselling as follows:

$$\text{Income effect (economic benefit)} = \text{Counselling-attributable jobs} \times W \times 12$$

Table 12 presents the steps in the calculation of annual net earnings of attributable jobs, which represent estimated income effects of individual counselling.

The results indicate that **approximately 23 million RSD in annual earnings can be attributed to counselling among job seekers**. Among participants who were employed after counselling, the estimated average monthly wage was 59,248 RSD. Applying this amount to the estimated 32 employment outcomes attributable to counselling, and multiplying by 12 months, gives approximately 23 million RSD in annual earnings attributable to counselling. For the full sample of participants, the average monthly wage was slightly lower, at 58,473 RSD. However, because

¹⁰ For example, respondents reporting a wage in the 40,000–50,000 RSD range were assigned a value of 45,000 RSD. The same procedure was applied to all closed intervals. For the open-ended intervals, representative values were assigned based on the width of the adjacent categories. Specifically, the lowest category ("below 40,000 RSD") was assigned a value of 35,000 RSD, while the highest category ("70,000 RSD or more") was assigned a value of 75,000 RSD. These assumptions allow the interval data to be transformed into approximate wage amounts suitable for calculating average earnings and estimating the fiscal effects of employment outcomes.

¹¹ As information on employment duration or job retention is not available, we assume a full year of employment. In addition to average earnings, sensitivity analysis can be conducted using lower-bound and upper-bound earnings estimates based on different wage categories observed in the survey.

the estimated number of attributable employment outcomes is substantially higher (105), the corresponding annual earnings attributable to counselling are estimated at approximately 73.8 million RSD.

Table 12: Calculation of the income effect (economic benefit)

Income effect (economic benefit)	Job seekers	All participants
Counselling-attributable jobs (Table 11)	32	105
Average monthly wage (RSD)	59,248	58,473
Total annual income attributable to counselling (RSD)	22,928,976	73,781,218

Note: Blue-shaded cells in the table indicate information taken from the survey, while white cells indicate a calculated indicator within the EFA model. Calculations are based on unrounded underlying values; displayed figures are rounded and may therefore not reproduce the reported totals exactly.

c. Estimation of fiscal effects

The fiscal effects consist of public revenues generated by counselling-attributable jobs. To estimate them, in the first phase, we use Serbian tax rules to calculate personal income tax, employee and employer social security contributions for the average wage calculated in the previous step. Total fiscal revenues are then calculated as:

$$\text{Fiscal revenues} = \text{Counselling-attributable jobs} \times \text{Average annual taxes and contributions}$$

The jobs attributable to counselling generate approximately 13.1 million RSD in annual tax and social security contribution revenues in the sample of job seekers. Table 13 presents the calculation of taxes and social security contributions associated with these employment outcomes. Since these taxes and social security contributions are calculated based on the gross wages, the first step is to derive gross wage from the estimated average net wage. Once¹² the gross wage is estimated, we calculate personal income tax (10% on taxable income = gross wage – 25,000 RSD of non-taxable allowance), employee social security contributions (19.9 percent of the gross wage), and employer social security contributions (15.15 percent of the gross wage). The sum of these components represents the average monthly fiscal revenue associated with each employed participant, which amounts to 33,969 RSD in the sample of job seekers and 33,471 RSD among all participants.

Total annual taxes and contributions attributable to individual counselling are then calculated by multiplying the amount of taxes and social security contributions generated per worker (33,969 for job seekers, 33,471 overall) by the estimated number of jobs attributable to counselling (32 among job seekers and 105 overall) and by 12 to obtain the annual amount. Annual fiscal revenues are estimated at approximately 13.1 million RSD for job seekers and 42.2 million RSD for the full participant sample.

¹² The calculation is based on the statutory personal income tax rate of 10 percent, a non-taxable monthly allowance of 25,000 RSD, and employee social security contributions amounting to 19.9 percent of gross earnings. The gross wage is derived by applying the reverse payroll calculation.

Table 13: Calculation of the fiscal effects

Fiscal Effect	Job seekers	All participants
Counselling-attributable jobs (Table 11)	32	105
Non-taxable portion of wage (RSD)	25,000	25,000
Personal income tax rate	10%	10%
Employee social contribution rate	19.90%	19.90%
Employer social contribution rate	15.15%	15.15%
Average monthly wage (RSD)	59,248	58,473
Gross monthly wage (RSD)	80,953	79,847
Personal income tax (RSD)	5,595	5,485
Employee social contributions (RSD)	16,110	15,890
Employer social contributions (RSD)	12,264	12,097
Total taxes and contributions per employee (RSD)	33,969	33,471
Total annual taxes and contributions attributable to counselling (RSD)	13,146,116	42,233,998

Note: Blue-shaded cells in the table indicate information taken from the survey or administrative data, while white cells indicate a calculated indicator within the economic and financial analysis. Calculations are based on unrounded underlying values; displayed figures are rounded and may therefore not reproduce the reported totals exactly.

d. Cost-benefit indicators

The final step compares estimated benefits with programme implementation costs. The cost estimates are based on the annual gross wages of staff engaged in delivering counselling services. According to administrative data, the total annual gross wage bill for counselling staff amounts to 30,586,059 RSD and these staff serve approximately 3,300 programme participants annually¹³. Dividing the total annual staff cost by the number of participants results in an estimated cost of 9,269 RSD per participant. This unit cost is then multiplied by the number of participants included in each analytical group to estimate total programme costs. For job seekers (282 participants), total programme costs are estimated at 2.6 million RSD, while for the full sample (1,933 participants), total programme costs amount to 17.9 million RSD.

Table 14 summarizes the costs, estimated jobs created, and economic and fiscal benefits of individual counselling. The results indicate that the programme generates substantial positive returns for both participants and public finances, with particularly strong performance when the analysis is limited to job seekers.

1. Cost per attributable employment

The cost per counselling-attributable job is estimated at RSD 81,046 among job seekers. The programme generated an estimated 32 counselling-attributable jobs among job seekers and 105 across all participants (Table 11). Considering the total programme costs, the estimated cost per attributable job is RSD 81,046 among job seekers and RSD 101,852 for the full sample. The lower cost per attributable job among job seekers reflects the higher perceived contribution of counselling to employment in this group.

¹³This figure differs from the total number of participants in the dataset (3,155), as information is missing for some participants.

2. Economic indicators

In this part we calculate two indicators. Firstly, we calculate the economic return ratio – which measures how many RSD of earnings are generated for every RSD invested in counselling services. Secondly, we estimate net economic benefit as the difference between earnings attributable to counselling and programme costs.

Economic return ratio = Total economic benefits / Total programme costs

Net economic benefit = Total economic benefits – Total programme costs

Among job seekers, **each RSD invested in counselling is associated with an estimated 8.8 RSD in annual labour income attributable to counselling and a net economic benefit of approximately 20 million RSD.** The estimated economic benefits considerably exceed programme costs. Annual labour income attributable to counselling is estimated at about 23 million RSD among job seekers and at about 74 million RSD across all participants. This corresponds to an economic return ratio of 8.8 among job seekers and 4.1 across the full sample. After deducting programme costs, the resulting net economic benefits are estimated at about 20 million RSD among job seekers and 56 million RSD across all participants.

Table 14: Cost-benefit analysis

		Job seekers	All participants
	Cost calculation		
1	Cost per participant	9,269	9,269
2	Total number of programme participants	282	1,933
3	Total programme costs (1 x 2)	2,613,718	17,916,016
	Employment cost indicators		
4	Counselling-attributable jobs (Table 11)	32	105
5	Cost per attributable employment (3 / 4)	81,046	170,385
	Economic effects		
6	Total annual income generated and attributable to individual counselling (RSD) (Table 12)	22,928,976	73,781,218
7	Economic return ratio (6 / 3)	8.8	4.1
8	Net economic benefit (6 - 3)	20,315,258	55,865,202
	Fiscal effects		
9	Total fiscal effect (RSD) (Table 13)	13,146,116	42,233,998
10	Fiscal return ratio (9 / 3)	5.0	2.4
11	Net fiscal benefit (9 - 3)	10,532,398	24,317,982

Note: Blue-shaded cells in the table indicate information taken from the survey, while white cells indicate a calculated indicator within the economic and financial analysis. Calculations are based on unrounded underlying values; displayed figures are rounded and may therefore not reproduce the reported totals exactly.

3. Fiscal indicators

In the fiscal analysis we also calculate two indicators: *Fiscal return ratio* – shows how many RSD of fiscal benefits are generated for each RSD invested in the programme, and net fiscal benefit – net fiscal gain generated by the programme after accounting for implementation costs. Fiscal benefits include additional tax revenues and social security contributions.

Fiscal return ratio = Total fiscal benefits / Total programme costs

Net fiscal benefit = Total fiscal benefits – Total programme costs

The results indicate that among job seekers, **each RSD invested in counselling is associated with an estimated 5 RSD in fiscal benefits and a net fiscal benefit of approximately 10.5 million RSD**. Total fiscal effects are estimated at 13.1 million RSD among job seekers and RSD 42.2 million across all participants. This corresponds to a fiscal return ratio of 5.0 among job seekers and 2.4 across all participants. After accounting for programme costs, the net fiscal benefits are estimated at RSD 10.5 million and RSD 24.3 million, respectively.

e. Robustness of the EFA indicators

As mentioned in Section III, the PAECI indicator, which forms the basis of the cost-benefit analysis, depends on an assumption regarding the share of employment attributable to counselling. We assumed that if participants answered that the counselling session "helped very much" (score of 5 on a five-point scale: 1 = "did not help at all", 5 = "helped very much") to their employment, this is equal to saying that 60% of their employment is due to the individual counselling session. To assess the sensitivity of the results to this assumption, we also calculate two alternative indicators: PAECI_low and PAECI_high. Under these specifications, a score of 5 is assumed to correspond to 40% and 80%, respectively, of employment being attributable to individual counselling, with lower scores implying proportionally lower contributions.

To provide a benchmark for these results, we also calculate PAECI_max, which represents the case in which the programme is fully successful, i.e. PAECI reaches its maximum assumed value of 60%. The EFA indicators calculated using PAECI_max therefore represent the maximum values that could be obtained under the same assumptions about wages and programme costs. Table 15 compares the observed PAECI with PAECI_max and, correspondingly, the EFA estimates with the maximum EFA indicators. The results indicate that the estimated 32 jobs attributable to individual counselling represent approximately 18.9% of the maximum 169 jobs that could be attributed to counselling sessions under the PAECI_max scenario. Consequently, all corresponding EFA indicators amount to approximately 18.9% of the values that would be estimated under the PAECI_max scenario.

Table 15: Economic and financial analysis – PAECI maximum estimates

	PAECI		PAECI_max	
I Employment effects	Job seekers	All	Job seekers	All
PAECI	11.4%	5.4%	60.0%	60.0%
Total number of programme participants	282	1,933	282	1,933
Counselling-attributable jobs	32	105	169	1,160
II Income effect				
Average monthly wage (RSD)	59,248	58,473	59,248	58,473
Total annual income attributable to counselling (RSD)	22,928,976	73,781,218	120,759,096	821,809,089
III Fiscal effect				
Non-taxable portion of wage (RSD)	25000	25000	25000	25000
Personal income tax rate	10%	10%	10%	10%
Employee social contribution rate	19.90%	19.90%	19.90%	19.90%
Employer social contribution rate	15.15%	15.15%	15.15%	15.15%
Gross monthly wage (RSD)	80,953	79,847	81,277	80,668
Personal income tax (RSD)	5,595	5,485	5,628	5,567
Employee social contributions (RSD)	16,110	15,890	16,174	16,053
Employer social contributions (RSD)	12,264	12,097	12,314	12,221
Total taxes and contributions per average wage (RSD)	33,969	33,471	34,116	33,841
Total annual taxes and contributions attributable to counselling (RSD)	13,146,116	42,233,998	69,268,129	470,983,885
IV Cost-benefit analysis				
Cost per participant	9,269	9,269	9,269	9,269
Total programme costs	2,613,718	17,916,016	2,613,718	17,916,016
Employment cost indicators				
Cost per attributable employment	81,046	170,385	15,448	15,448
Financial indicators				
Economic return ratio	8.8	4.1	46.2	45.9
Net economic benefit	20,315,258	55,865,202	118,145,378	803,893,073
Fiscal return ratio	5.0	2.4	26.5	26.3
Net fiscal benefit	10,532,398	24,317,982	66,654,412	453,067,870

Note: Calculations are based on unrounded underlying values; displayed figures are rounded and may therefore not reproduce the reported totals exactly.

Table 16 presents the EFA results based on these alternative PAECI measures. The results indicate that:

- The estimated number of jobs attributable to individual counselling sessions ranges from 21 to 43 among the 282 job seekers.
- Individual counselling is estimated to be associated with between about 15 and 30 million RSD in annual earnings, and between about 9 and 17 million RSD in annual fiscal revenues attributable to these jobs.
- Relative to programme costs, each RSD invested in individual counselling is associated with between RSD 5.8 and RSD 11.7 in attributable earnings, and between RSD 3.4 and RSD 6.7 in attributable fiscal revenues.

Overall, the results are robust to alternative assumptions about the share of employment attributed to counselling. Across all specifications, the estimated earnings and fiscal revenues attributable to counselling exceed the costs of providing individual counselling sessions.

Table 16: Economic and financial analysis – with alternative PAECI measures

	PAECI_low		PAECI_high	
I Employment effects	Job seekers	All	Job seekers	All
PAECI	7.6%	3.6%	15.2%	7.3%
Total number of programme participants	282	1,933	282	1,933
Counselling-attributable jobs	21	70	43	140
II Income effect				
Average monthly wage (RSD)	59,248	58,473	59,248	58,473
Total annual income attributable to counselling (RSD)	15,285,977	49,187,524	30,571,974	98,374,912
III Fiscal effect				
Non-taxable portion of wage (RSD)	25000	25000	25000	25000
Personal income tax rate	10%	10%	10%	10%
Employee social contribution rate	19.90%	19.90%	19.90%	19.90%
Employer social contribution rate	15.15%	15.15%	15.15%	15.15%
Gross monthly wage (RSD)	80,953	79,847	80,953	79,847
Personal income tax (RSD)	5,595	5,485	5,595	5,485
Employee social contributions (RSD)	16,110	15,890	16,110	15,890
Employer social contributions (RSD)	12,264	12,097	12,264	12,097
Total taxes and contributions per average wage (RSD)	33,969	33,471	33,969	33,471
Total annual taxes and contributions attributable to counselling (RSD)	8,764,073	28,156,025	17,528,158	56,311,971
IV Cost-benefit analysis				
Cost per participant	9,269	9,269	9,269	9,269
Total programme costs	2,613,718	17,916,016	2,613,718	17,916,016
Employment cost indicators				
Cost per attributable employment	121,568	255,578	60,784	127,789
Financial indicators				
Economic return ratio	5.8	2.7	11.7	5.5
Net economic benefit	12,672,259	31,271,508	27,958,256	80,458,896
Fiscal return ratio	3.4	1.6	6.7	3.1
Net fiscal benefit	6,150,356	10,240,009	14,914,441	38,395,956

Note: Calculations are based on unrounded underlying values; displayed figures are rounded and may therefore not reproduce the reported totals exactly.