



GLOBAL UNIVERSITY ENTREPRENEURIAL SPIRIT STUDENTS' SURVEY

NORTH MACEDONIA National Report 2023



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EXECUTIVE SUMMARY

The country report for the Republic of North Macedonia is based on data collected in 2023 by the research team at the University American College Skopje. The sample consisted of 254 students from various Universities (12 in total) in the country. The report also compares some results to the previous data collection waves (2015, 2018 and 2021) for the country data. The report also compares some of the national findings with the global findings.

The main findings of the study point to the following:

- Almost a quarter (23%) of all students would like to own their own business immediately after graduation and that percent increases to nearly half of the students (42%) five years after graduation. This is above the global average, but in 2023 there is a slight decline compared to previous data collection points (like 2021).
- The students appraise the role of education as a positive force in their entrepreneurial intentions. However, the majority of them have not taken any entrepreneurship related course during their studies.
- The family environment is also important as the students with family history of entrepreneurship also show higher entrepreneurial intentions.
- Personal characteristics such as higher self-efficacy, resilience and lifesatisfaction are linked to higher entrepreneurial intentions.
- Despite showing high entrepreneurial intentions, students show low levels of activities for starting a business.
- Most of the active entrepreneurs are majority owners of their business. Almost half of the students would like their business to become their main occupation after graduation.

Recommendations

- Education seems to be quite a powerful factor in stimulating the entrepreneurial intentions of the students. Universities need to gain more capacity to position themselves as "entrepreneurial" by creating an "entrepreneurial thinking" curriculum, providing leadership and mind-set for creating entrepreneurial thinking among its students.
- Universities should also create an atmosphere and programs that will build resilience among students, build their entrepreneurial self-efficacy and provide a source of life-satisfaction.
- Entrepreneurship support policies should seek to reduce barriers and support local entrepreneurial environments to occur over longer term horizons.
- Students should be stimulated to look for opportunities for business creation and gaps in the market that they could fill. To understand this, the strong

- emphasis should be given on practical experience in the curriculum which will empower young entrepreneurs to look for growth opportunities in all conditions.
- Specific support mechanisms need to be developed to help students move from idea generation to business ventures.
- Provide opportunities for helping students grow their business. This means that more financial opportunities need to be created as well as more support hubs, incubators and other forms of support need to become more widely available.

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1. Introduction

The current research is utilizing GUESSS methodology for understanding the entrepreneurial intentions and succession intentions among students. The methodology explores various factors and aspects related to the entrepreneurial intentions. The GUESSS project is one of the largest projects trying to make novel and unique insight of students' entrepreneurial thinking and activities to provide both academic and practice-oriented outputs. The effort is led by Swiss Research Institute of Small Business and Entrepreneurship at the University of St.Gallen, and the Department of Management and Entrepreneurship at the University of Bern in Switzerland. The current report is using data from the 10th wave of data collection. This wave of data collection included 57 countries.

The GUESSS approach is focuses on understanding entrepreneurial intentions and related variables. The current data collection ties the entrepreneurial intentions to the personal factors (such as self-efficacy, subjective well-being, resilience), social underpinnings (such as external enabler mechanisms), and various demographic variables. In addition, GUESSS approach also enables to understand the importance of education, as well as more global cultural variables as essential part of the entrepreneurial intentions. The approach also focuses on understanding the thinking and characteristics of the nascent and active entrepreneurs as well as student's experiences with family businesses of their parents.

Republic of North Macedonia has taken part in the survey for a fourth time (data collection points 2015, 2018, 2021 and 2023). This report is focused on the latest data collection (2023) but also provides a longitudinal perspective for certain data to enable tracking of the development of the issues over the years to enable better insight into the topics.

Therefore, this report tries to highlight the current issues that might be helpful for research and policy making in the field of stimulating entrepreneurship by:

- 1) Providing analysis of the entrepreneurial intentions among students
- 2) Exploring the linkages between personal and educational factors related to the entrepreneurial intentions of the students
- 3) Exploring the experiences, views and activities of nascent and active entrepreneurs

2. Demographic information about the sample in the year 2023

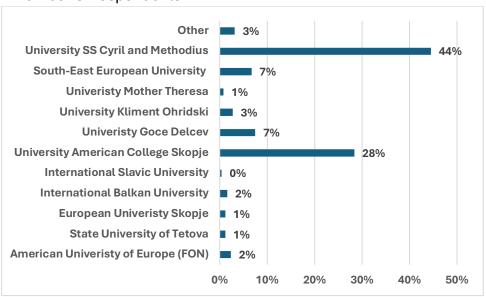
The 2023 wave of data collected had 254 participants which is more than in 2021 (Table 1). This is in contrast with what most countries experience in 2023 where the response in the global data was lower than in 2021 (Sieger, et al, 2024).

Table 1: Involvement of respondents

	GUESSS 2021	GUESSS 2023
Number of respondents	175	254
Number of universities		12
involved		

Majority of the respondents (Figure 1) come from the biggest University in the country, SS Cyril and Methodius, Skopje, followed by a private university, University American College Skopje. Most of the students also come from Bachelor programs (92.1%) and majority of them were females (71%). Also, the majority of the respondents were ethnic Macedonians (85%), followed by ethnic Albanians (8%) and ethnic Turks (3%). Majority of the students (91%) do not run their own business at the time of the survey.

Figure 1: Number of respondents



In terms of the study fields (Figure 2) a quarter of the participants are enrolled in social sciences programs (25%), followed by Business and Management (19%) and Economics (25%) with Computer Sciences and IT being the fourth most numerous program.

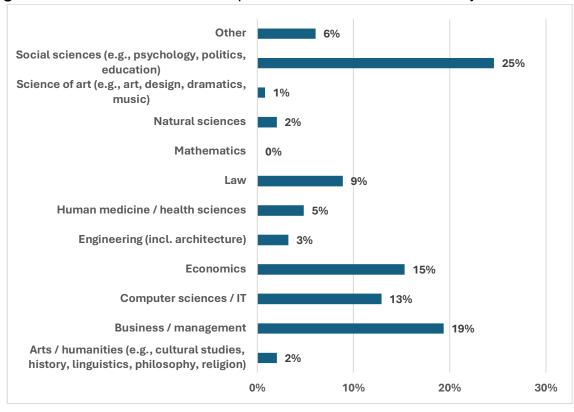
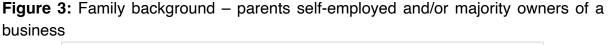
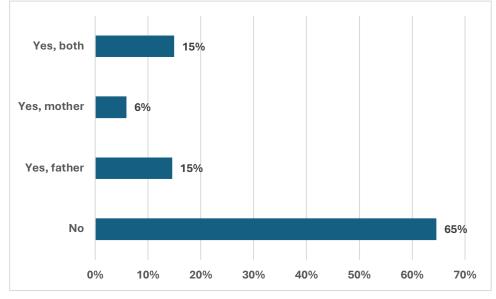


Figure 2: Characteristics of the respondents in terms of field of study

Majority of the students do not come from families where there is a tradition of entrepreneurship. However, 15% of students have experience with business ownership in the family where both parents are self-employed and additional 15% have a self-employed father, with only 5% having a self-employed mother (Figure 3).





3. Career choice intentions / entrepreneurial intentions

The main goal of the GUESSS research is to understand the entrepreneurial intentions and the factors related to them so that it can contribute to stimulating the entrepreneurial undertakings of students. Therefore, this part is dedicated to understanding some of the factors connected to the entrepreneurial intentions. Looking at the entrepreneurial intentions is arguably a good way to predict future career as certain authors show that intentions show stability over time especially when it comes to predicting future career and when there is a time lag between the intended and actual behavior (Veciana et al, 2005).

Becoming an entrepreneur is actually the most picked choice by students as a career choice immediately after graduation as almost a quarter of the students (23%) pick that option (Figure 4). This dedication to becoming an entrepreneur is even stronger 5 years after graduation as 42% of the students would like to become entrepreneurs 5 years after their studies. This number is higher than the average for the all the countries involved in the 2023 wave of data collection (Sieger, et al, 2024). Compared to previous data collection waves (Tomovska et al., 2022) for the country there is a similarity in percentage of those who would like to become entrepreneurs immediately after graduation and a decline of those who would like to become entrepreneurs 5 years after graduation (the percentage in 2021 was 50.3%). Looking at the other career options a fifth of the students are still undecided what they would like to become immediately after graduation and that number drops to 11% for 5 years after. Working for a large company is the third most popular option (17%) immediately after and second most popular (14%) 5 years after graduation.

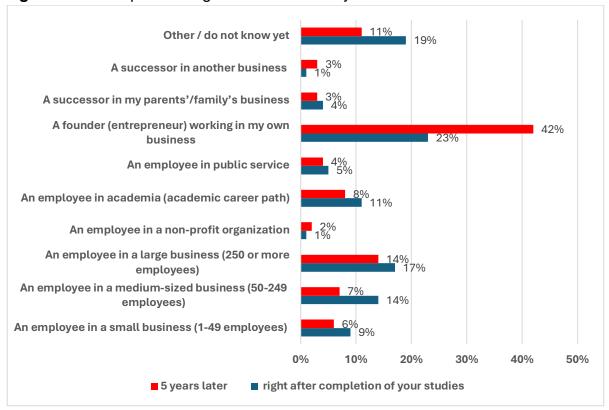


Figure 4: Career path after graduation and five years after that

Looking at specific aspects of the entrepreneurial intentions (Table 2) it is noticeable that students feel quite strongly about their intentions to start a business some day (56% generally agree with the statement). It is also noticeably that more than half of them generally agree that they seriously think about starting a business and being determined to start a business in the future. They are however mostly neutral when it comes to their readiness to undertake actions to start a business. The overall mean is 4.33 (SD=1.85) (out of 7) which is above the theoretical average, showing that the students show good preference for starting a business.

Table 2: Entrepreneurial intention

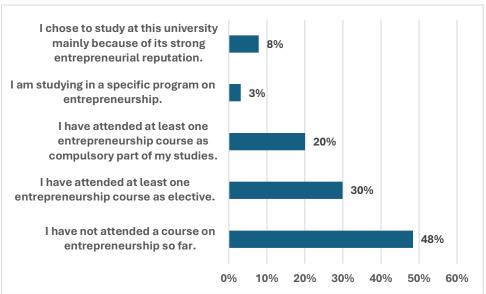
			I will			
			make			
		My	every	I am	I have	I have the
	I am ready to	professional	effort to	determine	very	strong
	do anything	goal is to	start and	d to create	seriously	intention
	to be an	become an	run my	a business	thought of	to start a
	entrepreneur	entrepreneur	own	in the	starting a	business
			business.	future.	business.	someday.
1	15%	16%	12%	13%	15%	14%
2	10%	12%	7%	10%	9%	5%
3	15%	14%	11%	9%	11%	9%

4	22%	16%	16%	15%	13%	15%
5	18%	18%	17%	15%	18%	16%
6	8%	12%	12%	12%	10%	12%
7	13%	13%	25%	26%	26%	28%

4. Drivers of entrepreneurial intentions

A number of factors can be connected to higher or lower entrepreneurial intentions. The latest data collection collected data on various aspects such as: educational experiences, family experiences as well as some personal characteristics of students. As can be seen in Figure 5 almost half of the students did not attend an entrepreneurship course during their studies and one third of them had attended an elective one. This is something that needs to be changed in the future as studies show that education can be an important determinant of the entrepreneurial intentions of the students (Tomovska et.al., 2016).

Figure 5: Attendance of students in offered business courses



Despite the lower numbers of students who took entrepreneurship courses students generally appraise the situation at their universities as mainly conducive towards entrepreneurship. The most positive appraisal is given for getting entrepreneurship related advice and guidance with 60% giving generally positive appraisal. The other aspects are also generally positively appraised.

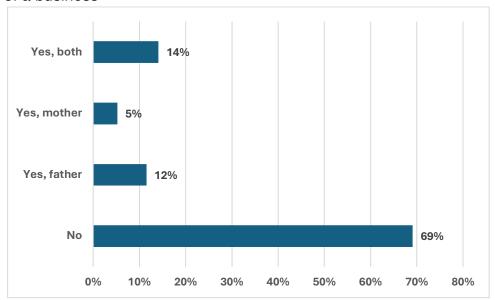
Table 3: University environment

			My university	At my university,
	The atmosphere	There is a	encourages	students can get
	at my university	favorable climate	students to	entrepreneurship-
	inspires me to	for becoming an	engage in	related advice
	develop ideas for	entrepreneur at	entrepreneurial	and guidance
	new businesses.	my university.	activities.	easily.
1	8%	10%	10%	8%
2	5%	7%	8%	8%
3	11%	10%	10%	10%
4	21%	20%	19%	14%
5	23%	20%	21%	15%
6	13%	16%	17%	19%
7	19%	17%	16%	26%

When it comes to gender and entrepreneurship the data shows that females (M=4.44, SD=1.82) have higher levels of entrepreneurial intentions compared to males (M=5.09, SD=1.86), which is a positive tendency.

Looking at the family experiences with entrepreneurship (Table 4) it can be noted that students with a self-employed father (M=5.17, SD=1.73) show the highest level of entrepreneurial intentions and those with a self-employed mother (M=3.97, SD=1.41) show lowest levels. This is an interesting finding that needs to be explored further to uncover the reasons between the results in outcomes related to the role of the employment of the two parents in the entrepreneurial intentions of their children.

Figure 6: Entrepreneurial Intentions: Parents that are self-employed and/or majority owners of a business



What is also worth mentioning is that close to one fifth of the students choose not to disclose whether they express their opinions on ESG (social, economic or environmental) issues in public (Figure 6). This is something that deserves attention as students should be encouraged to speak about such important issues and also embrace them in their future professional endeavors.

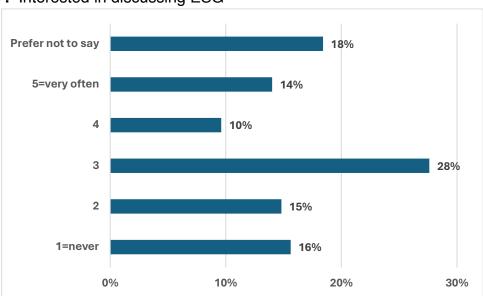


Figure 7: Interested in discussing ESG

When it comes to the personal characteristics (Table 5) it can be seen that there are statistically significant positive correlations between self-efficacy, life-satisfaction and resilience with entrepreneurial intentions of the students. This means that those students who are more satisfied with their current life are more prone to express higher intentions of starting their own business in the future, although the correlation is small. In addition, those who perceive themselves as better prepared to overcome difficult situations and achieve positive growth or are more resilient are also more prone to show higher levels of entrepreneurial intentions, although the correlation is also small. The statistically highest link (moderate correlation) is found between entrepreneurial self-efficacy and entrepreneurial intentions. This means that students who perceive themselves as being able to think creatively and being able to discover new business opportunities are also more prone to report higher levels of entrepreneurial intentions.

Correlations

					<u></u>
					Entrepreneu
		LifeSatisfact	SelfEfficac	Resilienc	rialIntention
		ion	У	е	s
LifeSatisfaction	Pearson	1	.513**	.468**	.288**
	Correlation				
	Sig. (2-tailed)		.000	.000	.000
	N	253	253	253	191
SelfEfficacy	Pearson	.513**	1	.581**	.526**
	Correlation				
	Sig. (2-tailed)	.000		.000	.000
	N	253	253	253	191
Resilience	Pearson	.468**	.581**	1	.361**
	Correlation				
	Sig. (2-tailed)	.000	.000		.000
	N	253	253	253	191
EntrepreneurialInten Pearson		.288**	.526**	.361**	1
tions	Correlation				
	Sig. (2-tailed)	.000	.000	.000	
	N	191	191	191	191

^{**.} Correlation is significant at the 0.01 level (2-tailed).

5. Nascent entrepreneurs

Figure 8 shows the proportion of students who are currently attempting to start their own business or become self-employed. It's interesting to note that only 19% of the students wish to be self-employed. This indicates a preference for more traditional career paths among the majority.

Looking more closely at the potential factors influencing this trend, we may consider that students might perceive entrepreneurship as risky, preferring the stability of conventional employment. Then, some students might aim for careers in established companies to gain experience before considering self-employment.

On the other hand, an external factor may be the lack of capital. Starting a business requires capital, which students might lack. Last but not the least, non-existence of the robust support system, such as mentorship and funding, students might hesitate to take the plunge into entrepreneurship.

Overall, while only a minority of students currently wish to be self-employed, strategic efforts can potentially boost entrepreneurial ambitions among the student population. Future considerations may be the following:

- Encouragement and Support: Universities and policymakers could consider increasing support structures like incubators, funding opportunities, and entrepreneurship courses.
- Raising awareness: Promoting the benefits and opportunities of entrepreneurship might inspire more students to consider this path.

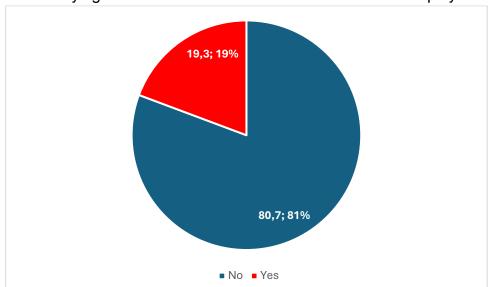


Figure 8: Students trying to start their own business/to become self-employed

Figure 9 illustrates the various future plans of students regarding establishing their own business. A noticeable percentage of students have concrete plans to start their businesses while studying (32%) or immediately after their studies (22%). This reflects a strong entrepreneurial drive and readiness to implement their ideas.

The results can indicate that some students have intermediate to long-term plans, indicating that while they are interested in entrepreneurship, they may require more time to gather resources, build networks, or gain further experience.

The further implications may be that universities can design programs that cater to these different timelines, offering foundational courses for early-stage entrepreneurs and advanced workshops for those ready to launch. Encouraging a growth mindset and resilience can help students navigate the challenges of entrepreneurship and stay committed to their goals. Regularly assessing students' progress and providing feedback can help in identifying common obstacles and areas where additional support is needed. Overall, the data in Figure 9 underscores the importance of a supportive ecosystem that nurtures students' entrepreneurial ambitions at every stage of their journey.

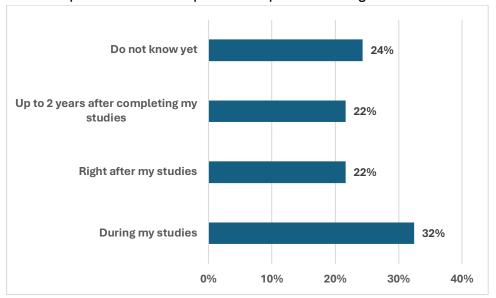


Figure 9: Future plans of the entrepreneurship establishing

Figure 10 presents the different sectors that students are interested in for their future business ventures. This can provide insights into emerging trends and areas where students see potential opportunities. The highest proportion goes to "other/not sure" (42%).

A noticeable proportion (22%) goes as well to technology-related businesses, reflecting the ongoing digital transformation and the appeal of tech entrepreneurship. The same interest is shown for banking, legal and healthcare (22%). In general, identifying the most relevant sectors helps in understanding where the next wave of innovation might come from. Also, universities and policymakers can tailor support and resources to these sectors, promoting growth and development in areas with high student interest. Finally, businesses and investors can look into these sectors for potential partnerships and investment opportunities, fostering a supportive ecosystem for student entrepreneurs.

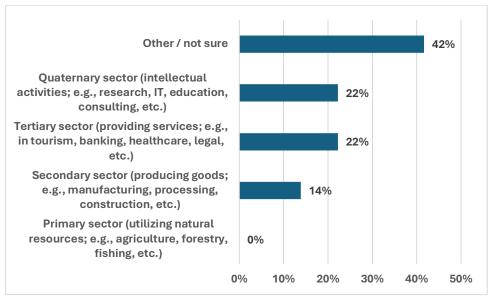


Figure 10: Sectors of the future business interest

Table 4, outlines the factors driving students' planned businesses and captures the percentage of students influenced by various factors.\

The largest percentage of students are driven by societal crises, such as economic downturns, geopolitical conflicts, and other major societal disruptions. This highlights a strong motivation among students to create solutions that address urgent and impactful problems. It shows a readiness to respond to immediate needs and contribute to societal resilience.

Many students are motivated by evolving social and cultural trends (33%). This reflects a significant awareness and responsiveness to changing societal values and cultural movements.

A substantial portion of students (31%) are driven by the quest for sustainability and addressing climate change. This indicates a strong environmental consciousness among students and a commitment to developing eco-friendly and sustainable business models. The same proportion is assigned to demographic change (31%), showing that students are influenced by changes in demographic patterns, such as aging populations, migration, and the effects of the baby boom. Also, changes in laws and regulations also drive a significant number of students (31%). This might indicate the readiness to adapt to legal changes and innovate within legal constraints.

New technologies are allocated with (19%). While less than other factors, new technologies still inspire nearly one in five students. This reflects an interest in technological advancements and innovation. These students may develop businesses in tech-centric industries such as software development, biotech, fintech, and other high-tech sectors.

The data reveals a diverse range of motivations behind students' planned businesses. The most prominent factors are societal crises and sociocultural trends, indicating a strong drive to address pressing social issues and align with cultural shifts. Climate

change and demographic changes also play significant roles, reflecting a forward-thinking approach to sustainable and demographic-driven business models. The influence of new technologies, while smaller, still highlights the importance of innovation. By understanding these motivations, universities, policymakers, and support organizations can better tailor their programs and resources to support these aspiring entrepreneurs, fostering a vibrant and responsive entrepreneurial ecosystem.

Table 4: The idea behind the planned business is driven by

					sociocultu	societ	
			demograp		ral trends	al	
			hic		(e.g.,	crises	
			change		animal	(e.g.,	
		climate	(e.g.,		welfare,	bank	
		change	ageing	change	pet	crisis,	other,
		and/or the	populatio	d laws	products,	Ukrai	major
	new	quest for	n, baby	and/or	LGBT+	ne	societal
	technolog	sustainab	boom,	regulati	rights/cult	crisis,	developm
	ies	ility	migration)	ons	ure)	etc.)	ents
1	19%	31%	31%	31%	33%	37%	23%
2	11%	9%	11%	11%	15%	11%	6%
3	14%	26%	17%	6%	6%	11%	14%
4	19%	6%	11%	20%	6%	11%	14%
5	14%	11%	11%	14%	18%	9%	9%
6	11%	6%	6%	6%	9%	6%	14%
7	11%	11%	11%	11%	12%	14%	20%

6. Active entrepreneurs

Table 5 indicates that nearly half of the students want their business to become their main occupation after graduation. This shows a strong commitment to their entrepreneurial endeavors. About a third (29%) do not plan for their business to be their main occupation, possibly viewing it as a side project or stepping stone.

In regards to their previous business experience, a small percentage of students (21%) have created another business before, suggesting some level of entrepreneurial experience. The majority (79%) are first-time entrepreneurs, highlighting the need for foundational support and guidance.

In regard to the business location, most businesses (54%) are located in the same city where students study, likely due to familiarity with the local market and access to resources.

Table 5: General information about students' business

	Do you		ls your
	want this		business
	business to		located in
	become	Have you	the same
	your main	created	city where
	occupation	another	you are
	after	business	currently
	graduation?	before?	studying?
Yes	46%	21%	54%
No	29%	79%	46%
Do not know yet	25%	Х	Х

Figure 11 shows the distribution of active student entrepreneurs' business establishment years and reveals the trend of when most businesses were started. We can see that the highest proportion (36%) of the companies were established before 2017. Having considered that the majority of businesses were not established in recent years, it indicates a declining entrepreneurial spirit among current students. This could be possibly influenced by economic conditions, university programs, or societal trends. What can be considered as a further recommendation is that universities can encourage and tailor their support programs to students' needs, particularly focusing on periods of low entrepreneurial activity.

Figure 11: Year of establishment of the company by students - active entrepreneurs,

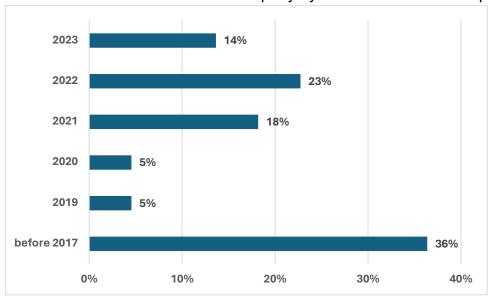


Figure 12 showcases the sectors in which there are active student entrepreneurs, indicating a diverse range of sectors where students are active entrepreneurs, with a strong emphasis on other than mentioned sectors (38%), followed by secondary sector

(manufacturing, processing, construction, etc) and tertiary sector (tourism, banking healthcare and legal sector).

This diversity reflects the broad interests and innovative spirit of student entrepreneurs, aiming to address various societal and market needs.

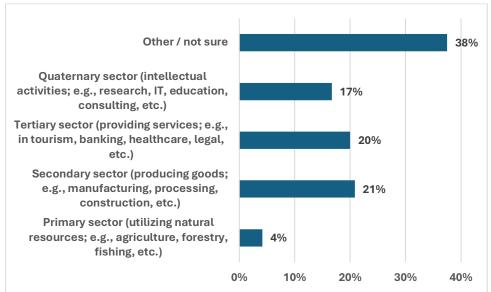


Figure 12: Sectors of the active students' business

7. Conclusion

The analysis of entrepreneurial intentions among students highlights several key insights such as:

Despite the indication of enthusiasm for entrepreneurial ventures after student graduation, not a very high proportion of students are interested in taking specific steps towards self-employment. This suggests that while many students are exploring entrepreneurial paths, the majority may prefer the stability of traditional career roles or are not yet confident in pursuing full-time entrepreneurship. This might also be a result of low levels of entrepreneurship courses at University. In regards to the diverse interests, students show a broad range of interests in sectors such as technology, healthcare, education, and social enterprises. This can confirm their drive to innovate and address various societal needs. The same trend may be confirmed through their primary motivations as well, indicating the highest proportion of addressing societal issues and climate change. It can be derived from a strong level of aspiration towards creating impact on the sustainable businesses and environmental challenges. Still, the analysis confirms the continual lack of foundational support, including mentorship, funding, and educational resources. It also has to be noted that resilience, self-efficacy and life-satisfaction are important when it comes to entrepreneurial intentions and should therefore be nurtured among students.

These insights emphasize the importance of more tailored support from universities, policymakers, and entrepreneurial ecosystems to initiate, nurture and sustain the entrepreneurial ambitions of students.

Most importantly, learning from other best practices can help entrepreneurial universities to be further developed, fostering a conducive environment for the students' entrepreneurial mindset to grow and create a valuable impact to the overall entrepreneurship environment.

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