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# Career preferences of business students in Norway and Poland: Factors explaining the choice between public and private sector

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## ABSTRACT

There is competition between the public and private sectors to attract a highly qualified workforce in business and management. This study contributes to understanding the factors that influence students' choices, which can help make workplaces more attractive. It examines the career preferences of business and management students from Norway and Poland, focusing on their inclinations towards the private and public sectors. A survey questionnaire of students in both countries, analysed with structural equation modelling, revealed a strong inclination (94%) towards the private sector. Key determinants influencing sector choice include perceptions of the public sector's efficiency, valuation of job security, social responsibility, and gender-based preferences. The study confirmed certain pre-existing notions about public sector perceptions while also highlighting regional differences between Polish and Norwegian students. While Poles prioritize job security, likely influenced by the nation's current labour market, Norwegians to a greater degree hold the public sector in high regard and demonstrate a strong sense of social responsibility. Across both nationalities, those valuing high prestige and salaries prefer the private sector. The paper underscores the nuanced factors guiding the career choices of the next generation of professionals.

## 1. Introduction

This article explores the career preferences of business and management students in Norway and Poland, focusing on their inclinations towards the private and public sectors. For comparison, we selected business students from one university in Kraków, Poland, and two universities in Norway, located in Trondheim and Sogndal. This choice was influenced by the contrasting socio-economic developments in these countries. We aimed to identify the factors impacting students' decision making in these two nations.

There is compelling evidence of a distinct preference for private sector careers amongst these students. This observation aligns with [Pedersen \(2013\)](#), who highlights that Danish business students tend to have a lower interest in public sector careers compared to their peers studying law and political science. [Asseburg and Homberg \(2020\)](#) also point out that the public sector in many countries has become less attractive to highly qualified personnel who can choose between the public and private sectors. This may be related to the wage gap between the private and public sectors ([Makridis, 2021](#)), as well as the valuation of different types of values ([Ritz et al.,](#)

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2023). Existing research does not provide a clear explanation, and there may be varying assessments across borders. Therefore, it is useful to gain more knowledge about this topic. This study aims to address the need for further investigation into the significance of factors influencing the choice of the public sector, exploring how diverse work motivations affect employer attractiveness and subsequently impact behavioral trends (Ritz & Waldner, 2011). Our research question is: How do different work motivations affect preference for public and private sector jobs, and how does this potentially differ between Norway and Poland?

An investigation of this depth is anticipated to pique considerable interest and offer crucial insights for those engaged in future workforce recruitment strategies. While there is a shared sentiment amongst students in both Poland and Norway, there may be nuanced differences in their career aspirations; this article seeks to elucidate these distinctions. There are significant cultural, historical, and economic differences between these two countries, so we investigate whether they are reflected in students' attitudes and priorities when choosing a job. Several researchers have analysed career choices and career priorities among business students (Ayoobzadeh et al., 2024; Maloni et al., 2019). Despite the internationalisation of business education and the increasingly global job market, there are still significant national differences within Europe (Schworm et al., 2017), and many articles have focused on cross-border disparities (Davoine & Ravasi, 2013). As far as we are aware, however, there are no published articles that have compared Norway with Poland in this respect. Studying similarities and differences by comparing the preferences of students from a Scandinavian country and another European country can provide valuable insights and knowledge developing an international job market for business students in Europe. Students have varying preferences and attitudes towards working in the private and public sectors. If students in both countries prefer to work in the private sector, the public sector may encounter recruitment challenges, potentially impacting the quality of services provided. There may also be some gender differences.

There has been insufficient research thus far on how differences in cultural values influence career choices between the public and private sectors. Existing studies on cultural disparities between Poland and Norway have predominantly concentrated on aspects that influence the assimilation of Polish migrants into Norwegian society (Friberg, 2011), perceptions of gender (Valved et al., 2021), and the examination of policies and research concerning work–life balance (Stańczak, Merez-Kot, & Jacukowicz, 2017). Yet, there is a notable lack of research that thoroughly examines the motivational factors behind the career decisions of business students. This article contributes to this field by examining how factors such as salary, personal growth opportunities, social responsibility, prestige, and perception of the public sector influence the choice between working in the public or private sector. Specifically, the paper provides new knowledge about the effect of students' emphasis on prestige in the choice between the public sector and the private sector, as well as documentation of differences between Norwegian and Polish business students. The analyses further identify the necessary conditions for the students' public sector preference. These are a positive view of public sector, an emphasis on job security and on social responsibility.

It is crucial to acknowledge that public organisations are committed to consistently enhancing the quality of their services, which serves the broader societal interest (AlMunthiri et al., 2024; Yean et al., 2022). Conversely, the dwindling labour pool due to demographic shifts in developed nations is leading to a pronounced scarcity of human resources, thereby intensifying the competition for talent among employers (Llorens, 2015). To date, public entities appear to be at a disadvantage in attracting top talent compared to their private counterparts. Thus, a deeper understanding of the motivations for working in the private sector could facilitate the development of appealing propositions for students whose needs and values align with the offerings of public organisations (Ritz et al., 2023).

The structure of this paper is as follows: the next section introduces the theory, reviews the relevant literature, and outlines the hypotheses. This will be followed by the methodology section, where structural equation modelling and necessary condition analysis are used to present the results of a survey conducted among management and business students in Norway and Poland. Subsequently, an analysis is performed based on the findings. Finally, the paper discusses the study limitations and draws overall conclusions.

## 2. Literature review and hypotheses development

Extensive academic discourse has been dedicated to factors that contribute to an individual's preference for employment in the public sector versus the private sector (Fernandes et al., 2022). Individuals often make pragmatic career choices, guided by personal aspirations and future outlooks. Although there are several common factors in the process of deciding between public and private sector jobs across the globe (Van de Walle et al., 2015), these overlapping themes can be attributed to aspects such as historical backdrop, cultural impact, economic environment, and the operational structure of the public sector in diverse countries. This paper examines the relevant literature to identify the decisive factors that influence students and employees when choosing between the public and private sectors, followed by the proposal of hypotheses grounded in established theories and prior research.

### 2.1. Job security

Employees highly value job security (Hur, 2022). Recent studies indicate that young adults consider job security as one of their top three most important values (Ayoobzadeh et al., 2024 (Maloni et al., 2019; Meret et al., 2018)). The reasons for this stem from the increased pessimism of young adults about the future of the world and the possibility of forming equitable relationships (Twenge, 2023). Generally, public sector jobs offer more security than private sector ones due to civil service rules, providing increased protection against layoffs. Market fluctuations impact the public sector less, giving it an image of stability. However, individual risk tolerance varies; it is influenced by experience, culture, finances, and personality, affecting individual career decisions (Görlitz & Tamm, 2020). Lee and Choi (2016) highlight the importance of job security in Korean students favouring public sector jobs, which is consistent with other findings (Bellante & Link, 1981; Boudarbat, 2008; Jain & Bhatt, 2015) suggesting that public sector workers are

typically more risk averse. The sector's perceived stability is appealing (Hatch & Schultz, 2001), especially in unstable job markets (Groeneveld et al., 2009). The public sector has lower turnover, and private sector employees would accept pay cuts of 0.5–2.9% for similar job security (Fontaine et al., 2020). We thus hypothesise.

**H1.** *A positive relationship exists between job security and public sector job preference.*

This suggests that the more a person values job security, the more they will lean towards the public sector. If H1 holds true, there will be an inverse relationship for private sector preference. However, Nicholson-Crotty et al. (2019) argue that public sector managers are not necessarily more risk averse than those in the private sector. Hence, business students' views on this remain intriguing.

## 2.2. Sustainability and social responsibility

Public sector motivation (PSM) theory implies that individuals prefer public sector jobs due to their desire to impact public policy, fulfil civic responsibilities, advocate for social justice, and prioritize the welfare of others (Perry & Wise, 1990; Ritz, 2011; Vandeebeele, 2007). Ng and McGinnis Johnson (2020) affirm that high PSM levels often correlate with a preference for public sector careers. Tschirhart et al. (2008) find a positive link between wanting a career that helps others and preferring government jobs but a negative association with desiring business sector employment. Research also suggests that sustainable and socially responsible HR management influences career satisfaction and aspirations in the public sector (Bolton, 2021; Latan et al., 2022). Many students feel obligated to serve the public sector (Henstra & McGowan, 2016). In particular, young adults are focused on social interest and protecting the environment from climate change, and they expect employers to be socially responsible and create added value for the community and the world (Lăzăroiu, 2017; Tarab, 2020, pp. 131–156). Based on this, we hypothesise.

**H2.** *Students' public sector job preference positively correlates with their sustainability and social responsibility interests.*

There is a common belief that public sector roles typically have a greater impact on society in these domains (Ng & McGinnis Johnson, 2020). Profit motives in the private sector may shift focus from these issues, contrasting with the public sector's stance.

## 2.3. Prestige and social status

Prestigious jobs often equate to high social standing (Gore et al., 2015). This prestige not only enhances job satisfaction and self-esteem, especially for future business leaders, but also facilitates networking with industry leaders (Jung & Lee, 2016). Such roles tend to open up more avenues for career progression (Binder et al., 2016), a significant factor for management students. Research indicates that the perceived prestige of a profession greatly influences students' career choices (Oliveira et al., 2020; Scheitle et al., 2021). However, the weight given to prestige can vary based on educational background, societal norms, and national contexts. Harzing (2004) highlighted these differences among European students.

The link between prestigious roles, high social status, and preferences for private or public careers in management fields is multifaceted. Factors including the country's public sector size and structure play a role. For instance, Lyons et al. (2006) find that Canadian private sector employees value prestige more than their public sector counterparts. Conversely, Siddiky and Akter (2021) associate high prestige with a preference for public sector roles. Furthermore, the perceived prestige can be job-specific; for instance, an economist might value a position in the Ministry of Finance over a routine public office job. By synthesising behaviour theory and previously published results, we propose this hypothesis.

**H3.** *The value placed on job prestige influences students' public vs. private sector preferences.*

This hypothesis remains neutral, as it is unclear which sector is seen as more prestigious. Public sector job prestige may vary based on the role and the cultural backdrop. Moreover, current research on young adults indicates that they generally do not tolerate inequality and that they value transparency; therefore, it can be assumed that they are less dependent on the traditional trappings of status and prestige than their older counterparts (Ayoobzadeh et al., 2024).

## 2.4. The Pursuit of high remuneration

Emerging research underscores the propensity of individuals to pursue lucrative careers even if such occupations lack inherent meaningfulness (Ward, 2023). Business and management curricula frequently aim to prepare students for industry positions that offer substantial monetary rewards. Consequently, the selection of these academic disciplines may stem from an anticipation of obtaining well-compensated employment opportunities. In an in-depth analysis of American trends from 1962 to 2013, Blom et al. (2021) propose that the lure of high remuneration significantly influences students when choosing their college-level field of study. Meanwhile, Van de Walle et al. (2015) suggest that public sector wages are generally lower than those of the private sector in most Central and Eastern European countries, as well as in Scandinavian nations, including Poland and Norway. Such salary discrepancies are a key determinant in career selection, with public sector employees commonly placing less importance on high income than their counterparts in the private sector (Houston, 2000). This evidence leads to the formulation of the following hypothesis.

**H4.** *A positive correlation exists between the desire for a high salary and the inclination to work in the private sector.*

Various elements shape career decision-making processes. The prevailing assumption is that individuals who prioritize high remuneration tend to gravitate towards the private sector due to the comparatively high salary levels it offers compared to the public sector.

### 2.5. Perceptions of the public sector and their influence on career preferences

The perspective that students have on the public sector, whether favourable or unfavourable, plays a critical role in their career decision making. These individual perceptions and attitudes are shaped by a plethora of variables, which include personal values, educational background, cultural context, and personal experiences. As [Van der Wal \(2017\)](#) report, there is a positive correlation between the performance of the public sector and the inclination of employees towards public sector careers.

Students who perceive the public sector as bureaucratic and less efficient in comparison to the private sector are more likely to opt for careers within the private sector, finding the public sector less appealing ([Van der Wal & Oosterbaan, 2013](#)). Conversely, some students may exhibit a strong PSM; these individuals typically harbour a negative view of the business sector while holding the public sector in high regard, thus compelling them towards public sector careers. A student inclined towards the public sector usually demonstrates a positive attitude towards it and strongly prefers to work within it ([Van der Wal & Oosterbaan, 2013](#)). Such attitudes are often linked with perceptions of the private sector and the values associated with it. Building upon these findings, we propose the following hypothesis.

**H5.** *Students with a positive outlook on the public sector and an appreciation of its characteristics are more inclined to favour and opt for careers in the public sector over the private sector.*

Various studies emphasise that students resonating with the values emblematic of the public sector find it a desirable future workplace ([Carpenter et al., 2012](#)). This notion is encapsulated by measures such as PSM, among others.

### 2.6. Personal growth

Several elements influence students' career preferences ([Demirtas & Tezer, 2012](#); [Siddiky & Akter, 2021](#)). Notably, personal goal fulfilment – such as well-being, skill utilisation, learning, and personal development – significantly impacts career choices. Research suggests that young adults consider career progression and promotion opportunities as critical factors when making decisions about employers and employment. These factors are believed to offer them enhanced job and career security, as well as greater autonomy ([Tarab, 2020](#), pp. 131–156; [Twenge, 2023](#)). Student preferences vary significantly in terms of the emphasis they place on such factors. Furthermore, perceptions of the public sector can differ depending on the country and job type, adding complexity to the relationship between these variables and the choice between the public and private sectors. The decision-making process is multifaceted, influenced by personal values, cultural standards, career prospects, and individual experiences. Understanding these specific dynamics and contexts is imperative when investigating the correlation between these factors and career choices.

Nevertheless, numerous researchers assert that students perceive superior opportunities for personal growth in the private sector compared to the public sector ([Jurkiewicz et al., 1998](#); [Rashid & Rashid, 2012](#); [Siddiky & Akter, 2021](#)). For example, a survey conducted by [Heponiemi et al. \(2011\)](#) among Finnish psychologists concludes that job satisfaction was higher within the private sector. In contrast, [Qu and Robichau \(2023\)](#), utilising American data, suggest that employees within the public sector experience greater job satisfaction relative to their counterparts in the private sector. This gives rise to the following hypothesis.

**H6.** *Students' experiences of personal growth differ between the private and public sectors.*

[Padhy and Bhuyan \(2015\)](#) argue that there are significant individual variances in the factors impacting job satisfaction, which subsequently influence personal preferences between the public and private sectors. A nation's cultural values and the structure of its public sector significantly impact students' evaluations of job satisfaction and personal development. Consequently, there are substantial differences across national borders ([Brunetto et al., 2013](#); [Drabe et al., 2015](#)). [de Juana-Espinosa and Rakowska \(2018\)](#) also underscored differences among public employees. Hence, we have opted to leave this hypothesis open-ended.

### 2.7. The influence of gender on public sector career preferences

Research largely suggests a heightened tendency among women to pursue employment within the public sector compared to men. More specifically, women are more likely than their male counterparts to opt for roles in the public sector over those in the private sector ([Van de Walle et al., 2015](#)). [DeRiviere et al. \(2021\)](#) argue that the motivations for choosing the public sector are gender dependent. Female applicants tend to exhibit a strong interest in facilitating policy changes related to social justice issues, whereas male applicants show a keen interest in understanding the intricacies of public policy processes and government bureaucracy. However, a few studies have found no statistically significant gender differences regarding students' career interests/orientations ([Andreea-Elena 2014](#)). Nevertheless, based on the majority of studies, we consider it legitimate to pose the following hypothesis.

**H7.** *Women demonstrate a stronger preference for public sector employment than men.*

It is not evident that this correlation holds among students of business and management. A study of American business students reveals a growing trend among both male and female students in adopting work values traditionally attributed to both genders. This indicates a shift towards a more inclusive and balanced perspective on gender roles in the workplace ([Beutell & Brenner, 1986](#)), pointing to the emergence of an androgynous work value pattern. The term 'androgynous' in this context refers to a combination of characteristics or values typically perceived as 'male' or 'female'. Traditionally, male work values could encompass competitiveness and a task-oriented focus, while female work values might prioritize collaboration and fostering relationships. However, the rise of an androgynous work value pattern suggests a trend towards an integration of these traditionally gendered values. In this evolving landscape, both men and women in the workforce are seen to adopt a blend of these attributes, particularly as they navigate similar

career trajectories (Beutell & Brenner, 1986; Gomez-Mejia, 1983). This shift could potentially contribute to more balanced, inclusive, and diverse workplace environments.

2.8. Cultural and socioeconomic context

The group of students examined in this study all belong to Generation Z, a demographic cohort with its own set of distinct characteristics. They are often recognised for their clear-cut career aspirations and well-mapped career development plans (Barhate & Dirani, 2022). Moreover, when deciding on an organisation to further their career, this generation places importance on aspects such as a positive organisational culture underscored by healthy working relationships, a lack of discrimination, and a diverse workforce (Arar & Önerenb, 2018). An appealing work–life balance also significantly boosts an employer’s allure for them (Barhate & Dirani, 2022). Although job security is not the foremost priority for Generation Z, it remains a critical value for the overall well-being of all employees, emphasising its indispensable nature (Silla et al., 2009). Notably, as the newest entrants in the workforce, Generation Z has a heightened interest in sustainability and corporate social responsibility, more so than Generations Y and X. Numerous studies suggest that while a competitive salary is vital for Gen Z, it is not their primary motivator (Fodor et al., 2018, pp. 93–107; Hampton & Welsh, 2019; Puiu, 2017). This attitude might be influenced by their youth, which would possibly evolve as they age and face familial responsibilities (Barhate & Dirani, 2022). Furthermore, the assertive and confident members of this generation are adept at negotiating their preferred salaries (Cseh-Papp et al., 2017). For Generation Z, professional growth within an organisation – including mentoring and learning opportunities, especially from peers and superiors – is paramount.

Concerning Generation Z, there is a prevailing theory of global convergence due to the digital revolution, granting this cohort access to shared cultural milestones: globalisation appears to be homogenising the experiences of Generation Z. They are not subject to the constraints experienced by previous generations, which is reflected in their way of living and thinking (Scholz & Vyugina, 2019). Therefore, they can be called the first truly global generation. Nevertheless, Scholz and Vyugina (2019) contend that Europe’s diverse nature means one cannot categorically define a European Generation Z; instead, we should understand it as Generation Z in Europe, acknowledging their varying experiences, commonalities, and aspirations. To identify nuances within Europe’s Generation Z, particularly those arising from national identities, we propose the following hypothesis.

H8. Business students from Norway and Poland exhibit different career preferences.

Existing research does not provide a clear basis for specific hypotheses in this regard, only some suggestions. Therefore, we do not make assumptions about the direction and strength of the relationship. Some studies do indicate certain differences, however. Norwegians are generally characterised by a lower propensity to consider job security as important in the choice of employment (Sal-ladarré et al., 2011). In the Polish labour market, obtaining job security does not seem to be a current priority either, especially for Generation Z (Smolbik-Jęczmień & Palen-Tondel, 2022). Data from the OECD (OECD, 2024a, b) indicate an increasing sense of job security among Polish workers in the labour market. The labour market insecurity index stood at 10.2 in 2010, but it had decreased to 5.05 by 2016. In contrast, in Norway, the index was only 1.66 in 2010 and rose to 2.85 in 2016. This trend, evident for only a few years, distinguishes the Polish labour market from Norway’s.

Additionally, aligning with the traits of Generation Z, individuals from this cohort are more likely to pursue opportunities that provide greater stability and security than those sought by Millennials (Gabrielova & Buchko, 2021). Nevertheless, business students still show a strong preference for employment in the private sector. It is therefore not obvious what the differences are between Norwegian and Polish students. Pay is a top priority for 70% of the Polish Generation Z (Piekarska, 2017). In 2023, Poland’s earnings versus purchasing power ranked 21st in the European Union (Eurostat), and its minimum wage was nearly three times lower than that

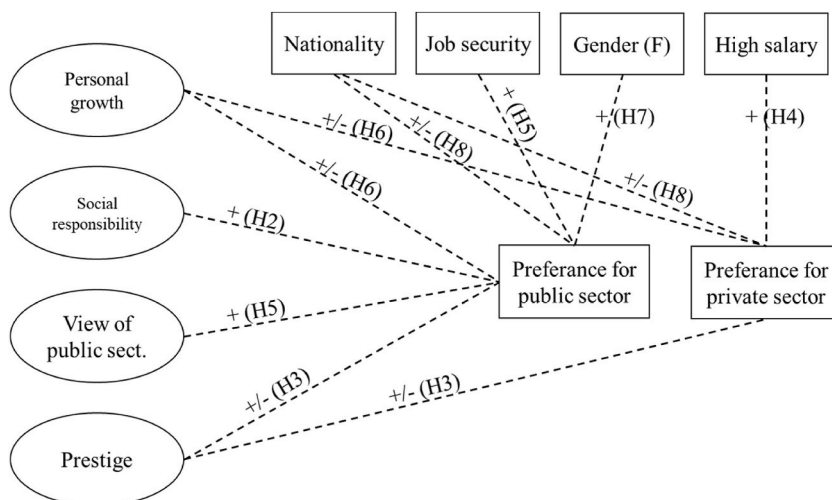


Fig. 1. Hypothesised relationships between concepts.



of Norway. Both countries equate prestige and social status with education, income, and occupation (Boguszewski, 2016; Chan et al., 2011). Yet, Poland has limited social mobility, with family background accounting for 68% of opportunity inequality (Transition Report, 2016–2017). The surveyed students, however, appear more privileged in this aspect – i.e., they have higher than average mobility (Wójcik, 2019). The lack of a sufficient theoretical basis makes it impossible to set directional hypotheses in this case, so we decided to set an exploratory hypothesis. Fig. 1 presents the research model with the hypotheses plotted on it.

### 3. Methods

#### 3.1. Research setting

Poland and Norway are European countries that have significant historical and cultural differences, which are reflected in the scope and perceptions of their respective public sectors. According to OECD data (OECD, 2021), public expenditure in 2020 constituted 58% of Norway's GDP, with the public sector employing 30.7% of the total workforce. Impressively, the Norwegian government holds an 83% trust rating from its citizens, the civil service enjoys a 71% trust rating, and a remarkable 90% of its population are satisfied with public services. In contrast, public expenditure in Poland in the same year represented 49% of the GDP, with the public sector accounting for 17.7% of the total workforce (OECD, 2021). Only 51% of the Polish population expressed trust in their government, 49% expressed trust in the civil service, and roughly 60% expressed satisfaction with public services. Meanwhile, security and consensus are key elements traditionally seen as characterising the Norwegian labour market (Friberg, 2011). There are also differences in female labour force participation between the two countries. The OECD (2024a) reports that although the percentage of employment in Poland (72.2%) is increasing and approaching that of Norway (77.8%), Poland has far fewer women relative to men who are economically active (67.4%) compared to Norway (76.8%). Furthermore, Norwegian culture is characterised by a higher degree of gender equality; Norway is a highly egalitarian society with respect to gender, with fewer stereotypes and less sexism compared to in Polish society (Valved et al., 2021). These economic and socio-cultural differences gave rise to the choice of the study settings.

#### 3.2. Research design

This study employs an observational and exploratory research design (Portney & Watkins, 2015): we analyse student attitudes and preferences using survey data rather than manipulating an experimental approach, and we explore the relationships among different variables. Within an observational exploratory approach, we employ an inferential statistics design to analyse the hypothesised relationships between our concepts of interest (Moses & Knutsen, 2019). In addition to describing the data, we aim to uncover explanatory relationships between concepts and variables.

We created a survey questionnaire for the study based on questionnaires used in previous studies of factors influencing career choice (Easterling & Smith, 2008; Granitz et al., 2014; Redmond & McGuinness, 2019; Sui et al., 2021). The survey was conducted among management and business students at universities in Norway (N = 150) and Poland (N = 178). A total of 328 students responded to the survey. Questionnaires in paper format were distributed in compulsory subject classes, and students were asked to fill them out anonymously. Although it is not a representative sample, the responses provide a good indicator of the students' preferences in the two countries. Since most of the concepts of the study do not have existing, predefined scales, we employ self-developed scales based on the aforementioned studies. This means that the scales have not been previously validated, but the questions used are relatively straightforward and not particularly susceptible to misunderstanding (refer to Table 1 for the precise wording of survey questions). For more abstract, complex concepts, pre-validation would be more crucial. All included survey items were rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree), except for demographic questions. Missing data were observed in some responses; these incomplete responses were included during the construct validation phase but were deliberately excluded from the data analysis. This approach aligns with the standard practices in statistical analysis, ensuring robust and accurate interpretation of the study results.

#### 3.3. Data analysis

Our data analysis consists of structural equation modelling (SEM) and necessary condition analysis (NCA). SEM is appropriate because our data consist of a wide range of survey items representing underlying concepts. SEM combines data reduction through identifying latent constructs (measurement model) with hypothesis testing of the relationships between concepts (structural model). Together, SEM and NCA provide deeper insight into the data. This combination of analyses has also been employed in recent studies (Hauff et al., 2024; Sukhov et al., 2023).

The first step of the analysis was a confirmatory factor analysis (CFA) to test the measurement model. All survey items related to each concept were added to the first model. To ensure construct validity (Anderson & Gerbing, 1988), we assessed the convergent and discriminant validity of the latent constructs. The average variance extracted (AVE), referring to the amount of variance in the variables captured by the latent construct, is a common indicator of convergent validity. The next step in the CFA was adjusting the model based on reliability and validity measures, where some items were excluded to achieve satisfactory measures. All constructs in the resulting measurement model had an AVE above the recommended threshold of 0.5 (Fornell & Larcker, 1981). The composite reliability (Raykov, 1997), which gauges the indicators' internal consistency, is another indicator of convergent reliability. We employed Raykov's factor reliability coefficient (RRC), which was above the desired threshold of 0.7 (Hair et al., 2010) for all concepts except *View of public sector*, which was 0.699. The standardised factor loadings in the measurement model were all above the threshold of 0.5

**Table 1**  
Latent constructs and associated survey items.

Latent construct	Item	Survey question (rated 1–7)
<b>Social responsibility</b>	Sustainability	When choosing education and career, I prioritize getting jobs that contribute to sustainable development for society.
	Contributes	I want to contribute and commit to the needs of society and the public.
	Helps others	When choosing education and career, I prioritize getting jobs that provide opportunities to help others.
	Useful to society	When choosing education and career, I prioritize getting jobs that give the opportunity to benefit society.
<b>Prestige</b>	Prestige	When choosing education and career, I prioritize getting jobs that have prestige.
	Attractiveness	When choosing education and career, I prioritize getting jobs that are attractive and require good qualifications.
	Social status	When choosing education and career, I prioritize getting jobs that provide high social status.
<b>View of public sector</b>	Bureaucratic (reversed)	The public sector is bureaucratic.
	Inefficient (reversed)	The public sector is inefficient.
<b>Personal growth</b>	Learning	When choosing education and career, I prioritize getting jobs where I can learn new things.
	Matches abilities	When choosing education and career, I prioritize getting jobs that match my abilities.
	Uses skills	When choosing education and career, I prioritize getting jobs where I get to use my skills.
	Well-being	When choosing education and career, I prioritize getting jobs where I enjoy myself.
<b>Observed variables</b>	Job security	When choosing education and career, I prioritize getting jobs that provide a high level of job security.
	High salary	When choosing education and career, I prioritize getting jobs that ensure a high salary.

(Hair et al., 2010). In sum, the different indicators show acceptable convergent validity. Discriminant validity is the degree to which a latent construct is distinct from other latent constructs. We examined whether the AVE was greater than the latent construct's shared variance with the other constructs (Fornell & Larcker, 1981). The AVE values were all greater than the squared correlations among the latent constructs, indicating discriminant validity.

Lastly, we assessed the measurement model's goodness-of-fit (Hair et al., 2010), which included the root means square error of approximation (RMSEA = 0.068), the comparative fit index (CFI = 0.943), the Tucker-Lewis index (TLI = 0.924), and the standardised root mean residual (SRMR = 0.074). The measures indicate a good model fit according to the recommended thresholds<sup>1</sup> (Hair et al., 2010). The measurement model is presented in Table 2.

### 3.4. Measurement model: concepts and variables

The measurement models consist of the following concepts resulting from the CFA. First, *Social responsibility* is based on four items asking respondents about the degree to which their career choices are related to a wish to contribute to societal and public needs, the importance of a future job contributing to sustainable development in society, the importance of having the opportunity to help others, and the value ascribed to a future job giving an opportunity to be useful to society. Second, *Prestige* is based on three items asking how different aspects are valued in the respondents' choice of education and profession: the importance of a future job having prestige, if it is attractive and requires high qualifications, and if it is related to high social status. Third, *View of public sector* is based on two items asking the respondents the degree to which they agree with statements about the public sector – the first being that the public sector is bureaucratic, and the second being that the public sector is inefficient. The variables were reversed, meaning that a value of 1 represents strong agreement and a value of 7 represents strong disagreement with the public sector being characterised as bureaucratic and inefficient, respectively. Fourth, *Personal growth* is more related to the evaluation of the intrinsic motivational factors of a future job. It is based on four different items: the importance of a future job giving the opportunity to learn new things, the importance of a job matching one's abilities, the importance of being able to use one's skills, and the importance of having a job where the respondent feels a sense of well-being. Table 1 shows the exact phrasing of all the included survey items.

### 3.5. Structural equation modelling

The next step is identifying the structural equation models. In addition to the latent constructs (concepts) in the measurement models, the SEMs consist of four observed variables. The dependent variables in our models are observed variables of preferences for the public and private sectors, respectively. The respondents were asked to rate their agreement (1–7) with the statements 'I prefer working in the public sector rather than the private sector' and 'I prefer working in the private sector rather than the public sector'. The evaluation of job security and high salary is considered important in our models, they are included as observed variables. The survey questions ask the respondents to rate their agreement with the importance of a future job having a high degree of job security and the

<sup>1</sup> RMSEA <0.7, CFI >0.9, TLI >0.9, SRMR <0.08.

**Table 2**  
Measurement model and item descriptors.

Latent construct	Item	N	Mean	Std. dev.	Std. loading	Z	RRC	Cr. alpha
Social responsibility	Sustainability	326	4.267	1.381	0.812	29.38	0.831	0.810
	Contributes	326	4.025	1.527	0.541	11.57		
	Helps others	324	4.571	1.407	0.770	25.42		
	Useful to society	323	4.495	1.350	0.867	35.71		
Prestige	Prestige	327	4.618	1.542	0.890	27.71	0.825	0.780
	Attractiveness	323	5.356	1.142	0.602	13.07		
	Social status	322	4.149	1.560	0.781	23.30		
View of public sector	Bureaucratic (reversed)	296	2.780	1.233	0.730	9.17	0.699	0.695
	Inefficient (reversed)	295	3.207	1.506	0.738	9.21		
Personal growth	Learning	327	5.900	1.036	0.639	14.96	0.807	0.798
	Matches abilities	324	5.772	0.981	0.746	20.62		
	Uses skills	324	5.815	0.978	0.826	26.03		
	Well-being	325	6.431	0.853	0.638	14.75		

importance of a high salary. Gender and nationality were also included as dichotomous, observed variables (female = 0, male = 1, Norwegian = 0, Polish = 1). The model was assessed using the model goodness-of-fit measures RMSEA, CFI, the Tucker-Lewis index, and SRMR (Hair et al., 2010).

3.6. Necessary condition analysis

Necessary condition analysis is a formidable statistical approach employed extensively in diverse domains across the social sciences. With its focus on identifying indispensable conditions for specific phenomena or effects, NCA offers a robust method for exploring the interrelationships among variables. Often regarded as a complementary tool to SEM, NCA enriches insights by delving into the essential conditions required for certain outcomes.

NCA serves as a technique enabling the translation of the principles of binary logic into fuzzy sets, facilitating a nuanced understanding of complex relationships. Its graphical representation often manifests in graphs containing the CE-FDH curve, providing visual insights into the interplay between variables. In decision-making processes regarding whether variables indeed act as a necessary condition for another, a statistical test is used. The statistical analysis culminates in a bottleneck table, offering a concise summary of the minimal values of explanatory variables associated with different levels of the dependent variable.

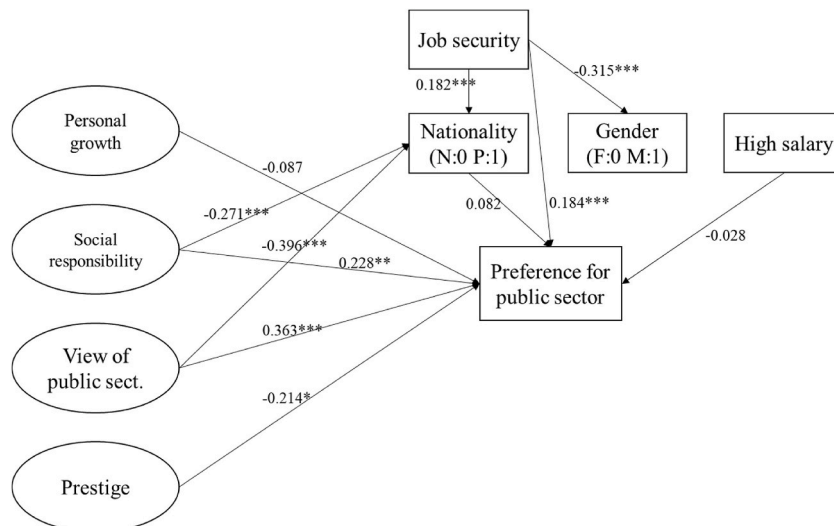


Fig. 2. Structural model of preference for working in the public sector with standardised parameters.



### 4. Results

We employed a SEM framework along with the NCA methodology. The utilisation of both these analytical methods yielded substantial benefits to our study. SEM provided a comprehensive understanding of the complex relationships among the variables under investigation, allowing us to assess the structural patterns within our model, while NCA contributed valuable insights by identifying the essential conditions for the observed outcomes to occur, thereby enhancing the robustness and depth of our analysis. The synergy between SEM and NCA not only facilitated a nuanced exploration of intricate relationships but also ensured a more holistic and rigorous examination of our research questions.

#### 4.1. SEM

We conducted two structural equation models, separating the preferences for the public and private sectors. The two models are shown in Figs. 2 and 3. Preference for the public sector has an  $R^2$  of 0.291, while preference for the private sector has an  $R^2$  of 0.317. Two covariances were added to the fitted model. First, between nationality and gender, we found that women were overrepresented in the Polish sample. Second, the covariance between the variables of prestige and social status (of the concept *Prestige*) were closely related to each other (Pearson’s  $R = 0.682$ ). The goodness-of-fit measures for the models show very good fit, with RMSEA = 0.05 and CFI = 0.953 for both models, TLI = 0.937 for the public sector and 0.936 for the private sector, and SRMR = 0.051 for the public sector and 0.052 for the private sector.

As Table 3 and Figs. 2 and 3 show, the value ascribed to job security, social responsibility, high salary, and a positive outlook on the public sector all demonstrate the hypothesised effects on preference for working in the public or private sectors. All the effects are significant at the 0.1–5% level. The most influential factor in both models is View of public sector, with standardized coefficients of 0.363 and 0.408. The more positive the outlook (i.e., the public sector is considered less bureaucratic and less inefficient), the higher the preference for the public sector, and vice versa. A high evaluation of job security has a positive effect on the preference for having a job in the public sector and a negative effect on the preference for the private sector. A high evaluation of social responsibility affects the preference for the public sector positively and for the private sector negatively. The value ascribed to getting a high salary has a positive and significant effect on preference for the private sector, while there is a negative but non-significant effect on preference for the public sector. Thus, the findings support hypotheses H1, H2, H4, and H5. Furthermore, the more important prestige is considered for a future job, the stronger the preference for the private sector, and vice versa, which supports the open-ended hypothesis H3. The relationship between preference for the public or private sectors and the personal growth factor is not significant; thus, we do not find support for hypothesis H6.

We find that being Polish (rather than Norwegian) negatively and significantly affects the preference for the private sector. The effect of being Polish on preference for the public sector is positive but not significant. The study showed that both Polish and Norwegian business students overwhelmingly prefer to work in the private sector than in the public sector. Thus, hypothesis H8 is partially supported.

When it comes to gender effects, we find that there is a negative and significant relationship (0.1%) with job security. Male respondents value job security to a lesser extent than female respondents. However, we do not find a direct path between gender and preference for the public or private sector. Thus, since job security significantly affects preference, hypothesis H7 is partially supported.

The standardised coefficients show that view of public sector has the largest effect in both models. For public sector, social

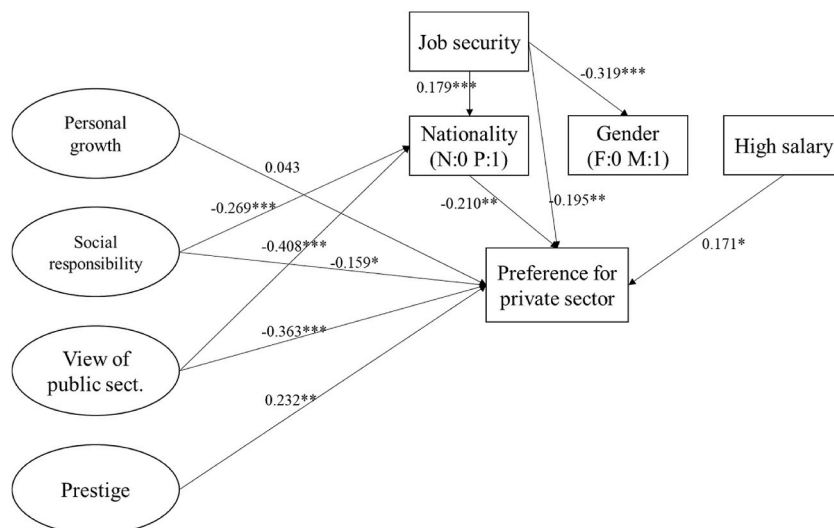


Fig. 3. Structural model of preference for working in the private sector with standardised parameters.

**Table 3**  
Structural models of preference for public and private sector with standardised coefficients.

Model 1. Preference for public sector			Std. coeff.
Preference for public sector	←←	Job security	0.184 <sup>a</sup>
	←←	Social responsibility	0.228 <sup>b</sup>
	←←	Prestige	-0.214 <sup>c</sup>
	←←	High salary	-0.028
	←←	View of public sector	0.363 <sup>a</sup>
	←←	Personal growth	-0.087
	←←	Nationality (P = 1)	0.082
	←←		
Nationality (P = 1)			
←←	Job security	0.182 <sup>a</sup>	
←←	Social responsibility	-0.271 <sup>a</sup>	
←←	View of public sector	-0.396 <sup>a</sup>	
Gender (M = 1)			
←←	Job security	-0.315 <sup>a</sup>	
N = 273, Log likelihood = -6,638, R <sup>2</sup> = 0.291			
Model 2. Preference for private sector			
Preference for private sector	←←	Job security	-0.195 <sup>b</sup>
	←←	Social responsibility	-0.159 <sup>c</sup>
	←←	Prestige	0.232 <sup>c</sup>
	←←	High salary	0.171 <sup>c</sup>
	←←	View of public sector	-0.363 <sup>a</sup>
	←←	Personal growth	0.043
	←←	Nationality (P = 1)	-0.210 <sup>b</sup>
	←←		
Nationality (P = 1)			
←←	Job security	0.179 <sup>a</sup>	
←←	Social responsibility	-0.269 <sup>a</sup>	
←←	View of public sector	-0.408 <sup>a</sup>	
Gender (M = 1)			
←←	Job security	-0.319 <sup>a</sup>	
N = 275, Log likelihood = -6,672, R <sup>2</sup> = 0.317			

<sup>a</sup> p < 0.001.

<sup>b</sup> p < 0.01.

<sup>c</sup> p < 0.05.

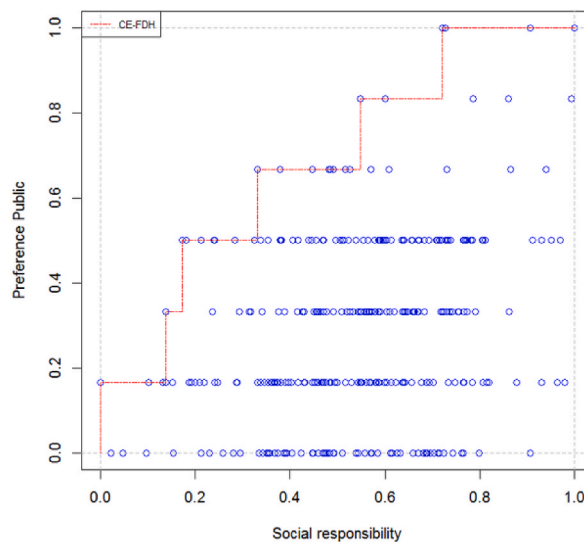


Fig. 4. An example of a CE-FDH line.

responsibility and prestige (negative) have the second and third largest effects. For the private sector, prestige and job security (negative) have the second and third largest effects.

#### 4.2. NCA

The large majority of the respondents who participated in our research preferred to work in the private sector (94%) rather than in the public sector (6%). Therefore, we decided to take a closer look at the conditions that must be met for a respondent to choose a career in the public sector. The analysis of relationships between constructs using the SEM model allowed for the identification of factors that significantly influence the decision to pursue a career in the public sector. The next stage of the dependency analysis is to identify the necessary conditions among those previously chosen as significant. This involves looking for conditions that must be met to achieve the intended result, which is the decision to work in the public sector. In this regard, the constructs previously used in the SEM model were subjected to NCA.

The CE-FDH line, a notable NCA technique, plays a crucial role in identifying necessary conditions for a specific outcome. This line effectively partitions the space with observations (situated on the right-hand side of the red ceiling line) from the area where no observations are present (situated on the left-hand side). Importantly, a larger area on the left side corresponds to a higher effect size and consequently a higher likelihood that the variable will prove to be a necessary condition (Fig. 4).

Table 4 presents the effect size ( $d$ ) of the latent variables scores on the preference for the public sector. The necessary condition effect size ( $d$ ) indicates the extent to which the condition is necessary for the outcome; it ranges from 0 to 1. The general benchmark is  $0 < d < 0.1$  is a small effect;  $0.1 \leq d < 0.3$  is a medium effect;  $0.3 \leq d < 0.5$  is a large effect; and  $d \geq 0.5$  is a very large effect.

The largest observed effect size in Table 4 relates to job security (large), followed by social responsibility (large), prestige (medium), (positive) view of the public sector (medium), personal growth (medium), and gender (medium). As expected, nationality is not a necessary condition for preference for the public sector.

To determine whether the conditions are significant, the NCA statistical test is used. According to Lehman et al. (2005), the statistical test used in NCA can be categorised as a permutation and randomisation test. In the case of this research, 10,000 random samples were created to obtain a distribution of effect sizes when the null hypothesis is true (factors are not related). Rejection of the null hypothesis indicates the existence of a necessary condition.

The results of the test in Table 4 indicate that social responsibility, job security, and (positive) view of the public sector are necessary conditions for a career in the public sector. Prestige and the nationality and gender of the respondent significantly influence the decision to work in the public sector (based on the SEM model), but they are not necessary conditions for making such a decision. It is worth noting that for gender as a variable, the permutation test gave a p-value close to 0.05, and the variable is on the verge of being statistically significant. Specifically, it can be observed in the data that no men stated that they would choose to work in the public sector with confidence greater than 80%. However, such statements did appear among women.

An even more in-depth understanding of the data can be obtained from the bottleneck table (Table 5). The table is used in conjunction with the CE-FDH line and serves as a useful tool to analyse the need for different combinations of conditions to produce the outcome of interest (Dul et al., 2023). The bottleneck table helps to visually identify the necessary conditions by focusing on the combinations of conditions that are bottlenecks. These are the minimal sets of conditions that are necessary and sufficient for the outcome to occur.

The bottleneck table shows the minimum scores of the constructs expressed in the percentages needed to achieve a high level of confidence that a career in the public sector is preferred (over 80%). As indicated, 54.9% was the minimum level of social responsibility, 50.0% for job security, and 41.7% for (positive) view of the public sector. These values indicate that if these threshold values are not reached, it is unlikely that the respondents will decide to work in the public sector rather than in the private sector.

Overall, the NCA indicated that three of the six attributes are necessary to determine a career in the public sector. Socially responsible individuals who value job security and harbour no prejudices towards public institutions are naturally predisposed to choose a career in the public sector. Women also tend to choose careers in this field more frequently than men. Nationality is not a necessary condition here.

**Table 4**  
Effect size and the NCA statistical test.

	CE-FDH	
	Effect size ( $d$ )	p-value
Job security	0.417	0.007
Social responsibility	0.319	0.000
View of public sector	0.229	0.000
Gender (male 0; female 1)	0.167	0.081
Prestige	0.277	0.507
Personal growth	0.208	0.530
Nationality (Norway 0; Poland 1)	0.000	1.000

**Table 5**  
Bottleneck CE\_FDH, percentage range.

Preference for public sector	Social responsibility	Job security	View of public sector	Personal growth	Prestige
0	NN	NN	NN	NN	NN
10	NN	16.7	4.4	NN	NN
20	13.8	33.3	7.5	NN	16.6
30	13.8	33.3	7.5	NN	16.6
40	17.3	33.3	8.7	NN	16.6
50	17.3	33.3	8.7	NN	16.6
60	33.1	50.0	33.2	NN	33.3
70	54.9	50.0	41.7	53.9	49.9
80	54.9	50.0	41.7	53.9	49.9
90	72.1	66.7	41.7	70.9	49.9
100	72.1	66.7	41.7	70.9	49.9

## 5. Discussion

This paper investigated the career inclinations of business and management students in Norway and Poland, specifically their preferences between the private and public sectors. Many of the findings are in accordance with previous research, especially regarding factors that influence students' preferences for careers in the public and private sectors. One contribution of this paper is the demonstration of different assessments among students in Poland and in Norway. It is worth emphasising that the research confirmed the strong preference of respondents to choose a job in the private sector (94%). In addition, it was possible to identify the factors that lead respondents to choose to work in the public or private sector. Numerous scholarly articles suggest that students seldom regard the public sector as a coveted career choice. For instance, [Lee and Choi \(2016\)](#) assert that the allure of the public sector has diminished, and [Delfgaauw and Dur \(2010\)](#) observe that only a minor fraction of highly educated university students opts for public sector careers. Additionally, an abundance of research illustrates marked differences in attitudes and preferences between individuals working in the public and private sectors ([Hansen, 2014](#)).

The findings based on SEM analysis fully support the first five hypotheses (H1–H5) and partially support the last two hypotheses (H7–H8) regarding the factors influencing individuals' preference for working in the public or private sector. The study does not confirm hypothesis H6 that personal growth differs in association with private and public sector preferences. A more positive outlook on the public sector, the perception of it as less bureaucratic and inefficient, a high valuation of social responsibility, a low need for prestige, a high evaluation of job security, and female gender lead to a higher preference for the public sector. The research also confirmed the negative outlook on the public sector as more bureaucratic and less efficient. However, a more positive outlook on the public sector was found to be a predictor of public sector choice (H5). This finding is consistent with results obtained by other researchers ([Van der Wal & Oosterbaan, 2013](#)). A high evaluation of social responsibility is also linked to the tendency to choose the public sector as a future workplace (H5): the indication is that working in the public sector means bettering society and helping others ([Doverspike & Vaiana, 2005](#)). The pro-social attitude and motivation towards social responsibility of those who prefer the public sector as a workplace is confirmed by the results of other studies ([Ritz, 2011](#)). Several studies have employed structural equation modelling to show that attitudes toward the public sector significantly influence one's desire to work in that sector. ([Bright, 2021](#)).

The propensity to prefer the public sector as a workplace is also related to a low need for prestige (H3). According to the survey, the need for prestige characterises respondents who prefer the private sector. Respondents who value job security more prefer the public sector (H1), which is considered more stable in nature because of the support available from the government even in turbulent times compared to the private sector, as confirmed by the work of other authors ([Barsoum, 2016](#); [Fontaine et al., 2020](#); [Jain & Bhatt, 2015](#)). The literature also indicates that individuals differ in their own preferences for job security, which probably also determines the preference for the private or public sector ([Silla et al., 2009](#)). Research partly confirms the greater propensity of women to prefer the public sector (H7). There is a significant negative relationship between gender and job security, with male respondents valuing job security to a lesser extent than female respondents. The results obtained indicate the mechanism explaining this preference, which is linked to the need for job security. Job security is a total mediator of the relationship between gender (female) and preference for the public sector. This means that job security is an important factor in women's choice of the public sector as a workplace. Similarly, for the private sector, a more negative view of the public sector has the largest effect, followed by high prestige, lower need for job security, high salary, low social responsibility, and male gender. Thus, in this case, the view of the public sector – with the difference that it was more negative – also proved to be the factor with the greatest power of influence.

The analysis also confirmed the lower evaluation of job security and social responsibility by respondents preferring employment in the private sector. In contrast, valuing a high salary has a positive and significant effect on the preference for the private sector, with a non-significant negative effect on the preference for the public sector (H4). Similarly, the importance of prestige in a future job influences preferences, with a higher preference for the private sector when prestige is considered important, and vice versa. This supports our open-ended hypothesis (H3). As the research indicates, the need for prestige and high earnings are linked. The amount of earnings most often determines the prestige and social status achieved ([Chan et al., 2011](#)), and working in the private sector is perceived as enabling the realisation of these needs.

### 5.1. Analysis of national differences

In many areas, there are no significant differences between Norwegian and Polish students. There are many similarities between these two groups of students in terms of career preferences, such as prestige, high salary, and personal growth. This study identifies only three significant differences between Polish and Norwegian students in their views on choosing between the private and public sectors. Polish students place a higher emphasis on job security, which favours choosing the public sector. On the other hand, they show less social responsibility and have a noticeably more negative view of the public sector. Both factors make the private sector more attractive.

There could be several factors explaining these distinctions between Norway and Poland.

The family's social and cultural capital accounts for a significant proportion of opportunity inequality in Poland. This suggests that the career preferences and decisions of many Polish students might be influenced more by their family background and upbringing than by personal inclinations or societal trends. In Norway, there is a greater focus on collective solutions managed by the welfare state, which may explain why Norwegian students place a higher emphasis on social responsibility.

Polish students prioritize job security more than Norwegians, typically associating it with public sector careers. Even though job security is not a top concern for Generation Z in Poland, previous studies have highlighted its importance (Bohdziewicz, 2016). The recent trend of valuing job flexibility over security might be influenced by Poland's current employee labour market. Norway, on the other hand, is known for its high employment security and pro-worker regulations. Regardless of regional context, job security remains crucial for economic, social, and personal fulfilment. Another important factor is the much higher economic prosperity in Norway and, notably, the development of the welfare state. There is a shortage of labour, leading to well-paid jobs, and if one becomes unemployed, there are strong welfare schemes in place to ensure economic security.

Polish students have a more critical view of their public sector, associating it with inefficiency and cumbersome management, supported by its lagging digital advancements compared to other EU nations. In contrast, Norway's decentralised public sector, which employs over 30% of its workforce, has a somewhat better reputation of efficiency and citizen satisfaction. Independent of nationality, individuals valuing prestige and higher salaries lean towards the private sector.

We observe a strong overall preference for the private sector in both Norway and Poland. This is aligned with global trends where the allure of entrepreneurship, start-ups, and corporate jobs in technology, finance, and other booming sectors eclipses the appeal of public sector jobs. Moreover, the perception of the public sector as bureaucratic and less dynamic might be a global phenomenon rather than a regional one.

### 5.2. Necessary condition analysis

NCA gives us a better view of the relevance of the factors identified in the study using SEM. It suggests that social responsibility, job security, and a positive view of the public sector are necessary conditions for a career in the public sector. However, prestige, nationality, and gender – which emerged as significant in the SEM – significantly influence the decision to work in the public sector, but they are not considered necessary conditions according to NCA.

Notably, the gender variable approaches statistical significance, with women showing a stronger inclination than men to choose a career in the public sector. This relationship is linked to the need for job security, which has been shown to be a complete mediator in this relationship. The fact of being a woman does not naturally determine the preference for working in the public sector. However, women who favour working in the public sector tend to score higher on the Likert scale compared to men with similar preferences.

## 6. Limitations

Our research has made it possible to identify a set of determinants of the propensity to work in either the public or private sector. However, it is not free of limitations. The research was conducted on Polish and Norwegian students as potential employees planning their careers, so the conclusions can only be read in relation to them. It would therefore be justified to carry out similar research in a larger, randomly selected sample covering different cultural contexts both within and outside of EU countries. As the research only included students with limited experience of the labour market, the results obtained may partly reflect commonly held stereotypes about the attractiveness of public and private organisations. Hence, it would be interesting to use other samples, such as more experienced job seekers with employment experiences in public and private organisations. While there has been a focus in recent years on how AI-based knowledge and technology can be applied in both the public and private sectors (Lăzăroiu, 2017; Peters et al., 2023a, b) we do not address this topic in this paper.

## 7. Conclusions

Many of the results are in accordance with previous research on the theoretical relationships examined. Candidates considering the public sector have a more positive view of the sector, emphasising job security and social responsibility. Novel results from our analysis is related to the students' emphasis on prestige in their preference for private sector, and the differences in preferences between Norwegian and Polish students. The most influential factor on sector preference in our analyses is the view of public sector.

Business students in both countries tend to view private sector jobs as more prestigious. The overall tendency is that the private sector is preferred in both countries. The necessary conditions for the students' preferring public sector are emphasis on job security, social responsibility, and a positive view of public sector. The findings also show differences between Norwegian and Polish students.



The Polish students place more emphasis on job security, have a more negative view of the public sector, place less emphasis on social responsibility, and have a lower preference for private sector compared to the Norwegian students. Norwegian students demonstrate higher social responsibility and have a more positive view of the public sector. This is useful knowledge for the development of educational offerings for business students, as well as to gain more insight into the factors that can ensure better recruitment to the public sector. Possible explanations for the national differences can be economic standards of living, and cultural aspects of family-orientation versus emphasis on collective solutions for society.

These results have practical implications. The public sector plays an important role in building social welfare and supporting the economic development of the country. This article documents that the public sector struggles to recruit skilled people in economics and management. The main reason for this is the perception of the public sector. If the public sector is to succeed better in recruitment, it should focus on being portrayed as less bureaucratic and more efficient, i.e., improving its image. These are points that are relevant and can be transferred to other countries in the EU. Therefore, attracting and retaining talent in the public sector is a matter of vital importance. It provides valuable information on how to communicate the value of public sector employment not only to students and but also to sources of career information, such as academics, advisors, and college career services. It can also benefit potential employees, who may find positions in the public sector better suited to their knowledge, skills, and abilities.

The paper addresses the limited body of work concerning a common assessment of students in Poland and Norway, thus serving as a foundational point for further research. Further research should closely analyse the factors that explain why many business students and students belonging to other disciplines (for example, engineers) across national borders find the public sector rather unattractive for their future careers.

### CRedit authorship contribution statement

**Marthe Holum:** Software, Resources, Methodology, Formal analysis, Data curation. **Dagmara Lewicka:** Writing – review & editing, Writing – original draft, Formal analysis, Conceptualization. **Leiv Opstad:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Formal analysis, Data curation. **Paweł Zajac:** Validation, Resources, Methodology, Investigation, Formal analysis, Data curation.

### Data availability

The authors do not have permission to share data.

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