

Overview of the Labour Market Trends and Labour Supply-Demand Connection in North Cyprus

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Abstract: The primary objective of this study is to thoroughly examine the structural characteristics of the labour market in North Cyprus and its key labour market indicators. In this way, it aims to provide information for the development of appropriate policies that support sustainable economic growth by better understanding the difficulties encountered in the labour market and the supply-demand dynamics. Another important element of the study is to fill the gap in the existing literature and provide a more comprehensive perspective on the island's general labour market. Within the scope of the study, focusing on the leading indicators of the labour market, unemployment rates categorised by age groups and education levels, as well as the sectoral and occupational distribution of employment, were presented in detail. Important information was obtained regarding the structure of the labour market. In addition, the dynamics of the labour market were analysed in depth by detailing the number of job applications, vacant positions and recruitments. The obtained basic indicators were compared with the records of South Cyprus to provide a comparative perspective.

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Keywords: Labour Market; Labour Supply; Labour Demand; Economic well-being

Kuzey Kıbrıs'ta İşgücü Piyasası Eğilimlerine ve İşgücü Arz-Talep Bağlantısına Genel Bakış

Öz: Bu çalışmanın temel amacı, Kuzey Kıbrıs'taki işgücü piyasasının yapısal özelliklerini ve temel işgücü piyasası göstergelerini kapsamlı bir şekilde incelemektir. Bu şekilde, işgücü piyasasında karşılaşılan zorlukları ve arz-talep dinamiklerini daha iyi anlayarak sürdürülebilir ekonomik büyümeyi destekleyen uygun politikaların geliştirilmesi için bilgi sağlamayı hedeflemektedir. Çalışmanın bir diğer önemli unsuru, mevcut literatürdeki boşluğu doldurmak ve adanın genel işgücü piyasasına ilişkin daha kapsamlı bir bakış açısı sağlamaktır. Çalışma kapsamında, işgücü piyasasının öncü göstergelerine odaklanılarak, yaş grupları ve eğitim düzeylerine göre kategorize edilmiş işsizlik oranları ile istihdamın sektörel ve mesleki dağılımı ayrıntılı olarak sunulmuştur. İşgücü piyasasının yapısı hakkında önemli bilgiler elde edilmiştir. Ayrıca, iş başvurusu sayıları, boş pozisyonlar ve işe alımlar detaylandırılarak işgücü piyasasının dinamikleri derinlemesine analiz edilmiştir. Elde edilen temel göstergeler, karşılaştırmalı bir bakış açısı sağlamak için Güney Kıbrıs kayıtlarıyla karşılaştırılmıştır.

Anahtar Kelimeler: İşgücü Piyasası; İşgücü Arzı; İşgücü Talebi; Ekonomik refah

Introduction

Sustainable economic growth is one of the key topics all politicians discuss, from the government to the opposition. Sustainable economic growth briefly refers to maintaining the increase in real national income, which is the annual production of goods and services, without leading to other economic problems. The increase in production occurs through an increase in the number of production factors and/or an increase in productivity. Labour, along with physical and financial capital and natural resources, is one of the leading production factors. Thus, evaluating labour market conditions is essential to designing appropriate policies to achieve sustainable economic growth and development. Especially in developing economies, the labour market's role in determining social and economic developments is undeniable, as employment status is one of the primary factors that determine poverty.

North Cyprus is a small island with an upper-middle-class economy functioning within a unique political and economic environment since 1974, when the island was de facto divided into North and South. The de facto independence

and isolation of North Cyprus have a significant impact on economic dynamics, particularly generating substantial labour market challenges. According to the 2022 records, the Gross Domestic Product (GDP) of North Cyprus is 4,450.3 million USD, while the per capita Gross National Income (GNI) is 14,648 USD (Statistical Institute, 2024). Nevertheless, South Cyprus has a per capita GNI of 31,520 USD for the same year, over twice that of North Cyprus (World Bank Group, 2024).

North Cyprus is characterised as a service-based micro economy since around 74% of the total value added is generated from the services sector. The services sector comprises trade and tourism, transport and communication, financial institutions, ownership of dwellings, business and personal services, and public services. The highest share of the value added is generated by trade and tourism, at 30.7%. This sector is divided into two sub-sectors: the value added generated through wholesale and retail trade, and the value added generated from hotels and restaurants. The hotels and restaurants sub-category of the trade and tourism sub-sector of services generated 19.7% of total GDP in 2022, the highest recorded to date. Table 1 below illustrates the sectoral distribution of GDP in North Cyprus from 2017 to 2022.

Table 1. Sectoral Distribution of GDP

	2017	2018	2019	2020	2021	2022
1. Agriculture	4.5	6.2	5.5	6.0	8.3	6.6
2. Industry	9.7	8.4	7.8	9.6	7.5	5.4
3. Construction	5.8	5.9	5.8	9.6	7.5	5.8
4. Trade – Tourism	20.1	20.8	22.2	12.8	13.8	30.7
4.1. Wholesale and Retail Trade	11.1	11.2	10.5	10.3	10.4	11.0
4.2. Hotels and Restaurants	9.0	9.6	11.7	2.5	3.4	19.7
5. Transport and Communication	8.0	7.3	7.3	6.4	9.2	9.3
6. Financial Institutions	6.9	8.1	8.0	7.9	8.9	7.1
7. Ownership of Dwellings	4.5	4.9	5.2	6.3	7.3	5.0
8. Business and Personal Services	15.7	15.8	13.2	12.9	14.2	10.3
8.1 Business and Personal Services	6.4	6.6	6.4	6.1	6.6	6.9
8.2 Higher Education	9.3	9.2	6.8	6.8	7.6	3.5
9. Public Services	15.1	13.4	16.1	19.4	15.5	11.5
10. Import Duties	9.7	9.2	9.0	9.1	7.8	8.3
GDP	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistical Institute (2024)

The services sector is the fastest-growing sector in North Cyprus, accounting for the highest share of the country's GDP. Moreover, with the highest share of value added generated, trade and tourism are the fastest-growing services

subsector, with a 41.1% growth rate in 2022. Table 2 below illustrates the real growth rates of sectors in North Cyprus from 2017 to 2022.

Table 2. Real Growth Rates of Sectors

	2017	2018	2019	2020	2021	2022
1. Agriculture	4.9	2.6	2.7	1.8	-1.5	-5.3
2. Industry	4.4	-12.4	-14.7	-15.0	16.8	7.0
3. Construction	10.6	7.6	3.9	-25.6	23.0	0.6
4. Trade – Tourism	9.0	0.4	-2.7	-35.6	5.4	41.1
4.1. Wholesale and Retail Trade	5.2	0.0	-4.9	-18.7	0.7	22.6
4.2. Hotels and Restaurants	22.4	1.6	4.0	-82.0	64.2	181.8
5. Transport and Communication	6.9	3.5	3.5	-16.6	32.8	25.9
6. Financial Institutions	3.1	2.7	1.2	0.5	-2.0	-0.6
7. Ownership of Dwellings	3.8	4.6	5.0	3.6	3.8	4.3
8. Business and Personal Services	7.7	5.3	1.3	-16.0	3.1	6.4
8.1 Business and Personal Services	7.1	1.2	-0.7	-18.2	9.9	13.0
8.2 Higher Education	8.0	7.5	2.3	-15.0	-0.1	3.0
9. Public Services	-0.8	1.3	3.7	-1.5	-5.5	1.0
10. Import Duties	0.5	2.4	3.6	-16.4	-26.1	34.0
GDP	5.4	1.3	0.2	-16.2	3.9	13.3

Source: Statistical Institute (2024)

Rather than being a small island nation, North Cyprus faces economic challenges, including high production costs in factor markets, increasing foreign trade, budget deficits, and price instability. This highlights the need for sensitive policies to enhance factor productivity, particularly in labour productivity. Improving labour productivity can be achieved by addressing the skills gap in the labour market. In this regard, providing education to sectors needing labour should be the appropriate policy to pursue. Therefore, a thorough analysis of the labour market in North Cyprus is essential.

This study aims to analyse the labour market in North Cyprus by focusing on its structure and examining its key labour market indicators in depth. This will enable us to provide information that better understands the labour market challenges faced and supply-demand characteristics, so that appropriate policies can be implemented to address labour market-related problems and achieve sustainable economic growth. Furthermore, this study offers a broader perspective on the labour market of Cyprus, filling a gap in the existing literature.

This study is followed by Section 2, delivering a brief literature review. Section 3 focuses on the leading labour market indicators. Section 4 focuses on the unemployment rates categorised by age groups and education levels in North

Cyprus. Section 5 presents the sectoral and occupational distribution of employment in North Cyprus. Section 6 details the number of job applications, vacancies and recruitments. Section 7 concludes the study, while Section 8 provides policy recommendations.

Literature Review

Although the literature includes several studies focusing on labour market structures in various countries, only a few studies have sketched the labour market characteristics in North Cyprus. Initial literature studies confirm the heavy dependence of the North Cyprus economy on the services sector, particularly tourism and education, as its primary drivers (Theophanous et al., 2008; Warner, 1999).

As mentioned in the introduction section and presented in Table 1, these sectors are still central to production and employment. However, continued vulnerability of the North Cyprus economy to external shocks, such as currency fluctuations, directly affects labour market dynamics (Giritli & Kalmaz, 2022). Ekici (2019), in chapter 5, titled 'The Labour Market' of his book, focuses on the labour market, examining how the public and the private sectors were developed after de facto division of the island in 1974 and the reasons behind the labour movements across the border between north and south of the island, from Turkey and from north Cyprus to the UK.

In another study, Besim et al. (2015) investigated the labour market experiences of Turkish immigrants and the gap in earnings between natives and immigrants. According to their findings, even though there are no traditional obstacles applicable to Turkish immigrants in the North Cyprus labour market, the immigrants' lower earnings are not statistically deniable. Lisaniler and Ugural (2010) investigated the public-private wage gap and the determinants of the North Cyprus labour market. According to their findings, several demographic factors, including gender, age, and marital status, are essential determinants of the wage gap in the North Cyprus labour market. Besim et al. (2017) analysed the North Cyprus labour market using two types of datasets, one of which is the Household Labour Force Surveys (HLFS), which include information about employed, unemployed, and out-of-labour-force individuals categorised by education levels and other demographic characteristics. Another dataset is provided by the Cyprus Turkish Chamber of Commerce (CTCC), which focuses on workers' self-reported education levels required for their current jobs, serving as a valuable tool to assess the education-skills mismatch in the North Cyprus labour market. This data will enable a deeper understanding of the discrepancies between the qualifications workers possess and those required for their roles. In addition to examining

education levels, the dataset also explores wage and work-hour mismatches, which are critical indicators of labour market efficiency. The main findings reveal that there is a significant potential for the labour market participation to be increased, as a substantial portion of the workforce that has left the labour market is willing to return, which mostly consists of females. Some highly educated individuals are unemployed, which indicates a lack of demand for such workers, and many less educated individuals are willing to re-enter the workforce, creating a large supply. This finding confirms the existence of the education-skills mismatch in the North Cyprus labour market. Additionally, there is a young, low-educated supply of potential workers with some prior work experience who are currently out of the labour force but willing to enter it if an opportunity arises.

Ioannou and Sonan (2016), provides detailed insights into youth unemployment in Cyprus, comparing the dynamics in both North and South Cyprus as well as the Eurozone. Their research highlights the unique challenges faced by young individuals in the labour market, such as limited job opportunities and the effects of educational mismatches. By analysing the differences between the two regions, the study sheds light on how socio-economic factors and policies influence youth employment rates. The findings can be instrumental in developing targeted strategies to mitigate youth unemployment and improve labour market outcomes in both parts of the island.

In addition, few studies concentrated on the labour market situation of females in North Cyprus, focusing on the labour market positions of females (Güven-Lisaniler - Uğural, 2001), investigating the determinants of female labour supply (Lisaniler & Bhatti, 2005), shedding light on the gender segmentation (Güven-Lisaniler, 2009), projecting the effect of gender inequalities in the labour force participation on the per capita output of the country (Beton-Kalmaz, 2018), exploring the extent, patterns and the sources of occupational gender segregation (Kalmaz & Lisaniler, 2019), and studying the reason behind low levels of female labour force participation in North Cyprus labour market (Beton-Kalmaz & Güven-Lisaniler, 2019). Usman & Sanusi (2016), examined the role of education in female labour market decisions using a cross-sectional dataset from the Household Survey 2011 conducted by the North Cyprus State Planning Organisation. They employed a binomial logit regression model, with findings indicating strong evidence supporting the human capital theory that as education levels increase, female participation in the North Cyprus labour market also rises. Additionally, the results confirmed that marital status, non-market income, and family size negatively impact female labour force participation (FLFP) in North Cyprus. Furthermore, women's residence and age significantly influence their labour market decisions. While residence place negatively impacts FLFP, an inverse U-

shaped pattern is observed between age and female labour market attainment, indicating that as age increases, FLFP rises to a certain level, and then begins to decline after that threshold age is reached.

Macroeconomic Labour Market Indicators in North Cyprus

This section of the paper focuses on the leading labour market indicators in North Cyprus. The labour market is where labour supply and demand meet, regulating wages and working conditions. In this section, three basic indicators (labour force participation, employment, and unemployment rates) and youth unemployment in North Cyprus are analysed and compared with South Cyprus.

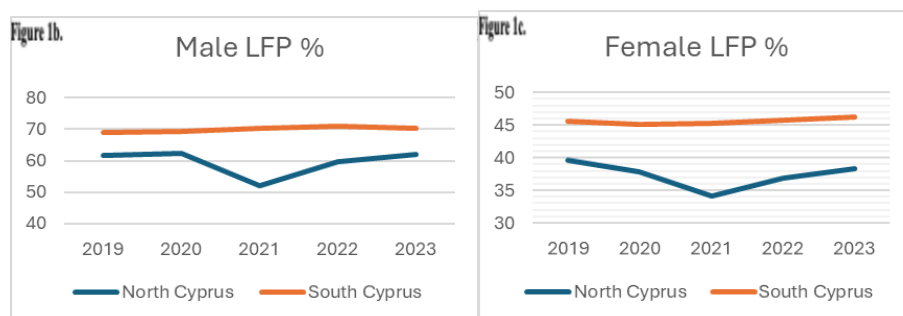
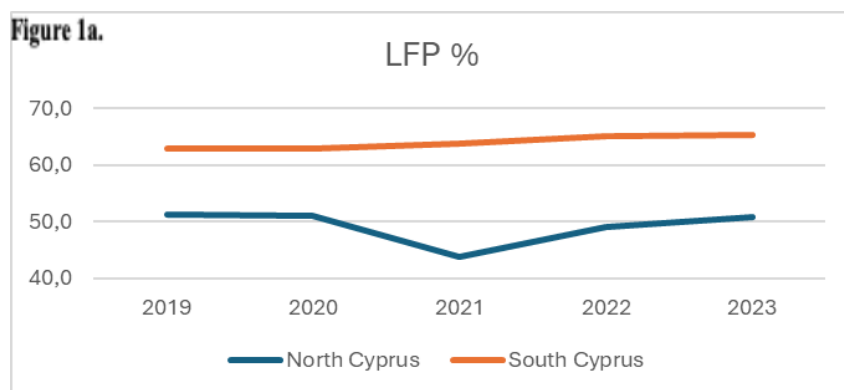
As a comprehensive and essential labour market indicator, labour force participation (LFP) measures the extent to which a country's working-age population (15 years and above) participates in economic activity. In general, high labour force participation implies that the labour supply, which is the number of people participating in economic activity, is high, indicating potential for economic growth. Nevertheless, LFP should be considered in conjunction with employment and unemployment rates to gain a general understanding of labour market conditions. The employment rate determines the amount of available labour resources used, indicating the job-creating capacity of the economy. The unemployment rate is the percentage of those participating in the labour force, specifically those in the workforce who have not been able to find employment opportunities despite actively seeking a job. The proportion of the economically active population is determined by analysing the employment and unemployment rates together. Furthermore, the three fundamental labour market indicators provide insights into the problems of low participation, low employment, and high unemployment, and offer solutions when they are analysed disaggregated by different age groups and genders. For example, high youth unemployment rates (15-24 age group) indicate that the economy is not able to create jobs for new entrants to the labour market; thus, to reduce unemployment, this age group should be the target of policies. Similarly, the high unemployment rate affecting a specific gender can be addressed only if policies aimed at reducing unemployment target that gender. The total and gender disaggregated statistics of the leading macroeconomic labour market indicators from 2019 to 2023 are summarised in Table 3 below.

Table 3. Macroeconomic Labour Market Indicators (2019-2023)

	2019	2020	2021	2022	2023
Labour Force Participation Rate %	51.3	51.1	43.8	49.1	50.9
Labour Force Participation Rate (Male)%	61.6	62.2	52.1	59.8	61.9
Labour Force Participation Rate (Female) %	39.7	37.9	34.2	36.9	38.3
Employment Rate %	48.1	45.9	40.4	46.0	48.3
Employment Rate (Male) %	58.3	57.0	49.0	56.7	58.9
Employment Rate (Female) %	36.5	33.3	30.4	33.7	36.1
Unemployment Rate %	6.3	10.1	7.8	6.3	5.1
Unemployment Rate (Male) %	5.3	9.0	6.0	5.1	4.8
Unemployment Rate (Female) %	8.0	12.2	11.0	8.6	5.8
Unemployed rate among young (aged 15-24) %	19.4	29.3	21.4	19.2	14.9
Unemployed rate among young (aged 15-24) (Male) %	18.3	25.6	17.7	17.2	12.9
Unemployed rate among young (aged 15-24) (Female) %	20.7	34.8	26.5	21.3	17.5

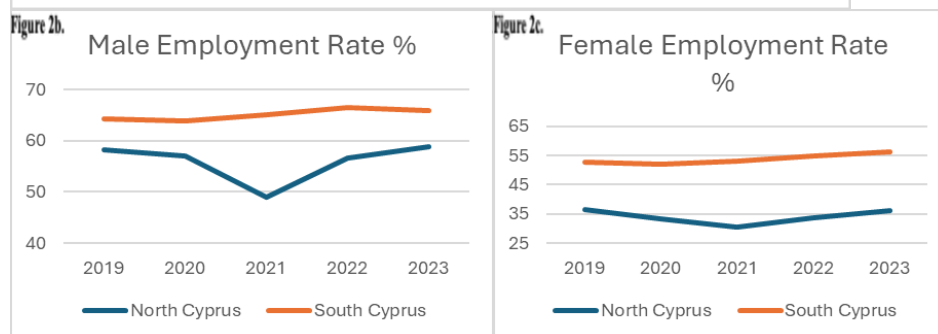
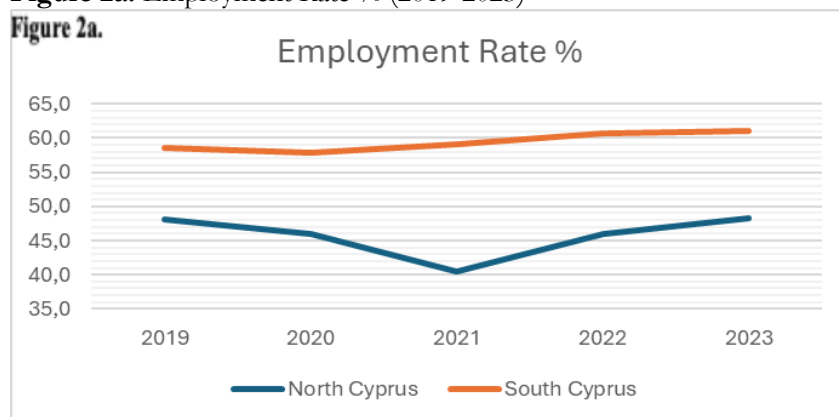
Source: Statistical Institute (2024)

The macroeconomic labour market indicators from the Statistical Institute show that the LFP is 50% on average over the last five years. However, LFP has experienced a slight decline, from 51.3% to 50.9%, from 2019 to 2023. The decline in LFP appears to be a result of the decrease in female LFP, as the LFP of males increased from 61.6% to 61.9%, while the LFP of females decreased from 39.7% to 38.3% over the same period. Over the same period, the female LFP rate remained approximately half that of the male LFP rate. Furthermore, compared to south Cyprus, the labour force participation rate in north Cyprus is considerably lower. Moreover, the situation appears to be worse for females in North Cyprus. Figures 1a, 1b and 1c below compare the LFP rates of North and South Cyprus for total LFP, male LFP and female LFP rates, respectively.

Figure 1a. Labour Force Participation (LFP) % (2019-2023)

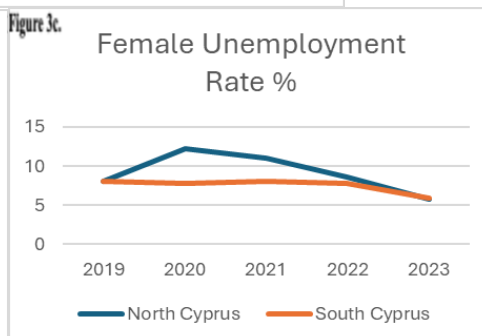
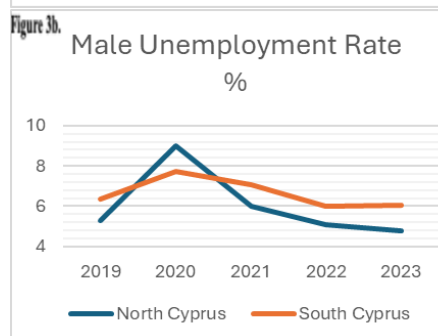
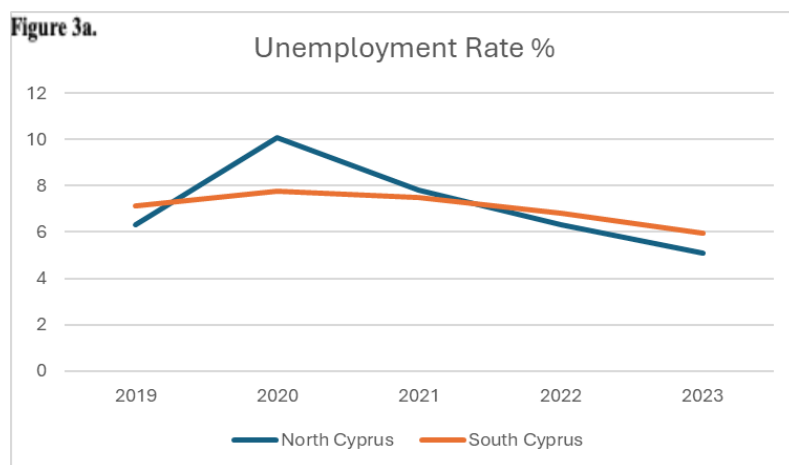
Source: Statistical Institute (2024), World Bank Group (2024)

As illustrated in above figures, LFP rates in total and for both genders in North Cyprus are lower compared to those in South Cyprus. The decline in LFP results in laid-off workers leaving the labour market due to becoming discouraged, giving up their job search, and ultimately leaving the labour market. The literature verifies that the low female LFP is driven mainly by demand constraints, gender stereotypes, and male domination, which generates high and persistent occupational gender segregation and segmentation (Lehmann, 2023; Ibourk & Elouaourti, 2023), which is also observed in North Cyprus. The labour market segmentation into male and female occupations limits the female's mobility between occupations, negatively affecting female LFP. In addition to the low rate of LFP in North Cyprus, employment rates are also considerably low, trending below 50% for the entire period covered. Figures 2a, 2b and 2c illustrate the total employment rate, as well as the employment rates of males and females in North and South Cyprus, respectively.

Figure 2a. Employment Rate % (2019-2023)

Source: Statistical Institute (2024), World Bank Group (2024)

Similar to the low levels of LFP, the employment rate in North Cyprus also appears low, mainly due to the low female employment rate, which is evident from the significant gap between the female and male employment rates in North Cyprus. The reason behind the low levels of employment and LFP of females in North Cyprus is the weakness of employment opportunities. The total, gender-based disaggregated unemployment rates of North and South Cyprus are illustrated in Figures 3a, 3b and 3c respectively.

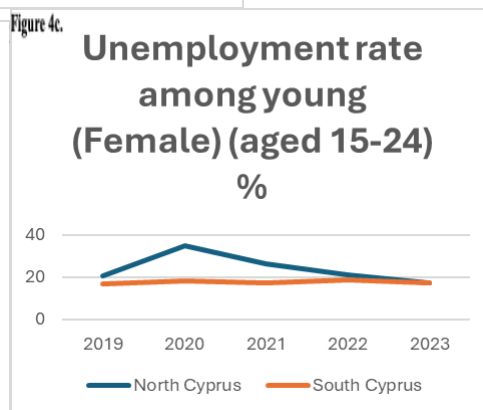
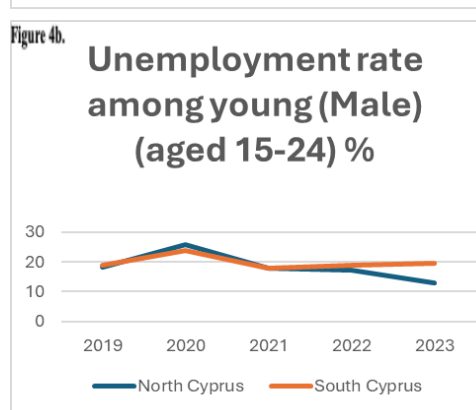
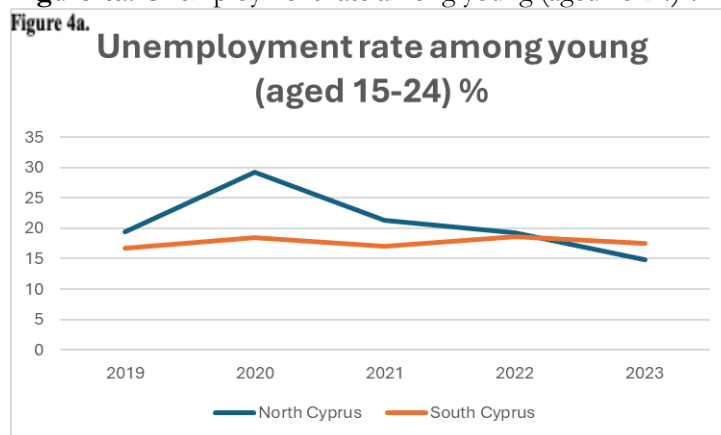
Figure 3a. Unemployment Rate % (2019-2023)

Source: Statistical Institute (2024), World Bank Group (2024)

The unemployment rate in North Cyprus has followed a downward trend since 2000, whereas in South Cyprus, it remains more stable. The total unemployment rate records are higher than in South until mid-2020; however, they turn out to be below afterwards. A similar trend is observed for males over the same period. However, the female unemployment rate in the North remains above that of the South until 2023, after which it catches up to the level of the South. Even though the unemployment rates in north Cyprus and the south are close, considered together with LFP rates, they become more serious, needing a detailed analysis. A low unemployment rate, coupled with low rates of LFP, is a signal for a high number of discouraged workers who leave the labour market due to stopping their job search (Vidya & Chakraborty, 2025).

Figures 4a, 4b and 4c compare the total, male, and female unemployment rates among young people in North and South Cyprus, respectively. Youth unemployment needs to be thoroughly analysed, as economic development is driven by the young. Despite the young having a lack of experience, they are endowed with a high level of motivation, new ideas and visions that should not be unexploited.

Figure 4a. Unemployment rate among young (aged 15-24) % (2019-2023)



Source: Statistical Institute (2024), World Bank Group (2024)

According to the records of the last five years, the youth unemployment rate in North Cyprus has shown a downward trend since 2020. The total and male youth unemployment rates in North Cyprus fell below those in South Cyprus after

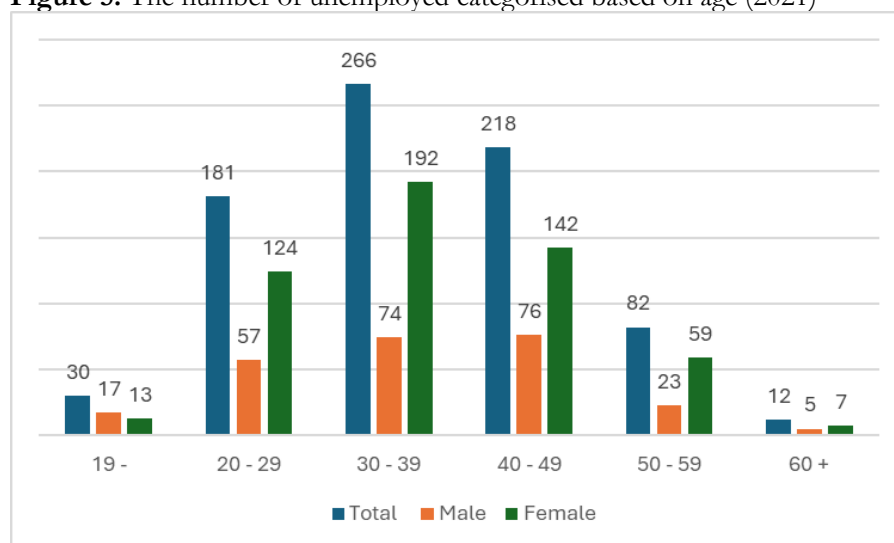
2022. However, over the entire period considered in this study, the decrease in female youth unemployment is insufficient, remaining above that of the South.

Unemployment by Age and Education in North Cyprus

This section of the study examines the unemployment rates categorised by age groups and education levels in North Cyprus. The importance of unemployment disaggregation by age groups and education levels lies in understanding the unemployment risk faced by new entrants to the labour market due to a lack of work experience (Ochsen, 2024; Algül, 2024). As the age increases, the importance of work experience and the skills required by the market also rise. The unemployment rate decreases as a result of the increased number of individuals who leave the labour market due to a mismatch between their experience and skills and the market's needs. Thus, as age increases, the unemployment rate is expected to decline. The number of unemployed individuals categorised by age in 2021 is illustrated in Figure 5 below.

Ochsen, C. (2024). Regional decomposition in age-group unemployment dynamics in Germany. *The Annals of Regional Science*, 72(4), 1443-1476.

Figure 5. The number of unemployed categorised based on age (2021)

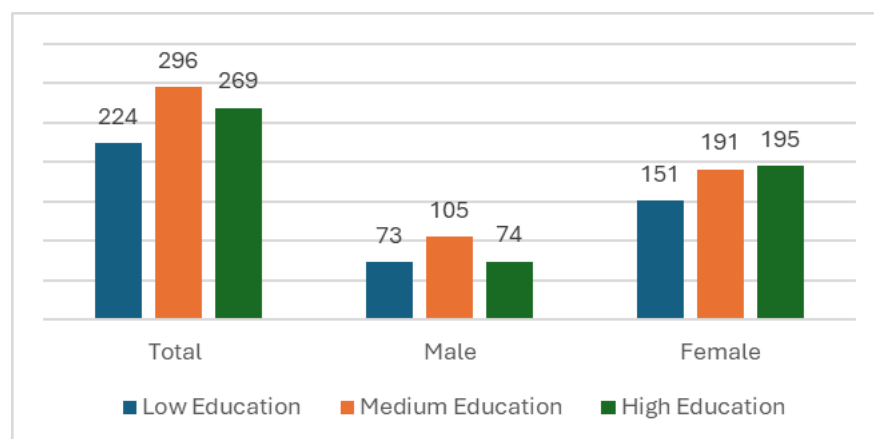


Source: Employment Office, Activity Report 2021

According to data gathered from the employment office, the age category 30-39 has the highest number of unemployed individuals, followed by the age group 40-49, which is not in line with what is generally expected. 61.3% of the total number of unemployed individuals fall within the 30-49 age category, accounting for more than half of the total number of unemployed in North Cyprus, according to the 2021 records. The third-highest unemployment rate is in the 20-29 category, typically expected to have the highest number of unemployed due to a lack of experience. Furthermore, the number of unemployed females is significantly higher than that of unemployed males in all age groups, except those under 19 years old. In age groups of 20-29, 30-39, 40-49, and 50-59, the number of unemployed females is over twice that of unemployed males, which is a serious problem that females face in the North Cyprus labour market.

The level of education is generally accepted as a significantly important factor affecting overall economic activities within a country, which is considered a determinant of the quality of human capital, as noted in the pioneering studies of Schultz (1961), Becker (1964), and Mincer (1974). Economic growth is achieved through higher education by creating and accumulating human capital, as well as increasing the economy's aggregate productivity level. Furthermore, as the economy grows, unemployment decreases; thus, education is expected to contribute to a decrease in unemployment within a country. Furthermore, a higher level of education increases the likelihood of employment due to the enhanced skill development it facilitates. The number of unemployed categorised based on education level in 2021 is illustrated in Figure 6 below.

Figure 6. Number of unemployed by education categories in North Cyprus (2021)



Source: Employment Office, Activity Report 2021

As expected, the low-education category has the highest number of unemployed individuals, as shown in Figure 6 above. As we move from the low education category to the medium education category, it is observed that the number of unemployed individuals declines, as expected. Nevertheless, there is an increase in unemployment experienced when one moves from a medium to a high level of education. The second-highest number of unemployed falls in the higher-education category in North Cyprus, while the lowest number of unemployed is in the medium-education category. When the number of unemployed is disaggregated by gender and education level, the number of unemployed females is higher than that of males in all education categories. Furthermore, it is observed that as the education level increases, the number of unemployed females also increases. This observation suggests that as females become educated, finding a job becomes more challenging in North Cyprus. The reason behind this might arise from demand shortages resulting from occupational gender segregation in North Cyprus. The next section of the study focuses on the sectoral and occupational distribution of employment in North Cyprus, with a comparison to the records of the South.

Sectoral and Occupational Distribution of Employment in North Cyprus

Focusing on the sectoral and occupational distribution of employment is essential to understanding the nature and level of economic development in North Cyprus. The economic development of a country shifts employment first from the agricultural sector to the industrial sector and then from the industrial sector to the services sector. The sectoral distribution of employment determines the sector that contributes most to the value-added. In contrast, the occupational distribution of employment reveals how labour is distributed across occupations according to the preferences, qualifications, and skills of workers (Edinak, 2024). The economic development of a country shifts the employment concentration share from low-skilled to medium- and high-skilled required occupations (ILO, 2024).

This section of the study first examines the sectoral distribution of employment, then focuses on the occupational distribution of employment in North Cyprus and provides a comparison with the South. There are three main sectors in North Cyprus's economy and labour market: agriculture, industry and services. The sectoral distribution of employment in North and South are represented by Table 4 below from 2017 to 2023.

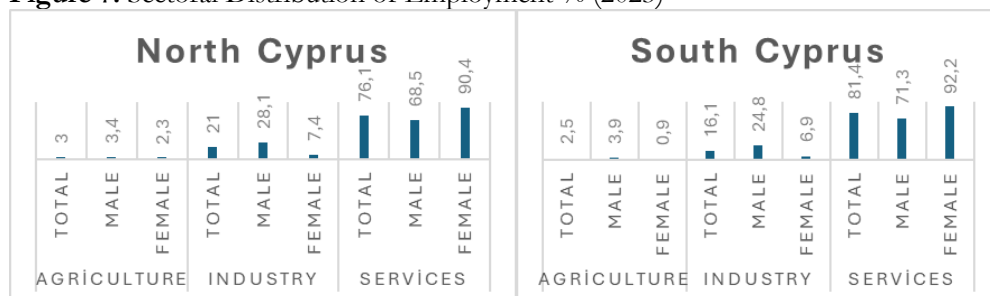
Table 4. Sectoral Distribution of Employment % (2017-2023)

			2017	2018	2019	2020	2021	2022	2023
North Cyprus	Agriculture	Total	3.6	2.7	4.1	3.1	3.6	4.2	3.0
		Male	3.8	3.2	4.3	3.4	4.0	4.1	3.4
		Female	3.2	1.8	3.7	2.4	2.8	4.4	2.3
	Industry	Total	16.8	16.1	17.9	17.8	18.3	18.3	21
		Male	23.7	20.3	22.1	13.4	24.6	24.6	28.1
		Female	4.4	8.8	8.3	6.8	6.3	6.2	7.4
	Services	Total	79.6	81.2	78.1	79.1	78.2	77.5	76.1
		Male	72.6	76.6	72.6	73.1	71.4	71.4	68.5
		Female	92.4	89.3	88.1	90.9	90.8	89.4	90.4
Source: Statistical Institute (2024)									
South Cyprus	Agriculture	Total	2.5	2.2	2.7	3.0	3.1	2.6	2.5
		Male	3.9	3.2	3.7	4.1	4.7	4.0	3.9
		Female	1.1	1.1	1.4	1.7	1.3	1.0	0.9
	Industry	Total	17.1	16.6	18.1	19.5	17.8	16.9	16.1
		Male	26.2	25.9	28.0	30.2	26.9	25.5	24.8
		Female	7.1	6.5	7.0	7.3	7.6	7.5	6.9
	Services	Total	80.4	81.2	79.2	77.5	79.1	80.5	81.4
		Male	69.9	70.9	68.3	65.7	68.4	70.5	71.3
		Female	91.8	92.4	91.6	91.0	91.1	91.5	92.2

Source: CYSTAT-DB (2024)

As shown in Table 5, the sectoral distribution of employment in the North is similar to that in the South. The services sector on both sides of Cyprus has the highest share of employment, with 76.1% in the North and 81.4% in the South. The second-highest share of employment belongs to the industry sector, followed by the agricultural sector, in both the North and South. However, the primary difference between the North and the South lies in the expanding sectors. The expanding sector in the North is the industry sector. At the same time, the services sector in the South, over the study's coverage period, provides information about the development levels of both economies, as mentioned at the beginning of this section of the study. The sectoral distribution of employment in 2023 in North and South Cyprus are given in Figure 7 below, which summarises Table 5 as a bar chart for easier illustration of the most recent year available.

Figure 7. Sectoral Distribution of Employment % (2023)



Source: Statistical Institute (2024), CYSTAT-DB (2024)

Figure 7 clearly shows that, according to the 2023 records, the sectoral distribution of employment in the North and South is similar. Interestingly, on both sides of the island, the share of females in the services sector is significantly higher than that of males.

Table 5 below displays the occupational distribution of employment in the North and South from 2021 to 2023.

Table 5. Occupational Distribution of Employment (2021-2023)

			Legislators and Managers	Professionals	Technicians	Clerks	Services and Sales Workers	Agriculture and Fishery Workers	Craft and Related Trade Workers	Plant and Machine Operators	Elementary Workers
North Cyprus	2021	Total	9,506	19,241	12,636	13,561	24,722	4,780	18,079	8,028	15,187
		Male	6,316	9,951	8,373	4,782	15,700	3,836	16,934	7,351	8,655
		Female	3,190	9,290	4,263	8,779	9,021	944	1,145	677	6,531
	2022	Total	8,690	22,708	10,455	16,562	29,806	4,976	15,896	10,887	18,627
		Male	6,638	10,914	7,943	6,738	19,956	3,681	15,140	10,079	10,288
		Female	2,053	11,793	2,512	9,824	9,850	1,295	756	809	8,339
	2023	Total	7,058	24,852	14,024	18,994	29,219	4,073	18,605	12,043	19,344
		Male	5,521	11,968	10,495	9,168	17,407	3,288	17,437	11,289	10,231
		Female	1,537	12,885	3,529	9,826	11,812	785	1,168	754	9,113
Source: Statistical Institute (2024)											
South Cyprus	2021	Total	17,932	91,390	61,458	47,499	76,220	10,707	50,268	20,722	59,531
		Male	13,953	40,881	33,391	11,176	33,033	8,668	47,750	17,876	21,018
		Female	3,979	50,510	28,068	36,323	43,187	2,040	2,518	2,846	38,513
	2022	Total	18,138	98,390	62,915	52,521	84,406	8,945	48,580	20,017	63,984
		Male	13,779	42,833	35,456	12,918	36,692	7,603	46,588	17,505	23,281
		Female	4,359	55,556	27,459	39,602	47,713	1,342	1,991	2,513	40,703
	2023	Total	20,716	108,955	66,907	51,077	86,993	7,541	46,609	19,460	63,999
		Male	14,937	48,970	34,960	13,582	36,181	6,692	44,303	17,081	23,650
		Female	5,779	59,985	31,947	37,494	50,811	849	2,306	2,379	40,349

Source: CYSTAT-DB (2024)

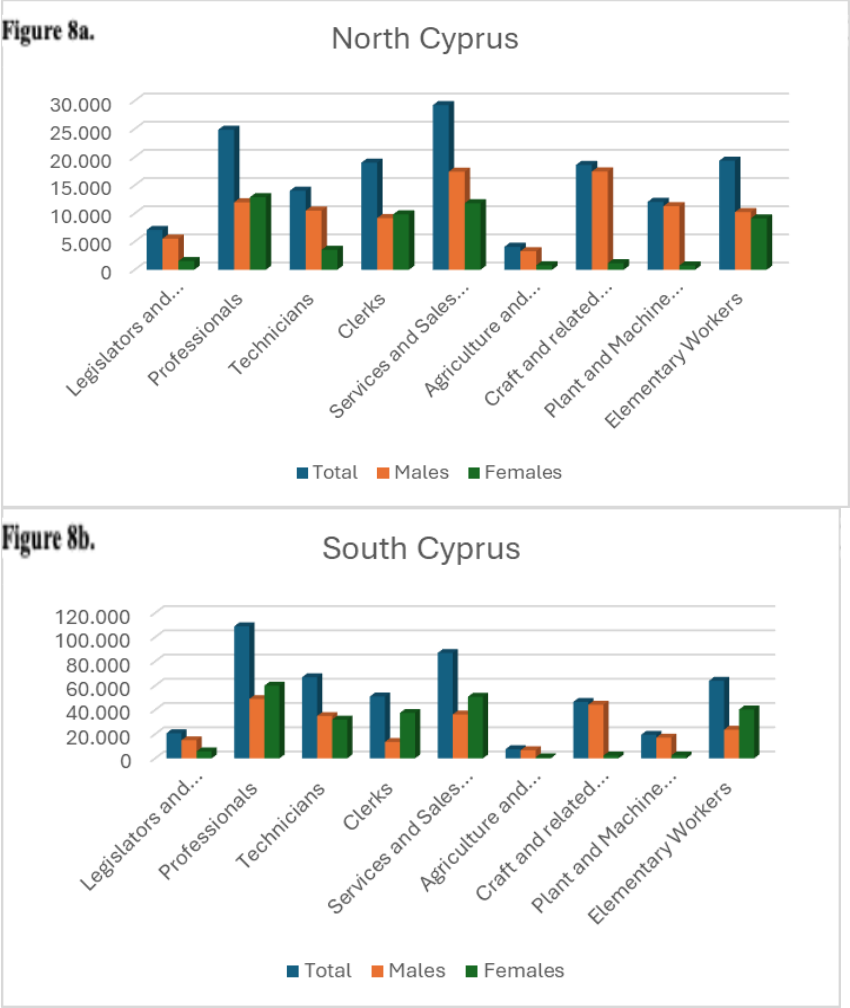
Unlike the sectoral distribution of employment in North and South Cyprus, the occupational distribution of employment is different. In the North, the services and sales workers' occupation has the highest share of employment, followed by professionals, elementary workers, and clerks. In the South, the professionals' occupation has the highest share of employment, followed by services and sales workers, technicians, and elementary workers.

There have been changes in the share of occupations over the years, from 2021 to 2023, in North Cyprus. In 2021, the most popular occupations were services and sales workers, professionals, craft and related trade workers, and elementary workers in descending order. In 2023, the most popular two occupations remained the same: services and sales workers and professionals. However, the third most popular occupation shifted from craft and related trade workers to elementary workers, while the fourth was clerks. On the other hand, the South experienced no occupational shift over the concentrated period of the study.

When the occupational distribution is gender-disaggregated, it is observed that the most popular occupations differ for males and females on both sides of the island. The highest number of male employment is in craft and related trade workers, followed by services and sales workers, and professionals from 2021 to 2023, while the highest number of female employment is in professionals, followed by services and sales workers, and clerks for the same years in North. The occupational distribution of employment in the South differs slightly from that in the North for males. Although the three most popular occupations are common among males on both sides of the island, the rankings differ. The highest employment for males in the South in 2023 was in professionals, followed by craft and related trade workers, and services and sales workers. On the other hand, although the two most popular female occupations on both sides of the island are the same, they differ from those in the North. In the South, the third most popular occupation is elementary workers.

The occupational distribution of employment in 2023 in the North and South Cyprus is given in Figures 8a and 8b below, which summarises Table 5 as a bar chart for easier illustration of the most recent year available.

Figures 8a & 8b. Occupational Distribution of Employment (2023)



Job Applications, Vacancies and Recruitments

This section of the study aims to identify the labour market's demand-supply mismatch, focusing on the number of job applications, vacancies, and recruitments, taking a deep look at the data collected from the Employment Office (August 2021). According to the latest records from the Employment Office

(August 2021), there were 1,886 job applications, 423 vacancies, and only 32 recruitments in the first eight months of 2021. Only 1.7% of the applicants were successful in being placed. Comparing the previous year's records, where 24%, 16.2% and 8% of the applicants were placed in 2018, 2019, and 2020, it can be concluded that the gap between the supply and demand of labour in the North Cyprus labour market is widening (Employment Office, 2024). The labour market's skills and/or wage mismatch explains the gap between labour supply and demand. The occupational distribution of the records is presented in Figures 9 below; where Figure 9a represents job applications, Figure 9b illustrates job vacancies, and Figure 9c shows recruitments.

Figure 9. Occupational distribution of job applications, vacancies and recruitments (2021)

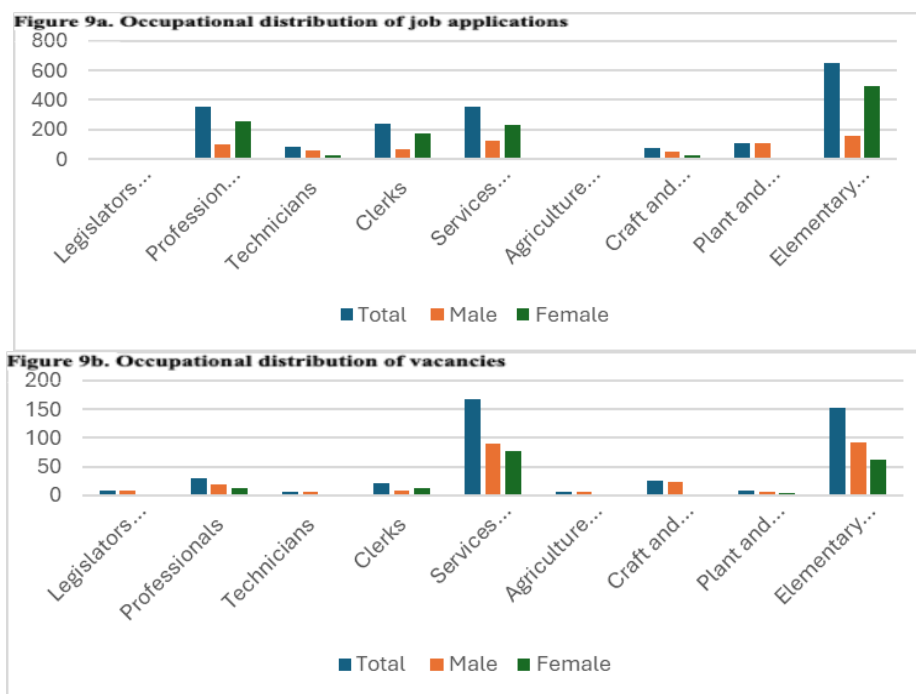
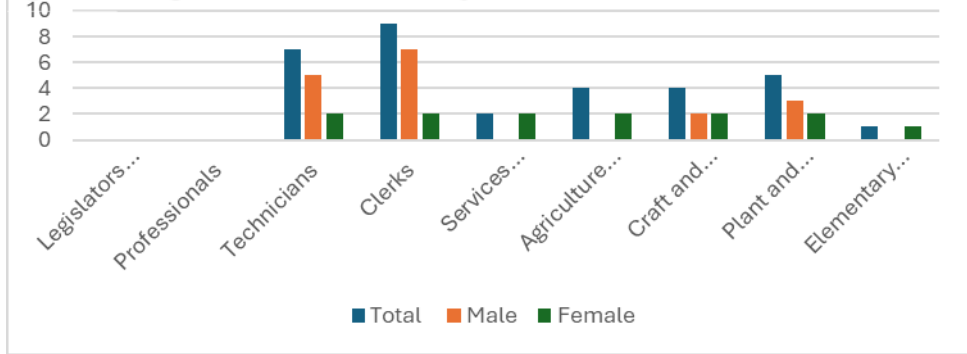


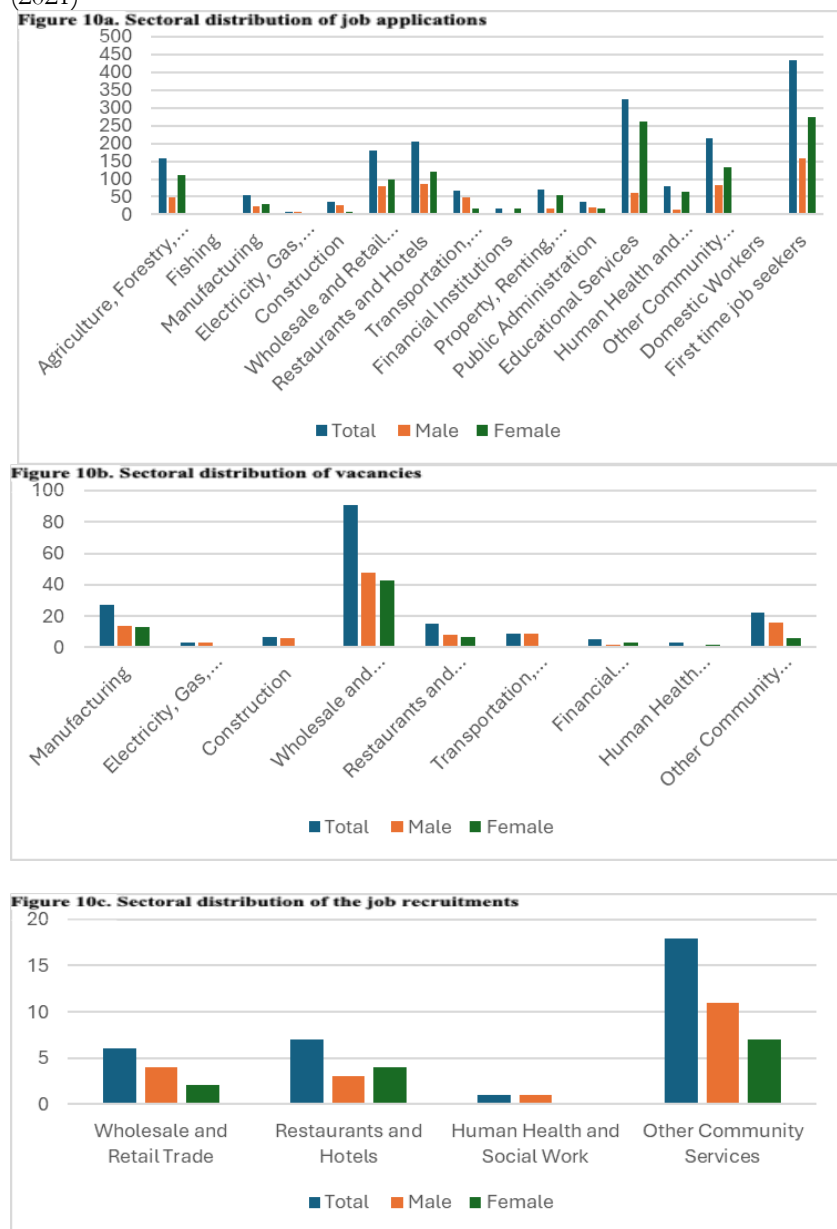
Figure 9c. Occupational distribution of the job recruitments



As can be seen from Figure 9a, the highest number of applications is made to elementary occupations, followed by services and sales workers and professionals, with the same number of applications, and clerks. However, the highest number of vacancies is for services and sales workers, followed by elementary workers, professionals and craft and related trade workers respectively. Moreover, the highest placement is for clerks, followed by technicians, plant and machine operators, agricultural and fishery workers, and craft and related trade workers. Although applications from professionals are ranked second highest and vacancies third, there is a 0% placement rate. This situation applies to legislators and managers who require specific skills. The statistics do not hold the same ranking for the total, male and female. A total of 1208 females applied for a job, while the number of male job applications was 678, accounting for almost half of the female applications. On the contrary, the total number of male vacancies was 255, while the number for females was 168. Moreover, 2.5% of males were placed, while 1% of female applications were placed. The highest application rates are for both males and females in elementary occupations. However, the second highest application of males is for services and sales workers, while females are more likely to be professionals, which typically requires high skills.

The sectoral distribution of the records is presented in Figure 10 below; where 10a represents job applications, 10b illustrates job vacancies, and 10c shows recruitments.

Figure 10. Occupational distribution of job applications, vacancies and recruitments (2021)



As can be seen from Figure 10a, the highest number of applications is made by first-time job seekers, followed by applications for educational services, other community services, and restaurants and hotels. However, most vacancies are for wholesale and retail trade workers, followed by manufacturing, other community services, and restaurants and hotels. Moreover, the highest placements are for other community services, followed by restaurants and hotels, wholesale and retail trade workers, and human health and social care workers. Although the sectors are grouped into 16 distinct categories, there are only four placements. The highest placements are for other community services, followed by restaurants and hotels, wholesale and retail, and human health and social work. The statistics do not hold the same ranking for the total, males, and females, even though the highest application rates are among first-time job seekers, as is the case for the total. The second highest application of females is for educational services, while males are more commonly found in restaurants and hotels. The ranking for females follows that of the other community services, restaurants, and hotels, while male applications are primarily for restaurants and hotels, as well as the wholesale and trade sector. The highest placement of applicants is for other community services, available to both males and females. Further information is gathered from the most popular job website in the community (<http://iskibris.com/>) to identify the most popular positions listed as vacant. According to the November 2024 records, the most popular categories are accounting and finance-related positions, followed by sales, logistics, and retail positions.

Conclusion

A labour market with unfilled job vacancies and persistent unemployment is an indication of labour supply mismatches with labour demand as a result of a mismatch that can be cyclical, frictional or structural, such as when the educational level of job-seekers does not correspond with the profiles sought on the labour market due to over-education or under-education for a position. The labour market functions efficiently when there is a perfect match between labour supply and demand. However, in reality, the experience, knowledge, and skills required for a job and endowed by workers are different. Thus, there are always workers who risk not finding employment, even though there are companies with vacant positions.

North Cyprus has an upper-middle-class economy with a per capita GDP that is significantly lower than that of the South. One of the most significant instruments for promoting strong and inclusive economic growth is a good match between the skills demanded by firms and those acquired through education and

on-the-job training. Thus, the labour market mismatch problem in North Cyprus needs to be mitigated to achieve improvements in labour market indicators and overall economic well-being.

One of the main problems that North faces is the low rate of LFP, which evidences a low labour supply, which weakens the economic growth potential. Furthermore, the low rate of LFP is accompanied by a low employment rate; in other words, the amount of available labour resources used, showing the job-creating capacity of the economy. Moreover, the unemployment rate is significantly high in North Cyprus. High unemployment rates with low LFP and employment rates indicate the lack of efficient use of potential labour in the production process. The situation is even worse for young people and women in the North, and it has worsened over the past five years. Moreover, compared to the South, all macroeconomic labour market indicators are significantly worse in North Cyprus.

Contradicting expectations, the unemployment rate is highest for the age group 30-39, indicating that it is difficult for even experienced labourers to find a suitable job in the labour market in North Cyprus. Furthermore, the number of unemployed labourers with high education is also significantly high, which can be considered a signal for a skills gap issue. The records regarding the number of job applications, vacancies, and recruitments also verify that the gap between the supply and demand of labour in the north Cyprus labour market is due to the skills and/or wage mismatch.

One of the most significant instruments for promoting strong and inclusive economic growth is a good match between the skills demanded by firms and those acquired through education and on-the-job training. Thus, the labour market mismatch problem in North Cyprus needs to be mitigated to achieve improvements in labour market indicators and overall economic well-being. Since the first job seekers make the highest number of job applications, and they cannot find positions in the labour market, according to recent statistics available. Considering both the economic and social costs of young people being unemployed or leaving the labour force, targeting appropriate fields for higher education and job creation should be the primary focus of policymakers.

Policy Recommendations

The development of the labour market in North Cyprus, particularly the prominence of certain sectors, is inextricably linked to its unique political and economic situation, primarily its international non-recognition and resulting economic isolation. Economic isolation hampers the growth of sectors dependent on international trade, causing manufacturing and export-focused industries to struggle due to limited market access and increased operational costs. In contrast,

the services sector, particularly tourism and higher education, dominates the labour market of North Cyprus, accounting for the largest share of GDP. Thus, the demand for labour and the skill sets needed within the labour market are influenced by the political and economic situation of North Cyprus.

In light of this working paper, this section provides policy recommendations to address the structural issues of the North Cyprus labour market and promote sustainable economic growth.

Key reasons for unemployment to be the highest among the 30-39 age group may include skill obsolescence, changing industry needs, and difficulties with career transitions. Implementing lifelong learning and requalification programmes, such as short-term, certified, and intensive training in information technologies—including data analysis and software development—targeted at individuals aged 30-39 who are unemployed or seeking sector change, could help reduce unemployment within this age group. Moreover, the government, universities, and professional chambers can develop continuous education modules tailored to the needs of this age group to help reduce the unemployment rate. Furthermore, employers can be offered tax incentives or employment subsidies in exchange for hiring and training unemployed individuals in this age group for a specific period. Additionally, specific projects or seasonal jobs that encourage temporary employment can be developed for this age group, thereby preventing the loss of motivation that can occur with long-term unemployment.

The high unemployment among highly educated individuals underscores a skills gap, leading to a significant waste of talent and resources that calls for suitable policy measures, especially for a small economy like North Cyprus. To address the skills-education mismatch issue, regular labour market needs analyses should be carried out to identify the specific skills and competencies required by current and future sectors. Additionally, higher education curricula can be aligned with sectoral demands. Furthermore, internships can be promoted by offering tax deductions or employment incentives to employers in exchange for hiring highly educated interns, while interns can be closely supervised to gain practical work experience and adapt to their sector. Lastly, employment subsidies or tax credits can be offered to businesses that employ newly educated graduates or qualified individuals who have been unemployed for a specified period. Furthermore, women's challenges in finding or maintaining employment or remaining in the labour market often arise from structural barriers such as inflexible working conditions, childcare duties, and potential discrimination. Incentives can be provided to employers, and the legal basis for remote or hybrid working models, which are particularly demanded by highly educated women, should be clarified. This will enable women to balance their professional careers with family

responsibilities better. Additionally, to ease the childcare and eldercare burden on working mothers, the capacity and quality of care centres should be enhanced. More importantly, training programs for employers and Human Resources professionals on gender equality can reduce potential biases in recruitment processes.

To tackle unemployment among highly educated individuals and eliminate the skill and wage mismatch between labour supply and demand in North Cyprus, all recommended policies should be implemented through a comprehensive approach with the cooperation of all relevant stakeholders such as the Government, Higher Education Institutions, the Business Sector, and Non-Governmental Organisations.

A primary limitation of this study pertains to the timeliness of the available data. While efforts were made to utilise the most current statistics, specific key indicators are only reported with a significant lag, meaning the analysis may not fully capture the most recent shifts or emerging trends in the labour market. Future research would significantly benefit from access to more updated datasets, enabling a more immediate assessment of policy impacts and market responses.

Genişletilmiş Özet

Kuzey Kıbrıs işgücü piyasası, dikkatli bir inceleme gerektiren benzersiz zorluklar ve dinamikler barındırmaktadır. 1974'ten bu yana Güney Kıbrıs'tan ayrılan Kuzey Kıbrıs, yüksek işsizlik, düşük işgücüne katılım oranı ve işgücü arzı ile talebi arasındaki uyumsuzluk gibi süregelen işgücü piyasası sorunlarıyla mücadele etmektedir. Ekonomi büyük ölçüde hizmet sektörüne bağımlıdır. 2022 yılında ticaret ve turizm sektörleri GSYİH'nın %30,7'sini oluşturmuştur. Ancak, Kuzey Kıbrıs, Güney Kıbrıs'a kıyasla ekonomik olarak önemli ölçüde geride kalmaktadır. 2022'de kişi başına düşen Gayri Safı Milli Gelir (GSMG) Kuzey'de 14.648 ABD doları iken, Güney'de 31.520 ABD dolarıdır. Bu ekonomik farklılıklar, işgücü piyasasının yapısı ve işleyişinde de açıkça görülmektedir.

Bu çalışma, Kuzey Kıbrıs'taki işgücü piyasasını, yapısına odaklanarak ve önde gelen işgücü piyasası göstergelerine derinlemesine bakarak analiz etmeyi amaçlamaktadır. Bu sayede, *karşılaşılan işgücü piyasası zorluklarını ve arz-talep özelliklerini daha iyi anlamamızı sağlayacak bilgiler sunarak*, işgücü piyasasıyla ilgili sorunları çözmek ve sürdürülebilir ekonomik büyümeyi sağlamak için uygun politikaların uygulanmasına zemin hazırlanacaktır. Ayrıca, bu çalışma Kıbrıs'ın işgücü piyasasına daha geniş bir bakış sunarak literatürdeki boşluğu doldurmaktadır. Çalışma, işgücü piyasasının önde gelen göstergelerine, yaş grupları ve eğitim düzeylerine göre kategorize edilen işsizlik oranlarına odaklanmakta, istihdamın sektörel ve mesleki dağılımını sunmakta, ayrıca iş başvurusu, açık pozisyon ve işe

alım sayılarını detaylandırarak işgücü piyasasına ilişkin daha derin bir anlayış sağlamaktadır.

Kuzey Kıbrıs'ta işgücüne katılım oranı son beş yılda ortalama %50 civarında seyretmiştir. Kadınların işgücüne katılım oranları özellikle endişe verici olup, erkeklere kıyasla önemli ölçüde düşük kalmaktadır. İstihdam oranı da benzer şekilde düşük ve %50'nin altında seyrederek işgücünün büyük bir kısmının ekonomik faaliyetlere katılamadığını göstermektedir. İşsizlik oranı 2000 yılından bu yana düşüş eğiliminde olsa da özellikle gençler ve kadınlar için hala yüksektir. Genç işsizliği, özellikle kadınlar için, Güney Kıbrıs'a kıyasla hala ciddi bir sorun olarak devam etmektedir. Düşük işgücüne katılım oranı ve yüksek işsizlik, Kuzey Kıbrıs'ta iş aramaktan vazgeçen büyük bir umutsuz işçi kitlesinin varlığına işaret etmektedir.

2021 yılı verileri, iş başvurularının açık iş ilanlarından çok daha fazla olduğunu ve işe yerleştirme oranlarının son derece düşük kaldığını göstermektedir. Örneğin, 2021 yılının ilk sekiz ayında 1.886 iş başvurusu kaydedilmiş, ancak yalnızca 32 kişi işe yerleştirilmiş; bu, sadece %1,7'lik bir yerleştirme oranına karşılık gelmektedir. Önceki yıllara kıyasla bu oran önemli ölçüde düşmüştür: 2018'de %24, 2019'da %16,2 ve 2020'de %8 olarak gerçekleşmiştir. En fazla başvuru temel işçilik ve hizmet-satış sektörlerine yapılırken, en fazla açık pozisyonlar toptan ve perakende ticaret ile imalat sektörlerinde olmuştur. Profesyonel işlere olan ilgi yüksek olsa da, bu alanlardaki işe alımlar son derece düşük kalmış, bu da ciddi bir vasıf uyumsuzluğunu ortaya koymuştur.

Yaş ve eğitim düzeyine göre işsizlik analiz edildiğinde, Kuzey Kıbrıs'taki işsizlik modellerinin genel beklentilere uymadığı görülmektedir. En fazla işsiz kişi 30-39 yaş grubunda yer almakta, bu da genç iş arayanların yanı sıra deneyimli işçilerin bile iş bulmada zorlandığını göstermektedir. Dahası, yüksek eğitim seviyesine sahip işsizlerin sayısı da oldukça yüksektir. Genellikle eğitim seviyesinin istihdam edilebilirliği artırdığı varsayılırken, Kuzey Kıbrıs'ta bu durum tam tersi bir tablo çizmektedir. Bu, ülkede ciddi bir vasıf uyumsuzluğu olduğunu ve eğitilmiş bireylerin yeterli iş olanakları bulamadığını göstermektedir. Toplumsal cinsiyet eşitsizlikleri sorunu bu durumu daha da derinleştirmektedir; kadın işsizlik oranları, tüm eğitim seviyelerinde erkeklere kıyasla sürekli olarak daha yüksek seyretmektedir.

Kuzey Kıbrıs'ta sektörel ve mesleki istihdam dağılımı, ekonominin büyük ölçüde hizmet sektörüne bağımlı olduğunu göstermektedir. İşgücünün %76,1'i hizmet sektöründe istihdam edilmektedir; bunu %21 ile sanayi ve %3 ile tarım sektörleri takip etmektedir. Bu yapı, Güney Kıbrıs'a benzemekle birlikte, Kuzey Kıbrıs'ta sanayi sektörü büyürken, Güney'de hizmet sektörü genişlemektedir. Mesleki dağılım incelendiğinde, Kuzey Kıbrıs'ta en yaygın meslek grupları hizmet ve satış çalışanları, ardından profesyoneller, temel işçiler ve memurlar olarak

sıralanmaktadır. Güney Kıbrıs'ta ise profesyoneller ve teknisyenler daha yüksek oranlarda istihdam edilmektedir. Toplumsal cinsiyete dayalı mesleki ayrım belirgin olup; erkekler teknik ve ticaretle ilgili mesleklerde yoğunlaşırken, kadınlar daha çok profesyonel, büro ve hizmet sektörlerinde istihdam edilmektedir.

İş arayanlar ve açık iş pozisyonları arasındaki dengesizlik, Kuzey Kıbrıs işgücü piyasasında daha geniş yapısal sorunları yansıtmaktadır. Ekonomi, eğitilmiş iş gücünü yeterince istihdam edememekte ve düşük vasıflı iş arayanlar da sınırlı pozisyonlar için büyük bir rekabetle karşı karşıya kalmaktadır. En büyük sorunlardan biri, iş piyasasına yeni girenlerin iş bulamaması ve bunun sonucunda iş aramaktan vazgeçmeleridir. Bu nedenle, politika yapıcıların eğitim sistemini piyasanın ihtiyaçlarıyla uyumlu hale getirmeye, büyüyen sektörlerde iş yaratmaya ve kadınların iş gücüne katılımını artırmaya odaklanmaları gerekmektedir.

Sonuç olarak, Kuzey Kıbrıs işgücü piyasası düşük işgücüne katılım, yüksek işsizlik ve ciddi vasıf uyumsuzlukları gibi yapısal verimsizliklerden muzdariptir. Güney Kıbrıs ile kıyaslandığında, Kuzey'deki işgücü piyasası göstergeleri önemli ölçüde daha zayıf olup, bu da iki bölge arasındaki ekonomik eşitsizlikleri yansıtmaktadır. Bu sorunların çözülmesi için, işgücü piyasasını iyileştirmeye yönelik hedefe yönelik politikaların uygulanması, kadınların iş gücüne katılımının artırılması ve genç ve eğitilmiş iş arayanlar için yeni fırsatlar yaratılması gerekmektedir. İşgücü arzı ile talebi arasındaki uçurumun kapatılması, sürdürülebilir ekonomik büyümeye ulaşmak ve Kuzey Kıbrıs'ta daha kapsayıcı bir işgücü piyasası oluşturmak için kritik öneme sahiptir.

Beyanlar

I confirmed that I have no conflicts of interest to disclose. Additionally, I verified that this research received no specific grants from funding agencies in the public, commercial, or not-for-profit sectors. The data used for the empirical analysis are openly available in a public repository that provides datasets with DOIs, which are included in the references.

Bu çalışmada herhangi bir çatışması olmadığını beyan ederim. Ayrıca, bu araştırmanın kamu, ticari veya kâr amacı gütmeyen sektörlerdeki fonlama kuruluşlarından özel hibeler almadığını doğrularım. Ampirik analiz için kullanılan veriler, referanslarda yer alan DOI'li veri kümeleri sağlayan herkese açık bir havuzda açıkça mevcuttur.

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