

FASTER OR BETTER? HOW UKRAINIAN MIGRANTS NAVIGATE TRADE-OFFS IN THE POLISH LABOR MARKET

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Author's Declaration

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Vienna, 10 June 2025

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Abstract

Traditional approaches to measuring migrant integration success rely on single metrics, failing to capture the complex trade-offs skilled forced migrants face between competing integration objectives. This study examines how Ukrainian migrants in Poland navigate these trade-offs following the 2022 Russian invasion. Using survey data from 306 highly educated Ukrainian migrants, the research employs a three-outcome analytical framework examining career preservation, employment status, and time to satisfactory employment through logistic regression and Cox proportional hazards models. The analysis reveals fundamental integration paradoxes: higher education creates competing effects where doctoral degree holders are 30 times more likely to preserve their careers but experience 69% slower employment acquisition compared to those with secondary education. Job search strategies show outcome-specific effectiveness—volunteering increases career preservation odds five-fold but reduces basic employment odds by 74%, while searching through friends devastates career preservation chances. Gender barriers operate primarily at labor market entry, with women facing 57% lower employment odds but showing no differences in career preservation. The findings demonstrate that integration success cannot be captured through any single metric, as factors facilitating one dimension often actively hinder others, requiring differentiated support strategies that acknowledge migrants' strategic calculations between immediate survival needs and long-term professional aspirations.

Keywords: international migration, refugees, forced migration, labor market integration, assimilation, human capital, career preservation, employment, career adaptability, Ukraine, Poland

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This thesis emerges from a deeply personal journey through two forced relocations—first from Belarus, then from Ukraine—that have shaped not only my professional path but my understanding of what it means to rebuild one’s life in new places. I write this as someone who has lived these complexities firsthand.

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1 Introduction

The Russian invasion of Ukraine on February 24, 2022, triggered the largest forced displacement in Europe since World War II, with over 16 million Ukrainian citizens crossing the border into Poland (Zyzik et al., 2024). While initial displacement peaked at approximately four million refugees across Poland, around one million Ukrainians currently reside in Poland, the primary destination country (Kosyakova et al., 2024). However, this “forced migration” includes substantial variety: while Eastern Ukrainian migrants fled active combat zones with little choice, many Western Ukrainian migrants had greater freedom in migration timing and destination selection (NBP, 2024).

This study builds upon and extends recent empirical work by Lvovskiy, Marozau, and Panasevich (2024), which used the same dataset to examine career preservation among Ukrainian and Belarusian migrants in Poland and Lithuania. While their research provides crucial validation of substantial human capital loss and identifies key predictors of career continuity, it adopts a single-outcome approach focused exclusively on career preservation. I extend their foundational work by developing a three-outcome analytical framework that simultaneously examines career preservation, employment status, and time to satisfactory employment, thereby revealing the fundamental trade-offs migrants face between competing integration objectives that cannot be captured through any single metric.

Despite extensive research on general migration outcomes, the career trajectories of skilled forced migrants remain critically understudied. While the National Bank of Poland’s comprehensive surveys reveal 78% labor market participation among Ukrainian migrants (NBP, 2024), these employment statistics mask complex questions about professional identity preservation and strategic trade-offs between immediate survival and long-term career aspirations. This research addresses three fundamental questions: What determines whether migrants preserve their professional identities? What factors influence basic employment acquisition? How quickly do migrants secure satisfactory work? By examining these dimensions simultaneously, this study reveals the inherent tensions that force migrants to choose between competing priorities rather than optimizing all outcomes simultaneously.

The Ukrainian migration to Poland represents a unique context for studying skilled forced migration. Unlike typical refugee populations, Ukrainian migrants demonstrate exceptionally high educational attainment—65.7% hold higher education degrees—yet face the trauma and resource constraints char-

acteristic of forced displacement (NBP, 2024). This population is predominantly female (67% according to NBP surveys), reflecting military mobilization policies that restricted male emigration. Poland’s integration policy framework, characterized by temporary protection status allowing immediate work authorization, creates conditions distinct from traditional refugee contexts while still presenting significant structural barriers including credential recognition challenges and discriminatory hiring practices (Solano & Huddleston, 2020; Zyzik et al., 2024).

The empirical foundation draws from a comprehensive survey conducted by the Belarusian Economic Research and Outreach Center (BEROC) in collaboration with CIVITTA consulting agency during summer 2024, yielding a sample of 306 skilled Ukrainian migrants residing in Poland. The survey captures detailed information on educational backgrounds, previous career experience, job search strategies, career adaptability resources, and integration outcomes across multiple dimensions.

The analysis employs a systematic hierarchical specification strategy, sequentially testing the effects of demographics, human capital, job search methods, strategic orientations, career adaptability measures, and university characteristics across all three outcomes.

The central finding challenges conventional wisdom about educational benefits in migration contexts. Higher education creates a stark paradox: while doctoral degree holders are 30 times more likely to preserve their careers compared to those with secondary education, they experience 69% slower satisfactory employment acquisition. This “education penalty” in job search duration likely reflects more selective job searching among highly educated migrants who hold out for positions matching their qualifications, forcing a fundamental choice between professional identity and quick labor market entry. Similarly, job search strategies produce outcome-specific effects that defy simple optimization: volunteering increases career preservation odds over five-fold but reduces basic employment odds by 74%, while searching through friends devastates career preservation chances (85% reduction) but may accelerate employment acquisition.

These patterns reveal that successful integration involves strategic calculations among competing priorities rather than universal optimization across all dimensions. Gender barriers operate primarily at labor market entry—women face 57% lower employment odds—but show no significant differences in career preservation, suggesting discrimination affects access more than career preservation. Psychological resources demonstrate dimension-specific effects: career confidence accelerates employment by

45% without affecting career preservation, while strategic clarity aids basic employment but not career continuity. Structural factors including education level and industry background completely dominate career preservation, while psychological resources only influence employment dynamics, indicating that mindset cannot overcome institutional barriers to maintaining professional identity.

This research makes several important contributions to migration studies and career development theory. Theoretically, it advances understanding beyond single-metric integration approaches to reveal systematic trade-offs that challenge human capital theory's linear predictions and extend career adaptability theory by demonstrating dimension-specific effects. Methodologically, the three-outcome comparative framework provides a template for future migration research, enabling identification of competing priorities invisible in traditional studies that assume universal optimization is possible. Empirically, it positions Ukrainian migration within broader patterns of skilled forced displacement while revealing mechanisms applicable to other high-skilled migrant populations facing structural barriers and credential recognition challenges.

For policy, the findings argue for differentiated support strategies rather than one-size-fits-all programs, acknowledging that migrants face genuine trade-offs between immediate survival needs and long-term professional aspirations. Some will prioritize quick employment for financial survival, others will invest in maintaining professional identity despite extended searches, and many will navigate between these extremes based on their resources and constraints. Understanding these fundamental tensions enables more effective intervention design that recognizes the complex calculations migrants make rather than assuming that all integration dimensions can be simultaneously optimized. This nuanced perspective proves essential for supporting skilled forced migrants in navigating the multidimensional challenges of career adaptation in new national contexts.

2 Literature Review

This overview synthesizes interdisciplinary research to establish theoretical foundations for understanding how skilled forced migrants navigate career transitions, demonstrating that successful integration cannot be captured through a single dimension.

Theoretical Foundations

Becker's human capital theory views education, training, and skill development as investments that increase future productivity and earnings, distinguishing between general human capital (useful across many firms) and specific human capital (primarily benefiting particular employers or industries) (Becker, 1962; Becker, 1964). However, migration contexts reveal significant complications to straightforward human capital predictions. Duleep and Regets' (1999) Immigrant Human Capital Investment model shows that immigrants with lower initial skill transferability invest more in destination-country human capital and experience faster earnings growth than those with higher transferability. This paradoxical finding challenges linear assumptions about educational benefits in migration contexts.

Contemporary evidence supports these theoretical complications. The United Nations Economist Network's analysis reveals that 12.5% of migrants in Europe identify credential non-recognition as their greatest challenge, surpassing language skills, discrimination, and visa restrictions (United Nations Economist Network, 2024). This "brain waste" phenomenon suggests that highly educated migrants often work below their skill levels due to structural mismatches between migrants' qualifications and destination country recognition systems.

While human capital theory emphasizes structural skill transferability, psychological perspectives focus on individual adaptive capacity. Savickas and Porfeli's (2012) internationally validated Career Adapt-Abilities Scale conceptualizes career adaptability through four psychological resources: concern (future orientation), control (self-discipline in decision-making), curiosity (exploration and information-seeking), and confidence (problem-solving self-efficacy). These resources function as competencies emerging from person-environment interactions rather than fixed personality traits, making them particularly relevant for examining how migrants navigate career disruptions (Savickas, 2009).

The Life Design paradigm emphasizes that career intervention cannot be captured through single-

outcome approaches, as individuals must navigate multiple, often competing life domains simultaneously (Savickas, 1997). This holistic perspective proves especially relevant for forced migrants, as displacement disrupts not only professional trajectories but entire life structures. The career shock literature provides additional grounding, with Akkermans et al. (2018) defining career shocks as “disruptive and extraordinary events that are, at least to some degree, caused by factors outside the focal individual’s control”. The 2022 Russian invasion represents a clear career shock, forcing Ukrainian migrants to reconsider professional trajectories within entirely new contexts.

Traditional assimilation theories, based on linear progression toward host society convergence, prove inadequate for understanding contemporary migration outcomes (Drouhot, 2024). The analysis reveals an “integration paradox” where immigrants may perceive more exclusion despite upward mobility, demonstrating that integration cannot be captured by single metrics (Schaeffer & Kas, 2023). Ager and Strang’s (2008) influential framework establishes “employment” as both a “key marker” and “means” of integration while identifying “non-recognition of qualifications and previous work experience” as a critical barrier leading to “under-employment”. Their sophisticated multidimensional framework with markers and means, social connections, facilitators, and foundational elements reveals the inherent complexity of integration, adaptation, and assimilation processes, showing that successful adaptation involves navigating multiple interconnected dimensions rather than following simple linear progression.

Empirical Evidence from Ukrainian Migration

NBP baseline data from 2022 reveals initial conditions of newly arrived refugees with severe language barriers (46% reported no Polish knowledge), high temporary residence expectations (64% planned stays under one year), yet remarkable economic activity (65% employment rate with 50% actively job-seeking) (NBP, 2022). Subsequent tracking shows dramatic improvements: Polish fluency among refugees rose from 5% to 28%, employment increased to 68%, upward occupational mobility occurred (simple jobs decreased from 53% to 44%), and benefit dependency declined (NBP, 2023).

Cross-national research reveals a critical tension between integration speed and sustainability: “work first” approaches yield higher short-term employment rates, while comprehensive human capital investments initially reduce employment through “lock-in effects” but enhance medium-term outcomes including stable employment and skill-matched positions (Kosyakova et al., 2024). Recent empirical

research demonstrates that despite exceptionally high labor market participation (90% economically active, with refugees achieving Europe’s highest employment rate at 65%), substantial qualification underutilization persists, with 69.7% of refugees performing low-skilled work compared to only 17.1% securing qualification-matched positions (Kubiciel-Lodzińska & Solga, 2023). Experimental research reveals systematic discrimination in recruitment, with Ukrainian female candidates receiving 30% fewer responses for non-specialist positions (Zyzik et al., 2024).

Poland’s integration policy framework creates specific structural constraints. The Migrant Integration Policy Index (MIPEX) findings indicate that Poland’s policies encourage the public to see immigrants “not as their equals, but instead as strangers,” creating a “vicious circle of exclusion” where institutional barriers reinforce social separation (Solano & Huddleston, 2020). German integration experiences provide valuable comparative context, with Nikolov et al. (2021) demonstrating that refugees experience more substantial and persistent skill downgrading than economic immigrants due to involuntary migration and lack of preparation for host country labor markets. Turkish research on Syrian refugees reveals that “social bonds” (co-ethnic connections) negatively associate with other integration dimensions, suggesting that stronger ethnic ties may hinder broader integration outcomes (Turper & Özçürümez, 2024).

Multidimensional Integration Approaches

Growing empirical evidence challenges traditional single-metric approaches to measuring integration success. Contemporary research reveals that integration involves complex trade-offs across different dimensions, where progress in one area may not translate to success in another. Hartog’s (2000) analysis demonstrates that while overeducation yields positive but diminished returns compared to required education, the phenomenon decreases with experience, validating temporal trade-offs where migrants initially accept below-qualification positions for faster employment, then gradually move toward career-appropriate roles.

Empirical evidence from Chiswick and Miller (2009) demonstrates that “overeducation is more common among recent labor market entrants” with immigrants often working in jobs requiring less education than they possess due to “less-than-perfect international transferability of human capital”. Their research shows that longer residence duration reduces overeducation as migrants acquire “destination-

specific skills”, supporting frameworks examining integration as strategic trade-offs between immediate employment access and longer-term career optimization.

Garcia-Mainar and Montuenga’s (2019) research reveals that overeducation serves a signaling role, allowing workers to access employment despite skill mismatches, while over-educated workers demonstrate lower job satisfaction but higher job search propensity, capturing the essence of integration trade-offs. Turper and Özçürümez’s (2024) empirical validation of multidimensional refugee integration across five dimensions demonstrates that different integration aspects respond differently to the same predictors.

Dheer and Lenartowicz’s (2018) identity-centric framework reveals how social embeddedness creates both resources and constraints, with ethnic embeddedness potentially enabling faster employment within ethnic economies but limiting mainstream career opportunities, while bicultural identity supports broader career preservation. This insight explains outcome-specific effectiveness of job search strategies and validates multidimensional approaches acknowledging trade-offs between different strategic choices.

Research Gaps and Theoretical Controversies

Current migration research faces significant methodological constraints limiting causal inference (Schuetler & Caron, 2020). Most studies employ cross-sectional designs that cannot distinguish between duration effects and cohort differences, while sample selection issues favor migrants with stronger community connections. The multidimensional integration literature particularly suffers from limited comparative outcome research—relatively few studies systematically compare how the same predictors operate across different integration dimensions.

However, part of recent research on forced migrants has exploited historical episodes of forced expulsions and population exchanges following major wars. O. Becker and Ferrara’s (2019) review identified 27 papers exploring historical events with examples ranging from WWII and Soviet invasion of Finland, to Hurricane Katrina and volcanic eruptions in Iceland. While these historical studies provide valuable causal identification through natural experiments, they may have limited applicability to contemporary forced migration contexts, particularly regarding the unique circumstances facing Ukrainian migrants in Poland’s modern European integration framework.

Several unresolved debates characterize the migration literature. Education’s paradoxical effects on

employment timing remain poorly understood, with some studies suggesting selective job searching among highly educated migrants while others emphasize structural barriers to credential recognition. Ghaffarzadegan et al.'s (2017) endogenous theory of degree inflation provides one explanation, demonstrating how educational expansion can create self-reinforcing cycles leading to sustained workforce-job mismatches, where higher credentials may paradoxically delay employment despite facilitating career preservation.

Gender disparities present another theoretical puzzle, with substantial evidence documenting employment gaps between male and female migrants, but inadequate distinction between structural discrimination, caregiving responsibilities, and human capital differences. Research identifies a “triple disadvantage” for female refugees due to family responsibilities and lower human capital investments (Kosyakova & Kogan, 2022).

The Ukrainian migration case presents unique research opportunities and challenges. Unlike typical refugee populations, Ukrainians demonstrate exceptionally high educational attainment and professional experience (NBP, 2024), yet face the trauma and resource constraints characteristic of forced migration. This combination requires theoretical frameworks sophisticated enough to account for both advantages (human capital) and disadvantages (forced displacement) simultaneously.

3 Data and Methodology

Research Design and Analytical Framework

This study employs a quantitative cross-sectional research design to examine the multifaceted nature of labor market integration among Ukrainian migrants in Poland. Moving beyond traditional single-outcome approaches, I implement an innovative three-outcome comparative framework that captures different dimensions and thresholds of integration success. This methodological approach recognizes that career adaptation during forced migration involves complex trade-offs between immediate employment needs and long-term professional aspirations.

The analytical framework examines three complementary outcomes:

- (a) **Career Preservation**, measuring whether migrants maintain their original professional trajectory versus undergoing career transitions;
- (b) **Employment Status**, capturing basic labor market participation regardless of career field; and
- (c) **Time to Employment**, analyzing the temporal dynamics of satisfactory job acquisition through survival analysis.

This multidimensional approach reveals how different factors may facilitate one aspect of integration while potentially hindering another, providing crucial insights for both theory and policy.

Data Collection and Sample

Survey Development and Implementation

The data derives from a comprehensive survey conducted by BEROCC in collaboration with CIVITTA consulting agency during summer 2024. The survey instrument was developed through an iterative process involving migration researchers, economists, and survey methodologists, with extensive pre-testing to ensure cultural appropriateness and question comprehension. The questionnaire was made available in Ukrainian, Russian, and Belarusian languages to maximize accessibility (Lvovskiy & Marozau, 2024).

Data collection employed Computer-Assisted Web Interviewing (CAWI) methodology, distributed through multiple channels including migration support organizations, diaspora networks, social media platforms,

and institutional partnerships with civil society organizations. This multi-channel approach aimed to reach diverse segments of the Ukrainian migrant population in Poland, though it inherently favors those with digital access and community connections (Lvovskiy & Marozau, 2024).

Sample Selection and Characteristics

From the initial pool of 565 Ukrainian respondents across multiple European Union countries, I selected those residing in Poland, yielding samples that vary by outcome measure: 269 respondents for career preservation analysis (employed migrants only), 306 for employment status analysis (all migrants), and 200 for time-to-employment analysis (migrants with valid job search data).

The sample demonstrates characteristics particularly relevant for studying skilled migration and career transitions. Women comprise 56.5% of respondents, consistent with the gender composition of Ukrainian refugee flows following Russia's 2022 invasion, which initially featured higher proportions of women due to military mobilization restrictions. Educational attainment is notably high, with 65.7% having completed some form of higher education—37.6% hold bachelor's degrees, 24.8% master's degrees, and 3.3% doctoral degrees. This educational profile exceeds Ukrainian national averages, suggesting either selective migration patterns or sampling bias toward more educated migrants.

Professional experience is substantial, with respondents averaging 12.8 years of work history. The majority (72.5%) arrived in Poland within 2–3 years of the survey, reflecting post-2022 invasion migration. While this purposive sampling does not guarantee statistical representativeness of all Ukrainian migrants in Poland, it provides valuable insights into the experiences of those who have engaged with support networks during their adaptation process.

Positioning Within the Broader Migration Research

The analytical approach deliberately focuses on the skilled migration segment, resulting in some demographic differences compared to broader population studies. While the NBP Survey in 2024 found 67% women and 47% with university degrees among 3,778 Ukrainian migrants, the BEROc sample comprises 56.5% women and 65.7% with higher education. This educational skew toward more qualified migrants is methodologically advantageous, enabling detailed analysis of career preservation dynamics among those with substantial human capital investments. Both studies confirm similar arrival patterns,

validating the temporal context. However, the emphasis on currently employed migrants (87.9% vs. 78% in NBP) allows for more precise examination of career trajectory outcomes among those who have successfully entered the labor market.

Variable Operationalization

Dependent Variables

The study's innovative three-outcome approach required careful construction of outcome measures that capture different facets of labor market integration:

Career Preservation represents the most stringent measure of professional continuity. Constructed from survey question CC2 ("Which statement best describes how you found employment in Poland?"), I created a binary indicator where one indicates career preservation (either continuing in the same position or remaining in the same profession at a lower level) and zero indicates career change (moving to an adjacent field or completely changing careers). This operationalization acknowledges that preservation may involve some status loss while maintaining professional identity and skill utilization.

Employment Status provides a fundamental measure of labor market attachment. Derived from variable C4 ("What is your main occupation at present?"), this binary variable distinguishes between those engaged in any paid employment (1) versus those outside the workforce (0). This measure captures basic integration regardless of job quality or career alignment.

Time to Satisfactory Employment introduces a temporal dimension through survival analysis. I constructed both an event indicator (one if employment was found, zero if still searching) and a continuous time variable measuring months until employment. For those who found work, I derived time values from categorical responses: "Less than 3 months" (coded as 1.5), "3 months to 1 year" (7.5), and "More than 1 year" (14). For censored observations, I used years since migration to estimate exposure time.

Independent Variables

The hierarchical modeling strategy organizes predictors into theoretically meaningful domains:

Demographics and Human Capital form the baseline, including gender (binary), marital status,

years since migration (continuous, derived from categorical ranges), educational attainment (six categories from secondary to PhD), work experience (continuous years derived from ranges), and number of professional development courses completed.

Previous Career Characteristics capture pre-migration professional context through twelve industry indicators (advertising/marketing, architecture/engineering, construction, consulting, education, financial services, healthcare, IT, manufacturing, tourism/leisure, trade/retail, and other services).

University Characteristics represent a methodological innovation of this study. For respondents with higher education, I developed a three-dimensional classification system:

- (a) **Prestige Level**, coded 1-5 based on international rankings, research output, and institutional reputation;
- (b) **University Type**, nine categories (Technical, Economics, Medical, Pedagogical, Humanities, Comprehensive, Law, Agricultural, Other);
- (c) **Foreign Status**, a binary indicator for degrees obtained outside Ukraine.

This classification involved systematic coding of up to three universities per respondent, with the highest prestige rating used for analysis, and binary indicators created for each educational type experienced.

Career Adaptability operationalizes Savickas's framework through four composite measures derived from 29 items from the Career Adapt-Abilities Scale (CAAS), corresponding to questions in the BEROCC survey. The CAAS was developed through an international collaborative approach across 18 countries to ensure cross-cultural validity from the outset (Savickas & Porfeli, 2012), making it particularly suitable for examining how Ukrainian migrants navigate career disruptions in Polish labor markets. The 29 items were systematically grouped into four dimensions, with appropriate reverse coding applied to ensure consistent directionality, and composite scores calculated using mean values across the items:

- (a) **Career Concern** (Cronbach's $\alpha = 0.562$): future planning and preparation behaviors;
- (b) **Career Control** (Cronbach's $\alpha = 0.248$): personal responsibility for career decisions;
- (c) **Career Curiosity** (Cronbach's $\alpha = 0.606$): information-seeking and exploration;
- (d) **Career Confidence** (Cronbach's $\alpha = 0.642$): self-efficacy in solving career challenges.

The low reliability for Career Control, as indicated by its low Cronbach's α ($\alpha = 0.248$), represents a measurement limitation addressed in the analysis.

Job Search Methods capture employment-seeking strategies through eleven binary indicators (employment service, job advertisements, friends/acquaintances, relatives, diaspora networks, resume databases, employer invitation, job fairs, education/study projects, volunteer projects, NGO/club membership), with “other methods” as the reference category.

Strategic Approach variables, derived from paired-statement questions (D1-D8), measure preferences along eight dimensions of career planning and execution, each rated on a 7-point scale. Key variables include orientation toward leveraging existing competencies versus developing flexibility (D5) and preference for clear vision versus openness to emergent opportunities (D2).

Statistical Analysis Strategy

Hierarchical Specification Framework

The analysis implements a systematic hierarchical approach, sequentially adding theoretically meaningful variable groups across seven specifications for each outcome. The hierarchical structure enables identification of domain-specific effects while building toward comprehensive models that reveal the relative importance of different predictor categories.

Analytical Methods

For binary outcomes (Career Preservation and Employment Status), I employ logistic regression with maximum likelihood estimation. The general form:

$$\log \left(\frac{p_i}{1 - p_i} \right) = X_i' \beta + \varepsilon_i \quad (1)$$

where p_i represents the probability of success, X_i is the predictor vector, and β contains regression coefficients. Results are reported as odds ratios with 95% confidence intervals.

For Time to Employment, I implement Cox proportional hazards models:

$$h(t|X_i) = h_0(t) \exp(X_i' \beta) \quad (2)$$

where $h(t|X_i)$ is the hazard function and $h_0(t)$ is the baseline hazard. Hazard ratios above one indicate faster employment, while values below one indicate slower job acquisition.

Model Evaluation and Validation

Model performance is assessed through multiple criteria:

- (a) AIC and BIC for specification comparison;
- (b) McFadden's Pseudo R^2 for explanatory power;
- (c) Area Under the Curve (AUC) from ROC analysis;

Diagnostic procedures ensure model validity:

- (a) Variance Inflation Factor (VIF) analysis (all values less than 2.5);
- (b) Schoenfeld residual tests (global $p = 0.483$);
- (c) Cook's distance examination;
- (d) Hosmer-Lemeshow test for logistic models.

Missing Data Strategy

Rather than global listwise deletion, I implement model-specific handling to maximize statistical power. This approach yields different sample sizes across specifications while preserving valuable information.

Considerations and Limitations

Several limitations warrant acknowledgment:

- (a) **Design Limitations.** The cross-sectional design limits causal inference, particularly regarding temporal ordering of psychological resources and labor market outcomes. Future longitudinal research could address these limitations.
- (b) **Sampling Constraints.** The non-random sampling approach, while necessary given the population's characteristics, may introduce selection bias toward migrants with stronger community connections or digital access. Results should be interpreted within this context.
- (c) **Measurement Challenges.** Self-reported outcomes may introduce recall bias or social desirability effects. The low reliability of the Career Control scale ($\alpha = 0.248$) suggests this dimension may not be adequately captured (Savickas & Porfeli, 2012). Additionally, the categorical-to-continuous transformations for time variables introduce some imprecision.
- (d) **Generalizability.** Findings are specific to Ukrainian migrants in Poland post-2022 and may not generalize to other migrant populations, time periods, or destination countries. The high educational attainment of the sample particularly limits generalizability to less-skilled migration contexts.

Despite these limitations, the innovative three-outcome framework, comprehensive variable measurement, and systematic analytical approach provide valuable insights into the multidimensional nature of career adaptation during forced migration. The methodology's strengths—including the novel university classification system, hierarchical specification strategy, and cross-outcome comparative analysis—advance the understanding of how skilled migrants navigate complex career transitions while contributing methodological innovations for future migration research.

4 Empirical Results

Three Dimensions of Integration Success

This chapter proceeds by first describing the sample characteristics and outcome distributions, then examining results for each integration dimension separately, before synthesizing findings through a comprehensive three-outcome analytical framework. The statistical analysis employs a hierarchical specification approach, sequentially adding control variables in theoretically meaningful groups to identify domain-specific effects and build toward sophisticated models. This systematic approach begins with basic demographics and human capital variables, then progressively incorporates job search methods, strategic orientations, career adaptability measures, and university characteristics, culminating in final specifications that combine the most significant predictors across all domains.

Building on the methodology outlined in [Chapter 3](#), I investigate what determines:

- (a) whether migrants preserve their professional identities;
- (b) their basic employment acquisition;
- (c) how quickly they secure satisfactory work.

This multidimensional approach reveals that labor market integration involves complex trade-offs—factors facilitating one aspect of success may actually hinder another—challenging simplistic notions of “successful integration”.

The analysis uncovers several striking patterns. Higher education emerges as a double-edged sword: while powerfully predicting career preservation, it significantly delays initial employment. Strategic job search approaches show outcome-specific effectiveness, with diaspora networks supporting career continuity but informal friend networks directing migrants away from their professions. Perhaps most surprisingly, psychological resources show limited effects: career confidence only speeds job finding, while strategic clarity and flexibility only aid basic employment. None influence career preservation, which depends entirely on structural factors like education and industry background—suggesting that mindset cannot overcome structural barriers to maintaining professional identity.

This chapter proceeds by first describing the sample characteristics and outcome distributions, then

examining results for each integration dimension separately, before synthesizing findings through cross-outcome comparative analysis. The hierarchical specification approach—testing demographics, job search methods, strategic approaches, adaptability, and university characteristics systematically—reveals how different predictor domains contribute to integration success.

How Do Ukrainian Migrants Navigate Integration?

Career Disruption as the Norm

The extent of professional disruption emerges as a defining feature of this migration experience. Only 21.9% of employed migrants maintained their original career paths in Poland—a stark indicator of the challenges in transferring professional identities across borders (see [Figure 4.1](#)). The majority (51.6%) experienced complete career changes to non-adjacent fields, while others faced downward mobility within their professions (10.5%) or shifted to related areas (16%).

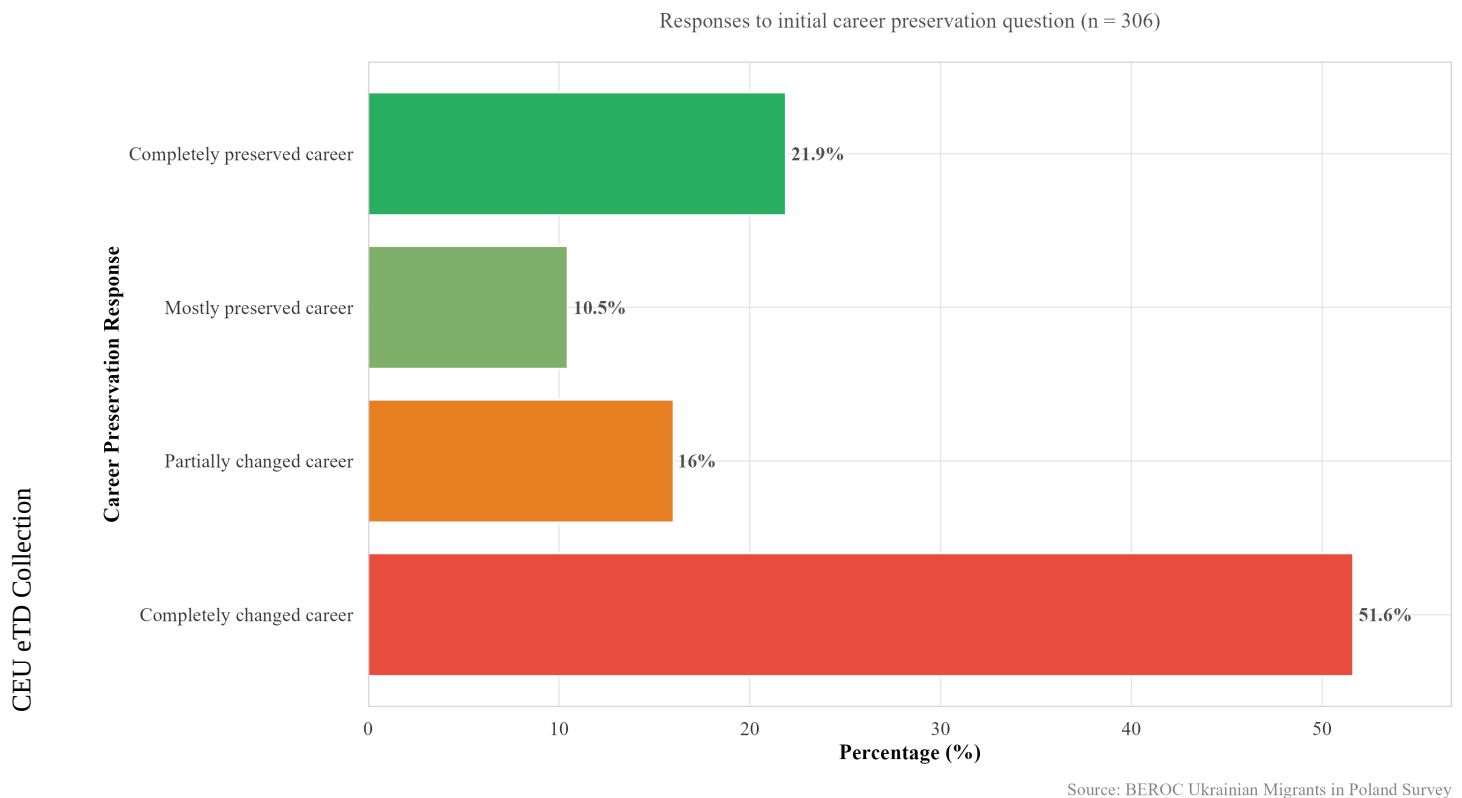


Figure 4.1: Career Trajectory Distribution Among Employed Ukrainian Migrants

This disruption varies dramatically by educational background, revealing how field-specific human cap-

ital transfers differently across borders (Table 6.8). Medical graduates demonstrate the highest career continuity (50.0%), followed by technical university graduates (45.9%). In contrast, those with legal education (28.6%), pedagogical training (25.0%), or humanities backgrounds (25.0%) struggle most to maintain professional trajectories. These patterns suggest that technical and medical fields offer more transferable credentials, while professions dependent on country-specific knowledge, language mastery, or local licensure face greater barriers.

Gender patterns in career preservation are illustrated in Figure 6.3, while Figure 6.4 shows career preservation rates by previous industry, highlighting the stark differences between sectors like IT (which shows high preservation) and financial services (which shows low preservation).

Employment Patterns and Gender Disparities

At the time of survey, 87.9% of respondents reported employment, with significant variation by demographic characteristics. Gender emerges as a crucial factor: 92.5% of male migrants secured employment compared to 84.4% of female migrants (Figure 6.8). This gap persists even after accounting for education and experience, suggesting barriers facing women in the Polish labor market.

Among employed migrants, workplace distributions reveal integration into diverse sectors of the Polish economy. Large businesses employ 28.1%, while small (24.2%) and medium enterprises (12.4%) account for substantial proportions (Figure 6.7). The remaining work in various organizational types including educational institutions, government agencies, and non-profit organizations.

Psychological Resources for Adaptation

Career adaptability assessments reveal varied psychological resources among migrants. Respondents score highest on Career Concern (planning for the future; $M = 4.04$, $SD = 0.65$) and Career Confidence (self-efficacy in problem-solving; $M = 3.73$, $SD = 0.65$), consistent with the four-factor structure validated by Savickas and Porfeli (2012). Career Curiosity (exploration behaviors; $M = 3.93$, $SD = 0.53$) shows moderate levels, while Career Control (decision-making responsibility; $M = 3.10$, $SD = 0.76$) demonstrates the lowest scores and problematic reliability (Cronbach's $\alpha = 0.248$). The distribution of these adaptability dimensions is visualized in Figure 6.1.

Strategic approach preferences, measured on 7-point scales ([Table 6.3](#)), reveal substantial individual variation (SDs ranging 2.2–2.6) in how migrants navigate career challenges. Mean scores falling slightly below scale midpoints (3.0–3.9) suggest mild preferences for structured over emergent approaches, though the large standard deviations indicate diverse strategic orientations within the sample.

University Backgrounds and Educational Capital

The educational backgrounds of migrants provide crucial context for understanding career outcomes. Among those with higher education, technical universities represent the most common background (27.8%), followed by comprehensive universities (14.4%) and economics (7.5%), with the remaining distributed across other specialized institutions including pedagogy (7.8%).

University prestige, coded on a 1-5 scale, reveals that most migrants attended mid-to-high reputation institutions (Level 3: 23.9%, Level 4: 22.5%, Level 5: 10.8%), with only 3.6% from lower-prestige schools. International education experience remains rare, with just 3.3% holding foreign degrees.

What Determines Career Preservation?

Career preservation—maintaining one’s professional identity despite geographic displacement—represents the most stringent measure of integration success. [Table 4.1](#) in the main text presents results from the specification, which combines key predictors identified through systematic domain testing while maintaining strong explanatory power (Pseudo $R^2 = 0.297$, AUC = 0.844).

The Power of Educational Credentials

Educational attainment emerges as the most powerful predictor of career preservation. Doctoral degree holders show nearly 30 times higher odds of maintaining their careers compared to those with secondary education ($OR = \exp(3.389) = 29.6$). This extraordinary effect likely reflects multiple mechanisms.

Table 4.1: Determinants of Career Preservation Among Ukrainian Migrants in Poland

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic Demographics							
Marital status (married)	0.038 (0.321)	-0.006 (0.361)	0.031 (0.328)	0.049 (0.324)	-0.067 (0.439)	-0.426 (0.668)	-0.018 (0.353)
Gender (female)	-0.331 (0.337)	-0.23 (0.392)	-0.355 (0.355)	-0.278 (0.346)	-0.426 (0.455)	-1.037 (0.757)	-0.257 (0.354)
Years since emigration	-0.603* (0.253)	-0.641* (0.299)	-0.67* (0.266)	-0.598* (0.261)	-0.469 (0.37)	-0.469 (0.586)	-0.618* (0.282)
Years of experience	0.008 (0.02)	0.009 (0.023)	0.013 (0.022)	0.005 (0.021)	-0.006 (0.029)	-0.007 (0.046)	0.007 (0.022)
Human Capital							
Higher education (Bachelor)	2.58* (1.143)	2.426* (1.162)	2.464* (1.132)	2.622* (1.157)	—	—	2.48* (1.117)
Master's degree	2.569* (1.154)	2.144† (1.174)	2.421* (1.146)	2.643* (1.171)	0.04 (0.436)	-0.133 (0.678)	2.349* (1.136)
PhD/Doctoral degree	3.607* (1.403)	3.492* (1.491)	3.369* (1.388)	3.346* (1.422)	1.336 (1.007)	0.957 (1.434)	3.389* (1.428)
Retraining courses completed	0.087† (0.053)	0.116* (0.056)	0.101† (0.055)	0.086 (0.053)	0.023 (0.065)	0.122 (0.103)	0.12* (0.055)
Previous Career							
Financial services	-1.877** (0.715)	-2.302** (0.784)	-1.79* (0.714)	-1.938** (0.726)	-1.618* (0.757)	-2.348* (1.07)	-2.324** (0.749)
IT and programming	1.053* (0.421)	1.035* (0.488)	1.013* (0.432)	1.011* (0.426)	1.298* (0.553)	1.555† (0.862)	1.077* (0.46)
Trade (wholesale/retail)	-1.051** (0.404)	-0.863† (0.447)	-1.036* (0.413)	-1.104** (0.409)	-1.73** (0.561)	-2.857** (0.986)	-0.971* (0.43)
Job Search							
Volunteer projects/free services	—	1.581 (1.02)	—	—	—	3.254† (1.789)	1.698* (0.833)
Employment service	—	-1.068† (0.562)	—	—	—	-2.669* (1.085)	-1.158* (0.541)
Through friends and acquaintances	—	-1.882*** (0.397)	—	—	—	-2.767*** (0.823)	-1.89*** (0.38)
<i>Observations</i>	269	269	269	269	167	167	269
<i>AIC</i>	328.6	311.8	335.6	333.2	239	220.2	290.8
<i>BIC</i>	411.3	434	447	430.2	329.4	382.3	373.5
<i>Pseudo R²</i>	0.188	0.3	0.214	0.198	0.203	0.489	0.297
<i>AUC</i>	0.777	0.84	0.794	0.785	0.782	0.921	0.844

Notes: ***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1. Standard errors in parentheses. All specifications estimated using logistic regression. The sample includes Ukrainian migrants in Poland who are currently employed.

Model specifications:

- (1) Demographics & Human Capital baseline (gender, marital status, years since emigration, work experience, education level, retraining courses);
- (2) Adding job search methods;
- (3) Adding strategic approach variables (D1-D8 preferences);
- (4) Adding career adaptability dimensions (concern, control, curiosity, confidence);
- (5) Adding university characteristics—reduced sample (prestige, type, foreign status);
- (6) Full comprehensive model—reduced sample (all available predictors);
- (7) Final model (key significant predictors from all domains).

Beyond signaling value, doctoral degree holders may show greater determination to preserve careers after years of specialized training, facing higher opportunity costs of career change. Their internationally transferable research skills, professional networks, and specialized expertise may both facilitate career continuity and limit options outside their field—creating strong incentives to persist in finding field-appropriate positions despite barriers.

The effect remains strong for master's (OR = 10.47) and bachelor's degrees (OR = 11.94), indicating that even undergraduate credentials substantially facilitate career continuity. Continuous professional development also matters—each additional training course completed increases career preservation odds by 13% (OR = 1.13), highlighting the value of skill updating for maintaining professional trajectories.

Industry-Specific Transferability

Previous career field dramatically influences preservation likelihood, revealing stark differences in cross-border skill transferability. Information technology backgrounds show the strongest positive effect (OR = 2.94), suggesting that technical skills transcend national boundaries more readily than other expertise. Conversely, financial services experience presents the greatest challenge (OR = 0.10), with former finance professionals facing 90% lower odds of career preservation. Trade and retail backgrounds also struggle (OR = 0.38), indicating particular difficulties for service-sector professionals.

These industry effects likely reflect varying degrees of regulatory barriers, credential recognition challenges, and cultural embeddedness across sectors. IT's universal technical standards contrast sharply with finance's country-specific regulations and relationship-based practices.

Job Search Strategies

How migrants search for employment profoundly affects career outcomes, with different strategies showing dramatically divergent effects (Table 6.7). Searching through friends and acquaintances—while potentially effective for finding any job—proves catastrophic for career preservation (OR = 0.15). This suggests that informal social networks, often comprised of other migrants in similar situations, channel job seekers toward survival employment rather than professional positions.

Using formal employment services similarly reduces career preservation odds (OR = 0.31), potentially

reflecting the mismatch between generic job placement approaches and specialized professional needs. In striking contrast, engaging in volunteer projects increases career preservation odds over five-fold ($OR = 5.47$). This counterintuitive finding likely reflects multiple dynamics: volunteers may be demonstrating commitment to their field at any cost, including working unpaid; they may have sufficient resources to invest in long-term career strategies; or they may view unpaid work as a foot-in-the-door to paid positions in their profession. Volunteering simultaneously may signal expertise and dedication while providing local professional connections and sector-specific experience.

The Erosion Effect of Time

Perhaps most troubling, each additional year in Poland reduces career preservation odds by 46% ($OR = 0.54$). This temporal pattern may reflect various processes: initial career compromises becoming entrenched, skill atrophy, or cohort differences. Earlier arrivals possibly faced more limited support infrastructure and diaspora networks compared to recent migrants, or may have exhausted financial resources, forcing career changes. However, without longitudinal data, I cannot definitively distinguish between duration effects and cohort differences. The pattern nonetheless suggests the potential value of early intervention to support career continuity.

What Determines Basic Employment?

While career preservation represents integration quality, basic employment captures fundamental labor market access. [Table 4.2](#) reveals that predictors of finding any job differ substantially from those supporting career continuity, highlighting the multifaceted nature of integration success.

Gender Disparities in Employment Access

Gender emerges as a significant predictor of basic employment, with women facing 57% lower odds compared to men ($OR = 0.43$). This substantial disadvantage persists even after controlling for education, experience, and job search strategies. The gender gap likely reflects both structural discrimination and the additional caregiving responsibilities disproportionately borne by female migrants, many of whom arrived with children while leaving spouses in Ukraine.

Table 4.2: Determinants of Employment Status Among Ukrainian Migrants in Poland

	(1)	(2)	(3)	(4)	(5)	(7)
Basic Demographics						
Marital status (married)	0.535 (0.407)	0.602 (0.433)	0.471 (0.432)	0.529 (0.41)	1.141 (0.734)	0.528 (0.41)
Gender (female)	-0.702 (0.46)	-0.519 (0.489)	-0.754 (0.492)	-0.676 (0.467)	-0.39 (0.694)	-0.836* (0.421)
Years since emigration	0.443 (0.273)	0.474 (0.293)	0.467 (0.288)	0.441 (0.278)	0.299 (0.489)	0.52† (0.268)
Years of experience	-0.022 (0.026)	-0.019 (0.027)	-0.034 (0.029)	-0.028 (0.028)	0.009 (0.045)	-0.026 (0.026)
Human Capital						
Higher education (Bachelor)	-0.742 (1.128)	-0.557 (1.152)	-0.363 (1.137)	-0.662 (1.14)	—	—
Master's degree	-0.625 (1.177)	-0.386 (1.191)	-0.267 (1.183)	-0.514 (1.192)	0.488 (0.697)	—
PhD/Doctoral degree	-0.773 (1.595)	-1.372 (1.771)	-0.236 (1.609)	-1.094 (1.617)	-0.718 (1.462)	—
Retraining courses completed	-0.024 (0.069)	-0.024 (0.076)	-0.033 (0.076)	-0.025 (0.07)	-0.089 (0.094)	—
Job Search						
Volunteer projects/free services	—	-1.428† (0.844)	—	—	—	-1.344* (0.597)
Strategic Choices						
Clear vs. unclear vision of results	—	—	-0.261* (0.109)	—	—	-0.237** (0.088)
Competence vs. adaptive flexibility	—	—	0.242* (0.1)	—	—	0.227* (0.089)
<i>Observations</i>	306	306	306	306	186	306
<i>AIC</i>	249.9	255.9	251.7	253.9	155.9	217.2
<i>BIC</i>	335.5	382.5	367.1	354.4	249.4	254.4
<i>Pseudo R²</i>	0.096	0.167	0.159	0.114	0.202	0.126
<i>AUC</i>	0.724	0.789	0.792	0.736	0.818	0.793

Notes: ***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1. Standard errors in parentheses. All specifications estimated using logistic regression.

Strategic Clarity and Adaptability

Strategic approach variables reveal complementary patterns for employment success. Migrants with clearer visions of their desired results show 21% higher employment odds per scale unit (OR = 0.79), while those emphasizing adaptive flexibility over existing competencies demonstrate 26% higher odds (OR = 1.26). This finding suggests that successful job seekers combine goal clarity with skill adaptability—they can articulate what they aim to achieve while signaling willingness to develop new capabilities. The pattern implies that effective employment strategies require both direction and flexibility: migrants benefit from having clear objectives about their desired outcomes while remaining open about the skills

and pathways to achieve them. Neither vague aspirations nor rigid insistence on using only existing competencies optimizes employment chances.

The Volunteer Paradox

Volunteer work's divergent effects across outcomes presents a striking paradox. While powerfully supporting career preservation ($OR = 5.47$), volunteering actually reduces basic employment odds by 74% ($OR = 0.26$). This suggests that volunteering may serve as an alternative to paid employment rather than a pathway to it, at least in the short term. Migrants engaging in volunteer work might be investing in long-term career capital at the expense of immediate employment, or volunteering might indicate sufficient financial resources to forego immediate income.

Time Heals (Some) Wounds

Unlike its negative effect on career preservation, migration duration shows a marginally positive association with basic employment ($OR = 1.68$, $p < 0.1$). This pattern could reflect migrants gradually developing language skills and local networks, or cohort differences if earlier arrivals were more positively selected or faced different labor market conditions. The contrasting effects on career preservation versus basic employment suggest migrants may initially hold out for appropriate positions but accept any work over time—though I cannot definitively separate duration effects from cohort characteristics without longitudinal data.

How Quickly Do Migrants Find Satisfactory Work?

Beyond whether migrants find employment, the speed of job acquisition provides crucial insights into integration efficiency. [Table 4.3](#) presents results from Cox proportional hazards analysis, where hazard ratios above one indicate faster employment and values below one indicate delays. [Figure 6.9](#) shows Kaplan-Meier survival curves by education level.

Table 4.3: Determinants of Time to Employment Among Ukrainian Migrants in Poland

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic Demographics							
Marital status (married)	0.013 (0.153)	0.065 (0.155)	0.011 (0.155)	0.024 (0.154)	0.102 (0.219)	0.084 (0.245)	0.033 (0.152)
Gender (female)	-0.343* (0.17)	-0.21 (0.175)	-0.288 (0.176)	-0.302 [†] (0.175)	-0.441 [†] (0.253)	-0.224 (0.282)	-0.19 (0.161)
Years since emigration	-0.036 (0.122)	0.003 (0.124)	-0.053 (0.123)	-0.05 (0.125)	0.069 (0.18)	0.035 (0.193)	0.028 (0.124)
Years of experience	0.004 (0.01)	0.006 (0.01)	0.006 (0.01)	0.002 (0.01)	0.013 (0.014)	0.004 (0.016)	0.004 (0.01)
Human Capital							
Vocational/technical education	-0.718* (0.299)	-0.846** (0.313)	-0.584 [†] (0.312)	-0.652* (0.304)	—	—	-0.794** (0.299)
Higher education (Bachelor)	-0.697* (0.288)	-0.783** (0.303)	-0.668* (0.297)	-0.658* (0.289)	0.086 (0.475)	0.231 (0.542)	-0.988** (0.313)
Master's degree	-0.8** (0.301)	-0.888** (0.316)	-0.723* (0.308)	-0.729* (0.307)	-0.002 (0.477)	0.202 (0.529)	-1.133*** (0.333)
PhD/Doctoral degree	-0.535 (0.507)	-0.628 (0.522)	-0.354 (0.513)	-0.753 (0.515)	—	—	-1.165* (0.521)
Previous Career							
Financial services	-0.562 [†] (0.313)	-0.677* (0.32)	-0.516 (0.32)	-0.548 [†] (0.314)	-0.728 [†] (0.418)	-0.852 [†] (0.47)	-0.678* (0.313)
Trade (wholesale/retail)	-0.329 [†] (0.183)	-0.391* (0.191)	-0.298 (0.187)	-0.316 [†] (0.186)	-0.618* (0.262)	-0.695* (0.313)	-0.4* (0.178)
Job Search							
Employment service	—	-0.436 [†] (0.238)	—	—	—	-0.492 (0.345)	-0.675** (0.218)
Employer invitation	—	0.604* (0.24)	—	—	—	0.781* (0.333)	0.581** (0.219)
Career Adaptability							
Career confidence	—	—	—	0.386* (0.151)	—	0.314 (0.231)	0.37** (0.119)
<i>Observations</i>	200	200	200	200	121	121	200
<i>AIC</i>	2119.3	2116.5	2129.7	2116	1173.4	1192.1	2086
<i>BIC</i>	2191.8	2225.3	2228.6	2201.8	1251.7	1334.7	2148.6
<i>Pseudo R²</i>	0.646	0.69	0.655	0.665	0.689	0.753	0.702
<i>AUC</i>	—	—	—	—	—	—	—

Notes: ***p < 0.001, **p < 0.01, *p < 0.05, [†]p < 0.1. Standard errors in parentheses. All specifications estimated using Cox proportional model.

The Education Paradox Intensifies

The relationship between education and employment timing presents the starkest trade-off in the analysis. Higher education universally delays job acquisition—doctoral degree holders face 69% slower employment rates (HR = 0.31), master's holders 68% slower (HR = 0.32), and bachelor's holders 63% slower (HR = 0.37) compared to those with secondary education. Even vocational education slows

employment by 55% ($HR = 0.45$).

This “education penalty” in job search duration likely reflects more selective job searching among highly educated migrants who hold out for positions matching their qualifications. Combined with education’s positive effect on career preservation, these findings reveal a fundamental trade-off: educational credentials help migrants maintain professional identity but at the cost of extended job search periods.

Pre-Arranged Employment as Fast Track

The most powerful accelerator of employment is arriving with pre-arranged work. Migrants invited by employers find jobs 79% faster ($HR = 1.79$), underscoring the value of international corporate networks and pre-migration job securing. This pathway, while available to relatively few migrants, essentially eliminates job search friction.

Conversely, using formal employment services paradoxically slows job acquisition by 49% ($HR = 0.51$). This counterintuitive finding might reflect the generic nature of public employment services, which may poorly match specialized skills with appropriate opportunities.

Confidence as a Catalyst

Among psychological resources, career confidence emerges as the sole significant predictor of employment speed. Each unit increase in confidence accelerates employment by 45% ($HR = 1.45$), suggesting that self-efficacy beliefs translate into more effective job search behaviors, better interview performance, or greater persistence in the face of initial rejections.

Integration Trade-offs

The power of my three-outcome approach becomes fully apparent when examining how predictors operate across different dimensions of integration success. [Table 4.4](#) synthesizes findings across all outcomes, revealing complex patterns of complementarity and conflict. [Table 6.10](#) provides model performance comparisons across all specifications and outcomes. [Figures 4.2 & 6.10](#) presents plots visualizing effect sizes across the three integration dimensions.

Universal Challenges and Opportunities

Certain factors consistently challenge integration across multiple dimensions. Financial services backgrounds emerge as a universal barrier, hindering both career preservation and employment speed. Former finance professionals face a “double penalty”—difficulty maintaining their careers and extended job searches when they do change fields. Similarly, formal employment services consistently underperform, associated with both lower career preservation and slower job acquisition.

In contrast, no single factor universally facilitates all aspects of integration. This absence of “silver bullets” underscores the complex, multidimensional nature of successful adaptation and the need for differentiated support strategies.

The Education Dilemma

Education’s divergent effects across outcomes crystallize the central tension in skilled migration. Higher education powerfully enables career preservation—doctoral degree holders are 30 times more likely to maintain their professions. Yet these same credentials significantly delay employment, with doctoral degree holders finding work 69% slower than those with secondary education. For basic employment probability, education shows no effect at all.

This pattern suggests that highly educated migrants face a dilemma: they can achieve quicker employment by abandoning career aspirations, or potentially remain unemployed while preserving professional identity.

Gender Integration Patterns

Gender effects reveal another dimension of integration complexity. Women face significant disadvantages in basic employment acquisition (57% lower odds) but show no significant differences in career preservation or employment timing. This pattern suggests that gender barriers operate primarily at the point of labor market entry rather than in career preservation or search duration.

The finding challenges simple narratives about gender discrimination, indicating that barriers may be more about access to any employment rather than differential treatment once in the job search process.

Table 4.4: Cross-Outcome Effect Comparison of Key Predictors

Variable	Career Preservation	Employment Status	Time to Employment
Demographics			
Gender (female)	—	0.43* ↓	—
Years since emigration	0.54* ↓	1.68† ↑	—
Human Capital			
Higher education (Bachelor)	11.94* ↑	—	0.37** ↓
Master's degree	10.47* ↑	—	0.32*** ↓
PhD/Doctoral degree	29.62* ↑	—	0.31* ↓
Retraining courses	1.13* ↑	—	—
Previous Career			
Financial services	0.10** ↓	—	0.51* ↓
IT and programming	2.94* ↑	—	—
Trade (wholesale/retail)	0.38* ↓	—	0.67* ↓
Job Search			
Employment service	0.31* ↓	—	0.51** ↓
Through friends	0.15*** ↓	—	—
Volunteer projects	5.47* ↑	0.26* ↓	—
Employer invitation	—	—	1.79** ↑
Career Adaptability			
Career confidence	—	—	1.45** ↑
Strategic Approach			
Clear vision of results	—	0.79** ↓	—
Competence vs. flexibility	—	1.26* ↑	—

Notes: Values shown are odds ratios (OR) for logistic models and hazard ratios (HR) for Cox models. ***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1. ↑ indicates positive effect, ↓ indicates negative effect, NS = not significant.

Strategic Divergence by Outcome

Different strategic orientations facilitate different integration outcomes. Having a clear career vision aids basic employment but shows no effect on career preservation or timing. Emphasizing adaptive flexibility over existing competencies also helps secure employment but doesn't influence career continuity. Career confidence accelerates job finding but doesn't affect whether that job maintains professional identity. These patterns reveal outcome-specific strategic requirements. Employment success benefits from goal clarity and adaptability—knowing what you want while being flexible about how to achieve it. Career preservation, however, appears driven more by structural factors (education, industry background) than strategic orientations. Speed of employment responds primarily to confidence rather than strategic approach. This suggests migrants face genuine trade-offs: strategic choices that optimize one integration dimension may be neutral or even counterproductive for others.



Figure 4.2: Effect Sizes Across Three Integration Outcomes

The Volunteer Investment Strategy

Volunteer work represents perhaps the clearest strategic choice with divergent outcome implications. The 5.5-fold increase in career preservation odds must be weighed against the 74% reduction in basic employment odds. This stark trade-off suggests volunteering functions as a long-term investment strategy—sacrificing immediate employment for potential career continuity.

Migrants choosing this path likely possess sufficient resources to forego immediate income while building professional networks and demonstrating skills in their chosen field. The strategy's effectiveness for career preservation validates this approach for those who can afford it, while its negative employment effect warns against volunteering as a universal recommendation.

Implications for Theory and Practice

These multidimensional findings advance the understanding of skilled migration by building upon Ager and Strang's (2008) foundational framework while demonstrating that even within the employment domain, multiple competing dimensions create inherent trade-offs. The findings align with Drouhot's (2024) critique of linear assimilation theories and support his "integration paradox"—where progress in one area may not translate to success in another.

First, "successful integration" cannot be captured by any single metric. Factors facilitating one dimension may actively hinder others, validating Turper and Özçürümez's (2024) findings among Syrian refugees and the Life Design paradigm's argument against single-outcome approaches (Savickas et al., 2009). This challenges integration policies that assume universal optimization is possible.

Second, the results challenge human capital theory's straightforward predictions. While education strongly predicts career preservation, its negative effects on employment timing suggest complex signaling processes rather than simple productivity enhancement. This aligns with Duleep and Regets' (1999) paradoxical findings and the global "brain waste" phenomenon affecting 12.5% of European migrants (United Nations Economist Network, 2024).

Third, psychological resources have dimension-specific effects. Career confidence matters for employment speed but not career preservation, suggesting the Career Adaptability Framework needs modification for forced migration contexts (Sultana, 2022). Structural factors completely dominate career preservation while psychological resources only influence employment dynamics.

Fourth, the findings support Akkermans et al.'s (2018) call for examining diverse career shock outcomes. The contradictory effects of education exemplify how forced migration creates fundamental trade-offs rather than uniform outcomes, adding unique dimensions to career shock research (O. Becker & Ferrara, 2019).

For policy, the results argue for differentiated support strategies rather than one-size-fits-all programs. This aligns with cross-national research showing that effective integration requires complex approaches combining multiple interventions (Mishchuk, 2024; Fasani, 2024). Different policy configurations produce different outcomes, with no single framework optimizing all dimensions simultaneously (Koopmans, 2010).

5 Conclusions

This analysis of 306 Ukrainian migrants in Poland reveals the inherently multidimensional nature of labor market integration. Three key insights emerge:

First, education creates fundamental trade-offs. Higher credentials strongly facilitate career preservation but significantly delay employment, forcing migrants to choose between professional identity and quick labor market entry. This pattern finds empirical support in Hartog's (2000) cross-national analysis demonstrating that overeducation yields positive but diminished returns compared to required education, and aligns with the systematic qualification underutilization documented across European contexts, where despite high employment rates, substantial proportions of skilled migrants work below their qualifications (Kubiciel-Lodzińska & Solga, 2023; OECD, 2024). The education paradox identified here extends beyond the Ukrainian case, as similar patterns appear in German research on refugee skill downgrading (Nikolov et al., 2021) and Swedish studies of occupational mismatch (Dahlstedt, 2010), suggesting systematic rather than context-specific dynamics.

Second, integration strategies cannot optimize all outcomes simultaneously. Job search through friends quickly yields employment but diverts migrants from their professions. Volunteering preserves careers but reduces immediate employment. Formal employment services consistently underperform across dimensions. These strategic trade-offs validate Borjas' (2013) longitudinal finding that larger ethnic enclaves facilitate rapid employment through co-ethnic networks but may hamper long-term integration and language acquisition, while supporting Garcia-Mainar and Montuenga's (2019) evidence that over-educated workers demonstrate lower job satisfaction but higher job search propensity—capturing the essence of integration trade-offs where initial strategies must be weighed against long-term outcomes.

Third, different factors matter for different outcomes. Career confidence accelerates employment without affecting career preservation. Strategic clarity and flexibility aid basic employment but not career continuity. Gender barriers operate primarily at labor market entry rather than in career preservation. These dimension-specific patterns challenge universal intervention approaches while supporting specialized career guidance literature (Bimrose & McNair, 2011; Sultana, 2022) that advocates for differentiated rather than generic support strategies. The gender pattern identified here—barriers at labor market entry rather than career preservation—finds support in experimental research documenting sys-

tematic recruitment discrimination (Zyzik et al., 2024) while contradicting assumptions about uniform gender disadvantages across all employment dimensions.

These patterns suggest that successful integration support must move beyond simplistic metrics to acknowledge the complex calculations migrants make among competing priorities. Some will prioritize quick employment for financial survival, others will invest in maintaining professional identity despite extended searches, and many will navigate between these extremes based on their resources and constraints. This conclusion supports the theoretical evolution from linear assimilation models toward multidimensional frameworks that acknowledge both individual agency and structural constraints in shaping migration outcomes (Easton-Calabria & Sturridge, 2025; Drouhot, 2024). Future research should extend this three-outcome approach to other migrant populations and destination countries, while longitudinal studies could separate duration effects from cohort differences. The methodological innovation of systematic cross-outcome comparison demonstrated here provides a template for advancing migration research beyond single-metric approaches toward better understanding how skilled migrants navigate competing survival and professional pressures.

6 Appendix: Tables and Figures

Descriptive Statistics and Sample Characteristics

Table 6.1: Sample Demographics and Characteristics

Characteristic	N	%
Gender		
Male	133	43.5
Female	173	56.5
Education Level		
General secondary education	24	7.8
Vocational/technical education	81	26.5
Incomplete higher education	15	4.9
Higher education (Bachelor)	115	37.6
Master’s degree	76	24.8
PhD/Doctoral degree	10	3.3
Years Since Migration		
Less than 1 year	45	14.7
1–2 years	122	39.9
2–3 years	100	32.7
More than 3 years	39	12.7
Work Experience		
Less than 1 year	12	3.9
1–5 years	78	25.5
6–10 years	89	29.1
11–20 years	95	31.0
More than 20 years	32	10.5

Notes: N = 306 Ukrainian migrants in Poland. Sample characteristics for all respondents included in the analysis.

Table 6.2: Career Adaptability Dimensions—Descriptive Statistics

Dimension	N	Mean	SD	Min	Max
Career Concern	306	4.04	0.65	2.33	5.00
Career Control	306	3.10	0.76	1.00	5.00
Career Curiosity	306	3.93	0.53	2.38	5.00
Career Confidence	306	3.73	0.65	1.83	5.00

Notes: All dimensions measured on 1-5 scale. Cronbach’s α : Career Concern (0.562), Career Control (0.248), Career Curiosity (0.606), Career Confidence (0.642).

Career adaptability scores across four key dimensions

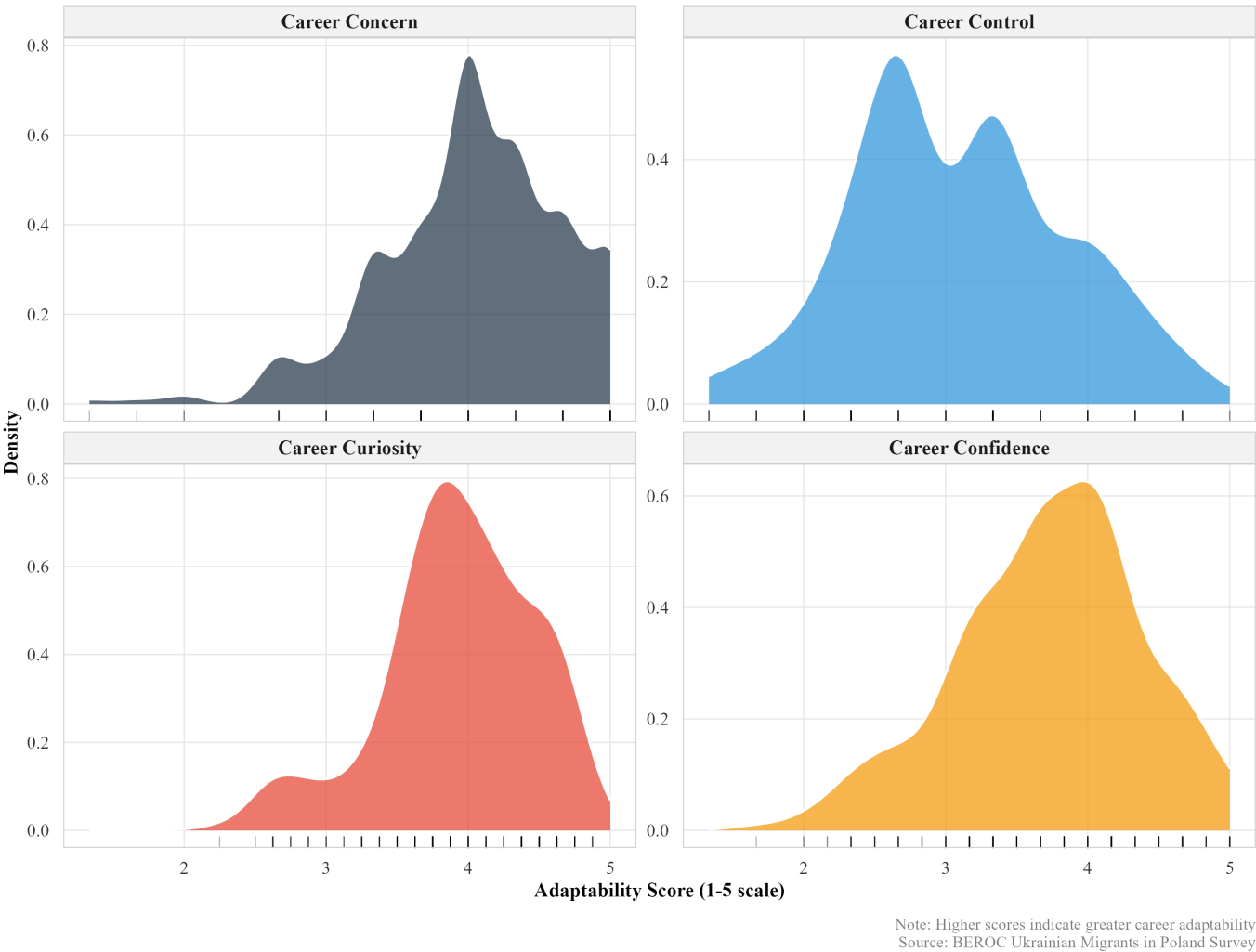


Figure 6.1: Distribution of Career Adaptability Dimensions

Table 6.3: Strategic Approach Preferences—Descriptive Statistics

Strategic Dimension	Mean	SD	Min	Max
Analysis vs. exploration approach (D1)	3.2	2.4	1	7
Clear vs. unclear vision of results (D2)	3.8	2.3	1	7
Control vs. unexpected opportunities (D3)	3.5	2.5	1	7
Important people vs. like-minded people (D4)	3.9	2.2	1	7
Competence vs. adaptive flexibility (D5)	3.4	2.3	1	7
Clear vs. flexible job responsibilities (D6)	3.7	2.4	1	7
Clear vs. general task descriptions (D7)	3.6	2.6	1	7
Defined vs. flexible team roles (D8)	3.0	2.4	1	7

Notes: All variables measured on 1-7 scale. Lower values indicate preference for first option, higher values for second option.

Table 6.4: University Prestige Level Distribution

Prestige Level	N	%
Level 1 (Lowest)	4	2.2
Level 2	3	1.6
Level 3	44	23.9
Level 4	41	22.5
Level 5 (Highest)	20	10.8
No higher education	72	39.1

Notes: Prestige levels based on international rankings, research output, and institutional reputation. N = 184 respondents with complete university data.

Table 6.5: Educational Background by University Type

University Type	N	%
Technical	51	27.8
Comprehensive	26	14.4
Economics	14	7.5
Pedagogical	14	7.8
Medical	6	3.3
Law	4	2.3
Humanities	7	3.9
Agricultural	3	1.7
Other	59	32.4

Notes: Based on respondents with higher education. Some respondents attended multiple universities, so categories may overlap.

Table 6.6: Job Search Methods Used by Ukrainian Migrants

Job Search Method	N	%
Job vacancy announcements	152	50.7
Through friends and acquaintances	131	43.7
Resume databases	64	21.3
Employment service	91	30.3
Through relatives	24	8.0
Through diaspora	9	3.0
Employer invitation	40	13.3
Job fairs/special events	37	12.3
Through education/study projects	6	2.0
Volunteer projects/free services	12	4.0
NGO/club membership	6	2.0
Other methods	24	8.0

Notes: Multiple methods could be selected. N = 300 respondents who provided job search information.

Table 6.7: Previous Career Distribution by Industry

Industry	N	%
Manufacturing	64	21.3
Trade (wholesale/retail)	79	26.3
Other services (transport, etc.)	42	14.0
Education	39	13.0
Construction	30	10.0
IT and programming	33	11.0
Financial services	24	8.0
Tourism, beauty and leisure	24	8.0
Healthcare and social services	15	5.0
Consulting (HR, legal, etc.)	12	4.0
Architecture and Engineering	9	3.0
Advertising/Design/Marketing	15	5.0

Notes: Based on primary career before migration. Multiple careers could be reported. N = 300 respondents with career information.

Career Trajectory Analysis

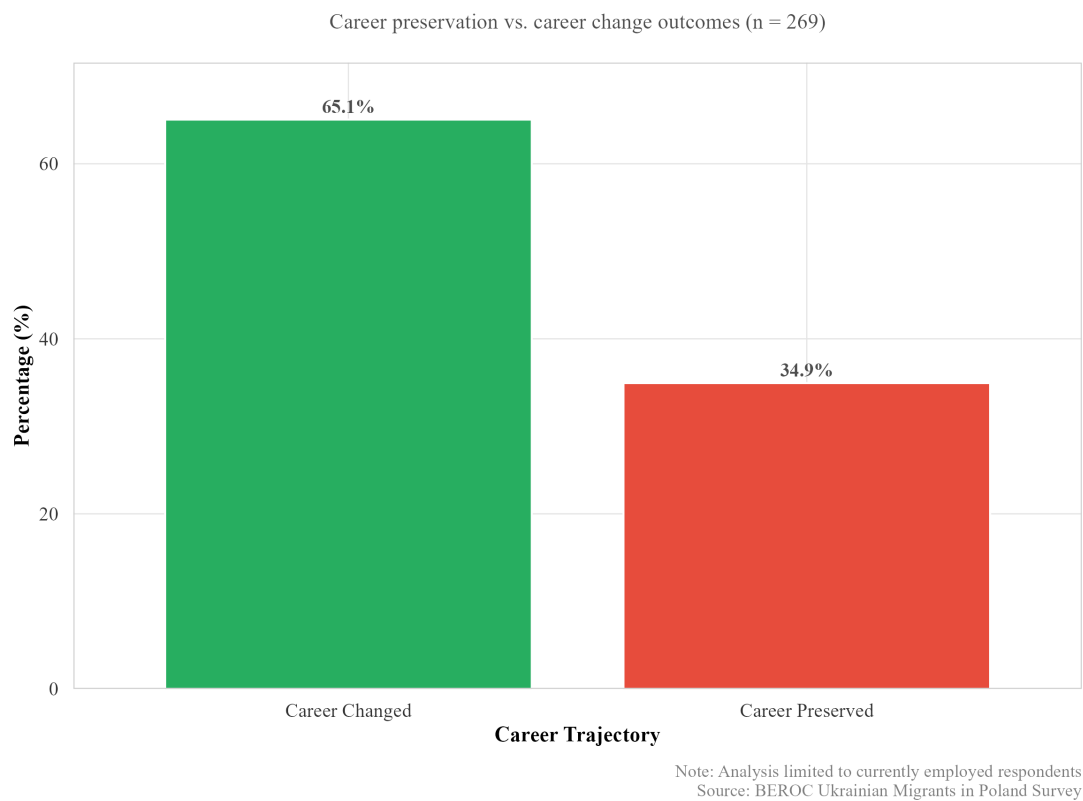


Figure 6.2: Career Trajectory Distribution Among Employed Ukrainian Migrants

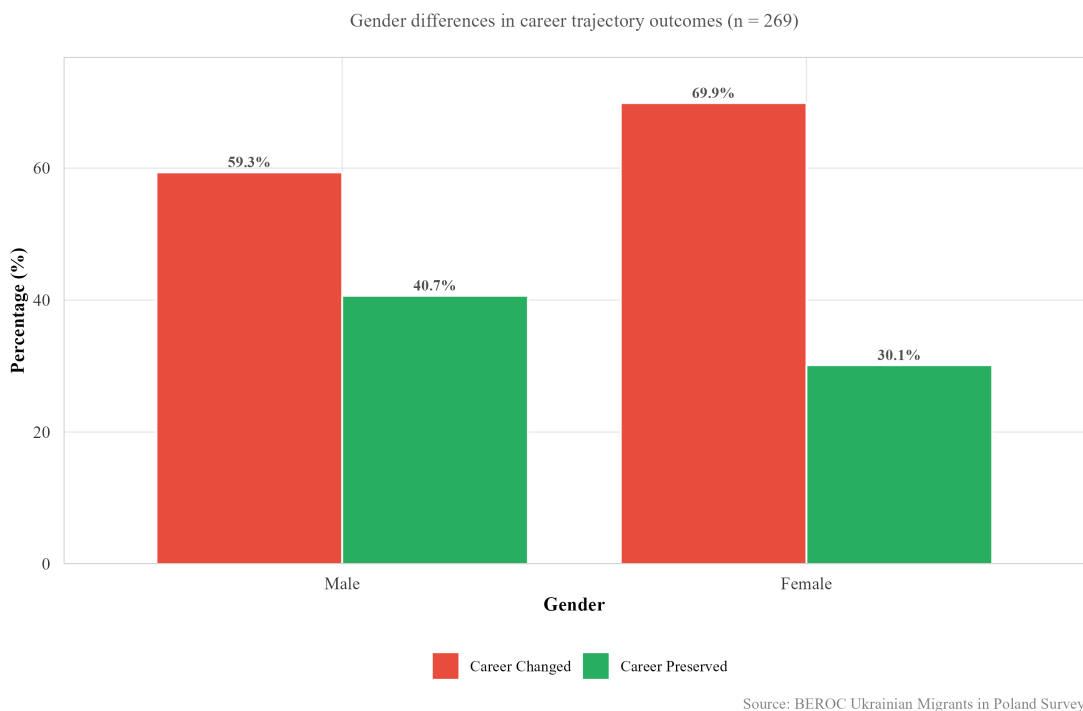
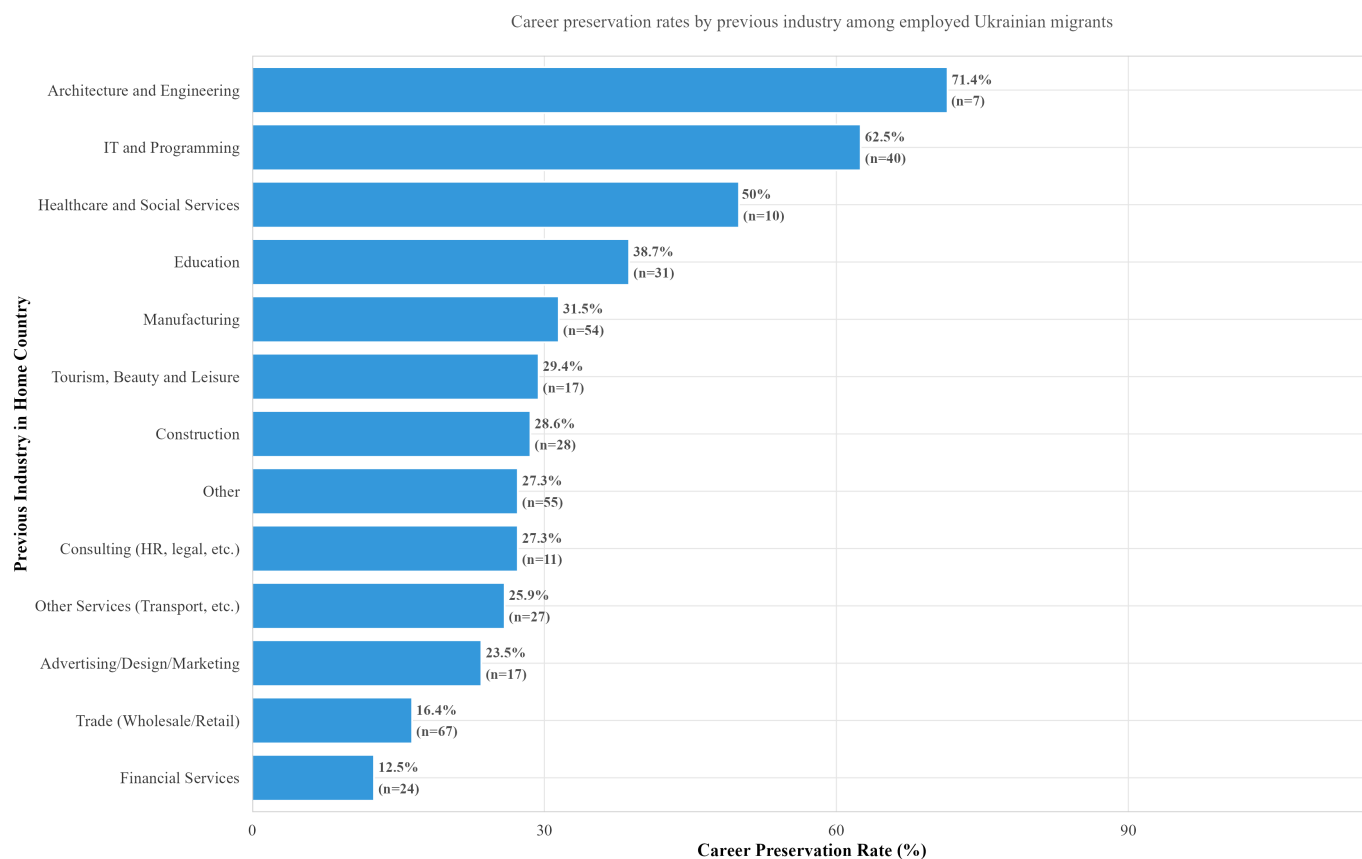


Figure 6.3: Career Trajectory Distribution by Gender

Table 6.8: Career Preservation Rates by University Type

University Type	N	Career Preservation Rate (%)
Medical	8	50.0
Technical	37	45.9
Comprehensive	19	36.8
Economics	10	30.0
Legal	7	28.6
Pedagogical	12	25.0
Humanities	8	25.0
Other	15	33.3

Notes: Career preservation defined as maintaining original profession or staying in same field at lower level. Based on employed migrants with higher education (n=116).



Note: Only industries with 5+ respondents shown. Sample size in parentheses
Source: BERO Ukrainian Migrants in Poland Survey

Figure 6.4: Career Preservation Rates by Previous Industry

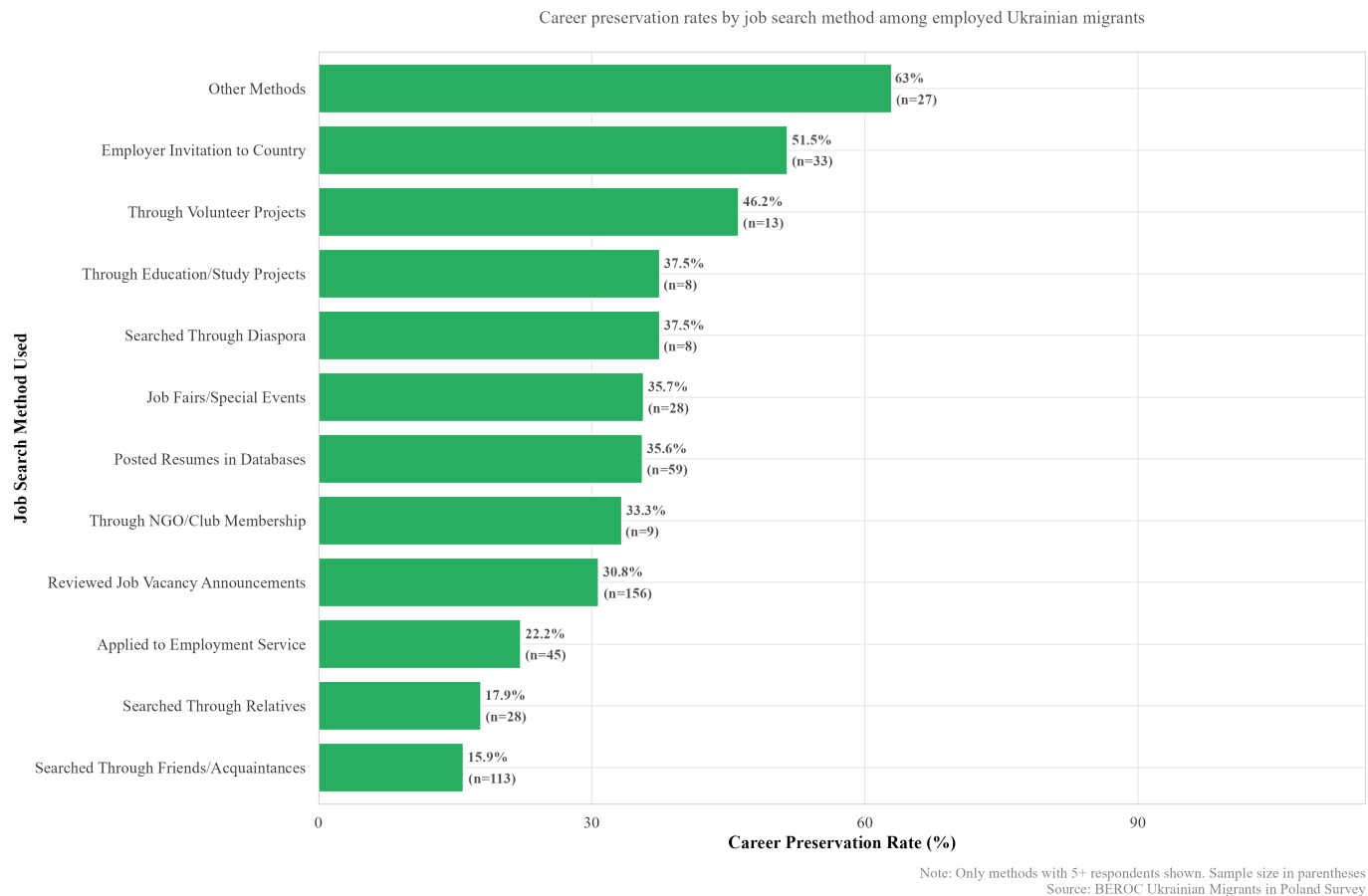


Figure 6.5: Career Preservation Success by Job Search Method

Employment Status Analysis

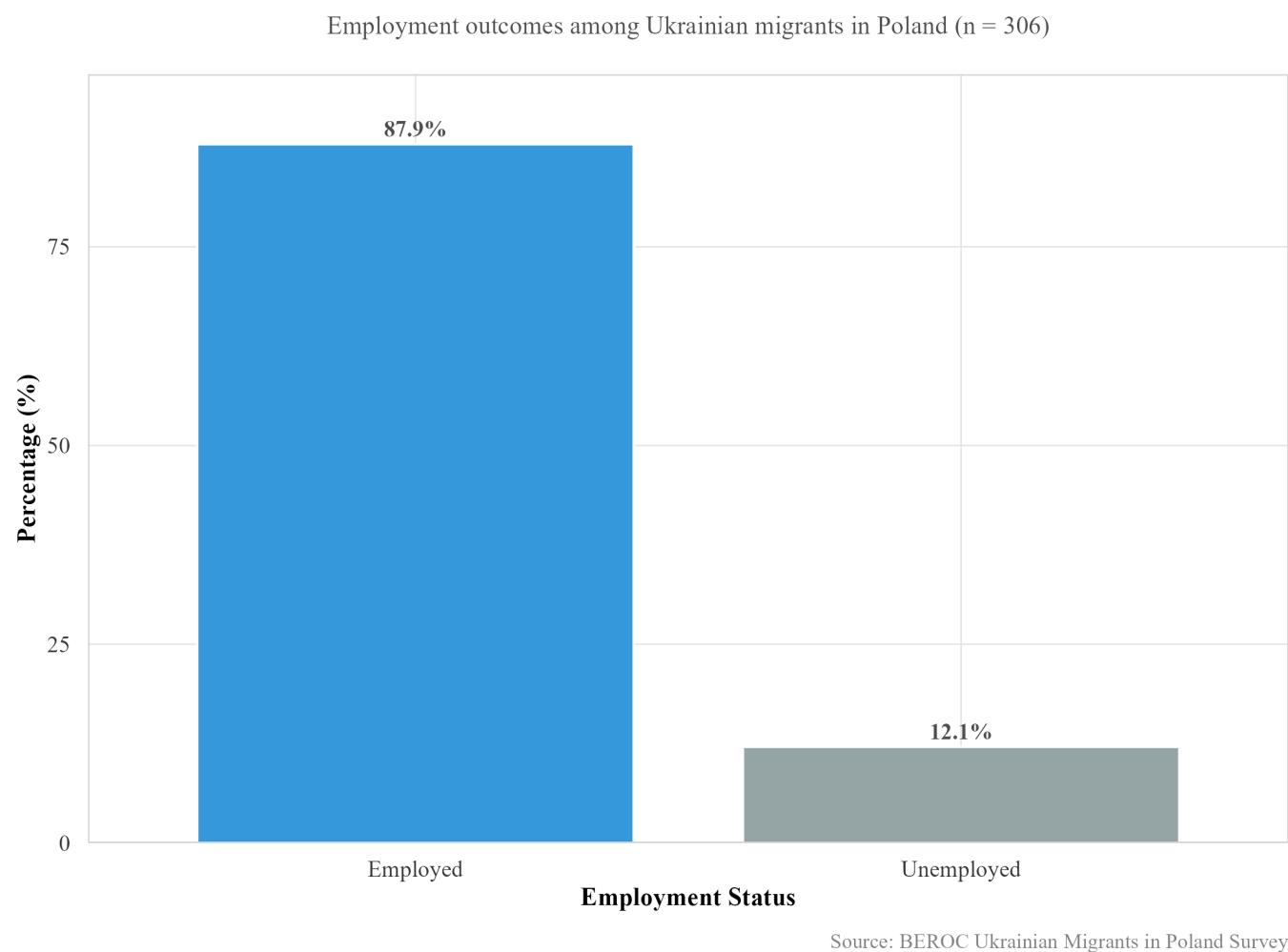


Figure 6.6: Employment Status

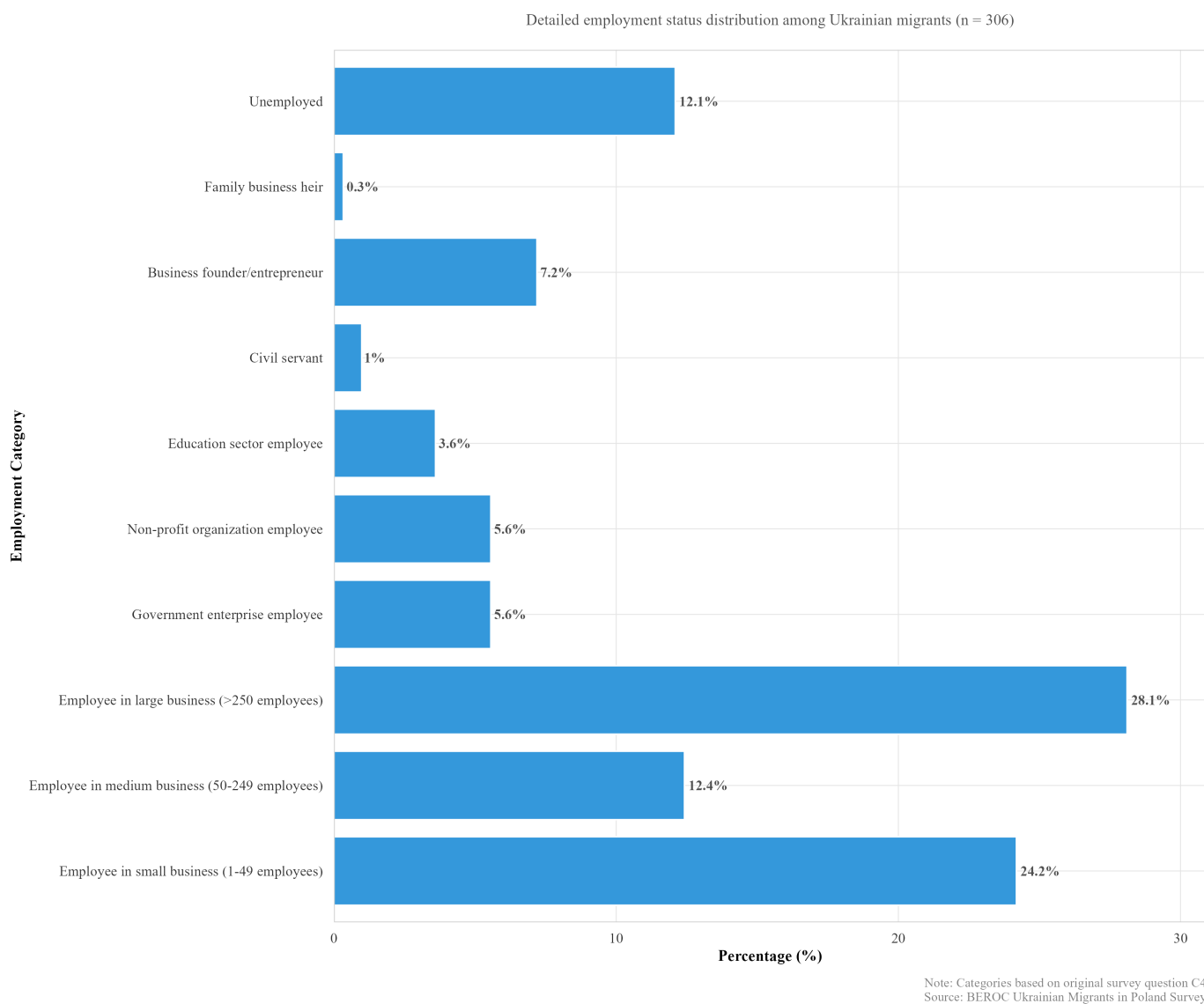
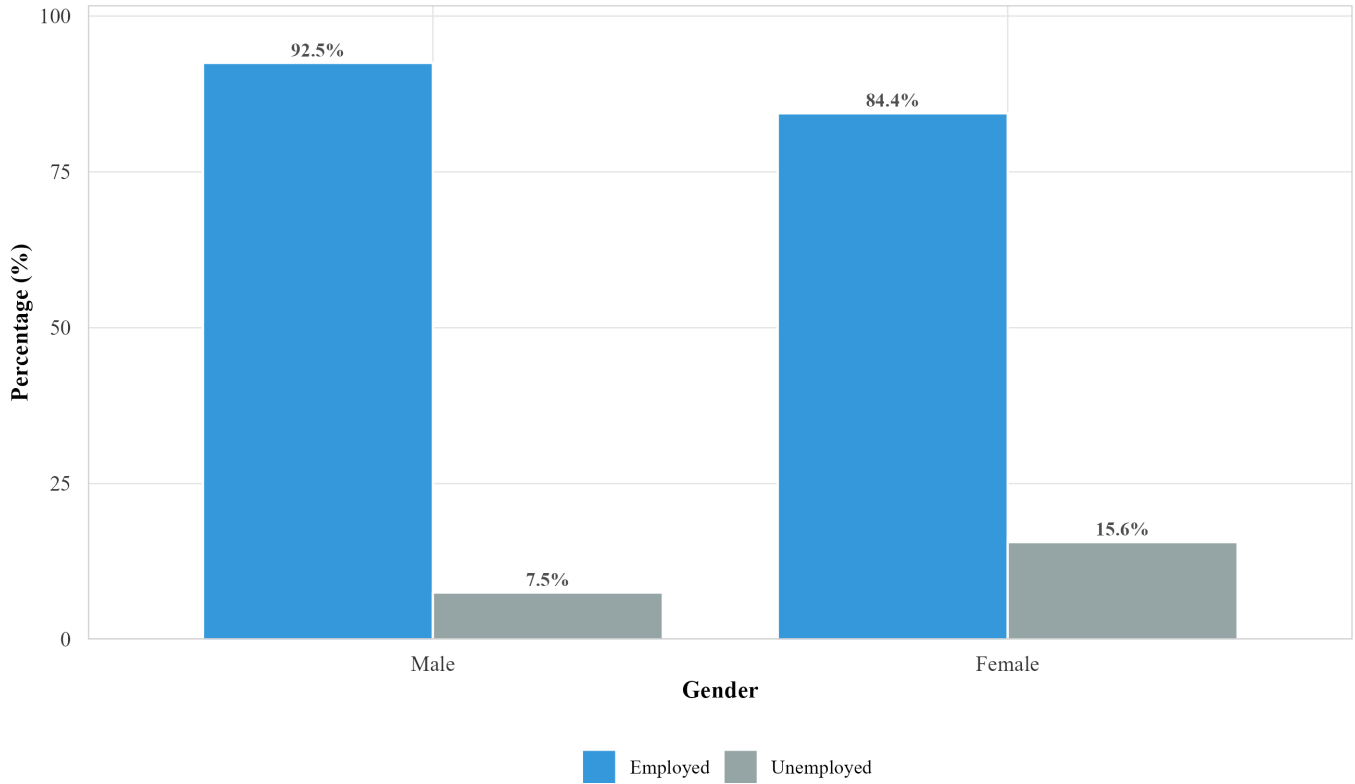


Figure 6.7: Employment Status Detailed

Gender differences in employment outcomes (n = 306)



Source: BERO Ukrainian Migrants in Poland Survey

Figure 6.8: Employment Status by Gender

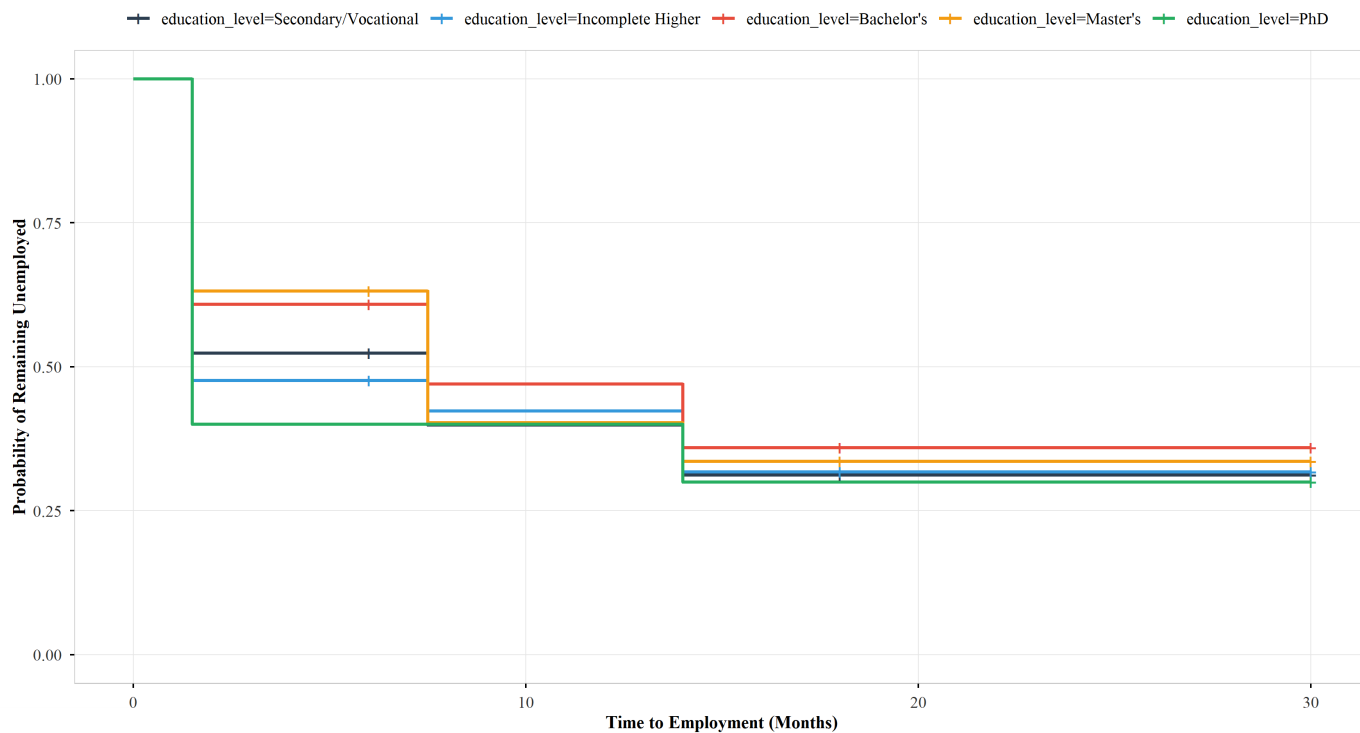
Time to Employment Analysis

Table 6.9: Time to Employment by Key Characteristics

Characteristic	< 3 months (%)	3-12 months (%)	> 12 months (%)
Education Level			
Secondary/Vocational	42.3	38.5	19.2
Bachelor's degree	28.7	45.2	26.1
Master's degree	21.4	42.9	35.7
PhD	12.5	37.5	50.0
Gender			
Male	35.2	41.7	23.1
Female	29.8	43.5	26.7
Previous Industry			
IT	45.5	36.4	18.2
Construction	38.9	44.4	16.7
Manufacturing	34.4	43.8	21.9
Financial Services	20.8	37.5	41.7
Trade	28.6	45.7	25.7

Notes: Based on respondents who found employment (n=200). Percentages may not sum to 100% due to rounding.

Time to employment by educational attainment among Ukrainian migrants



Note: Higher curves indicate longer time to find employment
Source: BERO Ukrainian Migrants in Poland Survey

	Number at risk			
education_level=Secondary/Vocational	84	32	17	17
education_level=Incomplete Higher	21	8	5	5
education_level=Bachelor's	115	51	32	32
education_level=Master's	76	30	16	16
education_level=PhD	10	4	3	3

Figure 6.9: Kaplan-Meier Survival Curves for Employment by Education Level

Model Performance and Diagnostics

Table 6.10: Model Performance Comparison Across Outcomes

Model Specification	N	AIC	BIC	Pseudo R ²	AUC/C-index
Career Preservation					
Demographics	269	328.6	411.3	0.188	0.777
Job Search	269	311.8	434.0	0.300	0.840
Strategic	269	335.6	447.0	0.214	0.794
Adaptability	269	333.2	430.2	0.198	0.785
University	167	239.0	329.4	0.203	0.782
Full	167	220.2	382.3	0.489	0.921
Simplified	269	290.8	373.5	0.297	0.844
Employment Status					
Demographics	306	249.9	335.5	0.096	0.724
Job Search	306	255.9	382.5	0.167	0.789
Strategic	306	251.7	367.1	0.159	0.792
Adaptability	306	253.9	354.4	0.114	0.736
University	186	155.9	249.4	0.202	0.818
Simplified	306	217.2	254.4	0.126	0.793
Time to Employment					
Demographics	200	2119.3	2191.8	0.646	—
Job Search	200	2116.5	2225.3	0.690	—
Strategic	200	2129.7	2228.6	0.655	—
Adaptability	200	2116.0	2201.8	0.665	—
University	121	1173.4	1251.7	0.689	—
Full	121	1192.1	1334.7	0.753	—
Simplified	200	2086.0	2148.6	0.702	—

Notes: AIC = Akaike Information Criterion, BIC = Bayesian Information Criterion. Lower values indicate better fit. AUC = Area Under Curve for logistic models. C-index not reported for Cox models due to censoring.

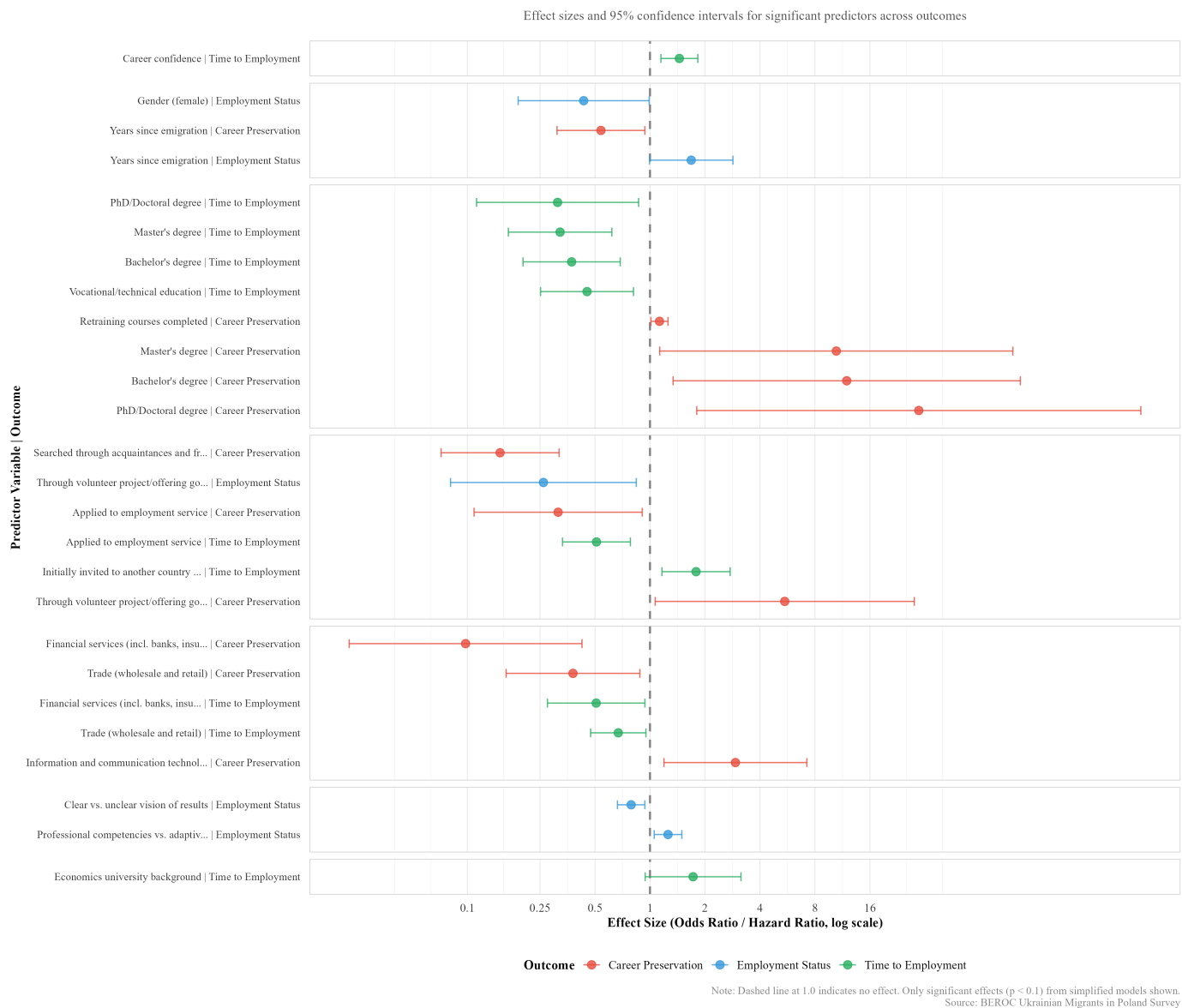


Figure 6.10: Forest Plot: Effect Sizes Across Three Integration Outcomes

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