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Abstract

Improving household welfare remains a central challenge in Egypt, where poverty persists and labor markets are characterized by high levels of informality and a large non-wage sector. Understanding how different forms of labor market mobility translate into economic gains is therefore critical. This paper examines how labor market dynamics across adjacent panel survey waves—including job ladder movements, employment transitions, and shifts in employment status—are associated with household and individual economic mobility. Using 25 years of panel data from the Egypt Labor Market Panel Survey, we analyze four pairs of adjacent waves: 1998–2006, 2006–2012, 2012–2018, and 2018–2023. We find that distinct dimensions of labor market dynamics operate through different channels. Job ladder movements are closely linked to wealth accumulation and gains in formality-adjusted wages. Employment transitions play a central role in shaping individual income dynamics and are particularly important for upward wealth and income mobility at the lower end of the distribution, including exits from poverty. Changes in employment status influence longer-term wealth trajectories and class mobility, with transitions into non-wage activities often associated with more favorable outcomes than wage employment. These results highlight the heterogeneous pathways through which labor markets shape economic mobility and underscore the need for policies that recognize the diversity of employment trajectories.

Keywords: labor market dynamics, job ladder movements, employment transitions, employment status shifts, wealth, consumption, income, wage, economic classes, Egypt

JEL Classifications: J62, O15, I32, J21, J31

ملخص

لا يزال تحسين رفاهية الأسر يمثل تحدياً رئيسياً في مصر؛ حيث يستمر الفقر وتتميز أسواق العمل بارتفاع معدلات القطاع غير الرسمي، وضخامة حجم العمل غير المأجور. ومن هنا، تبرز أهمية فهم كيفية انعكاس أشكال التنقل المختلفة في سوق العمل على تحقيق المكاسب الاقتصادية. تبحث هذه الورقة البحثية في ارتباط ديناميكيات سوق العمل عبر موجات المسوحات التتبعية —بما في ذلك الترقى الوظيفي، والتحويلات بين قطاعات التشغيل، والتغيرات في الوضع المهني— بالحراك الاقتصادي للأسر والأفراد. وباعتماد على بيانات المسح التتبعي لسوق العمل في مصر—على مدار 25 عاماً، قمنا بتحليل أربعة أزواج من الموجات المتتالية: (1998–2006، 2006–2012، 2012–2018، و2018–2023). وقد أظهرت النتائج أن الأبعاد المختلفة لديناميكيات سوق العمل تعمل عبر قنوات متباينة؛ إذ يرتبط الترقى الوظيفي ارتباطاً وثيقاً بتراكم الثروة وزيادة الأجور المعدلة وفقاً لدرجة رسمية العمل. كما تلعب التحويلات في قطاعات التشغيل دوراً محورياً في تشكيل ديناميكيات الدخل الفردي، وتكتسب أهمية خاصة في تعزيز الثروة والحراك الاقتصادي لدى الشرائح الأدنى دخلاً، بما في ذلك الخروج من دائرة الفقر. علاوة على ذلك، تؤثر التغيرات في الوضع المهني على مسارات الثروة والحراك الطبقي على المدى الطويل؛ حيث تقترن التحويلات نحو الأنشطة غير المأجورة في كثير من الأحيان بنتائج أكثر إيجابية مقارنة بالعمل المأجور. وتُبرز هذه النتائج المسارات المتباينة التي تشكّل من خلالها أسواق العمل الحراك الاقتصادي، مما يؤكد الحاجة إلى سياسات تنموية تستوعب تنوع مسارات التشغيل.

1. Introduction

Improving household economic well-being remains a central development challenge in low- and middle-income countries (LMICs) (World Bank 2024). A large share of households in these economies face limited economic security and remain vulnerable to poverty or downward mobility, leaving them highly exposed to economic and health shocks that can severely undermine their welfare (Stefan Dercon 2004; Günther and Harttgen 2009). Although positive macroeconomic development may improve some aggregate indicators, these improvements do not always translate into sustained improvements in household-level outcomes (Ravallion 2012). Many households continue to struggle to achieve stable gains in wealth, income, wages, and consumption, and to move durably out of poverty and vulnerability (Janz et al. 2023). Understanding the mechanisms that enable households to achieve sustained economic mobility therefore remains an important research question.

Labor markets play a fundamental role in shaping household economic mobility (Bandiera et al. 2017). For most households, labor income represents their primary source of livelihood, making employment opportunities and earnings growth key determinants of household welfare (World Bank 2012). Thus, job ladder dynamics—captured by workers’ movements across job tiers, employment formality, transitions between non-wage and wage employment, and transitions into and out of employment—may play an important role in shaping household economic outcomes (Fields et al. 2023; Moscarini and Postel-Vinay 2018). In well-functioning labor markets, workers may gradually move from lower-tier to higher-tier jobs (Haltiwanger et al. 2018), transition from informal to formal employment (Aleksynska et al. 2023; La Porta and Shleifer 2014), or shift from non-wage to wage employment (Sohnesen and Fox 2012), leading to improvements in wages and earnings. This paper seeks to understand how employment transitions across the job ladder and into and out of employment are associated with changes in household income, consumption, and wealth, individual income and wages, and movements across into and out poverty and vulnerability. The analysis highlights the critical importance of having a well-functioning labor market that allows individuals to upgrade their employment situation by undertaking upward transitions and limiting downward transitions and documents the cost in terms of wellbeing in failing to do so.

Egypt provides a particularly relevant setting to examine these dynamics. Poverty remains relatively widespread, highlighting the urgency of improving household economic welfare (El-Sayed, Mona et al. 2024). The Egyptian labor market is characterized by a high degree of informality that includes both informal non-wage workers—such as unregistered employers and self-employed workers and contributing family workers—and informal wage workers employed in unregistered firms, as irregular workers without strong employer attachments, or without social insurance coverage in formal firms (Assaad and Mahmoud 2024). Consistent with this pattern, social insurance coverage—commonly used to identify formality among wage workers—declined

from 52% in 1998 to about 30% in 2023 (Assaad and Mahmoud 2024; Krafft and Hannafi 2023).⁵ Moreover, in a context of steadily declining public sector employment, access to formal employment has become more limited, increasingly unequal, and strongly linked to social class (Assaad, Krafft, and Salemi 2022; Assaad and Krafft 2021; Krafft, Assaad, Rahman, et al. 2024). The literature on Egypt has also documented an increasingly inability to translate higher educational attainment and skill acquisition into higher skilled jobs and growing overqualification of workers relative to the jobs they hold (Binzel and Carvalho 2017; Krafft and Montalvo 2026; Roushdy and ElKhouly 2024). If these features point to a “broken” job ladder, it is essential to understand how this inability to upgrade one’s employment limits household and individual economic mobility.

Egypt's welfare landscape over the past decades has been shaped by successive structural shocks, policy reforms, and demographic pressures. Understanding these dynamics is essential context for examining how labor market mobility translates into household welfare gains. Egypt's national poverty rate has followed a broadly upward trend over the study period of 1998-2023, punctuated by brief periods of improvement. By 2015, the national poverty rate had reached approximately 27.8 percent, and by 2018 it reached 32.5% (The New Arab 2019) following the 2016 currency depreciation. In November 2016, Egypt floated its currency as part of an IMF Extended Fund Facility, triggering a sharp depreciation and an immediate surge in domestic prices (Alazzawi and Hlasny 2025). Research on the welfare effects of this devaluation documents rapid pass-through to consumer prices — approximately 4.5% within the first month and 15.5% within six months — with disproportionate impacts on poor households whose expenditure is concentrated in food and tradable goods. The resulting compression of real incomes reversed much of the poverty reduction achieved in the preceding years (Alazzawi and Hlasny 2025). The COVID-19 pandemic disrupted labor markets, particularly in tourism and informal employment, and constrained household incomes (Assaad, Krafft, Marouani, et al. 2022).

Beginning in early 2022, Egypt entered a period of accelerated inflation and currency depreciation driven by the compounding effects of Russia's invasion of Ukraine, tightening global financial conditions, and successive currency depreciations (World Bank 2023). Egypt's heavy dependence on grain imports — accounting for 58% of domestic demand in FY2021/22 — made it acutely vulnerable to global wheat price shocks (Zaki 2024). For the poorest households, who allocate more than 40% of their budgets to food based on 2021/22 household data, this translated into severe real income losses. The official poverty rate reached 33.5% by 2021/22 (World Bank 2025), and the accelerating inflation in 2022 and 2023 is expected to have increased poverty rates beyond this level. Regional disparities persist as rural Upper Egypt consistently recording poverty rates that are around two times the national average (World Bank 2019, 2023).

⁵ Using a different data source, Assaad and Wahby (2025) document a similar declining trend but from different starting levels.

Egypt's national Multidimensional Poverty Index (MPI) provides a richer portrait of deprivation than monetary measures alone. In 2021/22, approximately 21% of Egypt's population was classified as multidimensionally poor (ESCWA et al. 2024). The index encompasses 19 weighted indicators across seven dimensions — education, health, housing, basic services, employment, social protection, and food security — and reveals that employment deprivation is among the most important contributors to overall multidimensional poverty, accounting for 19% of the MPI, on par with deprivation in services. A household is considered deprived in the employment dimension if any working-age member (aged 15–64) in the labor force is unemployed and actively seeking work, or if a working member is employed without a formal contract or social insurance coverage — a condition that captures the depth of informality in Egypt's labor market. Multidimensional poverty was markedly more concentrated in rural areas, where 28% of the population was multidimensionally poor — more than twice the 12% rate in urban areas — mirroring the spatial patterns observed in monetary poverty measures and reinforcing the importance of understanding geographic heterogeneity in labor market outcomes (ESCWA et al. 2024).

The persistence of poverty in Egypt underscores why labor market structure matters so profoundly for household welfare. In an economy characterized by high informality, a large non-wage sector, and limited ability to capitalize on one's education and skills, the welfare implications of employment transitions are not straightforward. Movements along the job ladder, transitions between employment tiers, and shifts in employment status — wage versus non-wage, formal versus informal — may each operate through distinct channels with different implications for income stability, wealth accumulation, and resilience to external shocks. The macroeconomic context, including repeated inflationary episodes, exchange rate changes, and fiscal consolidation, also shapes the returns to labor market mobility. Disentangling these dynamics across a panel period provides the empirical foundation for assessing the welfare payoffs or costs of different labor market trajectories in Egypt.

Despite the importance of job ladder dynamics for household economic mobility, existing research has largely examined labor market dynamics and household welfare separately. A large body of literature studies employment transitions, informality, and labor market segmentation in developing economies, including Egypt, documenting the determinants and patterns of workers' movements across employment states (Krafft, Assaad, Helmy, and Armas-Montalvo 2026; Krafft, Assaad, Helmy, and Avendano 2026; Tansel and Ozdemir 2019). Another strand of research documents poverty dynamics, household vulnerability to economic shocks, and the determinants of welfare changes over time (S. Dercon 2006). However, relatively little empirical work in developing country contexts directly connects workers' employment transitions to changes in household and individual-level economic outcomes — and even where such connections are made, both dimensions tend to be incomplete.

On the employment transition side, existing studies typically examine one type of transition in isolation: either the wage consequences of job-to-job mobility in high-income country contexts that may not generalize to developing economies with large informal sectors (Haltiwanger et al. 2018), or the individual labor income consequences of formal–informal transitions (Aleksynska et al. 2023), or earnings differentials between wage and non-wage workers (La Porta and Shleifer 2014) — without considering the full spectrum of job ladder dynamics simultaneously. On the economic outcome side, even the existing studies tend to focus on a single dimension of welfare, typically individual labor earnings, without examining the broader household-level consequences for consumption, wealth accumulation, and movements across the welfare distribution (Gardeazabal and Polo-Muro 2025). As a result, it remains unclear to what extent, and through what kinds of employment transitions, job ladder dynamics jointly shape household income, consumption, wealth accumulation, and movements across the welfare distribution, including the exit and entry into poverty and upward and downward class mobility.

This paper addresses this gap by examining how job ladder dynamics shape household economic mobility in Egypt. Using longitudinal data, we analyze how workers’ employment transitions—including movements across job tiers, transitions between non-wage and wage employment, and shifts into formal and informal employment—affect key household and individual economic outcomes such as income, wages, consumption, and wealth. We further examine how labor market transitions translate into changes in household economic status, including exiting and entering poverty, moving upward from vulnerability, and experiencing upward or downward mobility from the middle class, with these categories defined by specific thresholds along the wealth and income distributions.

This paper contributes to the literature in several ways. First, it provides new evidence on job ladder dynamics in a developing country context characterized by high informality and segmented labor markets. While previous studies have documented labor market transitions in Egypt (AlAzzawi and Hlasny 2023; Krafft, Assaad, Helmy, and Armas-Montalvo 2026; Tansel and Ozdemir 2019), relatively little is known about how these transitions translate into changes in household economic well-being. Second, this paper directly links individual employment trajectories to household and individual-level economic outcomes, including income, wages, consumption, and wealth and dynamics into and out of poverty and vulnerability. By doing so, it bridges two strands of literature that have largely been studied separately: labor market dynamics and household economic mobility. Third, by examining transitions across job tiers, employment formality, and non-wage and wage employment, the paper provides new insights into how labor market structures may shape households’ ability to achieve sustained economic mobility in contexts with large informal sectors.

The remainder of the paper proceeds as follows. Section 2 introduces the data and outcomes and covariates. Section 3 describes the empirical strategy. Section 4 presents the main results on the

relationship between job ladder transitions and household economic mobility. Section 5 discusses the implications of the findings and concludes.

2. Data

2.1. Survey

This paper uses data from the Egypt Labor Market Panel Survey (ELMPS), a longitudinal survey that has five waves so far (1998, 2006, 2012, 2018, and 2023). The ELMPS is nationally representative when sampling weights are applied (Assaad and Krafft 2024; OAMDI 2024). The ELMPS tracks households and individuals over time, including those who split to form new households, and incorporates refresher samples in each wave to maintain representativeness. The survey contains rich information at both the individual and household levels, including detailed demographic characteristics and labor market outcomes. All waves of the ELMPS collect information about wages for wage workers, and employment and job characteristics that allow for the determination of formality status and skill requirements of jobs. All waves include information on housing conditions and durable goods that permit the construction of a wealth index as described below. Information on full household and individual income sources, including self-employment income and transfers, was only collected starting with the 2012 wave. Finally, the ELMPS does not collect household consumption data, so for the consumption outcome, we use imputed data derived from survey-to survey imputation methods as described below.

2.2. Analytical sample

Given the focus on how dynamic changes in the job ladder relate to economic mobility, we construct the analytical sample using pairs of adjacent survey waves. Specifically, we form four pairs of adjacent waves: 1998–2006, 2006–2012, 2012–2018, and 2018–2023, retaining individuals observed in any pair of adjacent waves. Individuals may be in our data multiple times if observed in three or more waves. We further restrict the sample to individuals aged 15 to 59 in the second of the two waves, capturing Egypt's core working-age population most relevant for labor market transitions and economic mobility. Since the window between waves ranges from five to eight years, we observe transitions by comparing the origin and destination states and ignore any churn in between. This limitation could be particularly relevant for employment states that experience frequent change, such as moves between casual wage work and self-employment.

In some instances, individuals split off to form new households between waves. These individuals are tracked and their entire new household is included in the sample. By necessity the latter household outcomes for these individuals will refer to those of their new household not their origin households and may be reflected in the changes we observe. Several considerations argue in favor of observing household changes in this way. First, since most of these splits in the Egyptian context

are due to marriage, intergenerational transfers at marriage ensure that married children maintain similar welfare levels to their parents even when they form their own households (Assaad and Krafft 2015a, 2015b). Second, the ability to marry (and therefore split) is often endogenous to changes in labor market status (Krafft and Assaad 2020), suggesting that splits could be an intermediate variable between labor market transitions and economic outcomes.

2.3. Outcomes

The outcomes are economic mobility, measured as adjacent-wave changes in economic status. Specifically, we examine changes in individuals' percentile ranks within the distributions of household wealth, household per-capita income, individual income, wages, and household consumption. In addition, we analyze transitions across household economic classes (based on thresholds in the distribution of household wealth or income), including exits from and entry into poverty, movements in and out of poverty or vulnerability, and upward and downward mobility from the middle class. We describe each of these outcomes in more detail below.

Variables that are used in the construction of the household wealth index are observed for nearly all individuals in all survey waves.⁶ The wealth index is constructed separately for each wave using factor analysis on variables indicating household ownership of various durables and housing characteristics using a method proposed by Filmer and Pritchett (2001). Within each wave, individuals are ranked by their position in the household wealth distribution, and adjacent-wave changes in percentile rank are then computed.

Household per-capita income and individual income are available only in the 2012, 2018, and 2023 waves,⁷ when detailed income modules were administered. Both income measures include wage earnings, non-wage earnings, and transfers.⁸ Wage earnings, household enterprise, agricultural, transfer, and other non-labor income are converted to monthly values before being incorporated into total income. Household per-capita income is calculated by summing all income components at the household level and dividing by household size. Individual income combines directly observed individual wage earnings with allocated shares of household-level income sources. Household enterprise income is distributed among participating household members based on their relative contribution, proxied by hours worked and predicted wages. Agricultural income is allocated to individuals engaged in agricultural activities, with equal sharing when individual

⁶There are no missing observations on the wealth index in 1998, 2006, or 2012 and only 4 out of 33,795 and 21 out of 38,805 are missing in 2018 and 2023, respectively, for the sample of individuals 15-59 years of age. The wealth index is provided in the public-use data of the various ELMPS waves.

⁷ Among individuals aged 15–59, household per-capita income is calculated for all sample members in 2012 (N=27,195), 2018 (N=33,795), and 2023 (N=38,805). Individual income is fully observed in 2012 and has minimal missingness in 2018 (73 of 33,759 observations) and 2023 (95 of 38,805 observations).

⁸ See Krafft and Davis (2021) and El-Sayed et al. (2024) for detailed descriptions of income components in the ELMPS.

contributions cannot be observed. Transfers and other non-labor income are assigned to reported recipients and, when unspecified, to the household head. Percentile ranks are defined within wave, and changes are computed across adjacent waves for which income is observed.

Individual wages are observed in all survey waves but only for wage workers.⁹ The analysis considers both monthly wages and formality-adjusted monthly wages (based on both primary and secondary jobs). The latter is constructed by scaling wages for formally employed workers to account for differences between formal and informal employment, as formal jobs provide substantial non-wage benefits, such as social insurance. We double formal workers' wages as proposed by Assaad (1999). As with other outcomes, wage percentile ranks are constructed within each wave, and adjacent-wave changes are computed.

Household consumption is not directly measured in the ELMPS. Plausible values of consumption are imputed using survey-to-survey methods, drawing on proximate waves of the Egyptian Household Income, Expenditure, and Consumption Survey (HIECS) as described in Krafft et al., (2019) but updated to the 2023 wave of the ELMPS by Assaad et al. (2026) using machine-learning techniques. One hundred stochastic imputations of household consumption are generated for each household in each of the ELMPS waves from 1998 to 2023. The imputations preserve the variance of the consumption distribution. Imputed consumption is then converted into within-wave percentile ranks and adjacent-wave percentile differences are computed. Thus, for each household and each adjacent-wave pair, there are 10,000 percentile differences (100×100), corresponding to all pairwise combinations of imputations across the two waves. Bootstrapping is used to produce regression coefficient estimates across the 10,000 plausible values as explained in the method section below.

Household economic class is defined using the within-wave distribution of household wealth; as a sensitivity analysis, we also construct classes using household per-capita income. Households are classified into four groups: poor (bottom 20 percent), vulnerable (>20th–40th percentile), middle class (>40th–80th percentile), and affluent (top 20 percent). We examine economic class transitions between adjacent survey waves using four binary mobility outcomes conditional on initial class status: (1) exiting poverty (versus remaining poor, among those initially poor); (2) exiting poverty or vulnerability (versus remaining poor or vulnerable, among those initially poor or vulnerable); (3) entering poverty (versus remaining vulnerable, middle class, or affluent, among those initially non-poor); and (4) entering poverty or vulnerability (versus remaining middle class or affluent, among those initially middle class or affluent). Each indicator is coded as 100 if the specified transition occurs and 0 otherwise. In addition, among individuals initially in the middle

⁹ In the sample of individuals aged 15-59, wage workers with observed wages are 4,678 observations out of 14,092 in 1998; 7,222 out of 21,932 in 2006; 9,745 out of 27,195 in 2012; 10,355 out of 33,759 in 2018; and 9,914 out of 38,805 in 2023.

class, we construct a three-category mobility outcome that distinguishes downward mobility (to poor or vulnerable status), upward mobility (to affluent status), and remaining in the middle class.

2.4. Covariates

To construct the main explanatory variables, we first define the job ladder based on employment status, formality, and skill level (see Krafft, Assaad, Helmy, and Armas-Montalvo 2026 for further details). Employment status distinguishes non-employment, wage employment, and non-wage employment, where non-wage employment includes employers, the self-employed, and contributing family workers. Formality is defined in accordance with the resolutions of the 21st International Conference of Labor Statisticians (ICLS-21) (ILO 2023). The classification is conditional on employment status. For non-wage workers, jobs are classified as formal if their enterprise is registered. For wage workers, jobs are considered formal if they are covered by social insurance. Informal employment is further broken down into two tiers based on skill level. Upper-tier informal jobs include those requiring any craft skill (including craftsmen, apprentices, and assistants), or occupations classified as managerial, professional, technician, or associate professional, while the remaining informal jobs are classified as lower-tier informal jobs. Combining these dimensions yields seven job ladder categories: formal non-wage employment, formal wage employment, upper-tier informal non-wage employment, upper-tier informal wage employment, lower-tier informal non-wage employment, lower-tier informal wage employment, and non-employment.

Based on this classification, we construct measures of job ladder mobility between adjacent survey waves along three dimensions. First, the analysis defines upward and downward transitions across job ladder rungs (formal, upper-tier informal, lower-tier informal). Upward mobility is defined as movement to a higher-tier category or movement from informal to formal employment. Downward mobility is defined as movement to a lower-tier category or from formal to informal employment. The reference group consists of individuals with no upward or downward movement, including those experiencing non-employment transitions. Second, the analysis includes employment transitions distinguishing employment stayers (the reference group), entry into employment, exit from employment, and non-employment stayers. Third, it includes transitions between wage and non-wage employment statuses, with all else serving as the reference category. Together, these variables characterize mobility across job ladder rungs, employment statuses, and employment.

We estimate specifications both with and without individual fixed effects (FE). The FE specifications absorb time-invariant unobservable individual characteristics, such as ability, preferences, and baseline socioeconomic status. To address potential confounding from contemporaneous household and labor market dynamics, these models additionally control for adjacent-wave changes in household size, marital status (i.e., transitions between not married—including less than minimum age, never married, contractually married, divorced, and widowed—

and married), and main breadwinner status within the household. Main breadwinner status is defined as the household member with the highest monthly wage income or, where applicable, the primary person in the household's first enterprise (with ties broken first by age and then by household roster order).

In specifications without individual fixed effects, we instead include a rich set of lagged (previous-wave) covariates, including sex; age group (<15, 15–24, 25–29, 30–39, 40–49, 50+); education group (illiterate, reads and writes, primary, preparatory, general secondary, vocational secondary, post-secondary institute, and university or above); marital status (never married, ever married); the interaction between sex and marital status; main breadwinner status; region (Greater Cairo, Alexandria and Suez Canal, urban Lower Egypt, urban Upper Egypt, rural Lower Egypt, and rural Upper Egypt); parental education (number of parents with secondary or higher education in the previous wave); household size; and its squared term.

3. Methods

3.1. Main models

We estimate the relationship between adjacent-wave job mobility and changes in economic outcomes using two complementary specifications: (eq. 1) with individual fixed effects and (eq. 2) without:

$$Y_{i,t-1,t} = \beta_0 + \beta'_1 UpDown_{i,t-1,t} + \beta'_2 Emp_{i,t-1,t} + \beta'_3 EmpStatus_{i,t-1,t} + \beta'_4 DynamicControls_{i,t-1,t} + \alpha_i + \lambda_{t-1,t} + \varepsilon_{i,t-1,t} \quad (1)$$

$$Y_{i,t-1,t} = \gamma_0 + \gamma'_1 UpDown_{i,t-1,t} + \gamma'_2 Emp_{i,t-1,t} + \gamma'_3 EmpStatus_{i,t-1,t} + \gamma'_4 LagControls_{i,t-1} + \lambda_{t-1,t} + \varepsilon_{i,t-1,t} \quad (2)$$

In both specifications, $Y_{i,t-1,t}$ denotes the adjacent-wave change in the outcome for individual i (e.g., percentile-rank changes in household wealth, household per-capita income, individual income, wages, household consumption, and indicators of economic class transitions). $UpDown_{i,t-1,t}$ is a categorical indicator capturing upward and downward job mobility categories for individual i between the previous wave $t-1$ and current wave t , with the reference category being no upward or downward movement (including non-employment transitions). $Emp_{i,t-1,t}$ captures employment transitions for individual i between the previous wave $t-1$ and current wave t , including employment stayers (reference group), enter employment, exit employment, and non-employment stayers. $EmpStatus_{i,t-1,t}$ captures wage versus non-wage employment status transitions, including non-wage stayers (reference group), non-wage to wage, wage to non-wage,

and wage stayers. Moreover, both specifications include adjacent-wave fixed effects $\lambda_{t-1,t}$ to capture aggregate shocks common to all individuals. Standard errors are clustered at the individual level, and adjacent-wave panel weights are applied throughout.

Specification (1) includes individual fixed effects α_i , which absorb time-invariant heterogeneity. It also controls for contemporaneous changes in household composition through $DynamicControls_{i,t-1,t}$, including changes in household size, marital status, main breadwinner status. Specification (2) excludes individual fixed effects and instead includes a rich set of baseline covariates $LagControls_{i,t-1}$, including sex, age group, education group, marital status, the interaction between sex and marital status, main breadwinner status, region, parental education, household size, and its squared term.

Outcome characteristics vary in terms of sample restrictions (e.g., wage earners only), data construction (observed versus imputed), and variable type (continuous, binary, or categorical). Accordingly, we estimate different specifications across outcomes. Continuous outcomes (e.g., percentile changes in wealth, income, wages, and consumption) are estimated using both specifications. When the outcome is individual wages, $Emp_{i,t-1,t}$ and $EmpStatus_{i,t-1,t}$ are excluded, as wage earners are, by definition, in wage employment and employment status transitions are not applicable.

For binary transition outcomes (exiting poverty, exiting poverty or vulnerability, entering poverty, and entering poverty or vulnerability), we estimate linear probability models using OLS without individual fixed effects, since requiring individuals to be observed in two pairs of adjacent waves in the same status necessarily means they did not transition in our setup.

Finally, for the categorical outcome capturing upward and downward mobility from the middle class, we estimate a multinomial logit model:

$$\Pr(Y_{i,t-1,t} = j | X_{i,t-1,t}, LagControls_{i,t-1}, Y_{i,t-1} = Middle) = \frac{e^{\rho'_j X_{i,t-1,t} + \delta'_j LagControls_{i,t-1} + \zeta_{t-1,t}}}{1 + \sum_{k=1}^K e^{\rho'_k X_{i,t-1,t} + \delta'_k LagControls_{i,t-1} + \zeta_{t-1,t}}}, \quad j = 1, 2, \dots, K \quad (3)$$

Where $Y_{i,t-1} = Middle$ denotes the household belongs to the middle economic class in the previous wave. Conditional on being middle class at $t - 1$, $Y_{i,t-1,t} = j$ captures the household's subsequent class transition between $t - 1$ and t , with $K=3$ categories of downward mobility, stability, and upward mobility. $X_{i,t-1,t}$ denotes three sets of main explanatory variables: indicators for upward and downward job ladder movements, employment transitions (entry, exit, and employed stayer or non-employed stayer), and employment-status transitions (wage-to-non-wage

and non-wage-to-wage), defined consistently with specifications (1) and (2). $LagControls_{i,t-1}$ are baseline covariates same as specification (2), and $\zeta_{t,t-1}$ captures adjacent-wave fixed effects.

Notably, for the household consumption outcome, which is imputed, we use the 100 plausible values of household consumption per wave to compute 10,000 plausible imputed percentile differences per household for each adjacent-wave pair described above. For each of these 10,000 plausible values, we estimate the corresponding specification and implement a bootstrap procedure with resampling clustered at the individual level. We then aggregate the estimates across imputations by pooling the bootstrap results, yielding a single set of point estimates and standard errors that incorporate both sampling variability and imputation uncertainty.

3.2. Heterogeneity analyses

To explore heterogeneous effects across population groups, we conduct heterogeneity analyses along four key dimensions. First, we examine heterogeneity by sex. Gender disparities in Egypt’s labor market are substantial, with women facing lower labor force participation and employment rates, higher concentration in the public sector, and more constrained job mobility than men (Assaad and Mahmoud 2024; Krafft 2025; Krafft, Assaad, and McKillip 2024). These differences may translate into distinct mobility patterns and economic returns to job transitions. Second, we analyze heterogeneity by education, classifying individuals based on their education level in the previous wave into three groups: less than secondary, secondary, and higher education. Education shapes access to formal employment and labor market segmentation in Egypt, with higher-educated individuals more likely to secure stable and formal jobs (Assaad and Krafft 2023). Third, we consider heterogeneity by age cohort, classifying individuals based on their age in the previous wave into three groups: young (15–24), prime-age (25–39), and older (40+). Life-cycle theory suggests that job mobility and its returns vary systematically across age groups, with younger workers experiencing more frequent transitions but greater instability, and older workers facing lower mobility but potentially higher returns to accumulated experience (Assaad and Krafft 2023; Krafft, Assaad, and McKillip 2024). Fourth, we examine regional heterogeneity across urban and rural areas. Egypt exhibits substantial spatial disparities in economic structure and access to opportunities, particularly between urban and rural areas (Assaad and Krafft 2013; Keo et al. 2022). All heterogeneity analyses use the specification without individual fixed effects but with controls. Finally, we examine heterogeneity by main breadwinner status. As the primary contributor to household income, the main breadwinner is likely to have a disproportionate influence on household economic well-being. Changes in employment status or position within the job ladder may therefore translate more directly into changes in household wealth, income, and economic mobility when experienced by the breadwinner than when experienced by other household members. Differences in labor market attachment, earnings potential, and household responsibilities may further contribute to heterogeneous effects across breadwinner and non-breadwinner household members.

3.3. Sensitivity analyses

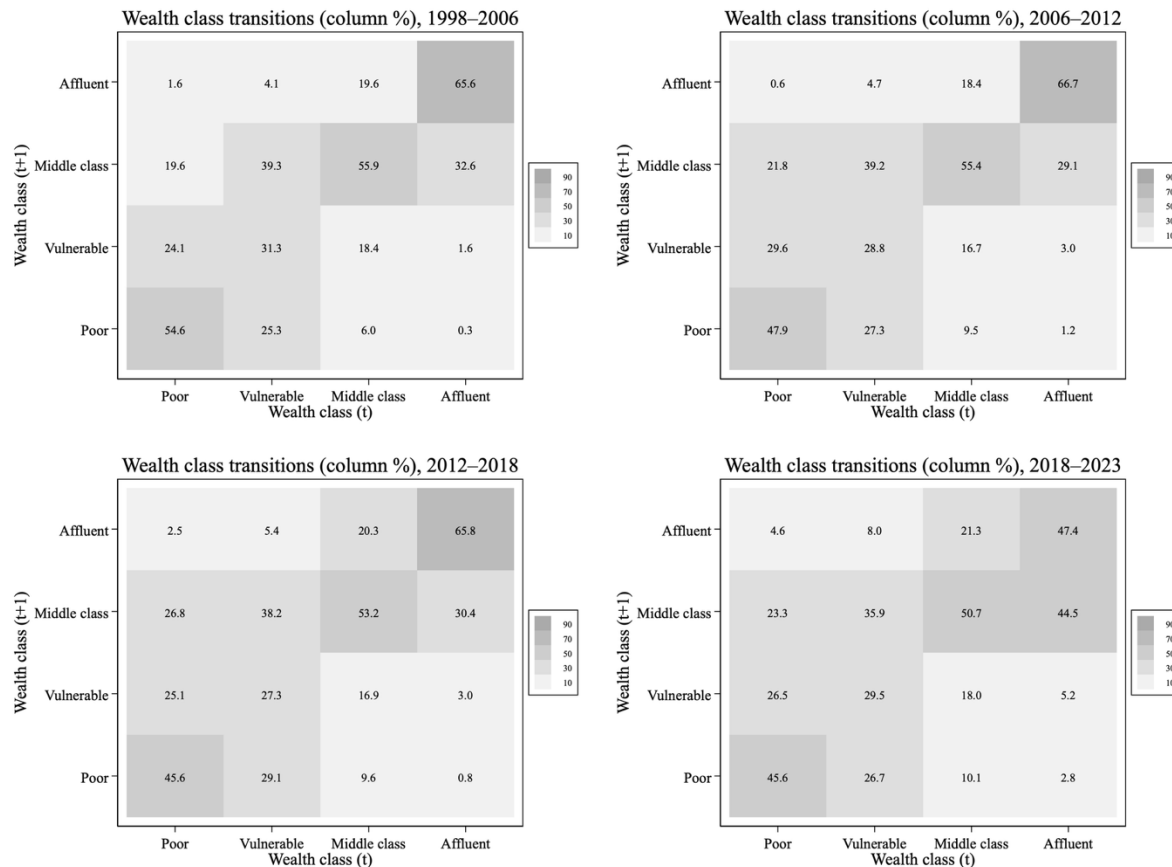
To assess the sensitivity of our results, we first re-estimate the models without control variables, thereby focusing on the unconditional relationship between job mobility and outcome changes. We also repeat our heterogeneity analyses using specifications with individual fixed effects for the continuous outcomes. Finally, we re-estimate the economic mobility outcomes using household per-capita income, rather than household wealth, to define economic class.

4. Results

4.2. Descriptive patterns of mobility in economic outcomes

Figure 1 presents transitions across economic classes (poor, vulnerable, middle class, affluent), based on household wealth. The results reveal a high degree of persistence across the wealth classes, with transition matrices strongly concentrated along the diagonal across all periods. Those individuals in poor households (bottom 20%) and affluent ones (top 20%) exhibit pronounced immobility, indicating entrenched positions at the extremes of the distribution, but persistence declines among the poor in the 2006-2012 period, and among the affluent in the 2018-2023 period. Persistence is also high among the middle group, but this is in part because it is a larger group (40-80% of the wealth distribution). They are increasingly likely to transition out across the four time windows, with both downward and upward transitions increasing over time, but with a higher likelihood of downward transitions. Persistence is lowest among the vulnerable group (second 20%), who are also likely to move in both directions. The likelihood of downward transitions into the poor group for the vulnerable rose over time from 1998-06 to 2012-18, but then declined in 2018-23. Overall, wealth exhibits the strongest degree of persistence among all outcomes considered.

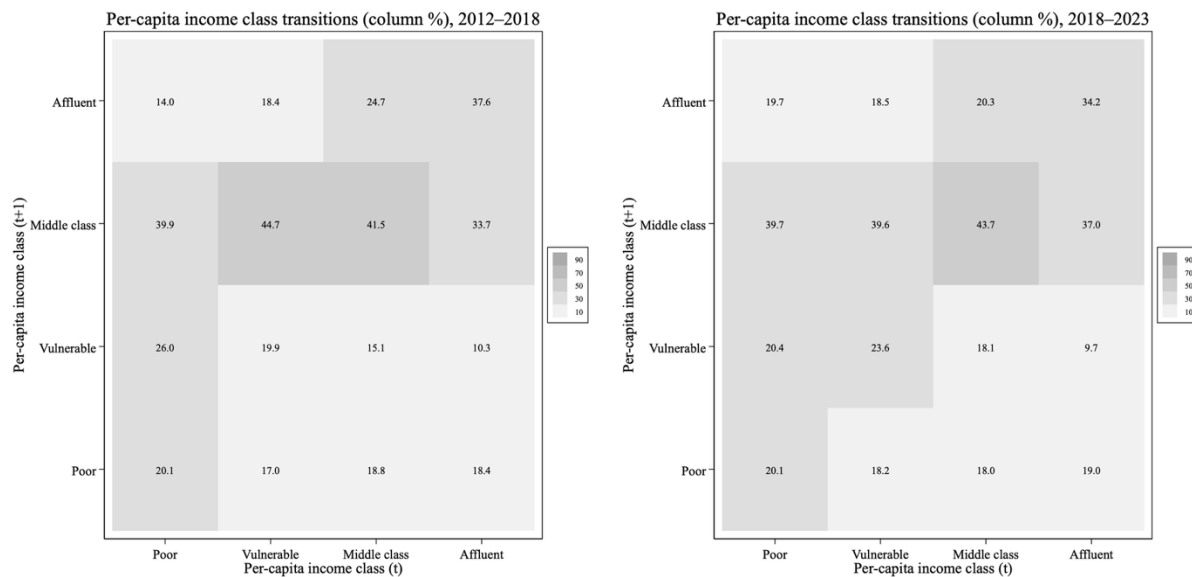
Figure 1. Household wealth economic class transitions (as a percentage of class in the base period)



Source: authors' calculations based on ELMPs 1998–2023 data.

Figure 2 presents analogous transition matrices based on household per-capita income for the 2012–2018 and 2018–2023 periods. Compared with wealth-based classes, income-based classes exhibit substantially lower persistence and greater mobility across economic groups. In particular, the poor and vulnerable groups display much weaker persistence, with a larger share of individuals moving between adjacent classes across waves. The middle class remains relatively stable but experiences considerable movement both upward into affluence and downward into vulnerability. Likewise, the affluent group is less persistent than in the wealth-based classification, with a notable proportion transitioning into the middle class. These patterns are consistent with the greater short-term volatility of income relative to wealth. While wealth tends to accumulate gradually and reflects longer-run economic status, income is more sensitive to changes in labor market outcomes, household composition, and other transitory shocks. Nevertheless, similar to the wealth-based results, mobility remains concentrated between neighboring classes, with direct transitions from poverty to affluence remaining uncommon.

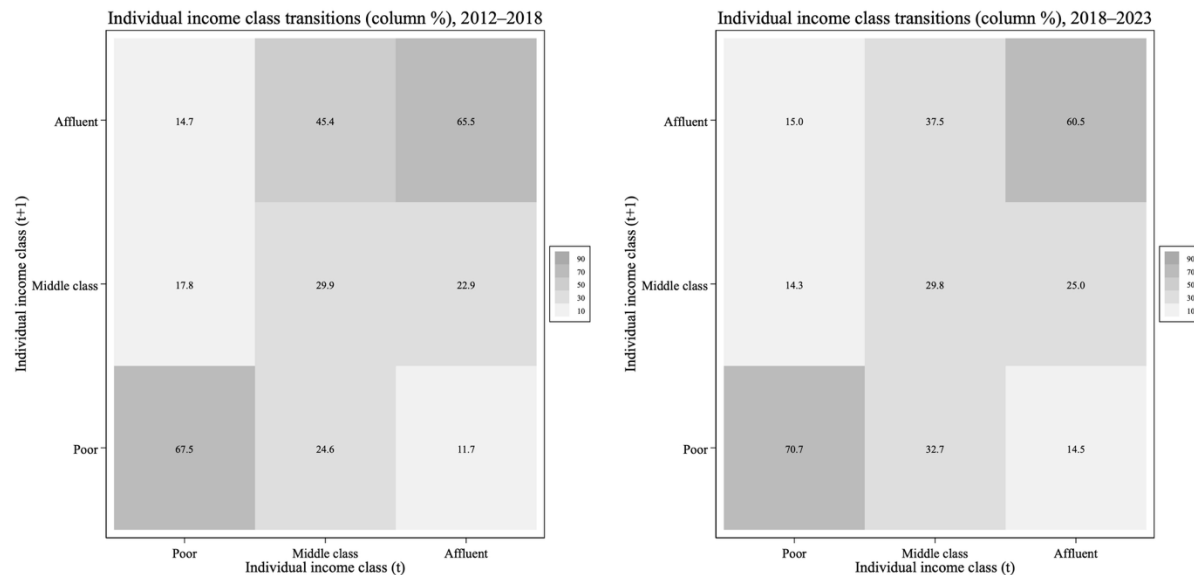
Figure 2. Household per-capita income class transitions (as a percentage of class in the base period)



Source: authors' calculations based on ELMPS 2012–2023 data.

Figure 3 shows that individual income displays a different pattern, a stronger persistence at the tails, especially in the poor/vulnerable group, who were and are likely remaining non-employed. A large share of individuals in the poor/vulnerable income group remains there across waves, and this persistence becomes stronger in 2018–2023. The top individual-income group is also relatively persistent, while mobility in the middle category is more dispersed. Overall, the comparison suggests that household per-capita income is more fluid than wealth and does not show the same strong class persistence, whereas individual income reveals more pronounced lower-tail persistence, likely reflecting repeated non-employment among individuals at the bottom.

Figure 3. Individual income class transitions (as a percentage of class in the base period)

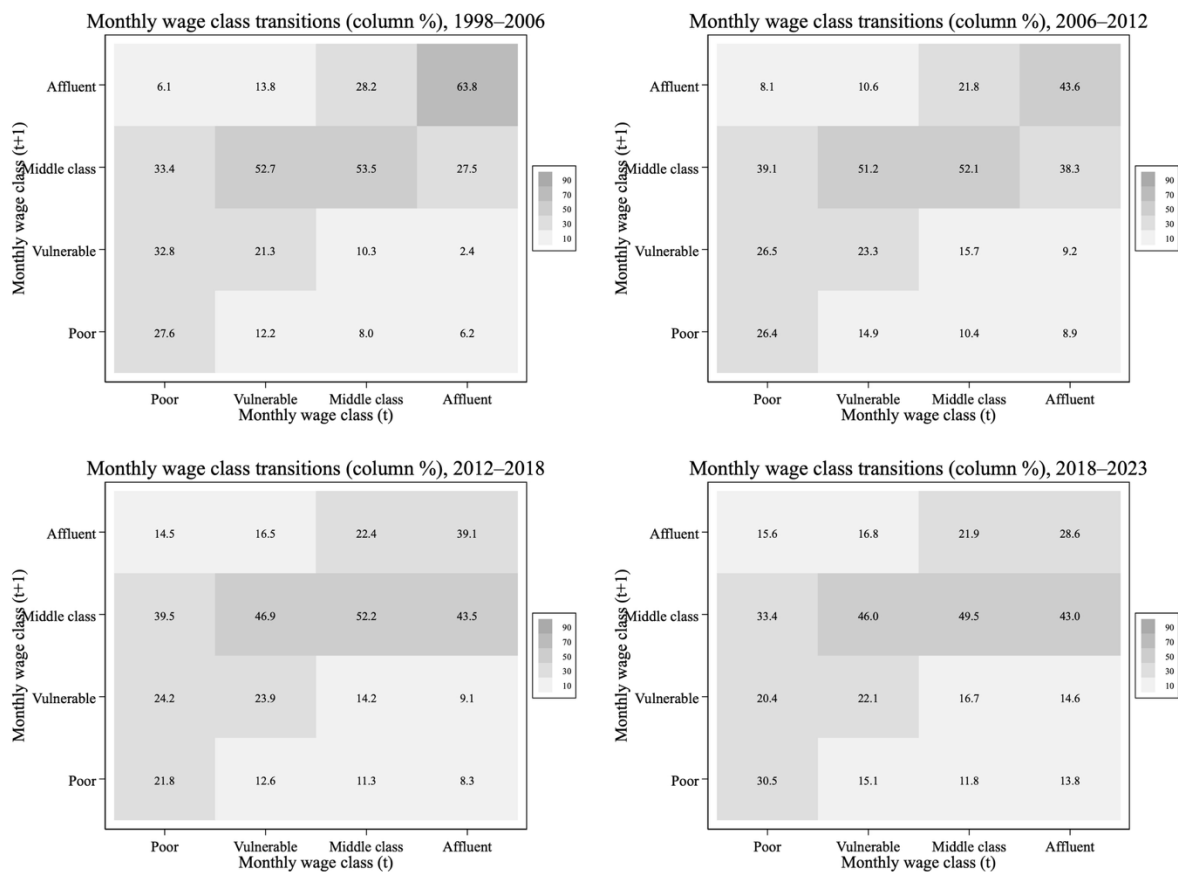


Source: authors' calculations based on ELMPs 2012–2023 data.

Notes: Due to the high prevalence of zero income (over 40% of observations), the Poor and Vulnerable groups cannot be distinguished and are combined into a single category.

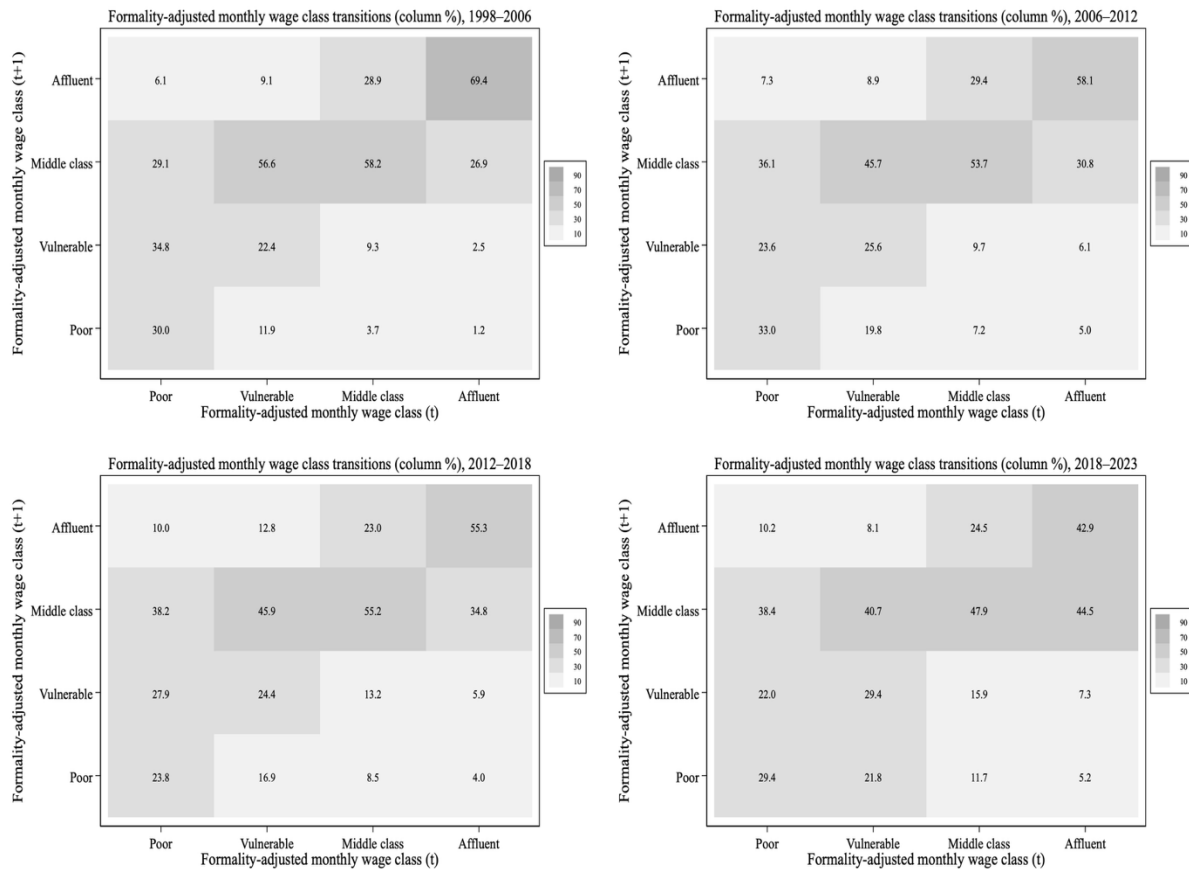
Figure 4 and Figure 5 present mobility in individual monthly wages, for those who were wage-earners in both periods, with Figure 5 incorporating formality adjustments. Wage mobility is notably higher than for income and wealth, as reflected in a weaker concentration along the diagonal and greater dispersion across classes. Transitions also span longer distances, indicating a higher likelihood of movement beyond adjacent classes. Compared to other outcomes, wage dynamics therefore suggest relatively greater short-run fluidity. Over time, mobility becomes more dispersed, particularly in the 2018–2023 period, where the diagonal structure weakens substantially. This pattern suggests increased re-ranking in wage positions, but not a corresponding improvement in upward mobility from the lower tail.

Figure 4. Individual monthly wage class transitions (as a percentage of class in the base period)



Source: authors' calculations based on ELMPS 1998-2023 data.

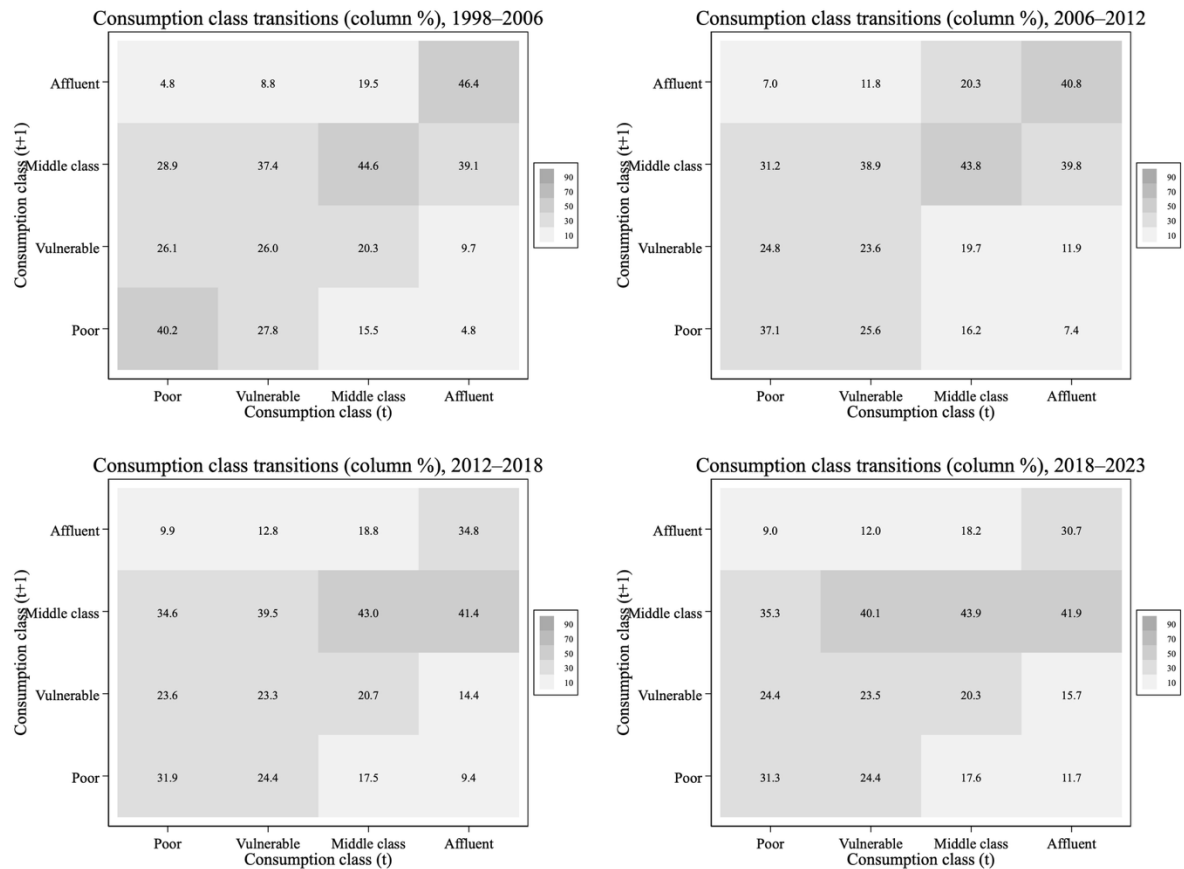
Figure 5. Individual formality adjusted monthly wage class transitions (as a percentage of class in the base period)



Source: authors' calculations based on ELMPs 1998–2023 data.

Figure 6 presents household consumption mobility, exhibiting a high degree of mobility, with transition matrices showing substantial dispersion beyond the diagonal. Households in the lower deciles are more likely to move upward relative to wealth, income, and wage measures, while downward mobility from higher classes is also more prevalent. This may, however, be a result of consumption being imputed. Over time, mobility patterns appear broadly stable, with no clear trend toward either increased rigidity or greater dispersion.

Figure 6. Household consumption class transitions (as a percentage of class in the base period)



Source: authors' calculations based on ELMPs 1998–2023 data.

4.3. Labor market dynamics and economic mobility: multivariate results

In this section, we present the multivariate results as coefficient plots; regression tables are in the appendix. Figure 7 examines the association between job ladder movements, employment transitions, and employment status shifts and the dynamics of economic outcomes (household wealth, household consumption, household per-capita income, individual income, and individual wages). We report estimates with and without individual fixed effects (FE). The FE specifications exploit within-individual variation and control for time-varying covariates, while the non-FE specifications control for previous-wave characteristics. Across specifications, estimates from models without individual fixed effects are more likely to be statistically significant. This likely reflects the fact that individual fixed effects absorb substantial time-invariant heterogeneity, leaving identification to rely on within-individual variation, which reduces statistical power and may attenuate some associations.

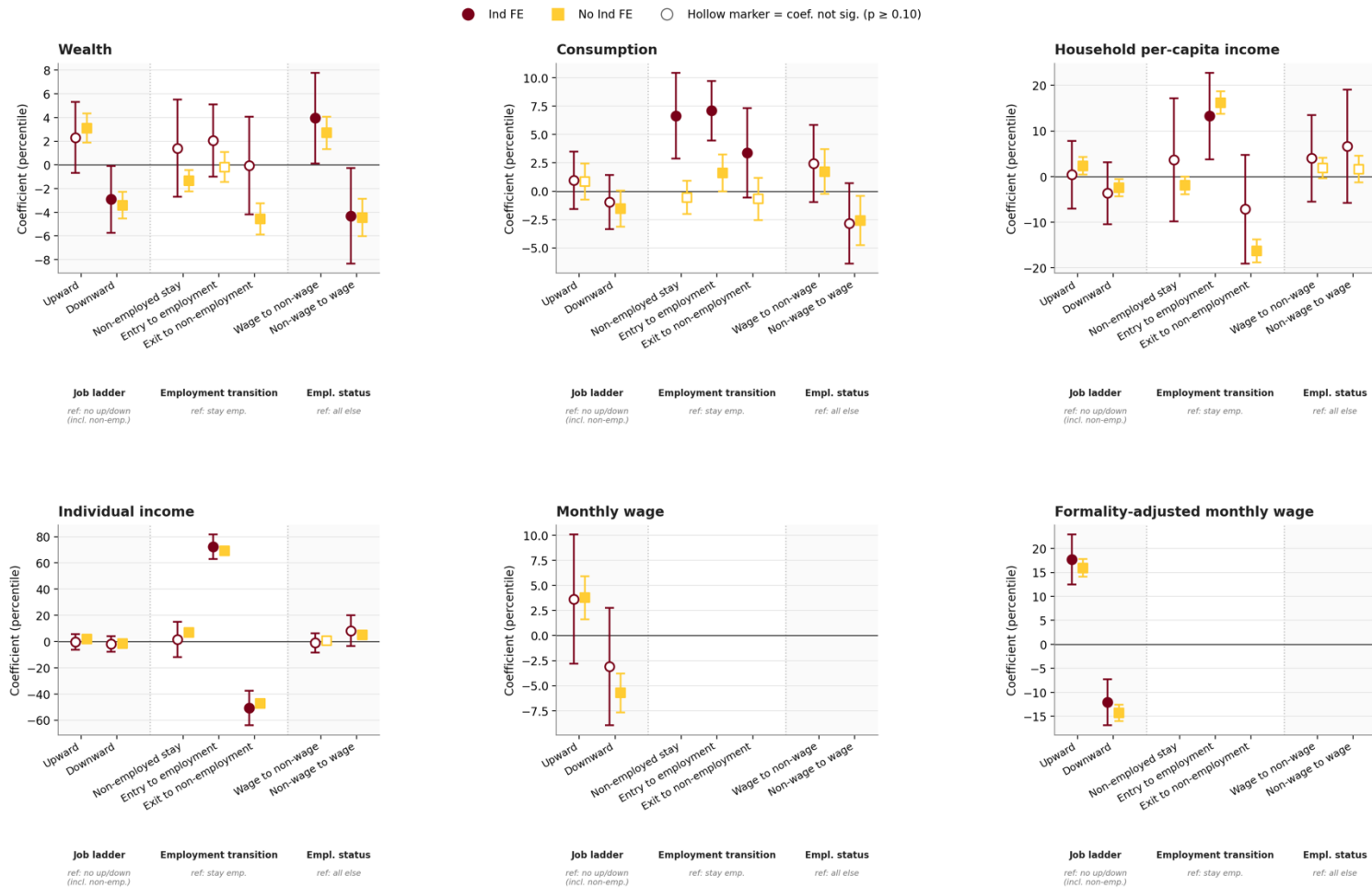
Relative to the reference category of no upward or downward movement (including non-employment transitions), upward transitions are significantly associated with higher formality-adjusted monthly wages in both specifications. However, their associations with household wealth, per-capita income, individual income, and monthly wages are generally weak and imprecisely estimated; only the non-FE specification shows significant positive associations. In contrast, downward transitions are more consistently associated with adverse outcomes: they are linked to significantly lower household wealth and lower formality-adjusted wages in both specifications, and to lower household consumption, household per-capita income, individual income and monthly wages in the non-FE model. This asymmetric pattern is consistent with evidence in Fields et al. (2023), which documents that movements up and down the job ladder are associated with earnings gains and losses across countries, although the magnitude of these effects varies across contexts.

Employment transitions show the strongest relationship with individual income. Relative to remaining employed, entry into employment is associated with large and significant increases in individual income and household per-capita income in both specifications, as well as higher household consumption, while its association with wealth is not significant in either specification. Exit to non-employment is associated with significant declines in individual income in both models and with lower household per-capita income in the non-FE specification. Remaining non-employed is associated with higher individual income in the non-FE model, lower household wealth and household per-capita income in the non-FE model, and higher household consumption in the FE model.

Employment status transitions are more strongly related to household economic outcomes (wealth and consumption) than to individual income. Relative to all else, moving from wage to non-wage employment is associated with significantly higher wealth in both specifications and higher consumption in the non-FE specification, whereas moving from non-wage to wage employment is associated with significantly lower wealth in both models and lower consumption in the non-FE specification.

Overall, the results highlight distinct roles of different dimensions of labor market transitions. Job ladder movements primarily shape wage-related outcomes and household wealth accumulation, with downward mobility generating more consistent and broader economic losses than upward mobility generates gains. Employment transitions, particularly entry into and exit from employment, are the dominant drivers of individual income dynamics. In contrast, employment status transitions mainly operate through household-level outcomes, with shifts into non-wage activities associated with higher wealth and consumption, and the reverse transitions associated with declines. Together, these findings suggest that different forms of labor mobility affect economic well-being through distinct channels, emphasizing the importance of distinguishing between job ladder progression, entry and exit from employment, and employment status changes.

Figure 7. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with and without individual fixed effects, and with controls



Notes: Each panel shows coefficients for one outcome (panel title) under two specifications: Ind FE (individual fixed effects, dynamic controls; maroon) and No Ind FE (no individual fixed effects, pre-wave controls; gold). Markers are point estimates, bars are 95% confidence intervals; filled = significant at $p < 0.10$, hollow = not; the line at zero is the null.

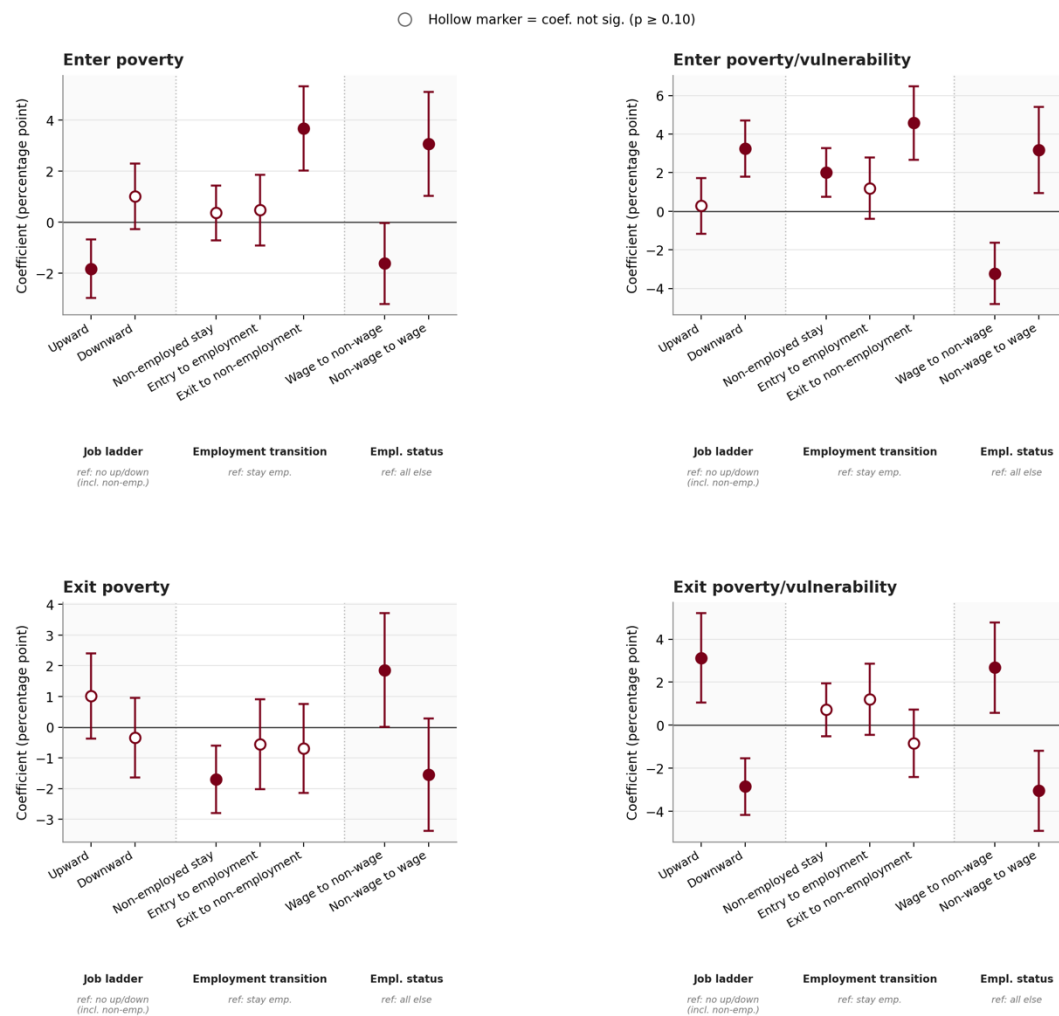
Figure 8 and Figure 9 report the relationship between labor market dynamics and entry and exits from poverty, entry and exit from vulnerability (including poverty), and upward and downward movements from middle class status. Again, we separately investigate the effects of job ladder movements, movements across employment statuses, and entry and exit from employment.

A clear asymmetry emerges for job ladder movements. Relative to the reference category of no upward or downward movement (including any non-employment transition), upward job ladder transitions are significantly associated with a higher likelihood of exit from poverty/vulnerability, a lower likelihood of falling into poverty, and an increased likelihood of upward mobility from the middle class. In contrast, downward job ladder transitions reduce upward mobility among poor/vulnerable households and substantially increase the likelihood of entering poverty/vulnerability. They also reduce the probability of upward mobility among middle-class households.

Employment transitions reveal a similar structure centered on downside risk. Relative to remaining employed, exit from employment is associated with substantially higher probabilities of entering poverty and entering poverty/vulnerability, and with greater risk of downward mobility and less upward mobility among middle-class households. Remaining non-employed (relative to staying employed) is associated with a higher risk of entering poverty/vulnerability and a lower probability of exiting poverty. By contrast, entry into employment is not significantly associated with entering or exiting poverty relative to staying employed.

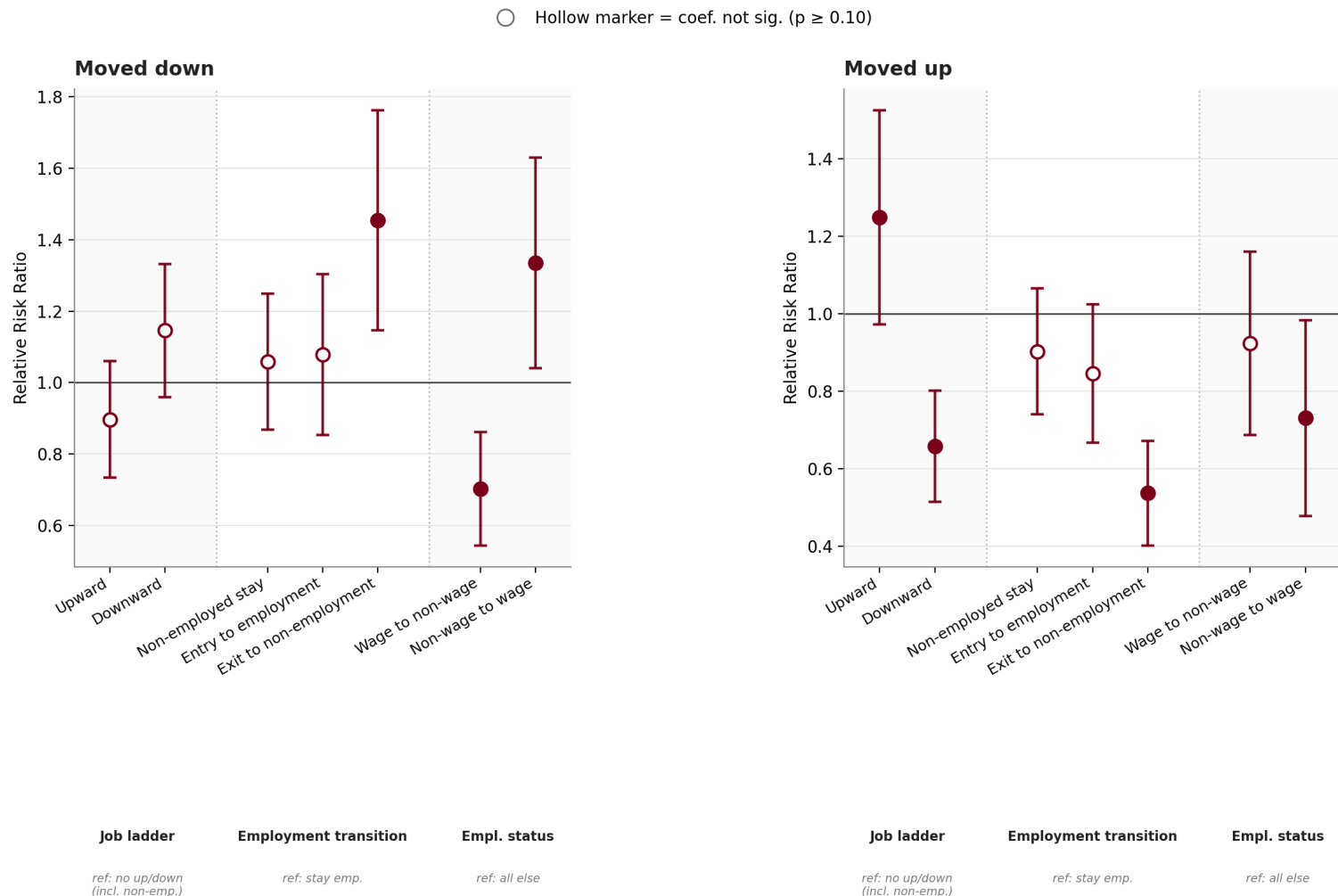
Shifts in employment status show divergent patterns by direction. Relative to all other employment statuses, moving from wage to non-wage employment is associated with lower probabilities of entering poverty and entering poverty/vulnerability, higher probabilities of exiting poverty and exiting poverty/vulnerability, and lower risk of downward mobility among middle-class households. In contrast, transitions from non-wage to wage employment are associated with higher risks of entering poverty and entering poverty/vulnerability, lower probabilities of exiting poverty and exiting poverty/vulnerability, and both a higher risk of downward mobility and a lower probability of upward mobility among middle-class households. Together, these patterns are consistent with the earlier finding that wage-to-non-wage transitions are associated with higher household wealth and consumption ranks, while non-wage-to-wage transitions are associated with declines in both. This pattern suggests that wage-to-non-wage moves may reflect entry into more remunerative non-wage activities, while non-wage-to-wage transitions may be driven by economic distress rather than voluntary labor market improvement.

Figure 8. Labor market transitions and household wealth economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls



Notes: Each panel plots linear-probability coefficients for one binary outcome (panel title), in percentage points. Markers are point estimates; bars are 95% confidence intervals. Filled markers are significant at $p < 0.10$, hollow markers are not; the line at zero is the null. A positive coefficient means the labor-market transition on the x-axis raises the probability of the outcome relative to the reference category for its group; a negative coefficient lowers it.

Figure 9. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls



Notes: Each panel plots relative risk ratios (RRR) for one mobility outcome (panel title) from a multinomial logit; the reference line is at 1.0 (no association). Markers are point estimates; bars are 95% confidence intervals. Filled markers are significant at $p < 0.10$, hollow markers are not. An RRR above 1 means the transition on the x-axis is associated with a higher relative likelihood of that move (vs. the base outcome), holding controls constant; below 1 means lower.

4.4. Heterogeneity analyses

4.4.1. By sex

As shown in Figure 10 (continuous household and individual economic outcomes) and Figure 11 and Figure 12 (household economic class outcomes), we examine heterogeneity by sex across the three dimensions of labor market dynamics. Joint tests indicate statistically significant gender differences in the relationship between labor market dynamics and economic mobility for household wealth ($p = 0.001$), household per-capita income ($p < 0.001$), and individual income ($p < 0.001$), while no significant differences are found for household consumption, monthly wages, or formality-adjusted wages. For economic class outcomes, significant gender differences are found for exiting vulnerability or poverty ($p < 0.001$) and marginally for middle-class mobility ($p = 0.053$).

The observed gender heterogeneity is concentrated in employment transitions. For household wealth, remaining non-employed ($p < 0.001$) and exiting to non-employment ($p = 0.010$) both exhibit significant gender differences, with men experiencing larger wealth losses than women in both cases.

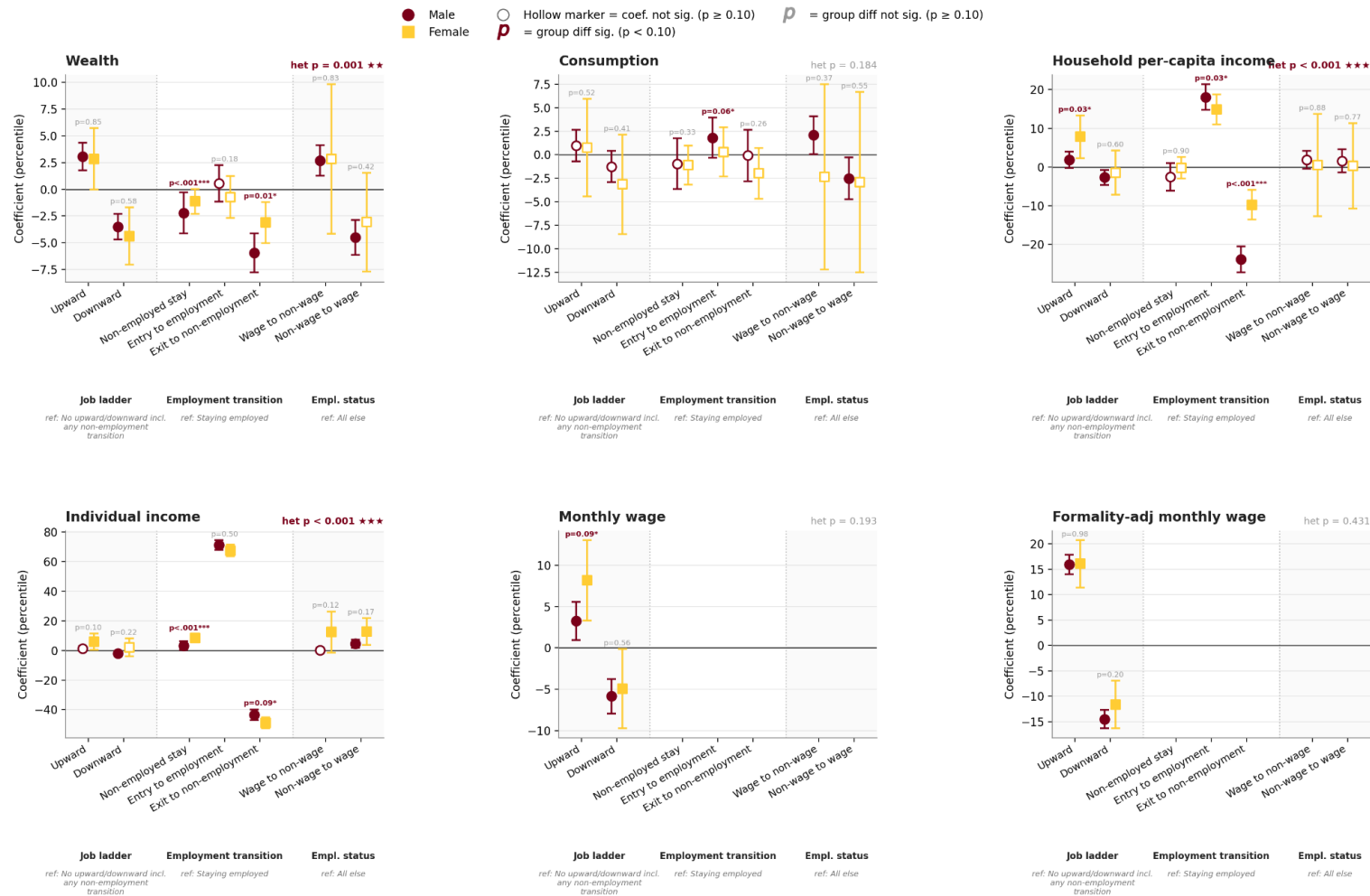
For household per-capita income, significant gender differences emerge for entry into and exit from employment. Entry into employment is associated with larger income gains for men than for women ($p = 0.033$), while exit from employment generates substantially larger losses for men than for women ($p < 0.001$). For individual income, remaining non-employed is associated with significant income gains for both men and women, but with significantly larger gains for women than for men ($p < 0.001$). Exit from employment generates marginally larger income losses for women than for men ($p = 0.091$).

For economic class outcomes, significant gender differences are found in the probability of exiting vulnerability or poverty. Remaining non-employed is associated with higher exit from vulnerability or poverty for women but not for men ($p < 0.001$). Similarly, entry into employment is associated with higher exit from vulnerability or poverty for women but not for men ($p = 0.007$). In contrast, exit from employment reduces the probability of exiting vulnerability or poverty for men but not for women ($p = 0.005$). For middle-class mobility, upward job ladder transitions are associated with higher upward mobility among men but not women ($p = 0.051$). Employment status transitions also show significant gender differences: wage-to-non-wage transitions are associated with lower downward risk for men but not women ($p = 0.037$), while non-wage-to-wage transitions are associated with higher downward risk ($p = 0.093$) and lower upward mobility for men ($p = 0.062$).

Overall, gender differences arise primarily along the employment transition dimension, though with distinct patterns across outcome measures. Men face larger wealth losses from non-

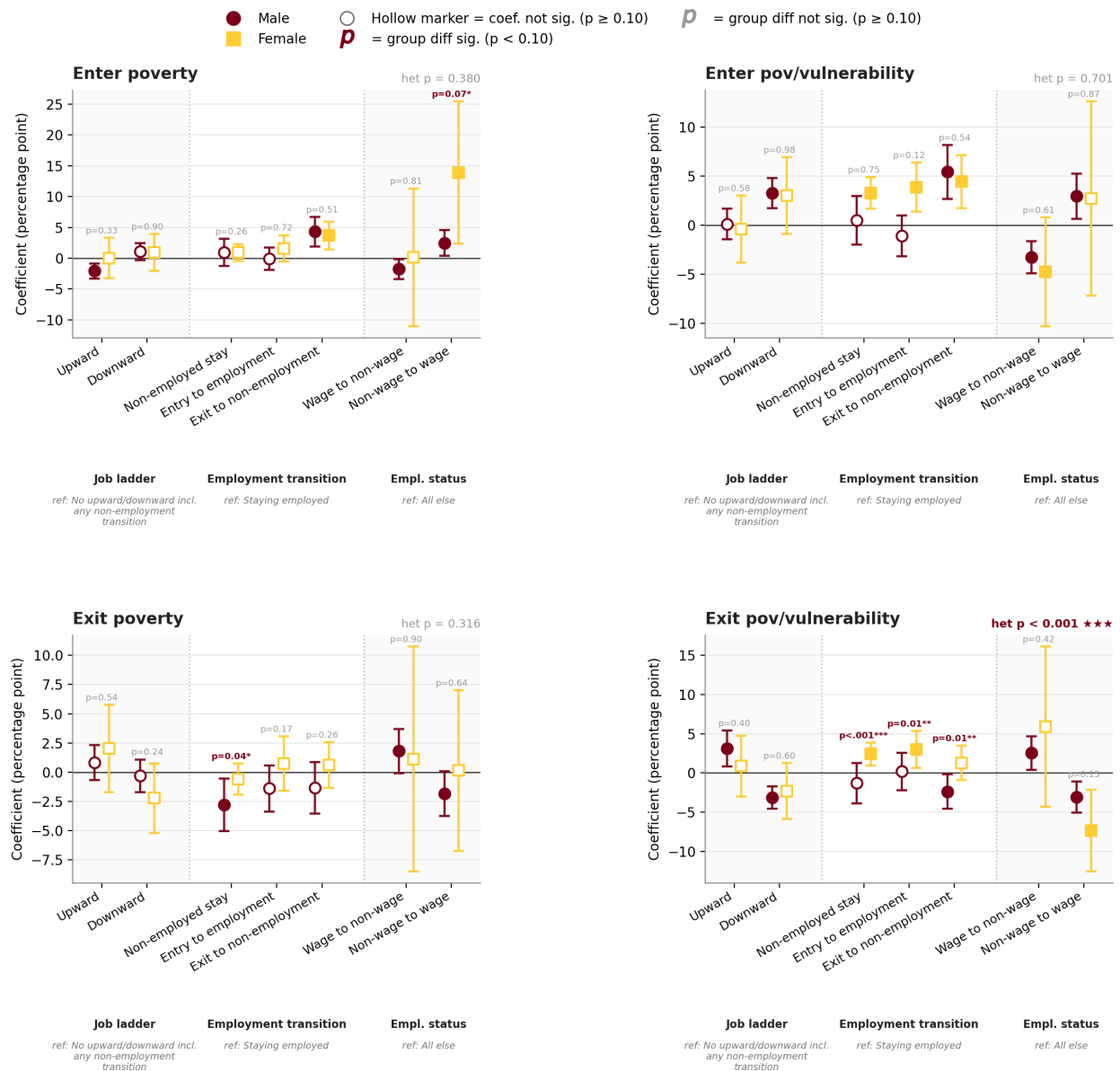
employment and exit from employment, and larger household income losses upon exit, but benefit more from entry in terms of household per-capita income. Women experience relatively larger individual income gains from remaining non-employed and are more buffered against wealth losses from non-employment. For class mobility, women benefit more from employment entry in terms of escaping vulnerability, while men benefit more from upward job ladder transitions in terms of middle-class advancement. These results suggest gendered pathways through which labor market mobility translates into economic well-being, with men more exposed to household-level wealth and income risk from labor market exit, and women more likely to benefit from employment stability in terms of poverty reduction.

Figure 10. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, male versus female



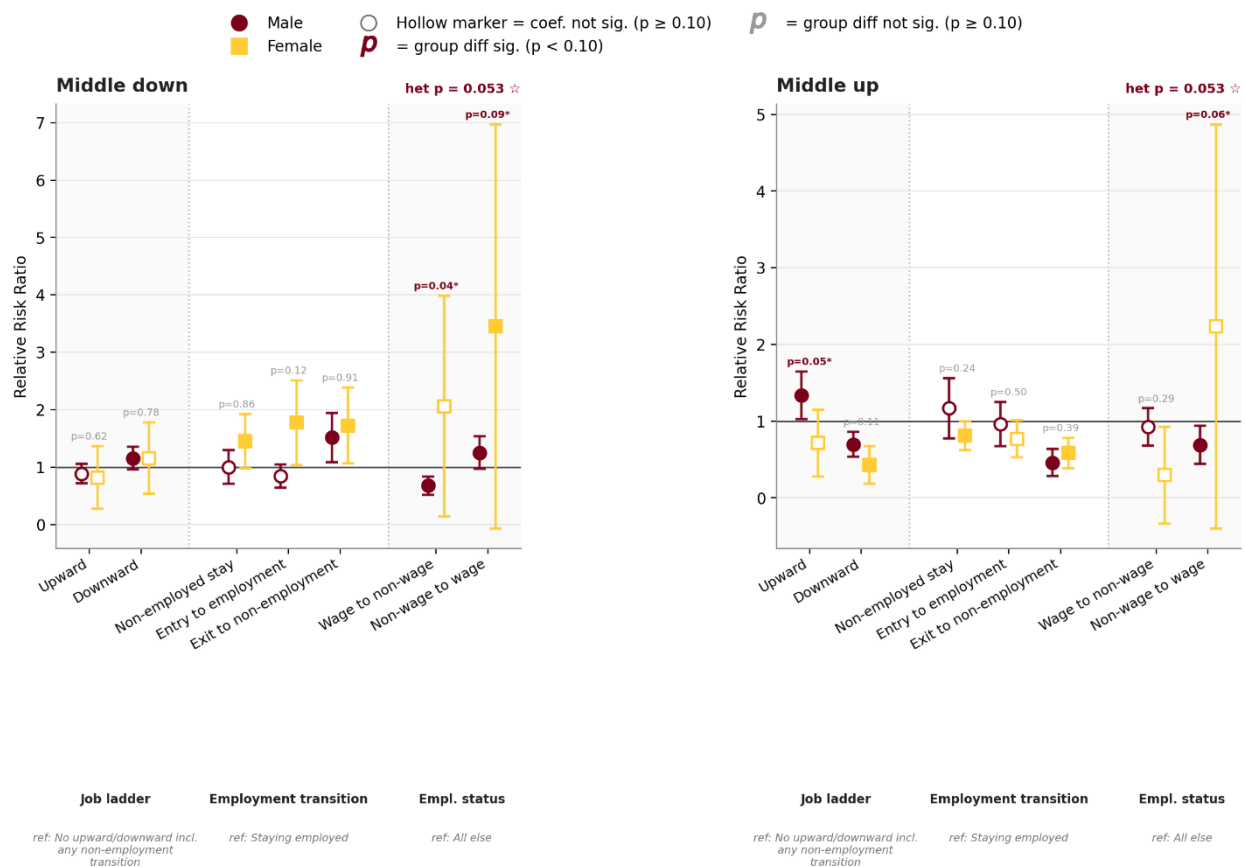
Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 11. Labor market transitions and household wealth economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, male versus female



Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals ($coefficient \pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p -value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p " value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 12. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, male versus female



Notes: Each panel plots relative risk ratios (RRR) for one mobility outcome (panel title) from a multinomial logit, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The reference line is at 1.0 (no association). The text above each set of estimates reports the p -value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p " value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

4.4.2. *By age*

As shown in Figure 13 (household and individual economic outcomes) and Figure 14 and Figure 15 (household economic class mobility outcomes), we examine heterogeneity by age group across the three dimensions of labor market dynamics. Joint tests indicate statistically significant age differences for household per-capita income ($p < 0.001$), individual income ($p < 0.001$), and formality-adjusted monthly wages ($p = 0.002$), as well as for entry into poverty ($p = 0.076$) and entry into poverty/vulnerability ($p = 0.084$), while no significant differences are found for household wealth, household consumption, monthly wages, exits from poverty or poverty/vulnerability, or middle-class mobility outcomes.

For household per-capita income, age heterogeneity is present across all three dimensions of labor market dynamics. Among job ladder movements, upward transitions are significantly associated with higher household per-capita income for prime-age individuals but not for young or older individuals, while downward transitions are associated with significant losses for prime-age individuals only. Among employment transitions, entry into employment is associated with significant income gains for all age groups, with notably smaller gains for older individuals, while exit from employment generates significant losses for all groups. Remaining non-employed is associated with marginally significant income losses for prime-age individuals. Among employment status transitions, wage-to-non-wage transitions are associated with significant income gains for prime-age individuals but not for other groups, while non-wage-to-wage transitions are not significantly associated with income changes for any group.

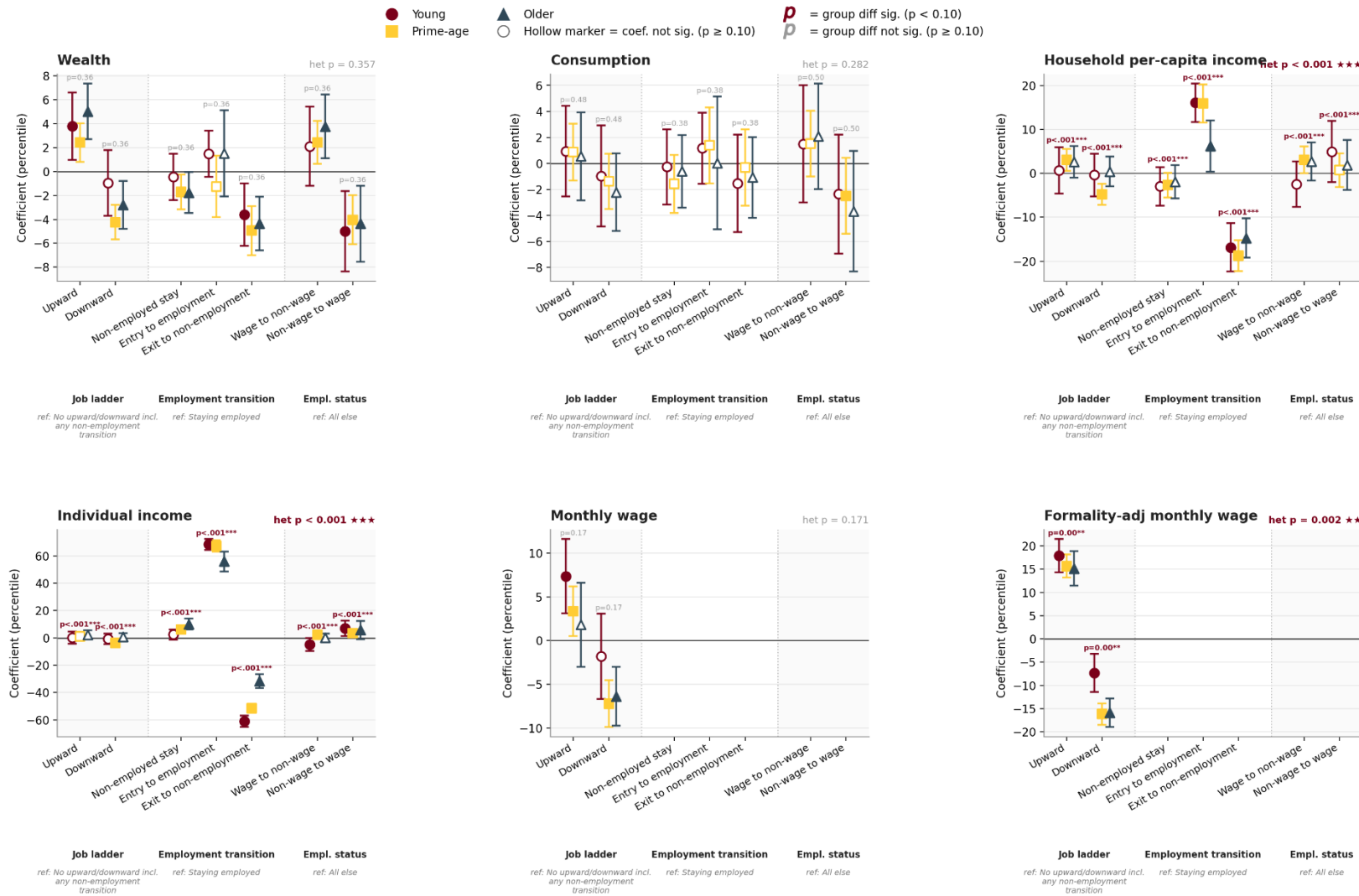
For individual income, age heterogeneity likewise spans all dimensions. Among job ladder movements, downward transitions are associated with significant income losses for prime-age individuals only, while upward transitions are not significantly associated with income changes for any group. Among employment transitions, entry into employment generates large income gains for all age groups, with the smallest gains for older individuals, while exit from employment leads to significant income losses across all groups, with the largest losses for young individuals and the smallest for older individuals. Remaining non-employed is associated with significant income gains for prime-age and older individuals, with larger gains for older individuals. Among employment status transitions, wage-to-non-wage transitions are associated with income losses for young individuals but income gains for prime-age individuals, while non-wage-to-wage transitions are associated with income gains across all age groups.

For formality-adjusted monthly wages, age heterogeneity is present for both job ladder movements. Upward transitions are associated with significant wage gains for all age groups, while downward transitions are associated with significant wage losses for all groups, with larger losses for prime-age and older individuals than for young individuals.

For poverty/vulnerability entry, age differences are marginally significant overall. Exit from employment is associated with higher risks of entering both poverty and vulnerability or poverty across all age groups, with the largest effects for older individuals. Remaining non-employed is significantly associated with higher poverty entry risk for older individuals only. Non-wage-to-wage transitions are associated with higher poverty entry risk for older individuals, while wage-to-non-wage transitions are associated with lower risks for young and older individuals but not for prime-age individuals.

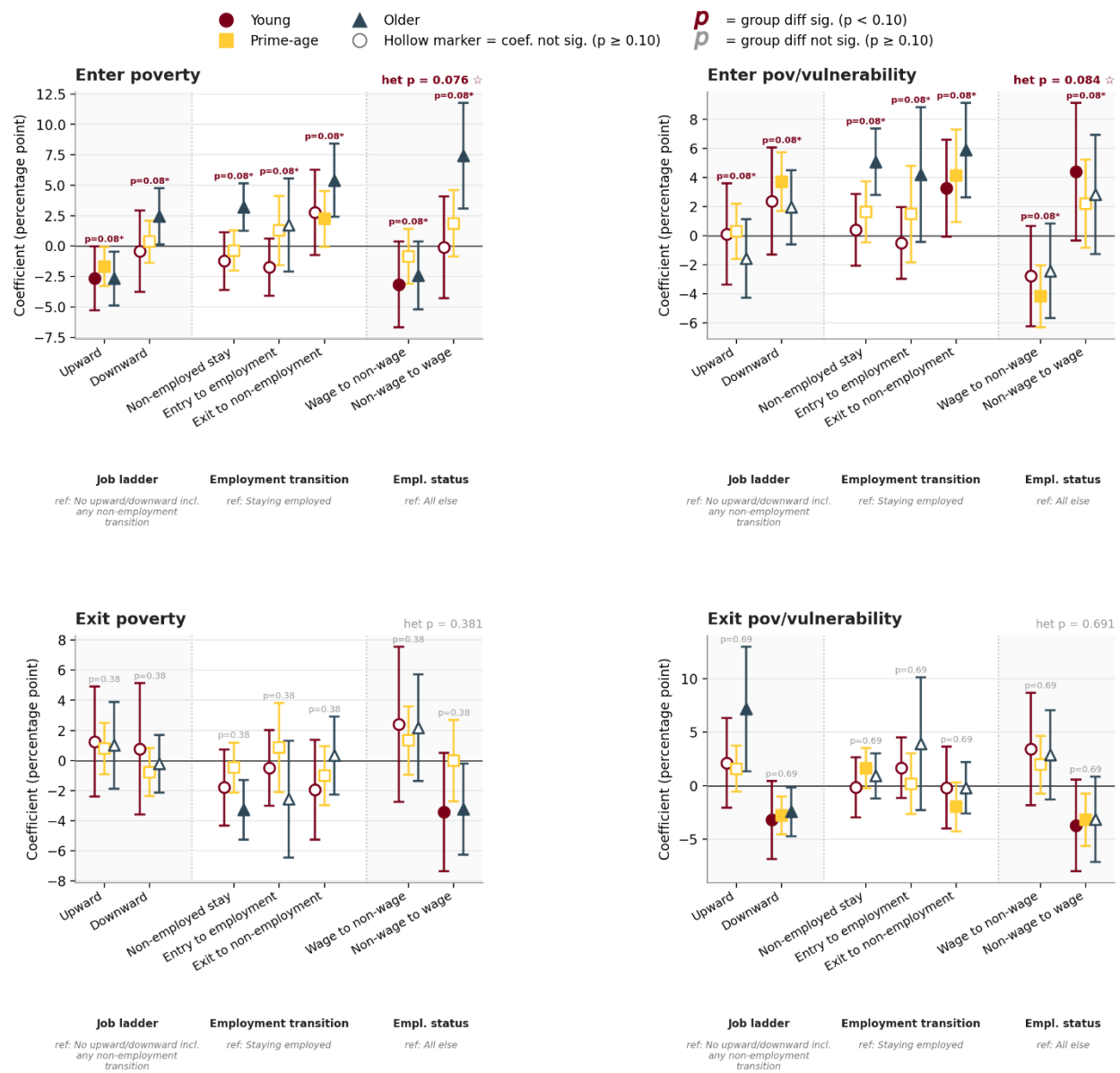
Overall, age heterogeneity is primarily concentrated in the employment transition and job ladder dimensions, particularly for household per-capita income and individual income. Entry into and exit from employment generate effects that vary meaningfully across age groups, with older individuals experiencing smaller income gains from employment entry and smaller income losses from employment exit. Prime-age individuals show the most consistent and adverse responses to downward job ladder movements. These patterns highlight important life-cycle differences in how labor market mobility translates into economic well-being, with distinct mechanisms operating across income, wages, and poverty outcomes.

Figure 13. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, by age group



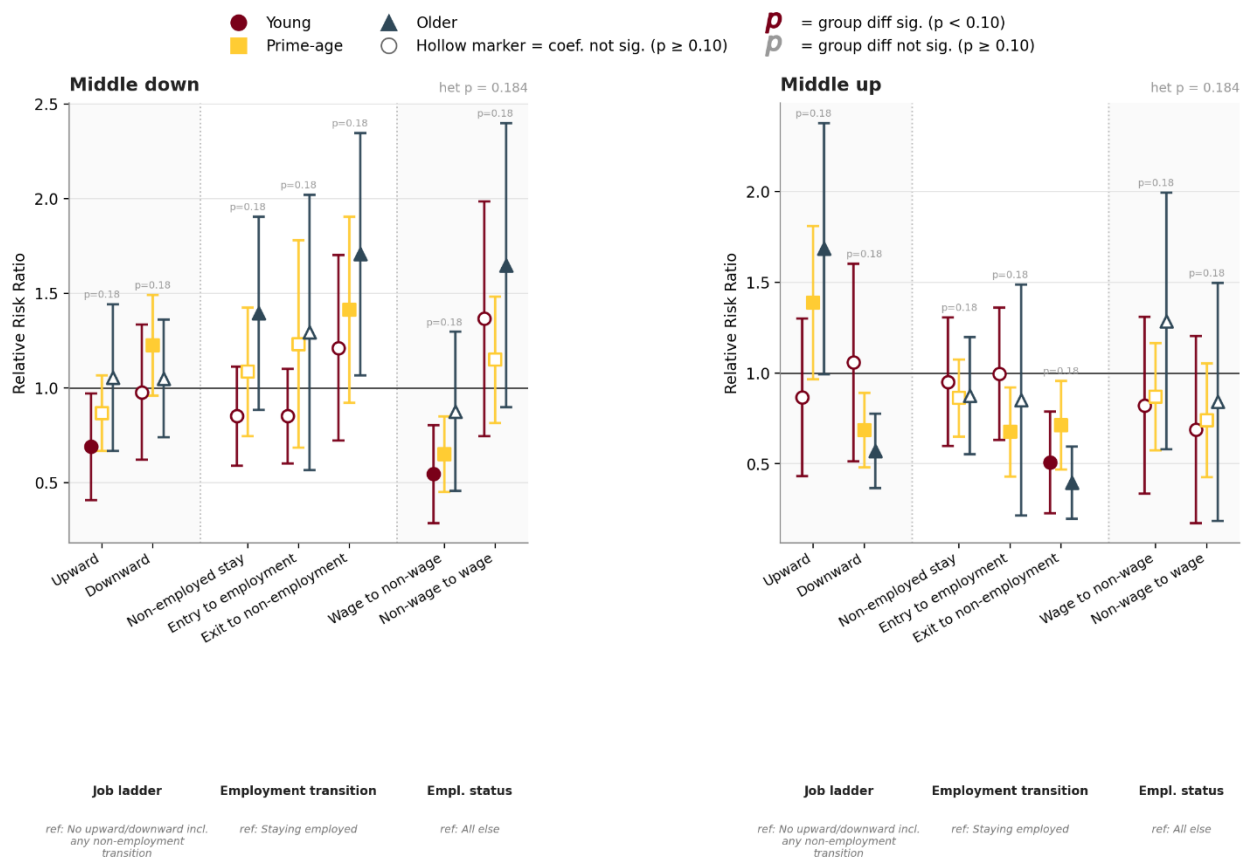
Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 14. Labor market transitions and household economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, by age groups



Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 15. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, by age groups



Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

4.4.3. By education

Figure 16 (household and individual economic outcomes) and Figure 17 and Figure 18 (household economic class mobility outcomes) present heterogeneity by education. Joint tests indicate statistically significant differences for household wealth ($p = 0.045$), household per-capita income ($p = 0.001$), individual income ($p < 0.001$), and all four binary poverty and vulnerability transition outcomes (enter poverty $p = 0.080$, enter vulnerability or poverty $p = 0.042$, exit poverty $p = 0.023$, exit vulnerability or poverty $p = 0.047$), as well as middle-class mobility ($p = 0.001$), while no significant heterogeneity is detected for household consumption, monthly wages, or formality-adjusted wages.

For household wealth, education heterogeneity is present across all three dimensions of labor market dynamics. Among job ladder movements, upward transitions are associated with significant wealth gains for low- and high-education individuals, while downward transitions are associated with significant wealth losses for both groups; secondary-educated individuals show no significant effects in either direction. Among employment transitions, exit from non-employment is associated with significant wealth losses for all education groups, with the largest losses for secondary-educated individuals. Remaining non-employed is associated with marginally significant wealth losses only for high-education individuals. Entry into employment is not significantly associated with wealth for any group. Among employment status transitions, wage-to-non-wage transitions are associated with significant wealth gains for low- and high-education individuals, while non-wage-to-wage transitions are associated with significant wealth losses across all groups, with the largest losses for secondary-educated individuals.

For household per-capita income, education heterogeneity also spans all dimensions. Among job ladder movements, upward transitions are significantly associated with income gains only for high-education individuals, while downward transitions generate significant losses only for low-education individuals. Among employment transitions, entry into employment is associated with large income gains for low- and high-education individuals but not for secondary-educated individuals, while exit from employment generates significant losses across all groups. Remaining non-employed is associated with significant income losses for low- and secondary-educated individuals. Among employment status transitions, wage-to-non-wage transitions are associated with income gains only for high-education individuals, while non-wage-to-wage transitions generate significant losses for secondary-educated individuals and gains for high-education individuals.

For individual income, education heterogeneity is present across all dimensions. Among job ladder movements, downward transitions are associated with significant income losses for low-education individuals only, while upward transitions show significant income gains for secondary- and high-education individuals. Among employment transitions, entry generates large income gains and exit generates large income losses across all education groups, with all effects statistically significant. Remaining non-employed is associated with significant income gains for low- and high-education individuals. Among employment status transitions, wage-to-non-wage transitions are associated with income gains only for high-education individuals, while non-wage-to-wage transitions are associated with significant income gains for low- and high-education individuals.

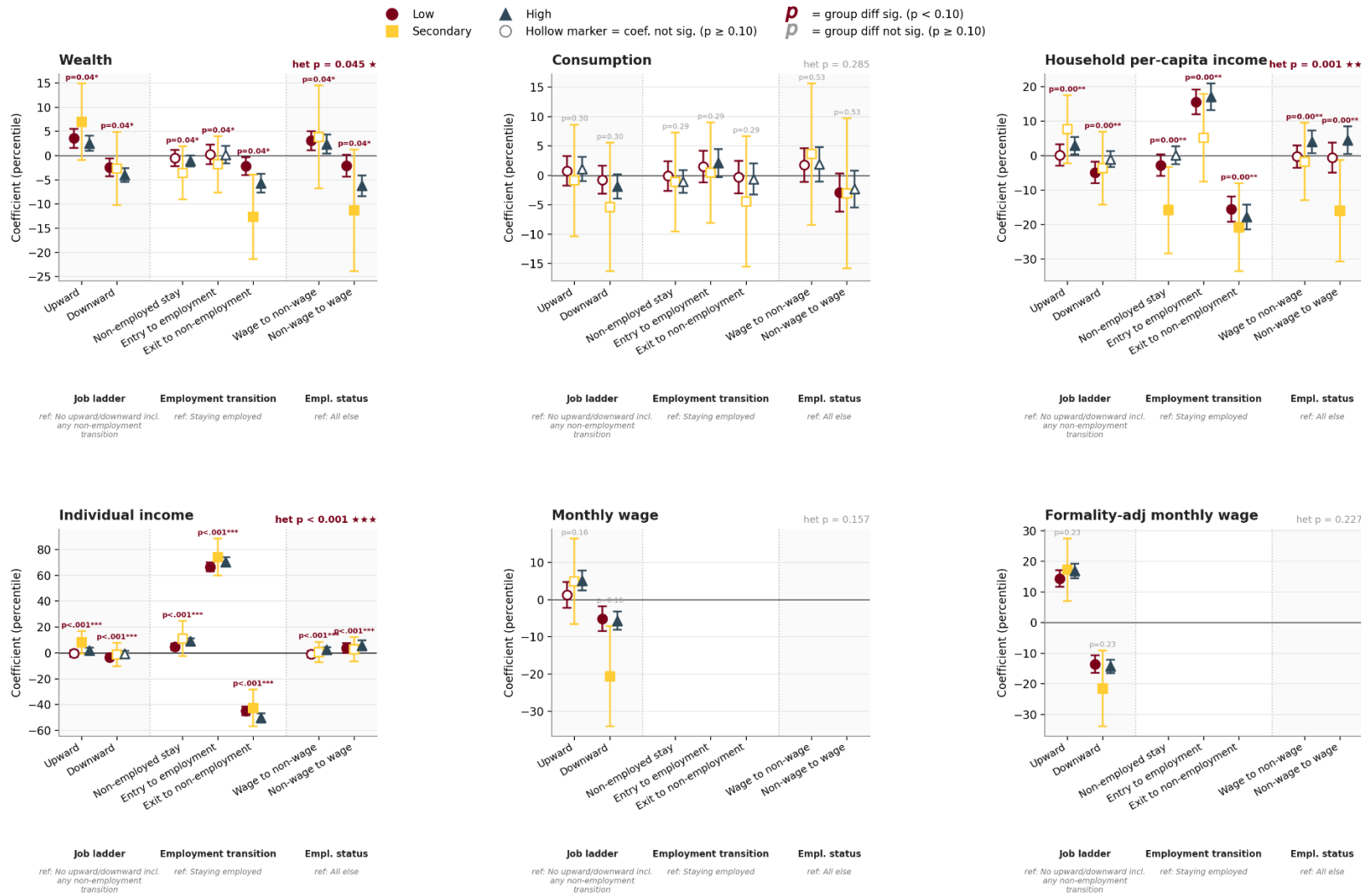
For poverty and vulnerability transitions, education differences are significant across all four outcomes. Exit from employment is consistently associated with higher risks of entering poverty and vulnerability across education groups. Among job ladder movements, upward transitions reduce poverty entry risk for low- and high-education individuals, while downward transitions increase the risk of entering vulnerability or poverty primarily for high-education individuals.

Wage-to-non-wage transitions reduce the risk of entering poverty and vulnerability for low- and high-education individuals. Non-wage-to-wage transitions increase poverty entry risk for low-education individuals. For exits from poverty, remaining non-employed and entry into employment reduce the probability of exiting poverty for low-education individuals. For exiting vulnerability or poverty, upward transitions and lower downward mobility risk are concentrated among low-education individuals, while wage-to-non-wage and non-wage-to-wage transitions show significant effects mainly for high-education individuals.

For middle-class mobility, education heterogeneity is significant overall ($p = 0.001$). Among job ladder movements, upward transitions are associated with higher upward mobility only for low-education individuals, while downward transitions increase downward mobility risk and reduce upward mobility for high-education individuals. Among employment transitions, exit from employment increases downward mobility risk and reduces upward mobility across all groups, with the largest effects for high-education individuals. Remaining non-employed reduces downward mobility risk for low-education individuals but increases upward mobility risk for them as well. Among employment status transitions, wage-to-non-wage transitions reduce downward mobility risk for low-education individuals, while non-wage-to-wage transitions increase downward mobility risk for high-education individuals and marginally reduce upward mobility for that group.

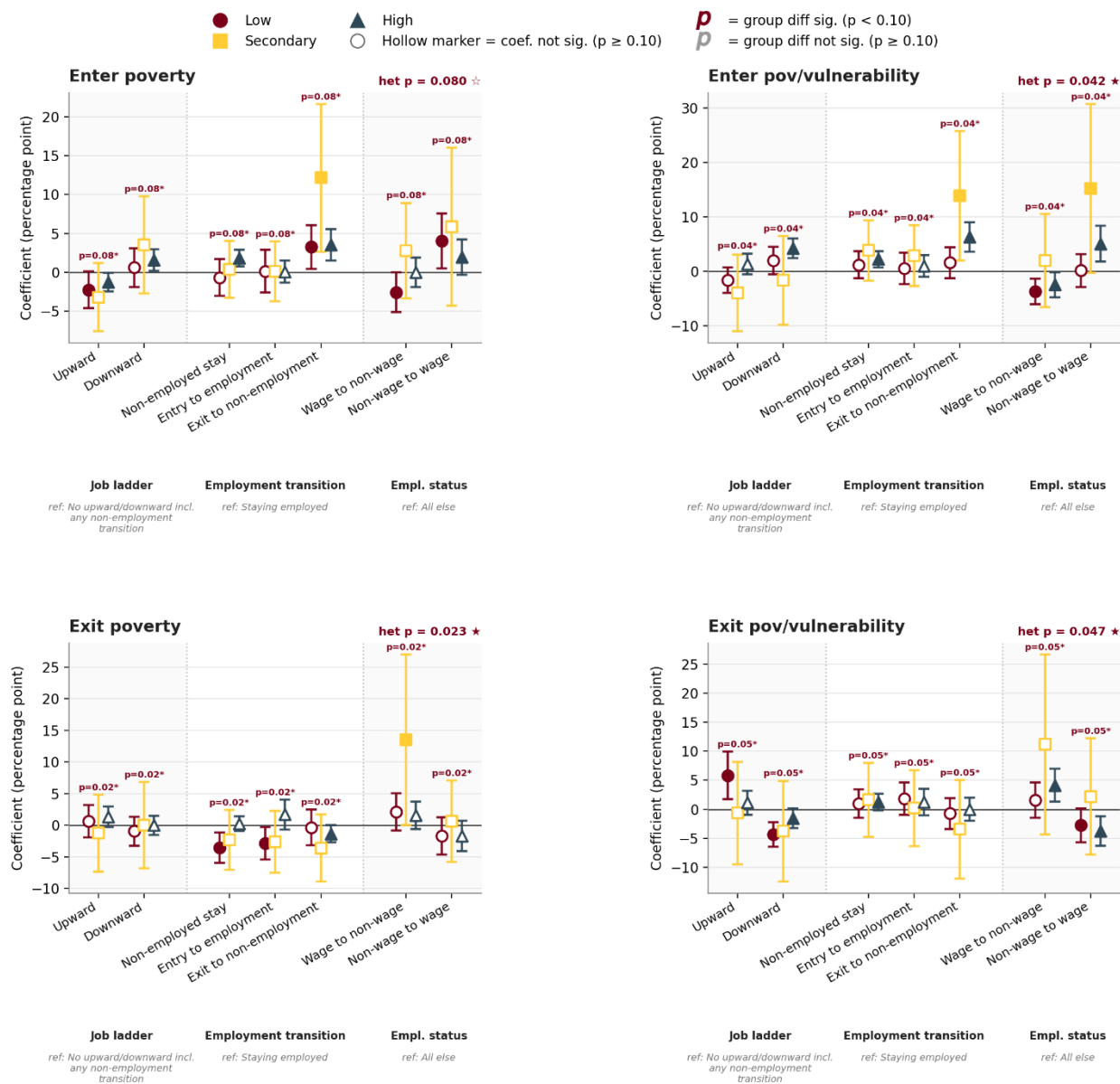
Overall, education-based heterogeneity is broad and systematic, extending beyond wealth and individual income to encompass household per-capita income, all poverty and vulnerability transition outcomes, and middle-class mobility. The patterns are most pronounced for employment transitions and job ladder movements, with low- and high-education individuals often showing stronger and more consistent responses than secondary-educated individuals.

Figure 16. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, by education



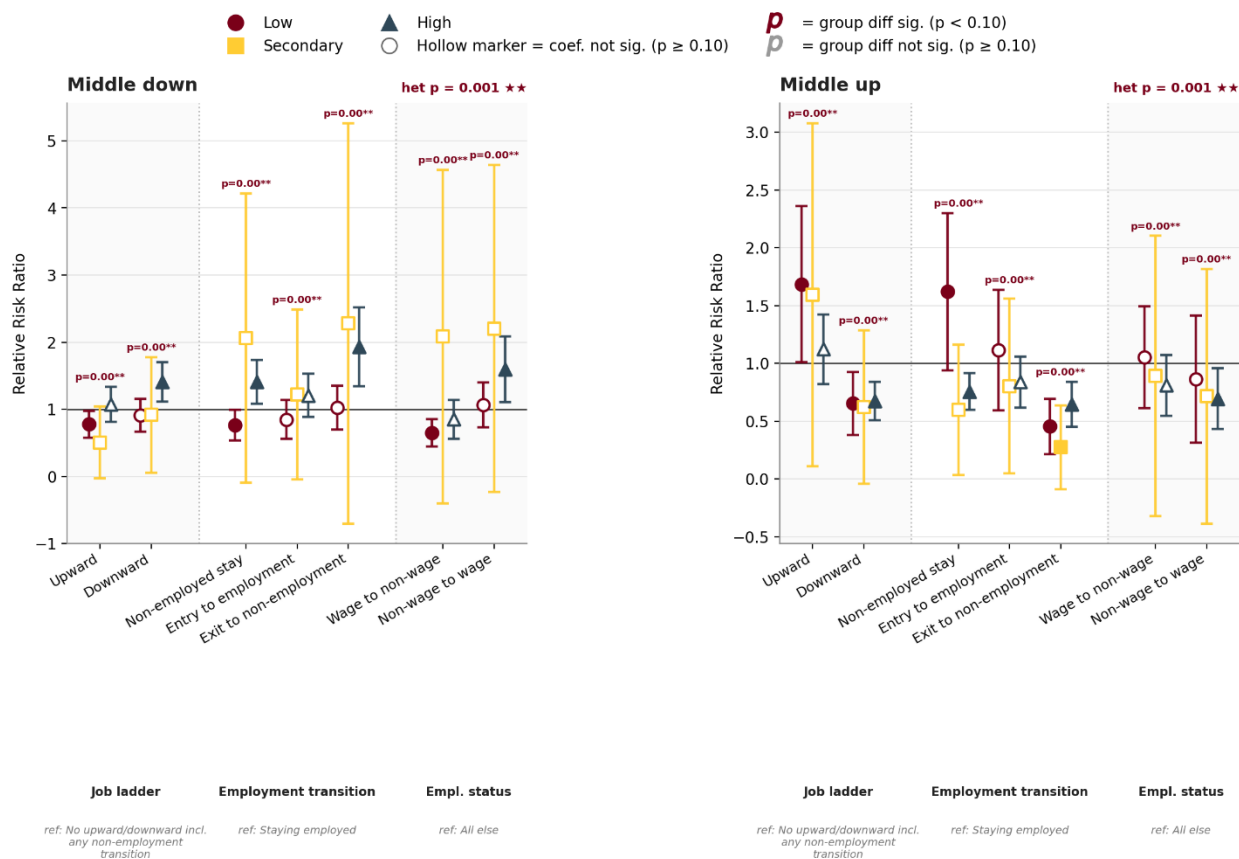
Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 17. Labor market transitions and household economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, by education



Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals ($\text{coefficient} \pm 1.96 \times \text{SE}$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p -value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p " value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 18. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, by education



Notes: Each panel plots relative risk ratios (RRR) for one mobility outcome (panel title) from a multinomial logit, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals ($\text{coefficient} \pm 1.96 \times \text{SE}$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The reference line is at 1.0 (no association). The text above each set of estimates reports the p -value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p " value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

4.4.4. By urban/rural location

Figure 19 (household and individual economic outcomes) and Figure 20 and Figure 21 (household economic class mobility outcomes) present heterogeneity by urban/rural location. Joint tests indicate statistically significant differences for household wealth ($p < 0.001$) and individual income ($p < 0.001$), as well as for exiting vulnerability or poverty ($p = 0.003$), while no significant heterogeneity is detected for household consumption, household per-capita income, monthly wages, formality-adjusted wages, or middle-class mobility outcomes.

For household wealth, urban/rural heterogeneity is concentrated in upward transitions and employment entry. Upward job ladder transitions are associated with significant wealth gains for both urban and rural individuals, but with significantly larger gains for rural individuals ($p =$

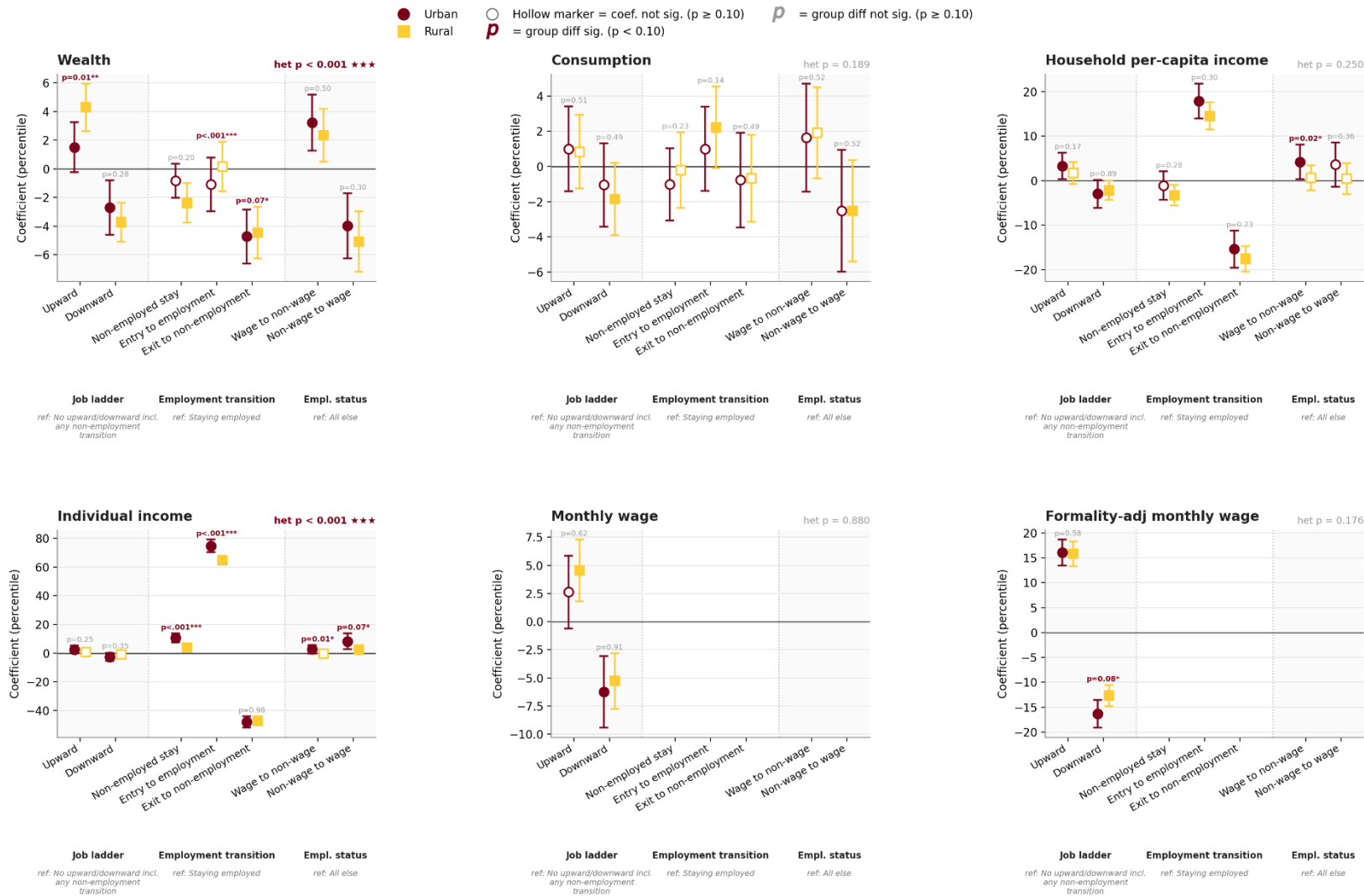
0.006). Entry into employment shows a significant urban/rural difference ($p < 0.001$), but with neither group having a significant association. Exit from employment is associated with significant wealth losses for both groups, with a marginally significant difference between them ($p = 0.070$), with slightly larger losses for urban individuals.

For individual income, urban/rural heterogeneity is present across employment transitions and employment status transitions. Remaining non-employed is associated with significantly larger income gains for urban individuals than for rural individuals ($p < 0.001$), though both groups show positive and significant effects. Entry into employment generates large and significant income gains for both groups, with significantly larger gains for urban individuals ($p < 0.001$). Exit from employment produces large income losses for both groups with no significant urban/rural difference. Among employment status transitions, wage-to-non-wage transitions are associated with significant income gains for urban individuals but no significant effect for rural individuals, with a significant difference between the two groups ($p = 0.013$). Non-wage-to-wage transitions generate income gains for both groups, with marginally larger gains for urban individuals ($p = 0.065$).

For exiting vulnerability or poverty, urban/rural differences are significant overall ($p = 0.003$). Upward job ladder transitions are associated with significantly higher exit from vulnerability or poverty for rural individuals but not for urban individuals, with a marginally significant difference ($p = 0.089$). Entry into employment is associated with higher exit from vulnerability or poverty for rural individuals but not urban individuals, with a significant difference ($p = 0.004$). Remaining non-employed shows a significant urban/rural difference ($p = 0.044$), with the effect not statistically significant for either group individually. Wage-to-non-wage and non-wage-to-wage transitions are associated with higher and lower exit probabilities respectively, with similar magnitudes across urban and rural areas and no significant difference between them.

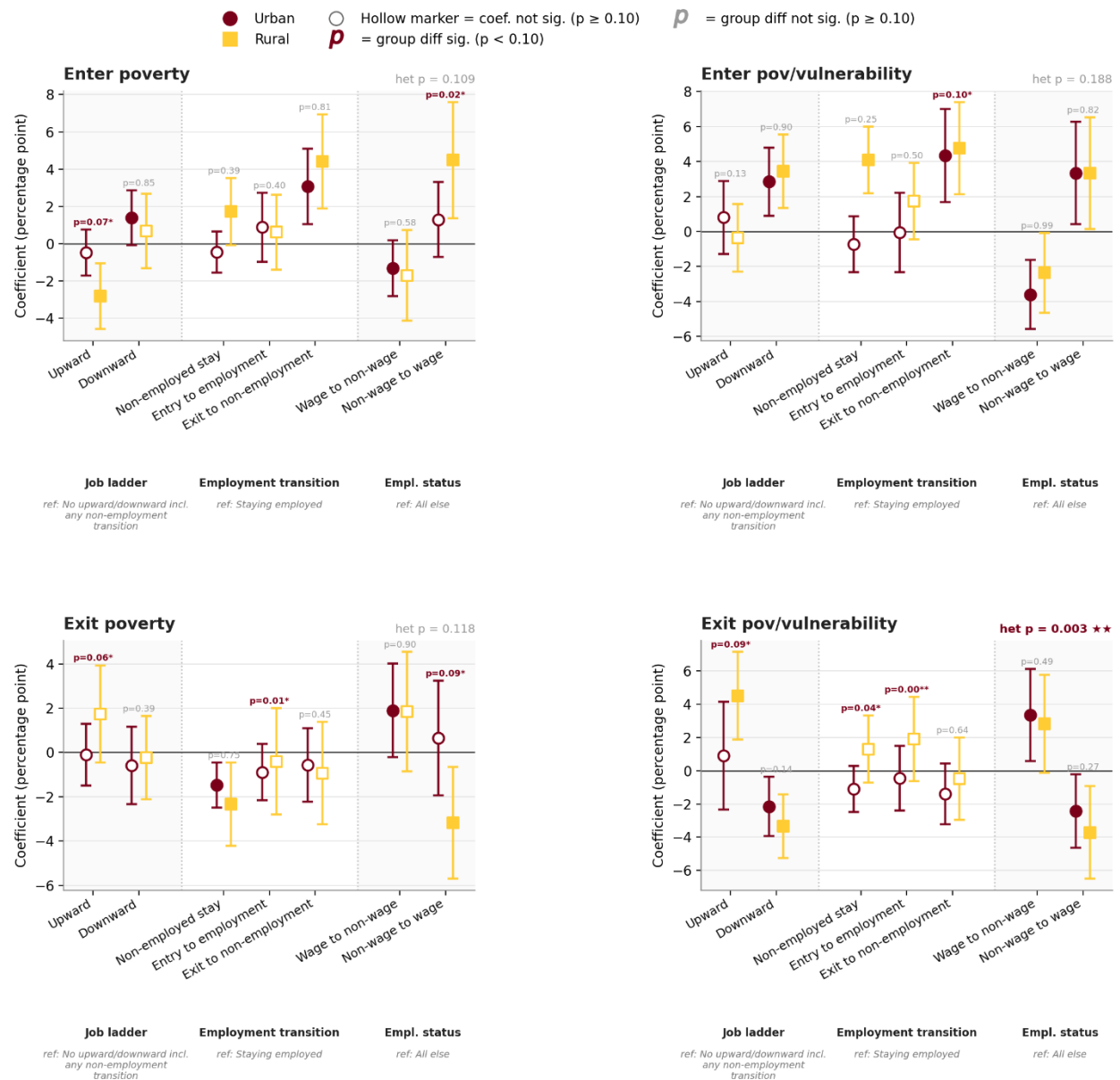
Overall, urban/rural heterogeneity is most pronounced for individual income and household wealth, particularly along employment transition and job ladder dimensions. Urban individuals tend to experience larger income gains from employment entry and from remaining non-employed, while rural individuals show larger wealth gains from upward job ladder transitions and are more likely to exit vulnerability or poverty following upward mobility and employment entry. These patterns highlight meaningful spatial differences in how labor market mobility translates into economic well-being, with distinct channels operating across wealth accumulation and income dynamics in urban and rural settings.

Figure 19. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, by location



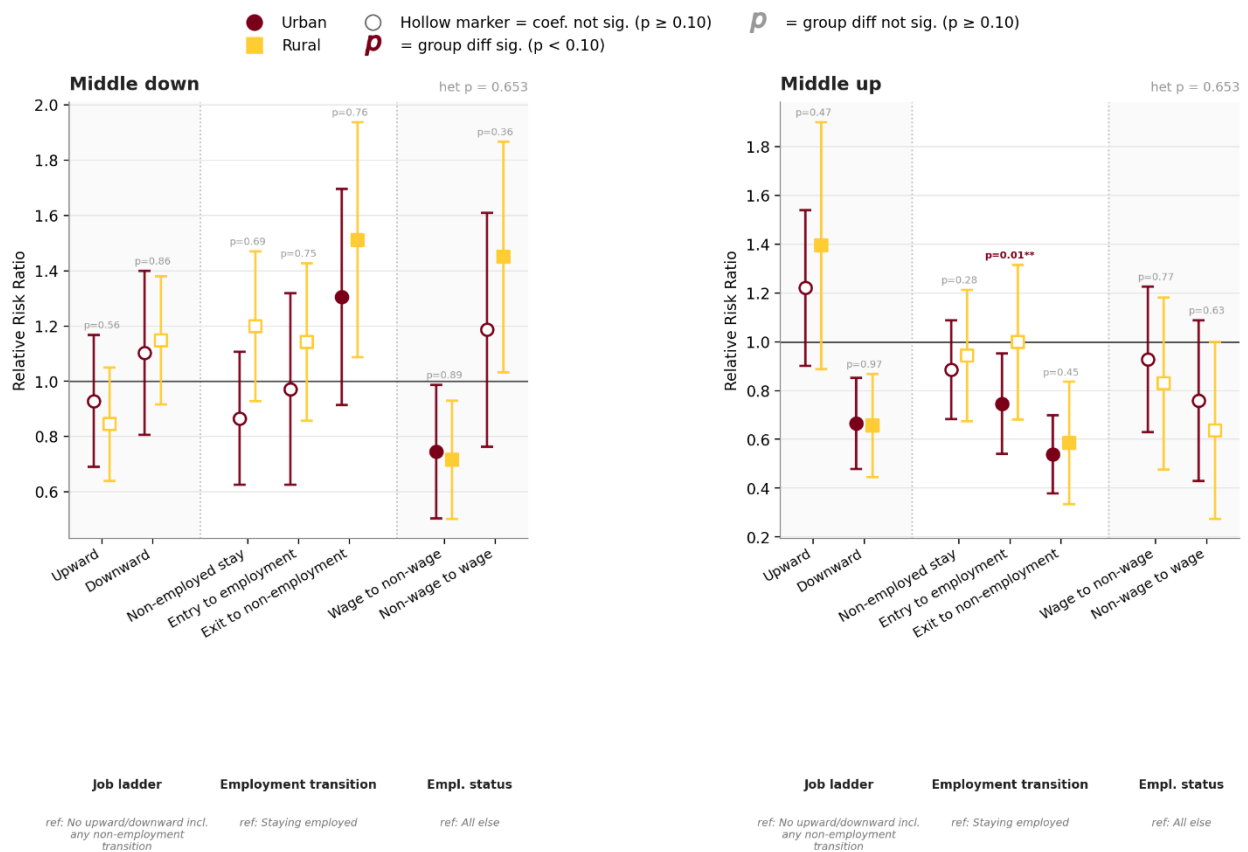
Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 20. Labor market transitions and household economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, by location



Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 21. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, by location



Notes: Each panel plots relative risk ratios (RRR) for one mobility outcome (panel title) from a multinomial logit, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The reference line is at 1.0 (no association). The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

4.4.5. By main breadwinner status

Figure 22 (household and individual economic outcomes) and Figure 23 and Figure 24 (household economic class mobility outcomes) present heterogeneity by main breadwinner status. Joint tests indicate statistically significant differences for household wealth ($p = 0.005$), individual income ($p < 0.001$), and formality-adjusted monthly wages ($p = 0.005$), as well as marginally significant differences for household per-capita income ($p = 0.096$) and monthly wages ($p = 0.069$). Significant heterogeneity is also found for exiting vulnerability or poverty ($p < 0.001$) and middle-class mobility ($p < 0.001$), while no significant differences are detected for household consumption, poverty entry, or poverty exit outcomes.

For household wealth, heterogeneity by breadwinner status is concentrated in employment transitions. Both non-breadwinners and main breadwinners experience significant wealth losses from upward and downward job ladder movements and from employment status transitions in similar magnitudes, with no statistically significant differences between the groups for these transitions. However, remaining non-employed is associated with significantly larger wealth losses for main breadwinners than for non-breadwinners ($p = 0.001$), with a very large negative coefficient for main breadwinners. Entry into employment is associated with a significant wealth loss for main breadwinners but no significant effect for non-breadwinners, with a significant difference between the two groups ($p = 0.010$).

For individual income, heterogeneity is most pronounced in employment transitions. Remaining non-employed is associated with significant income gains for non-breadwinners but with very large and significant income losses for main breadwinners, with a highly significant difference ($p < 0.001$). This pattern likely reflects that main breadwinners remaining non-employed face severe income consequences for the household, while non-breadwinners do not bear the same burden. Entry into employment generates large and significant income gains for non-breadwinners but no significant effect for main breadwinners, with a significant difference ($p = 0.011$). Exit from employment generates significant income losses for both groups, but with significantly larger losses for non-breadwinners than for main breadwinners ($p < 0.001$), suggesting that non-breadwinners' own income is more severely affected when they exit employment. Non-wage-to-wage transitions are associated with income gains for both groups, while upward job ladder transitions are significantly associated with income gains for non-breadwinners only, though the difference between the two groups is not statistically significant.

For household per-capita income, the marginally significant joint test is driven primarily by exit from employment, which is associated with significantly larger household income losses for main breadwinners than for non-breadwinners ($p = 0.003$), consistent with the greater household-level role of the main breadwinner. For wages, heterogeneity is observed for job ladder movements. Among monthly wages, upward transitions generate marginally larger gains for non-breadwinners than for main breadwinners ($p = 0.077$), while downward transitions generate marginally larger losses for main breadwinners ($p = 0.091$). For formality-adjusted wages, downward transitions are associated with significantly larger wage losses for main breadwinners than for non-breadwinners ($p = 0.001$), while upward transitions show no significant difference.

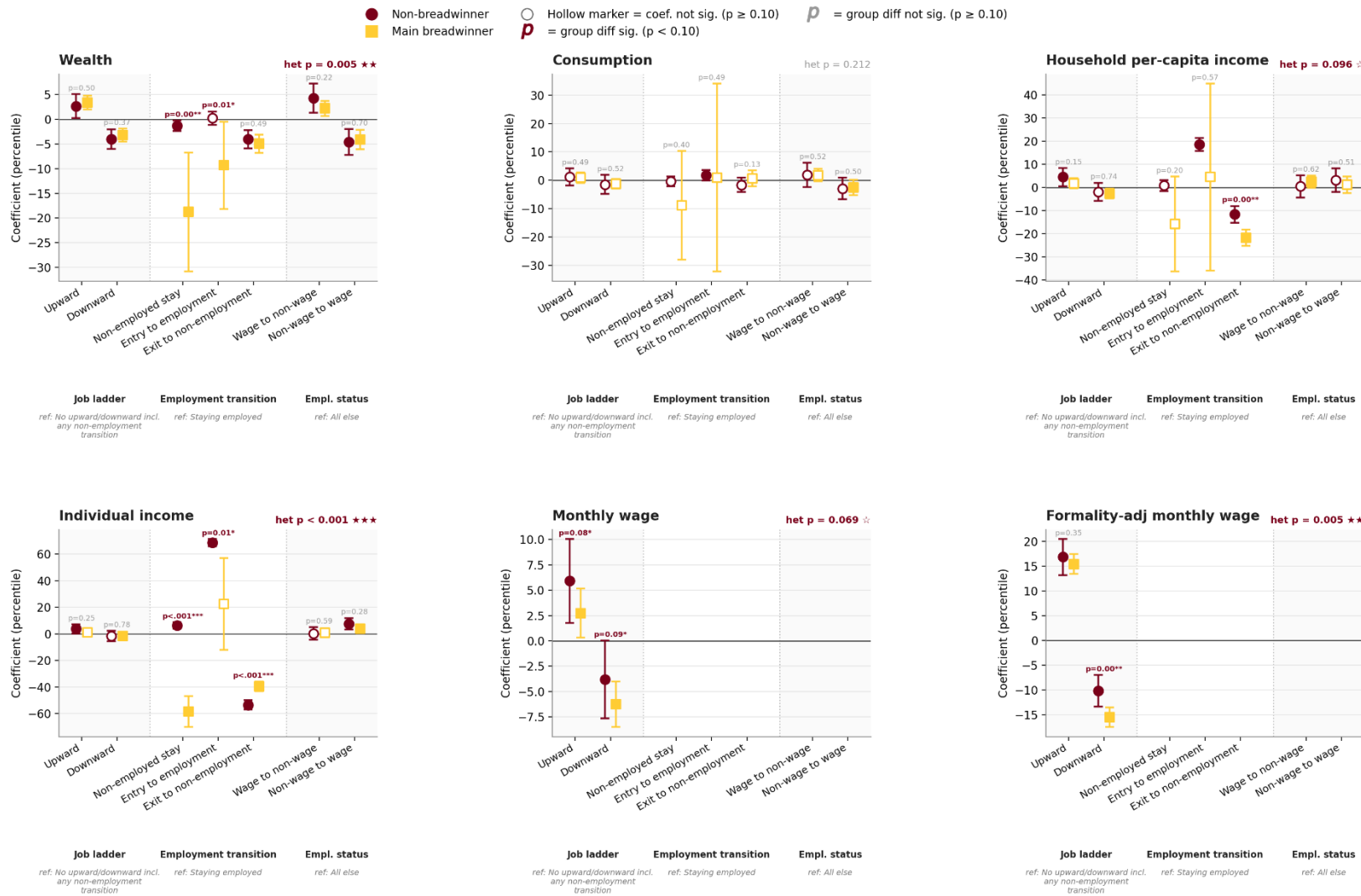
For exiting vulnerability or poverty, the significant heterogeneity ($p < 0.001$) is driven by remaining non-employed, which is associated with a very large and significant reduction in the probability of exiting vulnerability or poverty for main breadwinners, but no significant effect for non-breadwinners ($p < 0.001$). Wage-to-non-wage and non-wage-to-wage transitions are associated with higher and lower probabilities of exiting vulnerability or poverty respectively for non-

breadwinners, while effects for main breadwinners are smaller or not significant, though the differences between groups are not statistically significant.

For middle-class mobility, heterogeneity is significant overall ($p < 0.001$). Exit from employment increases downward mobility risk and reduces upward mobility for both groups, with no significant difference between them. Wage-to-non-wage transitions are associated with significantly lower downward mobility risk for non-breadwinners ($p < 0.001$), with a marginally significant difference relative to main breadwinners ($p = 0.052$). Non-wage-to-wage transitions are associated with higher downward mobility risk for both groups with no significant difference. Some coefficients for main breadwinners in the middle-class models — specifically entry into employment (moved down) and remaining non-employed (moved up) — show extreme values indicative of perfect prediction or near-collinearity, likely reflecting very few main breadwinners in those transition cells, and should be interpreted with caution.

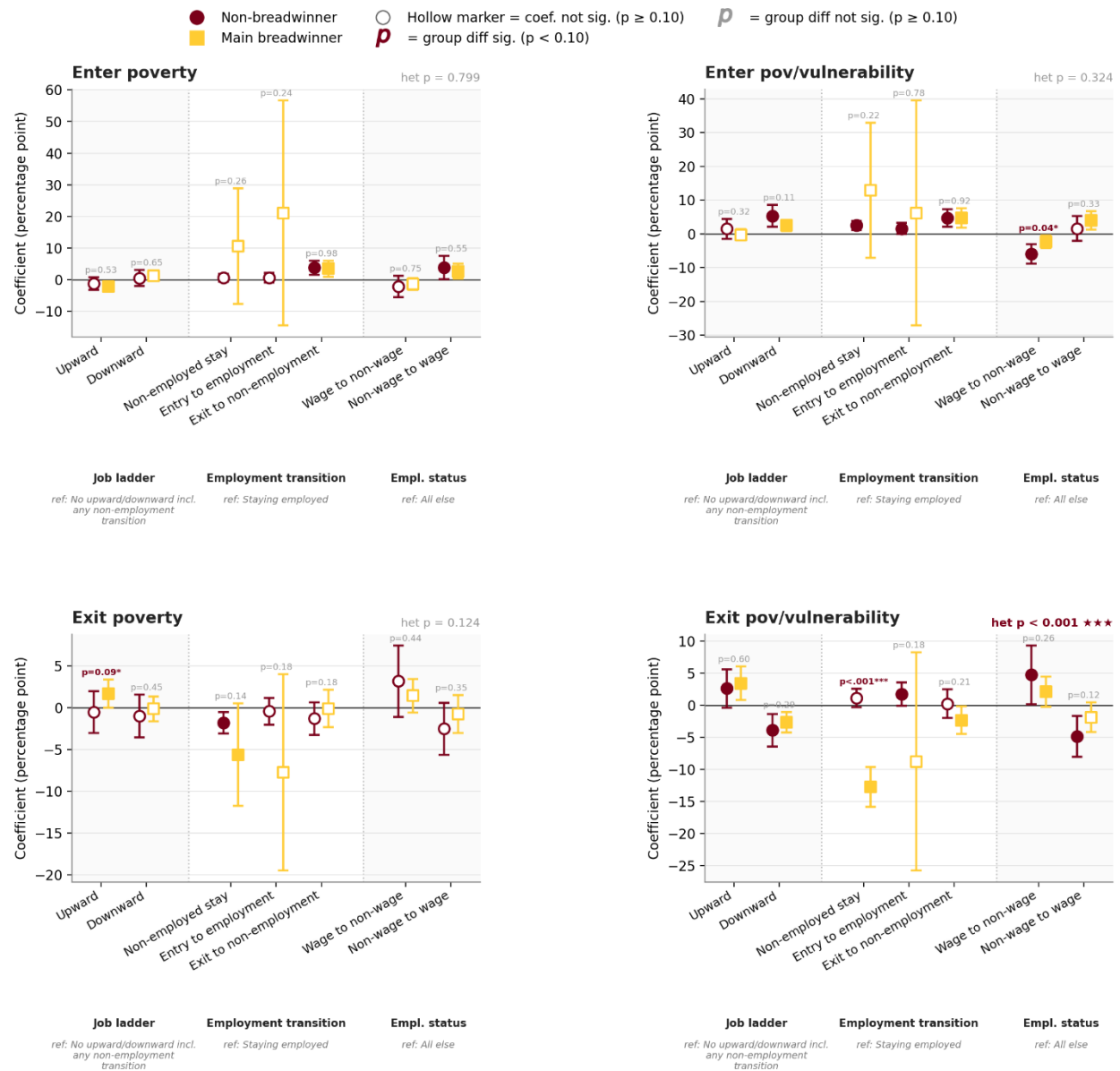
Overall, heterogeneity by breadwinner status is substantial and systematic, particularly for individual income and wage outcomes. Main breadwinners face much larger income and wealth consequences from remaining non-employed and from employment exit, reflecting the greater household-level dependence on their labor market status. Non-breadwinners, by contrast, experience larger individual income losses upon employment exit and benefit more from employment entry in terms of income gains. These patterns highlight that the economic consequences of labor market transitions are shaped not only by the nature of the transition itself but also by the individual's role within the household.

Figure 22. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, main breadwinner versus non-main breadwinner



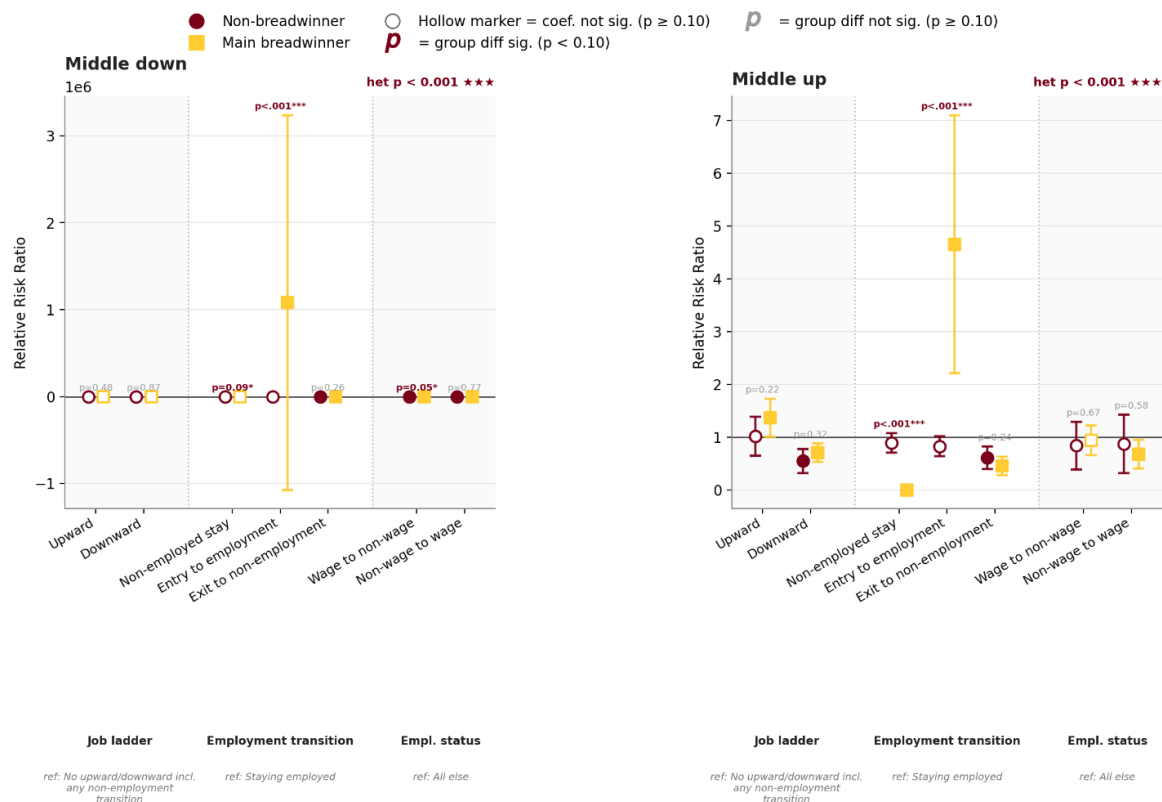
Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 23. Labor market transitions and household wealth economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, main breadwinner versus non-main breadwinner



Notes: Each panel plots regression coefficients for one outcome, estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p -value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p " value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 24. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, main breadwinner versus non-main breadwinner

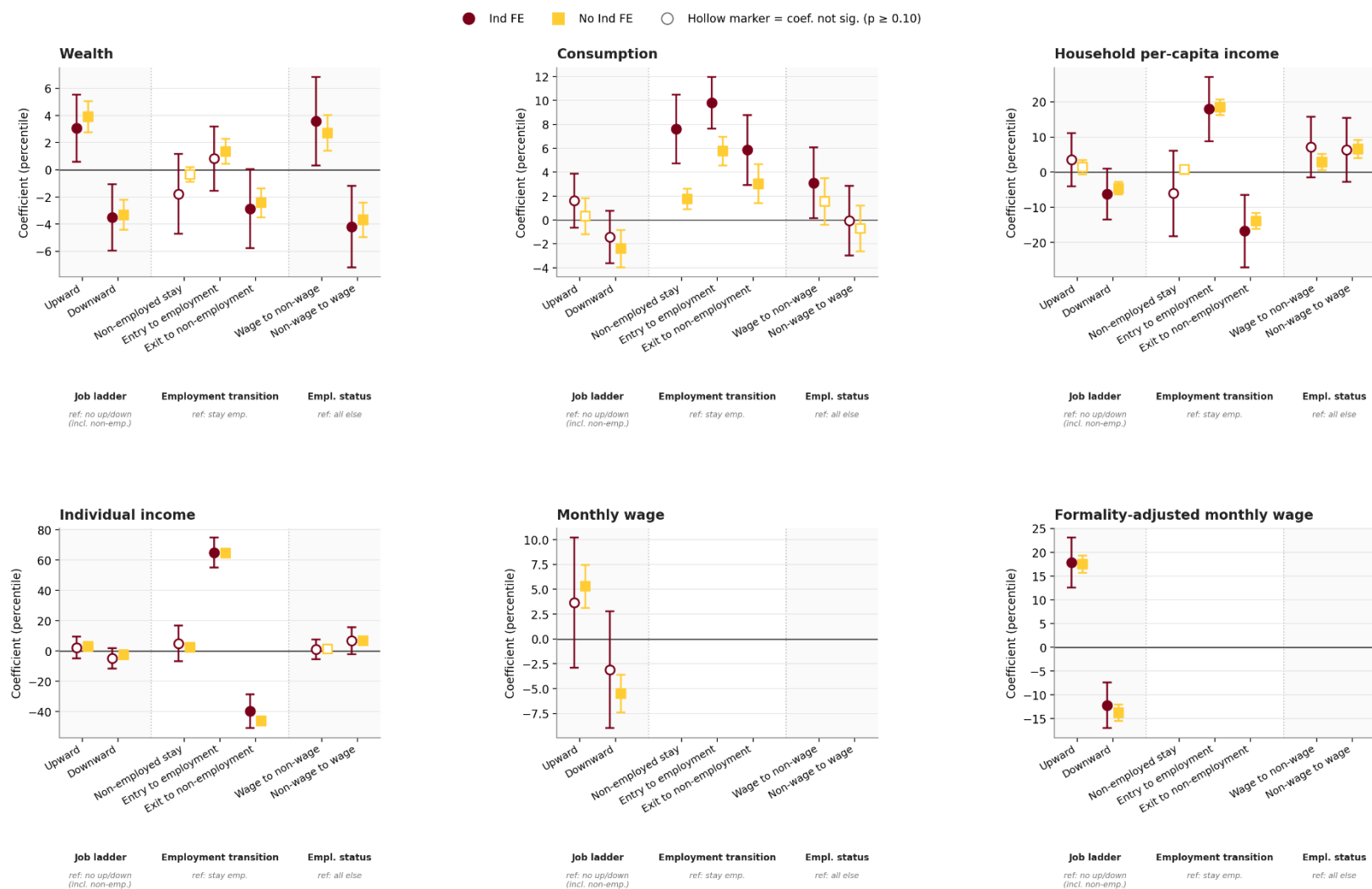


Notes: Each panel plots relative risk ratios (RRR) for one mobility outcome (panel title) from a multinomial logit, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The reference line is at 1.0 (no association); note the axis for middle down is on a 1e6 scale. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

4.5. Sensitivity analyses

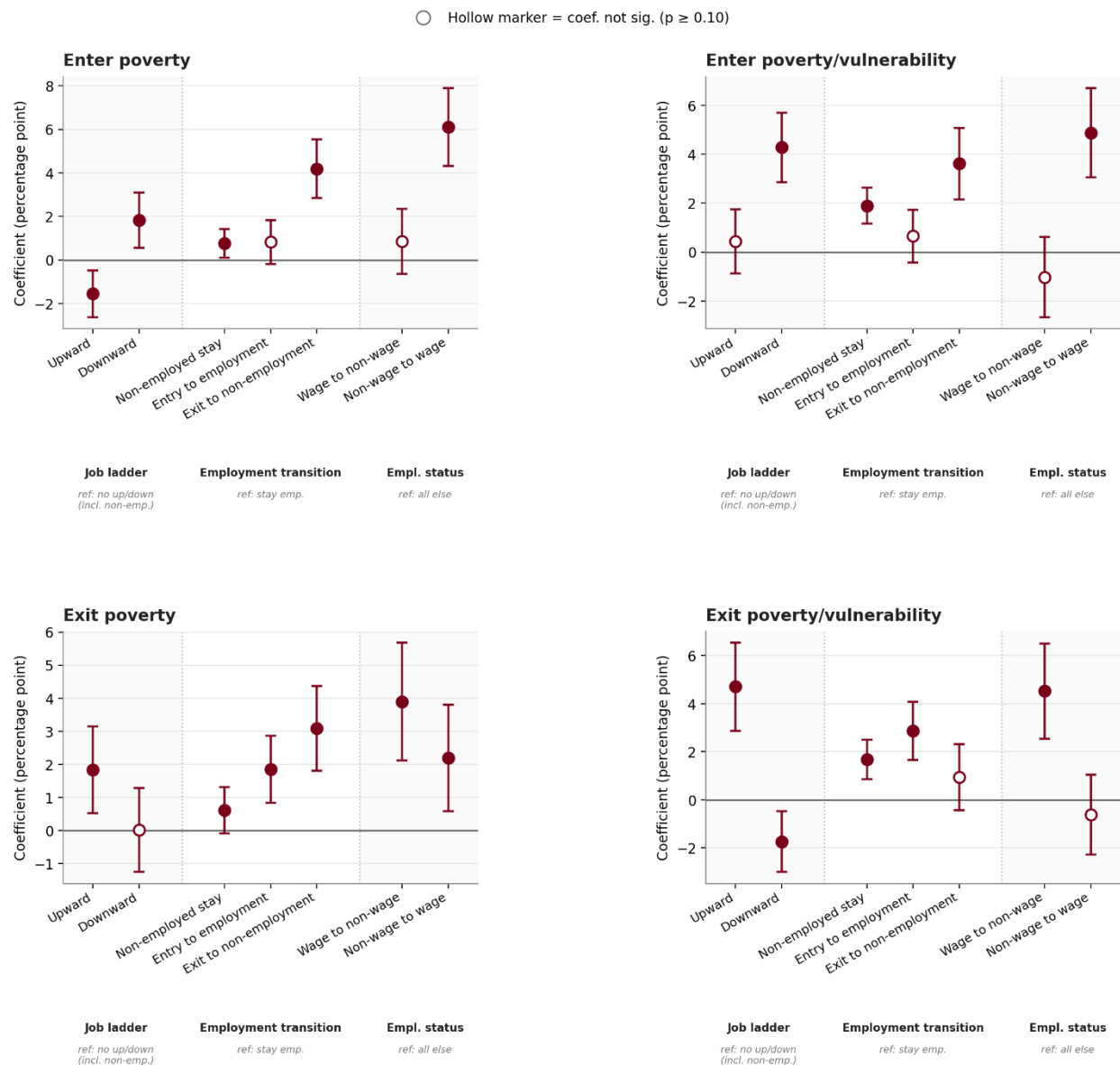
Figure 25, Figure 26, and Figure 27 present estimates excluding control variables as a sensitivity analysis complementary to the main results. The core findings are largely robust: coefficient signs remain stable across specifications for the vast majority of outcomes, and key employment transition and job ladder effects are consistent in direction and significance. A small number of coefficients change significance at the margins, primarily in the FE specifications and for poverty exit outcomes. The most notable exceptions are two employment status transition coefficients — wage-to-non-wage and non-wage-to-wage — whose associations with poverty entry and exit reverse sign once controls are included, suggesting that compositional differences partly drive the no-control estimates for these specific outcomes. Overall, the sensitivity analysis supports the robustness of the main results, with the with-control specifications serving as the primary reference for interpretation.

Figure 25. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with and without individual fixed effects, without controls



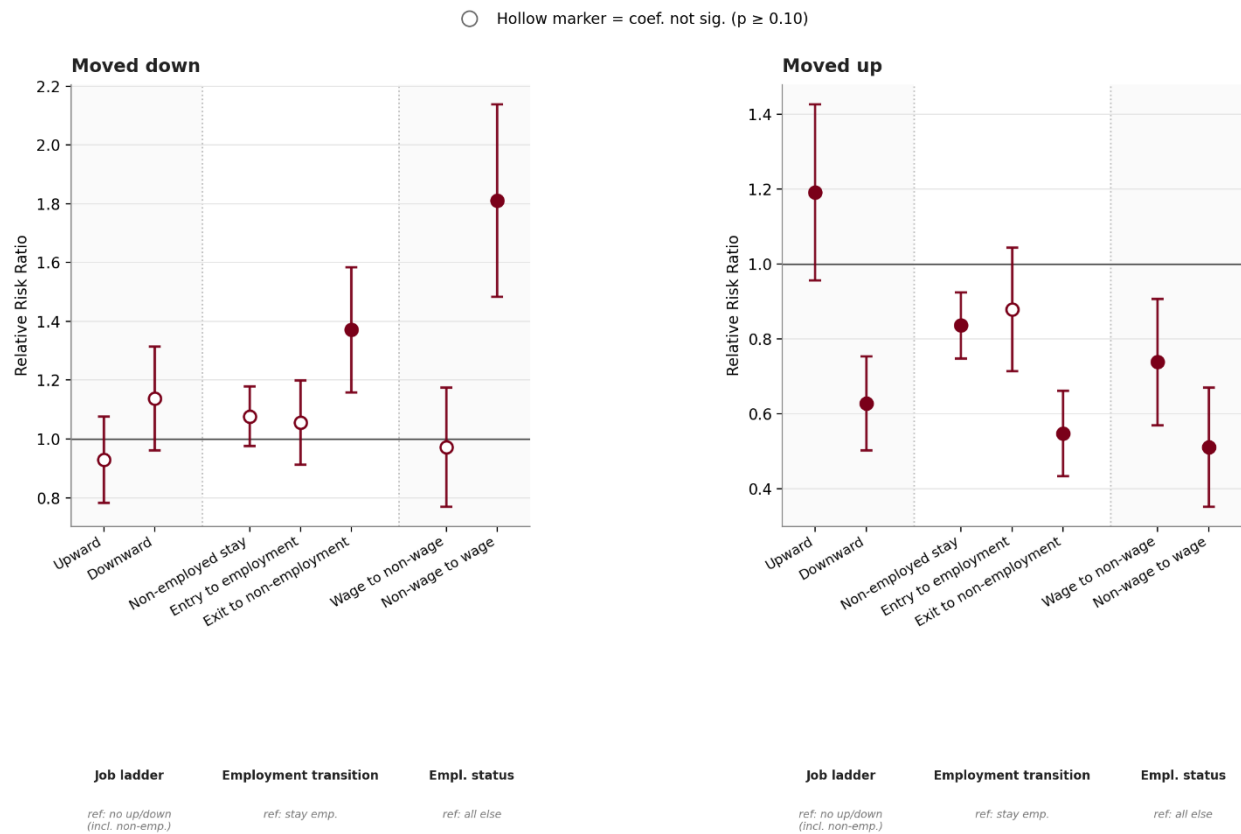
Notes: Each panel shows coefficients for one outcome (panel title) under two specifications: Ind FE (individual fixed effects, dynamic controls; maroon) and No Ind FE (no individual fixed effects, pre-wave controls; gold). Markers are point estimates, bars are 95% confidence intervals; filled = significant at $p < 0.10$, hollow = not; the line at zero is the null.

Figure 26. Labor market transitions and household economic classes outcomes: estimates of percentage point changes without individual fixed effects, without controls



Notes: Each panel plots linear-probability coefficients for one binary outcome (panel title), in percentage points. Markers are point estimates; bars are 95% confidence intervals. Filled markers are significant at $p < 0.10$, hollow markers are not; the line at zero is the null. A positive coefficient means the labor-market transition on the x-axis raises the probability of the outcome relative to the reference category for its group; a negative coefficient lowers it.

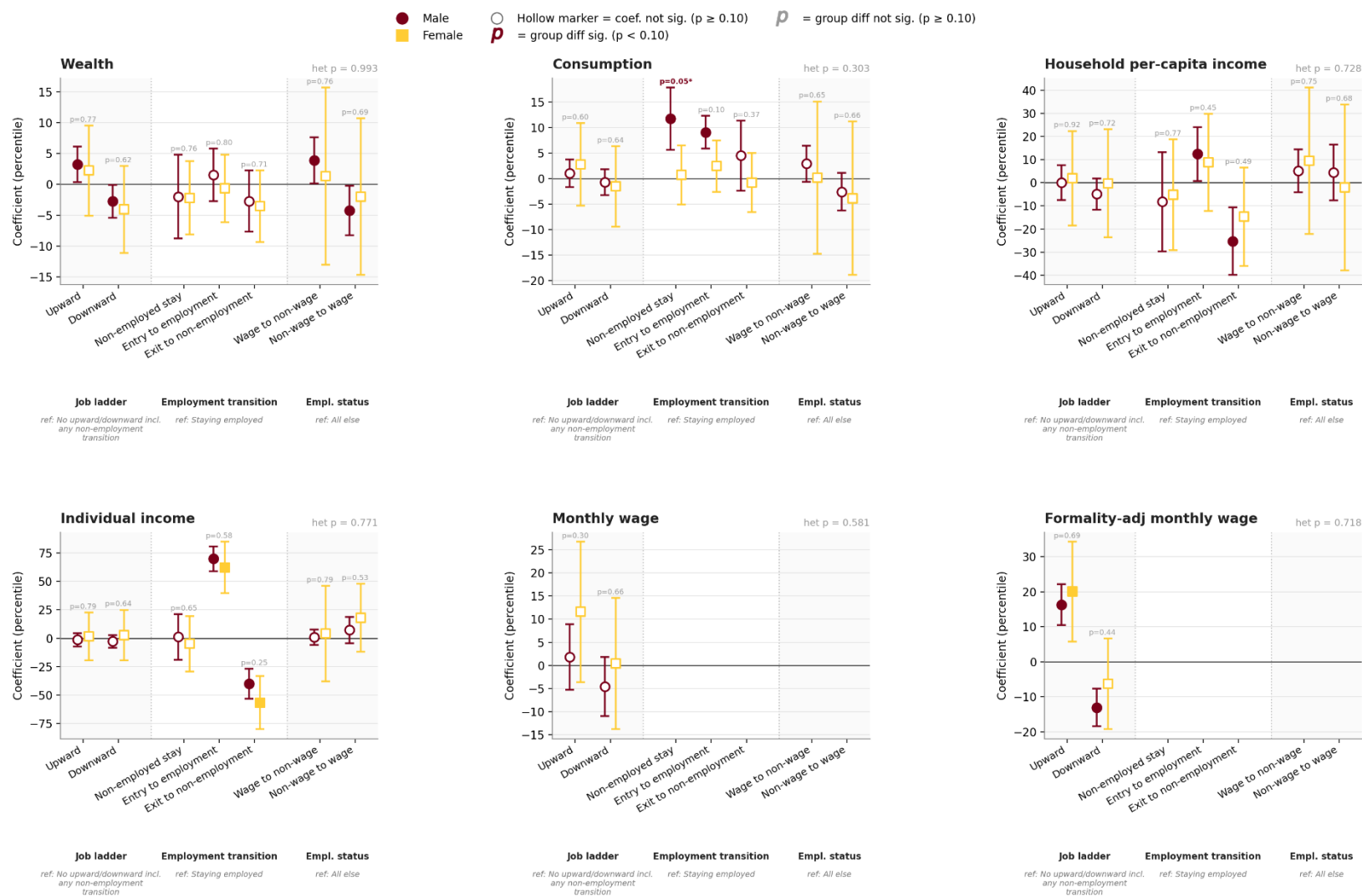
Figure 27. Labor market transitions and household wealth middle classes outcomes: multinomial logit model (relative risk ratio), estimates without individual fixed effects, without controls



Notes: Each panel plots relative risk ratios (RRR) for one mobility outcome (panel title) from a multinomial logit; the reference line is at 1.0 (no association). Markers are point estimates; bars are 95% confidence intervals. Filled markers are significant at $p < 0.10$, hollow markers are not. A RRR above 1 means the transition on the x-axis is associated with a higher relative likelihood of that move (vs. the base outcome), holding controls constant; below 1 means lower.

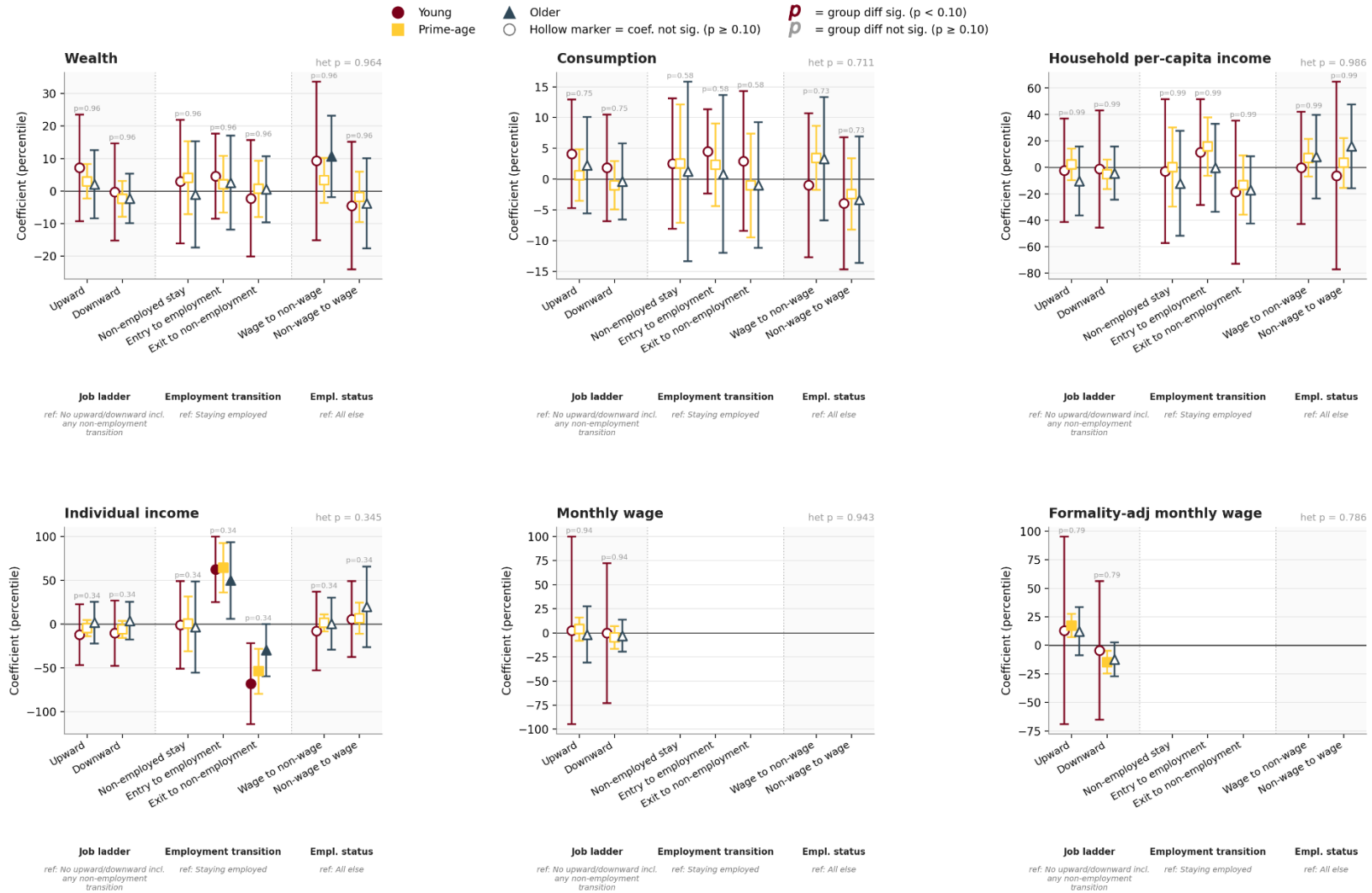
Figure 28, Figure 29, Figure 30, Figure 31, and Figure 32 report heterogeneity results for continuous outcomes under the individual fixed effects specification. As expected, estimates are generally less likely to be statistically significant, and joint heterogeneity tests are less often significant under this more demanding specification. Nevertheless, the overall directional patterns remain consistent with the main heterogeneity findings, further supporting the robustness of the results.

Figure 28. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, male versus female



Notes: Each panel plots regression coefficients for one outcome (column header), estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

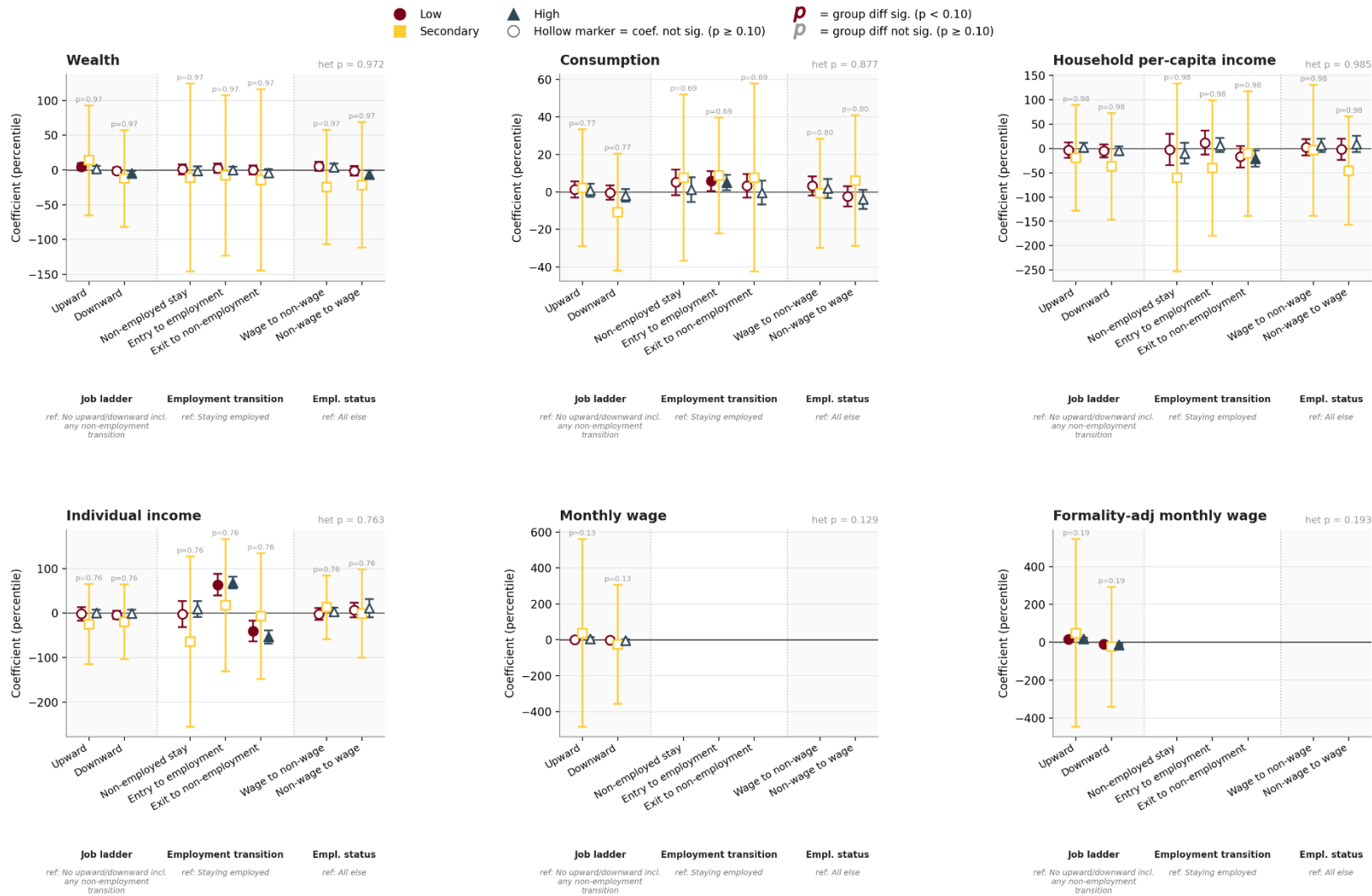
Figure 29. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, by age groups



Notes: Each panel plots regression coefficients for one outcome (column header), estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The

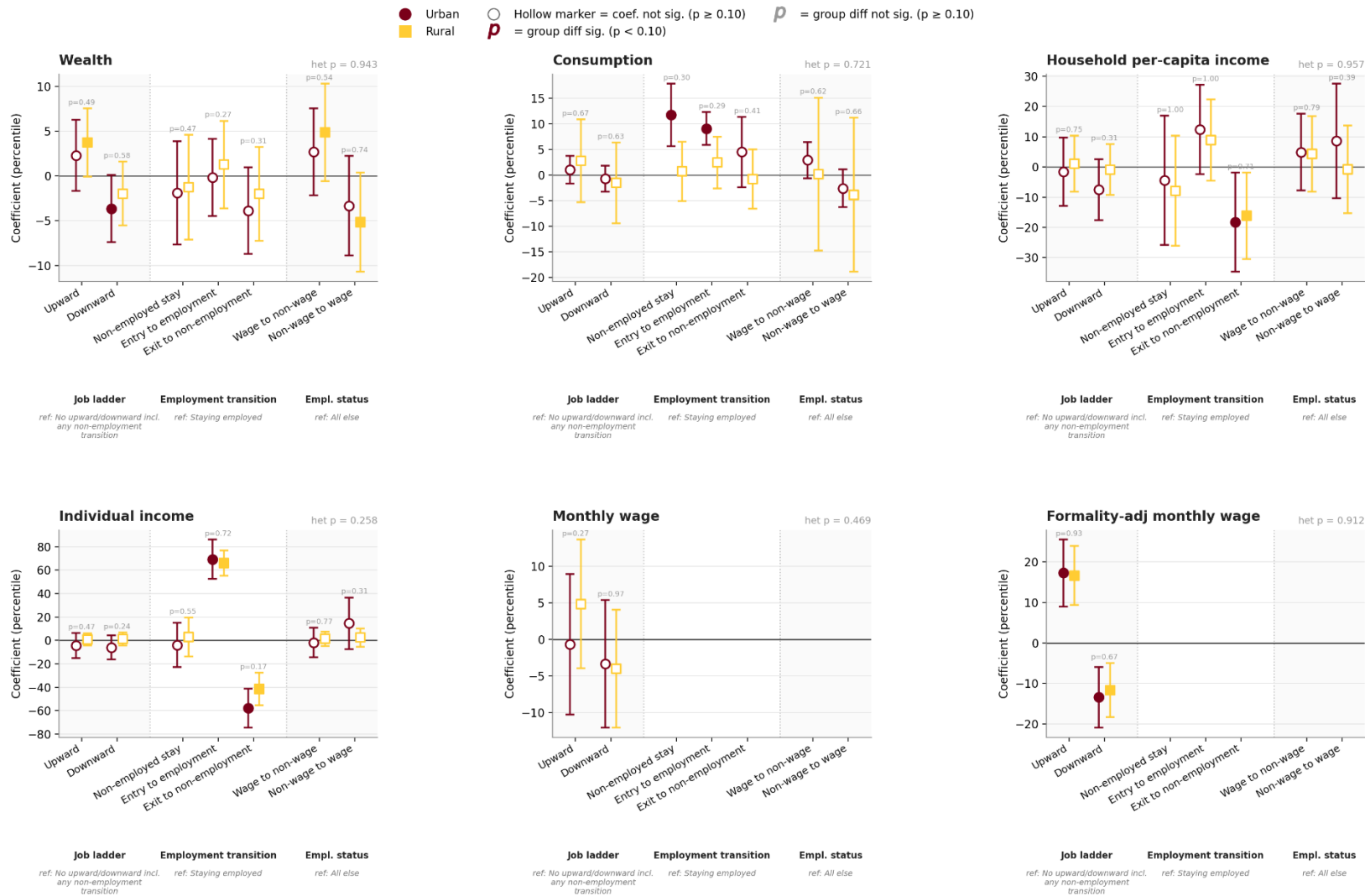
horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 30. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, by education groups



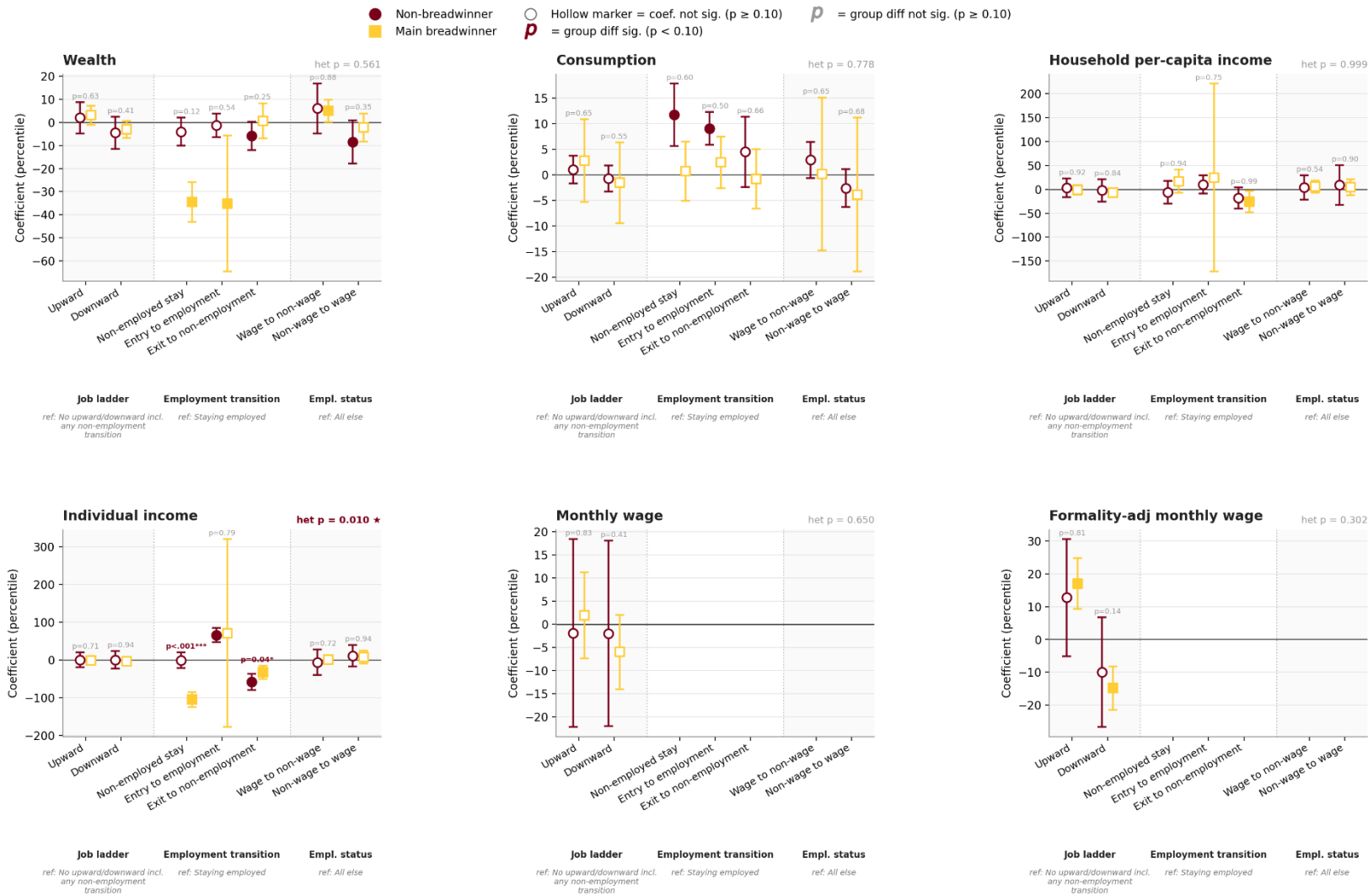
Notes: Each panel plots regression coefficients for one outcome (column header), estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

Figure 31. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, by location



Notes: Each panel plots regression coefficients for one outcome (column header), estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

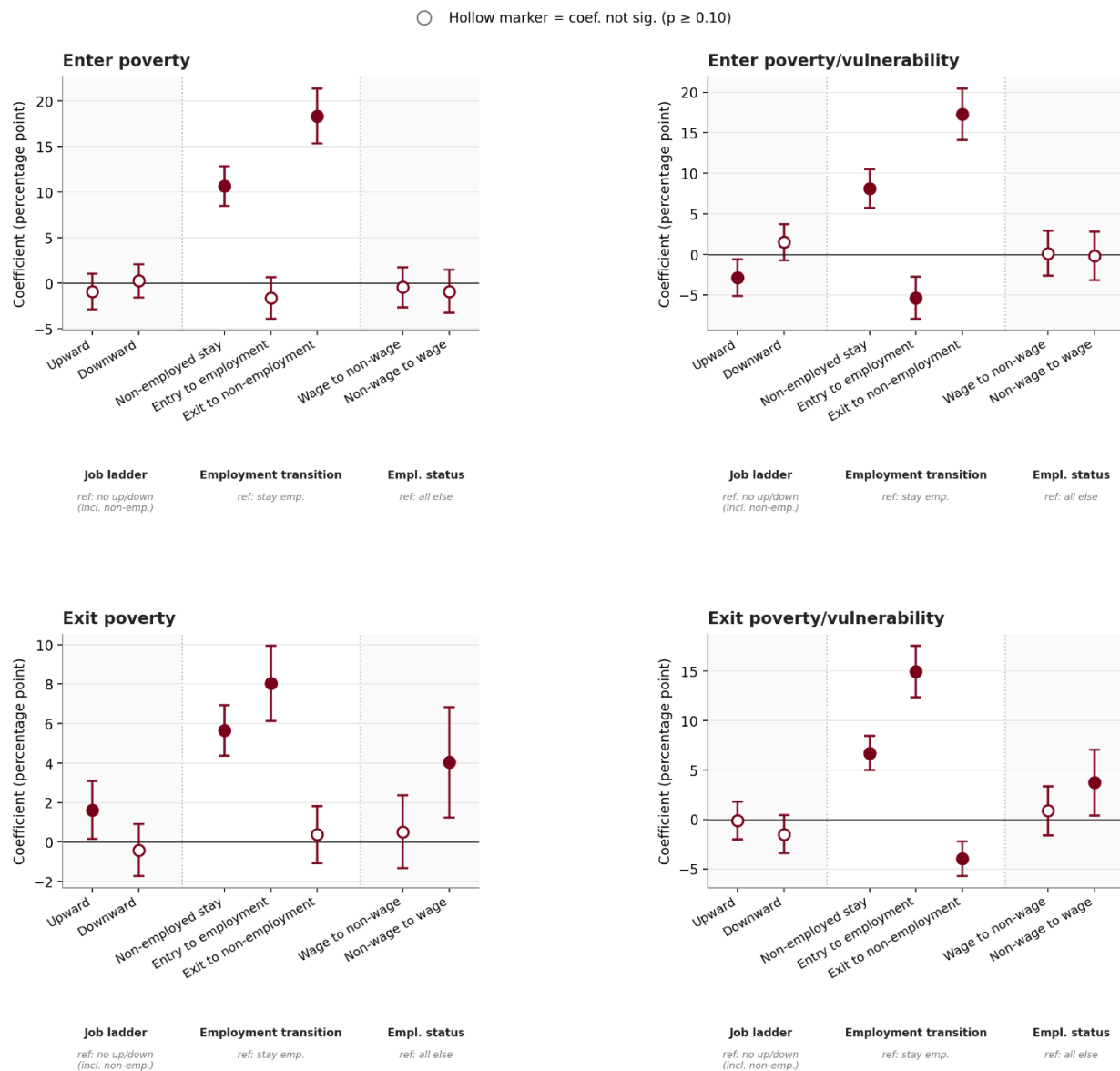
Figure 32. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, main breadwinner versus non-main breadwinner



Notes: Each panel plots regression coefficients for one outcome (column header), estimated separately by subgroup, shown as colored markers per the legend. Markers are point estimates; vertical bars are 95% confidence intervals (coefficient $\pm 1.96 \times SE$). A filled marker indicates the coefficient is statistically distinguishable from zero ($p < 0.10$); a hollow marker indicates it is not. The horizontal line at zero is the null. The text above each set of estimates reports the p-value from a test of whether the coefficients differ across subgroups at that regressor; it is printed in maroon when subgroups differ significantly ($p < 0.10$) and in grey otherwise. The "het p" value in the upper-right of each panel is the joint test of subgroup heterogeneity across all coefficients in that outcome.

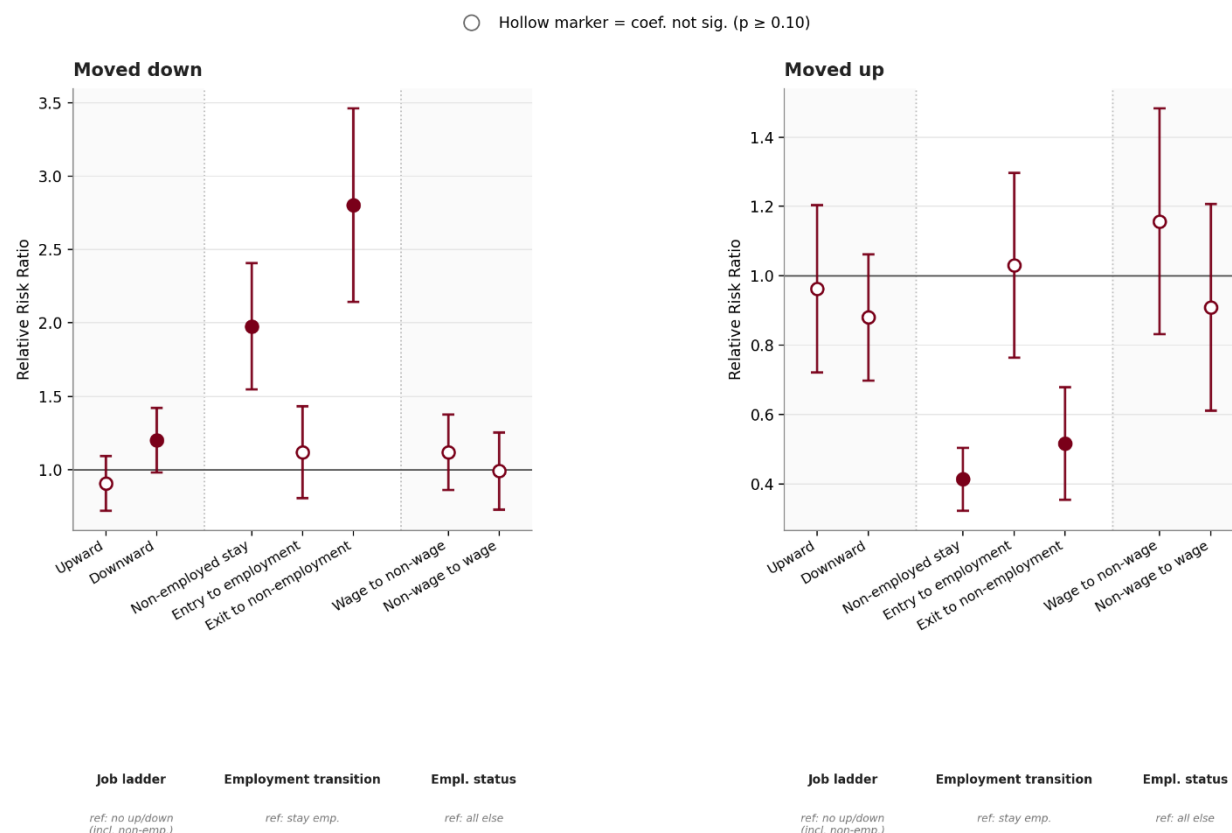
Figure 33 and Figure 34 present class transition estimates using household per-capita income as an alternative class definition. The results are broadly consistent with the wealth-based main results: exit from employment consistently raises the probability of entering poverty and of downward middle-class mobility, and employment entry supports upward mobility under both definitions. Two key differences stand out. First, employment transitions have substantially larger effects under the income definition, reflecting its greater sensitivity to short-run earnings changes. Second, employment status transitions are largely insignificant under the income definition but consistently significant under the wealth definition, suggesting these shifts operate primarily through asset accumulation rather than current income. Two sign reversals — for non-wage-to-wage transitions and remaining non-employed on poverty exit — are consistent with the different time horizons captured by income versus wealth. Overall, the results support the robustness of the main findings while highlighting that the channel through which labor market transitions affect well-being depends on the outcome dimension considered.

Figure 33. Labor market transitions and household income classes outcomes: estimates of percentage point changes without individual fixed effects, with controls



Notes: Each panel plots linear-probability coefficients for one binary outcome (panel title), in percentage points. Markers are point estimates; bars are 95% confidence intervals. Filled markers are significant at $p < 0.10$, hollow markers are not; the line at zero is the null. A positive coefficient means the labor-market transition on the x-axis raises the probability of the outcome relative to the reference category for its group; a negative coefficient lowers it.

Figure 34. Labor market transitions and household income middle classes outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls



Notes: Each panel plots relative risk ratios (RRR) for one mobility outcome (panel title) from a multinomial logit; the reference line is at 1.0 (no association). Markers are point estimates; bars are 95% confidence intervals. Filled markers are significant at $p < 0.10$, hollow markers are not. An RRR above 1 means the transition on the x-axis is associated with a higher relative likelihood of that move (vs. the base outcome), holding controls constant; below 1 means lower.

5. Conclusion

This paper examines labor market dynamics in Egypt across three key dimensions—job ladder movements, transitions into and out of employment, and employment status shifts—and their associations with a range of economic mobility outcomes, including movement along the household wealth, per capita income, and consumption distributions, the distribution of individual income and wages (including formality-adjusted wages), and household economic class mobility (including poverty, vulnerability, and middle class status). Using 25 years of panel data from the Egypt Labor Market Panel Survey (1998–2023), we provide a comprehensive assessment of how different forms of employment mobility drive changes in economic well-being.

Our findings show that economic mobility remains limited overall, with strong persistence over time—particularly in wealth and economic class. The three dimensions of labor market dynamics

operate through distinct channels to shape economic mobility. Job ladder movements are closely linked to wealth accumulation and formality adjusted wage gains, and to a lesser extent to monthly wages and household per capita income. They are also associated with the likelihood of entering and exiting poverty and/or vulnerability and with moving up from the middle class (but not moving down). When significant, the effects of upward and downward job ladder movements on all outcomes are in the expected direction.

Transitions into and out of employment play a central role in income and consumption dynamics, with entry to employment associated with increased consumption, household per capita income and, especially strongly, with individual income, but not associated with mobility across economic class. Conversely, exit from employment is associated with lower household and individual incomes and higher probability of entering poverty/vulnerability and a downward movement from the middle class.

Employment status shifts shape longer-term wealth trajectories and class mobility, with transitions from wage to non-wage work being associated with more favorable economic outcomes than the reverse. For instance, transitions from wage to non-wage work are associated with positive wealth changes, a lower probability to enter poverty and/or vulnerability, a higher probability to exit from them, as well as a lower probability to move down from the middle class. The opposite is true for movements from non-wage to wage. This suggests that individuals move to self-employment in response to economic opportunities and leave it in response to negative economic shocks affecting their businesses.

We also check whether the relationships between labor market dynamics and economic mobility differs across population subgroups. Our heterogeneity analysis shows that the effects of transitions across each labor market dimension vary by gender, age, education, urban/rural location, and main breadwinner status. When patterns differ along gender lines, our results suggest that men's economic outcomes are more responsive to their labor market transitions than women's, in line with men's stronger attachment to the labor market and women's predominant status as dependents. While there is no consistent pattern by age group, our results suggests that the individual and household incomes of older adults are less responsive to entry and exit from employment, consistent with transitions into retirement and the receipt of pensions. However, the poverty status of older adults is more sensitive to transitions from non-wage to wage employment, suggesting that the shocks that result in these transitions affect them more adversely.

There is not a great deal of heterogeneity of effects along educational lines. To the extent that it exists, it suggests that those with higher education are more negatively affected by downward job ladder transitions and by transitions from employment to non-employment, and from non-wage to wage work. Urban/rural differences in the effects of labor market dynamics are also limited. The

differences that exist suggest that rural residents benefit more in terms of wealth and exit from poverty/vulnerability from upward job ladder transitions and entry into employment.

A range of sensitivity analyses supports the robustness of our findings. Results remain qualitatively consistent when excluding control variables in the main specifications and when incorporating individual fixed effects in the analysis of continuous outcomes, including within subgroup analyses.

The case of Egypt—characterized by segmented labor markets, a high prevalence of informality, and significant non-employment (AlAzzawi and Hlasny 2025; Assaad and Mahmoud 2024; Krafft, Assaad, and McKillip 2024)—offers insights that extend beyond a single country context. These findings are relevant for other countries in the Middle East and North Africa region and similar developing economies facing comparable labor market structures. Our results underscore the linkages between labor market mobility and economic welfare dynamics. In the decades after structural reform, and beset by macroeconomic shocks, it has become harder to climb the job ladder in Egypt (Krafft, Assaad, Helmy, and Armas-Montalvo 2026); the breakdown of the job ladder has clear consequences for welfare.

From a policy perspective, improving labor market functioning is central to addressing persistent economic inequality. However, the results also highlight that no single dimension of labor mobility is sufficient. Policies should be tailored to specific development objectives and population groups: facilitating upward job ladder mobility to support wealth accumulation and protection against poverty and vulnerability, promoting access to employment to enhance income, household consumption, and poverty reduction, and recognizing the role of entrepreneurial activities in enabling upward economic mobility for certain groups.

Encouraging private sector competition can enhance job creation (Chekir and Diwan 2015; Diwan and Haidar 2021), supporting welfare-enhancing dynamics through entry. Reforms to social insurance and firm registration processes, as well as support for worker formalization can support movement up the job ladder and reduce downward risks (Abel et al. 2022; Asik et al. 2022; Canelas and Niño-Zarazúa 2022; Fajnzylber et al. 2011). Particularly for individuals with experience and skills (but not unemployed youth), microenterprise creation and business support can be welfare enhancing (McKenzie et al. 2025; Krafft and Rizk 2021; McKenzie and Paffhausen 2019). A more nuanced, multi-dimensional approach to labor market policy is therefore essential for fostering inclusive economic mobility.

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Appendix: Tables

Table 1. Mean economic outcomes by job ladder position, 2023

Outcome	Formal non-wage	Formal wage	Upper-tier informal non-wage	Lower-tier informal non-wage	Upper-tier informal wage	Lower-tier informal wage	Non-employment	Total
Wealth percentile	66.038	66.936	52.1	40.88	54.646	40.506	52.22	52.309
Consumption percentile	50.343	55.256	44.051	38.864	48.879	39.281	46.308	46.15
Household per-capita income percentile	60.915	61.945	58.538	53.585	60.561	57.17	46.836	51.966
Individual income percentile	82.064	78.57	81.744	74.349	78.131	79.916	10.125	39.365
Monthly wage percentile		63.558			46.08	40.207		50.103
Formality-adjusted monthly wage percentile		74.786			41.733	33.778		50.395
Wealth class: Poor	6.51	5.992	13.957	27.183	15.662	29.949	17.716	17.945
Wealth class: Vulnerable	13.766	11.278	21.563	26.247	16.956	25.031	19.209	19.189
Wealth class: Middle class	42.995	44.878	47.458	38.082	43.682	34.56	41.891	41.353
Wealth class: Affluent	36.73	37.853	17.022	8.489	23.7	10.46	21.184	21.513
Per-capita income class: Poor	11.412	15.965	7.946	16.613	10.022	10.292	23.607	18.992
Per-capita income class: Vulnerable	16.055	8.295	21.503	20.105	15.026	20.527	20.483	18.488
Per-capita income class: Middle class	38.754	38.785	44.126	39.944	44.984	43.778	39.934	40.676
Per-capita income class: Affluent	33.779	36.955	26.424	23.337	29.967	25.402	15.976	21.844

Source: authors' calculations based on ELMPS 2023 data.

Note: The table reports weighted mean economic outcomes by job ladder position in 2023. Wealth, consumption, household per-capita income, individual income, monthly wage, and formality-adjusted monthly wage are reported as percentiles within the 2023 distribution, with higher values indicating better economic outcomes. Wealth and per-capita income classes are defined as poor (bottom 20%), vulnerable (20–40%), middle class (40–80%), and affluent (top 20%). Class outcomes are reported as percentages of individuals in each class. Monthly wage outcomes are not reported for non-wage employment categories and non-employed individuals.

Table 2. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with and without individual fixed effects, with controls

	Wealth		Consumption		Household per-capita income	Individual income		Monthly wage		Formality- adjusted monthly wage		
	Ind FE Dynamic Controls	No Ind FE Pre-Wave Controls	Ind FE Dynamic Controls	No Ind FE Pre-Wave Controls	Ind FE Dynamic Controls	No Ind FE Pre-Wave Controls	Ind FE Dynamic Controls	No Ind FE Pre-Wave Controls	Ind FE Dynamic Controls	No Ind FE Pre-Wave Controls	Ind FE Dynamic Controls	No Ind FE Pre-Wave Controls
Up/down category (reference: No upward/downward incl. any non-employment transition)												
Upward	2.308 (1.525)	3.104*** (0.622)	0.949 (1.296)	0.863 (0.814)	0.413 (3.777)	2.364** (0.981)	-0.271 (3.093)	1.847** (0.839)	3.623 (3.285)	3.761*** (1.088)	17.685*** (2.657)	15.942*** (0.922)
Downward	-2.915** (1.433)	-3.406*** (0.577)	-0.956 (1.224)	-1.521* (0.813)	-3.646 (3.463)	-2.435*** (0.945)	-1.995 (3.031)	-1.609** (0.775)	-3.091 (2.992)	-5.724*** (0.996)	-12.108*** (2.446)	-14.270*** (0.873)
Employment transition (reference: Staying employed)												
Non-employed stay	1.408 (2.094)	-1.339*** (0.466)	6.658*** (1.929)	-0.545 (0.752)	3.653 (6.879)	-1.931** (0.977)	1.671 (6.841)	6.912*** (0.914)				
Entry to employment	2.052 (1.556)	-0.185 (0.650)	7.096*** (1.336)	1.610* (0.834)	13.267*** (4.829)	16.214*** (1.251)	72.217*** (4.789)	69.129*** (1.243)				
Exit to non- employment	-0.058 (2.109)	-4.551*** (0.673)	3.387* (2.013)	-0.674 (0.952)	-7.151 (6.091)	-16.288*** (1.279)	-50.735*** (6.759)	-47.242*** (1.282)				
Employment status transition (reference: All else)												
Wage to non-wage	3.947** (1.948)	2.701*** (0.697)	2.432 (1.737)	1.736* (1.006)	3.991 (4.846)	1.867 (1.156)	-1.023 (3.722)	0.733 (0.805)				
Non-wage to wage	-4.310** (2.057)	-4.443*** (0.799)	-2.851 (1.806)	-2.597** (1.104)	6.641 (6.336)	1.633 (1.495)	8.258 (5.980)	4.873*** (1.364)				
Adjacent waves fixed effects (reference: 1998-2006)												
2006-2012	-0.293 (0.958)	-0.093 (0.432)	1.528 (1.060)	1.371* (0.735)					-6.679*** (2.373)	-3.811*** (1.009)	-4.170** (1.871)	-1.208 (0.811)
2012-2018	-0.625 (0.999)	0.537 (0.422)	5.368*** (1.204)	4.972*** (0.754)					-6.762*** (2.583)	-1.764* (0.994)	-3.807* (2.031)	1.248 (0.788)
2018-2023	-1.911* (1.148)	-0.935* (0.479)	7.975*** (1.369)	3.800*** (0.826)					-11.600*** (2.931)	-5.594*** (1.126)	-11.564*** (2.343)	-4.965*** (0.909)
Adjacent waves fixed effects (reference: 2012-2018)												
2018-2023					-5.907*** (1.602)	-6.577*** (0.590)	-1.863 (1.244)	-3.585*** (0.507)				
Observations	49823	53635	44503	52629	31159	34253	31033	34124	15775	15303	15775	15303
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
R2	0.556	0.026	0.629	0.085	0.672	0.083	0.838	0.433	0.542	0.041	0.590	0.132
Adj R2	-0.161	0.025	0.065	0.085	-0.272	0.082	0.370	0.433	-0.255	0.039	-0.124	0.130

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPs 1998-2023 data.

Table 3. Labor market transitions and household wealth economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls

	Enter poverty	Enter poverty/vulnerability	Exit poverty	Exit poverty/vulnerability
Up/down category (reference: No upward/downward incl. any non-employment transition)				
Upward	-1.837*** (0.586)	0.280 (0.737)	1.013 (0.709)	3.126*** (1.059)
Downward	1.013 (0.659)	3.236*** (0.743)	-0.344 (0.662)	-2.858*** (0.674)
Employment transition (reference: Staying employed)				
Non-employed stay	0.360 (0.547)	2.001*** (0.644)	-1.702*** (0.558)	0.715 (0.629)
Entry to employment	0.471 (0.706)	1.190 (0.810)	-0.564 (0.747)	1.194 (0.845)
Exit to non-employment	3.680*** (0.842)	4.571*** (0.970)	-0.694 (0.742)	-0.849 (0.800)
Employment status transition (reference: All else)				
Wage to non-wage	-1.624** (0.814)	-3.227*** (0.810)	1.860** (0.943)	2.674** (1.069)
Non-wage to wage	3.071*** (1.044)	3.179*** (1.142)	-1.550* (0.936)	-3.057*** (0.955)
Adjacent waves fixed effects (reference: 1998-2006)				
2006-2012	3.017*** (0.505)	0.880 (0.593)	2.332*** (0.529)	1.029 (0.632)
2012-2018	4.335*** (0.516)	2.185*** (0.592)	3.184*** (0.514)	2.986*** (0.639)
2018-2023	4.471*** (0.509)	3.422*** (0.609)	4.219*** (0.591)	3.469*** (0.690)
Observations	53635	53635	53635	53635
Controls	Yes	Yes	Yes	Yes
Individual FE	No	No	No	No
R2	0.058	0.025	0.058	0.042
Adj R2	0.058	0.024	0.057	0.041

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 4. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls

	Moved down	Moved up
Up/down category (reference: No upward/downward incl. any non-employment transition)		
Upward	0.897 (0.083)	1.249** (0.141)
Downward	1.146 (0.095)	0.658*** (0.073)
Employment transition (reference: Staying employed)		
Non-employed stay	1.059 (0.097)	0.903 (0.083)
Entry to employment	1.079 (0.115)	0.846 (0.091)
Exit to non-employment	1.454*** (0.157)	0.537*** (0.069)
Employment status transition (reference: All else)		
Wage to non-wage	0.703*** (0.081)	0.924 (0.121)
Non-wage to wage	1.335*** (0.150)	0.731* (0.129)
Adjacent waves fixed effects (reference: 1998-2006)		
2006-2012	1.198** (0.091)	0.800*** (0.057)
2012-2018	1.516*** (0.118)	0.869* (0.064)
2018-2023	1.684*** (0.134)	0.843** (0.071)
Observations	22264	
Controls	Yes	
Individual FE	No	
Pseudo R2	0.095	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 5. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, male versus female

	Wealth			Consumption			Household per-capita income			Individual income			Monthly wage			Formality-adj monthly wage		
	Male	Female	Diff p-value			Diff p-value	Male	Female	Diff p-value	Male	Female	Diff p-value	Male	Female	Diff p-value	Male	Female	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)																		
Upward	3.065*** (0.663)	2.847* (1.458)	0.85	0.970 (0.851)	0.759 (2.646)	0.522	1.873* (1.051)	7.823*** (2.800)	0.033**	1.250 (0.873)	5.966** (2.828)	0.102	3.272*** (1.184)	8.186*** (2.489)	0.089*	15.923*** (0.989)	16.079*** (2.391)	0.979
Downward	-3.489*** (0.609)	-4.361*** (1.359)	0.576	-1.259 (0.849)	-3.148 (2.700)	0.415	-2.676*** (0.995)	-1.463 (2.913)	0.602	-1.923** (0.796)	2.195 (3.088)	0.218	-5.860*** (1.070)	-4.949** (2.447)	0.564	-14.524*** (0.931)	-11.657*** (2.385)	0.197
Employment transition (ref: Staying employed)																		
Non-employed stay	-2.205** (0.972)	-1.124* (0.587)	0.000***	-0.963 (1.385)	-1.115 (1.053)	0.327	-2.561 (1.838)	-0.190 (1.410)	0.902	3.289** (1.451)	8.436*** (1.427)	0.000***						
Entry to employment	0.548 (0.874)	-0.727 (0.993)	0.181	1.804* (1.086)	0.291 (1.339)	0.062*	18.097*** (1.702)	14.867*** (1.983)	0.033**	71.394*** (1.662)	67.552*** (1.982)	0.503						
Exit to non-employment	-5.948*** (0.930)	-3.100*** (0.976)	0.010***	-0.089 (1.395)	-1.982 (1.381)	0.263	-23.877*** (1.737)	-9.752*** (1.962)	0.000***	-43.392*** (1.868)	-48.873*** (1.905)	0.091*						
Employment status transition (ref: All else)																		
Wage to non-wage	2.689*** (0.720)	2.832 (3.564)	0.833	2.086** (1.024)	-2.359 (5.033)	0.368	1.893 (1.180)	0.509 (6.740)	0.88	0.290 (0.796)	12.549* (7.073)	0.119						
Non-wage to wage	-4.506*** (0.834)	-3.069 (2.343)	0.42	-2.525** (1.137)	-2.923 (4.905)	0.551	1.602 (1.543)	0.270 (5.619)	0.769	4.641*** (1.438)	12.738*** (4.611)	0.168						
Adjacent waves FE (ref: 1998-2006)																		
2006-2012	0.261 (0.618)	-0.548 (0.604)		1.559 (0.968)	1.258 (0.899)								-4.265*** (1.186)	-1.869 (1.785)		-1.552 (0.950)	0.385 (1.476)	
2012-2018	0.705 (0.580)	0.289 (0.616)		5.388*** (0.958)	4.620*** (0.908)								-1.956* (1.157)	-1.045 (1.806)		0.989 (0.909)	2.365 (1.535)	
2018-2023	-1.178* (0.660)	-0.848 (0.693)		4.221*** (1.027)	3.412*** (0.976)								-6.558*** (1.290)	-0.331 (2.106)		-5.653*** (1.037)	-1.158 (1.748)	
Adjacent waves FE (ref: 2012-2018)																		
2018-2023							-6.676*** (0.771)	-6.504*** (0.888)		-2.984*** (0.659)	-4.114*** (0.762)							
Observations	27172	26463		26692	25939		17161	17092		17051	17073		12695	2608		12695	2608	
Controls	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Individual FE	No	No		No	No		No	No		No	No		No	No		No	No	
R2	0.030	0.025		0.081	0.092		0.104	0.069		0.496	0.385		0.041	0.054		0.138	0.105	
Adj R2	0.029	0.024		0.080	0.091		0.103	0.068		0.495	0.384		0.039	0.044		0.136	0.096	
Heterogeneity p-value	0.001***	0.001***	0.001***	0.184	0.184		0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.193	0.193	0.193	0.431	0.431	0.431

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 6. Labor market transitions and household wealth economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, male versus female

	Enter poverty			Enter pov/vulnerability			Exit poverty			Exit pov/vulnerability		
	Male	Female	Diff p-value	Male	Female	Diff p-value	Male	Female	Diff p-value	Male	Female	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)												
Upward	-2.077*** (0.633)	0.015 (1.663)	0.325	0.124 (0.790)	-0.394 (1.752)	0.576	0.821 (0.762)	2.036 (1.909)	0.537	3.119*** (1.154)	0.863 (1.959)	0.396
Downward	1.086 (0.713)	0.959 (1.537)	0.896	3.271*** (0.789)	3.040 (1.995)	0.981	-0.306 (0.712)	-2.230 (1.512)	0.24	-3.151*** (0.727)	-2.297 (1.814)	0.597
Employment transition (ref: Staying employed)												
Non-employed stay	0.929 (1.120)	0.924 (0.696)	0.261	0.505 (1.257)	3.294*** (0.824)	0.749	-2.800** (1.151)	-0.593 (0.685)	0.042**	-1.300 (1.321)	2.407*** (0.741)	0.000***
Entry to employment	-0.084 (0.919)	1.597 (1.096)	0.72	-1.094 (1.057)	3.899*** (1.286)	0.123	-1.390 (1.011)	0.731 (1.185)	0.169	0.187 (1.214)	2.988** (1.193)	0.007***
Exit to non-employment	4.312*** (1.230)	3.679*** (1.144)	0.514	5.447*** (1.399)	4.452*** (1.375)	0.535	-1.348 (1.131)	0.607 (0.996)	0.256	-2.375** (1.127)	1.283 (1.131)	0.005***
Employment status transition (ref: All else)												
Wage to non-wage	-1.744** (0.826)	0.123 (5.709)	0.809	-3.254*** (0.841)	-4.765* (2.835)	0.615	1.819* (0.966)	1.130 (4.919)	0.903	2.535** (1.101)	5.896 (5.216)	0.419
Non-wage to wage	2.478** (1.053)	13.903** (5.906)	0.067*	2.965** (1.177)	2.740 (5.062)	0.872	-1.840* (0.978)	0.139 (3.513)	0.641	-3.073*** (1.000)	-7.357*** (2.654)	0.15
Adjacent waves FE (ref: 1998-2006)												
2006-2012	2.692*** (0.733)	3.398*** (0.693)		0.004 (0.839)	1.925** (0.839)		2.765*** (0.757)	1.931*** (0.740)		1.198 (0.904)	0.792 (0.884)	
2012-2018	3.709*** (0.719)	5.000*** (0.740)		1.808** (0.819)	2.667*** (0.857)		3.702*** (0.734)	2.652*** (0.725)		3.461*** (0.937)	2.428*** (0.872)	
2018-2023	4.221*** (0.738)	4.798*** (0.698)		3.160*** (0.860)	3.811*** (0.864)		4.260*** (0.811)	4.104*** (0.863)		2.865*** (0.937)	3.890*** (1.011)	
Observations	27172	26463		27172	26463		27172	26463		27172	26463	
Controls	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Individual FE	No	No		No	No		No	No		No	No	
R2	0.057	0.062		0.026	0.026		0.061	0.056		0.043	0.044	
Adj R2	0.056	0.061		0.025	0.025		0.060	0.055		0.042	0.043	
Heterogeneity p-value	0.38	0.38	0.38	0.701	0.701	0.701	0.316	0.316	0.316	0.000***	0.000***	0.000***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.
Source: authors' calculations based on ELMPS 1998-2023 data.

Table 7. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, male versus female

	Middle down			Middle up		
	Male	Female	Diff p-value	Male	Female	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)						
Upward	0.886 (0.086)	0.821 (0.277)	0.622	1.337** (0.159)	0.715 (0.222)	0.051*
Downward	1.156* (0.100)	1.157 (0.317)	0.783	0.697*** (0.083)	0.425*** (0.125)	0.112
Employment transition (ref: Staying employed)						
Non-employed stay	1.000 (0.150)	1.450** (0.242)	0.856	1.167 (0.202)	0.810* (0.097)	0.244
Entry to employment	0.844 (0.104)	1.776*** (0.377)	0.124	0.961 (0.146)	0.769 (0.124)	0.497
Exit to non-employment	1.516*** (0.220)	1.723*** (0.337)	0.905	0.460*** (0.091)	0.583*** (0.101)	0.39
Employment status transition (ref: All else)						
Wage to non-wage	0.681*** (0.081)	2.063 (0.982)	0.037**	0.924 (0.124)	0.295 (0.323)	0.288
Non-wage to wage	1.251* (0.145)	3.450** (1.795)	0.093*	0.689** (0.127)	2.234 (1.344)	0.062*
Adjacent waves FE (ref: 1998-2006)						
2006-2012	1.104 (0.115)	1.333*** (0.148)		0.819** (0.082)	0.777** (0.078)	
2012-2018	1.424*** (0.150)	1.638*** (0.189)		0.885 (0.092)	0.855 (0.089)	
2018-2023	1.600*** (0.178)	1.791*** (0.207)		0.867 (0.101)	0.818* (0.100)	
Observations	11203	11061		11203	11061	
Controls	Yes	Yes		Yes	Yes	
Individual FE	No	No		No	No	
Pseudo R2	0.098	0.097		0.098	0.097	
Heterogeneity p-value	0.053*	0.053*	0.053*	0.053*	0.053*	0.053*

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 8. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, by age group

	Wealth			Consumption			Diff p-value	Household per-capita income			Diff p-value	Individual income			Diff p-value	Monthly wage			Diff p-value	Formality-adj monthly wage			Diff p-value
	Young	Prime-age	Older	Young	Prime-age	Older		Young	Prime-age	Older		Young	Prime-age	Older		Young	Prime-age	Older		Young	Prime-age	Older	
Up/down category (ref: No upward/downward incl. any non-employment transition)																							
Upward	3.795*** (1.441)	2.430*** (0.823)	5.035*** (1.192)	0.3570.939 (1.774)	0.871 (1.117)	0.537 (1.728)	0.476 (2.683)	0.652 (1.271)	3.036** (1.823)	2.604 (1.823)	0.000*** (2.304)	0.173 (0.986)	1.050 (1.669)	2.333 (2.170)	0.000*** (2.170)	7.368*** (1.437)	3.356** (2.453)	1.811 (2.453)	0.171 (1.825)	17.933*** (1.262)	15.670*** (1.262)	15.150*** (1.887)	0.002*** (1.887)
Downward	-0.950 (1.403)	-4.244*** (0.737)	-2.801*** (1.024)	0.357-0.968 (1.982)	-1.373 (1.082)	-2.211 (1.522)	0.476 (2.483)	-0.393 (1.227)	-4.787*** (1.719)	0.394 (1.719)	0.000*** (1.973)	-0.803 (1.007)	-3.759*** (1.448)	0.790 (2.491)	0.000*** (2.491)	-1.784 (1.364)	-7.202*** (1.718)	-6.366*** (1.718)	0.171 (2.090)	-7.324*** (1.187)	-16.187*** (1.187)	-15.915*** (1.567)	0.002*** (1.567)
Employment transition (ref: Staying employed)																							
Non-employed stay	-0.444 (0.985)	-1.699** (0.746)	-1.760** (0.869)	0.357-0.273 (1.477)	-1.585 (1.142)	-0.613 (1.421)	0.375 (2.251)	-2.984 (1.451)	-2.710* (1.922)	-1.925 (1.922)	0.000*** (1.867)	2.518 (1.299)	6.182*** (2.018)	10.122*** (2.018)	0.000*** (2.018)								
Entry to employment	1.486 (0.995)	-1.252 (1.314)	1.520 (1.835)	0.3571.169 (1.394)	1.387 (1.491)	0.033 (2.607)	0.375 (2.237)	16.058*** (2.216)	15.850*** (2.216)	6.180** (2.967)	0.000*** (2.047)	68.498*** (2.098)	67.332*** (3.694)	56.004*** (3.694)	0.000*** (3.694)								
Exit to non-employment	-3.608*** (1.329)	-4.944*** (1.047)	-4.348*** (1.143)	0.357-1.540 (1.910)	-0.311 (1.499)	-1.083 (1.588)	0.375 (2.815)	-16.876*** (1.794)	-18.774*** (1.794)	-14.741*** (2.296)	0.000*** (2.158)	-61.076*** (1.656)	-51.555*** (2.553)	-31.621*** (2.553)	0.000*** (2.553)								
Employment status transition (ref: All else)																							
Wage to non-wage	2.114 (1.696)	2.431*** (0.916)	3.772*** (1.361)	0.3571.499 (2.298)	1.533 (1.289)	2.084 (2.073)	0.502 (2.642)	-2.482 (1.570)	3.070* (2.214)	2.670 (2.214)	0.000*** (2.404)	-4.747** (0.983)	2.157** (1.566)	0.178 (1.566)	0.000*** (1.566)								
Non-wage to wage	-5.007*** (1.720)	-4.045*** (1.049)	-4.364*** (1.620)	0.357-2.354 (2.333)	-2.492* (1.495)	-3.689 (2.366)	0.502 (3.553)	4.922 (1.953)	0.725 (2.920)	1.894 (2.920)	0.000*** (2.872)	7.151** (1.512)	3.448** (3.363)	5.730* (3.363)	0.000*** (3.363)								
Adjacent waves FE (ref: 1998-2006)																							
2006-2012	-0.824 (0.688)	1.050 (0.688)	-0.303 (0.820)	2.716** (1.123)	-0.331 (1.159)	1.444 (1.215)										-0.155 (2.671)	-2.275 (1.442)	-7.257*** (1.505)	1.783 (2.178)	-0.747 (1.145)	-3.271*** (1.239)		
2012-2018	2.327*** (0.721)	0.383 (0.697)	-1.446* (0.777)	7.197*** (1.180)	2.807** (1.106)	4.721*** (1.328)										5.087* (2.822)	-2.312* (1.390)	-3.985*** (1.535)	5.362** (2.272)	0.521 (1.103)	0.450 (1.212)		
2018-2023	1.785* (0.928)	-2.193*** (0.715)	-2.373*** (0.885)	5.343*** (1.256)	2.203* (1.145)	4.447*** (1.390)										-6.564** (2.998)	-5.823*** (1.635)	-5.428*** (1.762)	-6.164** (2.464)	-5.196*** (1.306)	-4.533*** (1.401)		
Adjacent waves FE (ref: 2012-2018)																							
2018-2023							-4.643*** (1.080)	-6.491*** (0.800)	-8.911*** (1.110)		-4.031*** (0.934)	-1.641*** (0.636)	-5.763*** (1.116)										
Observations	18641	22769	12225	18355	22314	11962	10966	15595	7692		10939	15540	7645		2511	8127	4665		2511	8127	4665		
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes		
Individual FE	No	No	No	No	No	No	No	No	No		No	No	No		No	No	No		No	No	No		
R2	0.043	0.025	0.019	0.125	0.065	0.023	0.106	0.074	0.081		0.556	0.393	0.210		0.065	0.044	0.040		0.142	0.139	0.112		
Adj R2	0.041	0.023	0.017	0.123	0.064	0.021	0.104	0.073	0.078		0.555	0.392	0.207		0.056	0.041	0.034		0.133	0.136	0.107		
Heterogeneity p-value	0.357	0.357	0.357	0.3570.282	0.282	0.282	0.282	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.171	0.171	0.171	0.171	0.002***	0.002***	0.002***	0.002***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 9. Labor market transitions and household economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, by age groups

	Enter poverty Young	Prime- age	Older	Diff p- value	Enter pov/vulnerability Young	Prime- age	Older	Diff p- value	Exit poverty Young	Prime- age	Older	Diff p- value	Exit pov/vulnerability Young	Prime- age	Older	Diff p- value
Up/down category (ref: No upward/downward incl. any non-employment transition)																
Upward	-2.653** (1.336)	-1.689** (0.825)	-2.663** (1.133)	0.076* (1.777)	0.102 (1.777)	0.294 (0.973)	-1.579 (1.375)	0.084* (1.869)	1.260 (1.869)	0.801 (0.868)	1.008 (1.473)	0.381 (2.144)	2.132 (2.144)	1.580 (1.098)	7.178** (2.976)	0.691
Downward	-0.424 (1.705)	0.360 (0.888)	2.444** (1.184)	0.076* (1.882)	2.365 (1.882)	3.706*** (1.031)	1.948 (1.307)	0.084* (2.232)	0.772 (2.232)	-0.769 (0.812)	-0.216 (0.981)	0.381 (1.862)	-3.219* (1.862)	- (0.901)	- (1.165)	0.691
Employment transition (ref: Staying employed)																
Non-employed stay	-1.237 (1.209)	-0.371 (0.845)	3.206*** (0.987)	0.076* (1.267)	0.391 (1.267)	1.626 (1.077)	5.081*** (1.166)	0.084* (1.289)	-1.794 (1.289)	-0.477 (0.853)	- (1.014)	0.381 (1.431)	-0.157 (1.431)	1.631* (0.956)	0.916 (1.078)	0.691
Entry to employment	-1.738 (1.190)	1.276 (1.450)	1.717 (1.952)	0.076* (1.268)	-0.509 (1.268)	1.493 (1.695)	4.202* (2.364)	0.084* (1.284)	-0.486 (1.284)	0.856 (1.512)	-2.570 (1.986)	0.381 (1.453)	1.671 (1.453)	0.179 (1.448)	3.927 (3.161)	0.691
Exit to non-employment	2.772 (1.783)	2.231* (1.167)	5.410*** (1.530)	0.076* (1.703)	3.275* (1.703)	4.125** (1.629)	5.890*** (1.662)	0.084* (1.694)	-1.955 (1.694)	-1.004 (0.998)	0.328 (1.322)	0.381 (1.958)	-0.187 (1.958)	-1.987* (1.169)	-0.187 (1.229)	0.691
Employment status transition (ref: All else)																
Wage to non-wage	-3.160* (1.804)	-0.854 (1.152)	-2.424* (1.426)	0.076* (1.764)	-2.785 (1.764)	- (1.090)	-2.436 (1.661)	0.084* (1.661)	2.416 (2.628)	1.329 (1.164)	2.175 (1.811)	0.381 (2.690)	3.428 (2.690)	1.953 (1.387)	2.888 (2.133)	0.691
Non-wage to wage	-0.107 (2.132)	1.867 (1.386)	7.425*** (2.223)	0.076* (2.421)	4.402* (2.421)	2.209 (1.549)	2.834 (2.097)	0.084* (2.010)	-3.431* (2.010)	-0.025 (1.380)	-3.227** (1.545)	0.381 (2.187)	-3.739* (2.187)	-3.201** (1.244)	-3.168 (2.040)	0.691
Adjacent waves FE (ref: 1998-2006)																
2006-2012	3.344*** (0.836)	3.162*** (0.822)	2.640*** (0.958)	1.871** (0.929)	1.871** (0.929)	-0.278 (1.008)	1.218 (1.140)	2.300** (0.939)	3.073*** (0.812)	1.754* (0.959)	-0.323 (1.077)	3.256*** (1.027)	0.406 (1.131)			
2012-2018	2.611*** (0.839)	5.744*** (0.852)	4.816*** (1.000)	2.487*** (0.942)	2.487*** (0.942)	1.975* (1.016)	2.523** (1.153)	2.861*** (0.938)	4.512*** (0.803)	2.090** (0.943)	3.807*** (1.123)	3.212*** (0.973)	2.184* (1.286)			
2018-2023	3.300*** (0.893)	6.267*** (0.814)	3.347*** (0.975)	2.821*** (1.006)	2.821*** (1.006)	4.309*** (1.037)	3.219*** (1.176)	4.964*** (1.174)	4.430*** (0.857)	3.851*** (1.040)	5.568*** (1.355)	3.045*** (1.013)	1.873 (1.236)			
Observations	18641	22769	12225	18641	18641	22769	12225	18641	22769	12225	18641	22769	12225			
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Individual FE	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
R2	0.052	0.063	0.073	0.025	0.025	0.030	0.029	0.070	0.050	0.061	0.055	0.036	0.036			
Adj R2	0.051	0.061	0.071	0.023	0.023	0.029	0.027	0.069	0.048	0.059	0.053	0.034	0.034			
Heterogeneity p-value	0.076*	0.076*	0.076*	0.076*	0.084*	0.084*	0.084*	0.084*	0.381	0.381	0.381	0.381	0.691	0.691	0.691	0.691

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 10. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, by age groups

	Middle down				Middle up			
	Young	Prime-age	Older	Diff p-value	Young	Prime-age	Older	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)								
Upward	0.690*	0.866	1.055	0.184	0.866	1.388**	1.686**	0.184
	(0.144)	(0.102)	(0.198)		(0.221)	(0.216)	(0.353)	
Downward	0.977	1.225*	1.050	0.184	1.059	0.685**	0.571***	0.184
	(0.182)	(0.136)	(0.158)		(0.278)	(0.104)	(0.105)	
Employment transition (ref: Staying employed)								
Non-employed stay	0.851	1.086	1.395*	0.184	0.951	0.862	0.875	0.184
	(0.134)	(0.173)	(0.260)		(0.181)	(0.109)	(0.165)	
Entry to employment	0.851	1.232	1.294	0.184	0.996	0.675**	0.850	0.184
	(0.128)	(0.279)	(0.371)		(0.186)	(0.126)	(0.325)	
Exit to non-employment	1.211	1.413*	1.707***	0.184	0.508**	0.712*	0.395***	0.184
	(0.250)	(0.251)	(0.327)		(0.143)	(0.125)	(0.102)	
Employment status transition (ref: All else)								
Wage to non-wage	0.545**	0.651***	0.877	0.184	0.822	0.870	1.287	0.184
	(0.132)	(0.102)	(0.214)		(0.249)	(0.151)	(0.361)	
Non-wage to wage	1.366	1.149	1.648**	0.184	0.688	0.739	0.841	0.184
	(0.316)	(0.170)	(0.383)		(0.263)	(0.160)	(0.335)	
Adjacent waves FE (ref: 1998-2006)								
2006-2012	1.284**	1.135	1.193		0.763**	0.846	0.758*	
	(0.153)	(0.142)	(0.191)		(0.095)	(0.093)	(0.110)	
2012-2018	1.522***	1.645***	1.370**		0.998	0.905	0.622***	
	(0.191)	(0.211)	(0.220)		(0.135)	(0.101)	(0.094)	
2018-2023	1.427***	1.994***	1.598***		1.117	0.822	0.556***	
	(0.193)	(0.256)	(0.263)		(0.177)	(0.102)	(0.096)	
Observations	7495	9821	4948		7495	9821	4948	
Controls	Yes	Yes	Yes		Yes	Yes	Yes	
Individual FE	No	No	No		No	No	No	
Pseudo R2	0.096	0.108	0.102		0.096	0.108	0.102	
Heterogeneity p-value	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 11. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, by education

	Wealth			Consumption			Household per-capita income	Individual income			Monthly wage			Formality-adj monthly wage			Diff p-value						
	Low	Secondary	High	Diff p-value	Low	Secondary		High	Diff p-value	Low	Secondary	High	Diff p-value	Low	Secondary	High		Diff p-value	Low	Secondary	High	Diff p-value	
Up/down category (ref: No upward/downward incl. any non-employment transition)																							
Upward	3.583*** (1.003)	6.998* (4.053)	2.563*** (0.807)	0.045** (1.283)	0.775 (4.842)	1.087 (1.072)	0.302 (1.593)	0.156 (1.593)	7.687 (5.022)	2.925** (1.274)	0.001*** (1.382)	-0.441 (4.515)	8.075* (1.093)	1.893* (1.093)	0.000*** (1.801)	1.286 (5.887)	4.942 (1.357)	5.155*** (1.373)	0.157 (1.373)	14.398*** (5.209)	16.813*** (1.206)	0.227	
Downward	-2.437** (0.947)	-2.667 (3.863)	-4.027*** (0.728)	0.045** (1.211)	-0.745 (5.579)	-5.390 (1.067)	0.302 (1.581)	-4.895*** (1.581)	-3.639 (5.389)	-0.977 (1.189)	0.001*** (0.994)	-3.522*** (4.618)	-1.250 (1.097)	-0.773 (1.097)	0.000*** (1.681)	-5.118*** (6.878)	-20.638*** (1.245)	-5.647*** (1.245)	0.157 (1.448)	-13.594*** (6.340)	21.510*** (1.093)	14.334*** (1.093)	0.227
Employment transition (ref: Staying employed)																							
Non-employed stay	-0.496 (0.837)	-3.552 (2.816)	-1.116* (0.593)	0.045** (1.284)	-0.114 (4.306)	-1.121 (0.993)	-1.043 (1.580)	0.295 (1.580)	-2.770* (6.402)	-15.785** (1.308)	0.165 (1.319)	0.001*** (6.986)	4.643*** (1.267)	10.996 (1.267)	8.898*** (1.267)	0.000***							
Entry to employment	0.258 (1.016)	-1.772 (2.962)	0.212 (0.911)	0.045** (1.380)	1.508 (4.357)	0.471 (1.209)	2.104* (1.833)	0.295 (1.833)	15.608*** (6.486)	5.194 (1.983)	17.127*** (1.983)	0.001*** (1.743)	66.496*** (7.342)	74.143*** (1.800)	70.414*** (1.800)	0.000***							
Exit to non-employment	-2.185** (0.944)	-12.633*** (4.434)	-5.661*** (0.990)	0.045** (1.405)	-0.308 (5.666)	-4.446 (1.364)	-0.618 (1.872)	0.295 (1.872)	-15.558*** (6.528)	-20.795*** (1.858)	0.001*** (1.792)	-44.875*** (7.346)	-42.609*** (1.862)	-50.365*** (1.862)	0.000***								
Employment status transition (ref: All else)																							
Wage to non-wage	3.068*** (0.986)	3.869 (5.441)	2.390** (1.019)	0.045** (1.466)	1.766 (6.142)	3.620 (1.497)	1.909 (1.681)	0.528 (1.681)	-0.268 (5.740)	-1.699 (1.666)	0.001*** (1.331)	-1.059 (4.045)	0.643 (0.992)	2.331** (0.992)	0.000***								
Non-wage to wage	-2.100* (1.153)	-11.303* (6.430)	-6.224*** (1.102)	0.045** (1.661)	-2.923* (6.514)	-3.031 (1.586)	-2.326 (2.240)	0.528 (2.240)	-0.584 (7.515)	-15.965** (2.026)	4.494** (1.916)	0.001*** (4.867)	3.796** (2.013)	2.773 (2.013)	5.651***	0.000***							
Adjacent waves FE (ref: 1998-2006)																							
2006-2012	-0.922 (0.602)	-2.094 (1.550)	1.018 (0.662)		2.519*** (0.976)	-0.960 (2.579)	-0.040 (1.059)									-3.986** (2.011)	-9.585 (10.403)	-3.810*** (1.130)	-0.640 (1.627)	-7.596 (8.599)	-1.647* (0.900)		
2012-2018	0.456 (0.609)	-0.254 (1.603)	0.948 (0.619)		6.620*** (1.001)	3.869 (2.571)	2.943*** (1.067)									0.799 (1.921)	5.729 (6.428)	3.115*** (1.129)	4.100*** (1.476)	8.976* (5.398)	-0.379 (0.906)		
2018-2023	-0.319 (0.709)	-2.040 (1.940)	-1.106 (0.694)		4.164*** (1.040)	4.008 (2.601)	2.742** (1.136)									-3.060 (2.073)	2.685 (7.385)	7.253*** (1.326)	-1.896 (1.657)	2.678 (6.257)	-6.883*** (1.064)		
Adjacent waves FE (ref: 2012-2018)																							
2018-2023								-8.856*** (0.846)	2.397 (2.274)	-5.646*** (0.847)		-4.911*** (0.736)	-4.010* (2.184)	-2.238*** (0.705)									
Observations	24380	3328	25927		24100	3229	25302	15030	2201	17022		14984	2190	16950		4747	301	10255	4747	301	10255		
Controls	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		
Individual FE	No	No	No		No	No	No	No	No	No		No	No	No		No	No	No	No	No	No		
R2	0.029	0.052	0.026		0.079	0.099	0.084	0.089	0.097	0.072		0.423	0.552	0.407		0.038	0.253	0.048	0.117	0.379	0.144		
Adj R2	0.028	0.044	0.025		0.078	0.092	0.083	0.088	0.087	0.070		0.422	0.547	0.406		0.034	0.194	0.046	0.113	0.330	0.142		
Heterogeneity p-value	0.045**	0.045**	0.045**	0.045**	0.285	0.285	0.285	0.285	0.001***	0.001***	0.001***	0.000***	0.000***	0.000***	0.000***	0.157	0.157	0.157	0.157	0.227	0.227	0.227	0.227

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 12. Labor market transitions and household economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, by education

	Enter poverty				Enter pov/vulnerability				Exit poverty				Exit pov/vulnerability			
	Low	Secondary	High	Diff p-value	Low	Secondary	High	Diff p-value	Low	Secondary	High	Diff p-value	Low	Secondary	High	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)																
Upward	-2.258*	-3.223	-1.255**	0.080*	-1.642	-4.017	1.353	0.042**	0.629	-1.243	1.343	0.023**	5.810***	-0.656	1.124	0.047**
	(1.216)	(2.242)	(0.614)		(1.186)	(3.596)	(0.968)		(1.316)	(3.095)	(0.831)		(2.098)	(4.500)	(1.062)	
Downward	0.594	3.505	1.539**	0.080*	1.965	-1.696	4.196***	0.042**	-0.921	0.041	-0.016	0.023**	-4.362***	-3.804	-1.545*	0.047**
	(1.263)	(3.193)	(0.710)		(1.286)	(4.167)	(0.925)		(1.167)	(3.486)	(0.776)		(1.095)	(4.440)	(0.864)	
Employment transition (ref: Staying employed)																
Non-employed stay	-0.677	0.358	1.811***	0.080*	1.148	3.808	2.192***	0.042**	-3.568***	-2.312	0.249	0.023**	0.950	1.608	1.214*	0.047**
	(1.198)	(1.867)	(0.549)		(1.267)	(2.817)	(0.760)		(1.233)	(2.403)	(0.590)		(1.244)	(3.263)	(0.729)	
Entry to employment	0.138	0.099	0.067	0.080*	0.480	2.817	0.945	0.042**	-2.826**	-2.603	1.711	0.023**	1.812	0.198	1.231	0.047**
	(1.406)	(1.967)	(0.731)		(1.479)	(2.850)	(1.010)		(1.308)	(2.479)	(1.210)		(1.428)	(3.345)	(1.177)	
Exit to non-employment	3.254**	12.167**	3.510***	0.080*	1.577	13.852**	6.273***	0.042**	-0.333	-3.611	-1.339*	0.023**	-0.734	-3.431	-0.001	0.047**
	(1.442)	(4.845)	(1.033)		(1.448)	(6.070)	(1.385)		(1.447)	(2.713)	(0.706)		(1.360)	(4.335)	(1.025)	
Employment status transition (ref: All else)																
Wage to non-wage	-2.572*	2.773	-0.027	0.080*	-3.714***	1.920	-2.502**	0.042**	2.092	13.517**	1.546	0.023**	1.558	11.171	4.127***	0.047**
	(1.320)	(3.138)	(0.972)		(1.192)	(4.368)	(1.157)		(1.499)	(6.888)	(1.109)		(1.542)	(7.920)	(1.455)	
Non-wage to wage	4.039**	5.851	1.947*	0.080*	0.114	15.192*	5.030***	0.042**	-1.675	0.622	-1.671	0.023**	-2.790*	2.196	-	0.047**
	(1.806)	(5.183)	(1.158)		(1.525)	(7.914)	(1.686)		(1.504)	(3.285)	(1.216)		(1.485)	(5.098)	(1.279)	
Adjacent waves FE (ref: 1998-2006)																
2006-2012	3.254***	1.525	2.368***		2.168**	0.631	-0.559		4.181***	-1.424	0.359		-0.329	-4.108*	3.763***	
	(0.824)	(0.962)	(0.581)		(0.860)	(1.625)	(0.900)		(0.836)	(1.693)	(0.653)		(0.931)	(2.277)	(0.859)	
2012-2018	4.980***	3.266***	3.129***		2.103**	1.333	2.030**		4.115***	0.716	1.917***		2.989***	-0.709	4.255***	
	(0.846)	(1.077)	(0.587)		(0.870)	(1.535)	(0.887)		(0.808)	(1.765)	(0.638)		(1.001)	(2.358)	(0.813)	
2018-2023	5.354***	3.011**	3.229***		4.255***	4.482**	2.497***		4.947***	0.600	3.317***		3.189***	0.301	4.986***	
	(0.840)	(1.325)	(0.582)		(0.882)	(1.764)	(0.950)		(0.954)	(1.871)	(0.734)		(1.084)	(2.502)	(0.866)	
Observations	24380	3328	25927		24380	3328	25927		24380	3328	25927		24380	3328	25927	
Controls	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	
Individual FE	No	No	No		No	No	No		No	No	No		No	No	No	
R2	0.039	0.067	0.041		0.012	0.057	0.036		0.036	0.061	0.058		0.029	0.087	0.054	
Adj R2	0.038	0.059	0.040		0.011	0.049	0.035		0.035	0.053	0.057		0.028	0.080	0.053	
Heterogeneity p-value	0.080*	0.080*	0.080*	0.080*	0.042**	0.042**	0.042**	0.042**	0.023**	0.023**	0.023**	0.023**	0.047**	0.047**	0.047**	0.047**

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPs 1998-2023 data.

Table 13. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, by education

	Middle down				Middle up			
	Low	Secondary	High	Diff p-value	Low	Secondary	High	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)								
Upward	0.777* (0.101)	0.507 (0.273)	1.073 (0.133)	0.001***	1.685** (0.344)	1.592 (0.757)	1.122 (0.153)	0.001***
Downward	0.913 (0.125)	0.919 (0.439)	1.407*** (0.149)	0.001***	0.654** (0.139)	0.622 (0.339)	0.673*** (0.084)	0.001***
Employment transition (ref: Staying employed)								
Non-employed stay	0.765* (0.116)	2.061 (1.099)	1.409*** (0.166)	0.001***	1.620** (0.347)	0.598 (0.288)	0.755*** (0.081)	0.001***
Entry to employment	0.849 (0.149)	1.222 (0.645)	1.208 (0.165)	0.001***	1.115 (0.266)	0.803 (0.386)	0.838 (0.113)	0.001***
Exit to non-employment	1.026 (0.165)	2.278 (1.521)	1.931*** (0.299)	0.001***	0.454*** (0.122)	0.275* (0.185)	0.645*** (0.099)	0.001***
Employment status transition (ref: All else)								
Wage to non-wage	0.652*** (0.103)	2.083 (1.267)	0.852 (0.147)	0.001***	1.052 (0.225)	0.891 (0.618)	0.810 (0.134)	0.001***
Non-wage to wage	1.066 (0.170)	2.202 (1.242)	1.597*** (0.248)	0.001***	0.865 (0.280)	0.715 (0.562)	0.695* (0.135)	0.001***
Adjacent waves FE (ref: 1998-2006)								
2006-2012	1.282*** (0.120)	0.727 (0.300)	1.057 (0.139)		0.710*** (0.083)	0.582* (0.177)	0.884 (0.087)	
2012-2018	1.444*** (0.145)	0.971 (0.364)	1.466*** (0.193)		0.787** (0.093)	0.787 (0.242)	0.939 (0.095)	
2018-2023	1.799*** (0.183)	0.998 (0.371)	1.500*** (0.209)		0.937 (0.134)	0.582 (0.197)	0.835 (0.093)	
Observations	9116	1366	11782		9116	1366	11782	
Controls	Yes	Yes	Yes		Yes	Yes	Yes	
Individual FE	No	No	No		No	No	No	
Pseudo R2	0.076	0.114	0.072		0.076	0.114	0.072	
Heterogeneity p-value	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 14. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, by location

	Wealth			Consumption			Household per-capita income			Individual income			Monthly wage			Formality-adj monthly wage		
	Urban	Rural	Diff p-value			Diff p-value	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)																		
Upward	1.508*	4.301***	0.006***	1.001	0.842	0.513	3.309**	1.748	0.175	2.559*	0.826	0.251	2.620	4.559***	0.618	16.067***	15.789***	0.578
	(0.887)	(0.846)		(1.231)	(1.062)		(1.519)	(1.255)		(1.385)	(1.009)		(1.654)	(1.400)		(1.343)	(1.253)	
Downward	-2.698***	-3.727***	0.275	-1.047	-1.844*	0.495	-2.984*	-2.180**	0.894	-2.692*	-0.902	0.346	-6.254***	-5.275***	0.909	-16.341***	-12.670***	0.079*
	(0.968)	(0.701)		(1.210)	(1.052)		(1.596)	(1.109)		(1.428)	(0.773)		(1.624)	(1.261)		(1.426)	(1.082)	
Employment transition (ref: Staying employed)																		
Non-employed stay	-0.843	-2.385***	0.204	-1.016	-0.216	0.228	-1.118	-3.277***	0.276	10.628***	3.825***	0.000***						
	(0.608)	(0.704)		(1.047)	(1.096)		(1.627)	(1.175)		(1.522)	(1.091)							
Entry to employment	-1.093	0.153	0.000***	0.995	2.228*	0.145	17.883***	14.521***	0.304	74.693***	64.791***	0.000***						
	(0.957)	(0.885)		(1.220)	(1.181)		(2.013)	(1.554)		(2.285)	(1.349)							
Exit to non-employment	-4.735***	-4.457***	0.070*	-0.772	-0.677	0.486	-15.403***	-17.607***	0.233	-47.982***	-46.989***	0.982						
	(0.959)	(0.924)		(1.374)	(1.261)		(2.132)	(1.489)		(2.058)	(1.566)							
Employment status transition (ref: All else)																		
Wage to non-wage	3.221***	2.348**	0.498	1.641	1.917	0.523	4.208**	0.619	0.021**	2.654*	-0.387	0.013**						
	(1.003)	(0.942)		(1.569)	(1.315)		(1.980)	(1.434)		(1.514)	(0.931)							
Non-wage to wage	-3.978***	-5.078***	0.301	-2.524	-2.510*	0.516	3.600	0.454	0.362	8.158***	2.523**	0.065*						
	(1.157)	(1.084)		(1.769)	(1.471)		(2.534)	(1.767)		(2.797)	(1.179)							
Adjacent waves FE (ref: 1998-2006)																		
2006-2012	2.314***	-2.041***		-0.374	4.100***								-2.248*	-5.554***		-0.207	-2.501*	
	(0.456)	(0.709)		(1.051)	(1.263)								(1.167)	(1.686)		(0.956)	(1.340)	
2012-2018	2.481***	-1.253*		3.003***	7.823***								-1.537	-2.375		1.359	0.748	
	(0.503)	(0.658)		(1.045)	(1.268)								(1.224)	(1.583)		(0.979)	(1.252)	
2018-2023	-0.037	-1.957***		3.747***	5.555***								-5.219***	-6.378***		-4.415***	-5.717***	
	(0.620)	(0.710)		(1.135)	(1.302)								(1.564)	(1.696)		(1.248)	(1.372)	
Adjacent waves FE (ref: 2012-2018)																		
2018-2023							-2.451**	-9.805***		-1.110	-5.343***							
							(1.017)	(0.673)		(0.855)	(0.586)							
Observations	25007	28628		24470	28161		13618	20635		13547	20577		7287	8016		7287	8016	
Controls	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Individual FE	No	No		No	No		No	No		No	No		No	No		No	No	
R2	0.015	0.042		0.060	0.107		0.072	0.093		0.467	0.412		0.046	0.043		0.149	0.123	
Adj R2	0.014	0.041		0.059	0.106		0.070	0.092		0.466	0.411		0.043	0.040		0.146	0.121	
Heterogeneity p-value	0.000***	0.000***	0.000***	0.189	0.189		0.25	0.25	0.25	0.000***	0.000***	0.000***	0.88	0.88	0.88	0.176	0.176	0.176

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 15. Labor market transitions and household economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, by location

	Enter poverty			Enter pov/vulnerability			Exit poverty			Exit pov/vulnerability		
	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)												
Upward	-0.478 (0.634)	- 2.821*** (0.901)	0.070*	0.798 (1.066)	-0.362 (0.990)	0.134	-0.101 (0.706)	1.733 (1.122)	0.057*	0.908 (1.654)	4.513*** (1.350)	0.089*
Downward	1.391* (0.754)	0.685 (1.019)	0.848	2.845*** (0.998)	3.435*** (1.069)	0.899	-0.579 (0.892)	-0.237 (0.955)	0.394	-2.151** (0.907)	- 3.346*** (0.980)	0.135
Employment transition (ref: Staying employed)												
Non-employed stay	-0.439 (0.564)	1.721* (0.916)	0.386	-0.729 (0.808)	4.082*** (0.972)	0.251	-1.470*** (0.521)	-2.334** (0.958)	0.748	-1.109 (0.704)	1.301 (1.023)	0.044**
Entry to employment	0.880 (0.945)	0.623 (1.028)	0.401	-0.054 (1.163)	1.734 (1.111)	0.497	-0.893 (0.648)	-0.403 (1.222)	0.015**	-0.463 (0.992)	1.913 (1.291)	0.004***
Exit to non-employment	3.076*** (1.033)	4.407*** (1.289)	0.81	4.346*** (1.359)	4.760*** (1.346)	0.098*	-0.565 (0.849)	-0.937 (1.181)	0.446	-1.389 (0.932)	-0.481 (1.268)	0.639
Employment status transition (ref: All else)												
Wage to non-wage	-1.320* (0.760)	-1.705 (1.243)	0.581	-3.605*** (1.010)	-2.362** (1.165)	0.992	1.899* (1.081)	1.842 (1.380)	0.898	3.348** (1.413)	2.820* (1.498)	0.492
Non-wage to wage	1.288 (1.024)	4.483*** (1.589)	0.018**	3.339** (1.491)	3.325** (1.628)	0.82	0.641 (1.319)	-3.184** (1.287)	0.093*	-2.426** (1.129)	- 3.716*** (1.424)	0.274
Adjacent waves FE (ref: 1998-2006)												
2006-2012	0.934** (0.376)	4.944*** (0.902)		1.565*** (0.573)	-0.078 (1.012)		2.623*** (0.334)	2.609*** (0.967)		3.346*** (0.502)	-0.894 (1.124)	
2012-2018	3.167*** (0.529)	5.891*** (0.857)		1.721*** (0.631)	2.337** (0.974)		2.997*** (0.351)	3.976*** (0.928)		5.134*** (0.624)	1.047 (1.080)	
2018-2023	2.991*** (0.463)	6.608*** (0.869)		4.246*** (0.671)	2.573*** (0.988)		6.141*** (0.589)	3.811*** (0.971)		5.732*** (0.678)	1.569 (1.150)	
Observations	25007	28628		25007	28628		25007	28628		25007	28628	
Controls	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Individual FE	No	No		No	No		No	No		No	No	
R2	0.040	0.038		0.035	0.014		0.042	0.039		0.041	0.025	
Adj R2	0.039	0.038		0.034	0.013		0.041	0.038		0.039	0.024	
Heterogeneity p-value	0.109	0.109	0.109	0.188	0.188	0.188	0.118	0.118	0.118	0.003***	0.003***	0.003***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPs 1998-2023 data.

Table 16. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, by location

	Middle down			Middle up		
	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)						
Upward	0.929 (0.122)	0.845 (0.105)	0.557	1.221 (0.163)	1.394* (0.258)	0.468
Downward	1.103 (0.151)	1.148 (0.118)	0.856	0.666*** (0.095)	0.657** (0.108)	0.973
Employment transition (ref: Staying employed)						
Non-employed stay	0.866 (0.123)	1.199 (0.138)	0.687	0.886 (0.103)	0.944 (0.137)	0.284
Entry to employment	0.972 (0.177)	1.142 (0.145)	0.747	0.746** (0.105)	0.998 (0.162)	0.007***
Exit to non-employment	1.305* (0.199)	1.512*** (0.217)	0.76	0.539*** (0.082)	0.585** (0.128)	0.448
Employment status transition (ref: All else)						
Wage to non-wage	0.746* (0.123)	0.716** (0.109)	0.89	0.928 (0.152)	0.829 (0.180)	0.765
Non-wage to wage	1.187 (0.216)	1.450** (0.213)	0.358	0.759 (0.168)	0.637 (0.185)	0.632
Adjacent waves FE (ref: 1998-2006)						
2006-2012	1.335*** (0.123)	1.089 (0.118)		0.843** (0.065)	0.783* (0.112)	
2012-2018	1.543*** (0.162)	1.548*** (0.167)		0.907 (0.076)	0.805 (0.113)	
2018-2023	1.849*** (0.186)	1.719*** (0.193)		0.827* (0.087)	0.867 (0.128)	
Observations	10935	11329		10935	11329	
Controls	Yes	Yes		Yes	Yes	
Individual FE	No	No		No	No	
Pseudo R2	0.059	0.069		0.059	0.069	
Heterogeneity p-value	0.653	0.653	0.653	0.653	0.653	0.653

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 17. Labor market transitions and household and individual economic outcomes: estimates of percentile changes without individual fixed effects, with controls, main breadwinner versus non-main breadwinner

	Wealth			Consumption			Household per-capita income			Individual income			Monthly wage			Formality-adj monthly wage		
	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)																		
Upward	2.667** (1.228)	3.356*** (0.709)	0.497	1.161 (1.513)	0.932 (0.953)	0.494	4.484** (1.999)	1.734 (1.115)	0.15	3.737** (1.834)	1.013 (0.912)	0.252	5.916*** (2.116)	2.736** (1.233)	0.077*	16.906*** (1.859)	15.456*** (1.029)	0.351
Downward	-4.017*** (1.006)	-3.234*** (0.672)	0.368	-1.479 (1.701)	-1.286 (0.885)	0.519	-1.963 (2.005)	-2.633** (1.068)	0.738	-1.602 (2.007)	-1.561* (0.820)	0.78	-3.820* (1.967)	-6.270*** (1.146)	0.091*	-10.133*** (1.631)	-15.526*** (1.010)	0.001***
Employment transition (ref: Staying employed)																		
Non-employed stay	-1.274** (0.546)	-18.779*** (6.165)	0.001***	-0.357 (0.871)	-8.837 (9.789)	0.4	0.766 (1.204)	-15.842 (10.479)	0.201	6.279*** (1.180)	-58.556*** (5.944)	0.000***						
Entry to employment	0.242 (0.700)	-9.313** (4.504)	0.010**	1.706* (0.948)	0.960 (16.921)	0.49	18.506*** (1.440)	4.432 (20.625)	0.57	68.601*** (1.440)	22.480 (17.685)	0.011**						
Exit to non-employment	-4.046*** (0.955)	-4.962*** (0.958)	0.492	-1.614 (1.278)	0.635 (1.426)	0.129	-11.636*** (1.843)	-21.749*** (1.824)	0.003***	-53.560*** (1.792)	-39.512*** (1.845)	0.000***						
Employment status transition (ref: All else)																		
Wage to non-wage	4.295*** (1.516)	2.199*** (0.780)	0.219	1.932 (2.181)	1.811 (1.107)	0.523	0.436 (2.448)	2.415* (1.316)	0.621	0.230 (2.435)	0.716 (0.801)	0.591						
Non-wage to wage	-4.580*** (1.332)	-4.112*** (1.000)	0.705	-2.917 (1.917)	-2.492* (1.399)	0.503	3.071 (2.581)	1.123 (1.830)	0.511	7.551*** (2.232)	3.784** (1.715)	0.284						
Adjacent waves FE (ref: 1998-2006)																		
2006-2012	-0.456 (0.512)	0.770 (0.778)		1.849** (0.842)	0.326 (1.105)								0.286 (1.616)	-6.046*** (1.250)		1.373 (1.305)	-2.686*** (1.005)	
2012-2018	0.699 (0.523)	0.169 (0.720)		5.603*** (0.850)	3.404*** (1.103)								3.043* (1.718)	-4.098*** (1.224)		4.590*** (1.371)	-0.412 (0.976)	
2018-2023	-0.510 (0.600)	-1.823** (0.797)		4.321*** (0.932)	2.389** (1.146)								-0.651 (2.304)	-7.929*** (1.310)		-1.060 (1.877)	-6.708*** (1.054)	
Adjacent waves FE (ref: 2012-2018)																		
2018-2023							-5.663*** (0.751)	-8.415*** (0.907)		-3.128*** (0.659)	-3.939*** (0.735)							
Observations	35555	18080		34900	17731		21911	12342		21869	12255		4323	10980		4323	10980	
Controls	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Individual FE	No	No		No	No		No	No		No	No		No	No		No	No	
R2	0.027	0.032		0.080	0.086		0.085	0.088		0.463	0.211		0.029	0.018		0.114	0.114	
Adj R2	0.026	0.030		0.080	0.084		0.083	0.086		0.462	0.209		0.023	0.016		0.108	0.112	
Heterogeneity p-value	0.005***	0.005***	0.005***	0.212	0.212		0.096*	0.096*	0.096*	0.000***	0.000***	0.000***	0.069*	0.069*	0.069*	0.005***	0.005***	0.005***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPs 1998-2023 data.

Table 18. Labor market transitions and household wealth economic class mobility outcomes: estimates of percentage point changes without individual fixed effects, with controls, main breadwinner versus non-main breadwinner

	Enter poverty			Enter pov/vulnerability			Exit poverty			Exit pov/vulnerability		
	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)												
Upward	-1.289 (1.050)	-2.193*** (0.710)	0.529	1.477 (1.475)	-0.319 (0.846)	0.317	-0.545 (1.286)	1.671* (0.857)	0.087*	2.611* (1.519)	3.421** (1.344)	0.6
Downward	0.459 (1.290)	1.212 (0.772)	0.654	5.341*** (1.628)	2.496*** (0.832)	0.11	-0.995 (1.301)	-0.142 (0.759)	0.453	-3.904*** (1.283)	-2.671*** (0.802)	0.291
Employment transition (ref: Staying employed)												
Non-employed stay	0.556 (0.647)	10.527 (9.325)	0.263	2.508*** (0.707)	12.934 (10.188)	0.217	-1.830*** (0.660)	-5.630* (3.139)	0.136	1.121 (0.733)	-12.731*** (1.592)	0.000***
Entry to employment	0.569 (0.779)	21.077 (18.186)	0.242	1.584* (0.861)	6.210 (17.038)	0.781	-0.446 (0.825)	-7.746 (6.001)	0.182	1.750* (0.920)	-8.786 (8.670)	0.179
Exit to non-employment	3.734*** (1.110)	3.410*** (1.266)	0.984	4.703*** (1.308)	4.708*** (1.459)	0.919	-1.321 (1.000)	-0.128 (1.140)	0.181	0.243 (1.149)	-2.330** (1.104)	0.214
Employment status transition (ref: All else)												
Wage to non-wage	-2.144 (1.727)	-1.387 (0.927)	0.752	-5.998*** (1.477)	-2.303** (0.954)	0.041**	3.170 (2.176)	1.414 (1.029)	0.442	4.729** (2.341)	2.128* (1.193)	0.256
Non-wage to wage	3.757** (1.890)	2.590** (1.227)	0.546	1.613 (1.888)	4.012*** (1.407)	0.327	-2.537 (1.581)	-0.767 (1.156)	0.347	-4.862*** (1.616)	-1.871 (1.185)	0.118
Adjacent waves FE (ref: 1998-2006)												
2006-2012	3.843*** (0.603)	1.069 (0.907)		0.974 (0.715)	0.575 (1.038)		2.247*** (0.637)	2.652*** (0.927)		0.537 (0.759)	2.233** (1.117)	
2012-2018	4.547*** (0.629)	3.726*** (0.920)		2.389*** (0.733)	1.886* (1.008)		3.186*** (0.626)	3.159*** (0.909)		2.623*** (0.756)	3.768*** (1.179)	
2018-2023	4.803*** (0.615)	3.623*** (0.908)		3.416*** (0.742)	3.527*** (1.073)		4.628*** (0.739)	3.485*** (0.975)		3.970*** (0.868)	2.674** (1.111)	
Observations	35555	18080		35555	18080		35555	18080		35555	18080	
Controls	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Individual FE	No	No		No	No		No	No		No	No	
R2	0.062	0.053		0.026	0.026		0.057	0.063		0.044	0.042	
Adj R2	0.062	0.051		0.025	0.024		0.057	0.061		0.043	0.041	
Heterogeneity p-value	0.799	0.799	0.799	0.324	0.324	0.324	0.124	0.124	0.124	0.000***	0.000***	0.000***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 19. Labor market transitions and household wealth middle class mobility outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls, male versus female

	Middle down Non- breadwinner	Main breadwinner	Diff p- value	Middle up Non- breadwinner	Main breadwinner	Diff p- value
Up/down category (ref: No upward/downward incl. any non-employment transition)						
Upward	0.801 (0.131)	0.940 (0.104)	0.485	1.019 (0.190)	1.368** (0.185)	0.219
Downward	1.165 (0.188)	1.157 (0.112)	0.87	0.548*** (0.116)	0.711*** (0.090)	0.316
Employment transition (ref: Staying employed)						
Non-employed stay	1.092 (0.119)	3.216 (2.967)	0.092*	0.894 (0.093)	0.000*** (0.000)	0.000***
Entry to employment	1.080 (0.128)	1.08e+06*** (1.10e+06)	0.000***	0.826 (0.097)	4.655*** (1.247)	0.000***
Exit to non-employment	1.372** (0.200)	1.555*** (0.255)	0.258	0.613*** (0.108)	0.456*** (0.087)	0.24
Employment status transition (ref: All else)						
Wage to non-wage	0.464*** (0.111)	0.800* (0.104)	0.052*	0.841 (0.230)	0.940 (0.142)	0.666
Non-wage to wage	1.419* (0.275)	1.319** (0.178)	0.771	0.875 (0.283)	0.681* (0.140)	0.583
Adjacent waves FE (ref: 1998-2006)						
2006-2012	1.213** (0.108)	1.153 (0.163)		0.762*** (0.066)	0.859 (0.108)	
2012-2018	1.569*** (0.147)	1.404** (0.198)		0.861* (0.078)	0.853 (0.110)	
2018-2023	1.726*** (0.165)	1.589*** (0.233)		0.842 (0.089)	0.805 (0.114)	
Observations	14633	7631		14633	7631	
Controls	Yes	Yes		Yes	Yes	
Individual FE	No	No		No	No	
Pseudo R2	0.101	0.090		0.101	0.090	
Heterogeneity p-value	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 20. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with and without individual fixed effects, without controls

	Wealth		Consumption		Household per-capita income		Individual income		Monthly wage		Formality-adjusted monthly wage	
	Ind FE	No Ind FE	Ind FE	No Ind FE	Ind FE	No Ind FE	Ind FE	No Ind FE	Ind FE	No Ind FE	Ind FE	No Ind FE
	Dynamic	Pre-Wave	Dynamic	Pre-Wave	Dynamic	Pre-Wave	Dynamic	Pre-Wave	Dynamic	Pre-Wave	Dynamic	Pre-Wave
	Controls	Controls	Controls	Controls	Controls	Controls	Controls	Controls	Controls	Controls	Controls	Controls
Up/down category (reference: No upward/downward incl. any non-employment transition)												
Upward	3.063**	3.903***	1.616	0.310	3.542	1.406	2.312	2.922***	3.638	5.296***	17.823***	17.502***
	(1.265)	(0.584)	(1.151)	(0.774)	(3.877)	(1.024)	(3.673)	(0.918)	(3.342)	(1.103)	(2.664)	(0.927)
Downward	-3.513***	-3.317***	-1.438	-2.406***	-6.229*	-4.551***	-4.804	-2.508***	-3.089	-5.504***	-12.183***	-13.757***
	(1.253)	(0.566)	(1.116)	(0.800)	(3.700)	(0.948)	(3.498)	(0.793)	(3.004)	(0.970)	(2.449)	(0.870)
Employment transition (reference: Staying employed)												
Non-employed stay	-1.784	-0.345	7.605***	1.763***	-6.037	0.703	5.044	2.381***				
	(1.501)	(0.280)	(1.468)	(0.439)	(6.208)	(0.611)	(6.029)	(0.523)				
Entry to employment	0.822	1.360***	9.799***	5.756***	17.933***	18.467***	64.976***	64.549***				
	(1.209)	(0.467)	(1.103)	(0.608)	(4.648)	(1.125)	(4.999)	(0.936)				
Exit to non-employment	-2.866*	-2.434***	5.853***	3.033***	-16.754***	-13.885***	-39.675***	-46.163***				
	(1.486)	(0.549)	(1.496)	(0.829)	(5.270)	(1.156)	(5.700)	(1.173)				
Employment status transition (reference: All else)												
Wage to non-wage	3.579**	2.708***	3.098**	1.557	7.133	2.800**	1.256	1.357				
	(1.660)	(0.672)	(1.514)	(0.997)	(4.395)	(1.185)	(3.310)	(0.842)				
Non-wage to wage	-4.193***	-3.699***	-0.062	-0.701	6.358	6.577***	6.729	6.869***				
	(1.531)	(0.648)	(1.486)	(0.979)	(4.628)	(1.298)	(4.529)	(1.106)				
Adjacent waves fixed effects (reference: 1998-2006)												
2006-2012	-0.697	-0.207	0.397	-0.874					-6.537***	-3.805***	-4.109**	-1.228
	(0.782)	(0.387)	(0.901)	(0.663)					(2.371)	(0.995)	(1.873)	(0.801)
2012-2018	-0.370	0.858**	3.219***	0.590					-6.656***	-2.189**	-3.821*	0.975
	(0.777)	(0.375)	(0.989)	(0.677)					(2.569)	(0.959)	(2.034)	(0.752)
2018-2023	-2.846***	-0.901**	2.087*	-1.301*					-11.417***	-6.479***	-11.713***	-5.707***
	(0.857)	(0.384)	(1.066)	(0.694)					(2.943)	(1.079)	(2.333)	(0.880)
Adjacent waves fixed effects (reference: 2012-2018)												
2018-2023					-1.956	-1.211**	-1.470	-1.371***				
					(1.384)	(0.582)	(1.220)	(0.484)				
Observations	72072	72072	63070	63070	48524	48524	48363	48363	15786	15786	15786	15786
Controls	No	No	No	No	No	No	No	No	No	No	No	No
Individual FE	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
R2	0.509	0.006	0.548	0.004	0.614	0.035	0.718	0.376	0.542	0.013	0.590	0.105
Adj R2	-0.172	0.006	-0.033	0.004	-0.327	0.035	0.029	0.376	-0.255	0.013	-0.124	0.105

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 21. Labor market transitions and household economic classes outcomes: estimates of percentage point changes without individual fixed effects, without controls

	Enter poverty	Enter poverty/vulnerability	Exit poverty	Exit poverty/vulnerability
Up/down category (reference: No upward/downward incl. any non-employment transition)				
Upward	-1.560*** (0.551)	0.436 (0.669)	1.834*** (0.667)	4.705*** (0.932)
Downward	1.821*** (0.650)	4.276*** (0.724)	0.012 (0.648)	-1.735*** (0.647)
Employment transition (reference: Staying employed)				
Non-employed stay	0.760** (0.339)	1.892*** (0.374)	0.608* (0.359)	1.684*** (0.419)
Entry to employment	0.821 (0.514)	0.648 (0.551)	1.849*** (0.520)	2.872*** (0.619)
Exit to non-employment	4.187*** (0.688)	3.611*** (0.744)	3.093*** (0.654)	0.948 (0.701)
Employment status transition (reference: All else)				
Wage to non-wage	0.851 (0.764)	-1.030 (0.836)	3.898*** (0.907)	4.529*** (1.010)
Non-wage to wage	6.104*** (0.913)	4.876*** (0.931)	2.199*** (0.822)	-0.620 (0.846)
Adjacent waves fixed effects (reference: 1998-2006)				
2006-2012	1.843*** (0.478)	0.781 (0.533)	1.243** (0.500)	0.770 (0.582)
2012-2018	2.320*** (0.469)	0.960* (0.513)	1.721*** (0.477)	2.123*** (0.579)
2018-2023	2.118*** (0.445)	1.992*** (0.505)	1.965*** (0.492)	1.646*** (0.576)
Observations	72072	72072	72072	72072
Controls	No	No	No	No
Individual FE	No	No	No	No
R2	0.003	0.003	0.002	0.003
Adj R2	0.003	0.003	0.002	0.003

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 22. Labor market transitions and household wealth middle classes outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, without controls

	Moved down	Moved up
Up/down category (reference: No upward/downward incl. any non-employment transition)		
Upward	0.929 (0.075)	1.191* (0.120)
Downward	1.137 (0.090)	0.628*** (0.064)
Employment transition (reference: Staying employed)		
Non-employed stay	1.077 (0.052)	0.836*** (0.045)
Entry to employment	1.055 (0.073)	0.879 (0.084)
Exit to non-employment	1.371*** (0.109)	0.547*** (0.058)
Employment status transition (reference: All else)		
Wage to non-wage	0.972 (0.103)	0.738*** (0.086)
Non-wage to wage	1.810*** (0.167)	0.511*** (0.081)
Adjacent waves fixed effects (reference: 1998-2006)		
2006-2012	1.050 (0.065)	0.979 (0.063)
2012-2018	1.136** (0.071)	1.166** (0.083)
2018-2023	1.216*** (0.073)	1.205*** (0.078)
Observations	29248	
Controls	No	
Individual FE	No	
Pseudo R2	0.006	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 23. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, male versus female

	Wealth		Consumption				Household per-capita income		Individual income			Monthly wage			Formality-adj monthly wage			
	Male	Female	Diff p-value			Diff p-value	Male	Female	Diff p-value	Male	Female	Diff p-value	Male	Female	Diff p-value	Male	Female	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)																		
Upward	3.221** (1.469)	2.221 (3.719)	0.772	0.984 (1.368)	2.774 (4.136)	0.6	0.129 (3.838)	1.946 (10.420)	0.916	-1.320 (3.023)	1.570 (10.752)	0.791	1.817 (3.619)	11.584 (7.749)	0.301	16.330*** (2.989)	20.069*** (7.285)	0.694
Downward	-2.766** (1.369)	-4.076 (3.597)	0.621	-0.756 (1.298)	-1.575 (4.014)	0.643	-4.934 (3.410)	-0.218 (11.926)	0.72	-2.745 (2.862)	2.707 (11.351)	0.641	-4.549 (3.267)	0.403 (7.243)	0.662	-13.048*** (2.733)	-6.265 (6.620)	0.443
Employment transition (ref: Staying employed)																		
Non-employed stay	-1.987 (3.474)	-2.183 (3.016)	0.755	11.729*** (3.126)	0.700 (2.951)	0.048**	-8.193 (10.939)	-5.267 (12.236)	0.767	1.200 (10.272)	-4.891 (12.421)	0.653						
Entry to employment	1.539 (2.164)	-0.669 (2.794)	0.802	9.064*** (1.630)	2.416 (2.581)	0.101	12.448** (5.940)	8.785 (10.749)	0.448	69.944*** (5.598)	62.376*** (11.608)	0.578						
Exit to non-employment	-2.711 (2.536)	-3.546 (2.953)	0.712	4.463 (3.498)	-0.841 (2.953)	0.373	-25.265*** (7.493)	-14.706 (10.848)	0.495	-39.921*** (6.725)	-56.688*** (11.968)	0.253						
Employment status transition (ref: All else)																		
Wage to non-wage	3.891** (1.917)	1.351 (7.323)	0.761	2.880 (1.789)	0.137 (7.632)	0.65	5.070 (4.728)	9.532 (16.182)	0.754	0.896 (3.432)	4.278 (21.449)	0.785						
Non-wage to wage	-4.242** (2.039)	-1.996 (6.479)	0.687	-2.633 (1.890)	-3.893 (7.687)	0.657	4.390 (6.152)	-1.999 (18.309)	0.68	7.207 (5.942)	17.993 (15.244)	0.532						
Adjacent waves FE (ref: 1998-2006)																		
2006-2012	2.347 (1.762)	-0.201 (1.726)		2.124 (1.357)	1.086 (1.315)								-4.371 (3.944)	-7.963 (5.949)		-2.353 (3.187)	-4.846 (4.816)	
2012-2018	4.649* (2.550)	0.561 (2.564)		6.165*** (1.515)	4.989*** (1.527)								-1.756 (5.971)	-9.931 (9.151)		-0.023 (4.864)	-5.953 (7.366)	
2018-2023	4.410 (3.485)	-1.143 (3.547)		8.350*** (1.752)	8.227*** (1.691)								-6.574 (8.172)	-8.933 (13.073)		-6.877 (6.709)	-10.952 (10.947)	
Adjacent waves FE (ref: 2012-2018)																		
2018-2023							-15.225*** (3.347)	-17.026*** (3.509)		-5.910** (2.377)	-2.523 (3.254)							
Observations	27172	26463		23550	20955		17161	17092		17051	17073		12695	2608		12695	2608	
Controls	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Individual FE	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
R2	0.518	0.546		0.622	0.638		0.705	0.701		0.863	0.805		0.557	0.543		0.605	0.580	
Adj R2	-0.163	-0.135		0.066	0.066		-0.054	-0.088		0.507	0.290		-0.249	-0.213		-0.114	-0.115	
Heterogeneity p-value	0.993	0.993	0.993	0.303	0.303		0.728	0.728	0.728	0.771	0.771	0.771	0.581	0.581	0.581	0.718	0.718	0.718

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPs 1998-2023 data.

Table 24. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, by age groups

	Wealth				Consumption				Household per-capita income				Individual income				Monthly wage				Formality-adj monthly wage			
	Young	Prime-age	Older	Diff p-value	Young	Prime-age	Older	Diff p-value	Young	Prime-age	Older	Diff p-value	Young	Prime-age	Older	Diff p-value	Young	Prime-age	Older	Diff p-value	Young	Prime-age	Older	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)																								
Upward	7.189 (8.376)	2.959 (2.708)	2.051 (5.336)	0.964	4.091 (4.493)	0.642 (2.141)	2.236 (3.996)	0.746	-2.278 (19.959)	2.193 (6.050)	-10.457 (13.293)	0.986 (17.701)	-12.147 (4.708)	1.796 (12.126)	0.345 (49.767)	52.567 (6.183)	3.938 (14.844)	-1.634 (14.844)	0.943 (42.012)	13.089 (5.142)	17.337*** (10.852)	12.405 (10.852)	0.786	
Downward	-0.266 (7.650)	-2.403 (2.794)	-2.290 (3.890)	0.964	1.833 (4.414)	-1.010 (2.009)	-0.361 (3.152)	0.746	-1.202 (22.591)	-5.229 (5.714)	-4.413 (10.205)	0.986 (19.066)	-10.367 (5.010)	3.937 (10.900)	0.345 (37.060)	-0.320 (6.011)	-4.740 (8.546)	-2.901 (8.546)	0.943 (31.000)	-4.598 (5.104)	-14.718*** (7.615)	-12.195 (7.615)	0.786	
Employment transition (ref: Staying employed)																								
Non-employed stay	2.892 (9.730)	4.084 (5.758)	-1.024 (8.338)	0.964	2.514 (5.409)	2.525 (4.911)	1.241 (7.448)	0.578	-2.847 (27.744)	0.123 (15.229)	-12.081 (20.211)	0.986 (25.430)	-0.806 (15.951)	0.351 (26.583)	-3.270 (26.583)	0.345								
Entry to employment	4.564 (6.667)	2.099 (4.469)	2.621 (7.387)	0.964	4.472 (3.493)	2.344 (3.424)	0.821 (6.533)	0.578	11.527 (20.436)	15.694 (11.289)	-0.332 (17.019)	0.986 (19.182)	62.499*** (15.182)	64.354*** (14.502)	49.977** (22.322)	0.345								
Exit to non-employment	-2.236 (9.161)	0.683 (4.423)	0.539 (5.213)	0.964	2.941 (5.804)	-1.044 (4.305)	-0.998 (5.207)	0.578	-18.760 (27.580)	-13.349 (11.406)	-17.053 (12.998)	0.986 (23.661)	68.093*** (13.090)	53.835*** (15.246)	-29.777* (15.246)	0.345								
Employment status transition (ref: All else)																								
Wage to non-wage	9.295 (12.452)	3.266 (3.556)	10.655* (6.418)	0.964	-0.997 (5.963)	3.447 (2.664)	3.307 (5.119)	0.728	-0.334 (21.682)	7.186 (7.281)	7.977 (16.068)	0.986 (22.952)	-7.918 (4.928)	1.256 (15.079)	0.538 (15.079)	0.345								
Non-wage to wage	-4.516 (10.044)	-1.803 (3.939)	-3.744 (7.066)	0.964	-3.941 (5.487)	-2.409 (2.945)	-3.343 (5.254)	0.728	-6.231 (36.248)	3.333 (9.588)	15.992 (16.193)	0.986 (22.042)	65.726 (9.116)	6.584 (23.568)	19.782 (23.568)	0.345								
Adjacent waves FE (ref: 1998-2006)																								
2006-2012	1.765 (6.183)	2.047 (2.596)	-1.548 (2.929)		-3.245 (2.695)	4.582** (2.325)	-1.043 (2.473)										-12.447 (71.577)	-0.252 (7.075)	-12.151** (5.534)	-4.834 (64.459)	-0.341 (5.686)	-7.728* (4.353)		
2012-2018	7.083 (9.429)	2.102 (3.098)	-4.147 (3.745)		-4.207 (3.999)	10.824*** (2.623)	0.022 (3.202)										-22.171 (85.860)	3.071 (8.926)	-10.833 (7.417)	-14.207 (74.492)	3.787 (7.322)	-6.434 (5.826)		
2018-2023	8.610 (13.332)	0.473 (3.580)	-6.349 (4.597)		-9.696* (5.283)	16.066*** (2.881)	1.281 (3.710)										-16.326 (113.545)	0.476 (10.950)	-13.617 (9.114)	-9.196 (97.074)	-1.767 (8.928)	12.691* (7.358)		
Adjacent waves FE (ref: 2012-2018)																								
2018-2023									-15.865 (11.485)	-16.156*** (2.934)	13.180** (4.460)		-2.079 (11.825)	-1.436 (2.376)	-5.221 (4.544)									
Observations	18641	22769	12225		15463	19175	9867		10966	15595	7692	10939	15540	7645		2511	8127	4665	2511	8127	4665			
Controls	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes			
Individual FE	Yes	Yes	Yes		No	No	No		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes			
R2	0.818	0.649	0.654		0.859	0.731	0.749		0.909	0.755	0.796	0.950	0.866	0.822		0.923	0.674	0.669	0.929	0.705	0.703			
Adj R2	-0.164	-0.233	-0.279		0.088	0.036	0.019		0.054	-0.136	-0.088	0.474	0.376	0.052		-0.465	-0.341	-0.265	-0.348	-0.213	-0.134			
Heterogeneity p-value	0.964	0.964	0.964	0.964	0.711	0.711	0.711	0.711	0.986	0.986	0.986	0.986	0.345	0.345	0.345	0.345	0.943	0.943	0.943	0.943	0.786	0.786	0.786	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPs 1998-2023 data.

Table 25. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, by education groups

	Wealth			Consumption			Diff p-value	Household per-capita income			Diff p-value	Individual income			Monthly wage			Diff p-value	Formality-adj monthly wage			Diff p-value
	Low	Secondary	High	Low	Secondary	High		Low	Secondary	High		Low	Secondary	High	Low	Secondary	High		Low	Secondary	High	
Up/down category (ref: No upward/downward incl. any non-employment transition)																						
Upward	4.701*	13.823	1.986	0.9721.332	2.074	0.882	0.77	-3.671	-19.254	2.070	0.985-1.789	-24.712	0.540	0.7630.543	37.862	5.246	0.12915.817***	49.126	17.671***	0.193		
	(2.726)	(40.365)	(1.894)	(2.192)	(15.903)	(1.757)		(8.101)	(55.240)	(4.881)	(7.679)	(45.861)	(3.678)	(6.471)	(267.293)	(4.085)	(5.346)	(254.219)	(3.452)			
Downward	-1.217	-12.209	-4.576**	0.972-0.402	-10.828	-1.958	0.77	-5.300	-36.767	-4.555	0.985-4.230	-19.564	-0.646	0.763-1.515	-25.543	-4.815	0.129-9.976**	-23.468	-13.005***	0.193		
	(2.294)	(35.427)	(1.853)	(1.913)	(15.922)	(1.715)		(6.790)	(55.649)	(4.428)	(4.612)	(42.808)	(4.334)	(5.632)	(169.240)	(3.769)	(4.670)	(161.583)	(3.252)			
Employment transition (ref: Staying employed)																						
Non-employed stay	0.929	-10.839	-1.004	0.9725.075	7.538	1.206	0.685	-2.525	-59.986	-9.904	0.985-2.671	-64.506	9.205	0.763								
	(3.764)	(69.028)	(3.346)	(3.439)	(22.668)	(3.374)		(16.384)	(98.678)	(10.757)	(14.874)	(97.941)	(9.247)									
Entry to employment	2.498	-7.841	-0.021	0.9725.748**	8.652	4.975**	0.685	11.717	-40.257	6.546	0.98563.586***	18.030	68.389***	0.763								
	(3.374)	(58.714)	(2.484)	(2.731)	(15.745)	(2.140)		(12.450)	(71.130)	(7.502)	(12.320)	(75.879)	(6.736)									
Exit to non-employment	-0.056	-14.384	-4.075	0.9723.229	7.639	-0.368	0.685	-17.234	-10.659	-21.160**	0.985-40.319***	-6.861	-53.815***	0.763								
	(3.240)	(66.607)	(2.736)	(3.178)	(25.618)	(3.257)		(11.359)	(65.243)	(8.356)	(12.006)	(72.298)	(7.611)									
Employment status transition (ref: All else)																						
Wage to non-wage	5.239	-24.507	4.222	0.9723.130	-0.777	1.884	0.803	2.198	-3.743	6.060	0.985-2.014	13.009	3.103	0.763								
	(3.339)	(41.956)	(2.715)	(2.621)	(14.879)	(2.598)		(8.465)	(68.679)	(6.876)	(6.690)	(36.585)	(4.452)									
Non-wage to wage	-1.095	-21.534	-6.631**	0.972-2.458	6.013	-3.987	0.803	-1.742	-45.855	8.720	0.9856.832	-1.092	11.007	0.763								
	(3.492)	(45.985)	(2.957)	(2.750)	(17.761)	(2.611)		(11.188)	(56.723)	(8.533)	(8.460)	(50.395)	(10.318)									
Adjacent waves FE (ref: 1998-2006)																						
2006-2012	0.575	15.442	1.702	2.999*	0.209	1.265									-7.567	-14.615	-3.088	-4.631	-24.863	-1.653		
	(2.239)	(38.576)	(1.830)	(1.579)	(12.855)	(1.557)									(7.919)	(424.901)	(3.731)	(6.400)	(381.434)	(3.050)		
2012-2018	2.506	11.146	1.939	6.914***	11.161	5.139***									-1.683	-86.845	-2.542	0.628	-81.994	-1.137		
	(3.280)	(52.154)	(2.644)	(1.749)	(14.570)	(1.773)									(11.925)	(662.651)	(5.808)	(9.621)	(600.224)	(4.770)		
2018-2023	2.141	10.294	0.169	8.327***	14.737	9.364***									-7.322	-92.053	-5.759	-7.324	-105.984	-7.500		
	(4.365)	(68.427)	(3.668)	(1.941)	(16.068)	(1.971)									(15.893)	(980.102)	(8.100)	(12.932)	(905.353)	(6.739)		
Adjacent waves FE (ref: 2012-2018)																						
2018-2023								-17.996***	-10.829	-15.635***	-7.106**	-9.939	-2.354									
								(4.328)	(61.321)	(3.547)	(3.451)	(25.501)	(2.831)									
Observations	24380	3328	25927	19926	2647	21901		15030	2201	17022	14984	2190	16950		4747	301	10255	4747	301	10255		
Controls	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		
Individual FE	Yes	Yes	Yes	No	No	No		Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes		
R2	0.645	0.924	0.522	0.714	0.942	0.631		0.781	0.956	0.701	0.859	0.988	0.840		0.588	0.964	0.553	0.618	0.970	0.604		
Adj R2	-0.136	-0.208	-0.170	0.071	0.084	0.066		-0.068	0.197	-0.085	0.310	0.776	0.419		-0.308	-0.338	-0.227	-0.213	-0.120	-0.085		
Heterogeneity p-value	0.972	0.972	0.972	0.9720.877	0.877	0.877	0.877		0.985	0.985	0.985	0.985	0.763	0.763	0.763	0.763	0.129	0.129	0.129	0.129		

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPs 1998-2023 data.

Table 26. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, by location

	Wealth			Consumption			Household per-capita income			Individual income			Monthly wage			Formality-adj monthly wage		
	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value	Urban	Rural	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)																		
Upward	2.290 (2.032)	3.711* (1.943)	0.492	0.984 (1.368)	2.774 (4.136)	0.673	-1.561 (5.765)	1.109 (4.726)	0.746	-4.451 (5.454)	0.764 (2.714)	0.468	-0.670 (4.902)	4.859 (4.493)	0.27	17.308*** (4.218)	16.663*** (3.704)	0.933
Downward	-3.653* (1.908)	-1.985 (1.813)	0.582	-0.756 (1.298)	-1.575 (4.014)	0.633	-7.544 (5.136)	-0.853 (4.295)	0.311	-5.950 (5.285)	1.233 (2.832)	0.244	-3.318 (4.441)	-4.014 (4.104)	0.969	-13.429*** (3.836)	-11.651*** (3.414)	0.672
Employment transition (ref: Staying employed)																		
Non-employed stay	-1.880 (2.939)	-1.260 (2.985)	0.473	11.729*** (3.126)	0.700 (2.951)	0.302	-4.420 (10.924)	-7.842 (9.291)	0.999	-3.939 (9.684)	2.901 (8.511)	0.55						
Entry to employment	-0.193 (2.198)	1.264 (2.492)	0.265	9.064*** (1.630)	2.416 (2.581)	0.291	12.381 (7.568)	8.933 (6.849)	0.999	69.339*** (8.626)	66.153*** (5.502)	0.72						
Exit to non-employment	-3.878 (2.469)	-2.014 (2.663)	0.307	4.463 (3.498)	-0.841 (2.953)	0.405	-18.284** (8.373)	-16.136** (7.305)	0.708	-57.923*** (8.517)	-41.618*** (7.072)	0.167						
Employment status transition (ref: All else)																		
Wage to non-wage	2.685 (2.473)	4.866* (2.777)	0.536	2.880 (1.789)	0.137 (7.632)	0.621	4.917 (6.481)	4.346 (6.393)	0.794	-1.826 (6.502)	1.388 (3.152)	0.768						
Non-wage to wage	-3.337 (2.831)	-5.172* (2.830)	0.736	-2.633 (1.890)	-3.893 (7.687)	0.661	8.645 (9.674)	-0.777 (7.431)	0.392	14.539 (11.308)	2.439 (3.936)	0.308						
Adjacent waves FE (ref: 1998-2006)																		
2006-2012	1.140 (1.509)	1.471 (2.013)		2.124 (1.357)	1.086 (1.315)								-1.458 (4.420)	-7.568 (5.201)		-0.879 (3.571)	-4.766 (4.210)	
2012-2018	1.996 (2.425)	4.163 (2.757)		6.165*** (1.515)	4.989*** (1.527)								0.726 (7.544)	-5.758 (7.265)		0.621 (6.030)	-2.781 (6.001)	
2018-2023	-0.484 (3.470)	5.194 (3.700)		8.350*** (1.752)	8.227*** (1.691)								-1.883 (10.398)	-10.058 (9.849)		-6.161 (8.650)	-9.484 (8.096)	
Adjacent waves FE (ref: 2012-2018)																		
2018-2023							-13.704*** (3.956)	-17.291*** (3.080)		-0.714 (2.978)	-5.998** (2.705)							
Observations	25007	28628		23550	20955		13618	20635		13547	20577		7287	8016		7287	8016	
Controls	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Individual FE	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
R2	0.508	0.554		0.622	0.638		0.710	0.701		0.848	0.823		0.554	0.562		0.610	0.601	
Adj R2	-0.172	-0.156		0.066	0.066		-0.008	-0.122		0.469	0.334		-0.250	-0.240		-0.093	-0.131	
Heterogeneity p-value	0.943	0.943	0.943	0.721	0.721		0.957	0.957	0.957	0.258	0.258	0.258	0.469	0.469	0.469	0.912	0.912	0.912

Note: *p<0.05; **p<0.01; ***p<0.001. Standard errors in parentheses.

Source: authors' calculations based on ELMPS 1998-2023 data.

Table 27. Labor market transitions and household and individual economic outcomes: estimates of percentile changes with individual fixed effects, with controls, main breadwinner versus non-main breadwinner

	Wealth			Consumption			Household per-capita income			Individual income			Monthly wage			Formality-adj monthly wage		
	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value	Non-breadwinner	Main breadwinner	Diff p-value
Up/down category (ref: No upward/downward incl. any non-employment transition)																		
Upward	2.072 (3.448)	3.099 (2.129)	0.632	0.984 (1.368)	2.774 (4.136)	0.654	3.065 (9.940)	-1.385 (5.203)	0.917	0.234 (10.106)	-1.592 (3.992)	0.715	-1.896 (10.361)	1.929 (4.724)	0.83	12.779 (9.133)	17.075*** (3.927)	0.809
Downward	-4.439 (3.550)	-2.950 (1.893)	0.408	-0.756 (1.298)	-1.575 (4.014)	0.554	-2.129 (11.885)	-7.041 (4.346)	0.844	0.463 (11.584)	-3.350 (3.796)	0.941	-1.981 (10.200)	-5.969 (4.090)	0.409	-9.999 (8.542)	-14.837*** (3.379)	0.142
Employment transition (ref: Staying employed)																		
Non-employed stay	-4.010 (3.117)	-34.577*** (4.399)	0.12	11.729*** (3.126)	0.700 (2.951)	0.603	-6.190 (11.979)	16.779 (12.322)	0.944	-0.634 (10.859)	-104.744*** (9.882)	0.000***						
Entry to employment	-1.231 (2.606)	-35.179** (15.068)	0.538	9.064*** (1.630)	2.416 (2.581)	0.496	10.218 (9.926)	24.570 (100.337)	0.752	65.979*** (9.393)	71.328 (127.067)	0.793						
Exit to non-employment	-5.867* (3.136)	0.732 (3.893)	0.253	4.463 (3.498)	-0.841 (2.953)	0.655	-18.100 (11.278)	-25.741** (11.099)	0.99	-57.777*** (11.037)	-32.572*** (9.102)	0.035**						
Employment status transition (ref: All else)																		
Wage to non-wage	6.131 (5.517)	5.043** (2.500)	0.876	2.880 (1.789)	0.137 (7.632)	0.648	3.613 (13.007)	5.337 (6.522)	0.543	-5.945 (17.144)	0.614 (4.587)	0.721						
Non-wage to wage	-8.444* (4.784)	-2.130 (3.106)	0.355	-2.633 (1.890)	-3.893 (7.687)	0.677	9.026 (21.338)	4.468 (8.457)	0.901	11.086 (14.534)	7.472 (8.750)	0.936						
Adjacent waves FE (ref: 1998-2006)																		
2006-2012	-1.241 (1.844)	3.013 (2.537)		2.124 (1.357)	1.086 (1.315)								-1.823 (9.822)	-10.492** (4.787)		-0.568 (8.000)	-7.282* (3.855)	
2012-2018	-0.571 (2.731)	4.355 (3.531)		6.165*** (1.515)	4.989*** (1.527)								-0.947 (15.472)	-9.041 (7.093)		0.251 (12.403)	-6.148 (5.799)	
2018-2023	-2.240 (3.804)	4.664 (4.732)		8.350*** (1.752)	8.227*** (1.691)								-2.252 (22.267)	-14.201 (9.669)		-3.842 (17.784)	-13.891* (7.913)	
Adjacent waves FE (ref: 2012-2018)																		
2018-2023							-18.390*** (3.823)	-15.519*** (4.410)		-1.458 (3.430)	-8.828*** (3.069)							
Observations	35555	18080		23550	20955		21911	12342		21869	12255		4323	10980		4323	10980	
Controls	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Individual FE	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
R2	0.621	0.588		0.622	0.638		0.763	0.729		0.859	0.832		0.811	0.583		0.828	0.628	
Adj R2	-0.141	-0.201		0.066	0.066		-0.066	-0.122		0.367	0.301		-0.017	-0.335		0.070	-0.193	
Heterogeneity p-value	0.561	0.561	0.561	0.778	0.778		0.999	0.999	0.999	0.010**	0.010**	0.010**	0.65	0.65	0.65	0.302	0.302	0.302

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Source: authors' calculations based on ELMPs 1998-2023 data.

Table 28. Labor market transitions and household income classes outcomes: estimates of percentage point changes without individual fixed effects, with controls

	Enter poverty	Enter poverty/vulnerability	Exit poverty	Exit poverty/vulnerability
Up/down category (reference: No upward/downward incl. any non-employment transition)				
Upward	-0.912 (0.996)	-2.894** (1.158)	1.618** (0.750)	-0.113 (0.960)
Downward	0.240 (0.935)	1.502 (1.141)	-0.408 (0.677)	-1.493 (0.973)
Employment transition (reference: Staying employed)				
Non-employed stay	10.640*** (1.121)	8.140*** (1.217)	5.653*** (0.654)	6.713*** (0.879)
Entry to employment	-1.651 (1.162)	-5.364*** (1.324)	8.035*** (0.969)	14.930*** (1.326)
Exit to non-employment	18.326*** (1.538)	17.294*** (1.617)	0.380 (0.737)	-3.980*** (0.898)
Employment status transition (reference: All else)				
Wage to non-wage	-0.466 (1.128)	0.141 (1.415)	0.515 (0.941)	0.868 (1.258)
Non-wage to wage	-0.921 (1.202)	-0.218 (1.529)	4.035*** (1.428)	3.715** (1.689)
Adjacent waves fixed effects (reference: 2012-2018)				
2018-2023	1.492*** (0.570)	4.094*** (0.652)	-6.226*** (0.425)	-5.099*** (0.604)
Observations	34253	34253	34253	34253
Controls	Yes	Yes	Yes	Yes
Individual FE	No	No	No	No
R2	0.029	0.031	0.047	0.058
Adj R2	0.028	0.030	0.046	0.057

*Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.*

Source: authors' calculations based on ELMPs 1998-2023 data.

Table 29. Labor market transitions and household income middle classes outcomes: multinomial logit model (relative risk ratios), estimates without individual fixed effects, with controls

	Moved down	Moved up
Up/down category (reference: No upward/downward incl. any non-employment transition)		
Upward	0.908 (0.095)	0.963 (0.123)
Downward	1.200* (0.112)	0.880 (0.093)
Employment transition (reference: Staying employed)		
Non-employed stay	1.977*** (0.220)	0.413*** (0.046)
Entry to employment	1.118 (0.160)	1.031 (0.136)
Exit to non-employment	2.802*** (0.336)	0.516*** (0.083)
Employment status transition (reference: All else)		
Wage to non-wage	1.120 (0.131)	1.157 (0.166)
Non-wage to wage	0.992 (0.134)	0.909 (0.152)
Adjacent waves fixed effects (reference: 2012-2018)		
2018-2023	1.026 (0.053)	0.736*** (0.047)
Observations	16215	
Controls	Yes	
Individual FE	No	
Pseudo R2	0.061	

*Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.*

Source: authors' calculations based on ELMPS 1998-2023 data.