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# Showing off to the new neighbors? Income, socioeconomic status and consumption patterns of internal migrants

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#### **Abstract**

This paper analyses incomes and socioeconomic status of internal migrants over time and in comparison to their new neighbors and investigates whether status consumption is a way for newly arrived city dwellers to signal their social standing. Using a novel dataset from the emerging economy of Kazakhstan we find that internal migrants earn an income and status premium for their move. In a comparison to indigenous city dwellers their earnings and household incomes are not significantly different; however, mobile households report a significantly higher subjective socio-economic status. Exploiting expenditure data, we find that recent migrant households gain status from using visible consumption to impress their new neighbors. This signaling might be used as adaptation to the new economic and social environment or to gain access to social capital.

JEL-Classification: P36, I31, R23

*Keywords:* Absolute and relative welfare, income, status consumption, conspicuous consumption, signaling model, adaptation, internal migration, rural-urban migration, emerging economy, Kazakhstan, socioeconomic status

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#### 1 Introduction

Globally, millions of individuals have incurred substantial costs to migrate to places with more promising economic prospects; reasons for moving include the aim to obtain a higher income (Sjaastad, 1962; Harris and Todaro, 1970) or to escape economic risks at home (Stark, 1991).

This paper examines the extent to which mobile individuals and households gain from migration within an emerging economy in terms of absolute and relative welfare. We focus on the impact of internal (as opposed to international) migration in Kazakhstan using data from the Kazakhstan Migration and Remittances Survey (KMRS), a unique survey of individuals who moved from rural or urban areas to the major urban centers of the country. We believe this setting to be interesting for two reasons: First, the break-down of the Soviet Union was accompanied by a lifting of mobility barriers inducing a substantial emigration of non-Kazakh city dwellers. In exchange, ethnic Kazakhs suffering from labor market restructuring (especially due to privatization and unprofitability in the agricultural sector; see Wandel and Kozbagarova 2009: 40) moved into cities completing a substantial reshaping of the social fabric of the country's cities. The most extreme example of this social remodelling was the relocation of Kazakhstan's capital from Almaty to Astana in 1997 with the latter having almost tripled its population size since then. This move was expected to contribute to the urbanization of Kazakhstan, enhance the economy in the northern regions and spread wealth more evenly across the country. Second, Kazakhstan exemplifies some massive urbanization trends which can be found in many urban areas of rapidly emerging economies.

Both phenomena, the compositional change in Kazakh cities as well as the rapid urbanization process in general, can potentially be accompanied by social disruptions. Newcomers to cities have to define their place in the urban society by signalling their status (Janabel 1996; Sivanthan and Pettit 2010) or by gaining costly access to social networks (cp. Anggraeni 2009) while incumbents may not fully accept migrants (Kendirbaeva 1997; Schröder 2010). Whereas most of the previous research on this topic stems from other fields (social psychology, consumer research), our economically

motivated paper sheds light on these disruptions by analyzing the consumption implications of status signalling by newly arrived city dwellers.

We begin by comparing migrants' earnings and their perceived socio-economic status before and after the move and by comparing migrants' average earnings, household income and socioeconomic status to that of non-migrants in the destination city. The main contribution of the paper is our analysis of status consumption patterns which clearly indicates that newly arrived migrants are concerned about their standing in the new environment.

In economics, earnings are usually treated as the primary measure of absolute economic success. Abstracting from moving costs, an increase of earnings after migration reflects a wise investment of a migrant's human capital. While the exact results from studies on migrant earnings vary, the literature has generally found a positive relationship between migration and earnings (Cooke and Baily, 1996; Dávila and Mora, 2008; Blackburn, 2009; Gagnon, Xenogiani and Xing, 2011).

Another measure of a migrant's welfare is his or her socioeconomic status; this measure is more general and does not exclusively rely on financial well-being. Developed within the context of social stratification theory, socioeconomic status refers to the position of individuals or households in a hierarchical ordering of society and hence is a relative measure of welfare (Weber, 1946; Chan and Goldthorpe, 2007). The status position is defined by a range of relevant economic and social characteristics such as income, education, occupational prestige and housing conditions, and it may or may not correspond to the subjective perception of an individual or household.

In the migration context, Stark and Taylor (1991) emphasize the importance of relative income in the decision to move in developing countries. They show theoretically that *ex-ante* relatively deprived households tend to send migrants abroad in order to improve their comparative income position at home. In contrast, the literature has been relatively silent about the actual welfare and status adjustments *ex-post* migration.<sup>1</sup> This is surprising given that the study of socioeconomic status is more than an

<sup>&</sup>lt;sup>1</sup> A small literature on well-being after migration exists, e.g. De Jong, Chamratrithirong and Tran (2002), Knight and Gunatilka (2010), Nowok et al. (2011) and Akay, Bargain and Zimmermann (2012).

abstract exercise: the subjective perception of socioeconomic status has been shown to shape subjective well-being (Di Tella, Haisken-De New and MacCulloch, 2010; Akay, Bargain and Zimmermann, 2012) and the state of health (Adler et al., 2000; Dalstra et al., 2005; Demakakos et al., 2008). In one of the few existing studies on welfare and status adjustments *ex-post* migration, Resosudarmo et al. (2010) show that rural-to-urban migration in most cases improves the socioeconomic status of internal migrants in Indonesia. While the majority of migrants claim that their economic conditions are worse than those of their new non-migrant neighbours, in fact, their absolute expenditure levels exceed that of non-migrants. The authors attribute this observation to changing aspirations.

According to the leisure class theory of Veblen (1899), people with higher socioeconomic status tend to distinguish themselves from less affluent individuals by signaling their status through intensive status consumption. A higher socioeconomic position in the own reference group creates higher incentives to signal status. A growing literature in development economics clearly indicates that status consumption is not confined to wealthy individuals but also prevalent among some of the poorest households (Banerjee and Duflo, 2007; Brown, Bulte and Zhang, 2011). Status signaling becomes even more important as the social cohesion of an individual's environment decreases and mobility rises. That is, more anonymous and frequent interaction with others—as is the case for newly arrived migrants in dynamic cities of emerging economies—makes status consumption a powerful tool to signal one's relative position (Kaus, 2012). Accordingly, internal migrants might spend more on status consumption in order to define their social position. Such consumption has attracted substantial policy attention in poorer countries, as it may divert resources from other spending areas like health, education and housing or even create poverty traps (Kaus, 2010; Moav and Neeman, 2010). While it appears difficult to prevent conspicuous consumption in practice through taxes (Christen and Morgan, 2005) or redistribution (Hopkins and Kornienko, 2004), there is also a theoretical reason against status consumption regulation: Recent research has suggested that status consumption may be used as a means to acquire social capital, i.e. as a potential mode of insurance (Anggraeni, 2009; Danzer, 2013).

Our paper presents evidence on the earnings of migrants and the socio-economic status of their households before and after migration ('inter-temporal comparison'). We show that recently arrived internal migrants report higher earnings and a substantially higher socioeconomic status as compared to before the move. Our main contribution, however, rests on the comparison of earnings, household incomes and socioeconomic status of internal migrants to urban centers with non-migrants at the destination ('inter-personal comparison'). Therefore, we estimate a number of regressions with earnings, income and socioeconomic status as the dependent variable that include regressors for whether an individual or household migrated to one of the sampled cities during four distinct periods of time. We find that recently arrived internal migrants report on average a substantially higher relative socioeconomic status than indigenous city dwellers. At the same, time they do not receive higher earnings or a higher household income, ceteris paribus. Digging deeper, we explore households' consumption patterns and show that recent internal migrants not only report a higher socioeconomic status but also spend a higher share of their expenditures on status consumption compared to their new neighbours. We argue that this status consumption is used by migrants to show their post-move upward mobility on the social ladder. Several extensions to our main model suggest that migrant households try to impress their new neighbors and that they are indeed motivated by status concerns.

We are aware of the fact that internal migrants are a selected group of people that might differ from non-migrants. Instead of attributing a causal effect to migration *per se*, our goal is to describe an interesting pattern of income, status and consumption between immobile and mobile persons. As we also compare recent with former migrants and conduct several sensitivity checks, we are confident that these patterns provide evidence for the social adaptation of migrant-newcomers.

The remainder of this paper is structured as follows. Section 2 describes the history and current situation of internal migration in Kazakhstan. Section 3 introduces the dataset, Section 4 the modeling approach. Results are reported in Section 5, which first summarizes the inter-temporal welfare effects of migration, and then focuses on comparing earnings, income and status between internal migrants and their new neighbors. Section 6 investigates the status consumption behavior of newly arrived migrants and provides a number of robustness checks. Section 7 concludes.

### 2 Internal migration in Kazakhstan

Kazakhstan is the ninth largest country in the world but inhabited by a relatively small population (16 million inhabitants). Urbanization processes are still ongoing. Although internal migration in Kazakhstan is not as dynamic as in neighboring China, this country has recently experienced high population inflows into some of its biggest cities which is typical for emerging economies. These movements have been fueled by the relocation of the capital from Almaty in the South of Kazakhstan to Astana in the North in the late 1990s. Since the relocation of the capital, Astana has turned into a magnet for migrants. Between 1999 and 2009, its population grew by 104 percent and that of Almaty by 19 percent.<sup>2</sup> Even the cities most affected by the significant outmigration of non-titular ethnicities (Russians, Germans etc.)—Karaganda and Pavlodar—recorded a net population growth of 5 to 7 percent during the same period (Gosudarstvennyj komitet Kazakskoj SSR po statistike, 2009).

Kazakhstan became part of the Soviet Union in 1920 and remained under Soviet rule until independence in 1991. During the Soviet regime internal migration was subject to governmental control. The Soviet government used organized recruitment and propaganda campaigns to encourage labor mobility to regions of high labor demand. At the same time the system of internal passports and residence permits (*propiskas*) restricted the inflow of people to urban centers. The intention was to avoid harmful consequences of unplanned movements to better-off cities and to regulate the inflow of people to towns of military importance.<sup>3</sup> In the 1950s the Kazakh SSR (Soviet Socialist Republic) received a high number of immigrants from the Russian SSR and other Soviet Republics because of its rapid industrialization and the so-called Idle Land Programs (Rahmonova-Schwarz, 2010). This inflow had a deep impact on the ethnic composition

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<sup>&</sup>lt;sup>2</sup> In China, the population of the largest cities – Beijing, Guangzhou and Shanghai – grew between 25 percent and 45 percent during the 2000s, but most major urban systems in China experienced growth rates between 15 and 20 percent during that decade (Kamal-Chaoui, Leman and Rufei, 2009).

<sup>&</sup>lt;sup>3</sup> The efficiency of the USSR's government in allocating its labor force and restricting the inflow to cities has been questioned by a number of studies. Lewis and Rowland (1979) argue that internal labor migration responded to economic opportunities and was largely unorganized until the mid-1970s. In her work on interregional migration in the USSR, Mitchneck (1991) shows that state institutions that allocated the labor force, such as the Organized Recruitment of Labor (*Orgnabor*), did not succeed in redistributing workers between surplus and deficit regions. Although the *propiska* system made it more difficult for Soviet citizens to move to preferred cities, these restrictions could be circumvented in a number of ways (Gang and Stuart, 2002).

of the Kazakh SSR. In 1959, indigenous Kazakhs accounted for only 30% of the population while Russians held a 43% share. After 1959 immigration from other Soviet Republics decreased, and between 1970 and the break-up of the Soviet Union net migration to the Kazakh SSR was negative. In consequence, the Russian population share shrank to 37.8% in 1989 when Russians were just outnumbered by indigenous Kazakhs (39.7% of the population). Today, 23% of Kazakhstan's population is ethnic Russian.

In the years following independence, economic reforms were introduced, and nation state institutions were developed in Kazakhstan. These reforms were accompanied by a deep economic crisis and a huge population outflow. Between 1991 and 2001, net migration accounted for a population loss of 2.03 million persons (13% of the population). Many migrants were of Russian, Ukrainian and German background and emigrated from urban areas in the Northern and Central parts of Kazakhstan. The urban population was strongly affected by emigration, and most cities in Northern and Central Kazakhstan experienced a decrease in population (Rowland, 1999). After 2000, the economy in Kazakhstan returned to positive growth, driven by a booming energy sector and the implementation of institutional changes. From 2002 onwards emigration diminished and the population of Kazakhstan began to grow.

In comparison to the huge population outflow in the first decade of Kazakhstan's independence, internal migration rates in the country have remained lower. This is remarkable since economic and social disparities between regions (*oblasts*) as well as between rural and urban areas remain very high (Dillinger, 2007; Aldashev and Dietz, 2011).

As discussed above, internal migration picked up substantially in the 2000s. Moves were directed towards bigger cities and urban centers where job opportunities are relatively abundant and where living conditions exceed those of rural areas. Privatizations in the countryside (1994) and cuts in the social sector in rural areas (1997) have also fueled internal migration from rural to urban areas (UNDP 2002). A particular push for internal migration has been the 1997 relocation of Kazakhstan's capital from Almaty to Astana. Since then the new booming city of Astana has attracted internal migrants; extensive con-

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<sup>&</sup>lt;sup>4</sup> Data on the ethnic composition in the Kazakh SSR are taken from Gosudarstvennyj Komitet Kazakskoj SSR po Statistike (1991).

struction projects and newly established administrative institutions unleashed strong labor demand. According to conservative estimates, around 12 billion USD had been spent on construction projects alone in Astana until 2007 (Eurasianet 2007). While the great population outflow after independence had already contributed to a decline of the Russian population share, the rural-to-urban movement has further increased the percentage of ethnic Kazakhs in the country's bigger cities.

#### 3 Data and Variables

We rely on data from the Kazakhstan Migration and Remittances Survey (KMRS), a new household survey that was conducted in four of Kazakhstan's biggest cities in 2010 containing 2,227 households (Dietz and Gatskova, 2011; Dietz, Gatskova and Schmillen, 2011). Our sample is representative of the population in these four cities, namely Almaty, Astana, Karaganda and Pavlodar. All have experienced a high migration turnover over the past two decades; they have attracted a large number of internal migrants and have been important sending areas as well. For the purpose of our analysis we exclude all respondents with international migration experience resulting in a sample of 2,074 respondents of which roughly half reported having internal migration experience. Table 1 summarizes the number of internal migrants and non-migrants for each of the four cities.

Table 1 Sample description

	Almaty	Astana	Karaganda	Pavlodar	Total
Internal migration 2001–2010	115	130	74	54	373
Internal migration 1991–2000	65	68	36	58	227
Internal migration until 1990	134	51	108	187	480
All internal migration	314	249	218	299	1,080
No internal migration	240	307	275	172	994

Source: KMRS data; own calculations.

The survey collected information on a large variety of individual and household characteristics. For the purpose of analyzing earnings and status inter-temporally and for comparing migrants with non-migrants, we mainly rely on a set of indicators of individual and household welfare before and after the move to the current place of residence. Although our data are not longitudinal, the survey provides detailed information on the current and previous welfare of migrants and their households using retrospective information.

<sup>&</sup>lt;sup>5</sup> We define internal migrants as persons who at least once in their life changed their place of residence without changing their country of residence.

Our sample is dominated by male-headed households, which is typical for Central Asian societies (Table A1 in the Appendix). The interviewed households comprise mostly adults aged between 16 and 65 years (78%). Children under 16 made up less than 15%, and persons over 65 years account for only 7% of household members. While one in four households is ethnically mixed, 37% of households are Kazakh and 40% are Russian. Homeownership is quite common with 88% of households inhabiting their own property. The majority of respondents works (68%) with approximately one third (30%) being employed in the state sector. On average, workers spend 45 hours per week in their job and have monthly earnings of 64,923 Tenge (approximately 426 US dollars).

Our empirical analysis focuses, first, on internal migrants and compares their earnings and the socioeconomic status of their households pre- and post-migration. Second, we compare internal migrants to non-migrants in their new place of residence with respect to individual earnings and the households' income and socioeconomic status. We classify as internal migrants those individuals who moved within the borders of the Soviet Union until the end of 1991 and within the borders of Kazakhstan starting from 1992. Because the political and economic structure of Kazakhstan differed significantly between these two periods of time, we explicitly distinguish migrants from these periods. The cut-off year 1991 was chosen to match Kazakhstan's independence in 1991. To shed more light on the determinants of household welfare with respect to the time since migration, we further split the two time periods into four and distinguish internal migrants who arrived (1) prior to the year 1981, (2) between 1981 and 1990, (3) between 1991 and 2000 as well as (4) between 2001 and 2010.6 Since people tend to adapt to new social environments over time, we would a priori expect all status differences between earlier migrants and indigenous city dwellers to have disappeared by 2010, the year when our household survey was conducted.

The main dependent variables in our analysis are net earnings, household income, socioeconomic status and status consumption. Monthly earnings and household per adult equivalent income are measured in Kazakhstani Tenge and reported in the natural logarithm; they are welfare indicators that can be compared and ranked according to

<sup>&</sup>lt;sup>6</sup> Note that our results are robust to the choice of either only two or even more time periods.

their absolute values. To capture inter-temporal changes in earnings as a result of internal migration, respondents were additionally asked to indicate whether they earned more, about the same or less in the first job after the move compared to the last job prior to the move. This information is used to describe the earnings effects of migration (which is thus recorded as being negative, neutral or positive). Our survey contains one feature that ensures a relatively high degree of data quality for the change in earnings at migration: Interviewers were supposed to check respondents' reports about their earnings with their work books (*trudovaya knizhka*). These work books were introduced during the Soviet period to register employment dates, earnings and work tasks with each employer. They are still commonly used in Kazakhstan today (as mandated in Article 35 of the Labor Code of the Republic of Kazakhstan as of 15 May 2007) and allow tracking past earnings quite accurately.

The socioeconomic status variable reflects the respondent's perceived position relative to others. The best-known method to measure the socioeconomic status is to ask respondents to place their households on some level of an imaginary social hierarchy or to choose one rung of a socioeconomic ladder which corresponds to their position in society. The scale usually contains between 6 and 11 rungs (e.g. Evans and Kelley, 2004; Powdhavee, 2007; Ravallion and Lokshin, 2002). In our study we collect information on the location of migrant households on a socioeconomic ladder before and after the move. For this purpose, we use two similar questions: "Where on a ladder between 1 (poorest) and 10 (richest) would the household in which you lived in the last place before moving be located (just before the move)?" and "Where on a ladder between 1 (poorest) and 10 (richest) would your household be located in the place of residence, where you are living now?" Individuals without migration experience were asked to rate their status at their present place of residence only.

In the final part of our analysis we construct a variable that measures the share of total expenditures directed towards status consumption and compare the consumption patterns of migrant and non-migrant households. We argue that such status consumption

<sup>&</sup>lt;sup>7</sup> Note that this strategy was chosen given the absence of panel data. Only those respondents who had worked in the last month prior to the move were asked this question.

is used by households to show off their relative standing in society. In our survey status consumption is measured as the fraction of total household expenditures spent on 'visible consumption' such as entertainment (including tourist trips, recreation, theater, cinema etc.) as well as on celebrations and feasts (e.g., inviting neighbors, buying presents). The survey explicitly asks respondents to report these expenditures for a typical month in order to rule out one-off expenditures such as wedding celebrations. It turns out that 61 percent of households report positive expenditures on status consumption with an average (median) budget share of 4.6 (2.4) percent.<sup>8</sup>

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<sup>&</sup>lt;sup>8</sup> Excluding zeros, the respective values are 7.7 and 5.7 percent. To rule out that some households might accidentally have included singular large-scale expenditures, we re-run our main regressions on status consumption excluding observations with expenditure shares of at least 50 percent (0.1 percent of households) and 25 percent (1.7 percent of households). The status consumption effects among recent migrants are even more precisely estimated and marginally larger when excluding these households (Table A7), suggesting that we present conservative estimates in the body of our paper.

## 4 Modeling Approach

In our regression analysis we intend to explore the determinants of individual earnings and household income, socioeconomic status and status consumption in four big cities in Kazakhstan. In particular, we are interested in investigating whether internal migrants differ from non-migrants according to the respective welfare indicators.

Since earnings are defined on the individual level (and only available for survey respondents), the earnings model takes the following form:

$$y_i = \alpha_0 + \sum_{k=1}^4 migrant_{ik}\alpha_{1k} + \alpha' X_i + \kappa + \varepsilon_i$$
 (1)

The outcome variable y is the log of contemporary earnings of individual i. The main explanatory variables are related to migration experience. In the baseline regression, four dummy variables,  $migrant_k$  with  $k=\{1,2,3,4\}$  are used to distinguish four migration episodes. Although individuals might have moved more than once we only consider a person's last move. More specifically, migrants are differentiated by the period of their move (before 1981, 1981–1990, 1991–2000 and 2001–2010). Those respondents who have never migrated constitute the reference category.

The vector X controls for the respondent's socio-demographic characteristics and his or her human capital (age, age squared, gender, ethnicity, educational attainment), as well as for work and job related characteristics (status, sector, occupation and working hours). These variables are all measured with respect to the survey date.  $\kappa$  are fixed effects for 16 city districts that capture local labor market conditions and account for differences in in the costs of living,  $\varepsilon$  is the error term.

The individual earnings function is estimated with OLS regressions over all respondents who reported positive earnings (N=1,381). We also experimented with Heckman selection models to account for selection into labor market participation. In these models parental education, household characteristics such as the proportion of children in the household and/or the work status before the break-up of the Soviet Union (when labor market participation arguably was not really voluntary) were used as excluded variable. Generally, we found selection not be a serious issue and therefore only report the OLS results. Results from the Heckman selection models are available upon request.

Our general econometric model of income, socioeconomic status and status consumption is formulated on the household level. It looks very similar to the earnings model:

$$w_{j} = \beta_{0} + \sum_{k=1}^{4} migrant_{jk} \beta_{1k} + \beta' Y_{j} + \kappa + \mu_{j}$$
 (2)

For the household level analysis, the dependent variable w measures welfare of household j. In different specifications, w either represents household income, the socioeconomic status of the household or the fraction of its expenditures directed towards status goods. Now, the  $\beta_{1k}$ s are the main parameters of interest. The vector Y controls for household demographic, human capital and wealth characteristics as well as the respondent's work status. The demographic controls are the ethnic composition of the household, the age and gender of its head, and the household's age composition (proportion of working-age and elderly adults and children in the household). The human capital of a household is now expressed by the proportion of adults with high, medium and low education. Apart from the income model, we also control for household wealth by current income and permanent income. The latter is proxied by housing and the ownership of assets (i.e. a property, a car or a computer). The work status variables indicate whether the respondent works, does not work or is a pensioner.

The income model is estimated with OLS. As socioeconomic status is measured on a ten-point Likert scale, we estimate the status model with ordered probit. Thus, we do not have to make cardinal assumptions about the dependent variable. Because the coefficients from the ordered probit model are hard to interpret, we also estimated the status model with an OLS regression and found very similar results (these estimations are not reported but again available upon requested). We provide all marginal fixed effects for the ordered probit model in Table A2 in the Appendix. Finally, for the status consumption regressions one has to keep in mind that the dependent variable is the fraction of total expenditures spent on status consumption. With a proportion as dependent variable we rely on a generalized linear model estimated with maximum likelihood. <sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Note that car and PC ownership are not included in the status consumption regressions as these might themselves signal status.

<sup>&</sup>lt;sup>10</sup> The dependent variable is assumed to be Poisson distributed and the link function is given by the natural logarithm (i.e. by the canonical link function).

## 5 Results on inter-temporal and inter-personal welfare comparisons

We will now present the results of our analysis with respect to (i) the effects of internal migration on individual earnings and socioeconomic status ('inter-temporal comparison') and (ii) the relative standing of migrants compared to non-migrants at the destination in terms of individual earnings, household income and socioeconomic status ('inter-personal comparison').

### 5.1 Inter-temporal comparison

Table 2 reports the answers of internal migrants to the question "Did you earn more, the same or less than in your job before the move?" It distinguishes between three groups of migrants: those who moved until 1990, those who moved between 1991 and 2000 and those who came to their current place of residence after 2000. As internal migration was subject to governmental control until independence, it is *a priori* unclear whether those who moved until 1990 gained from migration. In contrast, we expect a majority of recent internal migrants to experience gains in earnings since economic motives have become the key migration motive.

Table 2 Earnings before and after the move

("Did you earn more, the same or less than in your job before the move?")

	More	About the same	Less
Internal migration 2001–2010	95	44	38
In percent	53.7	24.9	24.5
Internal migration 1991–2000	53	32	18
In percent	51.5	31.1	17.5
Internal migration until 1990	68	75	24
In percent	40.7	44.9	14.4
All internal migration In percent	216	151	80
	48.3	33.8	17.9

Source: KMRS data; own calculations.

Indeed, we find that among recent internal migrants the share of those who earned more after moving was higher than among earlier migrants. Yet, in line with the previously cited literature that challenges the efficacy of the USSR's government in allocating its labor force, even a relative majority of earlier migrants enjoyed earnings gains after their move. Overall, 48% of individuals who went to one of the four big cities reported an earnings increase, 34% earned about the same, and 18% earned less.

Table 3 shifts the attention from earnings to socioeconomic status. It shows the average subjective socioeconomic status of migrants' households before and after their move, again distinguishing between those who moved until 1990, those who moved between 1991 and 2000, and those who moved later. By way of comparison it also reports the average status of non-migrants in 2010. The table reveals that the status of households of all three types of migrants improved on average with migration. Strikingly and in line with the results on earnings, post-independence internal migrants report a higher status growth than earlier migrants.

Table 3 Subjective socioeconomic status across different population groups

	N		gration itus	Current status		Difference
	11	Mean	Std. Dev.	Mean	Std. Dev.	in means
Internal migration 2001–2010	373	5.52	1.61	5.94	1.56	0.42
Internal migration 1991–2000	227	5.48	1.70	5.96	1.64	0.48
Internal migration until 1990	480	4.94	1.89	5.04	1.61	0.10
All internal migration	1,080	5.26	1.78	5.54	1.66	0.28
No internal migration	994			5.26	1.57	

Source: KMRS data: own calculations.

Note that the average subjective socioeconomic status before moving was markedly lower among early migrant households than among more recent ones. Besides, internal migrants tend to rate their households higher on the status ladder than individuals with no migration experience. The last point leads us to the next step of our investigation: a more thorough analysis of the relative standing of migrants compared to non-migrants at the destination with respect to individual earnings, household income and socioeconomic status.

## 5.2 Inter-personal comparison

In column 1 of Table 4 we investigate whether monthly earnings in 2010 differed between migrants and non-migrants by including four dummies for migration status in a rather standard Mincer-type earnings equation (coefficients for all regressors can be found in Table A3 in the Appendix). We find that men, the better educated, older individuals, the self-employed, and employees in the private sector and high-status occupations have significantly higher earnings than other workers, *ceteris paribus*. Internal migration experience, however, is not significantly associated with earnings levels once we condition on demographic and job characteristics. This implies that we observe no earnings discrimination for internal migrants as compared to indigenous city residents.

Table 4 Earnings, income and status of internal migrants compared to new neighbors

	(1)	(2)	(3)
Dependent variable	Log of earnings	Log income (p. adult equiv.)	Status
Estimation method	OLS	OLS	Ordered Probit
Migration 2001–2010 <sup>1</sup>	-0.0428 (0.0385)	-0.00313 (0.0353)	0.555*** (0.0724)
Migration 1991–2000	0.00801 (0.0407)	0.00608 (0.0377)	0.437*** (0.0822)
Migration 1981–1990	0.0308 (0.0550)	0.0202 (0.0485)	0.0745
Migration until 1980	-0.0350 (0.0431)	0.0199 (0.0314)	-0.0410 (0.0720)
Household size dummies	Yes	Yes	Yes
City district fixed effects	Yes	Yes	Yes
Observations	1,381	2,074	2,074
R-squared/Pseudo R-squared	0.340	0.360	0.065

Note: Household level controls include household composition (Proportion of household members aged 16–65; proportion aged 65 or above; proportion of adults with medium education; proportion of adults with high education; male headed household; ethnicity of household), assets (ownership of car, computer), residential property, size of home (log of sqm), log income (p. adult equiv.). Individual level controls include employment status, age, age squared, gender, education, ethnicity, state enterprise, status of occupation, sector of employment, weekly working hours. Reference group: <sup>1</sup> No (internal) migration experience.

Robust standard errors in parentheses.\*, \*\*\*, \*\*\*\* indicate significance levels at 10%, 5% and 1% respectively. Source: KMRS data; own calculations.

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<sup>&</sup>lt;sup>11</sup> All other things being equal, ethnic Kazakhs receive slightly lower earnings than non-Kazakh workers. Since we control for a variety of job-related characteristics (working hours, sectors, and occupations), this low but significant earnings differential is unlikely to be due to a workforce composition effect.

To complement the individual-level earnings regressions with a comparable estimation on the level of households, column 2 of Table 4 explores the relationship between internal migration status and monthly household income. In general, the table confirms the results obtained in the earnings regression: internal migration experience is not significantly associated with household income if demographic and job characteristics are adequately controlled for.

In the next regression, reported in column 3 of Table 4, the household's current socioeconomic status is the dependent variable. Self-perceived status is a relevant outcome if it hints at a quest for status which might in turn be accompanied by behavioral changes, e.g. in terms of consumption habits. As the coefficients in the ordered probit model can only be interpreted with respect to sign and significance levels, marginal effects are reported in Table A3. This regression reveals that the proportion of household members with better education, the size of the home, asset ownership, and household income (per adult equivalent) are positively correlated with the subjective socioeconomic status of households in urban Kazakhstan. Interestingly, labor market participation is not significantly related to socioeconomic status, ceteris paribus. Russian households report a significantly lower socioeconomic status as compared to Kazakh and ethnically mixed households. This might be because of the decreasing influence of ethnic Russians in politics and institutions in Kazakhstan. Most importantly, we find a statistically significant status premium for the group of internal migrants that arrived in the city most recently. In 2010, the status of internal migrants who arrived before 1991 was not different from that of nonmigrants. At the same time, the two groups whose members moved after 1991 on average held a significantly higher socioeconomic status. This finding indicates that the households of recent internal migrants tend to enjoy a significantly better subjective socioeconomic standing than other households. 12 As shown above, this cannot be due to higher earnings or income enjoyed by recent migrants because these do not

<sup>&</sup>lt;sup>12</sup> In other regressions we control for the average wage in the previous and/or current city in order to rule out that our findings are driven by different reference groups. Qualitatively, this hardly changes our results. The average wages are not significantly associated with household's subjective status. We also test whether the status differences are only significant for rural-to-urban migrants, but this is not the case.

differ significantly from those of their new neighbors. Instead, other opportunities available in big cities might have a stronger impact on the subjective status of recent migrants than on the status of indigenous city dwellers and earlier migrants.

 Table 5
 Status consumption

	(1)	(2)	(3)	(4)	(5)	
Dependent variable	Status consumption (fraction of total expenditures)					
Estimation method	GLM	GLM	GLM	GLM	GLM	
Migration 2001–2010 <sup>1</sup>	0.799** (0.377)	0.958** (0.415)	0.787** (0.400)		0.634 (0.386)	
Migration 1991–2000	0.198 (0.387)	0.354 (0.452)	0.194 (0.401)		-0.0506 (0.410)	
Migration 1981–1990	0.706 (0.663)	0.396 (0.783)	1.232* (0.667)		0.0608 (0.636)	
Migration until 1980	-1.180** (0.473)	-1.136** (0.562)	-1.114** (0.496)		-1.674*** (0.514)	
Log (household income p. adult. eq.)	1.452*** (0.334)	1.377*** (0.321)	1.462*** (0.334)	1.453*** (0.338)	1.473*** (0.334)	
Would like to go back		-0.888 (1.014)				
Mig 2001–2010*Would like to go back		1.092 (1.211)				
Mig 1991–2000*Would like to go back		0.957 (1.442)				
Mig 1981–1990*Would like to go back		-4.542** (2.024)				
Sending remittances			1.367*** (0.491)			
Mig 2001–2010*Sending remittances			-1.100 (0.792)			
Mig 1991–2000*Sending remittances			-1.124 (0.803)			
Mig 1981–1990*Sending remittances			0.550 (1.294)			
Mig until 1980*Sending remittances			-0.718 (0.956)			

Table 5 (continued)

	(1)	(2)	(3)	(4)	(5)	
Dependent variable	Status consumption (fraction of total expenditures)					
Estimation method	GLM	GLM	GLM	GLM	GLM	
Migration 2006–2010 <sup>1</sup>				1.134** (0.491)		
Migration 2001–2005				0.546 (0.450)		
Migration 1996–2000				0.294 (0.458)		
Migration 1991–1995				0.0410 (0.543)		
Migration 1986–1990				1.055 (0.817)		
Migration 1981–1985				0.165 (0.970)		
Migration before 1980				-1.184** (0.473)		
Log of average group income					-6.477** (3.198)	
Full controls	Yes	Yes	Yes	Yes	Yes	
Observations	2,074	2,074	2,074	2,074	2,074	
Pseudo R-squared	0.149	0.152	0.153	0.153	0.151	

Note: Controls include household size dummies, demographic, educational and ethnic composition, housing assets (living in own property and the size of home (log of sqm)) and employment status of household head. Reference group: <sup>1</sup> No (internal) migration experience.

Robust standard errors in parentheses. \*, \*\*, \*\*\* indicate significance levels at 10%, 5% and 1% respectively. Source: KMRS data; own calculations.

## 6 Results on status consumption and signaling

We will now explore whether the higher subjective socioeconomic status reported by recent migrants compared to their new neighbors goes hand in hand with comparatively higher status consumption. Since recent migrants have no significantly higher earnings and household incomes, we suspect that they reallocate their budget in order to signal higher status as a tool for establishing themselves and for adapting to the new social environment (Sivanthan and Pettit 2010). As mentioned above, a substantial literature on status signaling suggests that individuals or households consume in order to convey information about their status and that status consumption need not necessarily be related to economic resources (Moav and Neeman, 2010). We assume that households derive socioeconomic status from expenditures on status items and entertainment and analyze the relationship between migration and status signaling. Migration implies a change in many dimensions of life so it is plausible that new residents try to 'define their place' in society through status consumption. Because we focus on the fraction of expenditures dedicated to visible consumption and control for household income, our focus is on proper differences in consumption habits while keeping household income and the level of overall expenditures constant.

The regression analysis of the share of total expenditures spent on status goods reveals a number of plausible outcomes. Younger, better educated, smaller, and Kazakh households are more engaged in status signaling, as are households with higher incomes and larger homes. Status signaling is more likely in households with working respondents and households with non-working respondents in comparison to pensioner households (detailed results available on request).

More importantly, recent internal migrants spend a higher share of their total expenditures on status consumption than their otherwise comparable new neighbors while those who migrated before 2001 do not (Table 5). A plausible explanation for these results would be that status signaling is indeed part of the adaption process of newly arrived migrants. This explanation is in line with Table A4 in the appendix which shows expenditure regressions for 12 consumption categories (e.g., food, personal care, transportation): The only category on which recent migrants spend a significantly higher

fraction of their total expenditures is the one encompassing status goods (with the potential exception of education, which is marginally significant). At the same time, they spend less on food and public services/utilities. The observed consumption pattern is also prevalent independently of whether the migrant household originated in an urban or rural area (Table A5) and independently of its ethnicity (Table A6). This rules out the possibility that our results are solely driven by more traditional consumers from a rural background.

We will now discuss the finding that newly arrived migrants spend relatively more on status consumption and at the same time report relatively higher subjective status in greater detail. Specifically, we will investigate whether migrants really show off to their *new* neighbors. We will also investigate whether migrants' status consumption can really be interpreted as a form of adaptation to the new social environment and whether the consumption patterns of migrant households are in line with status concerns.

First, one might argue that migrants do not intend to impress their new neighbors but rather their peers in the former place of residence. Although this possibility does not appear entirely plausible given the kind of status goods we analyze, we conduct two tests of this alternative hypothesis. Impressing the previous neighbors would only make sense if migrants either desired to return home or if they were strongly embedded in a social network that reached beyond their current city of residence. Our survey contains two questions that allow addressing these two possibilities directly. In a regression similar to equation (2) we interact the migration period dummies with a dummy variable that indicates whether a household would like to return to the previous place of residence. If status consumption was used to impress peers in the previous place of residence, people who wanted to return should plausibly care most about their standing and spend most heavily on status consumption. However, the results in Table 5 show exactly the opposite result, i.e. that people who wish to return spend no more or even significantly less on status consumption, *ceteris paribus*.

In the next step we test whether those with geographically wider outreach into their social network spend more on status consumption. We conceptualize the social network using information of inter-household transfers and interact—similar to the previous ap-

proach—the migration dummies with an indicator taking on the value of one if a house-hold sends inter-household transfers, and zero otherwise. The results in Table 5 suggest that those who have stronger transfer ties in general spend more on status consumption. At the same time there are no statistically significant differences between those recent migrants who send and those who do not send transfers. Overall, these two extensions lend credibility to the idea that households try to impress their new neighbors and not their peers in the former place of residence.

Second, if visible consumption is used by households to adapt to the new social environment we expect this effect to vanish as time since migration elapses. To provide supporting evidence for this view we give up the previous differentiation of time since migration (four period dummies). Instead, we categorize migrants according to their migration year into seven year brackets (until 1980, 1981–1985, 1986–1990, 1991–1995, 1996–2000, 2001–2005, 2006–2010). The results in Table 5 show that only the most recent migrants spend a significantly higher fraction of their total expenditures on status than indigenous city-dwellers. While those who migrated 6–10 years ago show a tendency towards higher status consumption (albeit insignificant at conventional levels), all other groups are not different from the non-migrant comparison group. The fact that status effects slowly disappear over time is in line with other studies that analyze adaptations to status changes (Di Tella, Haisken-De New and MacCulloch, 2010). 13

Third, we want to directly test whether the spending pattern for status consumption is consistent with the fact that households care about their socioeconomic status. In a standard status model, households belong to reference groups with known income distributions and spend their income on status (i.e. observable) and unobservable goods. Since socioeconomic status is derived from the consumption signal which the society receives through the status goods consumed by the household—conditional on the reference (i.e. income) group that the household belongs to—the following can be postulated (Charles, Hurst and Roussanov, 2009): if status consumption is indeed driven by

<sup>&</sup>lt;sup>13</sup> Not reported here but available upon request are regressions where we interact the detailed migration year brackets with our dummy distinguishing rural and urban settlements in the place of origin. These find consistently higher visible consumption for both recent urban-to-urban and recent rural-to-urban migrants. This is fully consistent with the general pattern of status gains presented here and shows that the results are not driven by rural-to-urban migrants alone.

status concerns, the differences in status good expenditures between households belonging to different reference groups will disappear once the average income of the relevant reference group is controlled for.<sup>14</sup> Charles, Hurst and Roussanov (2009) and Kaus (2012) perform such tests based on racial differences in the USA and South Africa, respectively. In line with these applications, we add the average reference group income of migrant and non-migrant households in the current place of residence (defined here by city of residence and migration status) to regression 5 of Table 5. The results indicate that the significant difference in status consumption between recent migrants and non-migrants vanishes when the average income of the reference group is controlled for. Moreover, status consumption is negatively associated with average reference group income, just as predicted from a status concern model.

To sum up, all three extensions of our baseline status expenditure model support the view that migrant households care about their status position in the destination city and that their status signaling behavior slowly fades away as they adapt to the new surroundings.

<sup>&</sup>lt;sup>14</sup> Intuitively, the same income (expenditure) level could be associated with different status positions when the income (expenditure) distributions of the reference groups differ. Within the own reference group better-off households have incentives to signal their advantageous position.

#### 7 Conclusion

A substantial body of research has found that internal migration to urban centers generally improves migrants' income and socioeconomic status. Yet little is known about how newcomers compare to their new neighbors. We approached this question in the context of Kazakhstan, an emerging economy that had been part of the Soviet Union until the end of 1991. To explore the welfare consequences of internal migration to big Kazakh cities, we analyzed data from a new household survey that had been collected in 2010 in four urban centers: Almaty, Astana, Pavlodar and Karaganda. We estimated the relative welfare positions of internal migrants as compared to their new neighbors in terms of earnings, household income and socioeconomic status.

This comparison revealed that the subjective socio-economic status of migrant households exceeds that of indigenous city dwellers while their earnings and household income are not significantly different, *ceteris paribus*. With the help of expenditure data, we found that internal migrants not only report higher social status but also spend more of their resources on status consumption. This behavior is apparently chosen as a means to signal the migrants' achievements in the destination city and is likely to be a part of an adaptation strategy aimed at acquisition of social capital and at defining a place in the urban social hierarchy. Hence, migrant households show off to their new neighbors which might be welcomed if it gave them access to social networks, but which might theoretically be trapping them in deprivation (Moav, Neeman, 2010).

In light of these results, it should be noted that Kazakh state officials have recently demanded to strictly control and minimize internal migration, as they expected these movements to result in poverty and social deprivation of newcomers (Interfax Kazakhstan, 2012; Tengri News, 2012). Contrary to this reasoning and in line with the existing literature, our study shows that the majority of internal migrants to big Kazakh cities enjoy an inter-temporal earnings and status gain after moving. Compared to their new neighbors, we find neither earnings discrimination for internal migrants, nor differences in household income, all else being equal. In absolute terms, internal migration provides economic benefits for mobile households. From a relative welfare perspective, however, migrant households gain little on objective economic grounds. Their adaptation effort in

the form of status consumption has negative consequences for the consumption of food and public services/utilities. While regulating status consumption is on the political agenda in several countries, the available policy tools (taxes, bans, redistribution) do not necessarily meet their objective (Hopkins and Kornienko, 2004; Christen and Morgan, 2005; Danzer, 2013). Even more fundamental for drawing specific policy conclusions is the still open question whether status consumption is purely conspicuous or whether it relates to generating access to social capital.

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# **Appendix**

Table A1 Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
Individual level					
Earnings in 2010 in Tenge	1390	64923.36	44133.32	5000	500000
log(Earnings in 2010)	1390	10.92	0.55	8.52	13.12
Migration 2001–2010	2074	0.18	0.38	0	1
Migration 1991–2000	2074	0.11	0.31	0	1
Migration 1981–1990	2074	0.06	0.24	0	1
Migration until 1980	2074	0.17	0.38	0	1
Working	2074	0.68	0.47	0	1
Not working	2074	0.20	0.40	0	1
Pensioner	2074	0.13	0.33	0	1
Age in 2010	2074	43.04	15.01	18	91
Low education	2074	0.12	0.33	0	1
Medium education	2074	0.49	0.50	0	1
High education	2074	0.39	0.49	0	1
Male	2074	0.44	0.50	0	1
Kazakh	2074	0.39	0.49	0	1
Russian	2074	0.46	0.50	0	1
Other ethnicity	2074	0.15	0.35	0	1
Self-employed or business owner	2074	0.03	0.17	0	1
State enterprise	1402	0.30	0.46	0	1
Low-status occupation	1402	0.34	0.47	0	1
Medium-status occupation	1402	0.35	0.48	0	1
High-status occupation	1402	0.31	0.46	0	1
Manufacturing sector	1382	0.09	0.28	0	1
Services sector	1382	0.72	0.45	0	1
Construction, mining or other sector	1382	0.19	0.39	0	1
Hours per week	1397	45.03	13.12	4	96

Table A1 (continued)

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
Household level					
Status in 2010	2074	5.41	1.63	1	10
Expend. on entertainment (p. adult equiv. in 2010 in Tenge)	2074	2695.18	8926.83	0	300000
Fraction of expend. spent on on entertainment etc. (in 2010)	2074	4.65	6.49	0	74.07
HH Income (p. adult equiv. in 2010 in Tenge)	2074	54179.96	77364.09	2325.58	2855833
log (Income HH p. adult equiv. in 2010)	2074	10.67	0.63	7.75	14.86
District Almalinski (city Almaty)	2074	0.04	0.19	0	1
District Auezovski (city Almaty)	2074	0.06	0.24	0	1
District Bostandikski (city Almaty)	2074	0.05	0.23	0	1
District Zhetisuiski (city Almaty)	2074	0.04	0.19	0	1
District Medeuski (city Almaty)	2074	0.04	0.19	0	1
District Alatauski (city Almaty)	2074	0.01	0.10	0	1
District Turksibski (city Almaty)	2074	0.03	0.18	0	1
District Almaty (city Astana)	2074	0.12	0.32	0	1
District Sary-Arka (city Astana)	2074	0.15	0.36	0	1
District Kazybek bi (city Karaganda)	2074	0.16	0.36	0	1
District Oktyabrski (city Karaganda)	2074	0.08	0.28	0	1
District Severni (city Pavlodar)	2074	0.13	0.33	0	1
District Yuzhni (city Pavlodar)	2074	0.10	0.30	0	1
Proportion aged 0–15	2074	0.15	0.20	0	0.75
Proportion aged 16–65	2074	0.78	0.26	0	1
Proportion aged 65 or above	2074	0.07	0.22	0	1
Proportion of adults with low education	2074	0.14	0.27	0	1
Proportion of adults with medium education	2074	0.48	0.39	0	1
Proportion of adults with high education	2074	0.38	0.40	0	1
Households with male head	2074	0.64	0.48	0	1
Household size	2074	3.01	1.38	1	8
Kazakh household	2074	0.37	0.48	0	1
Russian household	2074	0.40	0.49	0	1
Mixed or other household	2074	0.24	0.43	0	1
Car ownership	2074	0.48	0.50	0	1
Computer ownership	2074	0.64	0.48	0	1
Lived in own property	2074	0.88	0.33	0	1
Size of home (sqm)	2074	55.68	25.50	12	300

Table A2 Marginal fixed effects after ordered probit

	Migration	Migration	Migration	Migration	Percent of pre-
	2001–2010	1991–2000	1981–1990	until 1980	dicted outcome
Marginal fixed effect for	-0.007***	0.005***	0.001	0.001	0.60/
outcome = lowest status		-0.005***	-0.001	0.001	0.6%
	(0.002)	(0.001)	(0.002)	(0.001)	
Marginal fixed effect for outcome = 2	-0.009***	-0.007***	-0.002	0.001	0.9%
	(0.002)	(0.002)	(0.002)	(0.002)	
Marginal fixed effect for	0.052***	0.040***	0.000	0.005	7.10/
outcome = 3	-0.053***	-0.042***	-0.009	0.005	7.1%
	(0.006)	(0.007)	(0.012)	(0.009)	
Marginal fixed effect for outcome = 4	-0.071***	-0.057***	-0.010	0.006	13.2%
	(0.009)	(0.010)	(0.015)	(0.010)	
Marginal fixed effect for outcome = 5	-0.078***	-0.061***	-0.008	0.004	36.7%
	(0.014)	(0.015)	(0.012)	(0.006)	
Marginal fixed effect for					
outcome = 6	0.034***	0.028***	0.007	-0.004	19.4%
	(0.004)	(0.004)	(0.009)	(0.007)	
Marginal fixed effect for outcome = 7	0.078***	0.062***	0.011	-0.006	13.9%
	(0.010)	(0.012)	(0.016)	(0.010)	
Marginal fixed effect for					
outcome = 8	0.077***	0.060***	0.009	-0.005	6.8%
	(0.013)	(0.014)	(0.014)	(0.008)	
Marginal fixed effect for outcome = 9	0.018***	0.014***	0.002	-0.001	0.9%
	(0.004)	(0.004)	(0.003)	(0.002)	
Marginal fixed effect for					
outcome = status	0.010***	0.008***	0.001	0.000	0.4%
	(0.003)	(0.003)	(0.001)	(0.001)	

Note: The fixed effects reported in this table correspond to column (3) in Table 4.

Table A3 Earnings, income and Status of internal migrants compared to new neighbors (full set of results)

	(1)	(2)	(3)
Dependent variable	Log of earnings	Log income (p. adult equiv.)	Status
Estimation method	OLS	OLS	Ordered Probit
Migration 2001–2010 <sup>1</sup>	-0.0428	-0.00313	0.555***
	(0.0385)	(0.0353)	(0.0724)
Migration 1991–2000	0.00801	0.00608	0.437***
	(0.0407)	(0.0377)	(0.0822)
Migration 1981–1990	0.0308	0.0202	0.0745
	(0.0550)	(0.0485)	(0.109)
Migration until 1980	-0.0350	0.0199	-0.0410
	(0.0431)	(0.0314)	(0.0720)
Proportion aged 16–65 <sup>2</sup>		0.135*	-0.0351
		(0.0704)	(0.139)
Proportion aged 65 or above		0.0230	0.133
		(0.0873)	(0.186)
Proportion of adults with medium education <sup>3</sup>		0.0932**	0.168*
		(0.0427)	(0.0957)
Proportion of adults with high education		0.510***	0.266***
		(0.0447)	(0.102)
Household with male head		0.149***	0.0683
		(0.0263)	(0.0503)
Kazakh household <sup>4</sup>		-0.0862***	0.165***
		(0.0293)	(0.0594)
Other or mixed household		0.0106	0.121**
		(0.0290)	(0.0601)
Car ownership			0.175***
			(0.0531)
Computer ownership			0.318***
•			(0.0555)
Living in own property <sup>5</sup>			0.131
			(0.0875)
Size of home (log of sqm)			0.284***
			(0.0666)
Log income (p. adult equiv.)			0.281***
			(0.0483)
Working <sup>6</sup>		0.248***	0.0563
5		(0.0409)	(0.0921)
Not working		-0.00550	-0.0198
-		(0.0467)	(0.102)

Table A3 (continued)

	(1)	(2)	(3)
Dependent variable	Log of earnings	Log income (p. adult equiv.)	Status
Estimation method	OLS	OLS	Ordered Probit
Age	0.0298***		
	(0.00826)		
Age squared	-0.000364***		
	(0.000102)		
Medium education <sup>7</sup>	0.169***		
	(0.0441)		
High education	0.390***		
	(0.0480)		
Male	0.259***		
	(0.0260)		
Kazakh <sup>8</sup>	-0.0809***		
	(0.0298)		
Other ethnicity	0.00572		
•	(0.0377)		
Self-employed or business owner	0.170**		
1 2	(0.0831)		
State enterprise <sup>9</sup>	-0.157***		
•	(0.0287)		
Medium-status occupation <sup>10</sup>	0.0441		
1	(0.0291)		
High-status occupation	0.160***		
	(0.0357)		
Manufacturing Sector <sup>11</sup>	-0.0537		
č	(0.0463)		
Services Sector	-0.123***		
	(0.0324)		
Hours per week	0.00647***		
*	(0.00120)		
Household size dummies	Yes	Yes	Yes
City district fixed effects	Yes	Yes	Yes
Observations	1,381	2,074	2,074
R-squared / Pseudo R-squared	0.340	0.360	0.065

Note: *Reference groups*: <sup>1</sup> No (internal) migration experience, <sup>2</sup> Proportion aged 15 or below, <sup>3</sup> Proportion of adults with no or low education, <sup>4</sup> Russian household, <sup>5</sup> Living in rented property, <sup>6</sup> Pensioner, <sup>7</sup> No or low education, <sup>8</sup> Russian, <sup>9</sup> Private or other enterprise, <sup>10</sup> Low-status occupation, <sup>11</sup> Construction, mining or other sector.

Robust standard errors in parentheses.\*, \*\*, \*\*\* indicate significance levels at 10%, 5% and 1% respectively. Source: KMRS data; own calculations.

Table A4 Fraction of total expenditures devoted to different spending areas

	(1)	(2)	(3)	(4)
Dependent variable	Food	Personal care	Construction Repair	Public Services, Utilities
Migration 2001–2010	-2.993***	0.145	-0.753	-1.745***
	(0.976)	(0.553)	(0.463)	(0.458)
	(5)	(6)	(7)	(8)
Dependent variable	Rent, Mortgage	Status consump- tion	Transportation	Communication
Migration 2001–2010	0.528	0.799**	0.433	0.0830
	(0.406)	(0.377)	(0.391)	(0.305)
	(9)	(10)	(11)	(12)
Dependent variable	Hiring helpers, workers for housework	Education	Clothes	Furniture and durables
Migration 2001–2010	0.0602	1.025*	0.288	-0.403
	(0.400)	(0.525)	(0.438)	(0.332)

Note: Sample size for all regressions: 2,074. Regressions control for: Migration 1991–2000, Migration 1981–1990, Migration until 1980, Proportion of household members aged 16–65, Proportion aged 65 or above, Proportion of adults with medium education, Proportion of adults with high education, male head of household, household size, ethnicity, home ownership, size of home (log of sqm), log of the total monthly household income in 2010, work status, years since migration fixed effects, city district fixed effects.

Robust standard errors in parentheses. \*, \*\*, \*\*\* indicate significance levels at 10%, 5% and 1% respectively. Source: KMRS data; own calculations.

Table A5 Status consumption and place of out-migration

	(1)	(2)
Dependent variable	Status consumption consumption	
Estimation method	GLM	GLM
Urban to urban migration 2001–2010	0.817**	
	(0.383)	
Rural to urban migration 2001–2010	1.067**	
	(0.416)	
Migration 1991–2000	0.591*	
	(0.335)	
Migration until 1990	$-0.635^*$	
	(0.345)	
Urban to urban migration 2006–2010		1.156**
		(0.530)
Rural to urban migration 2006–2010		1.359**
		(0.571)
Urban to urban migration 2001–2005		0.359
		(0.472)
Rural to urban migration 2001–2005		0.749
		(0.527)
Migration until 2000		-0.0805
		(0.273)

Note: Sample size for all regressions: 2,074. Regressions control for: Proportion of household members aged 16–65, Proportion aged 65 or above, Proportion of adults with medium education, Proportion of adults with high education, male head of household, household size, ethnicity, home ownership, size of home (log of sqm), log of the total monthly household income in 2010, work status, years since migration fixed effects, city district fixed effects.

Robust standard errors in parentheses. \*, \*\*\*, \*\*\*\* indicate significance levels at 10%, 5% and 1% respectively. Source: KMRS data; own calculations.

Table A6 Status consumption and ethnicity

	(1)
Dependent variable	Status consumption
Estimation method	GLM
Migration 2001–2010	0.970**
	(0.484)
Migration 1991-2000	0.545
	(0.528)
Migration 1981-1990	0.242
	(0.724)
Migration until 1980	-1.314***
	(0.444)
Migration 2001–2010 * Kazakh	0.0364
	(0.636)
Migration 1991–2000 * Kazakh	0.160
	(0.699)
Migration 1981–1990 * Kazakh	-0.114
	(1.042)
Migration until 1980 * Kazakh	0.932
	(0.781)

Note: Sample size for regression: 2,074. Regression controls for: Migration 1991–2000, Migration 1981–1990, Migration until 1980, Proportion of household members aged 16–65, Proportion aged 65 or above, Proportion of adults with medium education, Proportion of adults with high education, male head of household, household size, ethnicity, home ownership, size of home (log of sqm), log of the total monthly household income in 2010, work status, years since migration fixed effects, city district fixed effects.

Robust standard errors in parentheses. \*, \*\*, \*\*\* indicate significance levels at 10%, 5% and 1% respectively. Source: KMRS data; own calculations.

Table A7 Status consumption excluding high-consumption households

	(1)	(2)	
Dependent variable	Status con	Status consumption	
	Share below 50 percent	Share below 25 percent	
Estimation method	GLM	GLM	
Migration 2001–2010	0.887**	0.951***	
	(0.366)	(0.324)	
Migration 1991–2000	0.328	0.608*	
	(0.374)	(0.335)	
Migration 1981–1990	0.620	0.164	
	(0.614)	(0.540)	
Migration until 1980	-1.091**	-1.082***	
	(0.462)	(0.383)	
Observations	2,071	2,038	

Regressions control for: Proportion of household members aged 16–65, Proportion aged 65 or above, Proportion of adults with medium education, Proportion of adults with high education, male head of household, household size, ethnicity, home ownership, size of home (log of sqm), log of the total monthly household income in 2010, work status, years since migration fixed effects, city district fixed effects.

Robust standard errors in parentheses.  $^*$ ,  $^{**}$ ,  $^{***}$  indicate significance levels at 10%, 5% and 1% respectively.

Source: KMRS data; own calculations.