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MIGRATION

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ORIGINAL ARTICLE

Remitted euros are not equal: The complex spending behaviour of Kosovar households

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Abstract

This article uses a mixed-methods approach to evaluate how remittances impact household spending behaviour in Kosovo. Based on a nationally representative data set and using matching techniques, it shows that migration does not cause substantive changes in household spending. While remittances cover basic consumption needs, there are no impacts on budgetary allocations for business investments, health and education. Yet, qualitative research conducted in Kosovo's Opoja region, involving the analysis of 28 openended interviews, unveils a complex remitting mechanism. While migrants send smaller but regular amounts of money to cover basic needs, earmarked transfers are allocated for housing investments and conspicuous consumption only. These earmarked transfers do not enter Kosovar households' budgets, as migrants exercise decision-making authority over these funds. For policymakers, our findings suggest that standard survey questions fall short of capturing the complexity of the remitting mechanism. When promoting productive investments, it is the migrants who should be targeted as key decision-makers.

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INTRODUCTION

MIGRATION

Participation in migration and receipt of remittances are critical mechanisms for reducing poverty, improving living standards and potentially inducing economic growth if remittances are allocated to productive investments. Such investments can generate employment and create growth-income linkages. Migration-development literature explores these impacts from various angles. One branch examines the effects of migration on household income levels, including changes in poverty and inequality (Arapi-Gjini et al., 2020; Barham & Boucher, 1998; Feldman & Leones, 1998; Kimhi, 2010; Oberai & Singh, 1983; Shen et al., 2010; Stark et al., 1986; Taylor, 1992; Taylor et al., 2003, 2005). Another branch focuses on changes in household spending behaviour, precisely the balance between consumption and investments in education, health and job creation (Adams Jr. & Cuecuecha, 2010; Amuedo-Dorantes et al., 2010; Chami et al., 2003; Clement, 2011; Démurger & Wang, 2016; Randazzo & Piracha, 2019; Taylor & Mora, 2006). By highlighting expenditures and the use of remittances, we aim to close a gap in understanding the potential channels for poverty reduction.

Three main views dominate the current scientific debate regarding remittances and household expenditures. The first view maintains that remittances are fungible: once incorporated into a household's budget, they are spent at the margin just like any other type of income source (e.g. Adams Jr. et al., 2008; Kakhkharov et al., 2020; Randazzo & Piracha, 2019). The second view posits that remittances may cause behavioural changes at the household level. Empirical evidence links the receipt of remittances to changes in households' spending behaviour. This can be observed in increased conspicuous consumption, which entails purchasing items that indicate an enhanced social status, such as luxury cars, expensive gifts and extravagant celebrations, but also in disengagement from local labour markets (Amuedo-Dorantes, 2014; Chami et al., 2003; Clement, 2011; Démurger & Wang, 2016; Miluka et al., 2010). The third view, similarly, refers to a change in spending behaviour but stresses that remittances are conducive to positive economic development by enabling migrant families to spend more on human capital investments (Adams Jr. & Cuecuecha, 2010; Amuedo-Dorantes & Pozo, 2010; Calero et al., 2009; Samaratunge et al., 2020; Taylor & Mora, 2006; Valatheeswaran & Khan Imran, 2017).ⁱ

The prevalence of different views hinges on differences in empirical modelling and data issues. Two main approaches are used to model migration impacts on household expenditures: the first directly asks how remittances are used, while the second relies on including remittances as an explanatory variable in household demand models. Each method has assumptions and limitations, which may lead to significant differences in empirical findings across various studies. By directly asking how remittances are used, the first method ignores that remittance income is fungible and may substantially reshape households' expenditure behaviour. The second method, remittance income as an explanatory variable in a theoretically consistent demand system, suffers from two weaknesses. First, it separates remittance effects from migration effects on expenditures, while migration exerts influences that encompass and go beyond those of remittances (Taylor & Mora, 2006). Second, in the absence of panel data, the receipt of remittances needs to be instrumentalized. A valid instrument should strongly predict remittance receipt and be exogenous, meaning uncorrelated with the error term. While the instrument's relevance can be tested, its exogeneity must be convincingly demonstrated, making suitable instruments sometimes difficult to construct (McKenzie & Sasin, 2007). Several suggestions have been put forward to address these methodological concerns. First, matching similar households based on their propensity to send out migrants, followed by the subsequent comparison of expenditure patterns between those that partake in migration and those that do not, provides a robust framework for investigating causality. Matching has been adequately validated against other econometric approaches, and it is increasingly applied in migration research as a suitable method for analysing cross-sectional data (Clement, 2011; Démurger & Wang, 2016; Randazzo & Piracha, 2019; Romano & Traverso, 2019; Samaratunge et al., 2020). Second, an empirical approach based on the combination of quantitative and qualitative methods is well suited to uncovering confounding factors that are difficult to capture via econometric methods alone. Ethnographic research, for instance, emphasizes the local sociocultural context's crucial role in shaping remittance behaviour (Carling, 2014).

This article combines matching techniques with a qualitative approach to an interesting empirical case of a highly remittance-dependent economy. Kosovo's long history of labour migration and reliance on remittance transfers provides an excellent background against which we evaluate the intricate linkages between migration, remittances and the spending behaviour of households with migrant family members. In the first part of our investigation, we apply propensity score matching (PSM) using cross-sectional data from the Kosovo Remittance Survey. This technique facilitates the estimation of average budget shares across different expenditure categories in the counterfactual scenario of no migration. The quantitative empirical findings are discussed against a first-hand qualitative exploration conducted in Kosovo's Opoja region.

While the Kosovo Remittance Survey data reveal that migration and receipt of remittances do not cause significant changes in Kosovar households' spending behaviour, the qualitative data show a complex remitting mechanism not captured by the survey data. Remittances consist of two types of transfers: (1) basic transfers sent to cover households' basic consumption needs and (2) earmarked transfers sent for investments in houses, conspicuous purchases, and, to a lesser extent, for education and health. Compared to basic transfers, earmarked remittances represent more significant sums of money. They do not, however, enter Kosovar households' budgets because migrants exercise decision-making authority over these funds. These qualitative findings suggest that standard survey questions may fall short of capturing the complexity of remitting mechanisms. Policymakers aiming to promote productive investments should target migrants as key decision-makers with regard to remittance use.

This article contributes to the existing literature in two significant ways. First, it pioneers integrating quantitative and qualitative methods to explore the effects of migration and remittances on the spending behaviour of households in countries of origin. This approach adds richness and depth to a field traditionally dominated by quantitative analysis alone. Second, our empirical findings address a critical gap in migration-development literature by examining how migration influences household expenditures in remittance-dependent economies of Europe and Central Asia, where research on this topic has been limited.

The rest of the article is organized as follows. The next section briefly introduces the migration- cum-remittance livelihood strategy in the Kosovar context; then, we describe the data and illustrate the empirical strategy. Next, we discuss the results and conclude by delineating some critical implications for researchers and policymakers.

MIGRATION-CUM-REMITTANCES IN KOSOVO

Migration-cum-remittances, the strategy of supporting households' livelihoods through remittances, is deeply ingrained in Kosovo's long history of labour migration. Since the end of World War II, the country has experienced the following waves of migration: (1) the post-war internal migration within the former Yugoslav Federation; (2) the late 1960s' labour migration to Western Europe; (3) the early 1990s' migration due to the disintegration of the Yugoslav Federation, and (4) the exodus following the 1998–1999 Kosovo War. The latest wave of migration to EU countries occurred in the winter of 2014/2015. These migration waves were primarily driven by economic factors, with political factors also playing a role (Möllers et al., 2017).

Two decades after the war, the economic and social context of Kosovo remains extremely fragile. High youth unemployment rates, limited economic prospects and a general lack of hope for a better future continue to fuel labour migration. The most recent migration wave in 2014/2015 reaffirmed the deep-rootedness of the migration-cum-remittances livelihood strategy in Kosovo.^{II} The country ranks third among the top 10 remittance-dependent European and Central Asian transition economies (Figure 1). Furthermore, it is estimated that 40% of Kosovars have migrant family members, and around 25% of households with migrants receive remittances regularly (UNDP, 2016). For many of these households, remittances represent the primary source of income.

In Kosovo, the substantial magnitude and significance of remittances have captured the attention of policymakers and researchers alike, encouraging a debate regarding their benefits and drawbacks. One perspective

257

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FIGURE 1 Top 10 remittance recipient countries in Europe and Central Asia. Note: GDP = gross domestic product. Own compilation based on World Bank-KNOMAD estimates for the year 2020.

acknowledges that migration and remittances have the potential to improve livelihoods by reducing poverty and improving access to education and healthcare for children and the elderly (Alishani & Nushi, 2012; Arapi-Gjini et al., 2020; Möllers & Meyer, 2014; World Bank, 2011). Conversely, there is growing concern that remittance transfers are often used for conspicuous consumption rather than productive investments (OECD, 2019; UNDP, 2016). In general, however, a rigorous migration impact analysis on the expenditure behaviour of households with migrant family members, as this article will show, should not exclusively rely on quantitative data sets and analysis but be complemented with insights from qualitative research.

EMPIRICAL STRATEGY

258

This article answers the following key research question: What is the impact of migration and remittances on the spending behaviour of households with migrant family members? Given Kosovo's present economic realities, our hypothesis is that migration and the receipt of remittance transfers continue to boost household consumption (food, durables) without significantly affecting crucial categories such as education and health, productive investments, and savings. This hypothesis is informed by existing research on other countries with similar socioeconomic transitional trajectories (Castaldo & Reilly, 2007; Clement, 2011).

Our empirical approach combines a propensity score matching (PSM) analysis of cross-sectional data with qualitative insights. We start with a description of the quantitative data set followed by the presentation of the econometric approach used to estimate the causal effects of migration on households' expenditures. We then present the qualitative data and methodology used for the qualitative analysis.

Quantitative approach: data and method

The quantitative part of the investigation utilizes the cross-sectional Kosovo Remittance Household Survey (KRHS) 2011. Despite being collected in 2011, the data set still provides the best base for investigating the relationship between migration and household expenditures in the country. With a sample size of 8000 Kosovar households, it is the only data set with detailed information on household demographics, expenditure patterns, income-generating activities, labour market participation, number of family members residing abroad, as well as

259

remittance transfer channels and amounts remitted (in cash and in-kind). KRHS 2011 was randomly sampled, making it a nationally representative data set for Kosovo.

In the data set, 34% of households were identified as migrant households. These are households with at least one family member residing outside Kosovo for over 6 months. We use this variable as a treatment variable indicating participation in migration (see below). Moreover, 23% of survey households were remittance recipients. Remittance recipient households were those that received in-cash and in-kind contributions from international migrants but excluded migrants' visiting expenses in the year preceding the survey. The KRHS 2011 data indicate that a significant majority (more than 67%) of Kosovar migrants are males, typically around 40 years old, married and residing abroad with their nuclear families. Many migrants actively sustain strong connections with their Kosovo-based households by consistently sending remittances. Notably, the typical recipient household in Kosovo has been receiving remittances for nearly 8 years.

Furthermore, the survey collected information on monthly expenditures for 12 categories: expenses on food, non-food items (alcohol, cigarettes, everyday household goods), semi-durable goods (clothes, shoes, furniture), durables (home appliances, machinery, etc.), housing (rent and assessed rent, cost for phone, water, electricity), health (medicines and medical services), education (school fees, books, school supplies), transportation (e.g. fuel), entertainment (going out to the cinema, restaurant, travel), business investments, savings and debt repayment. Each type of expenditure category was aggregated to obtain annual values, whereby shares of each category are calculated as a percentage of total household expenditures. The annual budget shares for all 12 expenditure categories constitute the outcome variables for the migration impact analysis presented in this article.

Migration's impact on the expenditure behaviour of migrant households is estimated using propensity score matching (PSM). The PSM approach has certain features that make it useful for impact evaluations. Unlike the Engel curve approach, which models spending on specific goods as a linear function of income, remittances, sociodemographics, and prices, PSM effectively addresses the endogeneity of remittances. At its core, the counterfactual framework of causality maintains that individuals in treatment and control groups have potential outcomes in both observed and unobserved conditions. The counterfactual framework for an individual *i* with potential outcomes in both treatment and control groups (denoted as Y_{1i} and Y_{0i}) is expressed as (Equation 1):

$$Y_{i} = W_{i}Y_{1_{i}} + (1 - W_{i})Y_{0i}$$
(1)

 W_i is a binary variable which indicates participation in treatment, that is, participation in migration, or otherwise $(1 - W_i)$. Within this framework, the counterfactual is estimated as the difference in the mean outcomes of the participants in the treatment group with the mean outcomes of the participants in the control group. In the context of our empirical analysis, the counterfactual is estimated as the difference in the average budget shares (across the 12 budget categories) between households that partake in migration and those that do not.

Calculation of the propensity scores is the first step in any propensity score analysis. Propensity scores estimate the probability that a household participates in migration (Equation 2). Such estimations rely on binary choice models such as logit or probit (Equation 3).

$$P(W_i | X_i = x_i) = E(W_i) = \frac{e^{x_i \beta_i}}{1 + e^{-x_i \beta_i}}$$
(2)

$$\log_{e}\left(\frac{P}{1-P}\right) = X_{i}\beta_{i} \text{ where } P = P(W_{i})$$
(3)

We do not separate migration and remittance effects in line with mainstream migration-impact economic literature. Difficulties in disentangling migration and remittance effects derive primarily from the endogeneity of remittance transfers reflecting migrants' earnings and their remittance behaviour (Taylor & Mora, 2006). Hence, our choice is a logit model that predicts participation in migration rather than receipt of remittances.

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To claim random selection into migration, key observed variables influencing participation must be accounted for in the model. Yet, only those variables that simultaneously influence the selection into treatment (migration) and the outcome variables (average budget shares) are allowed to enter the model, which are independent of treatment status and, therefore, not influenced by participation in migration.

In our analysis, a household's likelihood of participation in migration is estimated as a function of the following covariates: age, gender and education of household head, marital status, ethnicity, family size and locational variables. Previous studies validate the econometric model's choice and specification (Arapi-Gjini et al., 2020; Duval & Wolff, 2015; Möllers & Meyer, 2014). Descriptive statistics for the variables in the model indicate that the average age of a Kosovan household head is 48 years. Approximately 87% of household heads are married males. Around 75% of respondents are male, and 23% reside in the capital city, Pristina. The average household size in Kosovo is 4.67 members. Regression coefficients, standard errors and p-values for the logit model are estimated, and propensity scores are generated accordingly (Tables A1 and A2 in Appendix).

The second important step in the PSM method is the choice of the matching algorithm, which defines how the matching is done in practice (i.e. with or without replacement, the number of control units used as a match for a treated unit, with and without a calliper, etc.). It is commonly accepted that the most crucial criterion for evaluating the matching quality is the percentage reduction of bias after the matching (Guo & Fraser, 2015). In the analysis of KRHS 2011 data, we use matching without replacement and within a specified calliper calculated at 0.25*SD (Standard Deviation) of the propensity scores. Two additional matching algorithms were tested to estimate propensity scores: matching with replacement within the nearest neighbour (1) and the nearest three neighbours (3). However, matching without replacement within a specified calliper reduced the percentage bias better than the other two (Table A3 in Appendix).ⁱⁱⁱ

Once a good quality of matching is achieved, closeness in propensity scores determines the formation of matched pairs consisting of migrant households and non-migrant households. Within the matched sample, our parameter of interest is the average treatment on the treated (ATT), and it is calculated as follows (Equation 4):

$$ATT = E[(Y_1 - Y_0) | X, W = 1]$$
(4)

ATT reveals the causal effects of migration and remittances on the expenditures of households staying behind. Finally, Rosenbaum's sensitivity analysis is performed to ensure that our estimated results are free of bias (Table A4 in Appendix).

Qualitative approach: data and method

The econometric results were assessed against qualitative insights from ethnographic fieldwork in the region of Opoja in Southwestern Kosovo in August 2016 and two follow-up visits in August 2017 and 2018. Given that there were no significant changes in migration and remittance patterns between 2011 and 2016 (UNDP, 2016), the qualitative data are a suitable complement to KRHS 2011. It helps to uncover those confounding factors that play a role in households' remittance use but are difficult to capture with quantitative data alone.

Opoja was chosen for qualitative fieldwork due to its long history of labour migration. Twenty-eight openended, in-depth interviews were conducted, including two focus group interviews. We complemented the qualitative interviews by immersing ourselves in a migrant household and engaging in participatory observation. This allowed us to gain insights into the family's daily life, revealing nuances like the impact of gender and age on traditional roles within the Opoja family.

The qualitative data have been analysed using thematic text analysis. Thematic text analysis is implemented in several steps (see Flick, 2009; Kuckartz, 2014). Initially, the data are systematized, and the recorded material is transcribed. Afterwards, open coding occurs, during which the entire data (transcribed material) are coded across specific thematic categories (i.e. migration history, remittance use). Subsequently, the allocation of all text

	Average househol	d budget shares			Average house	hold budget share	es after PSM	
Category	All households	Migrant households	Non-migrant households	T-test, <i>t/p</i> -value	Treated group	Control group	АТТ	T-test, <i>t/p</i> -value
Food	0.40	0.39	0.40	-4.28/0.000	0.38	0.41	-0.02	-4.98/0.000
Non-food	0.10	0.10	0.10	-2.59/0.009	0.10	0.10	0.00	0.55/0.582
Semi-durable goods	0.10	0.09	0.10	-3.24/0.001	0.09	0.10	0.00	-0.85/0.395
Durables	0.03	0.03	0.02	3.10/0.002	0.03	0.03	0.01	2.80/0.005
Housing	0.13	0.14	0.13	3.03/0.002	0.14	0.13	0.01	1.51/0.121
Health	0.06	0.06	0.05	3.67/0.000	0.06	0.06	0.00	1.10/0.271
Education	0.04	0.04	0.04	2.27/0.023	0.04	0.04	0.00	0.92/0.358
Transportation	0.05	0.06	0.05	3.50/0.001	0.06	0.05	0.01	3.10/0.002
Entertainment	0.04	0.05	0.05	-0.94/0.347	0.05	0.05	0.00	-1.63/0.103
Business investments	0.01	0.01	0.01	1.59/0.112	0.01	0.01	0.00	1.73/0.083
Savings	0.02	0.02	0.02	0.24/0.811	0.02	0.01	0.00	1.52/0.128
Debt repayment	0.02	0.02	0.02	0.05/0.960	0.02	0.02	0.00	1.28/0.200

TABLE 1 Average treatment effects on the treated for expenditure categories, 2011.

Note: N = 8000; the matching algorithm for the PSM analysis is NN without replacement and a specified calliper. Source: Own calculations based on KRHS 2011 data.

passages belonging to the same thematic category takes place. Once the allocation of text is complete, subcategories (sub-codes within each of the codes in the code system) are created.

For our thematic category of interest, that is, remittance use within migrant households, several sub-categories were inductively created: (1) housing; (2) conspicuous purchases (cars and weddings); (3) basic expenses (food and clothes); (4) education; and (5) health. Finally, a category-based descriptive analysis summarizes what interviewees said about remittance use, the decision-making process, and its effects on households' expenditures.

UNDERSTANDING THE USE OF REMITTANCES FROM A MIXED-METHODS APPROACH

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This section discusses the results from the representative KRHS data against observations made in a qualitative case study. The mixed-method approach is essential because the household budget data alone do not provide a complete picture of remittance transfers and their use within the budget. Qualitative data revealed crucial insights into the motivation for remittance use. However, most importantly, the qualitative field study uncovered two types of remittance transfers channelled to family members. Only one of them is fully reflected in the household budget data.

The first remittance channel comprises *fungible* transfers sent to cover basic household needs (i.e. food, clothes, and other daily needs). The second remittance channel is for *earmarked* transfers for investments in houses, weddings, luxury cars (and other conspicuous items) but also education and health. Remittances sent to cover the households' basic needs usually represented more frequent but smaller amounts of money. These transfers are often made regularly, and migrants typically do not interfere with how these remittances are spent. This means they become part of the household budget, and households can use them according to their needs. However, they are usually insufficient to cover additional expenditures beyond basic consumption. In contrast to basic transfers, earmarked remittances typically represent larger sums of money. These funds are not fungible, as the recipients have no decision-making power regarding their use.

Concerning the KRHS data, we contend that most of these earmarked transfers are not recorded in the household budget. KRHS 2011 captures remittance transfers by asking, "How much remittances (in cash and in-kind) did you receive in the last 12 months?" The recorded remittances (in cash and in-kind) amount to an average of 163 Euros.^{iv} It seems clear that this sum of money reflects the needs for necessities like food and clothing and does not consider larger earmarked (designated) remittances sent for purposes such as home construction or renovation, car purchases, additional educational or health-related expenses, and so on. This is confirmed by our qualitative observations, which made it clear that when respondents are asked about remittances, they tend to mention only fungible transfers, which are part of their budget. Earmarked transfers typically only come up in broader discussions of how families and villages benefit from migration.

According to the KRHS (see Table 1), food expenditures account for almost 40% of the mean household budget, implying that the average Kosovar household spends the highest percentage of its annual budget on food items alone. This category is followed by housing expenditures (13%). Altogether, food, non-food, semidurable, durables and housing expenditures constitute approximately 76% of total household expenditures, while health and education expenditures comprise 10% of the annual budget. The share of investments in businesses and productive assets is low (1%). Savings and debt repayment account for 4% of total household spending. With much household consumption focused on critical items such as food, non-food and semidurables and less towards education, health and business investments, Kosovar households' spending patterns have remained stable and unchanged since 2011 (Aliu & Mulaj, 2020). Furthermore, these patterns are very similar to those observed among households in the neighbouring countries of Albania and North Macedonia (Aliu & Mulaj, 2020) but also in the emerging economies of Central Asia and Africa (Clement, 2011; Randazzo & Piracha, 2019).

Table 1, moreover, presents a simple, descriptive comparison of average KRHS budget shares for migrant and non-migrant households. The descriptive statistics reveal little difference in expenditure patterns between migrant and non-migrant households in Kosovo. The sole exception is regarding budgetary food shares, as migrant households allocate a slightly smaller proportion of their budget towards food compared to non-migrant families (38% vs. 40%). Differences across other budget categories, such as non-food and semi-durables and housing, health, and transportation, are very small (close to 1%). These descriptive statistics do not establish causal evidence on the influence of migration and remittances on households' spending behaviour. Other confounding factors could have contributed to the observed differences rather than migration. For instance, the two groups of households may have had pre-existing differences regarding various economic and socio-demographic characteristics. Through the use of PSM matching, we have established that the (treated) migrant households and the (control) non-migrant households in the matched sample are very similar concerning these characteristics (Table A3 in Appendix). We, therefore, rely on PSM matching to compare average budget allocations across the designated expenditure categories for matched migrant and non-migrant households and estimate average treatment effects on the treated (ATT) accordingly. The estimated effects for the treated group are solely attributable to migration (Table 1).

The PSM analysis confirms that treated migrant households allocate a smaller share of their budget towards food expenditures than otherwise similar untreated non-migrant households. Participation in migration reduces the share of the household budget devoted to food consumption by two percentage points, a significant effect at the 1% significance level.

Other studies have corroborated the finding that participating in migration and receiving remittance transfers can reduce budget allocation for food expenses. This result is consistent with the findings of Taylor and Mora (2006), Yang (2008) and Adams Jr. and Cuecuecha (2010) in the context of other regions. Our qualitative research further underlines that both migrant and non-migrant households are using a relatively large share of their income for food and basic expenses. However, remittance access does not necessarily make an immediate difference in a household's possibilities to significantly increase other budget shares or savings. Ramë, a middleaged man we interviewed in Opoja, shed light on this matter. His household had been receiving remittances from his migrant brother in Germany for many years, and he articulated his perspective as follows:

The remittances may cover only some basic needs, only the family needs. You know what such needs are: to eat, to drink, and to buy clothes. It [the remittance income] is not enough to invest in agriculture, in a business or to achieve something.

In line with this statement, we find no effect of migration on budget shares for savings and debt repayments, suggesting that treated migrant households are not saving out of remittance income. Likewise, our empirical estimations display no further remittance effects on migrant households' expenditures on basics such as non-food items and semi-durable consumption. In other words, treated migrant households allocate the same budget shares towards these expenditure categories as non-treated households.

A positive but small effect of migration on the budget share is revealed in Table 1, at the 5% significance level, for durables and transportation. On average, migration increases household budget shares for durables and transportation by 0.5 percentage points. Treated migrant households also seem to use a slightly higher share of their budget for entertainment. However, this effect is weak and fails to meet a 10% significance level.

Qualitative observations from the field confirm that migrant households are better equipped with, for example, home appliances and means of transport such as cars and motorcycles, particularly regarding housing. The observed differences seemed, however, even more noticeable than the PSM analysis suggests.^V We explain this difference with the two different types of remittance transfers. Ramë, whom we cited above, was adamant that his migrant brother never interfered with the money sent through the first channel, covering the household's basic needs. However, when his brother decided on additional spending, such as house

263

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construction or renovation works, he channelled earmarked transfers. An earmarked transfer implies that a particular project was commissioned to Ramë, who then acted on the migrant's behalf and had no authority over the use of such money:

It is not me who decides about housing investments. If he [the migrant] sends 10,000 Euro and says build a house, I will build a house.

A significant proportion of earmarked funds is typically used for investments in new houses, as described by Ramë. These investments are easy to spot by any visitor to a migrant community. Although housing investments are not inherently conspicuous, they can occasionally incorporate elements of conspicuous purchases. This is particularly noticeable when funds are allocated towards catering to the aesthetic preferences of migrants both inside and outside the house. Paid for by migrants, most new homes are grandiose from the outside, spacious inside, and feature several rooms equipped with modern furniture. Couches, TV sets, bedroom sets, kitchen appliances, and other technology-related items (e.g. house cleaning robots) are directly bought by migrants. The described spending contributes to wealth accumulation in migrant households and may generate multiplier effects by creating demand for inputs and labour for construction works. However, as the recipients at the origin usually have no say regarding these expenditures, villagers who lived in large, migrant(s) and their local relatives in preparation for a split up of the household and equal treatment of the family's brothers in terms of inheritance. For this reason, many houses are unused during most months of the year. This underlines that house construction is generally not to be considered a productive investment that can generate sustained long-term growth.

The categories of productive investments in Table 1 are business investments and, in the broader sense, investments in human capital in the form of education and health spending. Although business investment is vital for providing employment opportunities and development, there is little evidence that such productive remittance investments are taking place on a larger scale in Kosovo. The PSM analysis underlines that participation in migration has only a weak positive effect on treated households' investments in business enterprises, including self-employment initiatives. This finding aligns with previous World Bank (2011) and UNDP (2016) assessments showing that remittances are rarely directed towards productive investments. However, these examples referred to an older generation of migrants who had returned for good after spending four decades working abroad. At the same time, their wives and children had stayed back in the village. Upon return, they invested their life savings into various business ventures in Opoja to secure a better standard of living for their children and grandchildren.

Regarding budget allocations for education and health between treated migrant households and non-migrant households, there were no noticeable differences (Table 1). The lack of significant treatment effects appears to indicate that migration and remittances have no direct impact on these expenditure categories. Other studies in Albania and Kosovo confirm a relatively low use of remittances for education and health (Alishani & Nushi, 2012; Cattaneo, 2012). In other regions of the world, Randazzo and Piracha (2019) show no notable effects of migration and remittances on education and expenditures in Senegal and Clement (2011) estimates minor adverse impacts of remittances on health and education expenditure categories in Tajikistan.

However, one should be cautious about interpreting this as a low priority given to these budget items. First, general education and basic health services are free in Kosovo. For school education, the families only incur expenses related to books, school supplies, and transportation. Moreover, our field observations showed that children's education had, in fact, a high priority over other productive investments. For this reason, migrants often cover any necessary education-related expenses, including living expenses for university students, through earmarked remittance transfers. Such designated transfers are frequently sent directly to their intended beneficiaries, that is, adult children attending university.

INTERNATIONAL MIGRATION

This critical point is not reflected in the quantitative results, where such transfers are not recorded in the household budget. Mira, one of our interviewees in Opoja, resided in a migrant household. During our discussions with her, we learned about the continuous contribution of the migrant brother-in-law towards her children's educational expenses. He had equally financed his niece's and nephew's schooling and university fees for many years. Investment in education took precedence over any other (business) investments, as Mira explained:

What to ask from him [the migrant brother-in-law]? First, it is hard for him too. He has done a lot for my children – a lot! [He paid for] The faculty for my daughter, for my son, so we do not get to invest remittances in agriculture.

Mira further explains that designated remittance transfers for education were paid directly to her children without entering the pooled income managed by the household head:

When my daughter received money for her studies, it was sent directly to her. She would receive the money separately and use it accordingly.

Similarly, we found that migrants send designated remittances specifically for health expenditures. Healthrelated transfers are reactive in nature, as migrants typically send them in response to sudden illnesses or when requested explicitly by family members in Kosovo. In Opoja, Xhevdet, a middle-aged resident, shared how his family depended on his migrant brother's help to handle unexpected illnesses:

If you suffer from a serious illness, for instance, we ask for the money, and he [the migrant] sends it. With the illness, you never know, so he sends the money.

There were a few instances of familial arrangements involving chronic illnesses where migrants remitted frequent sums of money for the purchases of medicine and medical treatments in Kosovo. In some cases, migrants also regularly dispatched medicine back to their families.

Overall, the results suggest that treated migrant households remain consumption-oriented. While fungible remittances are usually insufficient for significantly increasing productive investments, most earmarked remittances are not used for such purposes either – educational investments are the main exemption from this rule. Instead, conspicuous consumption dominates earmarked transfers. Conspicuous purchases carry signals of improved social status. They are striving for attention, marked by their extravagance. Typical conspicuous purchases in Kosovo are covered by migrants directly through earmarked remittance transfers or personally during visits. They include showy house interiors, expensive gifts, luxury cars and arranging extravagant events and celebrations such as wedding ceremonies. Our qualitative observations revealed that migrants actively seek visibility. Specifically, migrants work to create a (somewhat unrealistic) impression of personal success. Moreover, they actively reinforce the bonds with their family and village community at home through generous gifts. The main motivation for this is to overcome the social invisibility that many migrants experience while living abroad and to maintain a strong bond with their origin communities (Harper & Zubida, 2016).

We identified two main catalysts for the conspicuous behaviour observed among migrants. First, the economic realities of Kosovo may be seen as discouraging for business investments. Lack of capital and access to credit, deficient public infrastructure and weak state structures keep migrants away from risky investments. Moreover, starting from the 1990s, individual migration was replaced by family migration, and most Kosovar migrants nowadays live abroad with their nuclear families. With their lives and families abroad, migrants' motivation to invest in Kosovo is lowered. Second, conspicuous purchases are linked to status-related investments, which provide an immediate positive effect on the migrants and their households at home. Building a

265

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positive image in the home community is an essential driver of conspicuous consumption, as we will explain in the following.

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Conspicuous consumption must be seen as critical since it diverts resources from productive activities that could generate employment for those staying behind (Amuedo-Dorantes, 2014). Despite the benefits that such spending provides to the migrants, some have started to realize that the money spent on conspicuous items has been a massive drain on their resources with a limited impact on the well-being of their families and communities. We came across migrants who have long sent remittances and expressed regret and self-criticism about the unproductive use of remittance transfers. Poignantly, a migrant living in Germany for over two decades openly admits the futility of his conspicuous purchases over so many years, stating:

The money that I sent here, almost all of it was wasted. It made me proud to see that my brothers had luxury cars to drive around in. If I had invested this money into a business, it could have created 30 or 40 jobs until today. But this was my mistake as well. I was young, and I thought I was helping.

The literature on remittance use argues, and we also observed this in the field, that the conspicuous consumption of migrants drives local households to emulate the same patterns of expenditure ("pecuniary emulations"). The emulation effect of conspicuous consumption is clearly apparent in housing and cars, but it becomes especially prominent in wedding expenses. Weddings take place in summer when the migrants, who are the main financial contributors, arrive. A traditional wedding comprises lavish festivities with hundreds of guests. The more a family spends on a wedding, the higher its perceived social status. This kicks off an emulation effect and creates a competition, which families without migrant members struggle to match.

Our interviewees were divided when it came to justifying excessive wedding expenses. One camp was quite critical and openly admitted that wedding costs were unreasonable and exaggerated. In contrast, others justified such spending based on social pressures to adhere to certain standards. Diellza was a teenage girl whose Opojan grandfather, father and uncle had been migrants to Germany but who then lived with her family in the capital, Pristina. From her more urban-influenced view, the weddings in Opoja stood for a very traditional way of life that no longer matched hers. With some bewilderment, she reported that a family could spend well beyond 10,000 Euros for a wedding.^{Vi}

When we inquired Diellza about her thoughts on wedding ceremonies and the associated costs, she responded with unwavering conviction. Instead of a big wedding, she would prefer to use the money to learn a new language and travel abroad. However, she acknowledged the family and societal constraints, stating:

It's a shame [for the family] if you don't have it [a grand wedding]. It's just too important to the parents.

Conspicuous consumption and the follow-up emulation effects mainly result from spending not reflected in remittances that enter the household budget of recipients. Instead, migrants use earmarked transfers to seek visibility and to maintain or improve their status in the village. It is this behaviour and spending of money earned abroad that shapes remittance-receiving communities in Opoja. Therefore, it is unsurprising that remittances' effects seem negligible if the focus is narrowed to household budgets.

CONCLUSIONS

This article contributes to the migration-development research by adding important insights into the intricate links between international migration and remittances and the spending behaviour of households staying behind

MIGRATION

in countries of origin. Based on the empirical case of Kosovo and relying on matching techniques, we find that migration and receipt of remittance income do not cause substantive changes in Kosovar households' expenditure. Households with migrant family members spend a smaller share of their budget on food expenditures and a marginally higher share on durables and transportation than households without migrants. The result is in line with findings from other regions Taylor and Mora (2006), Yang (2008) and Adams Jr. and Cuecuecha (2010). Furthermore, in the analysis of household budget data, no significant effects on important categories such as business investments, education and health expenditures could be detected. These quantitative results are similar to those of other studies in Albania and Kosovo (Alishani & Nushi, 2012; Cattaneo, 2012). Overall, a general picture of remittances primarily used for consumption and little towards productive investments arises.

Yet, as our qualitative analysis demonstrates, the mixed-method approach provides essential insights without which remittance transfers and their use cannot be fully understood. Most importantly, the qualitative fieldwork uncovered two types of remittance transfers, only one of which is fully reflected in the household budget data. The first remittance channel comprises *fungible* transfers sent to cover basic household needs (i.e. food, clothes and other daily needs). The second remittance channel is for *earmarked* transfers for investments in houses, gifts, weddings (and other conspicuous items) but also education and health. Remittances sent to cover the households' basic needs usually represented more frequent but smaller amounts of money. These transfers are often made regularly, and migrants typically do not interfere with how these remittances are spent. This means they become part of the household budget, and households can use them according to their needs. However, they are usually insufficient to cover additional expenditures beyond basic consumption.

In contrast to basic transfers, earmarked remittances are not fungible, as the recipients have no decisionmaking power regarding their use. Therefore, we have reason to believe that a significant portion of earmarked transfers remains unaccounted for in the household budget. Hence, the analytical results based on household budget data cannot fully explain observations in the field. While they effectively capture remittances for basic consumption needs, earmarked transfers – at least in the case of Kosovo – seem to represent the most significant proportion of remittances but often go undetected. Highlighting this type of transfer is a key contribution of our research. Therefore, a critical conclusion of our study is that standard survey questions may be insufficient in capturing the complex remitting mechanisms involved. To overcome these limitations, future research should account for the different types of transfers, such as housing, conspicuous purchases, education, and health, between migrants and households in countries of origin.

As our qualitative results indicate, earmarked transfers are mainly used for conspicuous purchases, used by migrants "as a status-enhancing device" (Stark, 2009). These conspicuous purchases have two critical consequences: (1) they divert much-needed resources away from productive investments, and (2) they drive households (particularly those without migrant family members) to replicate similar expenditure patterns (Amuedo-Dorantes, 2014). Earmarked transfers are typically used for unproductive uses. Nonetheless, the qualitative investigation pointed to development-relevant investments in education and health. Since education and health-related expenses are paid by migrants directly to the beneficiaries as earmarked transfers, the quantitative analysis of expenditures failed to detect any remittance effects on the allocation of funds towards these items.

The understanding that remittances are not homogenous (fungible and earmarked transfers) and that the decision on how to spend them is not always up to the receiving households deserves special attention from migration researchers and policymakers alike. Since migrants (and not household members staying behind) are the ones who typically commission and undertake investments, targeted attempts from policymakers to promote productive investments should focus on migrants as key decision-makers.

Yet, the efficacy of national policies intended to foster productive investments is uncertain. Despite Kosovo's decades-long reliance on remittances, there has been an e absence of concrete action plans to use these funds productively, posing challenges in predicting future policy effectiveness. Additionally, as our research revealed, a combination of increased family migration and preference for status-enhancing spending means that most migrants are disinterested in investing in business enterprises within Kosovo.

267

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Despite the observed lack of interest in local businesses, best practices from other countries suggest potential ways to redirect migrant remittances. In Turkey, for instance, a country sharing similarities with Kosovo in terms of familial structures and cultural aspects, the strategy of encouraging remittance transfers through national banks yielded positive outcomes. Turkey's example and insights from other nations offer a compelling blueprint for directing remittances towards Kosovo's development (Chami et al., 2008; EIB, 2006; Ketkar & Ratha, 2007).

An obvious limitation of this paper is that our qualitative sample only represents a single region in Kosovo, making it non-representative of the entire country. The distinguishing factor here is the deeply traditional setting, where larger families (with over eight members) are sustained through remittances. As a result, the volume of remittance inflows, especially those used for houses, cars, weddings, health and education, is likely higher than in other regions in Kosovo and neighbouring countries like Albania, Montenegro and North Macedonia. Migrants in these areas typically support smaller family units.

While this insight originates from a single area in Kosovo, it is plausible that a similar pattern exists elsewhere. Therefore, we hope this paper will stimulate researchers to explore such dynamics in diverse regions globally. Finally, although the KRHS 2011 and qualitative interviews cover data only up to 2018, the findings remain relevant, as migration dynamics in the region have not significantly changed. Consequently, the insights in this paper continue to underscore the enduring influence of remittances on the financial behavior of Kosovar households.

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CONFLICT OF INTEREST STATEMENT

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PEER REVIEW

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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ENDNOTES

ⁱTable A6 in Appendix includes a review of key papers discussing the effects of migration and remittances on household spending behaviour in countries of origin, along with the data and methods used.

ⁱⁱDespite migration, most migrants maintain enduring links with translocal households based in countries of origin. In the Kosovar context, a translocal household refers to [...] a family unit that encompasses separate households established abroad by members, primarily connected through the patrilineal line, who collaborate with their family in rural Kosovo across various activities such as production, consumption, investments, childcare, and eldercare. These households, characterized by distinct roles based on gender, age, and international locations, encompass both normative and practical aspects (Leutloff-Grandits, 2023).

ⁱⁱⁱWe used treatment effects with inverse probability weights (IPW) as a robustness check, assigning higher weights to less likely treatment scenarios based on observed covariates. The consistent results reinforce the validity of our initial findings, adding robustness to our study (see Table A5 in Appendix).

^{iv}Arapi-Gjini et al. (2020) utilized the KHRS 2011 data set to determine that a typical Kosovar household with migrant family members received an average monthly amount of remittances (both in cash and in-kind) equivalent to 163 Euros. The monthly income from in-cash remittances alone amounted to 146 Euros.

^vThe KHRS results concerning housing are not particularly informative because expenditures under this category refer to (assessed) rent payments and running costs such as electricity. Since more than 90% of Kosovar households live in privately owned houses, assessed rent payments seem to be a weak indicator of capturing the impact of migration on housing investments.

^{vi}Migrants' financial support for household weddings in Kosovo is comparable to spending patterns observed in other remittance-dependent countries like Uzbekistan and Kyrgyzstan, averaging around 9200 Euros and 11,378 Euros, respectively (Irnazarov, 2015). Likewise, within these countries, the substantial costs linked to wedding ceremonies have raised concerns, being deemed unproductive and costly to emulate (Ibidem).

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APPENDIX

Independent variables		Mean/percentage share (for dummies)	Std. dev.
Agesq	Squared age of household head	2477.23	1334.11
Genderhh	Gender of household head (binary variable 1=Male)	87%	_
Educyhh	Years of education of household head	11.34	3.21
Married	Marital status of household head	87%	-
Familysize	Average size of a household	4.67	1.74
Albanian	Ethnicity is Albanian	75%	-
Prishtina	Region is Prishtina	23.09%	_

TABLE A1 Descriptive statistics of variables in the PSM logit model.

Note: N=80,000.

Source: Own calculation based on KRHS 2011 data.

TABLE A2 PSM logit results-psmatch2.

Independent variables	Coefficient	Std. err.	z	p > z	95% confidence in	terval
Agesq	0.00	0.00	7.72	0.000	0.00	0.00
Genderhh	-0.27	0.08	-3.53	0.000	-0.42	0.00
Educyhh	0.00	0.01	0.38	0.707	-0.01	-0.01
Married	0.15	0.08	1.86	0.063	-0.01	0.41
Familysize	-0.04	0.01	-2.83	0.005	-0.07	0.01
Albanian	1.15	0.07	17.23	0.000	1.02	0.00
Pristina	-0.42	0.06	-7.03	0.000	-0.54	1.30
_cons	-1.61	0.16	-10.33	0.000	-1.91	-0.42

Note: N = 8000.

Source: Own calculation based on KRHS 2011 data.

TABLE A3 Testing the balance of covariates and absolute bias reduction.

	Mean				t-test	
Variables	Treated	Control	%bias	% reduction in bias	t	<i>p</i> > <i>t</i>
Agesq						
Unmatched	2666.4	2380.2	21.2		9.12	0.000
Matched	2666.4	2647.8	1.4	93.5	0.49	0.623
Genderhh						
Unmatched	0.84	0.89	-12.4		-5.38	0.000
Matched	0.84	0.84	0.8	93.9	0.26	0.795
Educyhh						
Unmatched	11.20	11.41	-6.7		-2.87	0.004
Matched	11.20	11.14	1.6	75.6	0.57	0.565
Married						
Unmatched	0.87	0.87	-0.3		-0.14	0.982
Matched	0.87	0.87	-0.6	-72.6	-0.20	0.839
Familysize						
Unmatched	4.73	4.64	5.2		2.23	0.026
Matched	4.73	4.83	-5.6	-7	-2.06	0.040
Albanian						
Unmatched	0.87	0.69	46.8		18.86	0.000
Matched	0.87	0.87	0.1	99.8	0.04	0.135
Pristina						
Unmatched	0.19	0.25	-16.6		-6.91	0.000
Matched	0.19	0.20	-3.2	80.7	-1.24	0.215

Source: Own calculation based on KRHS 2011 data.

INTERNATIONAL MIGRATION

273 **IOM**

	Gamma	Sig+	Sig-	t-hat+	t-hat-	CI+	CI-
Food	1	2.30E-06	2.30E-06	-0.02044	-0.02044	-0.029221	-0.011722
	1.05	6.60E-09	0.000241	-0.025321	-0.015513	-0.034127	-0.006818
	1.1	8.40E-12	0.007166	-0.03001	-0.010895	-0.038873	-0.002184
Non-food	1	0.20865	0.20865	0.00142	0.00142	0.001948	0.004878
	1.05	0.611686	0.028298	-0.000414	0.003371	-0.003889	0.006847
	1.1	0.907871	0.00158	-0.002305	0.00521	-0.005731	0.008693
Durables	1	0.001459	0.001459	-3.10E-07	-3.10E-07	-3.10E-07	-3.10E-07
	1.05	0.015201	0.000075	-3.10E-07	-3.10E-07	-3.10E-07	-3.10E-07
	1.1	0.081912	2.50E-06	-3.10E-07	-3.10E-07	-3.10E-07	-3.10E-07
Semi-durables	1	0.171529	0.171529	-0.001683	-0.001683	-0.006042	0.001778
	1.05	0.020739	0.556413	-0.004167	-4.50E-07	-0.00848	0.004241
	1.1	0.001036	0.881249	-0.006419	0.002165	-0.010774	0.006562
Health	1	0.178746	0.178746	-2.70E-07	-2.70E-07	-2.70E-07	0.003582
	1.05	0.560065	0.023186	-2.70E-07	0.001958	-0.002201	0.005655
	1.1	0.879533	0.001285	-0.000263	0.004009	-0.004272	0.00781
Housing	1	0.053611	0.053611	0.003246	0.003246	0.000695	0.007236
	1.05	0.303065	0.003395	0.001034	0.005497	-0.00292	0.009496
	1.1	0.70137	0.000087	-0.001085	0.007611	-0.005046	0.011667
Education	1	0.44716	0.44716	-4.50E-07	-4.50E-07	-4.50E-07	-4.50E-07
	1.05	0.792583	0.139809	-4.50E-07	-4.50E-07	-4.50E-07	-4.50E-07
	1.1	0.957284	0.023518	-4.50E-07	-4.50E-07	-4.50E-07	-4.50E-07
Investments	1	0.44716	0.44716	-4.50E-07	-4.50E-07	-4.50E-07	-4.50E-07
	1.05	0.792583	0.139809	-4.50E-07	-4.50E-07	-4.50E-07	-4.50E-07
	1.1	0.957284	0.023518	-4.50E-07	-4.50E-07	-4.50E-07	-4.50E-07
Transport	1	0.001558	0.001558	0.002717	0.002717	-3.30E-07	0.006825
	1.05	0.028851	0.00003	0.000378	0.004895	-3.30E-07	0.008611
	1.1	0.186701	2.50E-07	-3.30E-07	0.007064	-3.30E-07	0.010328
Savings	1	0.039542	0.039542	-3.10E-07	-3.10E-07	-3.10E-07	-3.10E-07
	1.05	0.099807	0.012859	-3.10E-07	-3.10E-07	-3.10E-07	-3.10E-07
	1.1	0.202698	0.003637	-3.10E-07	-3.10E-07	-3.10E-07	-3.10E-07
Debt	1	0.151011	0.151011	-3.00E-07	-3.00E-07	-3.00E-07	-3.00E-07
	1.05	0.315693	0.056477	-3.00E-07	-3.00E-07	-3.00E-07	-3.00E-07
	1.1	0.518578	0.017294	-3.00E-07	-3.00E-07	-3.00E-07	-3.00E-07
Entertainment	1	0.003656	0.003656	-3.50E-07	-3.50E-07	-0.003788	-3.50E-07
	1.05	0.000102	0.049282	-0.00186	-3.50E-07	-0.006268	-3.50E-07
	1.1	1.30E-06	0.251333	-0.004167	-3.50E-07	-0.008497	-3.50E-07

TABLE A4 Rosenbaum bounds for expenditure categories.

Source: Own calculation based on KRHS 2011 data.

Category	ATT	Robust std. err	z value	p > z	[95% Conf. Int	erval]
Foodshare	-0.02	0.004	-5.46	0.000	-0.0302	-0.0143
Nonfoodshare	0.00	0.002	0.07	0.944	-0.0034	0.0037
Semidurshare	0.00	0.002	-0.8	0.423	-0.0055	0.0023
Durshare	0.01	0.002	3.24	0.001	0.0021	0.0087
Housingshare	0.00	0.002	2.41	0.016	0.0009	0.0088
Healthshare	0.00	0.002	1.35	0.176	-0.0011	0.0061
Educshare	0.00	0.002	0.89	0.372	-0.0019	0.0052
Transshare	0.00	0.002	3.07	0.002	0.0017	0.0079
Entertainmentshare	0.00	0.002	-0.48	0.629	-0.0038	0.0023
Investshare	0.00	0.002	1.3	0.193	-0.0011	0.0056
Savingshare	0.00	0.002	1.7	0.089	-0.0004	0.0055
Debtshare	0.00	0.002	0.24	0.809	-0.0031	0.0040

						1.1		0044
IABLE A5	Average t	reatment	errects d	on the	treated fo	or expenditure	categories,	2011

Note: N=8000; treatment effects are estimated using the Stata command teffects with inverse probability weights (ipw).

Source: Own calculations based on KRHS 2011 data.

Impact of migration and remittances on households' expenditures	Authors	Country/region	Type of data	Methods
No significant impact on households' spending behaviour	Castaldo and Reilly (2007)	Albania/Eastern Europe	2002 Albania living standards measurement survey (cross-sectional)	Ordinary Least Squares (OLS) regression
	Adams Jr. et al. (2008)	Ghana/sub-Saharan Africa	2005/2006 Ghana living standards survey (cross-sectional)	Instrumental Variable A estimation
	Randazzo and Piracha (2019)	Senegal/sub-Saharan Africa	2009/2010 Migration and remittance household survey (cross-sectional)	Matching method
Positive impact on households' consumption (+) Negative impact on productive	Chami et al. (2003)	113 remittance-recipient countries	World Bank World Development Data on remittance transfers between 1970 and 1998 (panel)	Panel data analysis
investments including human capital (-)	Clement (2011)	Tajikistan/Central Asia	2003 Tajikistan Living Standards Measurement Survey (cross-sectional)	Matching method
	Démurger and Wang (2016)	China	Rural–Urban Migration in China (RUMiC) survey (cross-sectional)	Matching method
Negative impact on households' consumption (-)	Taylor and Mora (2006)	Mexico	2003 Mexico National Rural Household Survey (cross-sectional)	Instrumental variable estimation
Positive impact on productive investments including human capital	Yang (2008)	Philippines/Southeast Asia	July 1997–October 1998 Panel Household Survey (panel)	Panel data analysis
(+)	Adams Jr. and Cuecuecha (<mark>2010</mark>)	Guatemala/Central America	2000 Guatemala ENCOVI National Household Survey (cross-sectional)	Instrumental variable estimation

TABLE A6 Overview of migration, remittances and expenditure estimations.

Source: Own compilation.