Migration patterns in a remittances dependent economy: Evidence from Tajikistan during the global financial crisis

ALEXANDER M. DANZER *
OLEKSIY IVASCHENKO **

Abstract

Before the global financial crisis, Tajikistan was a major labour exporting and the world's most remittances-dependent country. Remittances had contributed to a remarkable reduction in poverty. This paper exploits a new panel data set spanning the years 2007 to 2009 in order to investigate the effect of the financial crisis on migration and remittances patterns. Expectedly, the economic recession in the main destination country Russia affected Tajikistan through declining remittances. Owing to low diversification in pre-crisis migration patterns, the dependency on sending migrants to Russia and the migration stock there grew. In combination with increased migration risk this suggests that migrants bear part of the cost of the crisis.

Keywords: financial crisis, migration, remittances, risk, Tajikistan

Introduction

Before the onset of the global financial crisis in 2008, Tajikistan was the labour exporting country with the highest share of GDP (45 per cent) generated through remittances (Ratha et al., 2008). While remittances contributed to the substantial poverty reduction from 72 per cent in 2003 to 53 per cent in 2007 (World Bank, 2009), the Tajikistani economy and Tajikistani households became highly dependent on external finance. The analysis of the 2007 Tajikistan Living Standards Survey (TLSS) revealed that 23 per cent of households directly depended on remittances. In households with migrants, remittances account for as much as 35 per cent of household consumption—and even more for the households in the lower deciles of the consumption distribution. The Tajikistan migration model is one of predominantly seasonal low-skill migration, with 96 per cent of the migrants heading to Russia, where 55 per cent work in the construction sector, and another 30 per cent in other low-skilled occupations (Danzer and Ivaschenko, 2009).

Tajikistan's external dependence made the country vulnerable in times of the global financial crisis which reached the critical stage in late 2008. The crisis had quickly sprawled to Russia, where a plunging oil price helped to push the country into a severe recession throughout 2009. Tajikistan's economic dependence on remittances from Russia was expected to lead to an immediate "import" of the crisis. As migrants who had previously remitted more than 80 per cent of their foreign earnings now faced the risk of job loss and wage cuts, household receipts would be expected to decline sharply (Danzer and Ivaschenko, 2009; Marat, 2010; Ratha et al. 2010). At the same time, Tajikistan suffered from falls in world market prices of major export commodities (aluminium and cotton) thus adding to eco-

* Royal Holloway University of London, UK, Osteuropa-Institut Regensburg and IZA Bonn, Germany. Email: a.m.danzer@rhul.ac.uk.
** World Bank, Washington, DC, USA. Email: oivaschenko@worldbank.org.

nomic pressure in the domestic labour market (NCC America 2010; Global Info Mine 2010).

This paper presents empirical evidence on the change in migration and remittance patterns in Tajikistan throughout the global financial recession. With help of a newly collected household panel data set in Tajikistan (the TLSS, see details below) that comprises two household surveys collected in October/November 2007 (pre-crisis) and in October/November 2009, respectively, we are able to document (i) a substantial increase in labour migration, (ii) an increased uncertainty involved in international migration, and (iii) a decline in the financial gains from migration, i.e., remittances by roughly 30 per cent during the crisis.

Push and pull factors of migration during a global recession

The migration literature has produced substantial evidence on how migration responds in the face of aggregate shocks in destination (Becker et al., 2005) and source countries (McKenzie, 2003). Also, changes in remittances through exchange rate shocks have been documented to impact on household expenditure levels (Yang, 2008). However, little academic evidence exists on changes in migration and remittance patterns when the economic shock is of global nature (see Martin, 2009). This paper adds to this literature by comparing pre- and post-crisis migration and remittances patterns in Tajikistan.

A simple push-pull model of migration can be useful to determine the general driving forces behind population movements (Schoorl et al., 2000). For a global economic recession, this model predicts a reduction of pull factors from the destination country and an increase of push factors in the country of origin. Framed in our specific context, the economic returns from migrating to Russia are likely to drop as soon as the crisis hits Russia and as demand for foreign labour declines paired with stagnant or falling wages. The construction sector in Russia, which had provided stable jobs for the majority of Tajikistani migrants, contracted output-wise by almost 20 per cent in the first three quarters of 2009 (Obetkon, 2009; Martin, 2009). At the same time Tajikistan's domestic economy is hurt by the decline in commodity prices for aluminium and cotton (NCC America 2010; Global Info Mine 2010), adding incentives to leave the country. Oddly enough, the country is expected to be predominantly hurt through declining remittances from Russia, as exported labour actually comprises the largest economic "sector" of Tajikistan accounting for 45 per cent of GDP in 2007 (Ratha et al., 2008). Macroeconomic data from the first months of the financial crisis indeed suggest a decrease in remittances of roughly 30 per cent (World Bank, 2010).

The recent growth success of Tajikistan on the one hand and a substantial vulnerability to external shocks on the other hand are both deeply rooted in the country's economic reliance on remittances (Danzer and Ivaschenko, 2009; Shahriari et al., 2009). What performed well as a cure to widespread poverty since the mid-2000s may cause concern during crisis if households became over-reliant on a source of funding that might turn out to be volatile. Over-reliance on migration might imply that household have no other activity choice than further extending their increasingly risky migration business. As Tajikistan might be trapped in such a remittances curse (cp. Keely and Tran, 1989), it is of crucial importance to understand whether push or pull factors dominate and whether migration stocks will rise or fall during recession.

© *migration letters*

If the migration stock from Tajikistan increased during the financial crisis (suggesting the push factors were dominant) it remains to be explained how migration patterns changed. Higher migration stocks in Russia could be attributable to (a) longer stays abroad or (b) higher migration flows. In South-South migration, one can expect durations of stays to decrease if macroeconomic conditions and employment prospects become more volatile (Parrado and Cerrutti, 2003). Also, tighter controls on immigrants might be introduced in the destination country during times of crisis. To the opposite, migrants may try to "hibernate" the crisis abroad either because they lack funds to return or because they fear later refusal of re-entry (Martin, 2009; Ratha et al., 2009) thus prolonging their stay abroad. Also, potentially lower earnings abroad might increase migration duration in order to meet a specific savings target.

Persistent levels of migration during periods of increased uncertainty require some micro-economic behavioural explanation. It turns out that network theory provides a suitable framework for studying the changes in migration behaviour during crisis (Massey et al., 1993): Personal networks reduce the cost and risk of moving abroad. At the same time, they provide protection from deportation and harassment. In sum, while push and pull factors explain the motivation for migration personal networks are the means of realising it.

Rising migration uncertainty during the financial crisis

Migration is always risky. This can be easily understood if one considered that an individual planning a stay abroad has to compare—in economics jargon—two utility functions which contain several arguments (e.g., income as the product of the chance to find a job and the prevailing wage rate, leisure with and without the family). This comparison is non-trivial as the individual better knows the likely realization of outcomes at home as compared to a distant migration destination (Jaeger et al., forthcoming). During economic recession, the uncertainty about the success of a move further increases. Even for previous migrants, actual economic conditions and fluctuating demand for foreign labour are hard to grasp. Consequently, migration patterns might change when uncertainty increases. More specifically, the selection of migrants, the actual decisions how and where to move as well as the return from migration is likely to respond in the following ways:

First, if migration risks rise, relatively less risk-averse persons would be drawn into migration. Theoretically, young people are more inclined to migrate as they have invested less in home country or firm specific human capital (Goss and Paul, 1986) and fewer family obligations. Even in the light of curbed labour demand, young people might migrate to Russia for educational purposes and then work occasionally or permanently. Thus, we hypothesize to observe a decrease in the age at migration.

Second, higher uncertainty will manifest itself in greater difficulties to acquire a job abroad. This might be paired with lower chances of obtaining legal residence status, either because immigration becomes recognized as a burden on natives' labour market prospects or because registration officials surcharge in bribes (Olimov and Bosc, 2003). Thus, we hypothesize that fewer migrants can arrange work prior to moving and that fewer migrants are able to legalize their residence. In turn, more migrants have to return involuntarily. In order to reduce some of these risks, we expect migrants to rely stronger on personal networks when organizing migration

trips. This reliance, however, increases dependence on few migration destinations, especially Moscow.

Third, the financial returns from migrating (of which a large proportion is sent home in the form of remittances) can be expected to directly decline as a consequence from increased unemployment and reduced earnings. However, more interesting is whether migrants will change their remitting behaviour as a response to higher uncertainty abroad. Migrants in an uncertain environment might reduce remittances even in the absence of job or wage loss if they wished to build up precautionary savings. Anecdotal evidence tells that some Tajikistani migrants were unable to return to Tajikistan during the crisis simply because they lacked the funds to do so (International Crisis Group, 2010). Thus, we hypothesize that migrants will remit lower shares of their foreign earnings to their domestic household during the financial crisis.

Data and methodology

For our empirical analysis we use two waves of the Tajikistan Living Standard Measurement Survey (TLSS) which was administered by the World Bank and UNICEF. Well before the financial crisis, the first wave was collected during October and November 2007 comprising a total of 4,500 households and 32,000 individuals. In late 2009 (October and November), a randomly drawn subsample of these households (totalling to 1,503 households and 7,000 individuals) were re-interviewed. Specific attention was paid to the inclusion of a migration module that collected monthly migration information for all household members. The data include the dates, destinations and durations of cross-border moves as well as information on personal migration networks. Additionally, earnings and remittances can be retrieved from the survey.

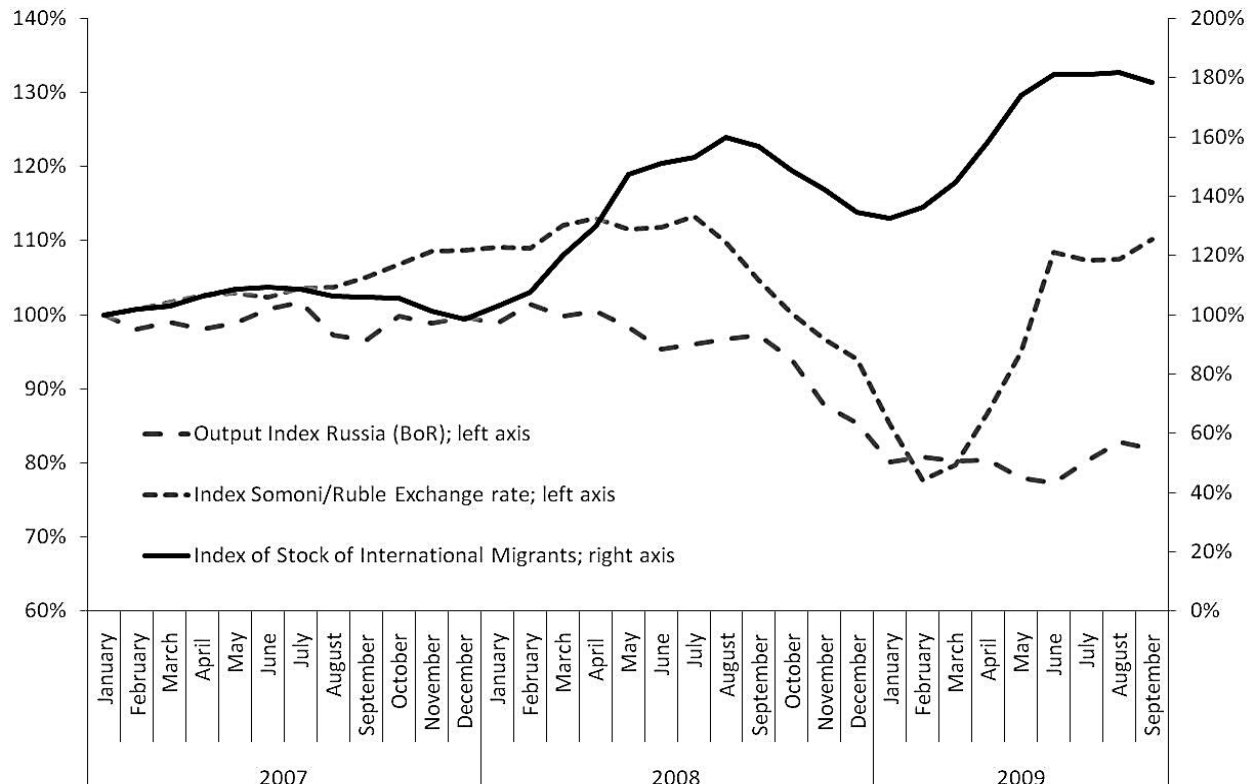
To shed light on changes in migration stocks, as well as migration and remittances patterns, we will predominantly provide descriptive evidence in the repeated cross-sectional setting. Owing to the collection of retrospective monthly migration information data in the 2009 TLSS, we are able to exactly track migrants through the crisis. To study dynamics throughout the crisis we will additionally provide some transition matrices for all 1,503 panel households. Unless otherwise stated, all calculations are performed by the authors using the TLSS data set.

Results

The stock of Tajikistani migrants abroad has risen sharply during the global financial crisis. As Figure 1 indicates, the total stock of international migrants in the total Tajikistani population above 14 years rose (from relatively stable 5 per cent throughout 2007) by around 60 per cent in late 2008. After a non-negligible dip in the first half of 2009, when output declined sharply in Russia and when the Tajikistani Somoni appreciated against the Russian Rouble by roughly 30 per cent, the stock of migrants rose to almost 180 per cent of the pre-crisis level, equalling 9 per cent of the Tajikistani adult population.

The higher migration stock could either be achieved by Tajikistani migrants staying longer abroad or by higher outflows of labour migrants. Most Tajikistani migrants are short term migrants and the average migration spell duration of those

Figure 1. Stock of Tajikistani migrants abroad and Russian macroeconomic indices

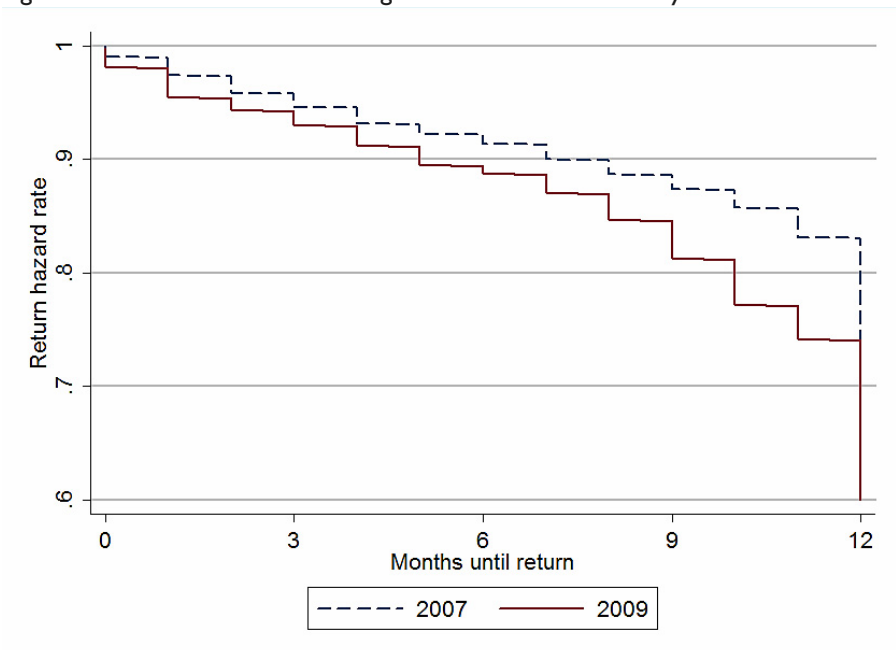


Note: Migration index value for September 2007 imputed. Source: TLSS 2007-09 and National Bank of Tajikistan.

who already returned (return migrants) declined from 12.5 months prior to the crisis (in 2006 and 2007) to 7 months (in 2008 and 2009).[1] Although indicative, these durations do not account for those migrants who have not returned yet. As migrants who are still abroad must be included into the overall picture, return hazards are a useful tool to detect changes in migration durations (Lindstrom, 1996; Reyes, 2001).

Figure 2 shows monthly return hazards starting from 12 months prior to the survey dates. Each vertical drop expresses the share of initially absent migrants returning to Tajikistan in a specific month. The full line (2009) decreases steeper than the dashed line (2007), indicating that migrants returned faster during the crisis. In other words, the duration of migration spells declined. After 12 months, almost 85 per cent of the 2007 stock was still abroad while the comparable number for 2009 is 75 per cent.

Figure 2. Return hazard rates of migrants within final 12 survey month

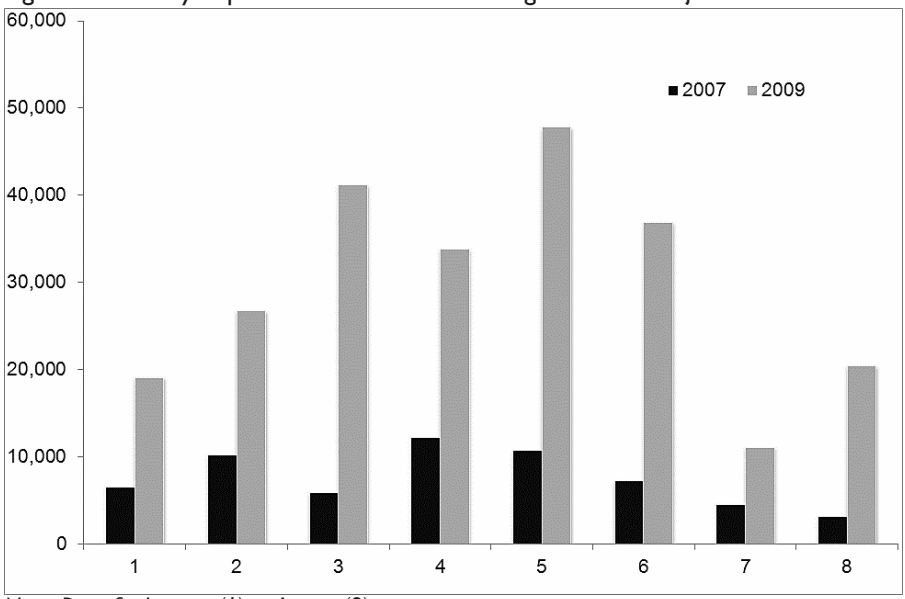


While reduced migration duration cannot explain the increased stock of labour migrants, the higher departure rate of migrants can. In the year 2007, on average 0.16 per cent of the Tajikistani adult population left the country per month, while the comparable figure rose to 0.53 per cent in 2009. Departures in absolute numbers show a strong exit tendency during the summer months (Figure 3) and thus directly relate to the increase in migrant stock during 2009 as evidenced in Figure 1.

The higher exit rate during the crisis is reconfirmed in the panel component of the data. While in 2007 almost 13 per cent of panel households had at least one member abroad during the previous 12 months, the number rose to almost 28 per

[1] Survey based evidence on migration duration suffers from not observing households who left the country altogether, but the number of those should be small in Tajikistan as households are normally large and as ethnic migration is no longer prevalent.

Figure 3. Monthly departures of international migrants from Tajikistan



Note: Data for January (1) to August (8).

cent in 2009 among the same households (Table 1, Panel A). Also, households increasingly started to send more than one member abroad. Panel B of Table 1 shows a high dynamic of households with respect to the migration status. Of those households who had a migrant in 2007, only 49 per cent also had at least one migrant in 2009 indicating that the composition of migrant households may have substantially changed as a consequence of the crisis.

Table 1. Household panel: Migration activity and dynamics, % of households

A. Migration activity		
	2007	2009
No migrant	87.3%	72.3%
1	9.5%	21.4%
2	2.3%	5.3%
3	0.8%	0.9%
4+	0.1%	0.1%

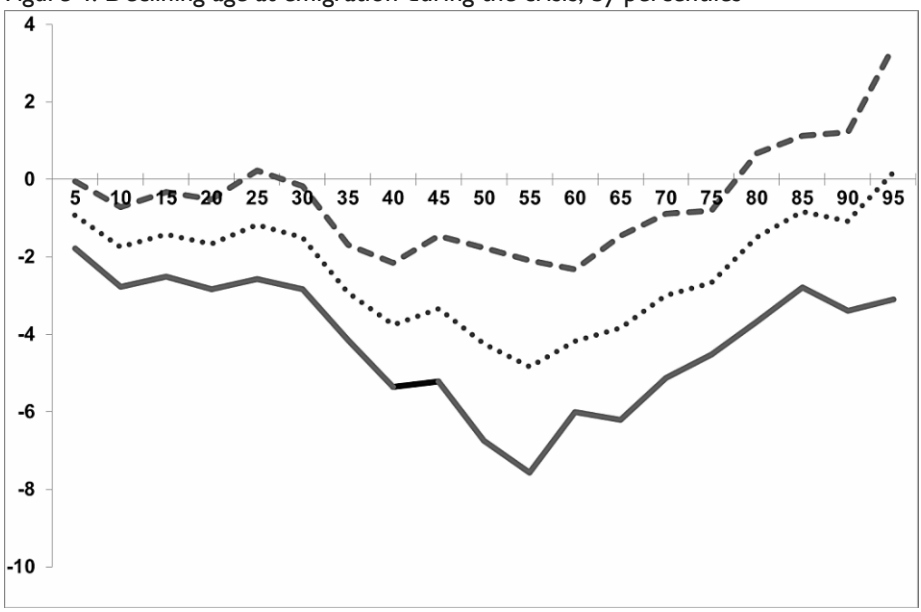
B. Migration dynamics (transition matrix)			
		12 months prior to 2009	
		No migrant	Migrant
12 months prior to 2007	No migrant	79.3	20.7
	Migrant	51.2	48.8

Note: Panel estimates of 1,503 households.

We find strong evidence that migration patterns respond to the increased risk from moving. Fewer migrants were able to obtain legal residence during the crisis, thus increasing their risk of police harassment (International Crisis Group, 2010: 11). The share of those without legal residence status increased from 34 per cent to 40 per cent. When considering the average age at migration it turns out that

migrants in 2009 are 2.3 years younger than their 2007 counterparts who were on average 33 years old. Taking a closer look at the entire age at emigration distribution shows a significant drop in migration age during the crisis in all parts of the distribution except for the top quarter. The median migrant was more than four years younger in 2009 as compared to 2007 (Figure 4). The observation that migration to Russia is increasingly dominated by younger people in times of recession is supported by the fact that more international migrants specify education as their main reason to go abroad. While the share of those who reported education as main motivation for migration was negligible in 2007 (0.7 per cent), it rose to (still modest) 1.8 per cent.

Figure 4. Declining age at emigration during the crisis, by percentiles



Note: The black line represents coefficients from quantile regressions of age at migration on a crisis dummy (year 2008 and 2009; controlling for gender). Dashed lines mark the 95% confidence interval. Drop in age at migration in years is reported on the y-axis. The x-axis indicates percentiles of the migrant distribution.

As younger people migrate, fewer of them have previous migration experience so that they have to rely stronger on personal networks with family and acquaintances (Figure 5). It should be noted that personal networks often have developed into migration support businesses, and migrants have to pay for the assistance provided by their relatives or acquaintances. Owing to reduced demand for foreign labour, the crisis has made it harder for migrants to arrange jobs from home. This implies that more migrants go to Russia without securing employment prior to their departures. However, established migration networks among family members and acquaintances not only reduce the cost of migration but also the risk associated with the move (Massey et al., 1993). As such, personal networks are an important medium to sustain the high stock of migrants abroad even in the face of increased labour market uncertainties in the destination country.

As migrants become more reliant on personal networks the scope for destination diversification declines. The share of migrants heading for Russia rose from 95

per cent to 97 per cent and even among the most important destination cities in Russia there is further concentration towards Moscow (Figure 6). The share of mi

Figure 5. Reason for destination choice before and after onset of financial crisis

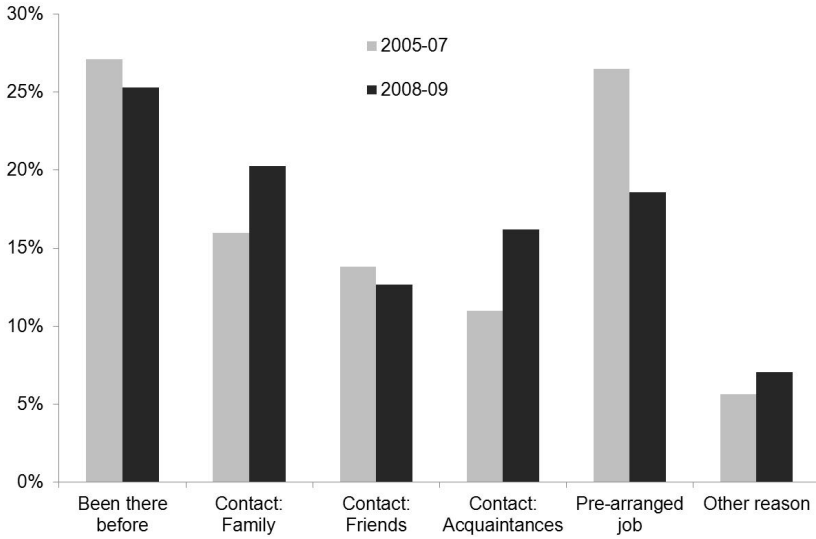
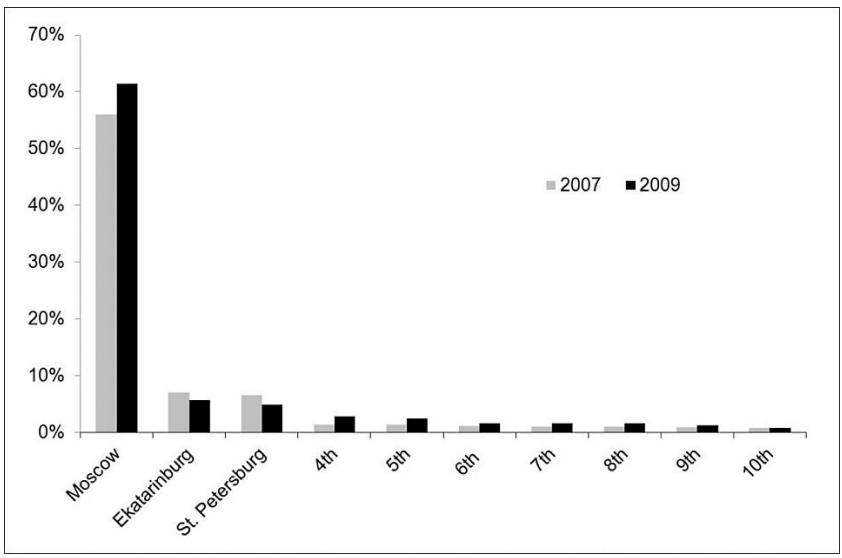


Figure 6. Increasing destination concentration after onset of financial crisis



grants heading for Moscow rose from 56 per cent to 61 per cent and the difference of five percentage points is statistically significant at the ten per cent level. This evidence stresses once more the importance of migration networks during the crisis: The increased risk from the crisis is counterbalanced by using personal contacts leading to clustering in the main migration destination. The fact that Tajikistan's

economy became even more dependent on one city is worrisome as a more diversified destination portfolio might have better reduced the crisis exposure.

As household seem unable to diversify with respect to destination, they expand into new occupations by increasingly sending women. While the vast majority of Tajikistani men worked in the construction sector, women traditionally work in housekeeping, caring and other service occupations. As Table 2 shows, the share of women migrants rose from 2007 to 2009, and especially picked up in 2008. In line with these observations, we find increases in caring, sales and service occupations among the migrants.

Table 2. Share of women among migrants

	2007	2009
In stock of currently absent migrants	6.61	13.01
Among recent exits (last two years)	6.26	8.64
Among this year's exits	5.45	7.54

The increased uncertainty of migration is also manifested in the various return reasons stated by migrants. While in 2007 the return decision was dominated by specific pull factors in the home country, push factors have gained in importance during the crisis (Table 3).

Table 3. Reason for return to Tajikistan 2007 vs. 2009

	2007	2009
Push factors (no residence or work permit, permit expired, expelled)	17.4%	23.9%
Pull factors (family reasons, homesick)	57.2%	43.1%
Ordinary return as work ended	25.3%	33.0%

Note: Per cent of known return reasons. An increasing share of individuals reports unspecified return reasons.

With the change of migration patterns during the financial crisis remittances were affected, too. On the one hand, we observe slightly lower ratios of migrants remitting money or remitting at all (Table 4). At the same time, more migrants seem to use cash and in-kind remittances simultaneously, potentially as a means of reducing exchange rate fluctuations. On the other hand, the share of household heads unable to report the earnings of the migrant increased drastically.[2] This might be due to earnings fluctuations or asymmetric information during the crisis. In sum, migrants remit on average 181 USD per month in 2009, as compared to 256 USD before (both expressed in 2007 USD). This drop of 29.5 per cent is in line with the predictions from macro data. However, the depreciation of the Tajikistani Somoni against the USD during the financial crisis helped receiving households in Tajikistan,

[2] Earnings of the person abroad are reported by the household head in *TLSS*.

reducing the plunge in remittances by a third.[3] Also, the higher migrant stock will have successfully balanced part of households' losses. When conditioning on full earnings information, the share of foreign income that migrants remitted dropped significantly from 2007 to 2009. In other words, migrants whose earnings were reported did not earn less than in 2007 but withheld a larger share of their income as precautionary savings in case they lose their job or want to return.

Table 4. Remittance behaviour of migrants abroad 2007 vs. 2009

Money remitted	Before financial crisis	81.2%
	During financial crisis	79.2%
In-kind remitted	Before financial crisis	7.2%
	During financial crisis	12.5%
No remittances sent	Before financial crisis	17.9%
	During financial crisis	19.6%
No foreign earnings reported*	Before financial crisis	6.9%
	During financial crisis	21.1%
Average amount remitted	Before financial crisis	256.1
per month (2007 USD)**	During financial crisis	180.6
Share of foreign earnings	Before financial crisis	79.2%
remitted***	During financial crisis	48.8%

*Notes: * This can be due to unemployment of the migrants abroad or the failure of the head of household to estimate earnings (e.g., because of high fluctuations of earnings)*

*** Amount of remittances is reported in USD, although some migrants might be paid in Russian Roubles—especially after the depreciation of the Rouble in late 2008. It makes little difference to the 2007 values whether a Russian CPI deflator or a Tajikistani CPI deflator is used.*

**** Only taking migrants with full information on earnings and amount remitted after outlier check.*

Conclusion

In this paper we showed that the global financial crisis further increased migration in a highly remittances dependent country, Tajikistan. The decline in the value of remittances coincides with the domestic economic slowdown in Tajikistan, so that households further expand the established migration system to cope with the domestic crisis. Despite the global financial crisis remittances remained a major source of finance for many households who have to bear most of the risk of Tajikistan's external dependence:

(1) The stock of Tajikistani migrants has increased during the period of economic crisis broadening the base but also the risks of remittance receipt.

(1A) The increase in the stock of migrants was driven by a higher rate of Tajikistani migrants going abroad in 2009 compared to the pre-crisis period. In order to

[3] In case migrants were paid in Rouble, receiving households suffered from a serious deterioration of the value of remittances while the Somoni appreciated sharply against the Rouble until March 2009. Until the interview period in 2009, the exchange rate returned, however, to its pre-crisis level.

increase employment chances, many households started to send more than one migrant abroad during the crisis.

(1B) Simultaneously, the average migration duration declined slightly, increasing relative migration costs.

(2) The pattern of migration has become more "risky"—during the crisis the average migrant was significantly younger than before and found it harder to obtain legal residence permits. At the same time, the share of migrants with pre-arranged (before departure) jobs declined implying more involuntary returns to Tajikistan as push factors in the destination country pressurize more migrants to leave. Households respond to these risks by relying more on familiar destinations with existing support networks. This reduces scope for regional diversification, however, the recently increasing share of women migrants points to increasing occupational diversification.

(3) Returns from migration fell as the average volume of real remittances per migrant declined by 30 per cent. This reduction is predominantly driven by precautionary savings of the migrants owing to increased risks.

Acknowledgments

The authors thank Barbara Dietz for helpful comments. Danzer gratefully acknowledges support from the VW Foundation for the research project 'Migration and Remittances in Kazakhstan and Tajikistan'. The views presented here are solely those of the authors, and should not be attributed to the World Bank group.

References

Becker, C.M., Musabek, E.N., Seitenova, A.S. and Urzhumova, D.S. (2005). "The Migration Response to Economic Shock: Lessons from Kazakhstan", *Journal of Comparative Economics*, 33: 107-132.

Danzer, A.M. and Ivaschenko, O. (2009). "Labor Migration, Remittances and Welfare Implications for Tajikistan", In: The World Bank: *Republic of Tajikistan Poverty Assessment*, Chapter 4.

Global Info Mine (2010). "Aluminium Mining." URL: http://www.infomine.com/ commodities/aluminum.asp, retrieved: 10 March 2010.

Goss, E.P. and Paul, C. (1986). "Age and Work Experience in the Decision to Migrate", *The Journal of Human Resources*, 21, 3: 397-405.

International Crisis Group (2010). "Central Asia: Migrants and the Economic Crisis." Asia Report No. 183. URL: http://www.crisisgroup.org/~/media/Files/asia/central-asia/183%20Central%20Asia%20Migrants%20and%20the%20Economic%20Crisis.ashx, retrieved: 11 July 2010.

Jaeger, D., Dohmen, T., Falk, A. Huffman, D., Sunde, U. and Bonin, H. (forthcoming). "Direct Evidence on Risk Attitudes and Migration", *The Review of Economics and Statistics*.

Keely, C.B. and Tran, B.N. (1989). "Remittances from Labor Migration: Evaluations, Performance and Implications", *International Migration Review*, 23, 3: 500-525.

Lindstrom, D.P. (1996). "Economic Opportunity in Mexico and Return Migration from the United States", *Demography*, 33, 3: 357-374.

Martin, P. (2009). "Recession and Migration: A New Era for Labor Migration?" *International Migration Review*, 43, 3: 671-691.

Massey, D.S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A. and Taylor, J.E. (1993). "Theories of International Migration: A Review and Appraisal", *Population and Development Review*, 19, 3: 431-466.

McKenzie, D. (2003). "How Do Household Cope with Aggregate Shocks? Evidence from the Mexican Peso Crisis", *World Development*, 31, 7: 1179-1199.

NCC America (= National Cotton Council of America) (2010). "Monthly A-Index." URL: http://www.cotton.org/econ/prices/monthly.cfm, retrieved: 10 March 2010.

Obetkon, R. (2009). Light at the End of Tunnel for the Russian Construction Industry. PMR Publications: Kraków.

Olimov, S. and Bosc, I. (2003). Labour Migration from Tajikistan. IOM: Dushanbe.

Overseas Development Institute (2009). The Global Financial Crisis and Developing Countries: Taking Stock, Taking Action. Briefing Paper 54, September 2009.

Parrado, E.A. and Cerrutti, M. (2003). "Labor Migration between Developing Countries: The Case of Paraguay and Argentina", *International Migration Review*, 37, 1: 101-132.

Ratha, D., Mohapatra, S. and Xu, Z. (2008). "Outlook for Remittance Flows 2008-2010: Growth Expected to Moderate Significantly, but Flows to Remain Resilient", Migration and Development Brief 8, The World Bank: Washington D.C.

Ratha, D., Mohapatra, S. and Silwal, A. (2009). "Migration and Remittance Trends 2009: A Better-than-Expected Outcome so Far, but Significant Risks Ahead", Migration and Development Brief 11, The World Bank: Washington D.C.

Ratha, D., Mohapatra, S. and Silwal, A. (2010). "Outlook for Remittance Flows 2010-2011: Remittance Flows to Developing Countries Remained Resilient in 2009, Expected to Recover during 2010-2011", Migration and Development Brief 12, The World Bank: Washington D.C.

Reyes, B.I. (2001). "Immigrant Trip Duration: The Case of Immigrants from Western Mexico", *International Migration Review*, 35, 4: 1185-1204.

Schoorl, J.J., Heering, L., Esveldt, I., Groenewold, G., van der Erf, R.F., Bosch, A.M., de Valk, H. and de Bruijn, B.J. (2000) Push and Pull Factors of International Migration: a Comparative Report. Theme 1 General Statistics. Eurostat: Luxembourg.

Shahriari. H., Danzer, A.M., Giovarelli, R. and Undeland, A. (2009). Improving Women's Access to Land and Financial Resources in Tajikistan. Economic Sector Work Report, The World Bank: Washington D.C.

World Bank (2009). Republic of Tajikistan Poverty Assessment No. 51341-TJ. Washington D.C.

World Bank (2010). "Remittances Data Inflows." URL: http://www.worldbank.org, retrieved: 09 July 2010.

Yang, D. (2008). "International Migration, Remittances and Household Investment: Evidence from Philippine Migrants' Exchange Rate Shocks", *The Economic Journal*, 118: 591-630.