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2020 H2	Economic Review

#### A STATISTICAL AND EMPIRICAL OVERVIEW OF REMITTANCE FLOWS Gerti Shijaku<sup>1</sup>, Research Department, Bank of Albania

ABSTRACT

Remittance flows constitute an important source of income for financing aggregate demand. They constitute also an important component in Albania's balance of payments statistics. For this reason, this paper analyses a number of important issues related to their sustainability, shock persistence, and rate of return to equilibrium in the event of an economic shock. An important part is the analysis of the long-term relationship, if any, between remittance flows and macroeconomic indicators related to sending and receiving countries. The study focuses on the aftermath of the global financial crisis.

#### 1. HOW TO UNDERSTAND AND MEASURE REMMITANCES?

The economic significance of remittances, or what are otherwise known as social remittances, goes beyond what official balance of payments statistics suggest, for both sending and receiving countries. The economic meaning of remittances is derived from the word remittance, which means to send back. The term most often used today to describe remittances refers to private funds which are commonly understood as money or goods that someone working abroad (migrants) sends to his family members and friends in their countries of origin, which tend to target the specific needs of the recipient and thus can play an effective role in poverty reduction [Ratha (2007)]<sup>2</sup>. The most common way to make a remittance is by using an electronic payment system through a bank or a money transfer service through the institutions that enable these transfers to take place. According to Ratha (2020) it is difficult to estimate the exact size of remittance flows because many transfers are made through unofficial channels. However, according to this author, a typical remittance transaction takes place in three steps:

- a) The migrant sender pays the remittance to the sending agent using money, check, money order, credit card, debit card, or has debit instructions sent by e-mail, telephone, or via the Internet.
- b) The sending agency instructs its agent to the recipient country to submit the remittance.
- c) The paying agent makes the payment to the beneficiary.

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<sup>&</sup>lt;sup>2</sup> See also Adams and Page (2003); Adams and Page (2005); and Gupta, et al., (2009).

For the settlement between agents, in most cases, there is no real-time transfer of funds. The balance owed by the sending agent to the paying agent is settled periodically through a commercial bank, while informal remittances are sometimes settled through the trade of goods. The costs of a remittance transaction include a fee charged by the sending agent, usually paid by the sender, and a currency conversion fee for delivering local currency to the recipient at another location.

However, global estimates of remittances include transactions beyond what is usually assumed to be remittances, as the statistical definition used for remittance data collection is broader [IMF, (2009)]. Also, such estimates do not include informal transfers. Remittances can also be of a social nature, such as the ideas, behaviors, identities, social capital and knowledge that migrants acquire during their stay in another part of the country or abroad, which can be transferred to communities of origin [Levitt , (1998)]. Broadly speaking, any payment of an invoice or money transferred to another party can be called a remittance and as such constitute one of the known forms of remittances. The methodology for recording remittances classifies them into three balance of payments items, as follows:

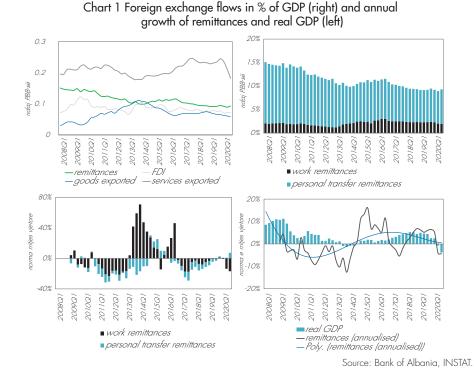
- a) "income from work" gross income of emigrants living abroad for less than 12 months, including the value of benefits per night (classified in the current account, subcategory "income from work";
- b) "remittances from emigrants" total remittances sent by emigrants living abroad for more than one year (classified in the current account, subcategory "current transfers"; and
- c) "transfers from emigrants" the net value of remittances from migrants moving from one country to another (classified in the capital account, in the category "capital transfers").

#### 2. REMITTANCES AS PART OF THE BALANCE OF PAYMENT

Remittances<sup>3</sup> constitute an important source of income for financing aggregate demand and important elements in household savings. As such, remittances constitute an important element in Albania's balance of payments statistics. This is noted by the relative weight that it continues to have in terms of Gross Domestic Product (GDP) and other macroeconomic indicators. Remittance income (Figure 1) shows that their contribution continues to be the largest inflow into the Albanian economy, leaving behind foreign direct investment and exports of goods. Remittance inflows are at the same time the most stable and secure financial inflow in the Albanian economy, over the years, surpassing the positive effects of other foreign capital flows. The data show that during the period 2008 Q1 - 2020 Q3, the ratio of remittances to GDP amounted to nearly 9.3%. The largest share of remittances is occupied by those related to personal transfers of sending individuals. This indicator has marked a positive annual growth rate at nearly 4% on average. This created a

<sup>&</sup>lt;sup>3</sup> Includes primary income for "employee compensation" and informal transfers from secondary income.

crucial financial support especially during the difficult economic period in the country connected with the negative shocks caused by the earthquake episode and the global pandemic as a result of the COVID-19 virus. This confirms the theoretical assumptions that remittance flows are driven by countercyclical trends, increasing during the economic downturn or after a natural disaster in the countries of origin of migrants, when private capital flows tend to decrease. Understandably, the importance of remittances is also shown by its effect in support of economic growth. It is estimated that the negative developments related to the decline in remittance inflows during the period 2009 Q1 to 2014 Q4 have been accompanied by a debility in GDP growth. Their upward trend during the following periods seems to have contributed positively to the improvement of economic performance in the country.



During the period 2008 Q1 – 2020 Q3, the ratio of remittances to GDP reached at nearly 9.2% on average. This weight has marked a slight increase in the period after 2017, continuing the significant support of this item in the macroeconomic framework of the country. Their importance is also confirmed by the reports to other indicators. First, within current account statistics, remittance flows continue to constitute a significant financial support to cover the trade deficit. At the end of 2020 Q3, Figure 2, total remittances averaged at nearly 42.1% of the trade deficit in goods. If placed in relation to the total trade deficit of goods and services, the ratio rises to nearly 64.6% for the same period. The ratio of this performance has been higher than its historical average, starting from the period 2015 Q1. At the same time, the average ratio of remittances to exports of goods is at nearly 157.2% and to foreign direct investment is at nearly 128.4%. The significant macroeconomic contribution of remittances is also noticed in the positive coverage that accompanies its performance

towards the dynamics of the current account deficit, finding a momentous place in mitigating its effects. At the end of 2020 Q3, the current account deficit widened by 0.7 percentage points of GDP and the contribution of remittances in this regard is estimated at nearly 0.5 percentage points, while the contribution of export earnings fell by 5.6 percentage points and that from FDI by nearly -0.6 percentage points. This is another sort of evidence supporting the conclution on the significant impact that remittance flows have on improving equilibrium and macroeconomic dynamics in the country. This means that maintaining these levels is very important for preserving the overall level of income, consumption and consequently real economic growth.

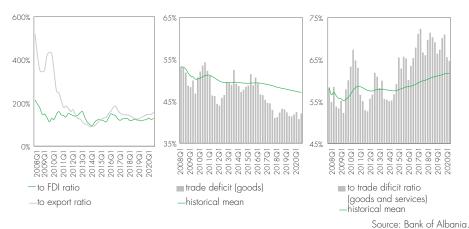


Chart 2 Ratio of remittances flows to balance of payments indicators.

## 3. THE BEHAVIOR OF REMITTANCES: AN EMPIRICAL ANALYSIS

Many studies highlight the essential importance of remittances at the macro level. The role that these financial resources play in promoting migrant entrepreneurship, community and family creation, and political integration is widely recognized [Levitt, (1998)]. However, little is known about how various economic factors influence their behavior over time. Empirical analysis is also scarce to understand whether their timely behavior is consistent. Likewise, to assess whether their persistence against shocks is great or whether returning to a new equilibrium requires more time. This information is scarce, especially in the case of a small open economy, namely Albania. Therefore, this section focuses on addressing the four core hypotheses, which are as follows:

- Are remmitances flows sustainable?
- Are remittance flows affected by autoregressive behavior?
- Is the persistence of shocks on remittances strong?
- What is the long-term relationship between remittances and key macroeconomic indicators of the sending and receiving countries?

To answer these hypotheses, an empirical approach was followed, which focuses on specifying different models. Each of these hypothesis is addressed below as appropriate.

#### 3.1. ARE REMITTANCE FLOWS SUSTAINABLE?

In the literature, the treatment of the concept of sustainability (stationarity) of an observable macroeconomic indicator is defined as a certain dynamic random process, which may be changing over time. For this reason, it is expected that through this process several different values will be obtained, which are assumed to be stable if their magnitude revolves around the level of their historical average, meaning mean-reverting. Thus, the dynamic performance of an indicator is considered stable if the trajectory of the values obtained from it is around the level of its historical average. This means that its higher rates over a period of time are associated with lower rates at a later point (period), and vice versa. This assumption is based on the theoretical estimation technique according to the autoregressive moving average approach, known as the ARMA method. According to this method, a series is said to be (weak or covariance) no time-varying if the mean and autocovariance of the series do not depend on time. Any time series that is time-varying is accepted to be defined by the root unit in the series. In these cases it is said that the series is non-stationary.

For this reason, to analyze the stability of remittance flows, an estimation approach is applied according to the structure of the unit root characteristics<sup>4</sup>. This approach makes it possible to assess whether the indicator of remittance flows to GDP ratio, or other related indicators, follows a stationary trajectory around an average or linear trend, or whether it is non-stationary due to a unit root [Kocenda and Cerný, (2017)]. In this case, a stationary time series is one where statistical properties, such as the mean and its variance, are constant over time. As noted in Table 1, the trajectory of the performance of indicators related to remittances, both in the case of those from work or those from transfers as well as their total value, is almost the same, but the results of the structure of characteristics of each of these indicators is mixed. If we refer to the statistical P values related to the probability of accepting the null hypothesis, this hypothesis is rejected in some cases according to the results of the ADF test. This means that the mean and auto-covariance of the analyzed series depend on time horizon. So these remittance related time series are not stable. Results that support these findings are stronger when a constant or a constant and a trend are included in the evaluation method. However, if these features are not included in the estimation method, then the findings are far from accepting the null hypothesis. This means that according to this analysis

<sup>&</sup>lt;sup>4</sup> The the unit root characteristics approach, previously followed by Shijaku (2012) for fiscal policy sustainability analysis, relies on the statistical test related to Augmented Dickey Fuller (ADF), Philip Perron (PP), and Kwiatkowski - Phillips - Schmidt - Shin (KPSS). Unlike other tests, the KPSS test the basic hypothesis under the assumption that the trajectory following a given time series has a static trend. The alternative hypothesis assumes that this trajectory is non-linear. The data are quarterly. In all cases the time delay is an optimal selection of the method. The evaluation analysis covers the period Q1 2008 - Q3 2020.

the null hypothesis can be rejected, implying that the data analyzed under this variant are stable. On the other hand, for the most part, results through ADF test approach are contradicted by those of the PP test, especially in the case of remittance flow analysis. This means that the conclusion whether the time series related to remittances are characterized by the existence of the unit root can not be final, as the results present mixed estimates.

At the same time, the absence of a unit root is not a test of stationarity, but, according to the KSPP test model, it has to do with resistance to an upward (downward) trend that is explained through a determinant such as the time trend. This is an important difference in the analysis of the consistency of time series. This is because it is possible for a time series to be non-stationary (not stable), i.e. not characterized by unit root features and still be stationary in trend. This is because, as in the case of fixed or unstable unit series processes, the mean value of a time series can increase or decrease over time. On the other hand, in the presence of a shock, stationary trend processes tend to return to the historical average (i.e., transiently, the values taken over time by an indicator (time series) may converge again towards the rising average, which is not affected by shock) while unit root processes have a permanent impact on the mean value (i.e. no convergence over time). Therefore, as noted from the KPSS test results reported in Table 1, the statistical P values in some of the results are less than the critical value (reported in this table) at a significance levels of 10%, 5 % and 1% making the null hypothesis acceptable in these cases. These results are similar especially in the case of annualized flows, which are assumed to better express the characteristics associated with the distinguishing features in the presence of the possible effects of a time trend. This means that there is a steady upward (or downward) trend that accompanies the performance and statistical properties of these series in general, which is constant over time. This means that these series are stable (stationary) around an average or linear trend. So we can say that these series are stationary not because of the lack of unit root, but because of its steady routine around the trend. Therefore, evaluating the results in general due to the change in the results of the ADF, PP and KPSS test, it can be concluded that remittance flows are stable around a defining trend. This makes their performance quite easy to build expectations towards them in the future accurately, as other complementary results show that their current performance is not determined by structural breaks. Similarly, in this regard the subsequent supportive results show that their behavior is affected in the short term by autoregressive behavior. This is another very important element that determines the stable performance of remittances.

			ment Jller (ADF)	Phillips-I	Perron (PP)	Kwiat		illips-Schm PSS)	idt-Shin
Indicator	Special charecteristics	Level	I(1)	Level	I(1)	Stat. Value		Critical valu Simptomati	
						Value	1%	5%	10%
	Constant	.494	.000	.000	.000	.788	.739	.463	.347
Remmitances (Total) to GDPb	Constant and trend	.632	.000	.000	.000	.220	.216	.146	.119
	None	.024	.000	.317	.000				
	Constant	.489	.000	.013	.000	.860	.739	.463	.347
Remmitances from transfers to GDPb	Constant and trend	.825	.000	.000	.000	.293	.216	.146	.119
	None	.012	.000	.239	.000				
	Constant	.505	.000	.000	.000	.448	.739	.463	.347
Remmitances from work to GDPb	Constant and trend	.729	.000	.000	.000	.173	.216	.146	0.119
	None	.495	.000	.180	.000				
	Constant	.446	.000	.432	.000	.827	.739	.463	.347
Remmitances (Total) to GDPc	Constant and trend	.664	.000	.657	.000	.152	.216	.146	.119
	None	.021	.000	.011	.000				
	Constant	.419	.000	.421	.000	.889	.739	.463	.347
Remmitances from transfers to GDPc	Constant and trend	.868	.000	.819	.000	.174	.216	.146	.119
	None	.007	.000	.006	.000				
	Constant	.584	.000	.587	.000	.394	.739	.463	.347
Remmitances from work to GDPc	Constant and trend	.849	.000	.849	.000	.112	.216	.146	.119
	None	.552	.000	.546	.000				

Table 1. Results of the structure of the root characteristics of the unit.

a – Kwiatkowski-Phillips-Schmidt-Shin (1992)

b – Related to remittances flows.

c – Related to annualised flows.

Source: Author's calculations.

# 3.2 ARE REMITTANCE FLOWS AFFECTED BY AUTOREGRESSIVE BEHAVIOR?

In statistics, or in the analysis of time series processing related to macroeconomic data, autoregressive behavior is defined as a certain dynamic random process that changes with time and the values obtained from it depend linearly on previous values, perhaps even seems to include a stochastic term (an unpredictable inappropriate term) related to the indicator itself. Therefore, to analyze the autoregressive behavior of remittances an evaluation approach is applied according to the structure of the variance decomposition table5. This approach enables the assessment of the impact that the indicator related to remittance itself or each of the other macroeconomic components, whether related to the sending or receiving country, has on the trajectory of remittance flows during a given period of time.

<sup>&</sup>lt;sup>5</sup> The decomposition structure of variance relies on the specification of a vector autoregressive model (VAR). This model consists of a system with more than one equation intertwined in more than one developing random variable. Macroeconomic indicators included in the model represent total remittances (REM); Eurozone GDP (GDP<sup>EZ</sup>) and Albania (GDP); the annual inflation rate of the Eurozone (P<sup>ZE</sup>) and that of Albania (P); exchange rate Lek - Euro (EX); and an indication of the spread of the domestic interest rate to that of Germany (s). The data are quarterly. The analysis covers the period Q1 2008 - Q3 2020. The lag in the VAR model is 4.

	inunce de	componor	ruccorun	Ig io ine i	и порре	acn.		
Period	S.E.	REM	GDPEZ	GDP	PEZ	Р	EX	S
1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	63.3	10.3	9.7	7.6	4.9	4.2	0.0
3	0.0	43.8	10.0	24.9	6.2	3.4	11.1	0.6
4	0.1	16.5	55.2	21.3	2.0	1.8	3.0	0.2
5	0.1	12.0	57.7	22.4	0.9	0.9	5.8	0.2
6	0.2	10.7	62.2	19.5	0.4	3.4	3.5	0.2
7	0.4	5.9	69.0	21.1	0.4	1.0	2.5	0.2
8	0.4	6.0	66.3	19.1	0.2	4.4	3.5	0.5
9	1.0	4.6	68.3	23.9	0.3	1.0	1.7	0.2
10	1.1	4.6	64.1	21.6	0.3	4.6	4.1	0.6
11	2.8	4.8	68.9	23.6	0.2	1.0	1.3	0.1
12	2.9	4.5	63.2	22.1	0.4	4.1	5.1	0.7
Cholesky Or	dering: RFM		D. PEZ. P. FX.	s				

Table 2. Variance decompotion according to the VAR approach

Source: Author calculations.

The autoregressive behavior of remittances is strong in recent periods, as noted in Table 2. The distribution of this behavior is estimated to be relatively strong within three time periods. So as such it lasts at least up to three quarters. This means that the expected values of remittance flows can be predicted according to an autoregressive behavior based on its past value performance, for at least 3 periods ahead. This characteristic behavior then fades taking on a relatively small weight after 12 periods. For other periods, after the third period, the distribution of factors that determine the dynamics of remittance behavior is estimated to be relatively more influenced by developments related to other macroeconomic indicators. Particularly a large weight in the performance of remittances seems to be played by developments related to the simultaneous production output in the sending countries, measured in this case through the GDP of the Eurozone, and that in the receiving countries, measured in this case through Albania's GDP. Other indicators are estimated to have no impact on the dynamics of remittances. An exception to this trajectory is the performance of the exchange rate, which in the third period manages to explain up to 11% of remittance behavior. Then its effect fades. These results imply that the indicators that affect the trajectory of remittances are particularly related to output performance in sending and receiving countries. In both cases there is a complete digestive tract, especially after the third period. The weight of the effect of production performance in the Eurozone countries is relatively 3 times greater than that of Albania. This effect reaches up to nearly 69% of explanatory power. However, from the time horizon point of view, results show that in the short run expectations on remittance flows are influenced by their autoregressive behavior. Meanwhile, in a longer time horizon, this tendency is reversed as the economic rendiment in the sending and receiving countries takes on a greater weight and as such are stronger determinants of this behavior. These results are expected as they relate to information asymmetry. This asymmetry is influenced by the availability of information on the performance of other indicators and the dynamics of correlation between macroeconomic indicators.

### 3.3 IS THE PERSISTENCE (MAGNITUDE) OF A SHOCK ON REMITTANCES STRONG?

The empirical analysis, as it is discussed above, shows that remittance flows are correlated with the performance of other macroeconomic indicators. Therefore, the magnitude of the long-term response of these flows as a result of a shock to another macroeconomic indicator related to it, which is described as the persistence of shocks to remittances, is an empirical issue not studied previously in the case of Albania. As noted, even from this analysis, the characteristics of remittances play a key role in the design and implementation of macroeconomic policies and have important consequences for the behaviour of private agents. Based on the assumption of Willis (2003) we have defined the persistence of the remittance shock as the speed within which their flows return to the previous flow or to a new equilibrium level after the effect of a shock materialises. So, in this view, shock persistence in this case is defined as the continuous effect of an infinitely (very) small shock that affects the future performance of remittances to return to the equilibrium level, for which three types of persistence can be distinguished:

- a. "Positive serial correlation on remmitances";
- b. "Delays between systematic economic policy actions and their impact (peak) on remittances"; and
- c. "Delayed responses to remittances to non-systematic macroeconomic policy actions".

For the evaluation of the indicator of type (a), as in the case of Kota (2011), we are based on the analysis according to the simple evaluation of the AR (1) and MA (1) coefficients based on the Autoregressive Moving Average method. This method is widely used to measure the inertia of a macroeconomic indicator. In our case, this method was approximated to measure the inertia of remittances. To ensure that our results are not specific to a particular measurement of remittances, we analyze the properties of two different indicators: net flows and annualized flows. These indicators express the performance of remittances for labor flows, transfers and their total.

As noted from Table 3, the results of the AR parameter (1) expressed through  $\rho$  show that the persistence measured for the period [3] reaches an absolute value of 0.978 for total remittance flows, indicating that these flows show relatively high persistence throughout this period. This trend is also observed in the case of different types (indicators) of remittance. In the case of remittances from transfers their persistence is higher than in the case of total remittances. Annualized remittances show a higher level of persistence compared to flows. Compared to the previous assessment, total remittances show a greater persistence. However, compared to different samples, the persistence of remittances is stronger in the period [1], but smaller in the period [2]. This indicates that the persistence of remittances has shrunk during the period [2]. This behavior is even higher when we use annualised data.

As Marques (2004) argues, there is a close relationship between the persistence of an indicator and the average return. According to him persistence should be assessed given the quality of the average return of the series<sup>6</sup>. The series showing low average returns, as Kota (2011) suggests, therefore describes the average slightly more often, implying a greater persistence. The results of the parameter MA (1) show that its absolute value reaches 0.052 in the case of total remittances. This value is relatively lower than that of remittances from work and / or those from individual transfers. Remittances from transfers have the highest MA value (1). However, in all cases the value for each of them coincides with that of the coefficient  $\rho$ . This confirms that the persistence of remittances in each case is high.

			Period	
Indicator		[1]	[2]	[3]
		2008 Q2 -2013 Q4	2014 Q1 –2020 Q3	2008 Q2 - 2020 Q3
	Work	0.639	-1.000	0.862
	VVOIK	[-0.224]	[1.000]	[-0.671]
Flows to GDP	TRANSFERS	0.943	0.842	0.984
ratio	TRAINGI ERG	[-0.677]	[-0.628]	[-0.694]
	TOTAL	0.938	0.853	0.978
	IOTAL	[-0.697]	[-0.752]	[-0.755]
	Work	0.818	0.674	0.890
	VVOIK	[0.520]	[0.139]	[0.213]
Annualised Flows to GDP	TRANSFErs	0.979	0.904	0.989
ratio	IRAINSPERS	[-0.016]	[0.304]	[0.108]
		0.981	0.912	0.988
	TOTAL	[-0.127]	[0.064]	[-0.052]

Table 3. Results on the persistence (p) of remittances according to AR(1) approach and the moving average MA(1) in [].

Source: Author calculations.

However, as suggested by Kota (2011), the persistence of an indicator analyzed according to method (a) is not an acceptable definition of persistence. First, so far we are dealing with persistence estimates using the one-variable method where the empirical literature assumes a constant long-run equilibrium level of remittances. Second, the parameter  $\rho$  provides information about the relative magnitude of the cumulative impact of a shock across series, but we cannot rely on it to obtain information about the relative absorption time of a shock. To get information about the latter, we must rely on other indicators that determine the level of persistence. For this reason, other definitions of persistence relate to the idea of speed, i.e. the response of remittances to a shock. If the velocity is low, then the velocity of return to equilibrium is small, consequently we say that remittance flows are not (very) persistent, and vice versa. Therefore, the issue of persistence was further followed by the error correction mechanization (ECM) method, which is estimated as presented in equation (1) below:

<sup>&</sup>lt;sup>6</sup> However, as Kota (2011) suggests, this classical method presented above assumes a constant average for the whole period. However, this may not always be the case, so a time-varying average appears to be more useful than a constant average. This limitation is the same in the case of the parameters *ρ*.

$$\Delta logREM = -0.128 * [logREM_{t-1} - 0.306 * logGDP_{t-1}^{EZ} - 0.317 * logGDP_{t-1} (-2.3) (-2.9) (-5.8)$$

$$(1)$$

$$+ 0.550 * P_{t-1}^{EZ} + 0.502 * P_{t-1} - 0.334 * EX_{t-1} + 0.209 * s_{t-1} + 4.179] (-3.0) (-5.0) (-4.7) (-2.2)$$

As can be seen from the data of equation (1), the results of the ECM parameter expressed through the coefficient  $\alpha$  show that its value is -0.128. Its magnitude is accompanied by a statistical value, expressed in (), which is approximately 2.3. These results indicate two important features. On the one hand, a negative sign that accompanies the value of the coefficient  $\alpha$  means that remittance flows are determined in the long run by the performance of other macroeconomic indicators. This reconfirms the suggestion of the Johansen cointegration test that there is a long run relationship between the indicators. So, shocks effect on them are expected to be determined in the same way by this tendency. This means that there is a long-term relationship and an error correction vector, which brings remittance flows back into equilibrium, in the event of a macroeconomic shock. This relationship is found to be statistically significant, given that the value of the coefficient to reach this conclusion is 2.3, i.e. greater than 2. So, Granger (1986) assumption that the long-run equilibrium between the indicators that are cointegration between them is complementary and achievable, even in the case of remittance flows. This supports also the assumption that remittance flows are determined by both the macroeconomic factors of the sending and receiving countries. On the other hand, however, the magnitude of the error correction vector is relatively low. Its value of 0.128 indicates that the speed of return to the previous equilibrium, or towards a new equilibrium, in case of an economic shock is relatively low. This means that in the event of a shock any deviation from the equilibrium level will be corrected over a relatively longer period of time.

In summary, we conclude that both the persistence measurements dictated above by the "sum of autoregressive coefficients" and the "average sample size", which can be referred to as approximate complementary indicators for a given period, show that the persistence of remittances is high. However, the speed of their return to the new equilibrium, or even the previous one, is slow according to what is suggested by the "error correction vector" method. However, the results confirm that the equilibrium of remittance flows is closely related to the macroeconomic factors of sending and receiving countries.

#### 3.4 WHAT IS THE LONG-TERM RELATIONSHIP BETWEEN THE REMITTANCES AND THE MAIN MACROECONOMIC INDICATORS OF THE SENDING AND RECEIVING COUNTRY?

The empirical analysis for estimating the long-run relationship between remittance flows and other macroeconomic indicators was analyzed based on equation (1) presented in the previous section. This equation includes

various macroeconomic indicators of the sending country as well as other indicators related to the receiving country. Thus, in this model remittance flows are expressed as a function of economic performance and the level of prices of the sending and receiving country, the exchange rate and the spread of interest rates.

As noted from from the results of equation (1), the findings show that remittance flows are positively affected by economic activity. The increase of this activity in the sending country has an impact with a response value of nearly 0.306, while the one in the receiving country reaches the value 0.317. The value of this indicator in the first case shows that any improvement by 1 percentage point in the economic performance in the sending countries increases the remittance flows in the long run by approximately 0.306 percentage points. This means that remittance flows are determined positively in the long run by the level of income in the sending country. This relationship is found to be also statistically significant at the conventional level. Similarly, the enhancement of economic activity in the receiving country was found to be positively related to remittance flows. The results show that for every 1 percentage point increase in output in the receiving countries, remittance flows will increase by approximately 0.317 percentage points. This relationship was also found to be statistically significant. The positive correlation between them means that senders of remittances are driven by their tendency to invest in receiving countries if output ratios in these countries increase. Moreover, the link between them is relatively stronger than that between remittance flows and the economy performance of the sending country. This means that remittance flows are driven more by the propensity to invest than by the income (welfare) effect.

Another important element is the relationship between risk factors and remittance flows. First, this aspect is analyzed through the relationship between remittance flows and the overall price level in sending and receiving countries. This connection is found to be negative in both cases. Their effect was even found to be statistically significant. The size of the effect is relatively slightly larger in the case of sending countries. However, in both cases, the sign of the coefficient that reflects these indicators shows that the increase in risk, as a result of a faster increase in the overall price level in each country, reduces remittance flows. The shocks associated with this effect were found to have a relatively greater impact compared to that of other indicators. Second, this negative effect was also found in the case of analyzing the long-run relationship between remittance flows and sovereign primary risk. This risk is measured through the sovereign premium risk spread indicator calculated as the difference between the 12-month rate of government bonds and that of a risk-free country such as Germany. An increase in this indicator means that the risk in the receiving countries is greater than that in the sending country, and vice versa. For every 1 percentage point increase of this indicator, remittance flows fall by about 0.209 percentage points. This relationship was found to be also statistically significant.

Finally, results represent a direct relationship between the appreciation of exchange rate and remittance flows. For every 1 percentage point increase of the exchange rate, remittance flows were found to decrease by approximately

0.334 percentage points, and vice versa if the value of the domestic currency in the market depreciates. This relationship was found to be statistically significant in the long run. This means that exchange rate patterns are also another important determinant of remittance flows. Similarly, judging through the sign of the coefficient, it means that remittance flows are determined by the motive to support consumption in the conditions of declining purchasing power parity due to the devaluation of the domestic currency.

#### 4. CONCLUSIONS

The theoretical and empirical literature presents an exhaustive elaboration of the economic significance that remittance flows have both for the economy in the host countries as a whole and for households in these countries. For this reason, in this paper we analyzed a number of characteristics related to remittance flows. Results in each case explain a number of important issues related to their sustainability, shock persistence and speed of return to equilibrium in the event of an economic shock. An important part was also the analysis of the long-term relationship, if any, between remittance flows and macroeconomic indicators related to sending and receiving countries. In each case, the analysis is based on data related to the performance of these indicators after the global financial crisis.

From the results data in each section of this analysis we concluded that remittance flows continue to constitute a significant stable source of revenue for financing aggregate demand. Beyond this, remittance flows continue to be an even more important item in the balance of payments as a major input contributor of foreign exchange flows to the Albanian economy, leaving behind foreign direct investment and exports of goods. Their contribution continues to be important in terms of financing the current account deficit, finding a valuable place to mitigate its effects. This means that maintaining these levels is very important for holding a relatively unchanged the level of overall income, consumption and consequently real economic growth. The results show also that remittance flows appear stable (stationary) around a defining trend in the long run. The analysis of other characteristics show at the same time that their performance in the short run is influenced by autoregressive behavior, which is another very important element that confirms the stable performance of remittances. Remittance flows were found to show a strong persistence from shocks, however their speed towards returning to equilibrium level is estimated to be relatively slow. On the one hand, we found that remittance flows are determined in the long run by a cointegrated relationship with other macroeconomic indicators. This means that their behavior is not random, but is influenced in time by the macroeconomic developments in the sending and receiving country. On the other hand, we found that in the long run their flows are positively affected by output performance in sending and receiving countries, but negatively by elements related to primary sovereign risk and faster price increases. In conclusion, we found that these flows are determined also by factors related to their incentive to cover the decline in purchasing power prity as a result of currency devaluation in the receiving countries.

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#### COVID-19 IMPACT ON REMITTANCES IN ALBANIA: TAKING STOCK, LOOKING AHEAD<sup>1</sup> Margerita Topalli, Research Department, Bank of Albania

#### 1. INTRODUCTION

Europe and the rest of the world are experiencing an unprecedented shock. The Covid-19 crisis that has taken their economies by surprise, has unleashed the worst global crisis in our lifetime. No country, no economy, no society has been spared, and Albania was no exception of this either.

Albania entered this crisis soon after the destructive earthquake in November 2019, hitting the economy even harder, with a declining economy and with negative economic growth forecasts weakening its resilience. In order to be able to cope with these upcoming negative impacts of the COVID-19 pandemic and preventing the economic downturn from transferring into a prolonged depression, the economy will require much faster economic growth. But, even before the COVID-19 crisis, the Albanian growth model was vulnerable. In 2019, the contribution of investment had been limited (World Bank, 2020)<sup>2</sup> while net exports subtracted from growth (high level of imports, weakening of EU as main trading partner). Instead, consumption continued to be the main driver of economic activity driven by remittance inflows<sup>3</sup> and higher consumer lending.

With the outbreak of the COVID-19 crisis, the Albanian economy, highly dependent on services exports, mainly tourism, becomes even more vulnerable to the economic impact of the crisis. Throughout the crisis, significant current account deficits (-7.6% of GDP) will need to be financed. In the past remittances and foreign direct investment (FDI), which have both seen a steep drop, were the main channel of trade deficit financing.

The purpose of this study is hence to assess the impact of the COVID-19 pandemic on the trend of inflow remittances in the domestic economy, which have provided a stable and predictable source of money to the region. Based on the good practices of other countries, it also offers some recommendations on how the financial and human capital of diaspora can be used for the purpose of economic recovery, as it entails great potential for Albania's development.

<sup>&</sup>lt;sup>1</sup> DISCLAIMER: The Inform does not necessarily reflect the opinions and views of the Bank of Albania, nor are they bound by its conclusions. Bank of Albania is in no way responsible for any use made of the information provided.

<sup>&</sup>lt;sup>2</sup> World Bank, 2020, http://documents1.worldbank.org/curated/en/301261588088338100/ pdf/The-Economic-and-Social-Impact-of-COVID-19-Setting-the-Stage.pdf

<sup>&</sup>lt;sup>3</sup> In Albania, Remittances refers to inflows of migrants' and short-term employee income transfers.

# 2. OVERVIEW OF REMITTANCES DURING THE COVID-19 PANDEMIC:

Remittances, tend to play a countercyclical role in a period of crisis, or at least tend to remain a stable source of funding, but with the COVID-19 pandemic, the situation is atypical, because sending and receiving countries have been affected due to unemployment or reduced income. The COVID-19 crisis is also disrupting migration flows, hence their potentiality to send remittances, and to some extent the functioning of the remittance's services. In this context, we can say that the loss on remittances caused by the COVID-19 pandemic may come from three main drivers: a) the economic driver, b) the migration driver, and c) the disruptions affecting remittance service providers<sup>4</sup>.

Before the COVID-19 crisis started, the World Bank had projected that remittance flows to low- and middle-income countries (LMICs) were expected to reach \$574 billion by the end of 2020<sup>5</sup>. But, as the Covid-19 pandemic and economic crisis continues to spread, a study conducted in October 2020 by Ratha et al.<sup>6</sup> forecasted a deep loss of remittances flows to LMICs (\$508 billion in 2020 and a further decline to \$470 billion in 2021).



Figure 1. Remittances in Albania (Eu, million)

The situation in Albania, entering the COVID-19 crisis, with the current economic shutdown and anticipated global recession, the remittances value started to fall, with a significant drop in the second quarter of 2020 with nearly 35% y-o-y losses (around 65 million Euros). Between January-September 2020, the value of remittances amounted to 471 million Euros or about 50 million Euros (around 10%) less than in 2019.

<sup>&</sup>lt;sup>4</sup> Derived from the literature on factors affecting remittance flows. See for instance: World Bank (2006) Economic Implications of Remittances and Migration

Data release: Remittances to low- and middle-income countries on track to reach \$551 billion in 2019 and \$597 billion by 2021 (worldbank.org)

<sup>&</sup>lt;sup>6</sup> https://www.knomad.org/sites/default/files/2020-11/Migration%20%26%20 Development\_Brief%2033.pdf

This decline in remittances is partly caused because of the strong impact on migrant workers, heavily concentrated in most impacted sectors, the containment measures that have frozen much economic activity in diaspora host countries, increased difficulty in accessing money transfer facilities, but also because a large share of remittances arrives through informal channels. This sharp drop is likely to have negative effects on the labour market and personal consumption, deteriorating domestic demand and resulting in a GDP decline. This loss may also result in a temporary widening of the current account deficit to a projected 11% of GDP in 2020, as well as putting pressure on the foreign exchange market.

However, recent data suggest a more nuanced trend. In fact, according to Bank of Albania, in the third quarter of 2020, remittances appear to have rebounded to amounts higher than the previous year for the same period, which is also expected to narrow the current account deficit to 7.3% of GDP in 2022.<sup>7</sup>

The upsurge in remittances represents a very positive development for the Albanian economy, as they play a critical role for emigrants' family members who have remained in origin countries. First of all, these transfers may help many families mitigate adverse macroeconomic shocks, as some of whom may have been heavily affected by the COVID-19 outbreak, either by job loss or by an increase in healthcare spending. Secondly, as remittances represent a significant portion of the economy nominal GDP, considering its multiplier effect in a struggling economy with low consumption, will have a much greater impact on the economy, helping as well the macroeconomic context<sup>8</sup>:

- Fiscal policy (an increase in consumption impact GDP levels and the VAT),
- Financial sector (access to foreign exchange source and as a result, loosen their access to credit conditions),
- Monetary policy (impacting the exchange rates)
- Labour market (support for self-employed: funding source for small business)

#### 3. OVERVIEW OF CURRENT INITIATIVES AND KEY RECOMMENDATIONS:

As the COVID-19 crisis unfolds, the resilience of the Albanian economy is being tested. In order to create a more sustainable and resilient economy, the post-pandemic actions will require major adjustments in the medium term (such as: normalizing balance sheets, debt reductions, safe and gradual economy re-opening and support aggregate demand) and they need to be timely, timebound, targeted, and transparent, in order to support recovery and growth.

<sup>&</sup>lt;sup>7</sup> https://ec.europa.eu/economy\_finance/forecasts/2020/autumn/ecfin\_forecast\_ autumn\_2020\_al\_en.pdf

<sup>&</sup>lt;sup>8</sup> On the economic effects of remittances see for instance: OECD (2016) International Migrant Remittances and their Role in Development

Remittances, in the context of current economic developments, remains a great potential for Albanian social and economic development, therefore they should be characterized and treated as an essential category and resource in a local economy.

Consequently, in order to facilitate remittance transfer and mitigate the impact of their reduction and loss, efforts are concentrated on appropriate mechanisms and measures to support them, and on remittances costs reductions through the promotion of digital channels use.

In this endeavour, with the goal to preserve remittance flows, intermediary organizations, namely: public institutions, Diaspora groups / organizations, IOM, World Bank, should enhance their cooperation and be involved in drawing up recommendations for concrete measures to address remittances. Most of them trying to bring down the cost of sending remittances. Below, we can find some of the international commitments on remittances:

- 1- International Working Groups were launched to help the global community with a coordinated response to the challenges faced by the actors in the remittances area.
- a. World Bank, also launched an International Working Group on Improving Data on Remittances, through the Global Knowledge Program on Migration and Development (KNOMAD), with the purpose to allow for better real-time monitoring of remittance flows; <sup>9</sup>
- b. The Remittance Community Task Force was launched by the International Fund for Agricultural Development (IFAD)<sup>10</sup>.
- 2- G20 target:11
- Accelerating efforts to reduce the cost of Remittances transfers to less than 3 % by 2030, and to eliminate remittance corridors with costs higher than 5 % (by promoting digital channels both at the sending and receiving end);
- b. Accelerating efforts to ensure financial inclusion (universal financial access, financial literacy and digital skills, addressing infrastructure and regulatory barriers).

As for Albania, we should specify that while comparing to its neighbors in the Western Balkans, Albania has implemented diaspora engagement projects faster and more strategically. The Ministry of Diaspora has partnered with international organizations, the Albanian Investment Development Agency, Bank of Albania, and the private sector to implement projects, facilitate dialogue with the Albanian diaspora and reduce bureaucratic barriers in governments.

<sup>&</sup>lt;sup>9</sup> The Call to Action Remittances in Crisis: How to Keep them Flowing at https://www.knomad. org/covid-19-remittances-call-to-action

<sup>&</sup>lt;sup>10</sup> Blueprint for action of the Remittance Community Task Force at: https://familyremittances.org/ idfr-2020/the-remittance-community-task-force/

WB's blog post at: https://blogs.worldbank.org/psd/remittances-times-coronavirus-keep-themflowing

Given Albanian's high emigration rates and large dependency on remittances and investment guided by members of the diaspora, we can find below some recommendations, policy guidance, of international organizations to support them and promote sustainable use of diaspora financial and human capital for economic development.

- 3- IOM Albania and diaspora institutions (SMD, NAD, NDF, ADBS, DPC,  $\rm CAR)^{12}$
- a. Facilitate the engagement of diaspora communities into their home country to promote social and economic development;
- b. Design and implement the ConnectAlbania investment boosting mechanism (establish investment platforms for diaspora businesses);
- Integrate the human capital of diaspora through a large database containing skills and professional experiences information (professional network);
- d. Facilitate and allow swift transfers of the know-how and the high skilled Diaspora members into institutional strengthening and territorial development.
- 4- World Bank Group highlighted with priority some recommendations:
- a. Greenback 2.0 project in Albania, in partnership with Bank of Albania (the overall objective is to reduce costs, make transactions more efficient, and promote financial education at both end);
- b. Mitigate or eliminate fiscal obligations for senders and recipients of remittances;
- c. Promote collaboration and coordination among all actors in the process;
- d. Financial inclusion of both senders and recipients of remittances;
- e. Promote digital channels both at the sending and receiving end, and improve remittances infrastructure.

(During 2018, according to the Bank of Albania, only 7.5% of households receiving remittances have a current bank account and 6.2% of households have a savings account. Financial education for the orientation and the use of banking institutions is still in the process of development and maturity.)

#### 4. CONCLUDING REMARKS

Undeniably, the COVID-19 crisis has been a massive hit, but as we try to emerge from it, by fueling the recovery, boosting productivity growth and modernizing the economy, it is of crucial importance to shape a better future and make economic recovery sustainable, equitable and resilient. It is precisely this kind of crisis that can turn policies around.

This global shock is disrupting remittances from the diaspora, which are an important source of financing for Albania, and are putting more pressure on CAD financing, and external stability. The 2021 and 2022 recovery will

<sup>&</sup>lt;sup>12</sup> State Minister for Diaspora; the National Agency for Diaspora; the National Fund for Diaspora; the Albanian Diaspora Business Chamber and the Diaspora Publishing Center, the Center for Arberësh Research

depend significantly on how well trade flows are revitalized. Recessions and delayed recovery in the EU countries, which are Albania's main trading partners, and FDI and remittances sources which fuels consumption, would dampen growth prospects for the economy. However, recent data shows an upsurge in remittances during the third quarter of 2020, representing a very positive development for the Albanian economy.

Therefore, we can conclude that the coronavirus pandemic has underscored once more the Diaspora's role - in helping mitigate some of the social and economic losses amid the challenges of large-scale depopulation - and has taught us that result will be visible, only through common, coordinated and responsible action.

#### HOUSEHOLDS' ASSETS AND DEBT ACCUMULATION IN REMITTANCE RECEIVING COUNTRIES: EVIDENCE FROM THE ALBANIAN HOUSEHOLD WEALTH SURVEY Ola Çami, Research Department, Bank of Albania

Remittances play an essential role in the economic development trajectory of the receiving countries, constantly drawing the attention of policy makers and scientific research. The impact of remittances is multidimensional in the social, economic and cultural life of families and communities, extending in the short and the long term. Despite numerous empirical analyzes conducted in recent decades, the dynamics remain unclear and sometimes contradictory, suggesting that remittances can generate both positive and negative outcomes for the beneficiary economies (Acosta, 2008; Adams and Cuecuecha, 2010; Garip, 2014).

The main arguments have focused on the impact that remittance inflows have on poverty and the economic inequality. On the one hand, the households of emigrants that receive remittances generate new forms of income and savings, and consequently tend to be less sensitive to the negative shocks of the economy (Giles and Yoo, 2007). On the other hand, some studies point out the negative effects of remittances and emigration on investment due to the fact that they are used mainly for consumption (Rempel and Lobdell, 1978). Furthermore, some studies have shown that remittance inflows reduce the inequality of income or wealth (Adams 1992; Taylor 1992; Taylor et al. 2009), while others have noted the opposite (Mora 2005).

This lack of consensus can be attributed firstly to the diversity of the investigated environments by bringing to light the importance of considering remittances as a process influenced by development contexts within the beneficiary countries (Docquiery et al., 2006), and secondly to the selected methodology and typology of the utilized data. One of the meaningful ways to assess the economic role of remittances is relying on survey-generated data that aim to gather information on household income, consumption and wealth in receiving countries. These surveys, which also take into account remittance inflows through informal channels, often tend to substantiate that remittances are a critical element of survival and economic decision-making for many poor households (Rodriguez (1996) Cox, Eser and Jimenez (1998) Brière et al. (2002)).

In Albania, remittances account for over 10% of the country's GDP (Bank of Albania, 2019), therefore detailed analyzes of their impact on economic progress are essential. Dushku (2019), who uses the data of the "Albanian Household Wealth Survey, 2019", shows that for households receiving income from emigrants, remittances are an important source of income, averaging to 34% of the total monthly household income (median 22%). Furthermore, they are the main and only source of income for 24.4% of households. Nonetheless, in terms of consumption and expenditures basket, the study does not find significant differences between remittance receiving households and nonremittance receiving households, but it finds differences in the level of savings whereby remittance receiving households, on average, save more than nonremittance receiving households. Also, the level of financial inclusion is lower for remittance receiving households. Consequently, we can indirectly expect the accumulation of assets to be higher in remittance receiving households, affecting their level of net assets (assets minus liabilities).

Using the Albanian Household Wealth Survey, this article aims to further enrich the discourse started in the paper published by Dushku (2019) with data on real, financial and debt assets, by analyzing the differences in the accumulation of households' net wealth. This paper also analyzes wealth inequality in totals terms, to observe whether it has been positively or negatively affected by emigrants' proceeds.

#### NET WEALTH OF REMITTANCE RECEIVING HOUSEHOLDS

Net household wealth is defined as the difference between its assets and liabilities. Assets consist of real assets (household main residence, other real estate properties, vehicles and motor vehicles, valuables such as jewelry, antiques or works of art and the value of family's business/businesses) and financial assets (deposits, collective investments, bonds, shares, money owed to the family, voluntary pensions and life insurance). In the survey, the category of liabilities consists of: formal debt (mortgage loan with the main domicile or other real estate set as collateral, consumer credit, credit cards, overdrafts and the like) as well as informal debt (debt owed to friends or family relatives, with or without a return interest rate).

Table 1 below shows the net wealth average value (in thousands ALL) decomposed by assets and liabilities for the households (i) receiving remittances; (ii) unrelated to remittances; (iii) households' total, to observe any differences in these indicators in aggregate terms.

	Remittance receiving households	Non-Remittance receiving households	Total households
Household Main Residence	5604	5868	5807
Other real estate	3989	3916	3937
Vehicles and motor vehicles	466	622	589
Business	1654	5245	4889
Valuables	80	94	89
Total of real assets	7283	7948	7793
Total of financial assets	349	583	525
Total assets	7316	7980	7825
Formal debt	206	545	492
Informal debt	316	469	429
Net wealth	7294	7873	7738
Total no. of observations	536	1568	2104

Table 1 Household net wealth (average value, thousands ALL)

Source: Bank of Albania "Albanian Households Wealth Survey, 2019", author's calculations.

The data presented above shows that remittance receiving households' display a lower average value in terms of total assets compared to remittance unrelated households. These differences are small and insignificant in terms of real estate and assets in the form of vehicles and motor vehicles, but are specifically evident when comparing the value that households own as business (70% less) and as financial assets (40% less).

Given that remittance receiving households have a lower rate of financial inclusion, this result is to be expected in terms of both financial assets and formal debt. Remittance receiving households seem to generally carry lower levels of total debt (almost half the debt of remittance unrelated households), since these households display lower levels of informal debt, implying that they have a lower need for funding. In this context, the remittance receiving households' level of net wealth is on average lower than that of remittance unrelated households.

Conversely, when analyzing the participation rate of households (presented in Table 2 below) in different forms of assets and debt, we notice that remittance receiving households have a higher participation rate in real assets and especially in possession of a main household residence and other real estate properties. Regrettably, it does not appear that these households have chosen to invest their income in business activities (see the monetary value above), a decision which would generate additional income in the long run.

	Remittance receiving households	Non-Remittance receiving households	Total of households
Household Main Residence	93.0	92.6	92.7
Other real estate	43.0	33.7	35.9
Vehicles and motor vehicles	33.2	38.3	37.1
Business	6.2	14.7	12.7
Valuables	17.7	9.9	11.7
Total of real assets	97.3	96.0	96.3
Total of financial assets	13.6	16.0	15.5
Total assets	97.4	96.8	97.0
Formal debt	11.4	14.4	13.8
Informal debt	14.8	13.1	13.5
Net wealth	97.8	97.2	97.4
Total no. of observations	536	1568	2104

Table 2 Household net wealth (participation rate, % of total)

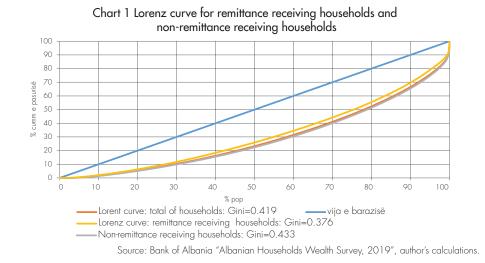
Source: Bank of Albania "Albanian Households Wealth Survey, 2019", author's calculations.

In addition, we notice that remittance receiving households, albeit for lower values, display a higher rate of participation in informal debt compared to non-remittance receiving households. This means that these households seek less funding in terms of value, but in case funds are needed, they are more likely to turn to relatives and friends rather than financial institutions.

An important topic that has sparked debates among economists has been the possible correlation between emigrant proceeds and economic inequality. The conclusions appear contradictory whereby a group of studies find that remittances reduce the level of inequality in terms of both income and wealth (Adams 1992; Taylor 1992; Taylor et al. 2009), while other studies suggest a noticeable increase in inequality due to the fact that income streams are

disproportionate among households (Mora, 2005) negatively affecting indicator totals.

This paper forwards a calculation of the inequality Gini coefficients, using the data provided by the survey, to briefly look at the potential dynamics that remittances may have on aggregate inequality. Lorenz curves for each of the three categories (i) non-remittance receiving households; (ii) remittance receiving households; (iii) total households are plotted in chart 1 below.

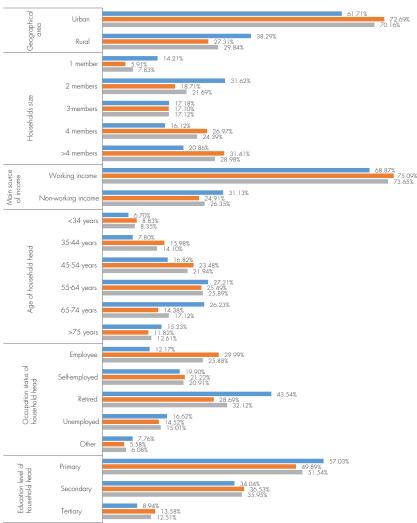


The Gini coefficient for total net wealth results 0.419, while if decomposed for remittance receiving households and non-remittance receiving households, the obtained values are 0.433 and 0.376 respectively, which means that wealth inequality results lower for remittance receiving households. The above, consequently, has an impact on the inequality indicator total. However, in order to reach a final conclusion, it is necessary for this analysis to be extended in time, something that is not possible from the data of this survey.

### NET WEALTH DECOMPOSED BY HOUSEHOLD SOCIO-DEMOGRAPHIC CHARACTERISTICS

The questions that arise naturally following the above analysis are: what are the remittance receiving households' socio-demographic characteristics; are they more vulnerable financially; can their behavior, in terms of the accumulation of assets and debt, be explained by these characteristics, and finally; do remittance receiving households own more assets and net assets than non-remittance receiving households having the same socio-demographic characteristics as the former?

The first step, in the context of attempting to explain the results generated in Tables 1 and 2 above, is to analyze the profile of remittance receiving households and where they differ from non-remittance receiving households. Dushku (2019) builds the household profile based on the income level and geographical distribution. Provided the survey information, this material deems important a continuation of the analysis for the following indicators: number of family members, head of the household age, main source of income, urban / rural area, head of the household employment status and head of the household education level. These indicators enable the construction of a more complete representation of the remittance receiving households. Graph 2 below presents the socio-demographic characteristics of households i) receiving remittances; ii) non-remittance receiving households; (iii) household total, expressed as a percentage of the total within each group.





Source: Bank of Albania "Albanian Households Wealth Survey, 2019", author's calculations.

<sup>■</sup> Remittance receiving households ■Non-remittance receiving households ■Total households

A between-groups comparison of the socio-demographic characteristics reveals that, on average, the remittance receiving households: are smaller in terms of household members (47% of them consist of 1 to 2 members, versus 24.6%), are more often found in rural areas (in 38.3% of the cases, versus 27.31%) and the head of the household age is on average higher (it is over 65 in 41.5% of the cases, versus 26%). Also, a higher number of households receive non-working income (including remittances) as their main income source and 43.5% of heads of households are retired (compared to 28.69% in remittance unrelated households), which is related to the heads of households' higher average age in these families. In addition, a larger number of heads of households in remittance receiving households have non-university education credentials (91.1%) compared to those in remittance unrelated households (86.4%), although it is noted that in totals terms this percentage remains high. Based on these characteristics, we may discern that remittance receiving households are more financially vulnerable to negative shocks than non-remittance receiving households. As a result, remittances have a high potential of positively contributing to the poverty level while also significantly improving the households' well-being.

In what follows we compare the accumulation of assets' level of the remittance receiving households to the one of the non-remittance receiving households, for all households being classified with the same set of socio-demographic characteristics. It should be readdressed that the survey does not provide information on the duration of remittance inflows for the households we are studying, and that the survey provided a single wave of data, deterring us from tracing the subjects in time (empirical literature finds a statistically significant correlation between the accumulation of assets and the number of years the household received remittances (De Haas (2009)). The net wealth components, decomposed by household and head of household characteristics, are presented in Table 3 below.

		Remittanc	ce receiving households	s				Non-Remittance re	Non-Remittance receiving households	
	Real assets	Financial assets	Formal debt	Informal debt	Net wealth	Real assets	Financial assets	Formal debt	Informal debt	Net wealth
Geographical area										
Urban	8522	337	236	332	8556	8841	484	365	447	8863
Rural	6479	361	185	304	6478	7593	628	909	484	7484
Number of HH members										
member	6143	365	153	81	6168	4778	512	110	88	4764
2 members	6755	315	113	214	6742	7834	644	381	208	7872
3 members	7688	434	172	116	7740	7041	676	958	1030	6985
4 members	6810	408	236	605	6855	9180	559	394	320	8938
>4 members	8880	167	256	286	8867	8032	513	489	477	7983
Main source of income										
Working income	9111	466	363	352	9140	7533	698	589	563	7522
Non-working income	6490	266	248	837	6490	6964	321	490	211	6719
Head of HH age										
<34 years	4006	421	217	674	4054	6616	558	805	194	6417
35-44 years	5176	613	433	529	5239	9652	692	450	794	9334
45-54 years	10300	219	165	391	10400	7922	596	281	671	7892
55-64 years	1///	366	121	244	7807	8534	622	905	274	8463
65-74 years	7062	323	129	88	7033	7081	596	147	336	7143
>75 years	6059	262	116	24	6050	6437	268	117	111	6426
Head of HH employment status										
Employed	7160	250	146	378	7165	7339	540	10/	340	7127
Self-employed	7530	328	178	514	7580	11600	1006	330	896	11700
Retired	6702	305	230	89	6681	6817	356	406	284	6829
Unemployed	9634	203	499	205	9669	6641	287	592	352	6550
Other	4662	256	22	442	4739	6114	213	322	196	5796
Head of HH education level										
Level I	7202	290	249	305	7214	6731	669	353	419	6744
Level II	7459	416	167	222	7464	9345	439	689	569	9143
Level III	7153	321	149	380	7182	8844	749	573	378	8696
Unemployed & educ. level I	10700	403	499	205	10100	6622	318	599	341	6537
Datirad 2 1 /7 mombars	0277	358	122	V L	6643	5870	55.A	284	157	5870

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The obtained values confirm the previous results regarding the dynamics of wealth and debt accumulation for the two groups under consideration. What we add, which is in line with theoretical and empirical suggestions, is that households having labor income as their main source of income but receive remittances as well, have accumulated on average more real assets than non-remittance receiving households. However, if we analyze these indicators for the two most vulnerable groups observed: "unemployed head of household with no university degree" and " 1 to 2 member households with a retired head of household", we notice that remittance receiving households are in a more favorable position in terms of assets, debt and wealth compared to the

#### CONCLUSIONS

non-remittance receiving households.

This paper analyzes the dynamics arising amid the availability of remittances and the long-term effect from real and financial assets accumulation, formal and informal debt and net wealth of beneficiary households in Albania. The analysis is based on the statistical data of the Household Wealth Survey, 2019, and follows the discourse in Dushku (2019) on households and remittances, which in turn focuses on their short-term effects on income and consumption.

Income from emigrants can contribute to the total income of households, not only directly, but also indirectly, influencing the generation of income from other sources. In the long run, remittances can finance the accumulation of assets impacting the distribution of household income and wealth (Taylor, 1992). The analysis suggests that remittance receiving households are more vulnerable to economic shocks than non-remittance receiving households, provided they are classified with the same set of socio-demographic characteristics, and consequently remittances have a high potential of positively contributing to the poverty level while also significantly improving the households' well-being. Remittance receiving households have a higher participation rate in real assets, especially in the ownership of a main household residence and other real estate properties, compared to non-remittance receiving households. However, on average, the former possess a lower monetary value in the form of these assets. Especially in terms of business / family businesses that they own, both the participation rate and the average value in ALL is significantly lower (70% less) supporting the hypothesis that beneficiary households generally do not choose to invest the money they receive but you consume them instead (Adams, 1998; Adams and Cuecuecha, 2010). On the other hand, both formal and informal debt are lower for remittance receiving households, suggesting that although the level of financial inclusion is lower, their financing needs are also lower. Notwithstanding, families in need of financing are more likely to turn to friends and relatives for help, rather than to lending institutions.

This paper also uses the Gini coefficient decomposition to observe if remittances bring about a positive impact on mitigating total inequality. It finds that the Gini coefficient of net worth in remittance receiving households is lower, therefore remittances appear to contribute positively to the total distribution of wealth.

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