Impact of Remittances on Economic Development: The Case of Kosovo

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Abstract

Over the last two decades, researchers and policymakers have been paying more attention to remittance flows in terms of their impact on economic development in developing and transition countries. Given that remittances are an important source of private capital, this study will examine the impact of remittances on the economic development of Kosovo, using annual data for the period from 2010 to 2016. Through the use of the Ordinary Least Square (OLS) method, we analyse the effect of remittance flows on economic growth. The results of the study indicate that remittances have a positive but not significant impact on economic growth in Kosovo. Theoretical and empirical literature on remittances will be examined in this paper. However, in order for the remittance flows to have an impact on economic growth in Kosovo, policymakers need to improve the overall environment for doing business.

Keywords: Migrants, emigrants, remittances, economic growth.

Introduction

Migration is relocation of people's residency from one place to other for various reasons. According to many studies, migration is both catalyst and consequence of economic and social change (Oke 2008). Migration is a global phenomenon which touches every region in the world either as sending, transit or receiving countries. Remittances represent one of the most consistent outcomes of migration (Anghel, Piracha, Randazzo 2015). The importance of international migration is evidenced by the numerous money transfer institutions and the rapid increase in international remittances (Mwangi, Mwenda 2015). According to the World Bank's Migration and Remittances Factbook 2016, more than 250 million people, or 3.4 percent of the world's population live outside their countries of birth. Remittances sent home by international migrants from developing countries are estimated to have risen to $432 billion in 2015, an increase of only 0.4 percent over the previous year (WB, 2016).
Remittances may help improve economic growth, especially if used for financing children's education or health expenses. Even when they are used for consumption, remittances generate multiplier effects, especially in countries with high unemployment. On the one hand, if remittances are used for consumption or purchase of immovable property or for other investments, they make clear the positive effects on the economy by stimulating demand for other goods and services

(WB 2005). The expansive remittance effect will be greater if they are invested or saved in the formal financial sector (WB, 2006). On another hand, international remittance inflows are feared to be capable of destabilising the macro economy of developing countries through excess demand resulting in price hikes; weakening international competitiveness of exports due to real appreciation of exchange rate, and promoting moral hazards where labour market participation is reduced due to over-reliance on remittances by beneficiary households while government inducement for implementing sound macroeconomic policies towards stability, growth, structural reforms, and poverty reduction might be considerably truncated (Adenutsi, 2011).

Remittances are an important source of income for households, in particular in developing countries (Alfieri, Havinga 2006). Historically, remittances have been stable and even countercyclical, tending to rise during times of financial crisis and natural disasters because migrants living abroad send more money to help their families back in places of origin (Shahid, Hassan, Bakhsh, Tabasam 2013; Beet 2011; Ratha 2013; OECD 2006; UNDP 2012). The relative importance of remittances to the receiving economies is strongly correlated with the development status of each country. Low-income developing countries are more dependent on remittances, while high-income developing economies are less dependent (UNDP 2012).

Throughout its history Kosovo has experienced migration with profound implications on its development. From 1989, the worsening political climate and growing unemployment among Kosovo-Albanians caused a larger exodus, where many migrants moved to neighbouring countries and those of Western Europe. A large share of these refugees returned to Kosovo after conditions stabilised. Since 2000, there has been a steady outflow of migrants in response to high unemployment and the lack of economic opportunities in Kosovo (KHDR 2014). There are various economic, social and educational factors that influence the migration of Kosovars and a significant number of those seeking family reunification (marriages) (Ministry of Internal Affairs, 2015). According to KAS (2014), almost half of the responses state that the main reason for emigration has been family (usually marriage or family reunification). After that followed job emigrants, which accounted for 35 percent of the total number. Migrations that occurred because of the war itself during 1998/99 (about 8%) were also important.

Given the size of the Diaspora population in comparison to the resident population in Kosovo (approximately 700,000/1.8 million)[1], the economic impact of these transactions is large in relation to Kosovo's domestic output and very prominent in Kosovo's international reserve inflows (CBK). Personal remittances alone amounted to 17 percent of GDP in 2012, making Kosovo one of the top 15 recipients of remittances worldwide, relative to the size of the domestic economy (WB 2012) quoted in (KHDR 2014). Financial flows from members of the Diaspora - including migrant remittances and travel expenditures - correspond to one fifth of Kosovo's Gross Domestic Product (KHDR 2014). Empirical findings revealed that migrants who are expected to invest in businesses in Kosovo are also more likely to return to their country of origin (Gashi,

[1] There is no accurate data regarding the number of Kosovar emigrants. However, the figure of 700,000 migrants refers to the Kosovo Human Development Report, while the figure 700,000 to 800,000 refers to UNDP (2014) quoted in (Dobruna, Ejupi, Hollaj 2015).

Adnett 2015).
While migration can have both positive and negative economic, social, and cultural implications for countries of origin, remittances are the most tangible and least controversial link between migration and development. Policymakers can do much more to maximize the positive impact of remittances by making them less costly and more productive for both the individual and the country of origin. Migrants pay transaction costs, on average, of 9 percent of the amount they remit (WB, 2013), quoted in (Ratha 2013).
Most of the studies on remittances focus on three main issues. The first group focuses on the direct impact of remittances on income distribution and individual well-being. The second group focuses on the impact of remittances on the country's trade and current account balance. The third group of research examines the impact of remittances on the national economic growth (Matuzeviciute, Butkus 2016). Most of empirical studies have been conducted on the impact of remittances on economic growth and their results are diversified with some getting a positive relationship and others negative relationship. Majority of these studies are done from a global or regional perspective with a few being done on an individual country. It is also worth noting that the few country specific studies have analysed the impact of remittances on several socioeconomic phenomena like consumption or poverty with no clear focus on the impact on economic growth. Most of these studies make use of panel data and a few using time series. It is therefore common that the impact of remittances on economic growth for a specific country is usually obtained through generalization. This is because most of the panel data studies use one coefficient for all the countries. Using one coefficient to measure the impact of several countries may not bring out well the impact to a specific country (Kiio, Soi, Buigut, 2014).
Therefore, in this study we will take a case study for Kosovo to analyse the effect of remittances on economic growth at the macroeconomic level. The rest of the paper will be organized as follows: Chapter 2 will summarize the theoretical aspect regarding the flow of remittances. Chapter 3 presents a review of the literature. Chapter 4 presents methodology, data collection and interpretation of results. The final chapter will present the conclusions and recommendations.

Theories of Remittances

There are a number of studies that have investigated the factors that determine the flow of remittances to the country of origin. Motivations of altruism such as: Loan repayments for family investments, risk diversification, and self-interest have been mentioned to influence the decision of the migrants to send money to their country of origin. Demographic attributes of migrants and families in the country of origin also affect remittance decisions (Soraya, Alba, Abdon, Garde, 2007).
In an altruistic model, a migrant sends remittances to family members in the country of origin because he or she cares for them. The reasons for altruistic behaviour are of an emotional and social nature, are aimed at improving the conditions of family life and maintaining and strengthening the relationships between senders and relatives in the country of origin. According to this model, there is a positive report on the

amount of remittances and incomes of migrants, and an opposite correlation with family income in the country of origin (Durand et al 1996, Lucas and Stark 1985, Osili (2004). If migrant behaviour is guided by a motive of pure self-interest, remittances can be sent for three reasons. First, the behaviour of remittances may be driven by inheritance aspirations. In the case of inheritance motivation, the migrant sends remittances to strengthen his/her reputation at home and ensure an important role within the family hierarchy. Hence, the higher the inherited wealth and the higher the incomes of migrants, the greater the number of sent remittances (De la Briere et al., 1997; Hoddinott 1994; Osili 2004). Secondly, migrants (usually temporary migrants) can send money for an exchange motivation; to invest in assets in the country of origin, or providing for their maintenance and the relatives left behind may represent the agent (Garip 2006); for the payment of services provided by the family at home, such as care for the children left behind (Cox 1987; Cox et al., 1998). The third model of self-interest is strategic (Stark 1995). The reasons behind remittances are the result of a strategic behaviour of skilled workers who want to protect their salaries from the presence of low-skilled migrants. According to this model, migrant salaries are based on the average productivity of the migrant group they belong to due to lack of information about individual skill levels, whereby employers in the country of destination cannot distinguish between workers in terms of their productivity. For this reason, skilled migrants may have incentives to avoid unskilled migration, and thus send remittances, quoted in (Ambrosetti, Cela, Fokkema 2011).

With an altruistic model, the strength of family ties as well as net recipients' gains will be important. According to the altruism model provided by Rapoport and Docquier (2005), the more migrants earn the more remittances the families need. Moreover, strong family ties between migrants and the remaining families will increase the propensity of migrants to return. On the other hand, remittances would be reduced by an increase in the wealth of the receiving household and during the time the migrants stay in the host country. Many studies have investigated the validity of this motive and most have come to the conclusion that altruism is insufficient in explaining remittances. Alleyne (2006) suggests that there is a strong investment motivation rather than an altruistic motive for sending remittances (Henry, Moulton, Ricketts 2009).

The neo-classical migration theory perceives migration as a form of optimal separation of production factors for the benefit of sending and receiving countries. In this perception of "balanced growth", the redistribution of labour from rural, agricultural areas to urban and industrial sectors (within or outside the borders) is considered a prerequisite for economic growth and, as a consequence, an integral component of the entire development process (Todaro, 1969, 139). The free movement of labour - in an unconditional market environment - will ultimately lead to a growing job shortage, consistent with higher marginal labour productivity and wage growth in immigrant countries. Capital flows are expected to go in the opposite direction, which is from the labour poor to the capita scarcely migrant sending countries. Eventually, this process of factor price equalization (the Heckscher-Ohlin model) predicts that migration ceases once wage levels at the origin and destination converge (Massey et al., 1998) quoted in (De Haas 2010). Neoclassical economics theory, stipulates that wage differences

between regions or countries make people move from regions with low wages and high unemployment, to regions with high wages and low unemployment. The expansions of neoclassical theory, called "new migration economy", use households, families, or other affiliated groups, instead of their markets, as their analysis units. These units act collectively to maximize revenue and minimize risk. Thus, they often send one or more family members to other parts of the country, usually in a larger city or abroad to increase their overall family income while others remain behind earning lower but more sustainable income (WB, 2006). The new economics of labour migration (NELM) rejects neoclassical models, which largely ignore constraints and were evaluated as too rigid to deal with the diverse realities of the migration and development interactions. It was particularly Stark (1978, 1991) who revitalized thinking on migration in and from the developing world by placing the behaviour of individual migrants in a wider societal context and by considering not the individual, but the family or the household as the most appropriate decision-making unit. This new approach also increases the scope for integrating factors other than individual utility maximization as affecting migration decision-making cited in (De Haas 2010). The remittance investment theory claims that migrants seeking investments and whose perceptions about the business environment in their country of origin are favourable, will be rewarded more because they plan or have already undertaken an investment; hence the motive of migrants to send remittances is fuelled by incentives to secure the assets they have invested or plan to invest in the future (Lucas and Stark, 1985) quoted in (Havolli 2009). If investment is the motive, improved economic circumstances in the recipient country would increase remittances, leading to procyclicality. The cyclical response to changes in sending-country GDP may be indeterminate in the case of insurance- or investment-driven remittances. If migrants retain income opportunities in a downturn, remittances under both motives may increase. This outcome is more likely if returns on assets in the origin country are lower than in the recipient economy. This would lead to countercyclicality with respect to the sending country's GDP (Chami et al. 2008). However, if the migrant loses income opportunities in the origin country because of the downturn, remittances would be procyclical with respect to its GDP (quoted in De, Islamaj, Kose, Yousefi 2016). Also, the effects of remittances on investment and growth are strongly linked to the determinants of remittances. Theories support a similar set of determinants that pertain to the socio-economic characteristics of the individual and his family, and that can influence the incentives to remit and the amount of remittances. Remittances are, on the one hand, driven by the demand side, that is the family's need for support, and they are, on the other hand, determined by the migrants' education, their income levels and the motivation to transfer the accumulated capital and to invest it in their home country (Brown 1997), quoted in (Buch, Kuckulenz, Le Manchec 2002).

But since migrants and families benefit the most from a lower transaction deal with each other than with a third party, they should be willing to give more to each other than a third party. By entering into an interchange agreement with each other, they are relatively certain about the fulfilment of the provisions of this exchange (Stark, Lucas 1988) quoted in (Stark and Lucas, 1988). That is the case of an implicit family loan repayment contract which ties migrants to their family. As part of this

family contract, remittances are seen as a return on investment; they are simply the repayment of costs incurred by the migratory family (the cost of education and/or the cost of migration). The financing of these costs is subject to an implicit agreement. Under this agreement, parents lend to their children and finance their education, travel and settlement in a foreign country. By doing this, they make an investment that is profitable and sustainable. This investment starts to pay off when migrants repay the loan (and its interest). In this model, remittances are not expected to decrease over time as in the altruistic model because a share of these funds may be used to finance migration costs for future generations. In their theoretical model, Ilahi and Jafarey (1999) insist not on the educational costs like Poirine (1997), but on the costs of migration, quoted in (Bouoiyour, Miftah 2015). On migrating, risks are at first very high: entry attempts into high-paying sectors may fail; entry into low-paying sectors, which may be relatively easy, entails high probability of discontinuity of employment due to the high sensitivity of these sectors to market fluctuations; and there is, of course, the distinct possibility of involuntary unemployment (Stark 1982) quoted in (Stark and Lucas, 1988).

Research on the economy of labour force migration has undergone an exciting and significant transformation over the last few years. At a theoretical level, migration research has expanded the range of variables that appear to be impacted and affected by environmental labour supply decisions; it has highlighted the role of broader social subjects and their interactions on conditional migration behaviour; it has identified new links between migration as a separate labour market phenomenon and other labour market and other labour market without labour market phenomena, and this has contributed to the understanding of the processes of economic improvement and development. People are quite engaged in comparing interpersonal incomes within their reference group. These comparisons create psychic costs or benefits, feelings of relative deprivation or relative pleasure. A person may migrate from one place to another to change his or her relative position in the same reference group, or to change his or her reference group. In general, a person who is more relatively deprived can be expected to have a stronger incentive to migrate than a person who is less relatively deprived. Moreover, a reference group characterized by more income inequality is likely to generate more relative deprivation and higher propensities to migrate (Stark, Bloom 1985).

Taylor, Arango, Hugo, Kouaouci, Massey, Pellegrino (1996) examined theories, data, and research on the macroeconomic relationship between international migration and national development in all world regions. According to them, earlier reviews have generally been pessimistic about the prospects for economic development as a result of international migration. Until recently, however, theories and data have not recognized the complex, multifaceted, and often indirect ways that international migration can influence the economic status of households, communities, and nations, and they have generally failed to appreciate how these relationships can change over time. When these complexities are incorporated into theoretical models, research designs, and data collection, a more nuanced and far more positive picture emerges.

Literature Review

Labour migration and remittances have recently started attracting the interest of researchers. The literature has looked at the effect of these phenomena at the micro and macro levels. Studies have examined their impact on poverty, inequality, labour supply, and household consumption and asset accumulation (Soraya, Alba, Abdon, Garde 2007).

Lal Srivastava, Chaudhary (2007) analysed the direct impact of remittance on three development indicators; GDP, GNP and PCI in Nepal during the period 1974/05 – 2004/05, applying linear and log-linear models under multiple regressions. The impact of remittance has been seen most remarkable in the GDP and GNP both in nominal and real terms. In the nominal GDP and GNP, the remittance shows 61 percent and 72 percent impact respectively while in real term it shows 48 percent and 55 percent respectively. Remittance has also shown positive impact on the PCI but it is comparatively lower (4 percent in nominal and 1 percent in real terms). The growth rates of independent variables; remittance in real terms (Rm), real gross capital (K), labour force (L) and export (X) have also been tested in the same model to find the effects on the dependent variables. The findings are positive except for labour force.

Stojanov, Strielkowski (2013) examined the effectiveness of remittances and official development assistance (ODA) in developing countries during the period 1970 – 2009, using the linear regression model. The authors conclude that in general remittances might have a stronger positive effect on the increase of GDP per capita in developing economies than ODA. This is not only based on the quantitative side (remittances being higher than ODA funds) but foremost on the question of effectiveness and the stability of the flow. Remittances also represent a more stable source of income than ODA in time of economic crises demonstrating on the data from recent global economic recession and financial crisis in South-East Asia at the end of the 1990s.

Karamelikli, Bayar (2015), examined the impact of remittances, FDI inflows and gross domestic savings on economic growth in Turkey during the period 1970-2013 by employing cointegration test based on ARDL approach. The cointegration test indicated that there was a long run relationship among economic growth, remittances, FDI inflows and gross domestic savings. The study demonstrated that remittances and FDI inflows had positive impact on economic growth.

This study was designed to explore the role of FDI and remittances on the economic growth of Pakistan by using the Engle Granger Cointegration method. Empirical results suggest that there is a long run relationship between the dependent and independent variables included in the model. Remittances and gross fixed capital formation variables have a positive impact on economic growth in the long run. However, FDI has a negative effect on the growth. Results suggest that there is disequilibrium among the variables in the short run (Shahid, Hassan, Bakhsh, Tabasam, 2013).

This study was carried out to analyse the role of remittance in economic development of Nepal, using data during the period 1975/76 – 2009/10. The data were analysed using the linear regression model. This study shows that the role of remittance in economic development is not statistically significant. Similarly, in the model of the

gross capital formation, remittances were not found to be important (Aryal, 2016).
The main objective according to Mwangi, Mwenda (2015), was to determinate the effect of international remittances on the economic growth in Kenya for the period 1993 – 2013 using Granger Causality to investigate the causality between international remittances on economic growth in Kenya. The Ordinary Least Squares (OLS) estimation was used to determine the effects of international remittances on economic growth. According to findings, the international remittances indicators are significant factors influencing the economic growth in Kenya. There is significant bi-directional causal relationship between GDP and remittances. This implies that a movement in GDP will cause a corresponding movement in remittances which also has the same effect on GDP. There also exists an unidirectional causality running from GDP to government expenditure.
However, (Adams and Cuecuecha 2013) examined the role of remittances in investment growth and poverty reduction in Ghana and found that households receiving remittances spend more on the margins of investment goods such as housing, education and health quoted in (Lloyd 2015).
Bett's (2011) study analysed the impact of remittances on economic growth in Kenya, panel data from 2003 to 2012 were analysed using multiple linear regressions method. According to the findings, diaspora remittances indicators are the most significant factors influencing the economic growth in Kenya. The study revealed that efficient diaspora remittances in the general economic growth are those that strive to; improve their capital bases, reduce operational costs, improve assets quality by reducing the rate of non-performing loans, employ revenue diversification strategies as opposed to focused strategies and keep the right amount of liquid assets.
Sobiech (2015) analysed the impact of remittances and financial development in developing countries for the period 1970 - 2010, using QML-FE and GMM model. Model estimates show that independently of the measure of financial development used, there is substitution between remittances and financial development as factors enhancing economic growth measured by GDP per capita. The negative sign of the interaction term between remittances and financial development indicates that if the financial sector is sufficiently large, additional transfers from migrants are not used in an efficient way in the domestic economy. The author evaluates an index of overall financial conditions and uses it to determine the relevance of the financial sector as a transmission channel for remittances to affect economic growth. Given that the generated index accounts also for efficiency of the financial sector, apart from its size and depth, and the negative sign of the interaction term preserves if this measure is used, it is less likely that this coefficient reflects nonlinear effects of financial development on growth rather than the nonlinear impact of migrants' transfers on economic performance. The index brings together information from existing measures, reflecting size, depth and efficiency of the financial system. According to the results of the study, the more financial development in a country, the smaller becomes the impact of remittances on economic growth and it can even turn negative. For countries with weaker financial markets, there is a positive effect, but significant only at the earliest stages of financial development.
Kiio, Soi, Buigut (2014) using secondary annual time series data for the period 1970 to

2010, where the analysis of the data was carried out by OLS method, found that there is a positive and highly significant relationship between migrant remittances and real GDP per capita, indicating that higher economic growth is related with higher remittances. Further, the authors found a positive impact of gross capital formation and change of exchange rate regime from fixed to floating on economic growth.

Incaltarau, Maha (2012), conducted an econometric analysis of the effects of remittances on the Romanian economy in terms of consumption and investment, using the series data for the period between 1990 and 2009, and the OLS regression model. Unlike the other sociological studies regarding the Romanian migration phenomenon, this study presents research targets on the macroeconomic level, following the extent to which remittances have supported the evolution of consumption and investment. The results of the econometric analysis confirm the contribution of remittances to the increase in household consumption and investments. However, the findings indicated that remittance contribution was more important in investment than in consumption.

Matuzeviciute, Butkus (2016) using an unbalanced panel data covering a sample of 116 countries with different development levels over the period 1990-2014, by using OLS regression with FD transformation and FE approach, studied the interaction between remittances and the level of economic development, as well as its impact on long-run economic growth - because the impact of remittances could be influenced by the development level of the receiving countries. Evidence was found that supports the view that remittances have promoted growth in relatively developed countries and that remittances-driven growth is less possible in relatively undeveloped ones. The authors estimated that a turning point from negative to positive impact of remittances on long-run economic growth is in countries with GDP per capita at about 8250 – 8960 US$. The impact of migrant remittances on long-run growth also varies across remittances-to-GDP ratios in the recipient country. According to the authors, the impact of remittances on long-run growth is diminishing and a positive effect is less possible in remittance-abundant countries. The marginal impact of remittances on long-run growth becomes negative when the remittances-to-GDP ratio reaches 10.4 - 11.9 percent. The results showed that, in general, remittances have a positive impact on long-run economic growth, but the impact differs based on the country's economic development level and the abundance of remittances in the economy.

Blouchoutzi and Nikas (2014) examined the impact of remittances on three key macroeconomic variables of these economies: consumption, imports and investment, in order to assess the use of the growth potential of remittances in Moldova and Albania. The econometric investigation was based on time series analysis for the period 1990 – 2010, using the OLS model and Keynesian macroeconomic modelling. The results showed that remittances have played an important role in the households' decision both on consumption and on investment spending. Remittances' contribution to all the three sectors of Moldova's economy was of great importance and was larger than the other disposable income's one. When it comes to Albania, the findings also agree with the above estimations since remittances seem to have a great impact on all the three variables tested, even greater than the other disposable income and it is obvious that their effect on consumption patterns is much bigger than on investment ones.

This study examines the empirical relationship between migrant remittances and economic growth using the most recent panel data (1977 - 2012) for some of the largest recipient countries of foreign remittances in the world namely, Bangladesh, India, Pakistan and the Philippines. This test confirms the presence of cross-sectional dependency in both series. We employed an appropriate panel unit root (CIPS) test that accounts for cross sectional dependence to test the stationarity of data. Having found that both the series contain unit root, the long run relationship between economic growth and remittance was confirmed by the Panel Pedroni and Westerlund cointegration tests. Then, the Pooled Mean Group (PMG) regression technique was applied to estimate the short- and the long run relationship between the two variables while controlling for country size and heterogeneity. The results indicate a highly significant long run positive relationship between remittance and economic growth in these countries. There is also an insignificant positive association between the variables in the short-run (Salahuddin, Gow, 2015).

Yaseen (2012), examined the impacts of remittances on economic growth, using panel data set of MENA countries, Algeria, Egypt, Jordan, Libya, Morocco, Oman, Syria, Lebanon and Tunisia, during the period 2000 – 2010. The study findings show that institutions and financial development play an important role in how remittances affect economic growth. Through their negative interaction with credit, they promote growth by substituting credit, thus improving the allocation of capital and hence accelerating economic growth. Remittances also promote growth by complementing total liquidity. The results confirmed that remittances were found to be positively and significantly related to economic growth. The inflow of remittances has financed consumption demand and reduced pressures on the current account. Moreover, these inflows, by contributing to national savings, have financed domestic investment and supported output growth in the largest recipient countries of these inflows.

Sami (2013) examined the role of remittances and economic growth in banking sector development in Fiji using annual data from 1980 – 2010. This study finds evidence of long run relationship between banking sector development, remittances and economic growth using bounds testing procedure developed by Pesaran et al. (2001). In addition, the causality analysis based on vector error correction model (VECM) and Toda Yamamoto Granger Non Causality test (1995) suggest that there is causality from economic growth and remittances to banking sector development. Also, the study shows that remittance inflows may not only be important for economic growth but also for the development of the banking sector. The causality analysis based on VAR - ECM reveals that there is short run causality from remittance to banking sector development and that in the long run, there is causality from economic growth and remittance to banking sector development. Also in the short run, there is a causality from economic growth to remittances.

Jayaraman, Choong, Kumar (2011) adopted an augmented Solow model approach for examining the nexus between remittance and economic growth in Samoa and Tonga during the past 28–year period (1981-2008). The findings are that inward remittances lead to growth in economic activities, by adding to the liquidity in the banking system, which in turn adds to rise in credit to private sector. It also emerges that growth is directly associated with financial sector development in Samoa and

Tonga. The results of the bounds tests for Samoa and Tonga confirm the existence of a long run relationship amongst the variables when real output per worker (Ly) is set as the dependent variable. Having confirmed the presence of a long-run relationship between per capita output and per capita capital stock, remittances and private credit, the authors proceed to estimate the long run equation by using the autoregressive distributed lag model (ARDL). The authors found first the estimated coefficients of log of per capita capital stock (Lk), log of remittances and log of financial development indicator have positive signs and are found significant at 10% level or better for both countries. Second, among the shift variables, we find that coefficients of remittances and financial development indicator are respectively for Samoa 0.041 and 0.051; and for Tonga 0.021 - 0.073, respectively, denoting the elasticities of output with respect to remittances and financial development indicator. The Granger causality test results for Samoa indicate that in the long run the causality runs in only one direction. The linkage is only from per capita capital stock, remittances and financial development indicator to per capita output, since ECT which measures the speed of adjustment back to the long-run equilibrium level is statistically significant only in the equation with per capita output. The Granger causality test results for Samoa indicate that bi-directional causal linkages exist between per capita output and remittances, per capita output and private credit, and per capita capital stock and remittances.

Data and Methodology

According to theoretical and empirical literature, remittance flows are influenced by various factors, which have enabled their use in different ways. Therefore, the main objective of this study is to analyse the impact of remittances on economic growth in Kosovo, using the data of annual time series from 2010 to 2016. Given that a sum of funds is sent through informal channels, remittances give unreliable data on migration in general. Secondary data are collected from various sources such as: The Central Bank of Kosovo (CBK), the Kosovo Agency of Statistics and researches conducted by various local institutions. This research period is important to determine the impact of remittances on economic growth, taking into account the period of world economic recession after 2008/09.

Table 1: Secondary Data Used in the Econometric Model

YEARS	GDPs	INFLATION	INVESTMENTS	REMITTANCES
2010	4.204	3.5	86.4	584.3
2011	4.595	7.3	102	584.8
2012	4.950	2.5	117.8	605.6
2013	5.233	1.8	135.4	620.8
2014	5.392	0.4	161.9	693.7
2015	5.796	0.5	198.6	752.4
2016	5.980	0.3	243.1	691.0

Source: CBK (2017), INDEP (2015),
KAS (2014)

The econometric model used to analyse the impact of remittance flows on economic growth is the OLS multiple regression model.
The econometric model used is as follows:

$$\Delta GDP=\beta_1+ \beta_2\Delta INFL+\beta_3 INV + \beta_4\Delta REM +u$$

Where GDP shows the annual GDP at current prices expressed in millions of euros, β_1 is the parameter for intercept, REM indicates the real value of remittances in millions of euros, where it is expected to have a negative impact, *INFL is the inflation rate which distinguishes the price from one year to the next (derived from the chain price index), which variable is expected to have a negative impact, INV* represent the real value of foreign direct inflows in millions of dollars, and are expected to have a positive impact, and u - is the unexplained part. The value of the coefficients "p – value" of independent variables, to estimate the effect of remittances in the economy, is of 10 percent significance. In this model, as a dependent variable is taken GDP, while REM, INV, and INF are taken as independent variables. The relationship between dependent and independent variables was analysed by applying the OLS method, according to which the parameters were evaluated through multiple regression models (Aryal 2016). Also, the data were analysed and obtained through the EVIEWS 8.0 program. Since the multiple regression model has been used in many empirical researches to estimate the effects of remittances on economic growth, this model will also find application.

Results of the Analysis and their Interpretation

Table 2: Statistical Description

Statistical Analysis	GDP	INFLATION	INVESTMENTS	REMITTANCES
Mean	5.164286	2.328571	149.3143	647.5143
Median	5.233000	1.800000	135.4000	620.8000
Maximum	5.980000	7.300000	243.1000	752.4000
Minimum	4.204000	0.300000	86.40000	584.3000
Std.Dev	0.634190	2.502475	55.92681	65.09574
Skewness	-0.192583	1.179723	0.573924	0.484662
Kurtosis	1.877829	3.246307	2.086789	1.777910
Jarque - Bera	**0.410556**	**1.641398**	**0.627524**	**0.709652**
Sum	36.15000	16.300000	1045.200	4532.600
Sum Sq Dev.	2.413181	37.574290	18766.85	25424.73

Source: Author's calculation (2016)

Table 2 shows the statistical results obtained with the dependent variable, in our case GDP, and the independent variables - inflation, direct investments and remittances such as: mean, median, maximum, minimum and other results from the above-mentioned data.

The Jarque –Bera Test, tests whether the distribution is normal or not. According to the rule of the decision if Jarque Bera ≤ 4.61, at the level of 10% of significance, then

in our case Jarque-Bera is 0.410556 i.e. 0.410556 ≤ 4.61. The result shows that we have normal or good parameters for prediction.

Table 3: Regression Results

Eviews 8.0 Program		
Equation:		
Dependent Variable: GDP		
Method: Least Squares		
Sample: 2010 – 2016		
Included observations: 7		

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	2.86801	1.747827	1.6409	0.1991
INFLATION	-0.022428	0.060821	-0.368758	0.7368
INVESTMENTS	0.008475	0.00328	2.584158	0.0815
REMITTANCES	0.001673	0.002999	0.557705	0.6160
R-squared	0.932413		Mean dependent variable	5.164286
Adjusted R-squared	0.864825		S.D. Dependent variable	0.63419
S.E. of regression	0.233167		Akaike info criterion	0.221435
Sum squared resid	0.1631.00		Schwarz criterion	0.190526
Log likelihood	3.224978		Hanna-Quinn criterion	-0.16059
Prob (F-statistic)	0.029217		Durbin- Watson stat	1.161869

Source: Author's calculation (2016)

The correlation coefficient measures the strength of the relationship between the two variables. The value of the correlation coefficient, marked as r, varies from -1 to +1, which shows the strength of the relationship, and whether the relationship is positive or negative. When the value r is greater than zero, it is a positive relationship; when the value is less than zero, it is a negative relationship. A zero value indicates that there is no relationship between two variables[2]. In Table 5, if we compare the results, it is seen that GDP has a strong correlation with investments and remittances, while GDP has a negative correlation with inflation. Also, investments and remittances have a strong correlation between them.

Table: 5. Correlation Analysis

	GDP	INFLATION	INVESTMENTS	REMITTANCES
GDP	1	-0.764225	0.956964	0.871217
INFLATION	-0.764225	1	-0.728342	-0.765266
INVESTMENTS	0.956964	-0.728342	1	0.845372

[2] www.investopedia.com/.../what.does-it-mean-if-correlation-coefficient-positive-negative...

REMITTANCES	0.871217	-0.765266	0.845372	1

Source: Author's calculation (2016)

From Figure 1 in the appendix, it can be seen that the remittance and GDP direction is the same, but in spite of the decrease in remittances in 2016, the GDP growth does not decrease, which implies that remittances do not affect GDP growth. Increase in remittances and foreign direct investments contribute to GDP growth, while decrease of the inflation level affects GDP growth.

Conclusions and Recommendations

In this paper, the main objective was to analyse the impact of remittances on economic development in Kosovo, using secondary data. The data were analysed using the OLS regression model with the 10% significance level. According to the results of the study, remittances do not have a significant impact on economic development, although their effect is positive, but with a very low participation of 0.001673. Investments also have a significant impact on economic growth. As expected, inflation is negative and insignificant to the economic growth.

The main reason for no impact of remittances on economic growth in Kosovo lies in the fact that remittances are used for consumption of imported products because the country faces a high trade deficit. Also, a part of remittances is also used for luxury goods.

Regarding the effect of remittances, the results of this paper are not consistent with most of the empirical researches that remittances have a positive impact on economic growth, but according to empirical research, remittances promote growth in relatively developed countries while remittances do not promote growth in relatively undeveloped countries (Matuzeviciute, Butkus 2016).

Recommendations

In order for the diaspora savings to be higher in the banking system, on the one hand, there is a need for cooperation between government and financial institutions to increase the interest rate on deposits, as these rates are very low on all types of deposits. Increasing the deposit potential from migrant assets would be beneficial to the economy and the banking system as this would enable the growth of credit potential in the country. On the other hand, in order to stimulate migrants to invest in Kosovo, it is of utmost importance to lower the interest rates on loans, which are still considered high. According to (OECD 2006), there are several macroeconomic factors, both in the host country and in the local country, which can significantly affect the flow of remittances. Unlike remittances used for consumption, the proportion of remittances that are saved and used for investments depend on macroeconomic factors such as; interest rates, exchange rates, inflation, and relative return rates in different financial and real assets.

In order for the remittances from migrants to be higher through formal channels, the agencies for transferring funds to the country should reduce commissions for their transfers. Empirical studies show that reducing money transfer level charge costs by

financial institutions to cheaper transfer services, namely commercial banks, would release billions each year for poor families in Africa, Asia, Latin America, and Eastern Europe (OECD, 2006).

Due to the fact that Kosovo Diaspora is relatively large and in order to use this potential in the most efficient way, the relevant authorities need to improve the overall business environment and investment legislation, which still leaves much to be desired. Also, in order to increase the remittance flows towards investments in the country, the government needs to mitigate fiscal policies which are still considered as barriers for investors.

Since remittances are used as an important source of private capital, future research on the flow of remittances in Kosovo and their impact on economic growth and development should be intensified as there is a lack of empirical research of this nature in the country. Also, this research should be expanded by using other variables as: interest rate, export, import and government expenditure. In order to investigate separately the effect of remittances on consumption and investments, the use of disaggregated data is of extraordinary importance for future research.

In order to find out if the remaining parts of our model suffer from autocorrelation or not, Durbin Watson (DW) test was carried out. The DW statistic test ranges from zero to four degrees. Each value of about two suggests that the remaining parts are not autocorrelated. As the DW test values move from two to four, there is a stronger negative autocorrelation and as the DW test values go from two to zero, it shows a positively stronger autocorrelation (Aryal, 2016). In our model, DW is 1.161869, where based on the results of the analysis, it is shown that we are dealing with an autocorrelation. This means that an increase of a time series over a period leads to a proportional increase of a time series in the next period.

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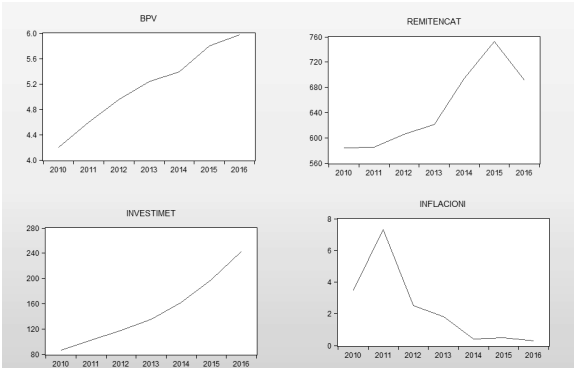
Appendix

Figure 1: The direction of remittances, investments and inflation in GDP

GDP

REMITTANCES



INVESTMENTS

INFLATION