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DOES GREYLISTING AFFECT THE WORKERS' REMITTANCES TO THEIR HOME COUNTRY? A CASE STUDY OF PAKISTAN

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ABSTRACT

Inward forward remittances are an important source of foreign reserves for Pakistan and they are also conducive in maintaining the current account deficit at a manageable level. In this article, the author has attempted to gauge the impact of FATF grey listing on the inward foreign remittances of Pakistani workers employed abroad. The time series data spanning from 2001-2022 has been used to estimate these effects using the ARDL time series estimation method and bounds testing technique for cointegration. It has been estimated that no statistically significant effect of greylisting on workers' remittances exists either in the short or in the long run. This is in tandem with various studies that have found that FATF listing does not necessarily have a conclusive or negative effect on economic variables. However, the estimates suggest that there exists a statistically significant relationship between the exchange rates and the workers' migration stocks in the short and the long run. The results of the study add to the existing literature because to the author's knowledge, no prior work has been done regarding the impact of greylisting on the workers' remittances sent to the home country and this effect has not been studied individually in the case of a developing country like Pakistan. Furthermore, the available literature suggests that in general, not much work has been done to estimate the impact of greylisting or blacklisting on the country's economy; the results available in the existing literature are also mixed; where some studies report unconclusive impacts whereas other studies report a negative impact of greylisting on the economic aspects they analysed.

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INTRODUCTION

In the wake of low foreign reserves¹, high external debt², low government revenues ³, increased reliance on international lenders⁴, downgraded credit ratings⁵, insufficient funds to finance government expenditures, and difficulty in external debt servicing ⁶; the inward foreign remittances from Pakistanis working abroad hold immense importance for Pakistan's economy because remittances affect a country's foreign reserves and the current account balance.

Pakistan has a history of being on the FATF grey list multiple times due to deficiencies in its AML/CFT/PF controls framework⁷. It was first placed in the grey list in February 2008 and was removed from the list in June 2010; subsequently, Pakistan also remained in the grey list from February 2012 to February 2015 and from June 2018 to October 2022. There are many negative economic and reputational ramifications for a country to be on the grey list; therefore, the FATF regularly appraises the countries about the

efficacy of their AML frameworks. Some of the negative impacts of being in the grey list include difficulty (and delay) in international financial transactions (as the transactional scrutiny is increased at the remitting country); furthermore, greylisting also makes it difficult for countries to take loans from international organizations (like the World Bank, IMF, ADB etc.), may also reduce the inward foreign investments; additionally, it would also result in reducing a country's reputation, global standing and trade volumes (Everington, 2012). Countries like Iran, DPR Korea, and Myanmar8 that are currently placed on the blacklist also get subjected to various economic sanctions (Anderson et al., 2023). Therefore, given the severe economic impacts of being in the grey list and the history of Pakistan of being in the grey list; the author in this paper attempts to gauge the impact of grey listing on the inward foreign remittances of the Pakistani workers employed abroad.

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¹ Liquid FX reserves \$ 8,527.7B as of May 2023 https://www.sbp.org.pk/ecodata/forex.pdf

^{2 \$126.94}B as of FY 2022

https://data.worldbank.org/indicator/DT.DOD.DECT.CD?locations=PK 3 Rs. 9,780.4B in July-March FY 2024

https://www.finance.gov.pk/survey/chapter_24/4_fiscal%20development.pdf 4 Chapter 5: Domestic and External Debt

https://www.sbp.org.pk/reports/annual/aarFY22/Chapter-05.pdf 5 Fitch Downgrades Pakistan to 'CCC+'

https://www.fitchratings.com/research/sovereigns/fitch-downgrades-pakistan-to-ccc-21-10-2022

 $^{^6}$ External debt was 7.9% of GDP in FY 2022

https://documents1.worldbank.org/curated/en/099041223153536828/pdf/P17507712d44490bd1bb661b4b60037e930.pdf

 $^{^{7}\,\}mathrm{There}$ and back again: A timeline of Pakistan's journey out of the FATF 'grey list.

https://www.dawn.com/news/1694958#:~:text=Feb%2028%2C%202008%2 0%E2%80%94%20Pakistan%20is,(APG)%20to%20achieve%20targets. 8High-Risk Jurisdictions subject to a Call for Action - June 2024

www.fatf-gafi.org/en/publications/High-risk-and-other-monitoredjurisdictions/Call-for-action-june-2024.html

The Financial Action Task Force (FATF) was created in the year 1989 by the G7 and it initially comprised of the European Commission, the G7 countries, and eight other countries⁹. It is an international organization that sets standards regarding the AML/CFT/PF and regularly issues guidelines related to the financial and non-financial sectors, transparency in transactions or businesses, and international cooperation to combat the menace of money laundering (ML), Terrorist Financing (TF) & Proliferation Financing (PF). The recommendations assist the counties in forming a comprehensive and robust AML/CFT/PF framework. Furthermore, FATF monitors the country's performance against the issued recommendations and takes appropriate measures against countries for their non-compliance with the standards. FATF works in collaboration with other international organizations like the World Bank (WB), International Monetary Fund (IMF), United Nations (UN), and other FATF style regional bodies (FSRBs). FATF relies on the FSRBs to help implement its standards and recommendations at a global scale. The FATF, International Organizations, and FSRBs review whether a robust controls framework is in place and whether it is efficient in implementing the FATF standards; this collaborative review method is referred to as the mutual evaluation that uses an agreed methodology to assess (Koker et al., 2023). The 09 FSRBs regional bodies are (1) CFATF- Caribbean Financial Action Task Force (2) APG-Asia/Pacific Group on Money Laundering (3) EAF- Eurasian Group (4) ESAAMLG- Eastern and Southern Africa Anti-Money Laundering Group (5) GABAC-Central Africa Anti-Money Laundering Group (6) GIABA- West Africa Money-Laundering group (7) MENAFATF- Middle East and North Financial Action Task Force (8) MONEYVAL- Council of Europe Anti-Money Laundering Group (9) GAFILAT- Latin America Anti-Money Laundering Group (FATF).

Although, initially FATF was created with a single mandate to mitigate the risk of money laundering (ML) i.e., situations where criminals take advantage of the intricate global financial network and transfer illegitimate funds (as determined by the law) to other countries (within no time) taking advantage of the lax controls against ML & TF. However, the mandate of FATF was expanded twice after its inception. In the aftermath of the 9/11 terrorist attacks in 2001, its mandate was expanded to include recommendations related to Terrorist Financing (TF), and its mandate was further expanded in 2012 to cover Proliferation Financing (PF) as well (FATF). Currently, there are 200 jurisdictions that are required to comply with the standards set by FATF and these standards are commonly referred to as the 'forty recommendations' (Koker et al., 2023).

FATF holds meetings thrice every year; furthermore, upon the commencement of every meeting, it issues a list of countries, classifying them into either of the two categories, blacklist or greylist. The listing of countries as either grey or black was first introduced in 2000 by the FATF (Anderson et al., 2023). The placement of countries in each category is dependent on the country's compliance with the AML/CFT recommendations issued by the FATF. The counties in the blacklist have a high risk of ML, TF, and PF, due to significantly weak regulatory and operational controls framework and gross non-compliance (negligence) to the regular AML/CFT standards issued by the FATF. Blacklisted countries are also referred to as the 'high-risk jurisdictions' requiring action. Whereas the countries in the greylist are those that have shown their commitment to resolving the deficiencies in their AML/CFT regimes within a specific period and are subjected

to increased monitoring by the FATF. To come out of the grey list, the countries need to take ample measures in addressing the weaknesses in their control framework and implementation that were identified by the FATF during their reviews. As per the 3rd meeting of FATF for the year 2023; there were 03 countries on the blacklist, which included Iran, DPR Korea, and Myanmar; furthermore, 23 countries were in the greylist; however, the list keeps on updating since FATF has a continuous monitoring mechanism (Anderson et al., 2023). Four countries including Jordan, Panama, Albania, and the Cayman Islands were removed from the grey list, due to adequate compliance with the earlier shortcomings in the AML/CFT regime identified by the FATF. Until October 2023; out of the 98 nations that were earlier placed in the grey list, 76 have been removed (Anderson et al., 2023).

Therefore, given the reputational and economic losses of black or greylisting, the counties take remedial actions as recommended by the FATF to strengthen their control mechanisms against the ML, TF, and PF. The finance ministries, external advisors, and all the relevant stakeholders take the remedial actions proposed by the FATF to remove their country from the FATF listings. Given the increased risk of ML, TF, and PL, especially in those countries placed on the black or grey list, the financial authority (such as the SBP in Pakistan, FED in the USA, or RBI in India) should make sure that the institutions dealing in financial transactions should have a risk-based AML/CFT mitigation control mechanism in place to reduce the threat of ML/TF/PF. Software like that offered by the 'Sanction Scanner' that utilizes intricate algorithms and machine learning can flag transactions as suspicious on a real real-time basis and can help financial institutions prevent Trade-Based Money Laundering as well (SC, 2024).

According to the existing literature, there are various studies that have analysed the impacts of greylisting on the jurisdiction's economy, and the literature suggests that the studies had mixed results; some suggest that there is an impact of listings whereas some studies find mixed or unconclusive results.

Mixed Impacts

To estimate the negative impact of FATF listing, if any, the changes in the Bank of International Settlements (BIS) transactions' data that of 'to and from tax havens' was analysed. The data of 46 jurisdictions was analysed for the quarters before FATF & OECD listing and the quarter after the removal from the FATF & OECD list. For the analysis, the total assets & liabilities data along with the bank loans and deposits data was taken into consideration. However, the results estimated were unconclusive; the estimates concluded that the inflow and outflow of banking investments were not significant in case of blacklisting for 38 jurisdictions out of a total of 46 jurisdictions in the data (Kudrle, 2009).

The connection between the capital movements between jurisdictions and their listing & delisting was analysed for 126 jurisdictions from 1996-2014. Numerous economic variables were used in the study including the bank flows, individuals' access to the financial services, stability and size of the financial markets, and the overall macroeconomic stability. However, the author found out that there is no significant negative impact on the economy (Balakina et al., 2017).

Negative Impacts

Some alarming estimates of the economic and financial damage resulting from the black or greylisting of a country (by the FATF) have been explored in various studies. ML has a negative effect on

⁹ History of FATF

economic growth; it damages the country's financial sector, lowers productivity, and hampers trade & capital flows (Bartlett, 2002). Furthermore, when the inaccurately priced export and import transactions to launder money are extensive then the effect on the country's external sector is tremendous (Bartlett, 2002).

One of the real-world examples is that of Nigeria where the government was unable to manage the official exchange rate of 'The Nigerian Naira' from a policy perspective because the exchange rate differential reflected a premium that was due to the excess demand for the foreign currency to pay for the illicit/false import documents; those illegitimate import documents were either to evade custom duties or to make transfer payments that were otherwise restricted or were declared illegal. Now this inflated demand for foreign currency in Nigeria resulted in the exchange rate of 'Nigerian Naira' increasing; hence making the Nigerian exports more expensive in the international market and resulting in decreased economic growth (IMF, 2001).

Using the data of 36 Latin American and Caribbean nations for the period 1960-2010, it was estimated that low compliance with FATF recommendations (resulting in a low FATF rating/score) reduces the investment to GDP ratios, it reduces FDI to GDP ratio and reduces credit markets to GDP ratio. Furthermore, the reduction in the FDI to GDP ratio could be very significant, it could be as high as 2% if the FATF score is low and it might get as high as 5% if a country is blacklisted (Farías and Almeida, 2014).

Analysis of 'Society for Worldwide Interbank Telecommunications' (SWIFT) data for the years 2003-2014 showed that the placement of a country in the FATF grey list results in a 7%-10% reduction in the payments received by the country from other countries worldwide but no reductions in the payment sent abroad. Furthermore, the decline in the payments is more likely for the payments that are received from countries with weak AML/CFT regimes (Collin et al., 2016).

Furthermore, an analysis of a bank's inflows for the period between 2010-2015 of 39 countries (10 out of 39 were grey listed) showed that listing a country by FATF results in a statistically significant & large reduction in bank's money inflows, almost by 15%-16% (Morse, 2019).

Millions of trade transactions between the US and Russia were analysed to detect abnormal pricing in international trade. The purpose of the analysis was to estimate the economic impact of under-invoicing and over-invoicing in international trade and to determine whether the capital movement through international trade is for money laundering, tax/duty evasion, or portfolio management. It was concluded in the study that the capital movement/flight due to international transactions can be attributed to money laundering and/or tax/duty evasions (De Boyrie et al., 2005a).

All the international trade transactions between the US and Switzerland during the period 1995-2000 were analysed to study the effect of Switzerland's AML Act of 1998 on the transfer of funds between countries due to false/illegitimate invoices in international trade. The study concluded that there were significant changes in the abnormal international trade prices after the Money Laundering Act was introduced in 1998. Hence, it showed that alternate techniques are adopted by the firms and the individuals if the AML laws, only focusing on the financial institutions are introduced in a nation (De Boyrie et al., 2005b). Using the machine learning techniques, it was estimated that the FATF grey listing on average decreased capital inflows in a country by 7.6% of GDP, FDI inflows by 3%, portfolio inflows by 2.9%, and other investment inflows by 3.6% of the GDP (Kida and Paetzold, 2021).

METHODOLOGY

The existing literature suggests that the number of emigrant workers has a positive impact on the remittances received (Gupta, 2005; Giuliano and Ruiz-Arranz, 2009; Neyapti et al., 2005) and more studies as well. Furthermore, the existing studies also suggest that the exchange rate also has a positive impact on the workers remittances received (Muhammad and Rehman, 2022; Alam et al., 2022; Yoshino et al., 2019; Kashif Munir, 2021; Bouhga-Hagbe, 2004).

This is because an increase in the exchange rate implies appreciation of the host currency; therefore, the remitters will get more local currency in exchange for the host currency. Furthermore, in terms of purchasing power, an increase in the exchange rate is expected to result in an increase in the purchasing power of the host currency. However, evidence also exists that the impact of the exchange rate could be negative as well because it depends on whether the wealth effect of an increase in the exchange rate is stronger or the substitution effect (Akçay and Karasoy, 2019; Khan et al., 2022).

Therefore, the model specification is as follows:

 $w_remit_t = f(greylist_d_t, fx_rate_t, mig_stock_t)$ (1)

ARDL estimation technique has been used to estimate the model parameters. The long-run effects are estimated using the bound testing method (post-error correction). Post-estimation tests are done to check for the heteroskedasticity, autocorrelation, serial correlation, normality, and stability of the model.

Data and Variables Description

The secondary data for the analysis has been obtained from various sources including the State Bank of Pakistan (SBP), the Financial Action Task Force (FATF), The World Bank (WB), and the Bureau of Emigration & Overseas Employment Pakistan (BEOE). The variable name, its description, and its sources are mentioned in Table 1.

Table 1. Description of variables.

Variable	Description	Date Source
w_remit _t	Emigrant workers' remittances received (in millions of US \$) during any year t	State Bank of Pakistan www.sbp.org.pk
greylist_d _t	Dummy variable for being in the greylist in a particular year t (equals to 1 if in grey list and 0 otherwise)	FATF www.fatf-gafi.org
fx_rate _t	Official exchange rate (LCU per US\$, period average) during year t	The World Bank https://databank.worldbank.org/
mig_stock _t	Stock of worker emigrants abroad at year t	Bureau of Emigration & Overseas Employment, GOP www.beoe.gov.pk

RESULTS AND DISCUSSION

Results mentioned in Table 2 show that the residuals are normally distributed, error variance is constant (homoscedastic), no serial or autocorrelation, and the model is stable. The estimated results of the model show that the worker's migration stock has a positive and statistically significant effect on the workers' remittances in the long and in the short run. According to the existing literature, this is in tandem with many studies that found a positive relationship between the stock of migrant workers and the remittances received by the home country (Abbas et al., 2017; Elbadaw and Rocha, 1992; Barua et al., 2007; Gupta, 2005; Giuliano et al., 2009).

According to the existing literature, there are four major motives behind workers' home remittances. Altruism is where the worker gets satisfaction from sending home remittances for the family's welfare; hence, their satisfaction is tied to their family's satisfaction. According to Chami and Fischer (1996) and Agarwal and Horowitz (2002) when the emigrant worker's income and employment get stable then the worker gets satisfaction in sending remittances for the family's well-being. Studies such as Lucas and Stark (1985) found that migrant workers send home remittances for personal motives, such as investing in land and property on behalf of the workers to earn profit. Furthermore, studies such as Agarwal and Horowitz (2002) point out an unwritten & informal agreement (or understanding) between the family and the migrant worker, according to which the family invests in the worker's education and travel costs, etc., and the migrant worker in return sends home remittances as if he is repaying the loan amount to the family; this is referred to as the family and ties motive. Lastly, there are studies (Sana and Massey, 2005; Gubert, 2002) that have identified income diversification and hedging against the risk of income uncertainty in difficult times. Therefore, as the stock of migrant workers increases then it is quite logical to expect more remittances because, from Pakistan's perspective, all four motives are quite dominant in its societal norms.

Furthermore, the estimated results show a positive and statistically significant effect of the exchange rate in the long run, indicating that the appreciation of the host currency results in an increase in the workers' remittances. According to the existing literature, this is in tandem with many studies that found a positive relationship between the exchange rate and the remittances received (Yoshino et al., 2019; Kashif Munir, 2021). However, in the short run, there exists a significant but negative relationship between the exchange rate and the workers' remittances. Akçay and Karasoy (2019) and Khan et al. (2022)

have pointed out that the impact of an increase in the exchange rate (i.e., appreciation of the host currency) is positive or negative depending on the relative magnitude of the wealth effect and the substitution effect; furthermore, if the substitution effect is dominant then the impact will be negative. The existing literature has studies that have estimated the negative impact of an appreciation of the host currency on workers' home remittances (Lueth and Ruiz-Arranz, 2007; Ojede et al., 2019).

However, the variable of interest i.e., the greylist does not have a significant effect in the long or in the short run. The results are consistent with the studies that concluded that greylisting does not necessarily result in a negative impact on the economic variable(s) or the results are inconclusive, such as Kudrle (2009). Balakina et al. (2017), and more. According to the study (Muhammad and Rehman, 2022) majority of the Pakistani workers, more than even 96% migrate to the Gulf countries for work, their contribution to the total worker remittances is around 60% and they are mostly working in sectors that require low level of skills such as in the construction sector, transport sector etc. Therefore, from these stated facts it could potentially be inferred that the majority of the workers that go abroad do not have the leverage to avoid sending remittances back home because their remittances might be the major source of income for their family. So, even in the case of more documentation and paperwork required for remittances, the workers do send their remittances even if Pakistan is on the grey list. The study (Alam et al., 2022) discusses about the fixed and discretionary remittances. Fixed remittances are sent to the families so that they can satisfy their immediate needs (Lipton, 1980; Russell, 1992). Therefore, the result of this study potentially suggests that the workers' remittances are at large the fixed remittances that do not depend on the greylisting of a country.

The Pakistani workers abroad due to motives such as family and ties (Stark, 1991; Gubert, 2002) and other motives like altruism (Johnson and Whitelaw, 1974; Solimano, 2003); send home remittances even if they come at the cost of more scrutiny of documents, increased documentation or more paperwork required due to greylisting of the destination country i.e., Pakistan. The results using the ARDL estimation technique are appended below.

The ARDL bounds cointegration method is used to see whether there exists a long-run or equilibrium relationship in the time series data. The variables might be in disequilibrium in the short run, however, if they are cointegrated then they converge in the long run.

Table 2. Diagnostic tests for model adequacy.

Model adequacy test	Name of the Test	Null Hypothesis: H ₀	Test Statistic	Prob.	Result
Normality Assumption	Jarque-Bera test	Residuals normally distributed	0.1816	0.9132	${\rm H}_0$ is not rejected at 5% level of significance
Heteroskedasticity of variance	White's test for homoskedasticity	Constant variance	21	0.3971	$\ensuremath{H_0}$ is not rejected at 5% level of significance
Serial correlation	Breusch-Godfrey LM test for serial correlation	No serial correlation	3.586	0.0583	$\rm H_0$ is not rejected at 5% level of significance
Model Stability	Cumulative Sum of Recursive Residuals	Graph within 95% confidence bands			

The criterion to determine whether the long-run relationship exists or not is as follows:

Accept if F < critical value for I(0) regressors

Reject if F > critical value for I(1) regressors

Therefore from Table 3, the F-statistic of the ARDL bounds test is 28.274 which is above I(1)=4.35. So, there is evidence of cointegration from the estimated results. Therefore, from the estimated values of Table 3, it can be concluded that a long-run relationship does exist in the time series data that has been used

for analysis. Hence, the error correction method will be used to estimate the long and short-run relationships.

From Table 4 it can be seen that in the long run, the coefficient of greylist is positive but not statistically significant at 5 % level. Furthermore, the coefficients of the migration stock and the exchange rates have positive and statistically significant results in the long run. In the short again the migration stock has positive and statistically significant results, but the exchange rates have negative and statistically significant results.

Table 3. Estimated Results of bounds integration test showing cointegration (using STATA 15).

resaran/Snin/S	Smith (2001) ARDL Bounds Tes	ol .			
H ₀ : no levels r	elationship	F=28	.274		
	-	t=-8.3	347		
Critical Values ((0.1-0.01), F-statistic, Case 3				
	[I_0] [I_1]	[I_0] [I_1]	[I_0] [I_1]	[I_0] [I_1]	
	L_1 L_1	L_05 L_05	L_025 L_025	L_01 L_01	
1.0	2.72 3.77	3.23 4.35	3.69 4.89	4.29 5.61	
k_3	2.72 3.77	0.20 1.00			
	tical value for I(0) regressors	0.20 1.00			
accept if F < cri		0.20 1.00			
accept if F < crit	tical value for I(0) regressors	0.20 1.00			
accept if F < crit	cical value for I(0) regressors ical value for I(1) regressors	[I_0] [I_1]	[I_0] [I_1]	[L_0] [L_1]	
accept if F < crit	tical value for I(0) regressors ical value for I(1) regressors (0.1-0.01), t-statistic, Case 3				

k: # of non-deterministic regressors in long-run relationship

Critical values from Pesaran/Shin/Smith (2001)

Table 4. Estimated results of the error correction model (using STATA 15).

ARDL(1,0,1,1) regression						
Sample: 2002-2022					Number of obs = 21 R-squared = 0.9057 Adj R-squared = 0.8653	
Log Likelihood = 29.1 D.lnw_remit	Coef.	Std. Err.	t	P > t	Root MSE = 0.0739 [95% Conf. Interval]	
ADJ	GUEI.	otti. EII.	ι	r > t	[7570 Com. mervar]	
lnw_remit L1.	6150026	.0736775	-8.35	0.000	773025345698	
LR						
greylist_t	.0386271	.0849081	0.45	0.656	1434827 .2207368	
lnmig_stock	.8929333	.2714193*	3.29	0.005	.3107968 1.47507	
lnfx_rate	.8646524	.359853*	2.40	0.031	.0928444 1.63646	
SR						
lnmig_stock	2.494133	.7460829*	3.34	0.005	.8939446 4.094322	
D1.						
lnfx_rate	8151229	.304784*	-2.67	0.018	-1.468821614263	
D1.	-5.386149	2.151914	-2.50	0.025	-10.001557707533	
_cons						

^{*}Represents coefficient(s) significant at 5% level

CONCLUSIONS

The estimated results suggest that there does not exist a long or a short run relationship between the FATF greylisting and the workers remittances sent home. It is of paramount importance to assess the estimated results from the perspective of each country separately, so that relevant and potent economic policies can be an adopted by each country depending on its own macroeconomic context. However, it is of paramount importance for Pakistan to remain out of the greylist through a robust AML control framework in place and effective implementation of the standards set by the FATF. This is because the FATF listing might potentially result in difficulty for Pakistan in securing external loans; financing its expenditures, repaying the already accumulated external debt, and maintaining the current account deficit within a reasonable level. In the current scenario with low foreign reserves, remittances are an important source of accumulating foreign reserves, and the government of Pakistan is also cognizant of this fact. Therefore, the government of Pakistan has time and again introduced policies that were aimed to give incentives to those who send foreign remittances to Pakistan. For instance, only in the year 2018-2019, some remittances-related initiatives include extending the services for home remittances, the M-Wallet scheme (that was introduced in 2017) was further rationalized, holding the second Pakistan remittance summit in 2019 and the introduction of remittances on blockchain models (GOP, 2019). Furthermore, in addition to the already existing E-Wallet, Sohni Dharti Remittance Program (SDRP) and more, further initiatives were introduced in 2023-24 to promote remittances, such as allocation of Rs. 80 billion rupees for more remittance incentive programs, MoU was signed between State Bank of Pakistan (SBP) and the Arab Monetary Fund (AMF) to facilitate remittances, reimbursement increment in the already existing TT Scheme and more (GOP, 2024).

REFERENCES

- Abbas, F., Masood, A., Sakhawat, A., 2017. What determine remittances to Pakistan? The role of macroeconomic, political and financial factors. J. policy Model. 39, 519–531.
- Agarwal, R., Horowitz, A.W., 2002. Are international remittances altruism or insurance? Evidence from Guyana using multiple-migrant households. World Dev. 30, 2033–2044.
- Akçay, S., Karasoy, A., 2019. The asymmetric impact of oil prices on remittances: evidence from India. OPEC Energy Rev. 43, 362–382
- Alam, S., Wasim, S.M.S., Ahmad, B., 2017. Macroeconomic determinants of workers' remittances: Pakistan, a case in point. Glob. Manag. J. Acad. Corp. Stud. 7, 85.
- Anderson, J., Cohen, J.M., Arellanes, W.L., Rogers, L., 2023. The Economic Impact of FATF Grey-Listing. From White & Case: https://www.whitecase.com/insight-alert/economic-impact-fatf-grey-listing.
- Balakina, O., D'Andrea, A., Masciandaro, D., 2017. Bank secrecy in offshore centres and capital flows: Does blacklisting matter? Rev. Financ. Econ. 32, 30–57.
- Bartlett, B.L., 2002. The negative effects of money laundering on economic development. Asian Development Bank Regional Technical Assistance Project No, 5967.
- Barua, S., Majumder, M.A., Akhtaruzzaman, D.M., 2007. Determinants of Workers' Remittances in Bangladesh: An Empirical Study. Policy Analysis Unit (PAU). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=139 8690.
- Bouhga-Hagbe, J., 2004. A Theory of Workers' Remittances with an Application to Morocco. IMF Working Paper: WP/04/194.

- https://papers.ssrn.com/sol3/papers.cfm?abstract_id=879 019.
- Chami, R., Fischer, J.H., 1996. Altruism, matching, and nonmarket insurance. Econ. Inq. 34, 630–647.
- Collin, M., Cook, S., Soramäki, A.K., 2016. The Impact of Anti-Money Laundering Regulation on Payment Flows: Evidence from SWIFT Data. Center for Global Development. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=289 3790.
- De Boyrie, M.E., Pak, S.J., Zdanowicz, J.S., 2005a. Estimating the magnitude of capital flight due to abnormal pricing in international trade: The Russia–USA case, in: Accounting Forum. Elsevier, pp. 249–270.
- De Boyrie, M.E., Pak, S.J., Zdanowicz, J.S., 2005b. The impact of Switzerland's money laundering law on capital flows through abnormal pricing in international trade. Appl. Financ. Econ. 15, 217–230.
- Elbadaw, I.A., Rocha, R.D., 1992. Determinants of expatriate workers' remittances in North Africa and Europe. Policy Research Working Paper; no. WPS1038; The World Bank. https://documents1.worldbank.org/curated/en/6237114 68741892408/pdf/multi-page.pdf.
- Everington, J., 2012. Assessing the impact of FATF's grey list. From The Banker: https://www.thebanker.com/Assessing-the-impact-of-FATF-s-grey-list-1707734050.
- Farías, M.E., de Almeida, M.A., 2014. Does saying 'yes' to capital inflows necessarily mean good business? The effect of antimoney laundering regulations in the Latin American and the Caribbean economies. Econ. Polit. 26, 96–127.
- Giuliano, P., Ruiz-Arranz, M., 2009. Remittances, financial development, and growth. J. Dev. Econ. 90, 144-152.
- GOP, 2019. Pakistan Economic Survey 2018-19. From Finance Division, Government of Pakistan. https://www.finance.gov.pk/survey_1819.html
- GOP, 2024. Pakistan Economic Survey 2023-24. From Finance Division, Government of Pakistan. https://www.finance.gov.pk/survey_2024.html
- Gubert, F., 2002. Do migrants insure those who stay behind? Evidence from the Kayes area (Western Mali). Oxford Dev. Stud. 30, 267–287.
- Gupta, P., 2005. Macroeconomic Determinants of Remittances: Evidence from India. IMF. https://www.jstor.org/stable/4418406.
- IMF, 2001. Nigeria: Staff Report for the 2001 Article IV Consultation. https://www.elibrary.imf.org/view/journals/002/2001/1 31/article-A001-en.xml.
- Johnson, G.E., Whitelaw, W.E., 1974. Urban-rural income transfers in Kenya: an estimated-remittances function. Econ. Dev. Cult. Change 22, 473–479.
- Kashif Munir, N.R., 2021. Remittances-Exvhange Rate Nexus: Evidence from Pakistan. J. Audit Account. Rev. 1, 12-29.
- Khan, D., Khan, D., Ahmed, T., 2022. China Pakistan Economic Corridor (CPEC): Vulnerable to Domestic and International Sabotage. Int. J. Contemp. Issues Soc. Sci. 1, 12–17.
- Kida, M., Paetzold, S., 2021. The Impact of Gray-Listing on Capital Flows: An Analysis Using Machine Learning. International Monetary Fund Working Paper. https://imf.org/-/media/Files/Publications/WP/2021/English/wpiea2021 153-print-pdf.ashx.
- Koker, L.D., Howell, J., Morris, N., 2023. Economic consequences of greylisting by the financial action task force. Risks 11, 81.
- Kudrle, R.T., 2009. Did blacklisting hurt the tax havens? J. Money Laund. Control 12, 33–49.

- Lipton, M., 1980. Migration from rural areas of poor countries: the impact on rural productivity and income distribution. World Dev. 8. 1–24.
- Lucas, R.E.B., Stark, O., 1985. Motivations to remit: Evidence from Botswana. J. Polit. Econ. 93, 901–918.
- Lueth, E., Ruiz-Arranz, M., 2007. Are Workers' Remittances a Hedge Against Macroeconomic Shocks? The Case of Sri Lanka. IMF Working Paper.
 - https://papers.ssrn.com/sol3/papers.cfm?abstract_id=961752.
- Morse, J.C., 2019. Blacklists, market enforcement, and the global regime to combat terrorist financing. Int. Organ. 73, 511–545.
- Muhammad, M., Rehman, H.A., 2022. Impact of Oil Price on Remittances from GCC to Pakistan. Cent. Eur. Manag. J. 30, 1427–1436.
- Neyapti, B., Aydas, O.T., Metin-Ozcan, K., 2005. Determinants of workers' remittances: the case of Turkey. Emerg. Mark. Financ. Trade 41, 53–69.
- Ojede, A., Lam, E., Okot, N., 2019. Identifying macro-determinants of remittance flows to a developing country: the case of Uganda. J. Int. Trade Econ. Dev. 28, 429–451.

- Russell, S.S., 1992. Migrant remittances and development. Int. Migr. 30, 267–287.
- Sana, M., Massey, D.S., 2005. Household composition, family migration, and community context: Migrant remittances in four countries. Soc. Sci. Q. 86, 509–528.
- SC, 2024. What is Trade-Based Money Laundering (TBML)? From Sanction Scanner:
 - https://www.sanctionscanner.com/knowledge-base/trade-based-money-laundering-tbml-40.
- Solimano, A., 2003. Workers Remittances to the Andean Region: Mechanisms, Costs and Development Impact. UN-ECLAC. https://publications.iadb.org/en/bitstream/handle/11319/744/Workers%20Remittances.
- Stark, O., 1991. Migration in LDCs: risk, remittances, and the family. Financ. Dev. 28, 39–41.
- Yoshino, N., Taghizadeh-Hesary, F., Otsuka, M., 2019.

 Determinants of International Remittance Inflows in Middle-Income Countries in Asia and the Pacific. ADBI Working Paper Series No. 964.
 - https://papers.ssrn.com/sol3/papers.cfm?abstract_id=354 1026.

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