

Human Capital Flight: Impact and Challenges on Economy, A Case of Pakistan

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Abstract

Migration of people from one place to another is a historical trend, creating connection and understanding among people of diverse cultural heritage. In the global market economy, the trend is increasingly taking footing especially and within the discourse of brain drain from global south to north. Pakistan is one of the countries plagued by the syndrome of human capital flight (HCF), as sizeable portion of its GDP is held by HCF. In this backdrop, the research seeks to analyze the pros and cons of human capital flight especially on GDP growth and income. The paper further revisits the theory of emigration and tries to discover whether or not there exist correlation and effect between human capital flight and government policy. Upon looking at existing literatures and collected data, the paper analyses the implications of human capital flight on the overall Pakistan economy growth and per capita income. It is found that workers' foreign remittance significantly positive effected on the economic growth (GDP) and per capita income during the time line of study 1980 to 2011.

Keywords: Human Capital Flight, Brain Drain, Global South and North, Global market, economic incentives

1. Introduction

Since the last three decades human capital flight (HCF) has been instrumental in shaping the direction of Pakistan's economy. The economy has faced many challenges yet resilience. The nation of Pakistan is no doubt endowed with huge human capital that can contribute to the development of the country. But the reversal has always been the case. Highly educated Pakistani would rather want to travel abroad because there are little or no incentives for them at home and those sponsored abroad for studies will not think of returning home for similar reasons. It thus becomes a matter of concern that Pakistan's academic sector is increasingly becoming a breeding ground for experts to be groomed and later think of settling in foreign countries, where there exist ample of opportunity and resources. Such disposition places migrant Pakistanis into the descriptive framework of an international migrant as a "person who has moved from one country to another with the intention of taking up residence there for a relevant period of time." (Hammar and Tamas, 1997: 16). The intention to seek alternative measure to bolster and readjust economic and financial status cannot be entirely disconnected from the economic stress, which is well grounded in economic theory of migration (Ben-Sira, 1997). For few critics, the plague of net emigration places Pakistan at receiving end, and thus follows, expected development will be, but a dream without a control of emigration.

Interestingly, the economic benefit of foreign remittance from Pakistan expatriates remains debatable issue. It is clear that people are migrating out of Pakistan to foreign countries, but there has been less work (research) done measuring the cost and benefit of foreign remittance on the overall gross domestic product (GDP) of Pakistan's economy and how swaying foreign remittance is on individual, community, societal and national status.

Therefore, we seek to understand the correlation between human capital flight and growth particularly in the Pakistani context. Should the government continue or discontinue aiding this process; such decision will become decisive

upon gauging the cost and benefit of the process. What are the domestic variables expediting human capital flight from Pakistan, and should these variables be mitigated? These are some of the questions we will seek to shed light upon. More importantly, we seek to dissect the situation by seeking refuge in the push and pull theory as theoretical framework for the understanding of why people leave their homeland. Meanwhile, our understanding of the situation also seeks comfort in the application of econometric tools and model, instrumental in weighing whether or not human capital flight from Pakistan should be encouraged. Interestingly, the research explores the existing debates in the literatures revolving around the subject, which in fact enhance our comprehension that human capital flight is not typical to Pakistan, but one of the syndromes in developing nations

2. Material and Methods

This study is an attempt to bridge the gap in the literature by answering the question whether human capital flight is good or bad for the growth of Pakistan. The study has dwelled much on secondary data. The study revolves around the hypothesis that "Pakistan's Gross Domestic Product (GDP) has been witnessing a sizeable growth on account of Human capital flight, though the latter cannot be disconnected from its large population." The dependent variable is Gross Domestic Product (GDP) while workers' remittance taken as independent variable. The second model that considers the dependent variable as per capita income and independent variable is workers' remittance. The GDP has been taken as a proxy for wage differentials. The time-line of data and analysis runs through July 1980 to June 2011.

The study has three models. The first model takes GDP as the dependent variable, while per capita income and foreign remittance stood as independent variables; therein we applied the multiple regression analysis on this model.

$$\text{Economic Growth (GDP)} t = \alpha t + \beta_1 \text{worker remittance} (t) + \beta_2 \text{Per Capita Income} (t) + \epsilon t$$

Whereas (GDP) t is the economic growth rate at time t , αt denotes the y -intercept, β_1 coefficient of workers' remittance at time t , β_2 co-efficient of Per capita income at time t and ϵt is the error term during the time.

The second model considers per capita income as dependent and foreign remittance as independent variable respectively.

$$\text{Per Capita Income} (t) = \alpha t + \beta_1 \text{worker remittance} (t) + \epsilon t$$

Per capita income (t) at time t , αt denotes the y -intercept, β_1 coefficient of workers' remittance at time t and ϵt is the error term during the time.

The third model considers GDP as dependent and foreign remittance as independent variable respectively. The simple regression analysis was applied on the two latter models.

$$\text{Economic Growth (GDP)} t = \alpha t + \beta_1 \text{worker remittance} (t) + \epsilon t$$

Whereas (GDP) t is the economic growth rate at time t , αt denotes the y -intercept, β_1 coefficient of workers' remittance at time t and ϵt is the error term during the time.

Our data repositories are State Bank of Pakistan, Ministry of Finance, Economic Survey of Pakistan Reports, Bureau of Emigration and overseas employment, Federal Bureau of Statistics, and Government of Pakistan Statistics Division.

3. Theory/Calculation

Human capital flow from the developing countries is an outright challenge to the sentimental paradigm that suggests people from global south lacks similar cognitive power as the Anglo-Saxon and European race. The facts are not opaque that people of African and Asian races have contributed immensely to the development of host countries as immigrants. Amidst the phenomenon of globalization outsourcing movement gains footing across borders, the jobs traditionally handled by Americans and Europeans are now eroding into the hands of skilled workers from the global south (Stiglitz, 2006).

Within the debate of human capital flow, the idea continuously flow that developing countries are growingly turning into breeding ground of experts that sooner find themselves at the shores of the developed world on the account that the

migrated experts do not have adequate institutions or environment where they could be more productive. Nonetheless, the argument cannot be downplayed that the simple fact that Africa and Asia can produce minds useful for the developed world, is a clear indication of their potentials.

Andrew (1997) looks at the correlation between income distribution, human capital accumulation and migration. He positioned himself along with the scholars that link economic growth, higher productivity and economic equality in the sending country with brain drain. With string argument, Andrew suggests that whether it is temporary or permanent emigration, there is tendency of increase in level of productivity of an economy.

Unlike Andrew, Simon et al (2004) claims that the flight of skilled workers often reduces the overall trend of welfare and development of the sending country. Brain drain is a further indication of the potential of brain exporting countries to produce able human capital, but lacking the infrastructures to make them fit for their immediate society. Yet nonetheless, human capital flow from the periphery to the core might further enunciate dependence yet clear the way that both still have avenue for cooperation. Irrespective of the impetuses behind brain drain, understanding the phenomenon of human capital flight requires deeper research to ascertain and measure its benefits and detriment on the migrant, home country and host country.

Nadeem and Kim (1994) note that people migrate for numerous benefits, but can also be dissuade from emigration on account of wage differentiation and assimilation costs. In addition, after tax wage can be a pushing factor necessary to make migrants hate staying behind in the host country, especially when there is a huge difference between migrant and native wage. By and large, growth of HCF will have an overall effect on per capita income growth of the sending country giving the flight of human capital to induce growth in the latter. Thus, such arguments resonate with the view that human capital flight enhances the 'differences in both the growth rates and the levels of per capita incomes across countries.' Yet to totally dismiss the economic benefit of brain drain will be unjust, although adverse effect of this trend is measured by the quality of various forms of human capital spread across the production process.

Michel et al, (2008) further sheds light on the phenomenon of brain drain. According to these scholars, from a developmental perspective, brain drain gets worrying remarks from analysts of the phenomenon. Yet to entirely discard the positive ramification of brain drain as in returns, investment in home country should not be underestimated. Be that as it may, actual gainer and loser in this intercourse between the core and periphery continue to make a debate, although some see the sending countries as the actual beneficiary of the intercourse. This argument revolves around the fact that on the account of the gain, skilled workers increase in number in the developing countries, as in those ready to migrate and those expatriate coming home better skilled. Consequently, policy debates have yet to fully capture the distributional effects of brain drain among developing countries. Arguing along the line of other observers, Michel et al argues that the actual cost and benefit measurement of HCF remains opaque, thus further investigation of the matter is more due for policy pertinence.

Hillel Rapoport (2002) concurs with the above, supporting the view that the level of development will posit the extent of brain drain; hence developing country with relatively high education population could be prone to this flight. Hence, some countries might be ready to allow greater brain flight giving the premise of the benefit, while other could discourage it on account of its implication on overall development. Rapoport holds that the rich country should not prey on the education population of the poor country, rather a workable immigration scheme should be instituted that will encourage return of migrants to countries badly hurt by brain drain and promoting international understanding on how to ensure equitable and distributional brain flight from poor countries.

Meanwhile, Nadeem ul Haque (2005) argues that the deteriorating development in the third world cannot all together be disconnected from human capital flight (particularly of skilled workers). The latter has been implicative on issues of governance, education and technology development. Regardless of the shortcoming of HCF, migration of the skilled from the developing countries avails them the opportunity of greater global and knowledge interaction. Brain drain equally avails developing countries to contribute their share in global talent hunt, a process that has been favourable to the hunter and the hunted. Such climate enhances the potential of developing countries to keep inventory and management of its stock of skilled workers. Such inventory and management of the pool of skilled workers will obviously become useful for governments of the donor countries to control and regulate the process of crowding out and in of talents.

Frederic Docquire (2007) argues along the line of (Haque,2005) that brain drain does not alone pose challenge to the development of developing countries, rather it adds some value to it. HCF of any country can always be determined by 'population size, political environment, education policy and level of development.' A tax system on brains should be instituted as compensation particularly in the context of harmful brain drain, yet such tax regime should take into consideration the proportion of small and large country.

Michele et al, (2001) scientifically looks at the socio-economic implications of migration, invariably explaining brain drain. Acting on the theories of migration, measuring the benefit and disadvantage of brain drain comes to bear only by understanding the more dominating of the two. Nonetheless, the authors concur that a better performing economy can spur brain drain.

The sociological approach employed by Frederic et al (2007) gives more nuances to the whole discourse of human capital flight. The authors suggest that lower education and proximity to rich countries can be strong determinant factors for migration of brains, although factors like 'proximity, historical links, country size, and fractionalization' are also viable and cannot be influenced by public policy. Yet, reducing the tendency of brain flight is possible through policies that pay serious attention to improvement of the socio-economic and political problems in the sending country.

Frederic et al (2007) see the level of education as important factor to cause migration, but (Kar-yiu Wong and Chong Kee Yip, 1999) opine that same education could be a vital policy mechanism to checking the challenges posed by brain drain on the economy. Interestingly, skilled workers have always benefited the most from the trend of human capital flight owing to their efficiency and productive capacity, hence incompatible with the unskilled migrant worker. But the question raised by them is that immigration policy has not paid serious attention to non-emigrants losing behind during a given time period. Meanwhile, a country having had the experience and tasted the benefit of brain flight could be affected if the growth of the trend gets halted and therefore affecting future generation.

The Islamic Educational, Scientific and Cultural Organization (ISESCO: 2007) in its final conference report argues HCF is one of the contending matters confronting the OIC countries. Therefore, tens of thousands of Pakistanis are noted to be leaving the shore of Pakistan for greener pasture abroad, with the hope that their talent will be better utilized and rewarded duly. It also goes forth to argue that government policy often times becomes a catalyst for this phenomenon of human capital flight, which in fact makes the educated and skilled less productive as expected. Invariably, HCF does not simply boost the economic standing of the immigrants upon leaving Pakistan, but also the benefits and exploitation of skilled workers by the industrialized nations, that is the developing countries like Pakistan, are rather becoming a breeding ground for manpower that will later fly out to the developed nations. Summarily, government has to formulate policy that could be rewarding for the skilled worker and thus saving them for economic development, and not letting go this skilled capital to countries, having already abundant of human capital and viable economic system.

According to the OCED/SOPEMI's report (2006) the laxity of government policy needed to be understood in terms of human capital flight and foreign remittance. It is opined that adequate environment for skilled labour is fewer or non-available, thus contributing to human capital flow. Arguably foreign remittance cannot be a substitute to enormous scientific and economic development that these skilled workers can do their nation if settled at home. Meanwhile, a comparison of Pakistani immigrants in the Middle East and Western countries shows that foreign remittance from the latter is lesser comparably to the former due to stricter immigration and citizenship rules, preventing Pakistani immigrants from being permanent residents in the Middle East. The correction of the situation is plausible only if government of Pakistan uphold similar policy of the developed nations, as in creating an incentive environment that will ultimately water-down the tendency to migrate, and as such reflective on the economy.

Syed A. Mateen (2006) discusses the need for proper documentation of Pakistani students going abroad for studies and most particularly Pakistani missions abroad should keep a track of these people, who often get absolved in studies and often times become comfortable to staying behind in these foreign countries rather than returning home. Hence, the Pakistani missions abroad should track these students, engage them, and acquaint them with the latest developments in Pakistan as to know what could be their contribution to their mother land. Meanwhile, the author chipped in the role of Pakistan International Airline (PIA) in facilitating the return of these students as in making concessions on international routes for them.

Bogdan Glavan (2008) dissects the phenomenon of brain drain from a scholarly approach. His description of the trend tallies with the general perspective of human capital flight. However, he identified that the "origin countries lose human capital and thus are deprived of one of the engines of future economic growth; on the other hand, these countries waste a substantial part of the public funds invested during emigrants' capital formation." Glavan further argues and insinuates that the dearth of functional institutions and productive working environment makes the flight of human capital more destructive for the economies of the developing countries. Although, according to him "the harmful consequences associated with brain drain originate not in the actual direction of human capital flow but in the institutions and the pattern of relationships that govern transactions with human capital."

Syed Jafar Askari (2008) subscribes to a similar view mentioned above that improper government policies and a state of insecurity drives out skilled Pakistanis out of the country for greener pastures in foreign prosperous countries. He however surmised that HEC's attempt to re-channel brain drain into brain gain is more or less ineffective. Askari shows

the report of World Institute for Development Economics Research (UNU-WIDER) that immigration of skilled workers damages the already weak health sectors in the developing countries the most. The reversal of human capital flow is probable only when the government makes serious socio-economic and political policies that will reverse the outflow of the brilliants back into the country as championed by the HEC under Dr Atta-ur-Rahman. Askari shares similar sentiment that Pakistan is increasingly becoming a nurturing ground for experts that will sooner or later migrate to foreign countries, hence invariably affecting the economy, a situation where the advance countries harvest the effort that is due for Pakistan.

Carrington and Detragiache (1999) points out the fact that without a productive working environment for the skilled workers, no amount of educational improvement and opportunities available in the developing countries can bring about a drastic change. The actualization of such climate will dissuade emigration. Lack of proper documentation and differing definition of immigrants further complicate the question of how to measure the flow of human capital and extent to which source countries get affected. Although employing varieties of measures, the authors surmise that sizeable population from developing countries reach the shore of the U.S and OECD nations. They further thrust that the level of education still maintain predominance and has not been outmatched by other factors as significant determinant factor for immigration, highly educated people migrate the most from the net emigration population. The authors drew their premise from a research that delineates "migrants to the United States tend to be better educated than the average person in their home countries," while comparatively highly educated Pakistani immigrants outpace Indian by 7 to 2 percent.

4. Results

The statistical tool rendered the verification and correlation of the foreign remittance, GDP and per capita income. The person co-relational results among variables are provided here under table 1.

Table 1: Results of Correlation

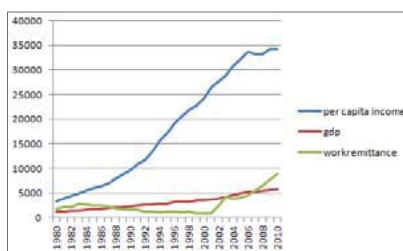
Correlations		Per capita	GDP	Worker remittance
GDP	Pearson Correlation	.982**		
	Sig. (2-tailed)	.000		
	N	31	31	
Worker remittance	Pearson Correlation	.595**	.703**	
	Sig. (2-tailed)	.000	.000	
	N	31	31	

** . Correlation is significant at the 0.01 level (2-tailed).

It is overwhelming significantly positive correlation found between GDP and per capita income at 1 % error margin. It is quite obvious that with the 100% increasing of the GDP the per capita income will positively increase the per capita income of the Pakistani people at 98.2%. Similarly workers' remittance reveals a significantly positive correlation with per capita income and GDP at 99% confidence interval. It shows that with the increasing of the workers remittance the per capita income will increase by 59.5% and 70.3% at 1% error margin.

According to the time-line, the first decade shows a steady rise in income and GDP, while the following decade experienced a relative stoop. The next decade beginning from 2001 till 2010 recorded a remarkable reflection of foreign remittance on the overall GDP. In similar version, the graph shown below attest to the fact that the economy witnessed a rise in per capita income and invariably reflected on the standard of living and life style of the people.

Graph 1



It was also instrumental in analyzing the effect of foreign remittance on GDP and per capita income. In table 2, the economic growth is taken as dependent variable while the combine effect of per capita income and workers' foreign remittance taken as independent variables.

Table 2: Results of Multiple Regression Analysis

Variables	B	SE	B	T	p
GDP	828.584	59.904		13.832	.000**
Per capita Income	.111	.003	.872	32.307	.000**
Foreign Remittance	.127	.019	.185	6.849	.000**

R= 0.993, R²= 0.987, *p < .05; **p<.01

The statistically analyzed results reveal that workers' foreign remittance significantly positively affected the GDP at 99% confidence interval. The value of R² shows the effect on dependent variable (GDP) is explained by independent variables (workers foreign remittance and per capita income) at 98.7%. The value of R describes the co-efficient of correlation of 99.3%. This value shows an overwhelming positive correlation between dependent variable (GDP) and independent variables (per capita income and workers' foreign remittance).

The separate effect of workers' foreign remittance on GDP also checked. The results of singly workers remittance on GDP reveals a quite significantly positive effect on the enhancing the GDP.

Table 2: Results of Foreign Remittance on Economic Growth through Simple Linear Regression Analysis

Variables	B	SE	B	T	p
GDP	1854.568	308.782		6.006	.000**
Foreign Remittance	.483	.091	.703	5.331	.000**

R= 0.703, R²= 0.495, *p < .05; **p<.01

The p value (.000) at 99% confidence interval reveals a overwhelming positive effect on the GDP. It proves that workers foreign remittance contribute to increase the GDP. The value of R² reveals moderate positive effect on the enhancement of economic growth of Pakistan during the time line of the study 1980 to 2011.

Furthermore the effect of workers' foreign remittance on the per capita income also checked by taking the independent variable as workers foreign remittance and dependent variable as dependent variable.

Table 3: Results of Foreign Remittance on Per Capita Income through Simple Linear Regression Analysis

Variables	B	SE	β	T	p
Per Capita Income	9227.000	2740.456		3.367	.002*
Foreign Remittance	3.204	.805	.595	3.982	.000**

R= 0.595, R²= 0.353, *p < .05; **p<.01

This model again contributes to find out the effect of foreign remittance on the per capita income. The p value (.000) at confidence interval at 99% reveals an overwhelming positive effect on the per capita income. This model also reveals the effect of workers remittance i-e the variation in dependent variable (per capita income) is explained by the workers' foreign remittance. It is obvious that Pakistan should have to reshape the structural and policy reformation to reverse the non-monetary developmental challenges caused by human capital flight to the Pakistani economy.

5. Discussion

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Arguably, like every other developing countries, wherein there is significant reliance on human capital flow and foreign remittance, the Pakistani government has not set any barrier to prevent exodus of human capital, instead the government has instituted a bureau that manages and monitors the emigration of Pakistanis abroad in an attempt to

furnish the flow of remittance into the economy. Although it is pertinent that most frustrated job seekers rather give premium to migrating abroad than making nuisance of themselves at home, particularly on account of family and economic pressure.

It is equally noticeable that the dearth of reconciliation between industries and academic institutions inform human capital flight. Upon graduation, willing and able Pakistanis wander in the pool of unemployment, meanwhile other well skilled labourers are not given incentives by the prevailing system, therefore little or no option is left than to migrate abroad where their need and capacity can coalesce.

6. Conclusion

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

The models underpin the correlation and effect that lies in the variables set within our hypothesis. Apparently, sufficient evidence suggests that there is correlation between income level, GDP and foreign remittance even more; the workers' foreign remittance yields a significantly positive effect on the economic growth (GDP) and per capita income. The growingly population of the country also lent a support for the net emigration witnessed by the country all through the time-line of study. The data consulted elucidated crystal clear that emigration from Pakistan is well represented by skilled and unskilled labourers respectively. Although educated, frustrated and skilled workers have chosen their destinations on the account of their educational and skill achievement. On the other end, the unskilled workers made their choice giving the proximity and cultural similarity of the host countries.

It has become an open truth that laxity of government not to put in place adequate infrastructures could eventually be detrimental for economic growth, more particularly as it becomes the excuse for human capital flight. It is also true that there is strong link between economic incentive and migration. Pakistan is endowed with huge population and that is an indication of great potential, an optimal utility of this potential is potent enough to drive Pakistan to the shore of economic progress, but invariably the reverse is the case. This trend although is not peculiar to Pakistan, rather a syndrome of the global south.

This trend refers to as brain drain could not have been possible without a relatively high educated population, though Pakistan cannot be ranked as highly educated country, nonetheless, its skilled minds find migration lucrative on the failure of the (Pakistan) system to offer them better incentives to stay at home.

The level of emigration from Pakistan cannot be dissected without taking into account the role of the international market. Thus, the systemic analysis is more than imperative in understanding why Pakistan skilled and semi-skilled minds would want to be a player in the phenomena of globalization, presenting opportunities to whomsoever can earnestly exploit. Therefore, as Nadeem ul Haque (2005) surmises brain drain avails developing nations to participate in the global talent hunt.

Interestingly, the global market economy is disproportionately represented, indicated by the unequal competition between the global north and south. In a way to humanise the system and compensate the disaffected nations, a tax system become imperative, in favour of countries dissatisfied from brain drain. Besides, countries having their population contributing to the development of other nations should be compensated either by permanent residential status or market

7. Recommendation

It imperative that government should wake up to the realisation that economic development is attainable upon the implementation of reconciliatory policy between industrial and academic sectors. Pakistan's higher institution cannot and should not continue grooming students having no future where to work at the end of the day. Hence, it is also suggested that both sectors (academic and industry) should have a liaison, that will be distinctive of the government. The liaison will be the avenue by which both sectors can work hand in hand. This has been the practice in the developed countries, where cooperation of both sectors has made development and growth more conspicuous. The benefit of such approach is that, it will reduce the propensity of Pakistan from further becoming breeding ground of skilled labour, whose efficiency and productivity will be of no use for Pakistan but the countries they seek to migrate.

Secondly, if education is one of the tools of effecting a change in any society, the government must not be left out from aiding the educational sector adequately. Government hand is actually reflective in the educational sectors, but indeed less sufficient for the level and requirement of growth. The fragmentation and segmentation in Pakistan's education system is another hurdle. It is true that the private school system cannot produce the actual amount of

workforce needed for Pakistan's growth; hence boosting the academic level of the public schools is exigently necessary if not compulsory. The coordination of graduates from both private and public sectors, alongside job opportunity, will not just enhance but improve Pakistan economy qualitatively.

A pragmatic action against excessive emigration is imperative to curtail the adverse effects of HCF on the growth. It will not be a novel idea if Pakistan government takes firm initiative to revert the trend of emigration. During the 1970s, the Southern European countries were net emigration countries before turning net immigration countries. Same is true for Eastern European and Malaysian economies, redirecting their economies towards industrialization and service based. With government initiative, the new bearing of the economies created job opportunities for all able and willing citizens at home and thus deprives them of looking outward.

In addition, the exigency for wage revision is more than important, appreciable wages are motivational and good incentive to convince potential emigrant from travelling. Working on these factors, will play a significant role in reducing if not stop emigration from Pakistan and consequently, the skilled labour can developmentally contribute to the overall GDP.

In order to make the foreign remittances more meaningful, Pakistani foreign expatriates will have to be strongly convinced by the government that the system is safe to settle and invest. Government should not preclude incentives as part of the measures to entice foreign money to becoming useful for the growth of the economy. The rationality for this is not far-fetched. Foreign companies and investor capitalists often make rational decision to settle and invest in a second country when assured of perfect market, healthy competition, profitability and good bargaining terms from the government. Same should be true for Pakistani foreign expatriates, who are more entitled to this package of assurance. More importantly, healthy investment leading to actual economic growth will cease to see the true limelight in a structural corrupt environment. Corruption needs a huge curtailment if not eradication. The government of Pakistan should take it more seriously to stamp out the menace and tradition of Brown Envelope.

Reference

- Askari, S. J. (2008, October). Economic woes cause brain drain. (Online). Nation, <http://www.nation.com.pk/pakistan-news-newspaper-daily-english-online/Regional/Karachi/09-Oct-2008/Economic-woes-cause-brain-drain> (Accessed August 9, 2012)
- Beine, M. F. D, H, R. (2008). Brain Drain and Human Capital Formation in Developing Countries: Winners and Losers. *The Economic Journal*, Vol.118, Issue 528, 631–652.
- Ben-Sira, Z. (1997). *Immigration, Stress, and Readjustment*. Westport, CT: Praeger Publishers.
- Commander, S., et al., (2004). *The Brain Drain: Curse or Boon? A Survey of the Literature*. Chicago: University of Chicago Press.
- Docquire, F., et al., (2007). Brain Drain in Developing Countries. *World Bank Economic Review*, Oxford University Press, vol. 21(2), 193-218.
- Docquire, F. (2007). Brain Drain and Inequality across Nations. *World Bank Economic Review*, Vol.21, Issue 2.
- Glavan, B. (2008). Brain Drain: A Management or a Property Problem?. (Online). *American Journal of Economics and Sociology*, 45-50. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1028536## (Accessed August 9, 2012)
- Hammar, T. and Kristof, T. (1997). Why Do People Go or Stay. In H. Tomas et al (ed.), *International Migration, Immobility and Development: Multidisciplinary Perspectives*. (p16). Oxford: Berg.
- International Fund for Agricultural Development, Remittances: Sending Money Home, www.ifad.org/pub/factsheet/remittances/e.pdf (Accessed August 9, 2012)
- Islamic Educational, Scientific and Cultural Organization (ISESCO), Prevention of Brain-Drain From OIC –Countries. (Online) www.icpsr.org.ma/Files/Brain_Drain_Final_ISESCO__1.doc (Accessed August 9, 2012)
- Beine, M. et al., (2001). Brain drain and Economic Growth: Theory and Evidence. *Journal of Development Economics*, Vol. 64, 275–289.
- Mateen, A. S. (2006, February), Brain Drain from Pakistan, *PakTribune*. <http://paktribune.com/articles/Brain-Drain-from-Pakistan-135156.html> (Accessed August 9, 2012)
- Mountford, A. (1997). Can a Brain Drain Be Good for Growth in the Source Economy?. *Journal of Development Economics*, Vol. 53, No. 2, 287-303.
- SOPEMI. (2006). *International Migrant Remittances and their Role in Development*. International Migration Outlook, OCED, www.oecd.org/dataoecd/61/46/38840502.pdf (Accessed August 9, 2012)
- Rapoport, H. (2002). Who is afraid of the brain drain? *Human Capital Flight and Growth in Developing Countries*. Policy Brief, Stanford Institute for Economic Policy Research.
- Stiglitz, J. (2006). *Making Globalization Work*. London: Allen Lane.
- Ul Haque, N. (2005). Brain Drain or Human Capital Flight. *Development Economics*, Pakistan Institute of Development Economics, No2.
- Ul Haque, N. and Se-Jik, K. (1994). Human Capital Flight: Impact of Migration on Income and Growth. *IMF Working Papers*, International Monetary Fund, 94/155.
- Wong, K. C, K. Yip. (1999). Education, economic growth, and brain drain. *Journal of Economic Dynamics and Control*, 23, 699-726.