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Anti Money Laundering Mechanism
An Application of Principal-Agent Model for Pakistan¹

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ABSTRACT

In this paper anti money laundering policy of the international financial regime is analyzed in principal agent model perspective. The strategy of the principal for formal agents is deliberated for global financial stability. This strategy encompasses incentive and dis-incentive for cooperation of formal agent. Formal agent by cooperating with principal may induce dis-incentive for informal agent. All the integrating stake holders make decision on the basis of comparison of present value of marginal cost of non-cooperation and present value of returns from cooperation. As the desired objective of the principal is to minimize transaction of money through informal channels therefore it has to include informal agents and clients in the strategy. The successful anti money laundering strategy can only be evolved by the cooperation of all the stakeholders.

Key words: International Financial Regime, Principal Agent model and Money Laundering
JEL Classification: F3, F33, G21 and G38

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1. INTRODUCTION

In the last few decades money laundering has become more organized, sophisticated and increasingly international in nature. It is multifaceted and also considered by criminals more profitable as compared to other legitimate businesses. This crime is as such that it gives birth to numerous other crimes in the society. The magnitude of the problem is traumatic and IMF estimate of the money laundering transactions are almost beyond imagination, it is estimated that the volume could be as much as 2 to 5% of the global GDP (IMF, 1998). While according to UNODC “estimate of the amount of money laundering globally in one year have ranged between \$500 billions to \$1 trillion” (UNODC 2007). It is a global crime and after having realized its implications for the societies, developed as well as developing countries have decided to adopt certain mechanism in order to control this global malaise.

In terms of Pilbeam (1998); “globalization is a loose term capturing the idea that the world of finance has become globalized industry; national financial market are increasingly integrated into a globally integrated network of markets. Financial institutions seek to have a global presence both as mean of expansion and to retain their existing customers who are ever more reliant on trade with foreign customers” (Pilbeam, 1998). Now owing to globalization of money laundering different states are taking anti money laundering measures at bilateral and multilateral levels. These initiatives are in line with the recommendations of World Bank (WB), International Monetary Fund (IMF) and Financial Action Task Force (FATF).

It indicates the intensity of this international crime which has forced institutions like WB and IMF to take necessary measures and are persuading other countries even by applying soft and hard laws (Malik, 2003). In response, many countries have taken legislative, legal, financial, and administrative initiatives to deal with this organized crime. Today, money laundering has become a critical issue for any significant criminal enterprise through out the world.

Organization of this paper is as follows, section two deals with some basic concepts of money laundering, its nature and scope, in section three sources of dirty money are discussed, section four deals with money laundering methods while section five explains the anti money laundering objectives of the principal. Section six highlights the strategy of the principal to combat money laundering, section seven deals with anti money laundering strategy of agents, section eight provides a brief view of Pakistan’s measures against money laundering, theoretical model is given in section nine, while section ten concludes and some recommendation are given in section eleven.

2. MONEY LAUNDERING: ITS NATURE AND SCOPE

Money laundering has an element of a 'bait' for an individual and a tool of exploitation for another individual and carries an externality (positive or negative) for the society. Its multifarious nature is analyzed in perspective of Principal-Agent-Client Model of Shah et al. (2006) for money laundering analysis in the present study.

Principal in this model of money laundering is International Financial regime, which governs money transaction directly through different channels by making guiding principles and laws to regulate this process. Different laws, rules, procedures, norms and ethical standards are made for making money transaction more transparent and monitorable and take measures to control money laundering. International Financial regime comprises of two types of organizations; the first one is established to perform multiple functions which also include anti money laundering for example United Nations, World Bank, International Monetary Funds. The other type of organizations and institutions are developed to achieve specific objectives of anti money laundering such as Financial Action Task Force (FATF), FATF Style Regional Bodies (FSRBs), Egmont Group and Wolfsberg Group of banks etc. As a consequence of global politico-economic changes 'FATF 40 recommendations' were drawn up in 1990 as an initiative to combat the misuse of financial systems by persons laundering drug money. In 1996 the Recommendations were revised for the first time to reflect evolving money laundering typologies. By 1996, these 40 recommendations had been endorsed by more than 130 countries and were then the international anti-money laundering standards (FATF, 2007).

The principal here utilizes the services of agents of two types (1) the states, banking and financial institutions and organizations being operationalised in governance of money transactions through different channels (2) agents comprising informal sector, where their activities are not fully monitored such as money changers and underground elements involved in money transaction. As part of money transactions takes place through this channel, hence they may be instrumental or otherwise at least in the measures to be carried out for curbing money laundering. However, in this study, we would mainly focus on formal agent. In this context it is partial application of model developed in Shah et al. (2006).

The services of agents are utilized to facilitate clients. The Clients here are the individuals, group or organization getting services of different agents for transactions of their money through different channels at international and local levels. Clients may also get services of agents directly or indirectly for legal or money laundering purposes.

All the integrating partners of the financial system such as principal, agent and client, make their decisions rationally while taking into account the available choices and their preferences. They count present value of their cost of making specific decisions regarding their role in system of money transaction and present value of returns from adopting specific role.

Now as a system Money laundering is complex in nature and global in its scope. Due to global nature of money laundering different organization including UN, World Bank IMF and FATF have given interpretations of money laundering. Different concepts and view points are highlighted in the following paragraphs.

World Bank defines money laundering as:

“It is the process by which the *proceeds* derived from a criminal activity (i.e., the predicate offense) are disguised in an effort to conceal their illicit origins and to legitimize their future use. The financing of terrorism is the financial support, in any form, of terrorism or those who encourage, plan or engage in terrorism. The two activities are linked because the techniques used to launder money are essentially the same as those employed to conceal the sources and uses of terrorist financing”.

Another functional interpretation of money laundering is devised in Vienna convention in article 3(b) and (c)(i):

“The conversion or transfer of property, knowing that such property is derived from any offence or offences [related to drug trafficking] or from an act of participation in such offence or offences, for the purpose of concealing or disguising the illicit origin of the property or of assisting any person who is involved in the commission of such an offence or offences to evade the legal consequences of his actions”.

These conventions also includes the concealment, or disguising the source, location, disposition, movement, rights with respect to, or ownership of property, knowing that such property is derived from an offence or offences from an act of participation in such an offence or offences. Further the acquisition, possession or use of property, knowing, at the time of receipt, that such property was derived from an offence or offences are also included.

Similarly, Palermo convention (2000) article 6(i) states:

“States *Criminalization of the laundering of proceeds of crime*. Each State Party shall adopt, in accordance with fundamental principles of its domestic law, such legislative and other measures as may be necessary to establish as criminal offences, when committed intentionally: (a) (i) The conversion or transfer of property, knowing that such property is the proceeds of crime, for the purpose of concealing or disguising the illicit origin of the property or of helping any person who is involved in the commission of the predicate offence to evade the legal consequences of his or her action”

Therefore, the World Bank (2003) in the Global Fight Against Money Laundering and Terrorist Financing further describes “Predicate offenses include virtually any serious crime generating proceeds, including kidnapping, theft, selling stolen goods, illegal arms trafficking, prostitution, corruption and fraud.”

The above definitions are considered as a benchmark for rest of the states and international agencies in order to set their objectives and pursue their strategies pertaining to money laundering. Its significance is also global because 191 countries are members of UN now and Global Programme against Money Laundering (GPML) is also directly operated by the UN. FATF being regulator of anti money laundering endorses in Recommendation No.1;

Scope of the criminal offence of money laundering: Countries should criminalize money laundering on the basis of United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988 (the Vienna Convention) and United Nations Convention against Transnational Organized Crime, 2000 (the Palermo Convention)”.

Internationally money laundering is most often described as the "turning of dirty money into clean money". Generally, the act of conversion and concealment is considered crucial to the laundering process. Perhaps the simplest definition is that money laundering is the process of converting cash, precious assets or other property which is derived from illegal activity, so as to give it the appearance of having been obtained from a legitimate and legal source (Shah et al.2006). One of the first formal definitions of money laundering to gain international recognition is that found in the United Nations' Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (Vienna Convention, 1988). The key elements of this definition include the conversion of illicit cash to a less suspicious form, so that the true source or ownership is concealed and a legitimate source is created. Many countries used this definition when they drafted anti-money laundering laws.

As drugs were also causing global problem so at that time the Vienna Convention definition applied specifically to the laundering of the proceeds of drugs trafficking. In turn a number of nations initially limited their own legal definitions (and changes to regulations, banking practices, etc.) to the laundering of drug profits. “Shadow or underground economic activity is a fact of life around the world and there is strong indication that it is increasing” Schneider and Dominik (2000).

Subsequently, there has been a move to extend the definition of money laundering to include proceeds of other serious criminal activities including smuggling, fraud, serious financial crime and sale of stolen goods. A 1996-

1997 survey by the Financial Action Task Force (FATF) of money laundering measures noted that along with drug trafficking, financial crimes (bank fraud, credit card fraud, investment fraud, advance fee fraud, bankruptcy fraud, embezzlement and the like) were the most frequently mentioned sources of proceeds of crime. It is such a phenomenon that “pick up any news paper any where in the world any day, and you will find news about illegal migrants, drug busts, smuggled weapons, laundered money, or counterfeit goods” Naim (2003). Many countries have now taken action to extend the scope of their money laundering offence to include a wider range of predicate offences because it has been recognized that drug profits are one of the many source of laundered funds. The internationalization of the issue is natural because “Accumulated balance of laundered assets is likely to be larger than annual flows increasing the potential for destabilizing economically inefficient movements, either across boarder or domestically” (Quirk, 2003).

3. SOURCES OF DIRTY MONEY

Dirty money is generated through various activities such as: Frauds, gambling, car theft, banks robbery, abduction for ransom, illegal arm sales, tax evasion, under/over invoicing foreign trade deals to accumulate wealth abroad or change black money into white money, bogus trade transactions to launder money, gun running, drug trafficking, smuggling, facilitating illegal immigration, embezzlement, counterfeiting, benefiting from insider trading, bribery, and cyber crimes. Activities vary from society to society. It is noted by Tanzi, (1999):

“Some activities are inherently criminal and do not generate an output that can be considered valuable to society even though it may generate pecuniary gains to those who engage in them (murders, kidnap- pings, stealing, extortion). Some activities are considered illegal in some countries and legal in others even though they generate an output considered valuable by at least a part of society (narcotics production and distribution, prostitution, gambling)”.

The perpetrator of these activities hides their true identity as well as source of their wealth. “The use of false identification to obscure identity proves to be a key facilitative activity in the reported cases of money laundering and terrorist financing. In the cases reported, it is evident that this method is used in all phases of the money laundering process” (Asia Pacific Group (APG) Yearly Typologies Report 2005 – 06).

4. MONEY LAUNDERING METHODS

The principal money laundering methods detected or suspected include Hawala/hundi, bearer investment schemes, investment and speculation in real

estate, foreign expenditure on luxury goods, over/under invoicing of imports and exports, bogus imports/exports, loan back methods, prize bond racketeering, smuggling of currency, and money shown as proceeds of agriculture or poultry or some other shell activities.

5. ANTI MONEY LAUNDERING OBJECTIVES OF THE PRINCIPAL

It is the objective of world financial regulators to have a stable, smooth, and transparent financial system across the countries so that interest of various stakeholders can be protected. Owing to these priorities FATF, with the active support of IMF, developed a mechanism to stop and deter the crime of money laundering. “All countries must participate-and participate enthusiastically-or money being laundered flow quickly to the weakest point in the international system” (IMF, 1998). Realizing the magnitude of the problem the FATF called upon all countries to take the necessary steps to bring their national systems for combating money laundering and terrorist financing into compliance with the new FATF Recommendations, and to effectively implement these measures, FATF (2007). Global problems need global objectives “as the world’s economies have become more closely woven together and it has become more difficult for states to effectively peruse key policy objectives , like dealing with economic recession, financial crisis, and environmental problems with out coordinating their actions with those of other states at some super national level” Kohler and Lake(2003). As a consequence of 9/11 the issue of financing of terrorism became a global threat so in October 2001 the FATF expanded its mandate to deal with the issue of the financing of terrorism, and took the important step of creating Special Recommendations on Terrorist Financing. These Recommendations contain a set of measures aimed at combating the funding of terrorist acts and terrorist organizations, and are complementary to the 40 Recommendations (FATF, 2007).

6. STRATEGY OF PRINCIPAL TO COMBAT MONEY LAUNDERING

Principal makes laws procedures and standards for anti money laundering regime. Through contract with agents it gets their cooperation of two types i.e. direct and indirect.

- a. Direct: those activities directly related with agents e.g. law making, institutional building, implementation of standards etc.
- b. Indirect: monitoring and regulation of other institutions/agents, banks, and exchange companies etc. for realizing global objectives of combating money laundering.

According to UNDOC (2007) the strategies include, granting technical assistance to developing countries, organizing training workshops,

transferring expertise, between jurisdictions, conducting research and analysis etc. Keeping in view the operation of Gresham law it has rightly been stated that “Money laundering can have devastating economic consequences. Fighting it should be a priority for all countries and is not incompatible with financial market liberalization (Quirk, 1997).

The importance of financial action force has been recognized by both IMF and World Bank that is why the FATF 40 and 9 Special Recommendations have been recognized by the International Monetary Fund and the World Bank as the international standards for combating money laundering and the financing of terrorism (FATF, 2007). Principal gets the cooperation of agents through push and pull forces along with resort to hard and soft laws. As developing countries are heavily dependent for economic and technical assistance on the multilateral institutions and developed countries, so non compliance to principal’s recommendations results in both assistance refusal and bad name. FATF regularly publishes list of non cooperative countries and entities .Listed non cooperative countries deprive themselves of financial, reputation and technical assistance. A key element in the fight against money laundering and the financing of terrorism is the need for countries systems to be monitored and evaluated, with respect to these international standards. The mutual evaluations conducted by the FATF and FATF-style regional bodies, as well as the assessments conducted by the IMF and World Bank, are a vital mechanism for ensuring that the FATF Recommendations whether effectively implemented or not by all countries (FATF, 2007). Even “named and shamed” “Blacklisting results in more severe sanctions in prospect for persistent noncompliance” (Levi, 2002).

USA being an active international actor is very active in the fight against money laundering and terrorist financing. After 9/11 USA made interagency commitment that provides counter-terrorist finance training to help coalition partners develop and/or enhance their capabilities to detect, disrupt and dismantle terrorist financing networks by strengthening the legal frameworks ,providing financial investigative training, training the banking regulatory communities on suspicious transactions ,developing financial intelligence units that cooperate internationally ,and strengthening the ability of prosecutors to bring terrorist financiers to justice (Economic and Business Affairs, 2003).

IMF and World Bank recommended for Pakistan that “A single law to provide a coherent and comprehensive legal framework for Anti-Money laundering and countering the financing of terrorism(AML/CFT) in line with FATF recommendations should be promulgated”(Financial Sector Assessment Pakistan, Joint IMF- World Bank FSAP 2005). World Bank also provided assistance for anti-money laundering measures under technical assistance for banking sector (TABS).

Mariano-Florentino,(2003) states “Political actors within developed economies probably have an interest in reducing criminal financial activity as a means of reducing the impact of crime within their jurisdiction”. USA is also keenly interested in anti-money laundering operations and provides needed assistance which is evident from the statement of USA State Department (2007):

“We have provided Pakistan assistance on drafting an anti-money laundering/counterterrorist financing (AML/CTF) law, that meets international standards, but this legislation is still awaiting parliamentary consideration. As soon as a law that meets international standards is enacted, we will be able to accelerate training efforts, including assistance for the establishment of a Financial Intelligence Unit (FIU). In the absence of an anti-money laundering and counterterrorism financing law, the State Bank of Pakistan has introduced FATF-compliant regulations in know-your-customer policy, record retention, due diligence of correspondent banks, and reporting suspicious transactions. Also in compliance with FATF recommendations, the Securities and Exchange Commission of Pakistan has applied know-your-customer regulations to stock exchanges, trusts, and other non-bank financial institutions. All settlements exceeding Rs 50,000 (\$840) must be performed by check or bank draft, as opposed to cash”.

7. STRATEGY OF AGENTS TO COMBAT MONEY LAUNDERING

The strategy of Pakistan in combating money laundering is based on the principle of cooperation for better financial system and elimination of threats both actual and perceived one. Pakistan is also determined to adopt internationally best banking practices so that the problem of money laundering can be appropriately tackled. The official policy point of view of Pakistan was stated by Ishrat Hussain the then Governor State Bank of Pakistan (2003): “Pakistan after review of the existing systems and procedures to combat money laundering and terrorism financing has developed a multiple track strategy” based on key elements that covers different activities. Develop a comprehensive legislation, assign clearly identifiable responsibilities to various institutions; strengthen regulatory and supervisory capacity, enforcement mechanism, training and awareness; adoption of international standards, technical cooperation and compliance with the UN resolutions.

The strategy of Pakistan is having not only regional significance but also international importance. Pakistan also enjoys strategic importance in the eyes of global powers that is why according to USA State department: “South Asia, and especially Pakistan, is a priority region for counterterrorist financing, due to the presence of al Qaida and other terrorist groups, porous borders, and cash-based economies that often operate through informal mechanisms, such as hawala. All countries in the region need to improve their terrorist financing regimes to meet international standards, including the

establishment of functioning Financial Intelligence Units. Both political will and technical assistance is needed to make this region a more effective partner”.

The strategy of Pakistan also has a lot of paradoxical consequences for informal financial beneficiaries who are more concerned with cost reduction and convenience in the trade off transactions.

8. PAKISTAN’S MEASURES AGAINST MONEY LAUNDERING

Being an active member of Asia Pacific on Anti-money laundering (SBP Annual Report FY 05). Pakistan adopted a cooperative strategy towards FTAF (Principal) objectives and took several legal, administrative, and policy measures to stop and deter money laundering. Laws & regulations are put in place by the government of Pakistan and by other controlling authorities for ensuring optimum results. A number of concrete steps delineate Pakistan’s strategy that includes National Accountability Ordinance, 1999, Control of Narcotics Substance Act 1997, Anti-Terrorism Act 1997, Prudential regulations by SBP, SECP AML UNIT and AML law.

8.1 National Accountability Ordinance, 1999

NAO 1999 deals mainly with the detection, investigation, prosecution and speedy disposal of cases involving corruption and corrupt practices. The following offences under NAO cover the offence of money laundering (NAB Ordinance 1999):

- Acquisition of any property / pecuniary advantage through corrupt, dishonest or *illegal means*.
- Having assets beyond known sources of income which can not be reasonably accounted for.
- Pursuant to Section 20, financial institutions are bound to report suspicious financial transactions to NAB.
- NAB has set up “money tracing & asset recovery consultancy (MTRAC - first-ever in Pakistan)”.

8.2 Control of Narcotics Substance Act 1997

The following offences/ provisions under CNSA cover the AML measures:

- Makes the acquisition of assets through drug money an offence.
- The suspected properties/assets may be frozen and subsequently forfeited through the Court (This measure can be construed as an anti-money laundering measure).
- Section 67: it is mandatory for financial institutions to report STRs to ANF, suspected to be related to drug business.

8.3 Anti-Terrorism Act 1997

This act deals comprehensively with the offences of terrorism and financing of terrorism. Makes compulsory for the proscribed organizations to submit all accounts for its political and social welfare activities and disclose all funding sources. It can propose Freezing, Seizure and Forfeiture of assets if they are found guilty of charge.

An anti-cyber crime unit has been set up at the Federal Investigation Agency .The anti-trafficking unit and monitoring and inspection cell had also been established for properly ensuring compliance to the desired goals. Although the FIA's staff of ACU has to be provided with modern training and technical know how to detect a visa or credit card fraud, computer network breaking, industrial espionage, software piracy, e-mail bombing and password sniffing and any other modern technological fraud.

The agency would take action against those committing cyber crimes under the Electronic Transactions Ordinance's (2002) sections 36 and 37.

Under section 36, "any person who gains or attempts to gain access to any information system with or without intent to acquire the information contained therein or gain knowledge of such information, whether or not he/she is aware of the nature or contents of such information, when he/she is not authorized to gain access shall be guilty of an offence punishable with either description of a term not exceeding seven years, or fine which may extend to Rs1 million or both."

Similarly, under section 37, "any person who does or attempts to do any act with intent to alter, modify, delete, remove, generate, transmit or store any information through or in any information system knowingly that he/she is not authorized to do any of the foregoing, shall be guilty of an under this ordinance.

8.4 AML/CFT Measures by SBP

As Money laundering activities can corrupt parts of the financial system and under mine the "governance of banks" .Therefore SBP has taken a number of steps to overcome this crime, e.g. setting up of dedicated AML/ CFT Units, Issuance of regulations and directions to banks and DFIs in accordance with FATF Recommendations and international best practices, receive STRs and process them for suitable action, Coordination and liaison with relevant Government departments, International and Multilateral bodies, Issue directives for freezing of accounts of individual and organization black listed by international bodies, On-site inspection and off-site surveillance, Formation of Exchange Companies and elimination of money changers (Hundi system), Restriction on RTCs – Bearer Instruments etc.

8.5 Amendment in Foreign Exchange Regulation Act 1947:

Owing to international financial changes Foreign Exchange Regulation Act has been changed. These changes are compatible to global changes and requirements. SBP has also replaced Authorized Money Changers with Exchange Companies'. Exchange Companies are subject to SBP regulations and onsite inspection. Full fledged exchange companies are authorized to deal in foreign currency notes, coins, postal notes, money orders, bank drafts, traveler's checks and transfers.

For the facilitation of customers Exchange companies are also allowed to open booths for remote areas. State Bank is also encouraging banks to gear up their systems and infrastructure for providing efficient remittance services by expanding its sphere. These measures have resulted in curbing informal sector along with increased documentation of financial transactions which is sine-qua-none for stopping the process of money-laundering.

8.6 Regulatory Framework

The central bank of Pakistan has issued following prudential regulations for banks to overcome money laundering

Regulation M-1: SBP has made it binding for banks/DFIs to adopt such banking practices which are in line with international best practices. M-1 has enabled banks/DFIs to eliminate chance of having any fictitious or numbered account in any branch because account must be authentic and transparent with all elements of respectability, integrity, and identity. Non-compliant or deviant financial institutions have to face strict action. This regulation is important because the use of false identification to obscure identity proves to be a key facilitative activity in the reported cases of money laundering and terrorist financing. In the cases reported, it is evident that this method is used in all phases of the money laundering process (APG 2005-06). Further State bank of Pakistan has made it obligatorily for all the banks and DFIs to properly ensure "Know Your Customer (KYC) and customer due diligence policy" so that the banking sector cannot be used for money laundering, terrorist financing, and allied crimes.

Regulation M-2: SBP issued M-2 so that appropriate Anti-Money Laundering measures should be taken. Banks/DFIs are bound to ascertain the genuineness of customers' status, his source of income, monitoring of account on regular basis bonafides of beneficiary and remitter. Any unmatching, inconsistent, abnormal, unlawful and illegal transaction has to be properly monitored.

Regulation M-3: While complying with recommendation No. 10 of FATF State bank has directed all the banks to ensure maintenance of all records of

transaction and identification data etc. in appropriate manner. This record /data pertaining to customers have to be maintained at least for five years so that it can be helpful in legal and operational smoothness.

Regulation M-4: In pursuance of SBP compliance to FATF recommendation, SBP has made it mandatory for banks/DFIs that correspondent banking relationship should only be established with those banks which are genuine, reputed and well regulated. Correspondent banking relationship with FATF “non-cooperative” and shell banks are strictly prohibited.

Regulation M-5: While observing the spirit of FATF for countering the threat of money laundering SBP has issued regulation M-5 for reporting of “Suspicious Transactions”. Banks/DFIs are instructed to pay special attention to all complex, unusual, criminal, and illegal transactions and report for further investigation any transaction which is suspicious in their judgment.

8.7 Measure taken by Securities and Exchange Commission of Pakistan

For compliance to FATF Recommendations Securities and exchange commission of Pakistan has taken significant Anti-Money Laundering steps, so that transparency and smoothness of financial market can be ensured. World Bank provided technical assistance for attaining the objectives of ensuring Anti-Money Laundering operations in financial sector of Pakistan. It includes reviewing and harmonization of documentation and reporting of transactions, strengthening Anti-Money Laundering capacity of SECP and creating awareness for Anti-Money Laundering amongst the stakeholders. It has also caused radical change in the documentation procedures and proper implementation of “know your customer” (KYC) and customer due diligence policy in the stock exchanges.

Owing to legislative, prudential, procedural and legal steps Asia Pacific Group on Money Laundering (2007) in its assessment of Pakistan has stated: Pakistan is currently strengthening its anti-money laundering and combating the financing of the terrorism system, having criminalized money laundering with respect to some serious offences having enacted laws to combat financing of terrorism. Pakistan has drafted anti-money laundering laws, which, when enacted, will enable Pakistan to establish a financial intelligence unit. Pakistan has capacity to report suspicious transactions in relation to some serious offences. Pakistan has undergone an APG mutual evaluation”.

Similarly efforts of Pakistan with regards to implementation of antimoney laundering measures have also been appreciated by USA state department (2007): “Turning to Pakistan specifically, we welcome the concrete actions it

has taken to implement its obligations under UN Security Council Resolutions, including the freezing of over \$10 million of al Qaida assets. Pakistan has also apprehended terrorists, including Abu Farraj Al Libbi, al Qaida's operational leader. We are encouraged by Pakistan's concern about the infiltration of terrorist groups into charitable organizations, and would welcome the opportunity to provide technical assistance to help Pakistan meet international standards on preventing abuse of its non-profit sector.”

9. THE MODEL

All the integrating partners of the financial system such as principal, agent and client, make their decisions rationally while taking into account the available choices and their preferences. They count present value of their costs of making specific decisions regarding their role in system of money transaction and present value of returns from adopting that specific role. Informal agents operating and participating in transaction of money laundering also decide their participation in money laundering while taking into account present value of their costs and returns.

The cost and returns to different agents principal and clients can be modeled along the lines of Shah et al (2006) who modeled the cost of adopting strategy by clients and agents whether to cooperate with the principal or not. As the principal wants the governance of money transactions based on the principle of transparency and monitorability and pursuing agents and clients to adopt the anti money laundering measures.

There are i periods and returns of Y from cooperative strategy with the principal and are assumed to be a stream of real net earnings Y_i during period one followed by later periods up to Y_n . The term real earnings are defined as the sum of monetary earnings and the monetary equivalent of psychic earnings. The present value of net earning stream Y is

$$V(Y) = \sum_{i=0}^n \frac{Y_i}{(1+r)^i} \quad (1)$$

Whereas r is market discount rate assumed for simplicity to be the same in each period. Assume that there is X non cooperative strategy of the clients and agents with the principal then net earning stream will be from X_0 to X_n so the present value of gain from of the strategy Y can be found as in equation (2)

$$d = V(Y) - V(X) = \sum_{i=0}^n \frac{y_i - X_i}{(1+r)^{i+1}} \quad (2)$$

This equation can be retransformed for more transparent cost finding. So we assume that by adopting the strategy of cooperation the agent and client makes some investment by paying additional taxes and charges for transaction of money through the channel recommended by the principal. Contrarily there is no additional investment required on transaction of money through the channel of money laundering that is adoption of strategy X. The cost of adoption of cooperative strategy Y relative to non-cooperative strategy X is the difference between their net earnings in the initial period and the total returns would be the present value of the differences between net earnings in later periods. As the agents has to get returns in monetary and other forms in later periods by cooperation with the principal but the clients may not have the same type and quantum of returns; so by adopting cooperative strategy they may get lesser returns as their stay abroad is shorter and their linked non monetary returns are very few if not zero; so their optimal strategy may be the non cooperative one. If

$$C = X_o - Y_o, k_i = Y_i - X_i, \text{ as } i=1, \dots, n$$

and R is total returns then the gain from Y is given as

$$d = \sum_{i=1}^n \frac{k_i}{(1+r)^i} - C = R - C \tag{3}$$

The value of d is very much a determining variable in decision making process by the rational agent, and clients. The clients and agents want to maximize d which can be maximized in two ways either to maximize R or minimize C. As rules of the game for governance of money transaction are set by the principal along with the control over the process of rule making. With the control of rules by principal the clients have the option either to follow the rules by cooperative strategy and accept lesser d_c or adopt a strategy of non cooperation with the principle and agents and make money transaction through the channel enabling him get higher value of d_n .

Optimal level of $d_c = d_n$ and $d_c - d_n = 0$, this condition leads to stability of the system of money transaction. The principal will have to bring both the d closer to each other and make d_c more acceptable for the clients and agents. The more risk averse are the number of clients in and agents in the system of financial and banking sectors more will be the probability that non cooperative X strategy is adopted and the principal has to increase value of d_c in order to attract more number of clients and agents with strategy Y. The value of d_c and d_n may be found through monetary and non monetary variables.

We may understand the nature of relationship existing between cost and returns with the application of internal rate of return method (IRR) which in this case we may take as a rate of discount r which equates the present value of costs to present value of returns as given below;

$$C = \sum_1^n \frac{k_i}{(1+r)^i} \tag{4}$$

$$\sum_{i=0}^n \frac{Y_i}{(1+r)^{i+1}} - \sum_{i=0}^n \frac{X_i}{(1+r)^{i+1}} = d = 0 \tag{5}$$

The formal and informal agents decide their strategy in view of their expected stream of costs and returns from a particular strategy. There is a pay off matrix for agents and principal along with relative expected gains to each player of the game which is given below;

| Principal- Agent's Pay-off Matrix | | |
|--|--------------|------------------|
| Principal | Agents | |
| | Co-operative | Non co-operative |
| Incentive | (a1, b1) | (a2, b2) |
| No incentive | (a3, b3) | (a4, b4) |

The main objective here is to maximize the social welfare i.e

Maximize $x_i = a_i + b_i$

subject to constraint $\Delta a_i \geq \Delta b_i$, where $i = 1,2,3,4$

Here a_i and b_i are respectively the gains of principal and agent from different choices of outcomes. With the assumption that both the principal and the agent are working in their own interest, bargaining take place in such a way that each of them try to maximize his gain. The principal has some power to control the behavior of agent by offering incentives in the case of not cheating and penalties otherwise

The game is started from the case where agent activity is harming the principal gain in such a way that social welfare is also affected negatively i.e. (a4, b4). Or in other words we can say that gain of agent from his behavior is less than loss of principal.

The best option from the agent point of view is (a2, b2), where he gets benefit from incentives offered by principal as well as by cheating. while from the principal point of view the best option is (a3, b3), where he gains without incurring any cost, but there is no free lunch hence both (a2, b2) and (a3, b3) are not optimal solutions. If agent opts to cheat he may face penalty if caught and if principal does not offer incentives he may loose due to cheating by agent. The only solution left is (a1, b1) with the conditions

$a_1 \geq a_4$ and $b_1 \geq b_3$. This implies that solution lies in between the two extremes those are (a_2, b_2) and (a_3, b_3) .

Further This analysis can be extended to any number of agents and principals as well as clients by additional assumptions.

9.1 Gain of the principal:

Principal wants to have stable global financial system. Global stability can only be achieved by the cooperation of all the states. Money laundering and terrorist financing are global problems and need effective global efforts. As a consequence of principal's consistent efforts international financial standards are being developed. Almost all the states are making laws and other relevant procedures to curb money laundering. Likewise global risk averting mechanism is taking place. A number of procedures and implementation mechanism are developed to minimize the risks of financial markets. These efforts are also resulting in consensus of regulators for banking regulations. Most of the member states have adopted and incorporated the proposed international standards in their domestic financial institutions. The percentage of cooperative states in anti money laundering is cent percent now, which was less before 9/11, and much lesser before the end of Cold War. These evidences reflect the degree of success of the principal's strategy to gain cooperation of formal agent's.

9.2 Gain of formal agent:

Formal agents including States mainly seem to increase their welfare by reducing money laundering. Since they find that the predicate offences of money laundering cause economic, political, social and administrative problems therefore they prefer to curb money laundering. States measure their gains in terms of reduction in crimes on one hand and increase in welfare on the other strengthening of financial institutions and documentation of economy is also a crucial gain for the agent.

The economic gain in the form of increase in foreign remittances of workers contributes to the stability of economy and national growth. Similarly, documentation of workers remittances and financial gain to the agent in response to its Anti-money laundering steps supports success of government's strategy. It is evident that in Pakistan remittances are increasing which is a strong indicator of economic gains.

Table 1: Worker remittances (Million)

| | |
|---------|----------|
| 1999-00 | \$ 913 |
| 2000-01 | \$ 1,022 |
| 2001-02 | \$ 2,341 |
| 2002-03 | \$ 4,191 |
| 2003-04 | \$ 3,826 |
| 2004-05 | \$ 4,110 |

Prior to systematic incentives strategy of the principal, there were large number of offshore banks, shell companies, fictitious accounts and some underground accommodation for criminals existed in most part of the financial entities. The outcome was (a4, b4) i.e. no incentive no cooperation. In the post incentives regime the situation is reverse of the above where financial discipline and consensus on international standard for curbing the threat of money laundering is being developed. Now the outcome is (a1, b1) which is leading to socially optimal case. However, the gains/losses for the clients are mixed one because legitimate clients who used to avail Hawala/Hundi are going to pay more physical, psychological, and financial cost due to more documentation and formalities. Because in Hawala “payments are made reliably, fast, cheaply and conveniently (home delivery service too) in places where banking services are unavailable or inefficient... trust a defining element of hawala, makes the system extremely efficient.”(Nikos, 2003).Therefore increased incentives in the shape of lesser service cost and convenience oriented procedure for the poor and illiterate clients will create win situation for all the law abiding stakeholders.

10. CONCLUSION

In the light of above discussions it can be inferred that the existing strategy of the principal for making world free from financial crime mainly rely upon cooperation of formal agent of global community. This strategy encompasses incentive and dis-incentive for cooperation of formal agent. Formal agent by cooperating with principal may induce dis-incentive for informal agent. Incentive for informal agent may increase pace of goal achievement. Principal and agents may cooperate and work jointly to make laws, rules and procedures and attempt to implement these laws so as to make money transactions more transparent and more monitorable. As the desired objective of the principal is to minimize transaction of money through informal channels. It is not always optimal strategy of all the agents and clients to minimize transaction through money laundering. They make decision on the basis of comparison of present value of marginal cost of non-cooperation and present value of returns from cooperation. Furthermore, matchability of interest, consistency of policies, institutional and capacity

building of developing countries and mutual trust and understanding of culturally diversified issues can result in attainment of desired targets.

11. POLICY RECOMMENDATIONS

Therefore the principal (International financial regime and developed economies) may have induced more incentives to increase present value of returns from cooperation with the principal and agents. The principal should also reduce present value of marginal cost to the clients which he has to bear by cooperating with the principal and agents. The international financial regimes may make conducive laws and procedures that enable clients to get money transaction in shorter time and with lesser cost. As long as the difference in the cost and benefits increases the non-cooperation increases. Similarly additional charges and taxes and other type of additional costs increase the non-cooperation, therefore the developed world through subsidy or other alternative laws and procedures may reduce the present value of marginal cost of cooperation.

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TABLE 8.8 WORKERS REMITTANCES

| COUNTRY | (US \$ Million) | | | | | | July-April | |
|-----------------|-----------------|----------|---------|----------|---------|---------|------------|---------|
| | 1999-00 | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2004-05 | 2005-06 |
| I.Cash Flow | 913.49 | 1,021.59 | 2,340.7 | 4,190.7 | 3,826.1 | 4,152.2 | 3,439.7 | 3,618.8 |
| Bahrain | 29.36 | 23.87 | 39.58 | 71.46 | 80.55 | 91.22 | 76.81 | 80.41 |
| Canada | 3.86 | 4.90 | 20.52 | 15.19 | 22.90 | 48.49 | 37.97 | 64.94 |
| Germany | 10.47 | 9.20 | 13.44 | 26.87 | 46.52 | 53.84 | 45.34 | 47.46 |
| Japan | 1.58 | 3.93 | 5.97 | 8.14 | 5.28 | 6.51 | 5.58 | 5.26 |
| Kuwait | 135.25 | 123.39 | 89.66 | 221.23 | 177.01 | 214.78 | 179.42 | 198.39 |
| Norway | 5.60 | 5.74 | 6.55 | 8.89 | 10.19 | 18.30 | 15.74 | 12.99 |
| Qatar | 13.29 | 13.38 | 31.87 | 87.68 | 88.69 | 86.86 | 70.90 | 92.43 |
| Saudi Arabia | 309.85 | 304.43 | 376.34 | 580.76 | 565.29 | 627.19 | 506.22 | 584.64 |
| Sultanat-e-Oman | 46.42 | 38.11 | 63.18 | 93.65 | 105.29 | 119.28 | 98.82 | 106.07 |
| U.A.E. | 147.79 | 190.04 | 469.49 | 837.87 | 597.48 | 712.61 | 580.87 | 555.84 |
| Abu Dhabi | 47.30 | 48.11 | 103.72 | 212.37 | 114.92 | 152.51 | 114.13 | 114.91 |
| Dubai | 87.04 | 129.69 | 331.47 | 581.09 | 447.49 | 532.93 | 443.80 | 420.15 |
| Sharjah | 12.80 | 12.21 | 34.05 | 42.60 | 34.61 | 26.17 | 22.23 | 19.70 |
| Others | 0.65 | 0.03 | 0.25 | 1.81 | 0.46 | 1.00 | 0.71 | 1.08 |
| U.K. | 73.27 | 81.39 | 151.93 | 273.83 | 333.94 | 371.86 | 309.99 | 346.40 |
| U.S.A | 79.96 | 134.81 | 778.98 | 1,237.52 | 1,226 | 1,295 | 1,076 | 994.78 |
| Other Countries | 56.79 | 88.40 | 293.28 | 727.64 | 567.93 | 507.27 | 435.89 | 529.26 |
| II. Encashment | | | | | | | | |
| * Encashment | 70.24 | 64.98 | 48.26 | 46.12 | 45.42 | 16.50 | 11.74 | 10.81 |
| Total (I+II) | 983.7 | 1,086.5 | 2,389 | 4236.8 | 3,871.5 | 4,168.7 | 3,451.5 | 3,629.6 |

* Encashment and Profit in Pak Rs. of Foreign Exchange

Bearer Certificates (FEBCs) & Foreign Currency Bearer Certificates (FCBCs)

Source: State Bank of Pakistan

TABLE 8.9 WORKERS REMITTANCES

| COUNTRY | (% Share) | | | | | | | | |
|-----------------|-----------|---------|---------|---------|---------|---------|---------|------------|--|
| | | | | | | | | July-April | |
| | 1999-00 | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2004-05 | 2005-06 | |
| Cash Flow | | | | | | | | | |
| Bahrain | 3.21 | 2.34 | 1.69 | 1.71 | 2.11 | 2.20 | 2.23 | 2.22 | |
| Canada | 0.42 | 0.48 | 0.88 | 0.36 | 0.60 | 1.17 | 1.10 | 1.79 | |
| Germany | 1.15 | 0.90 | 0.57 | 0.64 | 1.22 | 1.30 | 1.32 | 1.31 | |
| Japan | 0.17 | 0.38 | 0.26 | 0.19 | 0.14 | 0.16 | 0.16 | 0.15 | |
| Kuwait | 14.81 | 12.08 | 3.83 | 5.28 | 4.63 | 5.17 | 5.22 | 5.48 | |
| Norway | 0.61 | 0.56 | 0.28 | 0.21 | 0.27 | 0.44 | 0.46 | 0.36 | |
| Qatar | 1.45 | 1.31 | 1.36 | 2.09 | 2.32 | 2.09 | 2.06 | 2.55 | |
| Saudi Arabia | 33.92 | 29.80 | 16.08 | 13.86 | 14.77 | 15.10 | 14.12 | 16.16 | |
| Sultanat-e-Oman | 5.08 | 3.73 | 2.70 | 2.23 | 2.75 | 2.87 | 2.87 | 2.93 | |
| U.A.E. | 16.18 | 18.60 | 20.06 | 19.99 | 15.62 | 17.16 | 16.89 | 15.36 | |
| Abu Dhabi | 5.18 | 4.71 | 4.43 | 5.07 | 3.00 | 3.67 | 3.32 | 3.18 | |
| Dubai | 9.53 | 12.69 | 14.16 | 13.87 | 11.70 | 12.83 | 12.90 | 11.61 | |
| Sharjah | 1.40 | 1.20 | 1.45 | 1.02 | 0.90 | 0.63 | 0.65 | 0.54 | |
| Others | 0.07 | 0.00 | 0.01 | 0.04 | 0.01 | 0.02 | 0.02 | 0.03 | |
| U.K. | 8.02 | 7.97 | 6.49 | 6.53 | 8.73 | 8.96 | 9.01 | 9.57 | |
| U.S.A | 8.75 | 13.20 | 33.28 | 29.53 | 32.02 | 31.17 | 31.29 | 27.49 | |
| Other Countries | 6.22 | 8.65 | 12.53 | 17.36 | 14.84 | 12.22 | 12.67 | 14.63 | |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | |

Source: State Bank of Pakistan