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The Risks in Forex Trading in Commercial Banks in Pakistan

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“THE RISKS IN FOREX TRADING OF COMMERCIAL BANKS IN PAKISTAN”

TABLE OF CONTENT

---CHAPTER 01---

STATEMENT OF PROBLEM & IT'S BACKGROUND

1.1	Introduction.....	1
1.1.1	What is Forex.....	1
1.1.2	Foreign Exchange – A Brief History.....	2
1.1.3	The role of Forex in the global economy.....	3
1.1.4	FX– The most dynamic market in the world.....	3
1.1.5	Advantages of the Forex market.....	3
1.1.6	Main Forex Markets.....	4
1.1.7	FX Market Participants	6
1.2	Statement of the Problem.....	7
1.2.1	Tentative broad heads where risks will be identified in Forex operations.....	9
1.3	Significance of the study.....	9
1.3.1	Why Pakistan does Needs to Accumulate Foreign Currency Reserves.....	11
1.4	Scope of the study.....	12
1.5	Definitions of Terms.....	12

---CHAPTER 02---

RESEARCH METHODS & PROCEDURES

2.1	Research design.....	16
2.2	Research methods.....	16
2.3	Respondents of the study.....	16
2.4	Research instrument.....	17

2.5	Sources of data.....	17
2.5.1	Primary source.....	17
2.5.2	Secondary source.....	17
2.6	Treatment of data.....	17

---CHAPTER 03---
REVIEW OF RELATED LITERATURE & STUDIES

3.1	Local Literature.....	18
3.1.1	Too Much Money.....	18
3.1.2	Banks allowed to launch Financial Derivatives.....	19
3.2	Foreign Literature.....	20
3.2.1	The Banking Research Fund.....	20
3.2.2	New Strategies in Risk Management.....	20
3.3	Gaps to be bridged.....	21
3.4	Areas for Further Research.....	23

---CHAPTER 04---
PRESENTATION ANALYSIS

4.1	Overview of Banking Sector.....	24
4.2	Definition of Risk.....	26
4.3	Foreign Exchange Market.....	27
4.3.1	Exchange Rates.....	27
4.3.2	Effects of Exchange Control.....	27
4.4	Foreign Exchange Operations.....	28
4.4.1	SBP Act, 1956 and Banking Companies Ordinance 1962.....	29
4.4.2	Object of F.E. Act, 1947.....	29
4.4.3	Purpose of F.E. Act, 1947.....	29
4.4.4	Authorization to Deal in Foreign Exchange	30
4.5	SWOT Analysis of Forex with Reference To the Role of SBP.....	30
4.5.1	Strengths.....	30
4.5.2	Weaknesses.....	30
4.5.3	Opportunities.....	30
4.5.4	Threats.....	31
4.6	Foreign Currency Accounts.....	31
4.7	Concept of Banking and Non-Banking Channel.....	31
4.7.1	Benefits of Using Banking Channels.....	32
4.8	Exchange Rate Regime.....	32
4.9	Forex Transactions.....	32
4.9.1	Kerb Market.....	32
4.9.2	Inter-Bank Market.....	33
4.9.3	Central Bank.....	33
4.10	Emergence of the Kerb Market.....	33
4.10.1	Factors Responsible.....	33
4.10.2	Market Players in the Kerb Market.....	33

4.10.3	Significance of Premium in the Kerb Market.....	33
4.10.4	Hundi/Hawala – Undocumented Channel.....	34
4.10.5	Hundi — A Serious Threat to the Economy.....	34
4.10.6	Reasons for Growth in Hundi System.....	35
4.10.7	Corrective Measures.....	35
4.10.8	Protection of Economic Reform Act, 1992.....	36
4.10.9	Exchange (Temporary Restrictions) Act 1998.....	36
4.10.10	Amendment of Economic Reform Act 1992 (Ordinance of 1999).....	36
4.11	Protection of Foreign Currency Ordinance – 2001.....	37
4.12	Foreign Currency Accounts.....	38
4.12.1	Freezing of Foreign Currencies Accounts – 1998.....	38
4.12.2	The Effect of Investor’s Confidences and Foreign Direct Investment.....	38
4.12.3	Dollarization and Capital Flight.....	39
4.13	Foreign Currency Accounts.....	39
4.13.1	New Foreign Currency Accounts under F.E. 25/98.....	39
4.14	Situation after Terrorist Attacks of September 11, 2001.....	40
4.14.1	Impact on Pakistan Economy.....	40
4.14.2	Negative Impact on Pakistani Forex Market.....	40
4.15	SBP Initiative to Combat Market Situation.....	40
4.15.1	Repatriation of Export Proceeds.....	41
4.15.2	Development of Inter-Bank Market.....	41
4.15.3	Utilization of FE – 25.....	41
4.15.4	Liberalization of FX Market.....	41
4.15.5	Effect of Afghan War.....	41
4.16	Forex Transactions Affecting Forex Position Of the Bank.....	42
4.16.1	Reporting Requirements.....	42
4.16.2	Prudential Regulations and Its Effect on Market.....	42
4.16.3	Foreign Exchange Crises and SBP Management.....	42
4.17	Factors Affecting Exchange Rates.....	43
4.17.1	Fundamental/Economic Factors.....	43
4.17.2	Political Factors.....	43
4.17.3	Technical Factors.....	43
4.18	Inter-Bank Forex Operations.....	44
4.18.1	Balances Abroad.....	44
4.19	Function of Inter-Bank Market.....	44
4.19.1	Linkages of Regions and Interest Rates.....	44
4.19.2	Liquidity and Risk Management.....	45
4.19.3	Spreading Risks among Different Institutions.....	45
4.20	Overseas Operations of Pakistani Banks.....	46
4.21	Floatation of Pakistan Investment Bond.....	48
4.22	Foreign Exchange Dealing Risks.....	48
4.23	Risks in Forex.....	50
4.23.1	Position or Rate Risk.....	50
4.23.2	Credit Risk.....	52
4.23.3	Contract Risk.....	53
4.23.4	Clean Risk at Settlement.....	53

4.23.5	Sovereign Risk.....	53
4.23.6	Mismatched Maturates or Gap Risk.....	54
4.23.7	Operational Risk.....	54
4.23.8	Liquidity Risk.....	55
4.23.9	Interest Rate Risk.....	56
4.23.10	Equity Price Risk.....	57
4.23.11	Counterparty Risk.....	57
4.23.12	Insolvency Risk.....	58
4.24	Market Risk.....	59
4.24.1	Why Do Banks Expose Themselves To Market Risks?.....	59
4.24.2	Basic Measures of Market Risk.....	63
4.24.3	Scenario Simulations – Earnings and Economic Value.....	64
4.25	Risk Assessment Framework in the Bank.....	65
4.26	Seven Guiding Principles for Risk Management.....	66
4.26.1	Purpose of the Guiding Principles.....	66
4.26.2	Limit Setting.....	70
4.26.3	Exposure Limits.....	70
4.27	Foreign Exchange Limits.....	71
4.27.1	Customer Foreign Exchange Limit.....	71
4.27.2	Customer Daily Settlement Limit.....	71
4.27.3	Tenor Limitation.....	71
4.27.4	Closing Net Position: (Open Position).....	71
4.27.5	Maximum Net Position – All Currencies.....	71
4.27.6	Overall Net Position.....	71
4.27.7	Translation Rate.....	72
4.27.8	Gap Exposure.....	72
4.27.9	Procedure.....	72
4.28	Dealers Forward Projection/Outstanding Forwards.....	73
4.29	Forward Market Controls Inter-Bank Market.....	74
4.29.1	SBP Market Intervention (Domestic and Foreign).....	74
4.29.2	SBP Role towards Unified Exchange Rate Policy.....	74
4.29.3	Transaction Exposure.....	75
4.29.4	Daily Consolidation Exposure – FX.....	75
4.29.5	Procedure Used In Letter Of Credit.....	76
4.30	SBP – Exposure Limits For Banks.....	76
4.30.1	Effect of Market Distortion.....	76
4.30.2	Mark to Market Valuation.....	76
4.31	Risk Management Framework - Retrospect and Prospect.....	77
4.31.1	Changing Scenario - Risk Management.....	77
4.31.2	Settlement Risk.....	77
4.31.3	Enterprise Risk Management.....	78
4.32	Risk Analysis.....	79
4.32.1	Risk Management as a Closed Circle.....	80
4.33	Risk Strategy.....	80
4.33.1	Risk Identification.....	80
4.33.2	Risk Measurement.....	81

4.33.3	Risk Limitation Requires Definition of The Bank’s Risk Capacity Appetite.....	81
4.34	Exposure Reports.....	81
4.34.1	Bank Exposure.....	81
4.34.2	Settlement Limit.....	82
4.34.3	Forward Dealing Limit.....	83
4.35	Interest Rate Risk Management.....	83
4.36	Exposure Management.....	84
4.36.1	The Methodology.....	84
4.36.2	Forward Transactions.....	85
4.36.3	Option Forward.....	86
4.36.4	Forward Contracts.....	87
4.36.5	Square Position.....	89
4.37	Treasury Front Office.....	90
4.38	Treasury Back Office.....	91
4.39	Treasury Middle Office.....	93
4.39.1	Segregation of Dealing and Accounting Functions.....	94
4.39.2	Overdue Bills and Contracts.....	94
4.40	Gap Chart.....	96
4.40.1	Factors Responsible For Creation of Different Gaps.....	97
4.41	Value at Risk (VAR).....	98
4.41.1	What Is Value at Risk (VAR).....	98
4.41.2	Why Is Value At Risk Important?.....	100
4.41.3	Conclusion.....	101
4.41.4	Schematic Representation of How VAR Measures Works.....	102
4.42	Reserve Management.....	102
4.42.1	What Is Reserve Management And Its Importance?.....	102
4.42.2	Objectives of Reserve Management.....	103
4.42.3	Strategies for Reserve Management.....	103
4.42.4	Transparency and Accountability of Reserve Management.....	103
4.42.5	Institutional Framework of Reserve Management.....	103
4.42.6	Risk Management Framework of Reserve Management.....	104
4.42.7	Investment and Disinvestments Decision of Reserve Management.....	104
4.42.8	Existing Strategy of Reserve Management.....	104

---CHAPTER 05---

FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1	Findings.....	106
5.2	Conclusion.....	107
5.3	Recommendations.....	108

Bibliography.....	110
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---APPENDIX---

- Questions Asked During Interviews
- Statement of Foreign Currency Deposits (F.E. 25) and Utilization
- Foreign Currency Accounts
- Home Remittances
- International Reserves and Foreign Currency Liquidity
- Net Inflows of Foreign Private Investment

LIST OF FIGURES/TABLES

• Comparison of Spot FX, Equities and Futures Markets.....	3
• Forex Reserves.....	11
• Foreign Exchange Swap Points.....	22
• Dispersion by NOP to Capital.....	22
• Foreign Currency Accounts.....	39
• Overseas Assets of Pakistani Banks.....	47
• How Market Risk Influences a Financial Institution.....	59
• Daily Consolidation Exposure.....	75
• Procedures Used in Letter of Credits.....	76
• Open Position Per Currency.....	89
• Net Open Position of a Bank.....	90
• Foreign Exchange Risk Exposure – International Convention.....	90
• Treasury Role.....	94
• Functional Definition of Treasury Roles.....	95
• Proposed Integrated Treasury Structure.....	95
• Schematic Representation of how VAR Measures Works.....	102

Chapter 01

PROBLEM & IT'S BACKGROUND

CHAPTER 1

STATEMENT OF THE PROBLEM AND ITS BACKGROUND

1.1 INTRODUCTION

1.1.1 WHAT IS FOREX?

FOREX is an acronym for Foreign Exchange. The FOREX is a cash (spot) inter-bank market established in 1971 when floating exchange rates began to materialize.

Foreign exchange is the simultaneous purchase of one currency and sale of another – currencies are always traded in pairs. International currencies are traded on floating exchange rates. FOREX trading is exchanging one currency for another. To buy one currency one must exchange (sell) it for another.

The foreign exchange is not a market in the traditional sense. There is no central location for trading as there is in stocks and futures. Around the world trading takes place by utilizing computer terminals, telephone, telex and most recent innovation - the Internet. Unlike trading on the stock market, the forex market is not carried out by a central exchange, but on the “**interbank**” market also known as **OTC (over the counter) market**. Trading takes place

directly between the two counterparts necessary to make a trade. The main centers for trading are Sydney, Tokyo, London, Frankfurt and New York.

The FOREX is also the world's largest market. Daily volume is estimated in excess of US \$1.5 trillion. In comparison, the combined daily trading volume of the US Treasury Bond Market and all of the US Stock Markets averages under \$350 billion.

The FOREX is the most exciting market in the world today. Because it is so large and controlled by so many participants, no one player, including government, can directly influence its performance. Approximately 4500 central and commercial banks, corporations, commercial brokers and other financial interests all trade the FOREX. Commercial brokers conduct the largest volume of trading.

The inter-bank market accounts for 96% of the global foreign exchange market, with the remaining 4% being divided among all the global futures exchanges.

1.1.2 FOREIGN EXCHANGE – A BRIEF HISTORY

- The Breton Woods Agreement was initiated in 1944 in an effort to keep cash from draining out of war-ravaged Europe.
- Currency values were pegged to the U.S. Dollar, which was then pegged to the price of gold.
- The modern era of foreign exchange first emerged in 1971 with the collapse of the Bretton Woods Agreement.
- The U.S. Dollar was no longer convertible into gold, signaling an increase in currency market volatility and trading opportunities.
- The collapse in 1973 of the subsequent Smithsonian and European Joint Float agreements signaled the true beginning of the free-floating currency exchange system that drives the markets today.
- Starting in the 1980's, computer technology extended the reach of the exchange marketplace.

- Today, the values of the major world currencies are independent of each other, with intervention available to the states only through the central banking system.

Almost a third of all forex trading takes place in **London**, the world's largest center, with New York and Tokyo second and third. Although London forex trading grew more slowly than New York over the three years to 1998, its average daily turnover remains greater than New York and Tokyo combined, having risen from \$464 billion to \$637 billion.

1.1.3 THE ROLE OF FOREX IN THE GLOBAL ECONOMY

The foreign exchange market has been an invisible hand that guides the sale of goods, services and raw materials on every corner of the globe. Traders, bankers, investors, importers and exporters recognized the benefits of hedging risk, or speculating for profit. The fascination with this market comes from its size and complexity.

Inter-bank currency contracts and options, unlike futures contracts, are not traded on exchanges and are not standardized. Banks and dealers act as principals in these markets, negotiating each transaction on an individual basis. Forward "cash" or "spot" trading in currencies is substantially unregulated i.e. there are no limitations on daily price movements or speculative positions.

1.1.4 FX - THE MOST DYNAMIC MARKET IN THE WORLD

The attributes that determine the viability of a market as an investment opportunity, regardless of which instrument is being traded - stocks, municipal bonds, U.S. treasuries, agricultural futures, foreign exchange, are: liquidity, market transparency, low transaction costs, and fast execution. Based upon these characteristics, the spot FX market is the perfect market to trade.

	SPOT FX	EQUITIES	FUTURES
1	Large Market Liquidity	Decent Market Liquidity	Limited Market Liquidity
2	Very Low Cost - Little	More Costs & Commissions	Many Costs & High Commissions

	to Zero Commissions		
3	24-Hour Market	9 to 5 Market & Limited	9 to 5 Market & Limited
		After Hours Trading	After Hours Trading
4	No Bear Markets	Prolonged Bear Markets	Prolonged Bear Markets
5	Low Error Rates	High Error Rates	Very High Error Rates

1.1.5 ADVANTAGES OF THE FOREX MARKET

- **Forex is open 24 hours a day.**

Because of the decentralized clearing of trades and overlap of major markets in Asia, London and the United States, the market remains open and liquid

throughout the day and overnight. At 2:15 p.m. Sunday, New York time, trading begins as markets open in Sydney and Singapore. At 7 p.m. the Tokyo market opens, followed by London at 2 a.m., and finally New York at 8 a.m. As a trader, this allows you to react to favorable or unfavorable news by trading immediately.

- **Forex is the most liquid market in the world.**

The forex market is so liquid that there are always buyers and sellers to trade with. The liquidity of this market especially that of the major currencies, helps ensure price stability and low spreads. The liquidity comes mainly from large and smaller banks that provide liquidity to investors, companies, institutions and other currency market players.

- **50-to-1 leverage reduces the need for large amounts of capital.**

One consistent margin rate 24 hours a day allows Forex traders to leverage their capital more efficiently with as high as 50-to-1 leverage. For example, with a minimum account of USD 10,000, up to USD 500,000 can be traded. The USD 10,000 is posted on margin as a guarantee for the future performance of position.

- **Commission-free trading on more than 60 currencies.**

The cash Forex market traditionally has no brokerage charges, only a natural market bid/offer spread.

- **No restrictions on shorting which allows enjoying profit opportunities during any market condition.**

Since the market is constantly moving, there are always trading opportunities, whether a currency is strengthening or weakening in relation to another currency.

When currencies are traded they work against each other.

1.1.6 MAIN FOREX MARKETS

1. US DOLLAR & MAIN CURRENCIES

The majority of all foreign exchange trades involve the US dollar against another currency. Many commodity markets are denominated in US dollars leading to additional need for US dollar trading.

Traditionally, the German mark and the Japanese yen have been the basis of a lot of trading as well, with sterling and the Swiss franc trailing a little behind the three main currencies.

- The **dollar** has suffered violent swings as the credibility of US economic policy has been questioned on many occasions.
- **German Mark** - The traditional role of the Bundesbank as the world's most dedicated inflation fighter was undermined after unification with the former East Germany and it has now been replaced as the most influential central bank in Europe by the European central bank.
- The **yen** has been highly volatile in recent years, but in the past year or two, the longstanding Japanese problem of an appreciating exchange rate squeezing its exporting companies has returned.
- The **Swiss franc** serves as a "safe haven". This is due to the isolation of the Swiss economy, its independent and neutral political stance and the secrecy of Switzerland's banking system.

- The **pound** has always been a big part of foreign exchange markets and the first currency to be traded actively against the US dollar it will remain an interesting currency as it takes its place as one of the few key European currencies.

2. EUROPEAN CURRENCIES

European currencies have gained in importance in the last twenty years and have suffered some major crises due to the continued attempt to peg exchange rates to each other.

In the late eighties, playing the interest rate spreads between high and low interest rates between currencies - that were fixed - provided easy profits for speculators. The introduction of a common currency in 2001 spelled big changes to foreign exchange trading in Europe. As early as 1998, the participating currencies were fixed against each other This will spell a new dawn for sterling trading that will become the main national currency market (together with the Swiss franc) in Europe.

3. EMERGING MARKETS

Many currencies have long offered enormous profit potential as well as very substantial risks. The most noticeable approach has been to single out weak, but fixed currencies for brutal speculative attacks, leading to large devaluations and extensive economic problems for the countries involved.

The reason that many emerging currencies are pegged to the US dollar or other currencies is normally to force local monetary authorities to act with more discipline and to reassure holders of the currency against the risk of depreciation.

Interest focuses on South East Asia and South America, but there is no reason that both the African Continent and Eastern Europe should not provide interesting markets in the future.

1.1.7 FX MARKET PARTICIPANTS

1. BANKS

It is not uncommon for a large bank to trade billions of dollars on a daily basis. Some of this trading activity is undertaken on behalf of customers, but a large amount of trading is also conducted on desks where dealers trade to make the bank profits. A large part of the interbank

trading takes place on electronic broking systems that have negatively affected the traditional foreign exchange brokers.

2. INTERBANK BROKERS

Until recently, foreign exchange brokers were doing large amounts of business, facilitating interbank trading and matching anonymous counterparts for comparatively small fees. Today a lot of this business is moving onto more efficient electronic systems which function as a closed circuit for banks only.

3. CUSTOMER BROKERS

For many commercial and private clients, there is a need to receive specialized foreign exchange services. There are a fair number of non-banks offering dealing services, analysis and strategic advice to such clients. The services of such brokers are more similar in nature to other investment brokers.

4. CENTRAL BANKS

The national central banks play an important role in the foreign exchange markets. They control money supply and have official or unofficial target rates for their currencies. Among the most important responsibilities of a central bank is the restoration of an orderly market in times of excessive exchange rate volatility and the control of the inflationary impact of a weakening currency.

5. HEDGE FUNDS

Hedge funds have gained a reputation for aggressive currency speculation in recent years. With the increasing amount of money some of these investment vehicles have under management, the size and more liquidity. The leverage available in these markets allows such funds to speculate with billions of dollars at a time.

6. COMMERCIAL COMPANIES

The international trade exposure of commercial companies is the backbone of foreign exchange markets. Protection against unfavorable moves is an important reason why these markets are in existence. Commercial companies often trade in sizes that are insignificant to short-term market moves. Some multinational companies can have an unpredictable impact when very large positions are covered by their trade activities.

7. INVESTORS AND SPECULATORS

As in all other efficient markets, the speculator performs an important role taking over the risks that commercial participants do not. The boundaries of speculation are not clear because many other participants also have speculative interests especially the central banks.

1.2 STATEMENT OF PROBLEM

The statement of problem for which research is being conducted is

“Risks in forex trading of Commercial banks in Pakistan”

The risk of loss in trading foreign exchange can be substantial. Actual past performance is no guarantee of future results. Currency prices are highly volatile. Price movements for currencies are influenced by changing supply-demand relationships, trade, fiscal, monetary, exchange control programs and policies of governments.

In early 2001, the government started to take serious steps towards the removal of illegalities going on in the foreign exchange market of the country. In this connection, a Task Force was set up for overseas Pakistanis to give recommendations. There was a dire need felt to rationalize the foreign exchange market and to remove the existing distortions that were inhibiting the flow of non-resident Pakistanis resources through the normal banking channels. Under the rules all money changers were required to maintain an account with a scheduled bank and moneychangers defaulting on this requirement were faced with cancellation of licenses.

Due to this very importance of managing risk and problems faced by the banks, State Bank of Pakistan issued guidelines for the risk management that signifies the complexity of the issue and need for its resolution and active measurement and control. Risk Management encompasses risk identification, assessment, measurement, monitoring and mitigating/controlling all risks inherent in the business of banking. The basic principles relating to risk management that are applicable to every financial institution, irrespective of its size and complexity include:

- The overall responsibility of risk management vests in the Board of Directors, which shall formulate policies in various areas of operations of the bank. They are responsible for devising risk management strategy and well-defined policies and procedures for mitigating/controlling risks, which should be duly approved by the Board.
- At operational level, risk assessment may be made on portfolio or business line basis.

- Irrespective of a separate risk review or management function, individuals heading various business lines or units are also accountable for the risk they are taking.
- Wherever possible risks should be quantitatively measured, reported, and mitigated.
- The risk review function should be independent of those who approve and take risk.
- Banks should have contingency plans for any unexpected or worst case scenarios.
- The major risks to which the financial institutions can be exposed to include credit, market, liquidity, and operational risks.

Banks were encouraged to put in place an effective risk management strategy based on these guidelines that will also facilitate the banks in their preparation for the implementation of New Basel Capital Accord. Once the New Basel Accord is introduced in Pakistan, these guidelines will converge with the requirement of the Accord and will become enforceable regulation.

1.2.1 TENTATIVE BROAD HEADS WHERE RISKS WILL BE IDENTIFIED IN FOREX OPERATIONS

- **Against LCs**

Payments to be made in Dollars, pounds, DM, French Franc

Schedule of purchase of foreign currency and payments to be made by banks to parties

- **Forex Reserves**

How much to maintain at a time

Factors affecting variation decision

- **Investments in bonds (FC)**

Dollar and Euro Bonds

- **Long Position**

Risks and hedging

- **Foreign Subsidiary**

Subsidiary in comparatively financially established countries

Subsidiary in comparatively financially weaken countries

- **Impact of Hundi on Commercial Banks**

- **Impact of Forex on local currency cash flows**

HYPOTHESIS

Despite presence of risks and volatility in foreign exchange, Banks have incorporated proper systems and taken measures to secure their forex operations.

1.3 SIGNIFICANCE OF THE STUDY

Trading successfully is by no means a simple matter. It requires time, market knowledge and market understanding and a large amount of self restraint. As market professionals, we can point the right direction and indicate what are correct trading tactics and considerations. In order to make a successful trade, a trader has to take into account technical and fundamental data and make an informed decision based on his perception of market sentiment and market expectation. Timing a trade correctly is probably the most important variable in trading successfully but there can be times where a traders' timing will be off. One cannot generate returns on every trade.

Pakistan has faced tremendous increase in the value of foreign currency and a depreciation of Pak Rupee. The Dollar that was available for Rs. 34 once rose up to Rs. 64 but these days it is quite stable within a range. The appreciation in Dollar negatively affects not just the banking operations but also the economy of Pakistan, which is very vulnerable. In the best interest of the banks in operation State Bank should ensure that depreciation of rupee should not take place in future. The demand for dollars and other hard currencies, both for current imports and forward bookings to pay for them, is so high that the State Bank of Pakistan (SBP), the central bank, had to move in last week to ease the pressure on the rupee. It also decided that the growing lumpy payment for oil imports would, in future, be made out of the official forex reserves. It shifted these payments from the inter bank market, easing pressure on the rupee in the inter bank and kerb markets. The SBP moves helped stabilize the rupee, which had depreciated 5.5 per cent against the dollar in 2004 July-October period. The rupee, as a result, regained 2.8 of its value against the in just 10 days. The main factor, besides others is payment for oil import. The import bills for crude and oil products are expected to touch \$3.5 billion in the current fiscal year ending June.

The banking system of Pakistan has made long-strides in recent years towards its goal of becoming a financially viable and firm arm of the economy which in turn would help promote growth and prosperity. Its remarkable performance in terms of assets growth, particularly unprecedented loans expansion, and significant rise in profits during the year 2003 would further strengthen the process. This study will help identify the risks and mitigating steps for reducing these risks under the broad heads where the Commercial banks today deal. If the banks will not take calculated risk and steps, they will end up losing the whole investment and a huge loss can also result in default of a bank and lose of general public's trust on the party.

FOREIGN EXCHANGE RESERVES

(MILLION US\$)

END PERIOD	NET RESERVES WITH SBP	NET RESERVES WITH BANKS	TOTAL LIQUID RESERVES
1998-99	1,662.7	616.5	2,279.2
1999-00	991.0	976.6	1,967.6
2000-01	1,676.9	1,542.6	3,219.5
2001-02	4,333.4	2,098.2	6,431.6

According to the State Bank of Pakistan, Foreign exchange reserves rose by \$82 million to \$12.083 billion in the week ended November 20, 2004. The reserves held by commercial banks also rose to \$2.615 billion from \$2.577 billion.

1.3.1 WHY PAKISTAN DOES NEEDS TO ACCUMULATE FOREIGN CURRENCY RESERVES?

There are several reasons for a poor developing country like Pakistan to accumulate reserves. They are used as a tool of exchange rate and monetary policy management. The Inter bank market is used to affect monetary policy by either supplying domestic currency to the market or buying it in the market against foreign currencies. This affects the domestic money market

balance and so domestic interest rates. In Pakistan where the foreign exchange market has been liberalized the State Bank of Pakistan intervenes to affect the rate at which rupee trades. The objective of a stable, realistic exchange rate, which does not erode the competitiveness of Pakistani exports, can only be realized if the SBP has adequate reserves and can intervene at times to achieve this objective. In the long term we have to maintain or enhance Pakistan's share in the world markets and this market share cannot be allowed to slip away due to volatility or violent swings in the exchange rate. A pro-active policy of Reserve management helps Pakistan in maintaining the competitiveness of its goods and services in the world economy.

The banking sector in Pakistan has been going through a comprehensive but complex and painful situation. It is aimed at making these institutions financially sound and forging their links firmly with the real sector for promotion of savings, investment and growth. Although a complete turnaround in banking sector performance is not expected till the completion of reforms, signs of improvement are visible. The almost simultaneous nature of various factors makes it difficult to disentangle signs of improvement and deterioration.

Commercial banks have been exposed and withstood several types of pressures, some of these are: multi pronged reforms introduced by the central bank, freezing of foreign currency accounts, continued stagnation in economic activities and low growth and drive for accountability and loan recovery. All these have brought a behavioral change both among the borrowers as well as the lenders. The risk aversion has been more pronounced than warranted.

Today the competition has increased in the banking sectors and in the future only those banks will survive in the market that can understand the risk and have good strategies to handle the risks and offer the desired services to the customers. It is the time to find out the factors and causes of risks that are faced by the commercial bank and also find out different methods and techniques to mitigate risks as currently competition is so high in the banking sector. It is the time that country needs strong and sound banks, those working on the right path, increasing their profit, contributing to the economy of the country, and those performing marvelously and ethically. It is hoped that readers will find this report useful and that it will contribute not only in the development of financial sector of Pakistan but even more so to better decision- making.

1.4 SCOPE OF THE STUDY

- The study will be focused on research and data gathered keeping in view the current scenario of Pakistan and recent economic and political/legislative environment.
- Main focus will be in collection of data from the head offices of major banks located in Karachi and the forex branches of these banks operating.

1.5 DEFINITIONS OF TERMS

ARBITRAGE - The purchase or sale of an instrument and simultaneous taking of an equal and opposite position in a related market, in order to take advantage of small price differentials between markets.

ASK - The price at which the currency or instrument is offered.

BUNDESBANK - Central Bank of Germany.

BACK OFFICE - The departments and processes related to the settlement of financial transactions (i.e. written confirmation and settlement of trades, record keeping).

BASIS POINT - One hundredth of a percent.

BROKER - An agent, who executes orders to buy and sell currencies and related instruments either for a commission or on a spread. Brokers are agents working on commission and not on their own account. In the foreign exchange they act as intermediaries between banks bringing buyers and sellers together for a commission paid by the initiator or by both parties.

CLEARING - The process of settling a trade.

COUNTERPARTY - The other organization or party with whom the exchange deal is being transacted.

DAY TRADING - Opening and closing the same position or positions within the same trading session.

DERIVATIVES - Trades that are constructed or derived from another security (stock, bond, currency, or commodity). Derivatives can be both exchange and non-exchange traded (known as Over the Counter or OTC). Examples of derivative instruments include Options, Interest Rate Swaps, Forward Rate Agreements, Caps, Floors and Swap options.

DEVALUATION - Deliberate downward adjustment of a currency against its fixed parities or bands, normally by formal announcement.

EXPOSURE - (i) Net working capital - The current assets in a foreign currency minus current liabilities in the currency; (ii) Monetary/non-monetary method - Monetary assets and liabilities in the foreign currency are valued at present exchange rates, while non-monetary items are entered at the relevant historic rates.

FOREIGN EXCHANGE - The purchase or sale of a currency against sale or purchase of another.

FLOATING EXCHANGE RATE - An exchange rate where the value is determined by market forces. Even floating currencies are subject to intervention by the monetary authorities. When such activity is frequent the float is known as a dirty float.

FIXED EXCHANGE RATE - Official rate set by monetary authorities. Often the fixed exchange rate permits fluctuation within a band.

FORWARD RATE AGREEMENTS (FRA'S) – FRA's are transactions that allow one to borrow/lend at a stated interest rate over a specific time period in the future.

FRONT OFFICE - The front office usually comprises of the trading room and other main business activities.

HEDGE - The purchase or sale of options or futures contracts as a temporary substitute for a transaction to be made at a later date. Usually it involves opposite positions in the cash or futures or options market.

INTEREST RATE SWAPS (IRS) - An exchange of two debt obligations that have different payment streams. The transaction usually exchanges two parallel loans; one fixed the other floating.

KERB MARKET - The term given to unofficial trading of stocks or securities away from a recognized stock market, or outside stock market hours.

LIMIT ORDER - An order to buy at or below a specified price or to sell at or above a specified price.

LONG - A position to purchase more of an instrument than is sold, hence, an appreciation in value if market prices increase.

MARK TO MARKET - Traders account for their positions in two ways: accrual or mark-to-market. An accrual system accounts only for cash flows when they occur; hence, it only shows a profit or loss when realized. The mark-to-market method values the trader's book at the end of

each working day using the closing market rates or revaluation rates. Any profit or loss is booked and the trader will start the next day with a net position.

MARKET MAKER - A dealer who supplies prices and is prepared to buy or sell at those stated bid and ask prices. A market maker runs a trading book.

OFF BALANCE SHEET - Products such as Interest Rate Swaps and Forward Rate Agreements are examples of 'off balance sheet' products.

OFFER - The price, or rate, that a willing seller is prepared to sell at.

OPEN POSITION - A deal not yet reversed or settled and the investor is subject to exchange rate movements

OVERNIGHT - A trade that remains open until the next business day.

OVER THE COUNTER (OTC) - Used to describe any transaction that is not conducted over an exchange.

PEGGING - A form of price stabilization; typically used to stabilize a country's currency by making it fixed to the exchange rate with another country.

RE-PURCHASE (OR REPO) - This type of trade involves the sale and later re-purchase of an instrument, at a specified time and date. This occurs in the short-term money market.

RISK MANAGEMENT - To hedge one's risk they will employ financial analysis and trading techniques.

ROLLOVER - The settlement of a deal is rolled forward to another value date with the cost of this process based on the interest rate differential of the two currencies.

SETTLEMENT - The finalizing of a transaction, the trade and the counterparts are entered into the books.

SHORT - To go 'short' is to have sold an instrument without actually owning it and to hold a short position with expectations that the price will decline so it can be bought back in the future at a profit.

SPOT - Spot or Spot date refers to the spot transaction value date that requires settlement within two business days, subject to value date calculation.

SPREAD - The difference between the bid and offer (ask) prices; used to measure market liquidity. Narrower spreads usually signify high liquidity.

SQUARE - To be neither long nor short is the same as to be flat or square. One would have a flat book if he has no positions or if all the positions cancel each other out.

SPREAD - The difference between the bid and ask price of a currency.

THE NEW BASEL CAPITAL ACCORD - The New Accord will be applied on a consolidated basis to internationally active banks. This is the best means to preserve the integrity of capital in banks with subsidiaries by eliminating double gearing. The implications of The Accord will have a major impact on data management and storage initiatives, regulatory reporting, and financial architecture. It provides the enhanced ability to measure and manage both credit and operational risks in organization and delivers direct benefits to bottom line by enabling to reduce ongoing credit and operational losses that are a drag on profitability.

VALUE DATE - The date at which both parties of a transaction agree to exchange payments.

Chapter 02

RESEARCH METHODS

&

PROCEDURES

CHAPTER 2

RESEARCH METHODS AND PROCEDURES

2.1 RESEARCH DESIGN

◆ Descriptive Research

The Research Design includes a simple Questionnaire that has questions which duly answer any/all of the terminologies used in the Industry, identify the risks that exist for forex trading by the commercial banks and the mitigating steps that can be inferred by the research and an informal interview with the bank representatives.

2.2 RESEARCH METHODS

◆ Survey research

The research is aimed at identifying the risk factors that can lead to the ultimate profitability or default of a bank by the decisions taken on behalf of bank by the Treasury and Forex department personnel.

2.3 RESPONDENTS OF STUDY

The research thesis will involve gathering first hand information from the professionals especially:

- ◆ 2 representatives of each of the below mentioned banks, involving local and foreign banks, especially personnel working in the Treasury and Forex Department.
- ◆ Personnel of Exchange and Debt Department of State Bank of Pakistan.

MAJOR BANKS

- ⇒ Bank Alfalah Limited
- ⇒ ABN Amro
- ⇒ Deutsche Bank
- ⇒ United Bank Limited
- ⇒ Muslim commercial Bank
- ⇒ Habib Bank of Pakistan
- ⇒ Crescent Commercial Bank

2.4 RESEARCH INSTRUMENT

- ◆ Questionnaire
- ◆ Unstructured interviews

2.5 SOURCES OF DATA

2.5.1 PRIMARY SOURCE

- ◆ Interview
- ◆ Filled questionnaires

2.5.2 SECONDARY SOURCE

- ◆ State Bank of Pakistan
- ◆ Websites visited for information:
 - ⇒ www.refco.com

⇒ www.pakgulfeconomist.com

⇒ www.forexglossary.com

⇒ Daily Times

2.6 TREATMENT OF DATA

Different statistical treatment will be used in this report. The data and results would be presented in form of

- ◆ Tables,
- ◆ Diagrammatical representation.

Chapter 03

REVIEW OF RELATED LITERATURE & STUDIES

CHAPTER 3

REVIEW OF RELATED LITERATURE & STUDIES

3.1 LOCAL LITERATURE

3.1.1 TOO MUCH MONEY

What has been happening to money markets lately?

By SHABBIR H, KAZMI

Jun 14 - 20, 1999

Various policy decisions by the government of Pakistan (GoP) and measures taken by State Bank of Pakistan (SBP) have enhanced the cash liquidity in the banking system. All these measures are aimed at boosting process of industrialization, GDP growth rate and exports. The SBP has succeeded in introducing unified exchange rate, controlling dollar volatility and thereby reducing lending rates.

EXPOSURE LIMIT

On May 31, 1999, SBP replaced the net open position (NOP) limit with the aggregate forex exposure limit. This limit, which was earlier fixed according to a particular bank's trade transactions, has now been fixed at 10 per cent of the bank's paid-up capital with a maximum and minimum limit set at Rs 500 million and Rs 50 million respectively. However, banks will not be allowed to net off a position in one currency with an opposing position of an equivalent amount in another currency.

SBP STRATEGY

The SBP strategy to lower the interest rates has been successful so far. The message is loud and clear for all the participants. This is the basic requirement for any fiscal and monetary policy. The reason behind lowering interest rates is to reduce the cost of funding for industry. Going to the fiscal route alone essentially means that the government is entrusted with deciding the priorities. It is believed that, as compared to the government, other sectors of the economy are more efficient with the use of monetary tools to try and stimulate the economy if comparing with using fiscal measures alone.

Many analysts question the timing of the decision and response of trade and industry to lower interest rates. It is important to keep a watch on interest rate expectations rather than normal interest rate alone. The market participants are still under the impression that lower interest rates are a temporary phenomenon and not sustainable. This expectation will be corrected in due course of time for which consistent policies are a must.

3.1.2 BANKS ALLOWED TO LAUNCH FINANCIAL DERIVATIVES

Daily times 04/12/04

KARACHI: The State Bank of Pakistan (SBP) has decided to allow banks and development financial institutions, that meet the requisite eligibility criteria, to undertake the financial derivatives business under new regulations, said a statement issued by the SBP on Friday.

The regulatory framework includes operational and risk management standards for derivatives business, keeping in view the higher level of risk. Banks wanting to undertake derivatives transactions will be required to get approval from the SBP for an authorized derivative dealer or non-market maker financial institution status.

The State Bank had recently allowed over the counter financial derivatives in Pakistan, under which banks were permitted to undertake interest rate swap, foreign currency option and forward rate agreement on the basis of transactional approval from SBP.

The SBP said the OTC financial derivatives has undergone tremendous growth throughout the world during the last decade as the derivatives have become extremely popular for hedging risks as well as for profit making. The State Bank's decision to allow banks to undertake the financial derivatives business is to concurrently develop the FX market and to provide a risk hedging mechanism to the market participants, the SBP said. —Staff Report

3.2 FOREIGN LITERATURE

3.2.1 THE BANKING RESEARCH FUND

THE FINANCIAL SERVICES ROUNDTABLE, WASHINGTON, D.C.

By ANTHONY T. CLUFF

The important seven principles are as under:

1. Board and senior management oversight
2. Risk management framework
3. Integration of risk management
4. Business line accountability
5. Risk evaluation/measurement
6. Independent review
7. Contingency planning

Above guiding principles are so much crucial for any commercial bank because it gives the right direction to the banks in how to perform their functions, how to act as a moment in the market, how to assess, measure and evaluate the different types of risks. Basically it is related to

individual, that is, what are the roles and responsibilities of individual in the operation of the bank, accountable for their business and also encourage the banks toward making the contingency planning for facing unexpected events and situations in their banking business.

3.2.2 NEW STRATEGIES IN RISK MANAGEMENT **CONTRIBUTED BY VISION CONSULTING INC.**

By BELL AND GERALD ADAMS

New strategies that are most important in risk management are as under:

1. Expanding business arenas
2. Globalization
3. New products
4. Business transformation
5. Regulatory developments
6. Technology
7. Streamlining

Above recommendations are so good for the banks and according to the current performance of our economy expansion of business are crucial for any institution, going global is the need of the time, introducing the new product and service are the back born of any bank if bank gives new and desirable product and services to the clients than they can easily survive in the banking sector. Technology is also important for any bank if banks have excellent technology it helps the bank in performing good in their operations and activities. One of the most important thing is that this article gives the idea to the bank to how can they reduce their cost through reducing in the management layers, redesigned the structure of the bank, remove the old machines and gaining sound financial position, go toward mergers and acquisitions. Follow the rule and regulation of controlling bodies that run the banking business is so essential for any bank. All these recommendations help the banks to improve the performance in the financial sector.

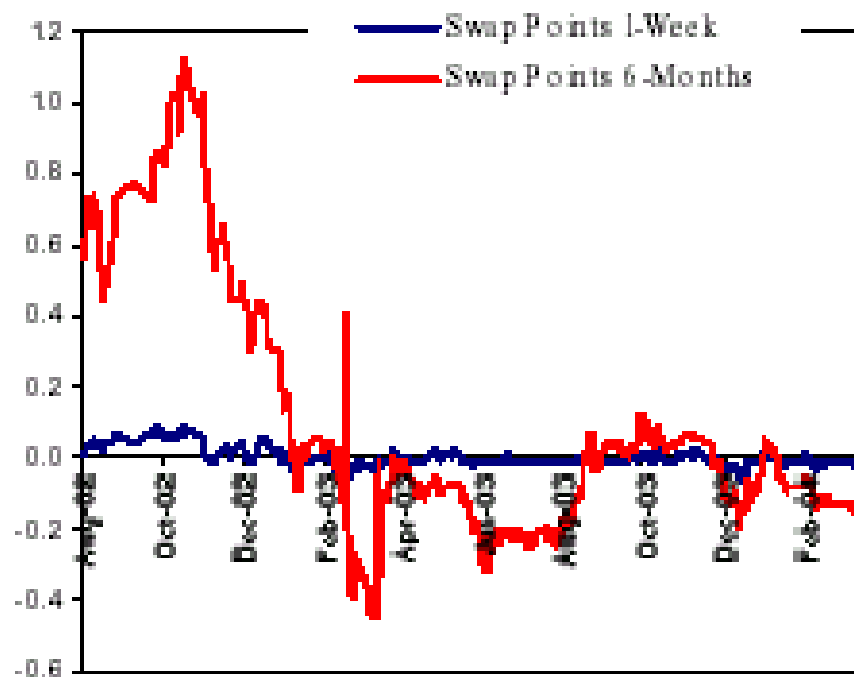
3.3 GAPS TO BE BRIDGED

By looking at the above literature, both local and foreign, we can say that much work needs to be done on our part to formalize the risk management framework in banking sector which is more open to risk than any other industry or sector.

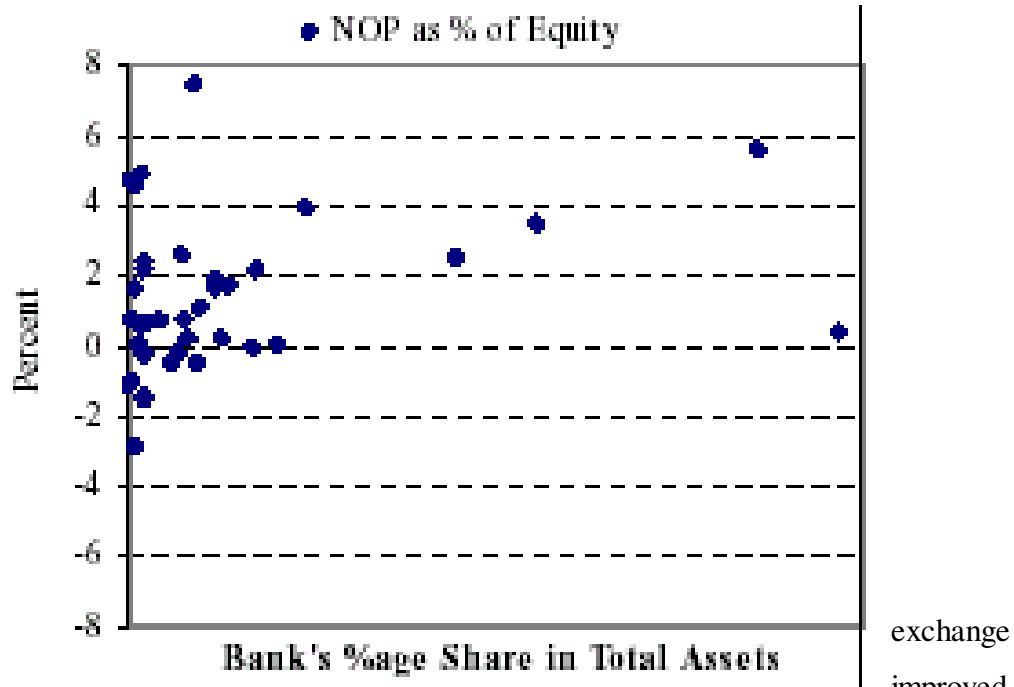
Even though State Bank highlights the facts and monitors various areas to control risk, banks still are exposed to it. The main reasons behind this are: lack of accountability and the time taking factor i.e. treasury department is too busy in performing its tasks that keeping each and every guideline principle in mind is practically not possible. This pushes them to at times get out of the limit and expose themselves to risks in various situations. To achieve the goal of financial stability, the SBP has launched an over-arching campaign which focuses on institutional strengthening, development of necessary infrastructure and ensures the smooth functioning of markets.

The solvency of the banking system stems from its capitalization. To fortify the capital base of banks, the SBP enhanced the minimum capital requirements to Rs1 billion in 2000 giving them two years time to meet the requirement in a phased manner. This led to mergers and acquisitions within banks and NBFIs. Banks also raised fresh capital through right or bonus issues. The required level of risk-based capital also went up due to a surge in risk-weighted assets.

FOREIGN EXCHANGE SWAP POINTS



DISPERSION BY NOP TO CAPITAL



foreign exchange liquidity due to surplus in current account, increasing FE-25 deposits and lesser purchases of foreign exchange by the SBP from the open market gave further gains to the Rupee against the USD. The negative swap points since the start of CY03 encouraged the banks to take a riskier stance by holding an aggregate oversold net open position.

The level of net open position (NOP) as a percentage of capital is well within the acceptable range of ± 10 percent. However, bank-wise analysis shows that around 10 banks holding the share of 63 percent in the total assets are running negative NOP. Now, if the lower yields on rupee instruments are not addressed, the rising returns on USD may exert an upward pressure on the exchange rate and if banks continue to have oversold positions, they would have to face exchange rate risk.

3.4 AREAS FOR FURTHER RESEARCH

This research is aimed primarily at identifying and highlighting the various kinds of risks associated with foreign exchange trading of commercial banks in Pakistan. Not just this it will

also help in identifying the risk mitigating factors and the steps that the bank takes in its normal operations in order to avoid too much exposure at a given point of time, which if taken can lead to fall of whole bank like we have the examples of Mehran Bank and Crescent Bank in Pakistan.

It will also briefly cover the rules and regulations designed by the State Bank of Pakistan to monitor and assist the banks in their forex trading, dealing and transactions.

Chapter 04

PRESENTATION ANALYSIS

CHAPTER 4 PRESENTATION ANALYSIS

4.1 OVERVIEW OF BANKING SECTOR

Banking sector have shown significant improvement and the industry structure presents a robust picture. The major developments are summarized as follows:

- ⇒ A few more banks with low capital base, which could have posed a systemic risk to the sector, merged and became part of more resilient and consolidated institutions, better placed to withstand any adverse shocks.

- ⇒ Profitability and earnings showed a remarkable improvement, thereby contributing significantly towards strengthening the capital base and resilience of the banking system.
- ⇒ Credit to the private sector picked up significantly, after showing years of sluggishness.
- ⇒ The system continued to have abundant liquidity. The recent upward movement in the interest rates, however, has increased the market risk.
- ⇒ The average intermediation cost came down as a result of cost controls and expanding business volumes. This reflected an increased efficiency in financial intermediation.
- ⇒ The privatization of Habib Bank Limited and UBL will further promote competition and efficiency in the system.

While these improvements owe much to financial sector reforms and improved corporate governance in banks, the regulatory and macro-economic environment have also contributed towards this:

- ⇒ The economy performed well and remained on the projected growth trajectory. The demand for bank credit by the private sector picked up. The key indicators of the corporate sector showed robust earnings and debt servicing capacity.
- ⇒ Workers' remittances, though decelerated as compared to the last years, remained in the projected growth brackets. Consequently, the flow of funds to the banking sector remained intact and was sufficient to maintain a comfortable liquidity position in the market.

The banking sector is sensitive to developments in the economic and political sphere. The country's political scene saw the resolution of some key issues, which had a salutary impact on

its economic condition. There are, however, some subtle concerns that may increase stress both on the economy as well as the banking system.

The banking sector's persistent robust operating performance over the last couple of years is a healthy sign. But, the overwhelming portion of trading gains presents a caveat, and this may not be sustainable on long-run basis. The recent upturn in credit demand, if it is to sustain, has the potential of making up much of the lost gains. Another caveat is the continuous drain on depositors' wealth; they are at present in a disadvantageous position as they have to settle at a negative real rate of return.

Other than the depressing yields, the specter of massive liquidity has not had any adverse impact on the system. Banks' adventures in the booming stock market has been capped at twenty percent of their equity. Along with upcoming margin rules for stock trading is likely to further solidify the banking system's inherent strength.

Credit disbursement at an exponential rate has, at last, broken the protracted spell of sluggishness. However, it has also at the same time, increased the level of credit risk for the banking system. Banks are still going through an evolutionary phase in developing risk appraisals and mitigating techniques in these areas. The future expansion of credit to new sectors will largely depend upon the extent to which the banks are able to develop internal procedures and controls in risk appraisals and mitigation.

To support a vibrant financial system, the State Bank took a number of policy initiatives. This included issuing guidelines on corporate governance to strengthen the culture of accountability and transparency, change of ownership and consolidation of weak institutions, and cleaning up of balance sheets through incentive-based recovery drives. Guidelines were also issued to banks on risk management to provide the banks a broader framework to identify measure, monitor, and control/mitigate various risks in their business. Realizing the importance of much needed expansion in the scope of business and the due risk management thereof, the SBP issued guidelines in various areas and liberalized its exchange policy in respect of trade financing.

4.2 DEFINITION OF RISK

Financial risk in banking organization is the possibility that the outcome of an action or event could bring up adverse impacts. Such outcomes could either result in a direct loss of earnings / capital or may result in imposition of constraints on bank's ability to meet its business objectives. Such constraints pose a risk as these could hinder a bank's ability to conduct its ongoing business or to take benefit of opportunities to enhance its business.

Regardless of the sophistication of the measures, banks often distinguish between expected and unexpected losses. Expected losses are those that the bank knows with reasonable certainty will occur (e.g., the expected default rate of corporate loan portfolio or credit card portfolio) and are typically reserved for in some manner. Unexpected losses are those associated with unforeseen events (e.g. losses experienced by banks in the aftermath of nuclear tests, Losses due to a sudden down turn in economy or falling interest rates). Banks rely on their capital as a buffer to absorb such losses.

Risks are usually defined by the adverse impact on profitability of several distinct sources of uncertainty. While the types and degree of risks an organization may be exposed to depend upon a number of factors such as its size, complexity business activities, volume etc, it is believed that generally the banks face Credit, Market, Liquidity, Operational, Compliance / legal / regulatory and reputation risks.

4.3 FOREIGN EXCHANGE MARKET

4.3.1 EXCHANGE RATES

Exchange rate is the price at which a currency can be bought and sold in terms of another. This price can be the result of supply and demand for the currency in the open market or as fixed by edict of a government or its monetary authority, usually the central bank. Most of the time the value of the currencies is decided by the interaction of the free market forces playing their role - - guided by the intervention of the monetary authorities to ensure currencies do not depreciate or

appreciate, excessively. The monetary authorities would not be doing their duty if they did not intervene in the market place to smooth out excessive price movements.

4.3.2 EFFECTS OF EXCHANGE CONTROL

Foreign currency operators in countries with rigid exchange controls have little opportunity to exercise their skills. In some countries the authorities fix the exact buying and selling rates periodically, even daily, in which case active foreign exchange dealing is practically non-existent, unless there is a gap in the regulations permitting some arbitrage transactions between different currency bands.

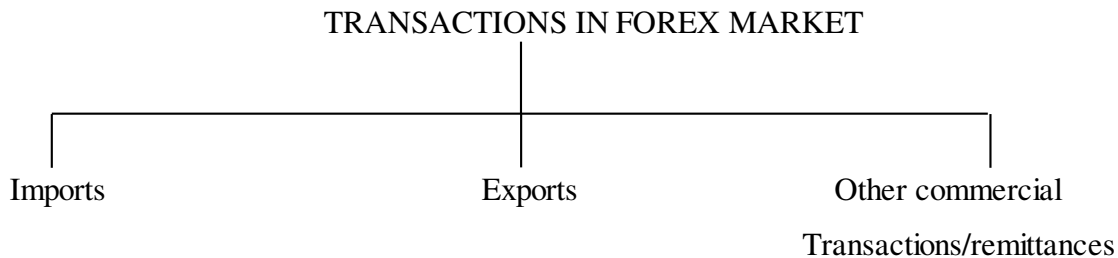
Where there are no (or practically no) exchange controls, the development and depth of the exchange market is a question of the willingness of the domestic banks to take views and to back these up with positions. Naturally, the size and volume of a domestic market in foreign currencies is limited by:

- ⇒ The size of the country,
- ⇒ Population figures,
- ⇒ The state of the economy
- ⇒ The number of participants.

In a small country with only a few banks and a limited money supply, a currency market against the national unit of account is very restricted and a comprehensive exchange market is unlikely to develop.

Lack of exchange controls also means that the banks operating in the foreign exchange market of a country will be responsible to ensure prudent dealing by imposing limits. However, instead of having exchange controls, the central bank or monetary authority may inhibit the freedom of the banks by setting capital and other ratios on the positions they are allowed to carry for a limited period.

4.4 FOREIGN EXCHANGE OPERATIONS



REGULATORY AND POLICY ISSUES

REGULATIONS IN FORCE

- ⇒ Foreign Exchange Regulations Act, 1947
- ⇒ State Bank Of Pakistan Act, 1956
- ⇒ Banking Companies Ordinance 1962
- ⇒ Protection Of Economic Reforms Act, 1992
- ⇒ Foreign Exchange (Temporary Restrictions) Ordinance 1998
- ⇒ Protection Of Economic (Amendment) Ordinances, 1999
- ⇒ Protection of F.C. Accounts Ordinance 2001
- ⇒ Export & Import Procedure Order (M/Com)
- ⇒ Investment Policies (Board Of Investment)

4.4.1 STATE BANK OF PAKISTAN ACT, 1956 AND BANKING COMPANIES ORDINANCE 1962

- ⇒ Mainly deals with the SBP's powers to execute their activities in respect to banking activities.

4.4.2 OBJECT OF F.E. ACT, 1947

- ⇒ To regulate in the economic and financial interest of Pakistan in respect of foreign exchange activities.
- ⇒ Exchange management in Pakistan is administered under the provision of the foreign exchange act 1947 and notifications issued there under.
- ⇒ Basic regulations are issued by Government of Pakistan and notifications by State Bank of Pakistan.

4.4.3 PURPOSE OF F.E. ACT, 1947

⇒ To give directions and secure compliance in respect of foreign exchange activities.

REGULATORY AND POLICY ISSUES

POLICY ISSUES

- i. Exports
- ii. Imports
- iii. Foreign Currency Accounts – Frozen, 31 i.e. incremental (up to 31/12/02) & FE (New F.C. account)
- iv. Licenses of Authorized Dealers/Money Changers
- v. Licenses to Exchange Companies
- vi. Home & Commercial Remittances
- vii. Private Remittances
- viii. Travel Regulations
- ix. Foreign Direct Investment (FDI)

4.4.4 AUTHORIZATION TO DEAL IN FOREIGN EXCHANGE

⇒ Authorized dealers – banks Head offices and designated branches

⇒ Authorized Money Changers

⇒ Exchange Companies

Authorizations are issued by SBP in the Form of Licenses

4.5 SWOT ANALYSIS OF FOREIGN EXCHANGE MARKET WITH REFERENCE TO THE ROLE OF SBP

4.5.1 STRENGTHS

- ⇒ Regulating framework regarding FCAs
- ⇒ Regulating framework regarding Foreign Direct Investment
- ⇒ Regulating framework regarding Repatriation of Proceeds
- ⇒ Regulating framework regarding Remittances

- ⇒ Regulating framework regarding Risk Management
- ⇒ Adequate Foreign exchange reserves

4.5.2 WEAKNESSES

- ⇒ Ad hoc policies of the Political Regimes
- ⇒ Economic Crises/Fiscal Imbalances
- ⇒ Heavy Foreign Indebtedness

4.5.3 OPPORTUNITIES

- ⇒ To explore the Foreign Market through leading exporters
- ⇒ Improvement in Home remittances
- ⇒ Policy innovations towards Foreign direct Investments, Project, Aids etc
- ⇒ Operational Framework Improvement
- ⇒ Regulatory Framework Improvement
- ⇒ Trade & Commerce Improvement

4.5.4 THREATS

- ⇒ Sudden change of governments i.e. policy matter
- ⇒ Volatility in Forex (at present in forwards) & Money Market

4.6 FOREIGN CURRENCY ACCOUNTS

To facilitate dealings in foreign exchange, a bank in Pakistan may maintain accounts with banks abroad. Similarly, some foreign banks may maintain accounts with banks in Pakistan. There are mainly three types of accounts:

1. NOSTRO ACCOUNT

Nostro account is the account maintained by the bank concerned (in Pakistan) with the bank abroad. For example, State Bank of Pakistan may maintain an account with Citibank, New York. Obviously, the account would be in US dollar. Similarly, it may have a Yen account with Bank of Tokyo, Japan. While corresponding with the foreign bank, State Bank of Pakistan would refer

its account with former as Nostro account, meaning 'Ours account with you'. So, for the State Bank of Pakistan, Nostro account means the bank account it maintains abroad in foreign currency. All foreign exchange transactions are routed through Nostro accounts.

2. VOSTRO ACCOUNT

A foreign bank, say Citibank, New-York, may open Rupee account with any Bank of Pakistan. While corresponding with Citibank, New-York, maintaining an account with it, the Pakistani Bank may refer to the account as 'Vostro account' meaning 'Your account with us'.

3. LORO ACCOUNT

Pakistani Bank is having an account with Citibank, New York. When Pakistani Bank likes to refer to this account while corresponding with Citibank, it would refer to it as 'Loro account', meaning 'Their account with you'.

4.7 CONCEPT OF BANKING AND NON-BANKING CHANNEL

If the foreign currency remittances from abroad come through the route of a bank, it is said to be received through **banking channel**. Remittances coming through any other channel are termed as received through **non-banking channel**.

4.7.1 BENEFITS OF USING BANKING CHANNELS

If the foreign currency is coming through the banking channel, the same can be utilized by the country for making payment of the import bills or may be utilized in other trade related activities. Such funds also constitute a portion of the forex reserves held by the banks. Since the funds are coming through the banking channels and the banking sector is regulated by the State bank, overall monitoring of the remittances is possible. Exchange rate stability can be maintained. Remittances coming from the non-banking channels encourage the un-documented economy. This may provide a chance for those who want to evade taxes etc.

4.8 EXCHANGE RATE REGIME

⇒ Currency board

⇒ Peg

⇒ Crawling peg – a system whereby the par value is automatically revised.

- ⇒ Band
- ⇒ Crawling band
- ⇒ Managed float
- ⇒ Independent float

4.9 FOREX TRANSACTIONS

There are three types of forex transactions:

1. KERB market
2. Inter-bank market
3. Central bank

4.9.1 KERB MARKET

Kerb market means a market where forex transactions are not routed through the banking channels. Therefore, these transactions are not documented. It is quite huge in number of countries including Pakistan.

4.9.2 INTER-BANK MARKET

Forex transactions being routed through the banking channels formulate inter-bank market. This represents official channel and is properly documented. Trade transactions like surrendering of export proceeds in the inter-bank, payment of import, payment of medical and education expenses abroad also route through inter-bank. Throughout the world there is a general trend in the development of the inter-bank market.

4.9.3 CENTRAL BANK

Central bank plays a vital role in forex market. Being the custodian of the foreign exchange component of the forex, Central bank has to monitor the transactions in the forex market. It also provides guidance to the market players. Central banks key role in this respect is to ensure the stability in exchange rate in the system.

State bank has shifted its role from CONTROL to MONITORING and GUIDANCE CULTURE.

4.10 EMERGENCE OF THE KERB MARKET

4.10.1 FACTORS RESPONSIBLE

- ⇒ High premium on the exchange rate
- ⇒ Easy process
- ⇒ Efficient delivery of home remittances
- ⇒ Lack of exchange control

4.10.2 MARKET PLAYERS IN THE KERB MARKET

- ⇒ Common public
- ⇒ Money changers
- ⇒ Remitters through Hundi/Hawala
- ⇒ Beneficiaries receiving through Hundi/Hawala

4.10.3 SIGNIFICANCE OF PREMIUM IN THE KERB MARKET

Premium on the exchange rate is probably the most important factor responsible for the development of the Kerb market. Kerb market can offer high premium because of the high turnover/volume and high risk. High turnover in the Kerb market is because of certain controls, high premium and efficient delivery. Hence, development of Kerb is like getting trapped in a vicious cycle.

4.10.4 HUNDI/HAWALA – UNDOCUMENTED CHANNEL

Foreign currency does not move through the banking channel. A person sitting abroad receives foreign currency from an interested Remitter. He calls someone (his agent) in the location of the beneficiary and asks to pay equivalent currency (may be either PKR or FCY). There is no documentation; there is high risk of money transfer and its allied activities.

Beneficiary country is deprived of the foreign exchange. Post 11 September events have curbed Hundi/Hawala.

4.10.5 HUNDI — A SERIOUS THREAT TO THE ECONOMY

According to a SBP report, 90% of the foreign exchange that Pakistanis living abroad send back home every year through unofficial channels. It is estimated that non-resident Pakistanis send \$8-10 billion every year of which major share goes through the Hundi system.

The network of the unauthorized money changers can be broadly divided into three areas i.e. the Gulf region, Pakistan and Rest of the world. Out of the three, the Gulf region was the most active with an 80% share in home remittance of which 75% came through Hundi walas while only 10% came through banking system.

Market sources say that money changers maintained their foreign currency accounts in the Gulf which were used for keeping funds collected through small Hundi walas as well as collections from the rest of the world. It was through these accounts that client's funds were transferred out of Pakistan. The unauthorized money changers used to take the rupee counterpart in Pakistan and transfer the funds to other countries either through its foreign currency account or through delivery of cash.

Within the Gulf region, Dubai stood as the hub of Hundi operations. Most unauthorized and illegal money changers and Hundi walas operated from there. It was a central point in the supply chain and all inflows from the entire world were channels into Pakistan through Hundi walas in Dubai. The foreign exchange was collected from retail Hundi walas and money changers and payments were made on behalf of the clients to their nominees in Pakistan. The system was well organized and very effectively managed. The rupee equivalent is paid in Pakistan within 24-48 hours.

4.10.6 REASONS FOR GROWTH IN HUNDI SYSTEM

The Hundi system, like any other country in the world became popular due to the following reasons:

- ⇒ It requires no identification
- ⇒ It offers better rates than official exchange rates
- ⇒ It ensures delivery of the cash even to remote areas in less than 24 hours

- ⇒ People take funds to a money dealer, who then contacts dealers in other countries to swap the amount they want to transfer
- ⇒ It is difficult for regulatory authorities to supervise such deals, through the Pakistani administration which wants to keep track on larger transactions.

4.10.7 CORRECTIVE MEASURES

In early 2001, the government started to take serious steps towards the removal of illegalities going on in the foreign exchange market of the country. In this connection, a Task Force was set up for overseas Pakistanis to give recommendations. There was a dire need to rationalize the foreign exchange market and to remove the existing distortions that were inhibiting the flow of non-resident Pakistanis resources through the normal banking channels. This was clearly due to a largely unregulated moneychangers business and smuggling, which was receiving the lion's share of the total inflow of remittances in the country. In this regard, it was observed that regulation of the business of money changers was inevitable with a view to gradually removing the current wedge between the official and open markets. In this connection following steps were initiated:

- ⇒ A campaign against unlicensed money changers was launched without exception.
- ⇒ A number of unauthorized persons engaged in illegal activity were apprehended.
- ⇒ The regulatory framework of licensed moneychangers was strengthened.
- ⇒ Under the rules all money changers were required to maintain an account with a scheduled bank and moneychangers defaulting on this requirement were faced with cancellation of licenses.

4.10.8 PROTECTION OF ECONOMIC REFORM ACT, 1992

DEALS WITH THE FREEDOM OF HOLDING FOREIGN EXCHANGE

“Freedom to bring, hold, sells and takes out foreign currency – All citizens of Pakistan a resident in Pakistan or outside Pakistan and all other persons shall be entitled and free to bring, hold, sell and transfer and take out foreign exchange within or outside Pakistan in any form and shall not be required to make a foreign currency declaration at any stage not shall anyone be questioned in regards to the same.”

4.10.9 FOREIGN EXCHANGE (TEMPORARY RESTRICTIONS) ACT 1998

RESTRICTION ON WITHDRAWAL OF FOREIGN EXCHANGE ETC.

“Notwithstanding anything contained in the Protection of Economic Reforms Act, 1992 (XII of 1992), or in any other law for the time being in force, or in any agreement or contract, it is hereby provided that the right to hold, sell, withdraw transfer, pay or take out foreign exchange held by any person in Pakistan as on twenty-eight day of May, 1998, (the “specified date”) without the prior permission of the State Bank of Pakistan shall remain suspended. Provided that there shall be no legal restriction on any person covering his foreign exchange held as above into rupees at the officially notified rate of exchange.”

4.10.10 AMENDMENT OF ECONOMIC REFORM ACT 1992 (ORDINANCE OF 1999)

DEALS WITH IMMUNITY

“Provided that such immunity shall not be available to citizens of Pakistan residing in Pakistan and to firms, companies and other bodies registered or incorporated in Pakistan in respect of any new foreign currency account opened or deposits created on or after 16th of December, 1999 or to any incremental deposits thereafter in an existing foreign account.

“Provided that such exemptions shall not be available to citizens of Pakistan residing in Pakistan and to firms, companies and other bodies registered or incorporated in Pakistan in respect of any balance in a new foreign currency account opened or deposits created on or after the 16th of December, 1999 or to incremental deposits created on or after the 16th of December, 1999 in an existing foreign currency accounts and income therefore.”

4.11 PROTECTION OF FOREIGN CURRENCY ORDINANCE – 2001

⇒ PROTECTION OF FOREIGN CURRENCY ACCOUNTS – No person holding a foreign currency account shall be deprived of his right to hold or operate such accounts or in any manner be restricted temporarily or permanently to lawfully sell, withdraw, remit, transfer, use as security or take out foreign currency there from within or outside Pakistan.

⇒ INDEMNITY – No suit or other legal proceedings shall lie against the federal government or any person for anything in good faith done or intended to be done in pursuance of this ordinance or any rule, direction or order made there under.

⇒ ORDINANCE TO OVERRIDE OTHER LAWS

- The provision of this ordinance shall have effect notwithstanding anything contained in the Foreign Exchange Regulation act, 1947 (VII of 1947), the customs act, 1969 (IV of 1969), the income tax ordinance, 1979 (XXXI of 1979) or any other law for the being in force.
- The protection provided to a foreign currency account holder under this ordinance shall be in addition to and not in derogation to the protection provided under the protection of Economic Reforms Act, 1992 (XII of 1992)

⇒ POWER TO MAKE RULES ETC.

- The Federal Government may in consultation with the State Bank by notification in the official gazette rules for carrying out of this ordinance.
- The State Bank may make regulations consistent with the provisions of this ordinance and the rules made there under to provide for all matters for which provision is necessary for the purpose of giving effect to the provision of this ordinance.
- All rules, regulations, orders or instructions in respect of foreign currency accounts made or issued by the Federal Government or, as the case may be, the State Bank, before the commencement of this ordinance, shall in so far as they are not inconsistent with the provisions of this ordinance, shall have effect and shall be deemed to have made or issued under this ordinance.

4.12 FOREIGN CURRENCY ACCOUNTS

1. Frozen foreign currency accounts
2. Incremental deposits (F.E. 31)
3. New foreign currency accounts (F.E. 25)
4. FE – 45

4.12.1 FREEZING OF FOREIGN CURRENCIES ACCOUNTS – 1998

REASONS OF FREEZING OF FC ACCOUNTS

- ⇒ Non availability of Foreign Exchange resources
- ⇒ Moratorium from AID giving agencies
- ⇒ Risk of expected decline of FDI
- ⇒ Stoppage of future loan from various agencies.

EFFECT

- ⇒ Confidence shaken activated
- ⇒ Authorized Money Changers business (Parallel FX Market) leads to capital Flight

4.12.2 THE EFFECT OF INVESTOR'S CONFIDENCES AND FOREIGN DIRECT INVESTMENT

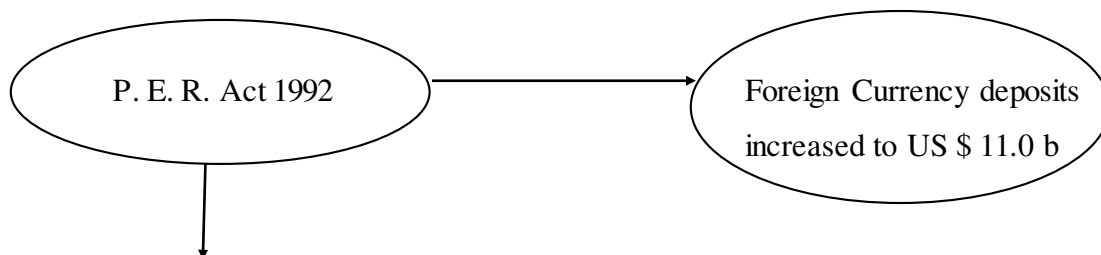
- ⇒ Increased role of authorized money changers
- ⇒ Reduction in Home Remittances
- ⇒ Reduction in foreign Direct investment
 - Decrease in resource mobilization of FDI
 - Existing FDI encashment
- ⇒ Negative effect on AID & Loaning Agencies

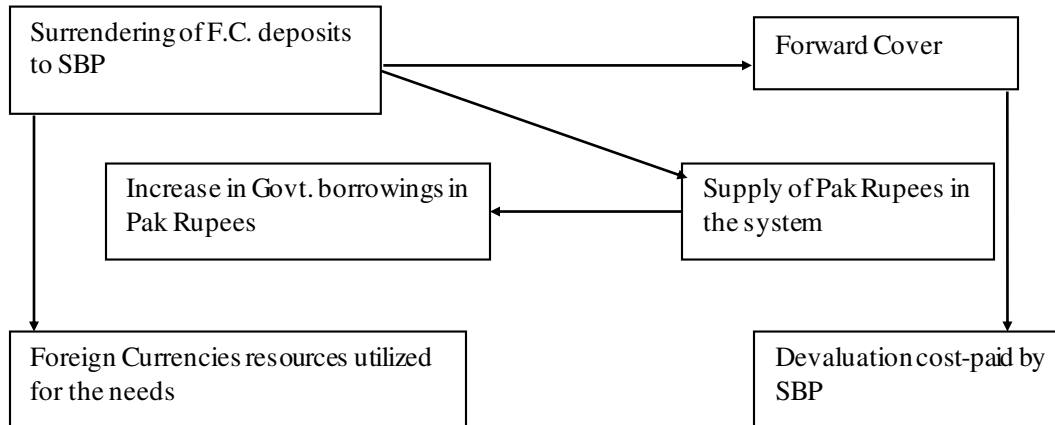
4.12.3 DOLLARIZATION AND CAPITAL FLIGHT

WAYS TO COMBATING THE ADVERSE TRENDS

- ⇒ Regulations are in place
- ⇒ Confidence of public
- ⇒ Exchange rate stabilize
- ⇒ Minimum difference in exchange rate in inter-bank & Kerb market

4.13 FOREIGN CURRENCY ACCOUNTS





4.13.1 NEW FOREIGN CURRENCY ACCOUNTS UNDER F. E. 25/98

- ⇒ Decided to allow the opening and free operations of New Foreign Currency Deposit Accounts by residents as well as non-residents under new rules.
- ⇒ Free to decide the rate of return
- ⇒ Free to invest, subject to observance of regulations
- ⇒ Enjoy the protection under Protection of Economic Reform Act, 1992, ordinance 1998, 1999, 2001

4.14 SITUATION AFTER TERRORIST ATTACKS OF SEPTEMBER 11, 2001

4.14.1 IMPACT ON PAKISTAN ECONOMY

There was an increase in home remittances after September 11, 2001 because the people felt quite insecure in keeping money in outside. There was an increase in foreign direct investment as the region was considered to be of strategic importance from investment point of view. Inter-bank and Kerb market rate differential that leads to arbitrage profit minimized and at times inter-bank rates were higher than Kerb rates (previously about 5% differential).

Pak Rupee exchange rate was appreciated along with an appreciation in capital market that is prevailing at present as well. Pak Rupee moved into the safe haven concept with the documentation of the economy.

4.14.2 NEGATIVE IMPACT ON PAKISTANI FOREX MARKET

There was a decrease in exports from Pakistan in terms of quantity and there was cancellation of some orders etc. in addition to this the value of exports also decreased due to the appreciation of Pak Rupee. Soon after September 11, 2001 US planned an attack on Afghanistan, neighbor country, and there was an imposition of War Risk Charge on shipments.

4.15 SBP INITIATIVE TO COMBAT MARKET SITUATION

- ⇒ Regulation for early repatriation of Export proceeds
- ⇒ Development of inter-bank market and reduction in the exchange difference in the exchange difference between official/kerb markets enabling to attract home remittances through banking channel.
- ⇒ Development of avenues for utilization of FE 25 into Trade related activities (imports/exports)
- ⇒ Liberalization of FX market
- ⇒ Attractive investment policies
- ⇒ Monitoring the activities of Authorized Money Chargers
- ⇒ Establishment of Exchange Companies

4.15.1 REPATRIATION OF EXPORT PROCEEDS

All exporters were repatriated the full export proceeds of the goods exported within a period of six months from the date of shipment. In case of delay in realization of export proceeds, the authorized dealers were to report to SBP along with any overdue exports bills. In case of less realization of export proceeds, authorized dealers are to report to SBP for necessary approval. Exports were allowed to export the goods against advance payments.

4.15.2 DEVELOPMENT OF INTER-BANK MARKET

Efforts were made with certain strict regulation for routing all transactions through banking system. All payments included: travel, medical, imports, exports, etc.

4.15.3 UTILIZATION OF FE – 25

Banks are allowed to freely utilize their FE 25 deposits in trade related activities like trade loans for imports or exports. However, this has to be sanctioned under Prudential Regulations

specifically issued for FE 25 loans. This facility has enhanced banks ability to earn more on FE
25

4.15.4 LIBERALIZATION OF FX MARKET

SBP took number of initiatives for liberalization of market like:

- ⇒ Powers delegated to Assistant Directors for authorization of their new branches
- ⇒ Upper limits in various non-commercial transactions removed e.g. in case of travel, medical, education etc.
- ⇒ SBP is in process of allowing other banks to make remittances of foreign exchange against 'M' Form approved by designated bank.

4.15.5 EFFECT OF AFGHAN WAR

Afghan war negatively affected Pakistan because export orders from Pakistan were cancelled, foreign currency inflows were hit, AID from International Donor Agencies. In addition to this there was rescheduling of various International Loans. A positive impact of Afghan war was opening of new avenues for reconstruction in war hit and damaged Afghanistan.

4.16 FOREX TRANSACTIONS AFFECTING FOREX POSITION OF THE BANK

Following are the transactions that have a major impact on forex position of bank:

- ⇒ Payment IMPORT bill makes a banks position SHORT
- ⇒ Exports purchases makes banks position LONG
- ⇒ Direct purchase of foreign currency makes a banks position LONG
- ⇒ Direct sale of foreign currency makes a banks position SHORT
- ⇒ Forward purchase from the customer makes a banks position LONG
- ⇒ Forward sale to the customer makes a banks position SHORT
- ⇒ Receipt of Home Remittances makes a banks position LONG
- ⇒ Remittances by the bank on account of Royalty & Technical fees makes a banks position SHORT
- ⇒ Remittances of Dividend/Profit abroad makes a banks position SHORT

4.16.1 REPORTING REQUIREMENTS

Banks are required to report their foreign currency exposure and positions in daily basis. Some of the foreign banks are available on-line. Their positions can be monitored on-line. Rests of the banks have to provide data through floppy diskettes or direct mailing through network.

4.16.2 PRUDENTIAL REGULATIONS AND ITS EFFECT ON MARKET

- ⇒ Investment risk of deposit generated against F.E. 25
- ⇒ Requirements Special Cash Reserve (15%)
- ⇒ Per party Placement limit if 20% of equity (net of accumulated losses)
- ⇒ Free to use F.E. 25 deposit for their trade-related activities (imports/exports)
- ⇒ Foreign currency deposit mobilized under F.E. 25 scheme should not at any point exceed 20% of their local currency deposits

4.16.3 FOREIGN EXCHANGE CRISES AND SBP MANAGEMENT

- ⇒ Appreciation/depreciation of rupee/ vs. US \$ in inter-bank market
- ⇒ Appreciation/depreciation of rupee/ vs. US \$ in kerb market
- ⇒ Heavy fluctuations in FX market in inter-bank/kerb market
- ⇒ Market sentiments
- ⇒ Heavy payment (commercial and government)
- ⇒ Unforeseen events

IMMEDIATE ISSUES

- ⇒ Nostro limit – abolished
- ⇒ Allowed market to operate freely and to determine the exchange rate
- ⇒ Forward cover allowed for all periods
- ⇒ Export/import matters

4.17 FACTORS AFFECTING EXCHANGE RATES

Following factors affect the exchange rates:

- ⇒ Fundamental / economic factors

- ⇒ Political factors
- ⇒ Technical factors

4.17.1 FUNDAMENTAL/ECONOMIC FACTORS

This includes balance of payment approach, devaluation of currency, relative inflation rates, relative interest rates, sentiments of both investors and borrowers and the Central banks intervention

4.17.2 POLITICAL FACTORS

The factors under the political head that affects the forex rates are the changes in government policies, changes in government and the political instability.

4.17.3 TECHNICAL FACTORS

Analysis of the technical factors can be conducted with the help of various types of charts with the chart pattern being reversal or continuation. There are also automated trading techniques that are available for the said purpose.

4.18 INTER-BANK FOREX OPERATIONS

Bank to bank international business takes two basic forms:

- ⇒ Inter-bank Deposits (placements)
- ⇒ Loans

In both instances the growth of the international inter-bank market has been substantial over the years. Such an activity is conducted not in any one country, but it is entered in the leading national financial cities: Sydney, Tokyo, Singapore, Hong Kong, Dubai, Mumbai, Amsterdam, Paris, Zurich, Frankfurt, Brussels, London, New York, Toronto & others, i.e., right from Asia pacific to America and Canada. Within each city, the market is further decentralized. By managing and arbitrating and hedging of their own and customers, positions within each country and between currencies, they provide the market with continuity and depth.

4.18.1 BALANCES ABROAD

Banks do maintain with overseas branches and correspondents, balance in foreign currencies at levels, which are commensurate with their normal business needs having regard to the number of correspondent and branches in the country concerned. While transacting foreign exchange business, banks should ensure that balances are not accumulated in their Nostros, which are in excess of immediate needs of such payments towards imports or maturing deliveries under forward contracts or other remittances etc.

4.19 FUNCTION OF INTER-BANK MARKET

4.19.1 LINKAGES OF REGIONS AND INTEREST RATES

The international inter-banks market performs many functions. It ties regions together much as money markets do domestically, at the same time linking interest rates across markets. By standing between the suppliers in one location and end-users elsewhere, the market performs an intermediary function in the global flow of funds. It provides for forward exchange covering and enables banks to take speculative and/or hedging positions against interest rate and exchange rate movements. Many transactions are not inter-banks at all but are statistical images of inter-bank arbitrages and transfer pricing motivated by bank's avoidance of tax and banking regulations.

4.19.2 LIQUIDITY AND RISK MANAGEMENT

In addition, the inter bank market aids liquidity and risk management in a number of ways. A major function of inter bank funds is to enable banks to cope up with the lumpiness of wholesale –sized deposits and loans and plug up holes in the balance sheet. Unwanted deposits can be laid off to other banks. Funds, needed to support lending can be bid for inter bank. In this way, the need for resources as such is largely obviated. Inter bank and related funds market give confidence that funds to meet balance sheet contingencies will be available. This confidence under pins banks willingness to issued stand by credit lines in of balance sheet business. Banks go to considerable lengths to maintain a market presence and to keep open inter bank credit lines. Bank adopts the habit of re-depositing a practice, which incidentally inflates the statistic of market size. Trading on both sides of the inter bank market prevents a bank from being seen as a perpetual taker of funds, so enhancing its repute it also enables reciprocal relationships with other banks to be formed. Most banks immediately re-deposit with other banks over 40% of

funds obtained in the market. Breaking up of maturity transformation Inter –bank markets break up the maturity transformation process. In retail banking maturity transformation is normally undertaken fully by the bank which accepts the deposit. On their way from end suppliers like OPEC countries, to end-users like the developing countries funds in international banking may pass through several chains of banks and-- maturity transformation can take place in any one of the chains. While the bank making the end placement is likely to carry the largest share, each bank is still left with some share of the transformation process. Taking positions in the inter-bank market “mask” and thus facilitates the overall degree of maturity transformation inherent in non-bank business. By their addition, greatly mismatched non-bank business is “padded out” or diluted in the total balance sheet. Each bank’s total balance sheet is mismatched but not to a great extent.

4.19.3 SPREADING RISKS AMONG DIFFERENT INSTITUTIONS

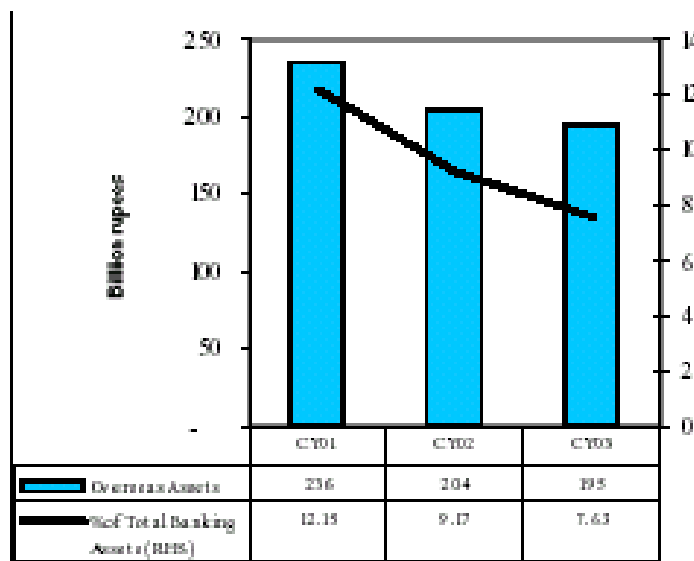
Finally, the inter-bank market enables the risks of lending to be spread amongst many different institutions. Loans risks are backed not just by the capital of the lending bank but also indirectly by the capital of the banks, which agree to lend to it. The risk is known to participating bank and finds reflection in the practices of interest rate “tiers” and lending limits. Banks are classified into interest rate tiers according to perceived risk. The margin levied by the lending bank is in effect a premium paid by the borrowing bank for “insurance” against the default risk shared. In normal times, the range of rates for most banks is around $\frac{1}{4}$ of 1%. But at times some banks have paid as much as 2 % over LIBOR to get funds. Nearly all banks set overall and daily limits on inter-bank placements of funds. Factors governing the size of limits are the size and profitability of the institution, quality of management, evidence of over-trading in the market and its access to lender of the last resort funds in its national market. Whereas inter-bank dealings can be looked upon as means of risk-bearing banks who seek to protect themselves against loan risks in more formal ways. These include co-financing with official lending institutions, credit insurance home government guarantees with national export banks or agencies. The most important risk-sharing device is the syndication of large loans.

4.20 OVERSEAS OPERATIONS OF PAKISTANI BANKS

Most of the Pakistani banks are operating within the country. Some of them, particularly big banks, also have their presence internationally either through their overseas branches or subsidiaries. These branches represent 7.6% of the overall assets base of the banking system, including foreign banks.

During the year 2003, the number of Pakistani banks with overseas branch networks increased to five from four, but the overseas assets base declined by 4.6%. Nevertheless, this decline amidst strong growth in domestic operations caused significant erosion in the share of overseas assets in the overall assets of the banking system. The geographical distribution of overseas assets of the Pakistani banks shows their presence in almost all global regions. The major portion of their international operations is concentrated in the Middle East. The region has historically remained an epicenter of the country’s foreign remittances as it hosts a large number of overseas Pakistani workers and is also one of the major trade areas for the country. Pakistani banks in the region cater to the needs of these overseas Pakistani workers and also to facilitate trade activities.

OVERSEAS ASSETS OF PAKISTANI BANKS



The composition of overseas assets shows that overseas branches of the Pakistani banks are risk averse, as just below two third of their assets composition comprises cash and bank balances and investment in government papers. These branches do not seem to have good lending experiences as the infection ratio at 24.9 percent is quite high. As a result, their lending activities are limited and loans contribute to around one third of their total assets portfolio.

The operating performance of these overseas operations has witnessed a significant improvement during the year. Although the total overseas assets registered a decline, pre-tax profit from these operations increased by 60% to Rs3.5 billion. This improvement was mainly contributed by non-interest income. Accordingly, pre tax ROA, with an improvement of 80 basis points, rose to 1.8%. The Middle East region being the major player, contributed 50% of total profit.

The overseas arena presents bright prospects and there is a wide scope for improvement of Pakistani banks as well. Presently, these branches are mainly focusing on conventional, risk free bank placements for their earnings. Fee based income and retail lending is emerging as promising avenues and they hold encouraging prospects for the Pakistani banks as well. Keeping this in view, some of the local private banks are also exploring the possibilities of opening their branches overseas.

4.21 FLOATATION OF PAKISTAN INVESTMENT BOND

These bonds are planned to be sold for 3, 5, 10 years maturity through auction. Price will be governed by auction and coupon payable at six monthly durations. In addition to this it will be acceptable as collateral. It can be purchased and held by individuals, institutions and corporate bodies including banks. Tax/Zakat is applicable as per the rules. There is an approved security of SLR (not more than 5% of Demand & Time).

4.22 FOREIGN EXCHANGE DEALING RISKS

A bank generally faces the following two risks in its foreign exchange dealing activities, which could result in losses:

- ⇒ Unfavorable movements in market prices caused by unanticipated changes in interest rates, exchange rates or volatility.
- ⇒ The failure (bankruptcy of counter parties) before their dealing commitments are settled

When dealing activities are conducted with full knowledge and authority of the general management of the bank concerned, these risks are controlled by the limits. However, if they are conducted without the full knowledge of general management or beyond their authority, these risks may not be controlled and the potential for loss could be magnified.

It is responsibility of market participants not only to ensure that they are dealing with knowledge and authority of their own management but also to warn their management of irregularities in dealing to prevent unwarranted losses to their own institutions and to counter parties. It is presumed that dealers recognize when unauthorized dealing occurs in their own institutions and that procedures are in place for them to inform their management.

Characteristics of dealings that indicate unauthorized transactions are as follows:

- ⇒ A sudden increase in volume to levels considered too large in relation to the size of the bank or branch concerned. This could be questionable warning since the total volume of business that a bank can place in the market depends on its reputation, standing and credit-worthiness and it is practically impossible to ascertain the basis of operations of a bank of undoubted standing.
- ⇒ An unusual increase in the turnover in a banks clearing/nostro accounts with central banks/correspondent banks, particularly if overdrafts were to occur frequently. As the turnover on clearing accounts aggregates the counter value of any number of deals, which by themselves might not arouse the suspicion of the counter parties to those deals, this could be a useful warning.
- ⇒ A change in normal pattern of dealing

Open positions need not be taken only for forward delivery, but can be taken by buying or selling spot currency, which is then swapped from day to day, or for short periods. Such operations will lead to an increased presence in the market and, normally, a consequent increase in turnover on clearing accounts. Risk of losses also occurs when a bank runs a forward book. Although there is no net open position as total purchases matches total sales, there is a risk on the unmatched forward maturities.

- ⇒ Failure to receive confirmation of deals
- ⇒ No satisfactory response to requests for verification of outstanding contacts
- ⇒ A willingness or desire to deal at a price which is deliberately pitched outside the market level

It is recommended that anyone who notices these situations should refer the matter to his management for a prompt action to be taken before it takes an adverse impact on the overall banks performance.

4.23 RISKS IN FOREX

In view of the volume, volatility in currencies, market structure liberalization in trade and exchange control, integration of the Pakistani forex market to global market, sophistication of mechanism and skill to handle dealing operations a risk does exist.

Forex business places risks the management of which requires understanding and appreciation of controls separate from those applicable to domestic operations. As these risks arise as a consequence of certain unique features, forex business has given birth to various aspects:

- ⇒ Operations are transnational –obviously subject to controls, restriction, monetary and fiscal policies.
- ⇒ Involve dealing in currencies whose value is volatile due to a variety of factors.
- ⇒ Operations are integrated with a vast global market spread in all time zones.
- ⇒ Quick decentralized decision taking involving large values without losing sight of the main theme of profits of earnings at acceptable risks levels.

⇒ Requirement of compliance with exchange control in Pakistan.

4.23.1 POSITION OR RATE RISK

There are inherent risks involved in forex business. Dealing in forex involves acquisition of assets and liabilities denominated in foreign currencies whose values against the domestic currency change, the bank is exposed to a rate risk. A total quantitative match between assets and liabilities denominated in one currency is normally not practicable because of the following facts:

- ⇒ Merchant sales and purchases are not likely to match and the consequent in the market may not be immediately taken up.
- ⇒ Market participants deal in standard lots and it may not be worth while going for cover of small amounts.
- ⇒ Transactions entered into by the branches effects the exchange position but may come to the notice of the dealing room later.
- ⇒ Open position may be built up and held deliberately to the advantage of prospective rate movements.

Control over position risk generally is through currency wise limit on the size of the exposure (i.e. the mismatch between assets and liabilities in that currency). The limit would generally be fixed on the following considerations: While no empirical relationship is fixed, it is obvious that the first two deal with merchant generate exposure while the last two deal with the potential loss on exposure and the bank's ability to bear it, Separate limits are generally fixed for the exposure during the trading hours—the daylight limit and the exposure left at the closure of the day.

OVERNIGHT LIMIT

The Overnight Limit should necessarily be smaller, since the exposure allowed is prone to a greater risk as it remains unattended till the next trading day. Individual banks are permitted to have an open position at the close of the day subject to approval by the board of the respective Banks and also State Bank of Pakistan. Overnight limits should be conservatively set. While fixing the overnight limit it is advisable to consider the impact of small value transactions effected at the branches the whole report will be received at the dealing room only after the day is closed. Such transactions though individually small could collectively distort the closing

position of the bank. It is therefore suggested that banks periodically estimate the volume of such small value transactions and their impact on the exchange position. This would not only enable banks to review the limits set for the branches to report transactions by telex/fax/phone but also give the dealer an indication of the extent of possible distortion so that the overnight exposure could be managed to offset such distortion.

DAY LIGHT LIMIT

Day Light Limit should allow for greater exposure constantly and undertake market operation to maximize its returns on the exchange position. Generally the exposure limit is fixed currency wise. Banks - also fix an overall exposure limit expressed in terms of a single currency, example US\$ in Pakistan's perspectives. This limit functions as an over-ride to ensure that the exposure is lower than the sum of all the currency wise limits. It is preferable for easy monitoring, to have individual currency exposure measured and limited.

CUT LOSS LIMIT

The limit serves to restrict the quantum of loss a bank is willing to risk on its open position during the day. The limit operates within the exposure limit, i.e. the daylight limit, and is a function of the exposure size as also the extent to which rates have moved adversely. The moment the rates move adversely to translate into a loss equivalent to the limit, the position has to be liquidated and the loss booked. This serves to avoid holding on to a position in anticipation of reversal of movement of rates. The quantum of loss should be explicit for easy monitoring and it is better to translate it into the number of points on the exchange rate before an adverse movement can be accepted. Banks generally have the practice of consolidating the balance in the different position accounts and tallying the net position with the closing position of the dealer. This is an operational procedure to ensure no transaction has been omitted either by the dealer or the accounting section.

4.23.2 CREDIT RISK

Credit risk is a contingent risk which arises when the counterparty in a foreign exchange transaction fails to honor the commitment. Credit risk arises from the potential that an obligor is

either unwilling to perform on an obligation or its ability to perform such obligation is impaired resulting in economic loss to the bank.”

In a bank’s portfolio, losses stem from outright default due to inability or unwillingness of a customer or counter party to meet commitments in relation to lending, trading, settlement and other financial transactions. Alternatively losses may result from reduction in portfolio value due to actual or perceived deterioration in credit quality. Credit risk emanates from a bank’s dealing with individuals, corporate, financial institutions or a sovereign. Credit risk could stem from activities both on and off balance sheet.

In addition to direct accounting loss, credit risk should be viewed in the context of economic exposures. This encompasses opportunity costs, transaction costs and expenses associated with a non-performing asset over and above the accounting loss.

Credit risk can be further sub-categorized on the basis of reasons of default. For instance the default could be due to country in which there is exposure or problems in settlement of a transaction. Credit risk not necessarily occurs in isolation. The same source that endangers credit risk for the institution may also expose it to other risk. For instance a bad portfolio may attract liquidity problem.

4.23.3 CONTRACT RISK

Where the failure of the counterparty is known prior to the performance of bank’s commitment in the contract; the contract has to be treated as cancelled and the risk is to the extent of loss resulting from an adverse movement in exchange rates while covering the transaction on going market rates.

4.23.4 CLEAN RISK AT SETTLEMENT

Currencies are exchanged at settlement on the same value date; the time zone difference between different centers would result in one currency being paid before the other is received. If the failure of the counterparty occurs after you have settled your portion of the commitment, it would result in the loss of the entire value of the contract. The case of bank Herstatt in Germany,

which failed in 1974 in the afternoon after receiving Deutschemark funds but before delivering counter value dollar funds, is an example of the clean risk at settlement of funds. But launch of continued Link Settlement Service (CLS) looks set to finally lay this specter to rest.

Control over credit risk is exercised by fixing limits on aggregate value of outstanding commitments for merchants as also inter bank counterparties. The limits are constantly monitored and the dealing room suitably advised. Limits are fixed on the aggregate outstanding commitments and separately for the amount of funds to be settled on a single day. The limit for amount of funds dealt with in a day would be smaller and is intended to control the clean risk at settlement.

4.23.5 SOVEREIGN RISK

Sovereign risk is the political side of the credit risk when a country suspends or imposes restriction on payments. Thus, even if the counterparty is willing and able to honor commitments, sovereign action could frustrate the contract. This risk is present not merely in dealing room activity but also the entire volume of assets is prone to such a risk. The exposure limits for different countries should take into consideration factors such as political stability, health of the economy, possibility of state interference, availability of infrastructure for legal recourse, etc.

4.23.6 MISMATCHED MATURES OR GAP RISK

Assets and liabilities constituting the exchange position generally have different maturates and mismatches in cash flows. If uncorrected this translates into problems of overdrafts or idle surpluses. The deal situation would be a matching of assets and liabilities not only in quantum but also in maturity. Despite these efforts it does not materialize because:

- ⇒ Uncertainty with merchant transaction. Option periods available under forward contracts as also early/delayed receipt of export payments.
- ⇒ Non-availability of matching forward cover in the market.
- ⇒ Deliberate attempt to hold gaps and covers them subsequently to minimize swap costs or to earn swap gains.

The risk the bank runs in carrying the gap is that when the gap has to be covered by a suitable swap the forward differential could go against the bank and costs more than provided for, could result. State Bank of Pakistan has placed restrictions on banks maintaining mismatches.

Control of gap is exercised at monthly intervals by segregating assets and liabilities maturity wise and quantifying the net inflow or out flow for each period. Banks thereafter take the cumulative effects of these period wise mismatches to quantify the cumulative inflow and outflow, on the quantum of which limits are placed.

This is the way the net outflow or inflow is measured and subject to an individual mismatch or gap limit. For all the periods, instead of the concept of cumulative outflow or inflow, the individual gaps are grossed without subject to an aggregate limit. The rationale behind computing the aggregate gap limit in the manner is often questioned, since what is really relevant is cumulative effect of inflows and outflows. Intent in fixing the aggregate limit is not risk control but to avoid excessive trading.

4.23.7 OPERATIONAL RISK

Operational risks arise out variety of situations ranging from human errors to administrative inadequacies, provisions' flaws in system and procedures, etc. It is essential that they are recognized early and ensured that they are controlled and corrected.

“Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and system or from external events.” It is the risk of loss arising from the potential that inadequate information system, technology failures, breaches in internal controls, fraud, unforeseen catastrophes or other operational problems may result in unexpected losses or reputation problems. Operational risk exists in all products and business activities.

Operational risk event types that have the potential to result in substantial losses includes Internal fraud, External fraud, employment practices and workplace safety, clients, products and business practices, business disruption and system failures, damage to physical assets, and finally execution, delivery and process management.

The objective of operational risk management is the same as for credit, market and liquidity risks that is to find out the extent of the financial institution's operational risk exposure; to understand what drives it, to allocate capital against it and identify trends internally and externally that would help predicting it. The management of specific operational risks is not a new practice; it has always been important for banks to try to prevent fraud, maintain the integrity of internal controls, and reduce errors in transactions processing, and so on. However, what is relatively new is the view of operational risk management as a comprehensive practice comparable to the management of credit and market risks in principles. Failure to understand and manage operational risk, which is present in virtually all banking transactions and activities, may greatly increase the likelihood that some risks will go unrecognized and uncontrolled.

4.23.8 LIQUIDITY RISK

“Liquidity risk is the potential for loss to an institution arising from either its inability to meet its obligations or to fund increases in assets as they fall due without incurring unacceptable cost or losses.”

Liquidity risk is considered a major risk for banks. It arises when the cushion provided by the liquid assets are not sufficient enough to meet its obligation. In such a situation banks often meet their liquidity requirements from market. However conditions of funding through market depend upon liquidity in the market and borrowing institution's liquidity. Accordingly an institution short of liquidity may have to undertake transaction at heavy cost resulting in a loss of earning or in worst case scenario the liquidity risk could result in bankruptcy of the institution if it is unable to undertake transaction even at current market prices.

Banks with large off-balance sheet exposures or the banks, which rely heavily on large corporate deposit, have relatively high level of liquidity risk. Further the banks experiencing a rapid growth in assets should have major concern for liquidity.

Liquidity risk may not be seen in isolation, because financial risk are not mutually exclusive and liquidity risk often triggered by consequence of these other financial risks such as credit risk, market risk etc. For instance, a bank increasing its credit risk through asset concentration etc may

be increasing its liquidity risk as well. Similarly a large loan default or changes in interest rate can adversely impact a bank's liquidity position.

4.23.9 INTEREST RATE RISK

Interest rate risk arises when there is a mismatch between positions, which are subject to interest rate adjustment within a specified period. The bank's lending, funding and investment activities give rise to interest rate risk. The immediate impact of variation in interest rate is on bank's net interest income, while a long term impact is on bank's net worth since the economic value of bank's assets, liabilities and off-balance sheet exposures are affected. Consequently there are two common perspectives for the assessment of interest rate risk

A) EARNING PERSPECTIVE

In earning perspective, the focus of analysis is the impact of variation in interest rates on accrual or reported earnings. This is a traditional approach to interest rate risk assessment and obtained by measuring the changes in the Net Interest Income (NII) or Net Interest Margin (NIM) i.e. the difference between the total interest income and the total interest expense.

B) ECONOMIC VALUE PERSPECTIVE

It reflects the impact of fluctuation in the interest rates on economic value of a financial institution. Economic value of the bank can be viewed as the present value of future cash flows. In this respect economic value is affected both by changes in future cash flows and discount rate used for determining present value. Economic value perspective considers the potential longer-term impact of interest rates on an institution.

The risk may be further divided into following categories:

- ⇒ Refinancing Risk
- ⇒ Reinvestment Risk

REFINANCING RISK

Whenever a financial institution holds longer-term assets relative to liabilities it potentially exposes it to refinancing risk. In this situation the cost of rolling over or borrowing funds exceeds to the return earned on asset investments. For example, if commercial banks finance

long term projects through short term borrowings. If interest rates rise during the term of the loans the banks will be facing higher costs to refinance the long term loans.

REINVESTMENT RISK

Reinvestment risk generally concerns financial contracts involving more than one cash flow. For example, investments in coupon bonds would involve re-investment risk. The risk is originated because of the uncertainty surrounding the interest rate at which the coupon payments will be reinvested over the life of the bond.

4.23.10 EQUITY PRICE RISK

It is risk to earnings or capital that results from adverse changes in the value of equity related portfolios of a financial institution. Price risk associated with equities could be systematic or unsystematic. The former refers to sensitivity of portfolio's value to changes in overall level of equity prices, while the later is associated with price volatility that is determined by firm specific characteristics.

4.23.11 COUNTERPARTY RISK

All transactions involve one or both parties in counter party risk. The potential loss that can arise if one party was to default on its obligations. An alternative name for counter party risk is credit risk. The magnitude of this risk depends upon the size of all outstanding positions with a particular counterparty, the size of transaction due for settlement on a particular day, and whether or not any netting arrangements are in force.

Practitioners often distinguish between settlement risk, which is the loss that can arise from the settlement of the transaction on a given day, and replacement risk, which is the potential loss if a transaction has to be replaced prior to its maturity date.

4.23.12 INSOLVENCY RISK

Insolvency risk is a consequence or outcome of excessive interest rate, market, credit, off-balance sheet, technological, sovereign, and liquidity risks. Technically, insolvency occurs whenever the internal capital or equity resources of the banks are inadequate to meet losses

incurred due to one or more risks of a nature described in the preceding sections. In general, the more equity capital to borrowed funds a bank has – that is, the lower its leverage- the better able it is to withstand losses, whether due to adverse interest rate changes, unexpected credit losses, or other reasons. Thus, both management and regulators focus on the management of banks capital and its capital adequacy as key measures of its ability to remain solvent and grow.

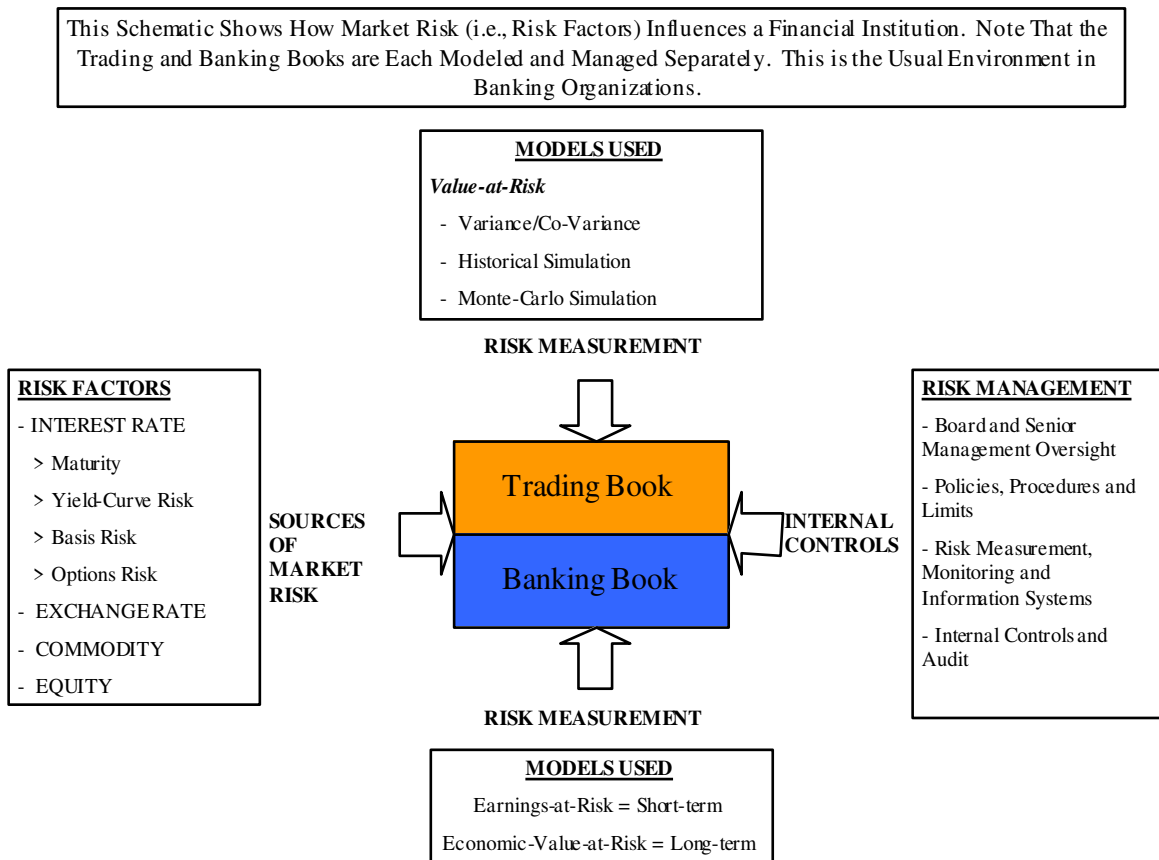
4.24 MARKET RISK

Market risk (also known as “systematic risk”) is the exposure of an institution's financial condition to adverse movements in macroeconomic factors that influence asset prices. These factors are changes in:

- Interest Rates
- Equity Prices
- Foreign Exchange Rates
- Commodity Prices

Figure illustrates the way market risk influences a banking organization, how exposures to market risk are commonly managed, and the risk management and internal control process.

4.24.1 WHY DO BANKS EXPOSE THEMSELVES TO MARKET RISKS?



Banks engage in market intermediation i.e., when banks accept deposits and assumes liabilities; they do so for the purpose of earning profits.

The key for any company to be successful is to create value by making good investments; however, in order to make good investments, a financial institution has to fund the investment through a mix of equity and debt. Given the high leverage of most banks and the large expense of equity, banks are primarily in the businesses of assuming liabilities to turn into, or invest in, assets that earn returns sufficient to

- ⇒ Fund all liabilities
- ⇒ Pay for overhead expenses
- ⇒ Provide returns to shareholders

Risk Component	Typical Exposure Level	Comments
Credit	Highest	Banks spend significant dollars monitoring and controlling credit risk exposures. Assessing this risk is crucial to determining the safety and soundness of a financial institution. Capital must be held against credit exposures.
Market	High	The measurement and control of market risk is evolving. While most banks have the highest exposure to credit risk, market risk is an important secondary risk. For trading portfolios, capital is required to be held against market risk exposures.
Liquidity	Medium-to-High	The ability of a bank to fund its deposits and asset allocation strategies is a critical consideration. Although liquidity risk has no specific capital charge, the assessment of a bank's liquidity is part of the "CAMELS" risk rating system.
Operational	Medium-to-Low	This is an emerging area of discussion. Most recent banking debacles are tied to significant operational shortcomings. As such, there is a debate whether and

		how capital should be charged for operational risk. The assessment of operational risk is still evolving.
Legal	Medium-to-Low	There are, of course, some jurisdictions where legal risk is quite high; however, legal risk is often adequately controlled.
Reputational	Low	Reputational risk can cause significant problems and may be considered an “event” risk. Loss of reputation can cause bank failure; however, the occurrence of such massive reputational failure is often preceded by a catastrophic event, such as large publicized trading losses.

Banks take market risk in two main areas of the balance sheet:

The Trading Book:

- Typically has a short-term time horizon
- Usually marked-to-market on a daily basis
- Market risk is more “transparent” within a trading book

The Banking Book:

- Typically has a long-term time horizon
- The banking book is not marked-to-market
- Market risk is not as obvious as for a trading book

Following is the list that shows the limits commonly found in banking and trading organizations:

⇒ **Limits on net and gross positions:** Limits may be placed on gross (notional) positions, net positions, or both. Limits on gross positions restrict the size of a long or short position in a given instrument. Limits on net positions, on the other hand, attempt to recognize the natural offset of long and short positions. Banks generally should use both types of limits.

- ⇒ **Maximum allowable loss ("stop-loss"):** Limits may be established to avoid the accumulation of excessive losses in a position. Typically, if these limits are reached, a senior management response is required to hedge or liquidate a position. These limits are usually more restrictive than overall position limits. Typical stop-loss limits are retrospective and cover cumulative losses for a day, week, or month.
- ⇒ **Value-at-risk limits:** Management may place limits on the extent to which the value of a portfolio is affected by changes in underlying risk factors. Limits can be specified as the maximum loss for a specified scenario (for example, a 100 basis point change in rates) or for scenarios defined at some specified confidence level derived from internal VaR measures (for example, 99 percent of possible occurrences over a ten-day time horizon). Generally, measures of sensitivity are based on historical volatilities.
- ⇒ **Repricing gap limits:** These limits enable an institution to control the risk of adverse changes in rates for the periods designated in the bank's planning time horizon. Limits might range from stated absolute amounts for each time frame to weighted limits that emphasize increasing rate-movement exposure applicable to the relative distance into the future in which the gap appears. In addition, these limits should specify the maximum repricing date of the specific instrument or combination of instruments. Typically, banks employ repricing gap limits to control risks arising from parallel shifts in yield curves.
- ⇒ **Limits on options positions:** An institution should place unique limits on options positions to adequately control trading risks. Options limits should include limits that address exposures to small changes in the price of the underlying instrument (delta), rate of change in the price of the underlying instrument (gamma), changes in the volatility of the price of the underlying instrument (vega), changes in the option's time to expiration (theta), and changes in interest rates (rho).
- ⇒ **Limits for volatile or illiquid markets:** Management may choose to limit trading in especially volatile markets, in which losses could accumulate quickly or in illiquid

markets in which management may be forced to take a loss to close a position it cannot offset.

Market risk need not be the result of large or complex trades; market risk is more a function of the relative concentration of activity in products and instruments (assets as well as liabilities) that will react in the same manner to a single market event.

4.24.2 BASIC MEASURES OF MARKET RISK

NOTIONAL MEASURES

Notional measurements are the most basic methodologies used in market risk management. Notional refers to the risk positions represented on the aggregate amount of transactions and holdings. For example, a derivative contract with a “notional” amount of 1,000 and an investment in a cash security of 1,000 would represent 2,000 in notional.

Typical notional measurement methods summarize net risk positions or gross risk positions. For example, in foreign exchange it is common to express open positions in gross long, gross short or some combination thereof. Notional measurements may also be used in conjunction with other risk-measurement methodologies. For example, an institution may use notional measurements to control market risks arising from foreign exchange trading, while using duration measurements to control interest rate risks.

For certain banks with limited, noncomplex risk profiles, notional measures may be sufficient to adequately control risk. In addition, the ease of computation in a nominal measurement system may provide more timely results. Many organizations place “position limits” on certain activities by using notional values. However, nominal measures have several limitations. Often, the nominal size of an exposure is an inaccurate measure of risk since it does not reflect price sensitivity. This is especially the case with derivative instruments. Also for sophisticated banks nominal measures often do not allow an accurate aggregation of risks across instruments and trading desks.

FACTOR-SENSITIVITY MEASURES

Basic factor-sensitivity measures, such as the dollar-value of a basis point (DV01) offer higher level of measurement sophistication than notional measures. As the name implies, these measures gauge the sensitivity of the value of an instrument or portfolio to changes in a primary risk factor – such as interest rate movements along the yield-curve.

Banks can express the basic price sensitivities of their holdings in terms of one representative instrument. Continuing the example using duration, an institution may convert all positions into the equivalent amounts of one reference instrument, such as a four-year government, three-month Eurodollar or other common financial instrument. For example, all bonds in a portfolio might be converted into a dollar amount of a "two-year" U.S. Treasury security. The banks can then aggregate the instruments, place limits on the aggregate and evaluate the risk as if the instruments were a single position in the common base.

While basic factor-sensitivity measures can provide useful insights, they have certain limitations - especially in measuring the exposure of complex instruments and portfolios. For example, they do not assess an instrument's convexity or volatility and can be difficult to understand outside the context of market events. Supervisors should ensure that factor-sensitivity measures are used appropriately and, where necessary, supported with more sophisticated measures of market-risk exposure.

4.24.3 SCENARIO SIMULATIONS – EARNINGS AND ECONOMIC VALUE

Another level of risk-exposure measurement is estimating the potential change in the value of instruments and portfolios under specified scenarios of changes in risk factors. On a simple basis, changes in risk factors can be applied to factor-sensitivity measures such as duration or DV01 to derive a change in value under the specified scenario. These scenarios can be arbitrarily determined or statistically inferred either from analyzing historical data on changes in the appropriate risk factor, or from running multiple forecasts using a random (i.e., stochastic) process that describes how a risk factor may behave under certain circumstances.

4.25 RISK ASSESSMENT FRAMEWORK IN THE BANK

Banks follows the risk assessment framework of State Bank of Pakistan. It is very helpful for banks for assessing the risk in their operation and activities. The rapidly changing financial scenario has forced regulators to recognize the importance of changing the risk profile of banks. The expanding business avenues, deregulation and globalization of financial activities, developments such as use of highly automated technology, growth of electronic banking and greater risk appetite have considerably broadened risk horizons. To ensure financial stability through proactive monitoring of risks faced by the banks, the SBP has developed an Institutional Risk Assessment Framework (IRAF). The IRAF signifies a major up-gradation over the existing supervisory approach.

Through RAF the management of banks is working on the standards, codes, and guidelines of SBP. It helps them to increase the degree of transparency and discipline in bank. Due to RAF the risk assessment in banks are more integrated and collaborative. The RAF based on the following five inputs:

1. COMPLIANCE WITH STANDARDS, CODES AND GUIDELINES

Banks compliance with the standards, codes and guidelines as adopted in Pakistan laws and regulations, they are following the SBP's guidelines like regulatory and statutory requirements, code of corporate governance and risk management guidelines and instructions for sound business and financial practices. It is self-assessment exercise for the BOD of Banks. This component is an aggregate weight-age of 20%.

2. SUPERVISORY AND REGULATORY INFORMATION

For the supervisory and regulatory information banks are gathering information from the inspection on of capital adequacy, management, profitability, asset quality, liquidity, surveillance reports as well as enforcement/compliance status and policies. This component is an aggregate weight-age of 25%.

3. FINANCIAL PERFORMANCE AND CONDITIONS

For the assessment banks are analyzing the financial performance and fulfill the condition of audited annual statements reports and quarterly/annual published accounts. This component plays a major role in assessment. This component is an aggregate weight-age of 40%.

4. MARKET INFORMATION AND INTELLIGENCE

For this component banks assess the performance of their operations and activities from credit rating agencies, research reports, and international supervisory reports. This component is an aggregate weight-age of 15%.

1	COMPLIANCE WITH STANDARDS, CODES AND GUIDELINES	20%
2	SUPERVISORY AND REGULATORY INFORMATION	25%
3	FINANCIAL PERFORMANCE AND CONDITIONS	40%
4	MARKET INFORMATION AND INTELLIGENCE	15%

4.26 SEVEN GUIDING PRINCIPLES FOR RISK MANAGEMENT

4.26.1 PURPOSE OF THE GUIDING PRINCIPLES

The main purpose of Banks risk management-guiding principles contained is to provide education and guidance. Because they operate differently, because there are various levels of sophistication at bank, and because the methodologies for managing risk continue to evolve. They are strongly believed that each banking institution develop methodologies for managing and controlling risk suited to its business needs and capabilities, as well as the needs and interests of its customers and other stakeholders. Accordingly, the definition of risks, the risk management organization, and structure, and the level of quantification and formalization of these principles currently vary by organization and will continue to do so. These variances are acceptable and proper. However, the guidelines do fundamentally address what the management of risk accomplishes. Each bank has maximum flexibility to design a program to meet its needs within these guidelines.

Following are the seven general guiding principles of Banks for risk management:

1) BOARD AND SENIOR MANAGEMENT OVERSIGHT

- a. To be effective, the concern and tone for risk management must start at the top. While the overall responsibility of risk management rests with the BOD, it is the duty of senior management to transform strategic direction set by board in the shape of policies and procedures and to institute an effective hierarchy to execute and implement those policies. To ensure that the policies are consistent with the risk tolerances of shareholders the same be approved from board.
- b. The formulation of policies relating to risk management only would not solve the purpose unless these are clear and communicated down the line. Senior management has to ensure that these policies are embedded in the culture of organization. Risk tolerances relating to quantifiable risks are generally communicated as limits or sub-limits to those who accept risks on behalf of organization. However not all risks are quantifiable. Qualitative risk measures could be communicated as guidelines and inferred from management business decisions.
- c. To ensure that risk taking remains within limits set by senior management/BOD, any material exception to the risk management policies and tolerances be reported to the senior management/board that in turn must trigger appropriate corrective measures. These exceptions also serve as an input to judge the appropriateness of systems and procedures relating to risk management.
- d. To keep these policies in line with significant changes in internal and external environment, BOD is expected to review these policies and make appropriate changes as and when deemed necessary. While a major change in internal or external factor may require frequent review, in absence of any uneven circumstances it is expected that BOD re-evaluate these policies every year.

2) RISK MANAGEMENT FRAMEWORK

A risk management framework encompasses the scope of risks to be managed, the process/systems, and procedures to manage risk and the roles and responsibilities of individuals involved in risk management. The framework is comprehensive enough to capture all risks a bank is exposed to and have flexibility to accommodate any change in business activities. An effective risk management framework includes

- a. Clearly defined risk management policies and procedures covering risk identification, acceptance, measurement, monitoring, reporting and control.
- b. A well constituted organizational structure defining clearly roles and responsibilities of individuals involved in risk taking as well as managing it. Banks, in addition to risk management functions for various risk categories may institute a setup that supervises overall risk management at the bank. Such a setup could be in the form of a separate department or bank's Risk Management Committee (RMC) could perform such function. The structure is such that ensures effective monitoring and control over risks being taken. The individuals responsible for review function (Risk review, internal audit, compliance etc) are independent from risk taking units and report directly to board or senior management who are also not involved in risk taking.
- c. There are effective management information system that ensures flow of information from operational level to top management and a system to address any exceptions observed. There is an explicit procedure regarding measures to be taken to address such deviations.
- d. The framework has a mechanism to ensure an ongoing review of systems, policies and procedures for risk management and procedure to adopt changes.

3) INTEGRATION OF RISK MANAGEMENT

Risks must not be viewed and assessed in isolation, not only because a single transaction might have a number of risks but also one type of risk can trigger other risks. Since interaction of

various risks could result in diminution or increase in risk, the risk management process recognize and reflect risk interactions in all business activities as appropriate. While assessing and managing risk the management have an overall view of risks the institution is exposed to. This requires having a structure in place to look at risk interrelationships across the organization.

4) BUSINESS LINE ACCOUNTABILITY

In every banking organization there are people who are dedicated to risk management activities, such as risk review, internal audit etc. It must not be construed that risk management is something to be performed by a few individuals or a department. Business lines are equally responsible for the risks they are taking. Because line personnel, more than anyone else, understand the risks of the business, such a lack of accountability can lead to problems.

5) RISK EVALUATION/MEASUREMENT

Until and unless risks are not assessed and measured it will not be possible to control risks. Further a true assessment of risk gives management a clear view of institution's standing and helps in deciding future action plan. To adequately capture institutions risk exposure, risk measurement represent aggregate exposure of institution both risk type and business line and encompass short run as well as long run impact on institution. To the maximum possible extent institutions establish systems/models that quantify their risk profile, however, in some risk categories such as operational risk, quantification is quite difficult and complex. Wherever it is not possible to quantify risks, qualitative measures are adopted to capture those risks. While quantitative measurement systems support effective decision-making, better measurement does not obviate the need for well-informed, qualitative judgment. Consequently the importance of staff having relevant knowledge and expertise cannot be undermined. Finally any risk measurement framework, especially those which employ quantitative techniques/model, is only as good as its underlying assumptions, the rigor and robustness of its analytical methodologies, the controls surrounding data inputs and its appropriate application

6) INDEPENDENT REVIEW

One of the most important aspects in risk management philosophy is to make sure that those who take or accept risk on behalf of the institution are not the ones who measure, monitor, and

evaluate the risks. Again the managerial structure and hierarchy of risk review function may vary across banks depending upon their size and nature of the business, the key is independence. To be effective the review functions have sufficient authority, expertise, and corporate stature so that the identification and reporting of their findings could be accomplished without any hindrance. The findings of their reviews are reported to business units, Senior Management and, where appropriate, the Board.

7) CONTINGENCY PLANNING

An institution has a mechanism to identify stress situations ahead of time and plans to deal with such unusual situations in a timely and effective manner. Stress situations to which this principle applies include all risks of all types. For instance contingency planning activities include disaster recovery planning, public relations damage control, litigation strategy, responding to regulatory criticism etc. Contingency plans are reviewed regularly to ensure they encompass reasonably probable events that could impact the organization. Plans are tested as to the appropriateness of responses, escalation and communication channels, and the impact on other parts of the institution.

4.26.2 LIMIT SETTING

An important element of risk management is to establish exposure limits for single obligors and group of connected obligors. Institutions are expected to develop their own limit structure while remaining within the exposure limits set by State Bank of Pakistan. The size of the limits is based on the strength of the obligor, economic conditions, and the institution's risk tolerance. Appropriate limits are set for respective products and activities.

4.26.3 EXPOSURE LIMITS

- ⇒ SBP exposure limit
- ⇒ Party/branch wise limit
- ⇒ Per transaction limit
- ⇒ Per currency limit
- ⇒ Stop Loss limit
- ⇒ Intraday limit

EXPOSURE LIMITS – INTERNATIONAL CONVENTION

In this method, all LONGS and all SHORTS are first converted into equivalent Pak Rupees. Then, all LONGS are added up separately and all SHORTS are added up separately. Now, higher of two legs i.e. either LONGS or SHORTS (whichever is higher) is taken as Exposure Limit. This is a moderate method.

4.27 FOREIGN EXCHANGE LIMITS

4.27.1 CUSTOMER FOREIGN EXCHANGE LIMIT

The maximum cumulative amount of dealings spot and/or forward, in any or all currencies that is permitted to be outstanding at any one time in the name of a customer. One side only of each transaction shall be included in this calculation.

4.27.2 CUSTOMER DAILY SETTLEMENT LIMIT

The maximum cumulative amount in all currencies spot and/or future, to be settled on any single day by a customer. One side only of each transaction shall be included in this calculation.

4.27.3 TENOR LIMITATION

Maximum tenor from the date of the contract to the settlement date – usually one year.

4.27.4 CLOSING NET POSITION: (OPEN POSITION)

The maximum amount, Long or Short that a Unit is permitted to maintain overnight in a foreign currency.

4.27.5 MAXIMUM NET POSITION – ALL CURRENCIES

The maximum allowable total of all positions.

4.27.6 OVERALL NET POSITION

The differences between the balances of all assets and all liabilities in each foreign currency (including outstanding forward contracts).

Overall assets exceed liabilities this is referred to as a LONG POSITION (sometimes called Overbought)

When overall liabilities exceed assets, this is referred to as a SHORT POSITION (sometimes called Oversold)

4.27.7 TRANSLATION RATE

For limit recording purposes (whenever applicable) foreign currency translations shall be effected at the prevailing spot or forward middle rates where contracts do not express a dollar equivalent.

4.27.8 GAP EXPOSURE

The net of total assets against total liabilities, inclusive of contingencies, of one calendar month against another. Base and/or local currencies should be excluded.

4.27.9 PROCEDURE

This procedure covers the actions to be taken by the personnel (dealers) in the Treasury Front Office, responsible for controlling the Bank's overall position in all currencies.

- ⇒ Establish and advise day's exchange rates (based on current market prices) to different branches and operating departments for bookings of transactions with their customers.
- ⇒ Update Position Pads with the Spot/Forward maturities on the basis of information received from Bank office.
- ⇒ Update Position Pads on the basis of information's received from different branches and operating departments in respect of transactions conducted by them with their customers.
- ⇒ Receive indicators from other Dealers in the market as to their current positions either directly or through Brokers.
- ⇒ During the day review position in each currency and trade (cover) Inter-Bank or through the Central Bank whenever necessary, in order to keep his position in a state

of equilibrium after having regard to the advice he has received either from his Treasury Manager or from other Dealers (if any) in the market.

⇒ Closing a Spot or Forward Contract by Exchange Dealer:

- Dealer will ensure that proposed contract is within limit or obtain approval from appropriate authority
- Record contract in the Position Pad and pass on the Deal Slip to Back Office for necessary processing.

⇒ At the close of trading the Dealer will report his final position to the General Manager/Treasury Manager or designated officer advising the reason for any excess over stipulated limits.

⇒ Pass the Position Pad to Back Office or designated officer for reconciling with the Contract Book and the Foreign Currency Ledger.

4.28 DEALERS FORWARD PROJECTION/OUTSTANDING FORWARDS

The Dealers Forward Projection/Outstanding Forwards statement is also known as MATURITY PROFILE since all outstanding spot and forward transactions are reflected there on the basis of respective maturities in sequence.

This statement is generally produced in two different formats, as under:

- ⇒ All outstanding spot and forward transactions reflected on the basis of their respective maturities irrespective of the currencies.
- ⇒ All outstanding spot and forward transactions pertaining to a particular currency reflected separately in maturity order for different currencies.

The Forward Projection Chart will generally contain the following columns, which will highlight the full nature of the outstanding spot and forward transactions:

- ⇒ Deal date
- ⇒ Maturity date
- ⇒ Contract number
- ⇒ Reference number

- ⇒ Nature of transaction
- ⇒ Inter-Bank/Customer
- ⇒ Counter party
- ⇒ Spot/Forward
- ⇒ Type of transaction
- ⇒ Currency code
- ⇒ Amount in foreign currency
- ⇒ Exchange rate
- ⇒ Equivalent Pak Rupees
- ⇒ Equivalent Notional Value in Pak Rupees
- ⇒ Name of Broker

4.29 FORWARD MARKET CONTROLS INTER-BANK MARKET

The banks can operate truly in forward to hedge their FX and time lag exposure.

4.29.1 SBP MARKET INTERVENTION (DOMESTIC AND FOREIGN)

SBP makes an intervention to regulate the floating inter-bank rates and the protection of currency from speculators. Market intervention is done for both the spot and forward markets. It also intervenes to control demand and supply of foreign exchange in the market.

4.29.2 SBP ROLE TOWARDS UNIFIED EXCHANGE RATE POLICY

Start from early 1998 – Free exchange rate regime

July 1998 - Two tier exchange rate system

May 1999 - Abolished the two tier exchange rate and shifted to floating inter-bank rate system (market forces determining demand and supply). This was applicable for all current account foreign exchange receipts & payments for public and private section.

Exporter - To surrender their FX trade flows through inter-bank

Imports - To receive the FX trade requirements from inter-bank

Exporters/importers are free to sell/buy their FX positions to their choice of bank

Forward markets are free to quote their forward rates to their customers.

4.29.3 TRANSACTION EXPOSURE

Transaction exposure arises because under a regime of floated exchange rates there is uncertainty about the rate at which a foreign currency asset or liability will be converted into the home currency. There is uncertainty about the rate at which a foreign currency asset or liability will be converted into the home currency.

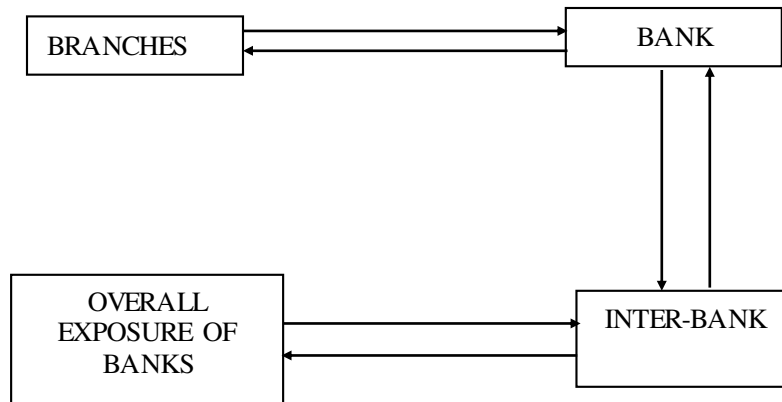
ILLUSTRATIONS

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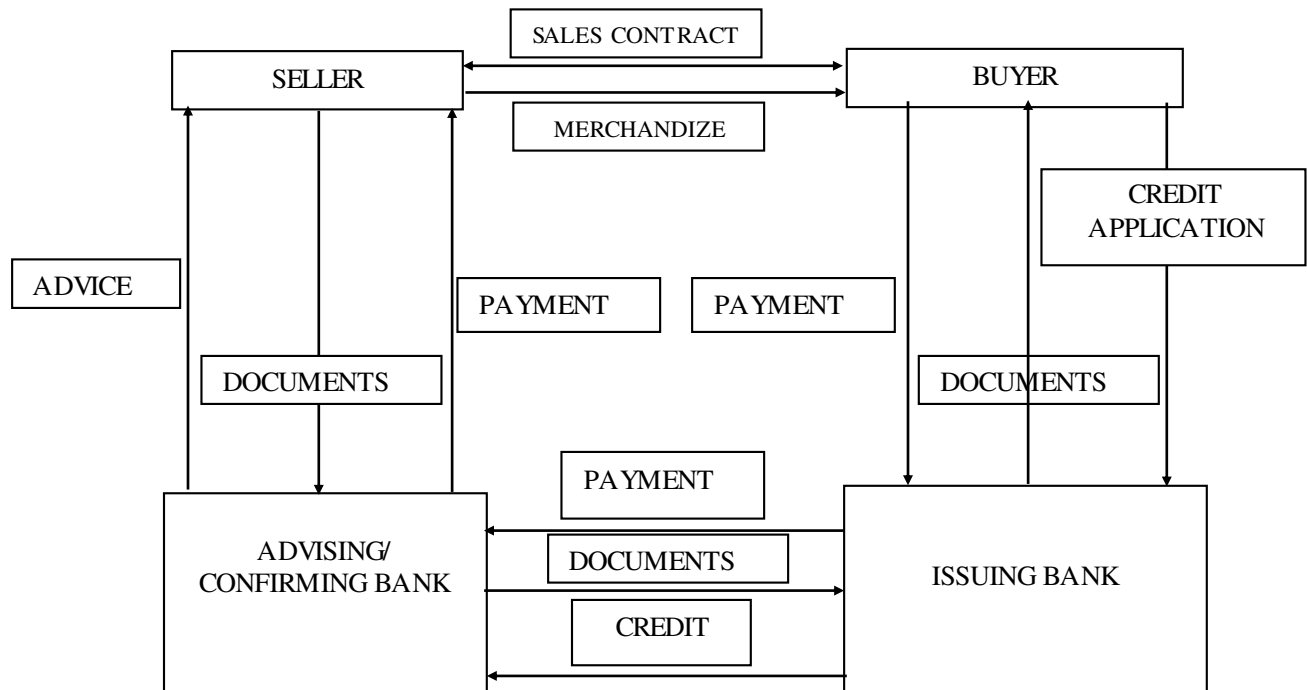
ELEMENTS OF EXPOSURE

TIME & CURRENCY
 TIME & CURRENCY
 CURRENCY
 TIME
 TIME
 TIME & CURRENCY

4.29.4 DAILY CONSOLIDATION EXPOSURE – FX



4.29.5 PROCEDURE USED IN LETTER OF CREDIT



4.30 SBP – EXPOSURE LIMITS FOR BANKS

SBP replaced the system of Net Open Position by an aggregate foreign exchange exposure limit. Limit – 10% of the paid up capital with minimum and maximum of Rs. 50 million and Rs. 500 million, respectively.

Limit represents all foreign exchange activities including those arising out of trade transactions, remittances etc.

4.30.1 EFFECT OF MARKET DISTORTION

- ⇒ Wide margins
- ⇒ Negative sentiments
- ⇒ Uncertainty
- ⇒ Un-experienced players

4.30.2 MARK TO MARKET VALUATION

State Bank has directed the following measures for valuation purposes:

- ⇒ Revaluation of books daily on mark to market basis

- ⇒ This system requires that each Foreign Currency transaction should be revalued daily on the basis of rates prevailing in the market till its maturity
- ⇒ Rates will be provided by SBP through Reuters at day end.

4.31 RISK MANAGEMENT FRAMEWORK - RETROSPECT AND PROSPECT

Competitive and regulatory pressures make it mandatory to have an organization wide risk management framework in place. Organizations that do not implement such a risk management framework may be unable to compete effectively in the marketplace.

4.31.1 CHANGING SCENARIO - RISK MANAGEMENT

A global marketplace characterized by the communization of driven business, industry consolation, deregulation and technology advances has heightened the level and nature of potential risks. The current environment demands sophisticated and comprehensive controls to quickly bring products to market. The expectations of the Board of Directors, regulatory bodies, rating agencies and shareholders regarding controls continue to rise. As a core competency, risk management empowers organizations to control risk, but also measure performance more effectively, determine capital allocations and realize a variety of other business advantages. Thus, by being more proactive an organization can gain competitive edge and even enhance its business reputation.

4.31.2 SETTLEMENT RISK

Settlement risk is the risk that a settlement in a transfer system does not take place as expected. Generally, this happens because one party defaults on its clearing obligations to one or more counterparties. As such, settlement risk comprises both credit and liquidity risks. The former arises when a counterparty cannot meet an obligation for full value on due date and thereafter because it is insolvent. Liquidity risk refers to the risk that a counterparty will not settle for full value at due date but could do so at some unspecified time thereafter; causing the party which did not receive its expected payment to finance the shortfall at short notice. Sometimes a counterparty may withhold payment even if it is not insolvent (causing the original party to

scramble around for funds), so liquidity risk can be present without being accompanied by credit risk.

4.31.3 ENTERPRISE RISK MANAGEMENT

All organizations are in business of placing capital at risk in pursuit of ventures that are uncertain. This includes financial institutions, governmental bodies, corporations and non-profit organization. They all have goals and they allocate resources to pursue them. Because all organizations face uncertainty in achieving their goals, they all face risk. Enterprise risk management is about optimizing the process with which risks are taken. It became a critical issue for the 1990's because organizations have started suffering spectacular losses—often from risks they never should have taken in the first place.

Losses such as these never used to occur. In the past, organizations might go bankrupt or suffer losses, but the forces that caused them were macroscopic – competition, mismanagement or adverse conditions would bleed an organization's vitality. Today, an individual can pick up a phone and deal with billions of dollars. This is new. The risk does not come from derivative instrument alone. It arises from the many sources of leverage, which are available today. These include derivatives, repos, and securities lending and structured notes. Such tools have increased liquidity in the markets and enable institutions to efficiently manage many of their risk exposures.

Leverage doesn't only magnify market risk. As margins of error contract, other risk increases, including credit risk liquidity risks, operations risk and legal risk. Organizations are focusing on all these. Through enterprise risk management, they seek comprehensive solutions – not because the problem is new, but because the consequences have become enormous. Regulators due to the threat of leveraged risk are pursuing initiatives that:

- ⇒ Enhance the disclosure of off – balance sheet risks.
- ⇒ Promote corporate risks management.
- ⇒ Ensure that institutions are sufficiently capitalized for the risks that they take.
- ⇒ Reduce systemic risk.

Finally, organizations are embracing enterprise risk management because it makes good business sense. Today, they actively make this decision to change the way they take risks. They implement innovative procedures. They install new technology. They actively reshape their corporate culture to facilitate better risk taking. Implementing an effective strategy of enterprise risk management is not easy, and for each organization, it is different. There are, however, three fundamental elements that should comprise any risk management strategy:

⇒ Corporate culture.

⇒ Procedures.

⇒ Technology.

4.32 RISK ANALYSIS

“How much risk are we taking?” is the question that underlies enterprise risk management. In the past, organizations would look to their profit and loss statement to answer the question. Volatile profits meant high risk. A problem, however, is that profit and loss is a retrospective measure of risk. Indeed, for many risks, the profit and loss statement may reveal little or no information – even retrospectively. A credit loss might impact profit and loss years after an exposure is first taken. The profit and loss statement may provide no indication of liquidity risk. That risk tends to strike infrequently, but with devastating effect. The first time a liquidity crisis impacts the profit and loss statement is often the last. In order to manage risks, organizations need to be able to measure those risks prospectively. They need to know based on their positions today, how much risk they are actually taking.

Organizations are addressing this challenge with statistical risk measures. For market risk, they are using value at risk (VAR). For credit exposure, they are using expected exposure or maximum exposure. Such risk measures are powerful because they can summarize a complete risk with a single number. For example, value at risk incorporates all of a portfolio’s holdings as well as the volatilities and correlations of applicable risk factors. Because value at risk is based on a portfolio’s current holdings, it is a prospective measure of risk. It tells how much risk is being taken now – not how much risk was taken last week or a month ago and because it takes into account market volatilities and correlations, it captures all hedging and diversification effects.

4.32.1 RISK MANAGEMENT AS A CLOSED CIRCLE

The introduction and operation of a risk management system form a circle. Risks are identified, measured and controlled. They are monitored regularly to ascertain whether the risks are still within the prescribed limits. If not, the circle starts again: the excessive risks and their causes are identified, measured and corrected.

4.33 RISK STRATEGY

Within a bank's risk management, the Board of directors and the senior management are responsible for the definition of the objectives, priorities, principles and strategies. It is up to the Board of directors to approve the risk policy and thus the overall framework of the bank's risk management and to supervise its implementation. It is the responsibility of the Board and the senior management to ensure that structures and processes are implemented which guarantee a systematic, efficient and effective risk management. They are also responsible for the establishment of an appropriately organized, properly staffed, technically equipped and methodical infrastructure. Finally, the Board of directors and the senior management are responsible for the supervision and the control of risk management, for the adherence to its principles and the global risk limits.

4.33.1 RISK IDENTIFICATION

Risk identification means first of all that the bank systematically recognizes its risks, classifies them and assigns them to areas of responsibility or to products/markets. This also includes the operational definition of the risks. To this extent, risk identification means sorting the risks, according to a certain structure. The following factors have shown to be decisive in determining the quality of risk identification:

- ⇒ Knowledge of the products, business areas and markets, the inherent in these areas and their causes
- ⇒ A practical, appropriate and consistent order
- ⇒ Clear and operational definitions

4.33.2 RISK MEASUREMENT

Risk measurement must provide answers to two basic questions:

- ⇒ How does the target figure (e.g. Profit, cash flow, value of an asset or the Bank as a whole) change when the risk factors (interest prices, creditworthiness of the business partners etc.) change?
- ⇒ What changes in the risk factors must be reckoned with in the future?

4.33.3 RISK LIMITATION REQUIRES DEFINITION OF THE BANK'S RISK CAPACITY APPETITE

The limitation of risk cannot take place in a vacuum. It must be related to the bank's risk capacity. The capacity to bear risk is an expression of the maximum unexpected loss the bank could suffer without endangering its existence. This definition rests on the assumption that appropriate valuation provisions or reserves have already been built to cover the expected losses. In practice, the limit of the risk capacity will probably be reached when the bank no longer meets the regulatory minimum equity requirements.

4.34 EXPOSURE REPORTS

4.34.1 BANK EXPOSURE

While covering the customers transactions and squaring the overall positions, the Treasury Front Office enter into deals with the participants of Inter-Bank and Overseas Markets. When the deals are done with the other banks and correspondents, the Front Office Dealers must ensure that they cannot deal with them beyond the limits provided by Head Office, general manager or any other appropriate i.e. they do not enjoy an unlimited authority for dealing with other banks and correspondents.

The limits for each other bank and correspondents are provided on the following basis:

- ⇒ Financial stability of the counter-party after analyzing the Balance Sheet and other financial documents.
- ⇒ Creditability of the counter-party in honoring the timely settlement of all foreign exchange and money market deals done with them.
- ⇒ Volume of business received from the counter-party.
- ⇒ Fixation of limits by the counter-party for the Bank.

The limits are not fixed for dealing with overseas branches, subsidiaries and the Central Bank.

Generally two types of limits are fixed:

⇒ Settlement limit

⇒ Forward dealing limit

4.34.2 SETTLEMENT LIMIT

The settlement limit, relating to the exposure on any one settlement date with another party, should be limited to an acceptable amount, as otherwise, on this crucial day a bank would be too much exposed to default by accident or design.

The settlement day or value day of an exchange contract is the day that the principal amount is subject to a 100% loss, if the paying party remits the counter value in a near time zone and does not receive cover in a later one.

The settlement risks can be incurred if the clearing bank in the other country or even the same country does not advise the receiving bank that the cover for a sale has not been received in time, or not at all.

Most of the time these settlement defaults are a matter of misunderstandings or transmission overnights. The paying bank or organization indicates the wrong clearing bank in the other country and consequently the funds end up with another bank, or the receiving bank does not know how to apply the funds in the absence of instructions from the beneficiary. The worst that can happen in these circumstances is that the beneficiary is overdrawn and has a claim against the offending party for interest due. Most of the time accidental defaulters will pay up for their mistakes, although when there is some valid excuse for the mistake, such as unclear payment instructions or confusion in the transmission of the payment details, the offending bank may well plead that it was joint error and that the costs incurred should be shared by both parties. In these days of high interests a mistake of this nature which has taken some time to find out could be extremely costly, even if one of the parties feels that the mistake was not theirs. The settlement limit is linked with the dealers Placement Limit which is based on a percentage of capital funds plus reserves.

4.34.3 FORWARD DEALING LIMIT

The Forward Dealing Limits applies to the foreign exchange contracts maturing in the future. The size of this limit will depend on the interpretation of the real risk by an organization. Some banks and financial institutions are of the opinion that the further the maturing date the smaller the risk of a settlement default, as anything unforeseen happening to a counterparty's ability to meet the terms and conditions of the contract would come to the notice of the exposed bank, hopefully well before the item falls due for settlement. Thus in some banks generous settlement limits will be set for longer maturities, whereas, in others the immediate future risks are considered negligible and consequently settlement limits for near maturities are larger than for due dates that are further away.

First of all, the actual settlement risk of a distant forward transaction may be greater in that it may not be executed at all. The longer the maturity the greater the chance that the creditworthiness of a company or bank would change for the worse or that ownership of the counterparty may alter and affect the settlement of the transaction. This can be the case particularly when dealing with countries where a change of regime could result in contracts being cancelled without the innocent party being able to claim reimbursement for exchange or settlement losses.

4.35 INTEREST RATE RISK MANAGEMENT

Factors affecting interest rates:

- ⇒ Change in demand and supply of credits
- ⇒ Economic cycle
- ⇒ Inflation
- ⇒ Taxation
- ⇒ Market sentiments
- ⇒ Government objectives
- ⇒ Economic indicators

4.36 EXPOSURE MANAGEMENT

The long term health and survival of a financial service entity is critically dependent on its ability to understand, appreciate, quantify and manage the range of risks associated with its line of business. The components of the risk spectrum are growing in number as the regulators retreat and permit a freer play of market forces. It is imperative that banks develop risk management as one of its “Core Competencies” in view of the liberalization and increasing globalization of the Pakistani economy more specifically its financial risk. The practice of risk management around the world has already evolved into a complex domain. It incorporates sophisticated statistical techniques for forecasting, advanced mathematical applications for managing analysis in a multi-variable context as well as custom made 4th generation software solutions. Many a multinational banks have risk management as their prime core competence.

4.36.1 THE METHODOLOGY

To arrive at the optimum exposure limit ensuring avoidable high risk the following building blocks have been deployed.

- ⇒ The economic region to which the bank belongs
- ⇒ The specific country rating of its home currency
- ⇒ Rating assigned to banks by international rating agencies
- ⇒ The total capital of the correspondent banks
- ⇒ The asset size of the correspondent
- ⇒ The market leadership position (measured in terms of their ranking in the world as well as in their home currency in terms of their capital)

THE ECONOMIC REGION

This is the most general parameter of macro nature expected to serve as an early warning indicator. Almost all credit rating agencies as well as reputed international financial magazines like “Institutional Investors”, “The Bankers”, “The Euro money” constantly forecast the emerging scenario of each region in which our correspondent bank is located.

Through this parameter a bank may aim to time the triggering of a review for all the banks in the region in tune with the forecast of expected developments.

COUNTRY RATING

The rating of the home country of a correspondent bank enable to estimate the probability of a delay or default that could occur due to the macro economic factors of that country. While the published ratings of the rating agencies perform the role of a signpost, an actual assessment of the implications can be culled out from various sources. These include the constant feedback from other correspondent banks, personal impressions gathered as well as customer feedback on the case of securing payments from those territories.

4.36.2 FORWARD TRANSACTIONS

A forward contract is a foreign exchange deal made for delivery on any value date in the future. It is defined as a purchase or sale of foreign currencies against another currency for commercial purposes or cover of principals and interest on foreign currency loans and deposits to mature at a given date normally over and above seven days.

A forward contract is entered into to eliminate any risk of exchange rates moving between the times that a commitment is first established and the date of the actual delivery of funds. For example, if one of the banks customers knows that in three months of time he will need dollars for payment of goods imported from the USA he will buy these dollars from the bank now on a forward basis, value date on which the import is required to be settled. This eliminates any risk for him of rate movements between now and three months time and he knows now what the exchange is in order that he may calculate his costs accordingly. The bank in turn would normally cover the deal in the market.

Forward transactions are deals over two business days from transaction date for periods of one month onward fixed at the time of dealing. The maturity date of the forward transaction is fixed on the basis of spot settlement date. When dealers are trading for say six months forward, the maturity date will be taken as six months from the spot settlement date. If the maturity date falls on a non-business day or a holiday or weekend, the maturity date will be in the next business day.

The object of a "Forward" deal in foreign exchange is to fix at once the rate for a contract to be executed on a future date agreed upon with the intention of freeing both buyer and seller from

any risk of loss which might accrue through fluctuations in the exchange rate. Under such an operation the exchange of one currency for another is arranged for a stipulated date at a rate of exchange fixed immediately. Regardless of the current rate of exchange on the date of actual exchange of currencies, the exchange is carried through at the rate fixed when the contract was entered into.

Forward rates of exchange are either quoted as a 'margin' against the spot rate of the currency concerned i.e. a 'premium' or 'discount' on the spot rate, or they may be quoted 'outright' i.e. the actual forward rate of exchange in the currency obtained by allowing for the forward margin over or under the current spot rate.

The word 'premium' signifies that the currency is dearer or costlier forward than spot. The word 'discount' signifies that the currency is cheaper forward than spot.

FACTORS AFFECTING FORWARD MARGINS

Demand and supply for forward currencies will have an influence on forward margins. Relative interest rates also have a direct bearing on margins.

<u>Quotation</u>	<u>Premium</u>	<u>Discount</u>
Direct	Add	Subtract
Indirect	Subtract	Add

4.36.3 OPTION FORWARD

In the foreign exchange market an 'option forward' does not imply an option whether to execute the forward contract or not. The only option available is as to the date of the eventual completion of the contract. An 'option forward' is therefore, a contract under which one contracting party cannot state definitely at the time of entering into the contract on what exact date he will be able to complete the contract, and he therefore obtains the consent of the other party that the contract may be completed on any date between two specified dates, or during a stated period, at the option of the party to whom such option is granted.

The party giving the option, will naturally safeguards itself by quoting a rate which is least advantageous to the party receiving the option. Thus, in selling a premium currency to a

customer, for example, three months forward with a one months option (the customer can take delivery any time during the third month) the bank will apply the full three months premium. When buying forward from the customer on the same basis, the bank would allow only two months premium because the customer has the choice of delivering to the bank the day after the close of the second month.

The forward rate for a currency is the price at which this currency can be bought or sold for delivery on the future date.

In essence, there is little difference between the spot rate and the forward rate for a currency. Once the exchange rate for a forward deal has been agreed between two parties, the confirmation and settlement procedures are identical with those for a spot transaction. With the one exception of the end of the month forward value date, the convention to fix forward dates also follows the spot value pattern.

In reality, the spot rate for a currency is just as much a forward rate, especially if market conditions permit dealings to take place for same day (cash) or next day settlement. There are a number of risks attached to forward dealing which make it essential to exercise greater care than for a spot transaction. For example, the forward rate is not purely a reflection of the strength or weakness of a currency but also allows for interest rate differentials, thus forward rates at times move even more dramatically than spot rates. On the other hand, the advantages outweigh such drawbacks. The ability to cover risks in the forward markets makes it easier for treasurers and dealers to fix the value of future assets and liabilities.

4.36.4 FORWARD CONTRACTS

For all forward transactions Forward Contracts must be raised whether these transactions are originated between the Treasury and branches or between different banks. A prenumbered manifold set is raised at the time of the forward deal containing the full details of the deal i.e. amount sold, amount bought, exchange rate, value date, receiving nostro agent, paying nostro agent etc.

Forward Exchange Contract will contain the following forms:

- ⇒ Advice
- ⇒ Confirmation
- ⇒ Contingent Account Vouchers
- ⇒ Register Copy

The advice and confirmation copies are sent to counter parties after the deal and the confirmation copy is received back from the counter party duly signed by their authorized Signatory.

The contingent account vouchers are used at the time of origination of the deal and conclusion of the deal. The register copy of the contract is kept in Awaiting Confirmation File by the Treasury Back Office till the confirmation is received from the counterparty.

All procedures relating to the processing of forward contracts (preparation, checking, signing of advices and vouchers) including the receipt of advices or confirmations relative to such contracts will be undertaken and supervised by personnel independent of exchange trading. Confirmations relative to these contracts, whether on the banks form or customers or banks headed notepaper, will on no account be handled by exchange trading personnel.

The main supply of these pre-numbered manifold forms will be controlled by an officer and a designated employee will be given sufficient working supply.

Clauses to protect the banks interest against failure of the counterparty to deliver, imposition of regulations restricting the banks ability to deliver, and other similar contingencies should be incorporated on the Advice and Confirmation copies of all manifold sets. Exact wording of these clauses should be tailored to suit local market practice. With the approval of the legal advisor the General Manager may waive the incorporation of these clauses on the manifolds used for contracts with such counterparties as banks, financial institutions etc.

When a forward contract is made with an individual, particular care has to be exercised to ensure that the banks interest is properly protected, as the clauses on the manifold may need to be supplemented by additional documentation.

4.36.5 SQUARE POSITION

A bank is said to be in Square position in a particular Foreign Currency if its assets in that currency are equal to its liabilities in the same currency. For example, if

$$\text{USD Assets} = 100\text{M} \ \& \ \text{USD Liabilities} = 100\text{M}$$

DRAWBACK OF NET OPEN POSITION (NOP)

The main drawback of the NOP method is that in this method LONG and SHORTS are netted off. Hence, there is a possibility of understatement of the exposure risk. For example, if there is an adverse movement in two currencies which are netted off, the underlying risk is not properly mitigated. Example, the following is the position:

CURRENCY	POSITION	CONVERSION	EQV. PKR
EUR	(1,000)	58.00	(58,000)
GBP	500	92.00	46,000
NOP in equivalent PKR			(12,000)

NOP should oversold risk of only PKR 12,000/- whereas in case of adverse movement in both EUR and GBP, the banks risk would be very high.

OPEN POSITION – PER CURRENCY

BALANCE SHEET ITEMS			
ASSETS		LIABILITIES	
Cash	600	Current	(800)
US \$ Loan	300	Saving	(350)
US \$ NOSTRO Acc	400	Term Deposit	(400)
Total LONGS	1,300	Total SHORT	(1,550)
		B/S Position	(250)
OFF-BALANCE SHEET ITEMS			
Forward Purchases	600	Forward Sale	(200)
Total LONGS	600	Total SHORT	(200)
Off B/S Position	400		
Open Position in US \$ 150			

NET OPEN POSITION OF A BANK – CALCULATION

CURRENCY	POSITION	SPOT RATE	EQV. PKR
		(Against PKR)	
US \$	1,000	@51.50	=51,500
EUR	-700	@54.25	=37,975
GBP	300	@85.50	=25,650
JPY	-25,000	@0.445	=-11,125
NOP in PKR			28,050

NET OPEN POSITION – DRAWBACK

CURRENCY	POSITION	SPOT RATE	EQV. PKR
EUR	-800	@54.25	=43,400
GBP	500	@85.50	=42,750
NOP in PKR			-650

Netting among individual currencies position understated the actual magnitude of the exposure.

FOREIGN EXCHANGE RISK EXPOSURE – INTERNATIONAL CONVENTION

LONGS				SHORTS			
POSITION		SPOT RATE	EQV. PKR	POSITION		SPOT RATE	EQV. PKR
US \$	1000	@60	60,000	EUR	-700	@55	-38,500
GBP	300	@90	27,000	CND	-1500	@34	-52,500
SUM			87,000	SUM			-91,000

FX Exposure (PKR) -91,000

4.37 TREASURY FRONT OFFICE

Front Office or Dealing Room plays an important role in the overall structure of the Bank. Its responsibility is to manage the liquidity and market exposures in local and foreign currencies within the parameters set by the Bank. Ultimately, balance sheet management is carried out by through the Front Office. Amongst other things, the Front Office is primarily responsible to compile local and foreign currency exposures taken by the corporate and retail sectors of the bank and to ensure that these exposures are managed profitably for the bank.

Each person in the front office is assigned a clear area of duty and responsibility and is accountable to his/her senior for compliance of working parameters. The authority/limit of the front office personnel vary from person to person depending upon the job description and every person has to perform his/her duty within the limits allocated by the senior management. The Front Office consists of the following personnel:

- ⇒ Treasurer
- ⇒ Chief Dealer
- ⇒ Senior Dealers
- ⇒ Junior Dealers/Position Pad Writers

The main functions of Treasury Front Office are:

- ⇒ Recording and compiling of all foreign and local currency transactions reported by different departments and different branches of the Bank
- ⇒ Taking a view on the foreign currency and interest rate movements in the market
- ⇒ Squaring foreign and local currency exposures in the inter-bank and international markets and with the State Bank
- ⇒ Monitoring and compliance of the State Bank and Head Office limits, especially:
 - Net Open Position (NOP)/Exposure Limit
 - Balances Held Abroad/NOSTRO Accounts Limits
 - Overall and Overnight Limits for each currency
 - Intra-day Limits for each currency
 - Gap Limits in local and Foreign Currencies
 - Counterpart Exposure Limits

4.38 TREASURY BACK OFFICE

Treasury Back Office or Settlements is primarily responsible to settle deals done by the Front Office and to provide support to the Front office and to provide support to the Front Office in terms of various MIS reports that would assist in managing risk and exposure.

Treasury Back Office should be administratively independent of the Front Office so that the management may exercise an effective check on the workings of the front Office. Therefore, the Back Office should report to an independent unit/branch head instead of Treasury Manager in order to have a proper control and check over the functions of the Front Office.

Treasury Back Office may consist of the following personnel:

- ⇒ Treasury Operations Manager
- ⇒ Head of Foreign Currency Settlement
- ⇒ Head of Local Currency Settlement

The main functions of Treasury Back Office are as under:

- ⇒ Verify the contents of the deal slip originated by the Front Office with the attached confirmation – either a printout of the dealing system or a copy of the telex conversation or a broker note, if the deal is done through a broker.
- ⇒ Generate and dispatch confirmation of the deal to the counterpart
- ⇒ Prepare payment instructions for the deal on maturity
- ⇒ Ensure that payment is received from counterpart
- ⇒ Prepare and post accounting entries on foreign currency ledger and general ledger
- ⇒ Prepare and update various MIS reports e.g., Forward Projection Charts, Gap Charts, Cash Flow charts, Counterpart Exposure Repots.
- ⇒ Update Front Office with information relating to deals maturing on the date.

All the above functions must be efficiently and promptly carried out by the Back Office and it should be ensured that the deals originated by the front office are settled on the actual due dates and there is no undue delay resulting in payment of interest for the late delivery of funds that may eat away the profits made by the Front Office.

The better liaison and coordination between the Front Office and Back Office will result in the better performance of the Treasury Unit. That in turn will have a positive impact on the overall performance of the Bank.

4.39 TREASURY MIDDLE OFFICE

Treasury Mid Office is a relatively new concept and is important from the managerial central point of view. Its job is to check and control the activities of the Front Office as well as Back Office and to perform certain independent functions in order to assess the accuracy and efficiency of the workflow involved. The Mid Office should report directly to the senior management independently and its staff should be fully conversant with the functions of both – Front Office and Back Office.

Treasury Mid Office may consist of the following personnel:

- ⇒ Treasury Mid Office Manager
- ⇒ Head of Internal Reporting
- ⇒ Head of External Reporting

The main functions of the Treasury Mid Office are as under:

- ⇒ Reconciliation of Dealer Position Pads
- ⇒ Mar-to Market/Revaluation of Foreign Exchange and Money Market Positions
- ⇒ Follow-up on breaches and non-compliance of agreed standards
- ⇒ Review of functions of Front and Back Office and confirm the compliance of all requirements of State Bank and Head Office
- ⇒ Suggest improved procedures to senior management

It is the responsibility of the Mid Office to ensure that the Front Office personnel are dealing within the parameters provided by the senior management and also to warn their management of irregularities in dealing to prevent unwarranted losses. Following are the instances of the unauthorized transactions, when come to notice, should be immediately brought to the attention of the senior management for necessary action:

- ⇒ A sudden increase in volume to levels considered too large in relation to the size of the bank or branch concerned
- ⇒ An unusual increase in the turnover in a banks clearing/nostro accounts with central bank/correspondent banks, particularly if overdrafts were to occur frequently

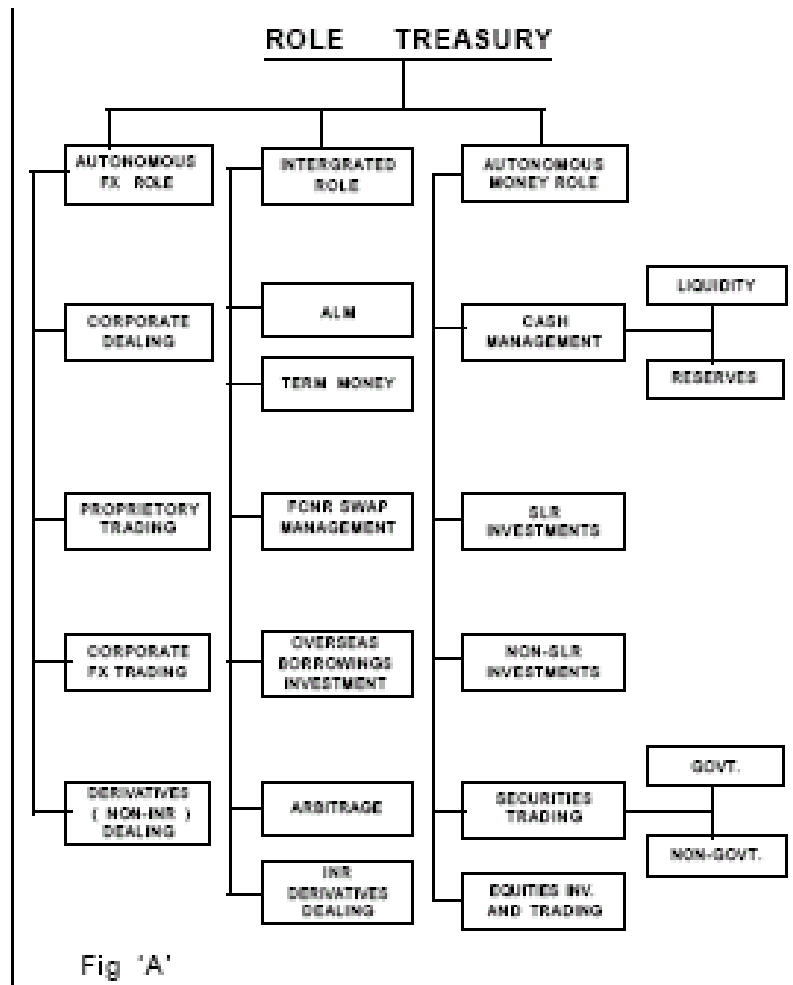
- ⇒ A change in normal pattern of dealing
- ⇒ Failure to receive confirmations of dealings
- ⇒ No satisfactory response to requests for verification of outstanding contracts
- ⇒ A willingness or desire to deal at a price that is deliberately pitched outside the market level.

4.39.1 SEGREGATION OF DEALING AND ACCOUNTING FUNCTIONS

It is essential that the dealing decision and its execution be separated and performed by different functionaries. This ensures that a check is maintained on the dealer's activities and the dealer of course cannot execute a dealing decision without involving the accounts section.

4.39.2 OVERDUE BILLS AND CONTRACTS

Export bills and forward contract have to be monitored to ensure that they are delivered as per their tenor. Failing this the bank is likely to incur considerable swap costs in maintaining these items in position.



FUNCTIONAL DEFINITION OF TREASURY ROLES

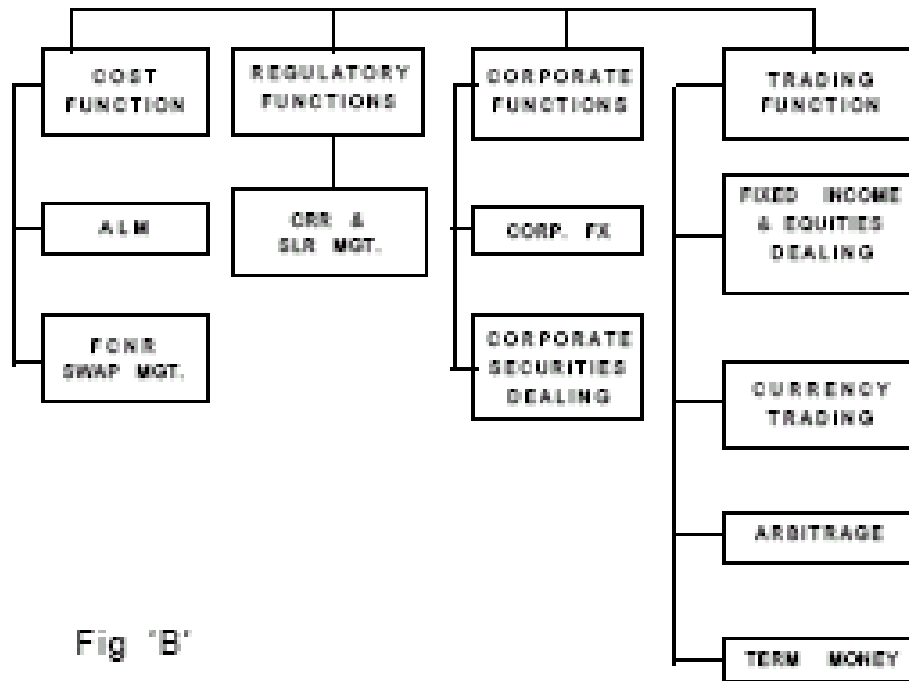
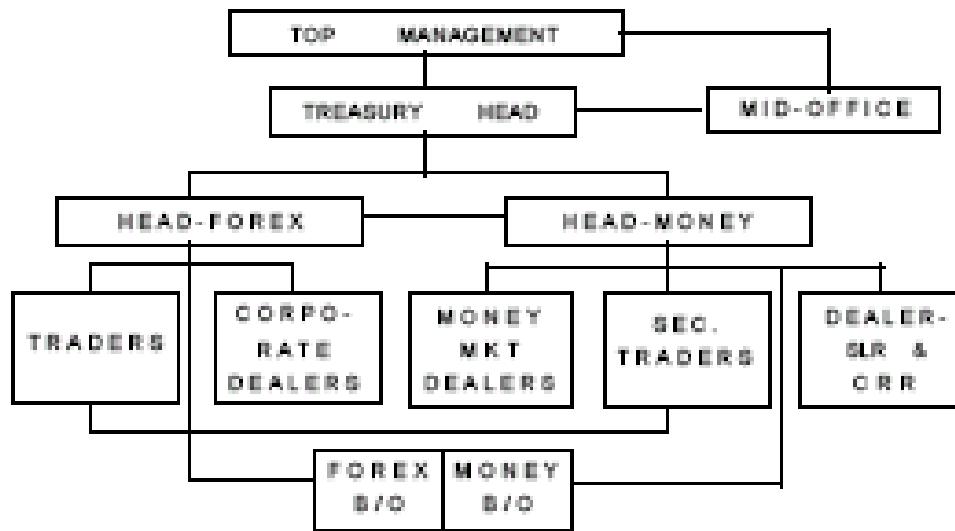


Fig 'B'

PROPOSED INTEGRATED TREASURY STRUCTURE



4.40 GAP CHART

Just like Forward Projection Chart, the Gap Chart is to be prepared for every currency separately. The Gap Chart will contain the different columns which are generally known as GAPS. Gap means that a particular period within which the outstanding spot and forward contracts will mature. Every Gap will represent a particular period, as under:

1. Spot – Outstanding Spot and Forward Contracts maturing within spot period from the date of origination.
2. 1 week - Outstanding Spot and Forward Contracts maturing within a period of one week from the date of origination.
3. 2 week - Outstanding Spot and Forward Contracts maturing within a period of two weeks from the date of origination.
4. 1 month - Outstanding Spot and Forward Contracts maturing within a period of one month from the date of origination.
5. 2 month - Outstanding Forward Contracts maturing within a period of two months from the date of origination.
6. 3 month - Outstanding Forward Contracts maturing within a period of three months from the date of origination.
7. 4 month - Outstanding Forward Contracts maturing within a period of four months from the date of origination.
8. 5 month - Outstanding Forward Contracts maturing within a period of five months from the date of origination.
9. 6 month - Outstanding Forward Contracts maturing within a period of six months from the date of origination.
10. 7 month - Outstanding Forward Contracts maturing within a period of seven months from the date of origination.
11. 8 month - Outstanding Forward Contracts maturing within a period of eight months from the date of origination.
12. 9 month - Outstanding Forward Contracts maturing within a period of nine months from the date of origination.
13. 10 month - Outstanding Forward Contracts maturing within a period of ten months from the date of origination.

14. 11 month - Outstanding Forward Contracts maturing within a period of eleven months from the date of origination.
15. 12 month - Outstanding Forward Contracts maturing within a period of twelve months from the date of origination.

Every column or Gap will reflect the net of outstanding purchases and outstanding sales and the net figure will be represented by LONG (overbought) or SHORT (oversold).

For every Gap a limit is provided by the Head Office/General Manager/Treasury Manager or any other appropriate authority within which the Front Office Dealers must keep their positions whether the position is LONG or SHORT. With the passage of time the outstanding forward contracts reflected in the Gap of maturity will come nearer and nearer when they are compared with the actual date of the statement.

4.40.1 FACTORS RESPONSIBLE FOR CREATION OF DIFFERENT GAPS

1. Forward Bookings by Customers
2. Early Take-ups and Cancellation of Forward Contracts
3. Forward Maturities

These are the instances when actual gaps are created and the Front Office Dealers must cover these transactions accordingly.

Sometimes even after covering the above transactions a gap is also created, as under:

“A customer wants to import goods from abroad and he is not sure that when the goods will arrive and what will be the exchange rate prevailing at that time. In order to cover the exchange risk and to cover his position the customer will deal with the Bank in such a way that he should not suffer by way of exchange loss at the time of arrival of goods.”

“In this situation the customers, in Pakistan, generally book forward for six months optional. By optional it means that this forward contract will be at the option of the customers and the maturity date will not be say six months fixed. Again the optional contracts are booked by the customers in two ways. Firstly the contract is at the option of the customer in the last month of actual maturity and secondly the contract is at the full option of the customer's right from the date of origination to the actual maturity date. Option means that the customer has got the option to take up the contract on any date during that optional period and not that the customer has got

the option to cancel the deal. The contract will only be cancelled if it remains outstanding after the actual maturity date.

In order to get the optional delivery contract, the customer will have to pay a higher price than the actual forward price. The reason being for payment of higher price by the customer is based on the following facts:

“When an optional contract is booked by the customer, the Dealers in the Treasury Front Office are not sure about the actual delivery date therefore they cannot cover this transaction in the Market for a specific date. In these types of transactions, the deliveries are generally taken up before the actual maturity dates and hence these transactions are covered by the Dealers in the earlier months. In case if the forward contract is not taken up by the customer in the month of Front Office Dealer booking, automatically the dealers will have to take up their contracts done in the Inter-Bank market and to cover this situation the Front Office Dealers will have to enter into a SWAP TRANSACTION to regularize the position.”

The high price paid by the customer at the time of Optional Contracts actually relate to the SWAP COST which the bank will incur.

4.41 VALUE AT RISK (VAR)

4.41.1 WHAT IS VALUE AT RISK (VAR)

Value at risk is an estimate of the risk in a mixed portfolio in dollar terms. It is an approximation, a ball park figure, designed to give senior managers a feeling for the risks that a company is running. VAR attempts to answer the questions, “Given reasonable assumptions about the market, what is the greatest loss likely to occur in a portfolio of risks?”. The problem is in the assumptions made about notoriously fickle markets (especially where derivatives are involved) and varying expectations between managers and companies.

In order to measure exposures when evaluating trading books, many banks calculate "value-at-risk" (VAR), representing the maximum amount by which the market value of their trading portfolios could decline during a specific period of time and with a pre-defined degree of

statistical confidence. For example, at the close of business, a bank might calculate its VAR to be \$10 million at a level of confidence of 99% over a one-day period. Most banks use this measure as a management and capital allocation tool for evaluating their trading positions, limits, and strategies. By measuring the risk daily, management can quickly revise its positions, limits, and strategies as market conditions change. VAR models come in different varieties including:

- ⇒ Variance/Co-Variance Models
- ⇒ Historical Simulation Models
- ⇒ Monte Carlo Methods.

VAR performs a role similar to that of modified duration (Price Value of a basis point), which gives Treasury and funds managers a good approximation of the potential loss (or profit) in a bond portfolio as a result of a small, parallel movement in the yield curve. VAR is designed, however, to be used not only to estimate the risks in a portfolio of bonds but also that contain Foreign Exchange, Equity and Commodity positions and even the derivatives.

There are three major assumptions needed to estimate VAR:

1. **Holding Period** the investment horizon or the period in which the positions could be liquidated.
2. **Historical Observation Period** the period over which changes in the market prices have been gathered to compute price volatility.
3. **Confidence Level** the level of probability that the actual loss will not exceed VAR.

For example, if the VAR on a portfolio was estimated to be \$1 million at a 99% confidence interval then, assuming no shift in the market over the holding period, the portfolio would be expected to lose more than \$1 million only one day in every 100.

The calculation of VAR is very sensitive to the assumptions made and care must be taken when comparing VAR numbers to ensure that the results are measuring the same risks over the same periods using the same confidence levels.

4.41.2 WHY IS VALUE AT RISK IMPORTANT?

Value at risk is important because it has become the standard tool used by large financial institutions and banking regulators to estimate the amount of capital that banks must maintain to cover their risk taking activities. It is equally important for shareholders and stakeholders.

By converting portfolio risk to a single number that is expressed in terms that management can understand, it becomes easier for senior managers to compare investment returns across businesses on a risk adjusted basis, demanding higher returns for those businesses that bear the highest risk. In volatile markets, it allows management to place limits on trading activity based not on the arbitrary size of positions but on the losses that could occur if the positions turned bad.

It also promotes better risk management, allowing managers to delve into the activities of traders and fund managers to ensure that risks are not being hidden. Three major methods for estimating VAR have been proposed by the banking industry:

1. **Variance/Covariance** based on statistical summaries of price behavior. While this approach is mathematically elegant and handles market correlations it does not cope with derivatives well.
2. **Historical Simulation** using historical observations to create a Profit and Loss distribution from which VAR could be estimated easily. While this approach makes no assumptions about return distributions and can handle derivatives, it does assume that the future resemble the past and hence does not cope well with market shocks.
3. **Monte Carlo Simulation** using random simulation to generate a Profit and Loss distribution based on the possible changes in market prices. While relatively simple to implement, this method requires a very large amount of computer power to arrive at a reasonable estimate.

Each of these approaches has problems and their accuracy depends on the intricacy of the models used and the historical data behind them. There are three major practical problems using VAR:

- ⇒ Data on the precise risks that firms are running
- ⇒ Data on the market characteristics of those risks
- ⇒ Data on the correlation between risks

Another major problem in using VAR is obtaining information about the likely behavior of the risks that firm is running. However, data about the statistical behavior of prices of heavily traded assets, such as major currencies and stock indices, can be purchased from specialist market data vendors, such as Bloomberg and Reuters.

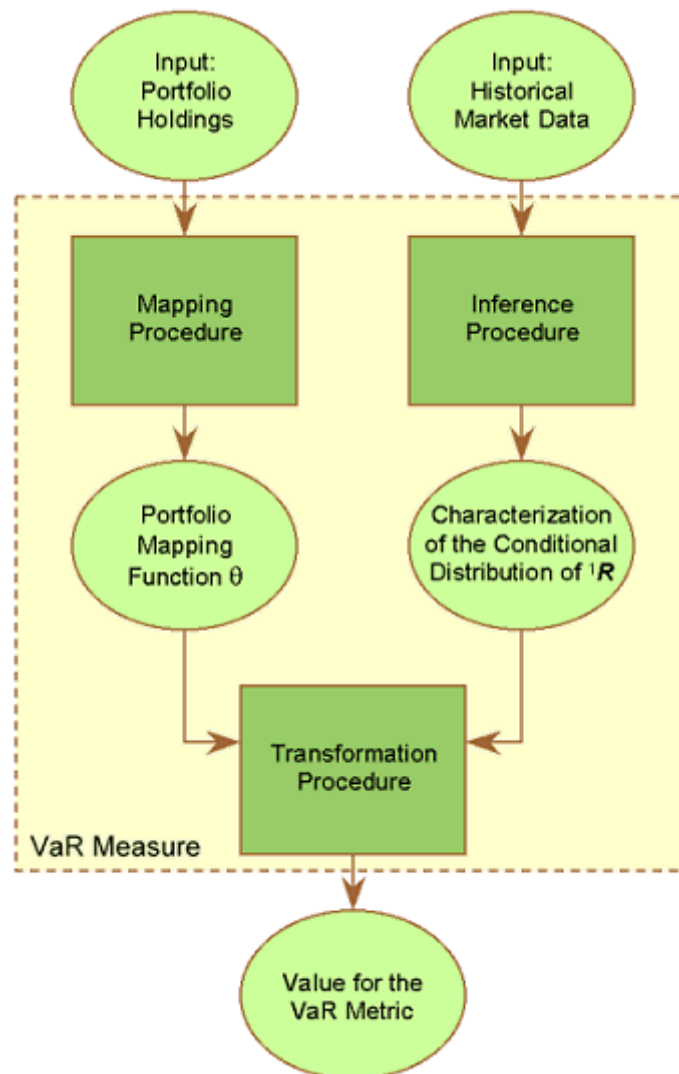
The final category of data that is difficult to collect and interpret is the correlation between the behaviors of various types of risks. It is difficult to quantify such relationships in a form that can be used to measure risk.

4.41.3 CONCLUSION

Despite the many problems with its use and interpretation, Value At Risk is an important tool for managing risk because it quantifies the risks across a firm in a consistent manner and expresses that risk in a form that senior management can understand i.e. Dollars.

With an appreciation of the amount of money involved, executives can address those areas of the business in which they wish to increase and decrease their risk taking activities.

4.41.4 SCHEMATIC REPRESENTATION OF HOW VAR MEASURES WORKS



4.42 RESERVE MANAGEMENT

4.42.1 WHAT IS RESERVE MANAGEMENT AND ITS IMPORTANCE?

Reserve management is a process that ensures:

- Public sector Foreign Assets are readily available and controlled by define range of national objectives
- A reserve management entity is normally made responsible for the management of reserves and to control all its risks.

- c. Sound reserve management practices are important because they can increase a country's overall resilience of shocks.
- d. Support and maintain confidence in the FX and monetary policies and the capacity to intervene in support of national interest
- e. Maintain Foreign Currency liquidity that can be utilized at the time of shocks
- f. Level of confidence in the market
- g. Demonstrate the backing of domestic currency by external assets
- h. Reserve for national disaster or emergencies
- i. Fiscal income for the country

4.42.2 OBJECTIVES OF RESERVE MANAGEMENT

The main objective of reserve management is to be adequate and available for meeting a define range of national objectives including direct financing or indirect regulations of a country's external imbalances.

4.42.3 STRATEGIES FOR RESERVE MANAGEMENT

- ⇒ Be consistent with and supportive of the country's specific policy in respect of monetary and exchange rate arrangements
- ⇒ Purposes of reducing country external vulnerabilities

4.42.4 TRANSPARENCY AND ACCOUNTABILITY OF RESERVE MANAGEMENT

For this there should be:

- ⇒ Clarity of roles and responsibility
- ⇒ Open process
- ⇒ Public availability of information

4.42.5 INSTITUTIONAL FRAMEWORK OF RESERVE MANAGEMENT

The institutional framework for reserve management should be such that it ensures sound governance and be supported by legislative framework. Not only should this but it also enable sound management of internal operations and a sound operational system.

4.42.6 RISK MANAGEMENT FRAMEWORK OF RESERVE MANAGEMENT

- ⇒ Framework that identifies and assess the risk of reserve management operation
- ⇒ Risk exposures should be frequently monitored
- ⇒ Active management of portfolios
- ⇒ Stress tests to ascertain the potential effects of macroeconomics and financial shocks.

4.42.7 INVESTMENT AND DISINVESTMENTS DECISION OF RESERVE MANAGEMENT

These decisions should be based on: market awareness, self requirements of various banks and their branches, future strategies to be pursued, perception of the market about what's going to happen in future and knowledge about the products being offered.

4.42.8 EXISTING STRATEGY OF RESERVE MANAGEMENT

AIM & STRATEGY

The basic aim of the investment policy is to ensure availability of enough foreign exchange liquidity to meet foreign exchange obligations. Existing policy is based on the following principals:

- ⇒ State Bank being a Central Bank should avoid element of speculation in foreign currencies
- ⇒ Liquidity maintenance
- ⇒ Security
- ⇒ Maximizing returns, while ensuring the first two considerations.

Foreign exchange reserves held by the State Bank of Pakistan stood at \$ 12751.7 million on end-January 2005, showing an increase of 6.2% over the level of \$ 12006.5 million as on end-January, 2004. The currency most used in foreign exchange transactions is Dollar followed by Pounds. These and other currencies are used for payments of debt and opening of LCs by the banks on behalf of its customers. Basis that the banks follow in order to determine the level of particular currency in its forex reserve portfolio is:

- ⇒ To cover minimum balance of payments
- ⇒ For customers: import of machinery or raw material/finished goods
- ⇒ Liquidity characteristics of particular currency in market

Objective to maintain foreign exchange reserves are:

- ⇒ Maintaining confidence in monetary and exchange rate policies;
- ⇒ Enhancing capacity to intervene in foreign exchange markets;
- ⇒ Limiting external vulnerability by maintaining foreign currency liquidity to absorb shocks during times of crisis;
- ⇒ Providing confidence to the markets especially credit rating agencies to the effect that external obligations can always be met, thus reducing the overall costs to the economy or the market participant's adding to the comfort of the market participants, by demonstrating the backing of domestic currency by external assets.

It is not uncommon to find some pressure on exchange rate building when economic activity accelerates. Pakistan has witnessed some pressure on exchange rate during the current fiscal year for a variety of reasons:

1. As a result of acceleration in economic activity the demand for imported machinery, raw material and capital goods have surged. During the first six months of the current fiscal year, imports of non-food, non-oil are up by 36%. Therefore, such a massive increase in import of these items has increased the demand for US dollar and as such Rupee came under pressure.
2. The oil price in international market has touched as high as \$ 56 per barrel, causing 38% increase in the import of crude and petroleum products in value term. This has also increased the demand for dollar and generated pressures on Rupee. Pre-payment of expensive external loan also put pressure on exchange rate. As such, the Rupee – Dollar parity in inter-bank market stood at Rs.59.5 per US dollar on end-January, 2005 as against Rs.57.4 on the same period last year, reflecting a depreciation of 3.5%. However, since the beginning of the current fiscal year, Rupee has depreciated by only 2.0%. In the meantime, Rupee – Dollar parity in the open market on end-January, 2005 was Rs.59.7, showing a premium of 0.3%. As against the corresponding period of last year, rupee depreciated in the open market by 3.7%. On the whole, exchange rate has remained stable and the government is committed to maintain a stable and strong Rupee consistent with country's macroeconomic fundamentals.

Chapter 05

FINDINGS, CONCLUSION & RECOMMENDATIONS

CHAPTER 5

FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 FINDINGS

- With the global recognition towards need of an effective risk management and control systems in financial sector, State Bank of Pakistan being cognizant of the importance of the subject, has prepared guidelines on Risk Management by banks/DFIs. These guidelines, organized by risk category, are designed to provide an overview of actions financial institutions may take but do not intend to detail every control procedure that might be put in place.
- The guidelines contain a brief introduction to risk management and a detailed elaboration of major risks that financial institutions may be exposed to. Risk Management encompasses risk identification, assessment, measurement, monitoring and mitigating/controlling of the risks inherent.
- The major risks to which the financial institutions can be exposed to include credit, market, liquidity, and operational risks.
- The State Bank had recently allowed over the counter financial derivatives in Pakistan, under which banks were permitted to undertake interest rate swap, foreign currency option and forward rate agreement on the basis of transactional approval from SBP.
- The State Bank's decision to allow banks to undertake the financial derivatives business is to concurrently develop the FX market and to provide a risk hedging mechanism to the market participants.
- During the study conducted for preparation of this thesis it was found that State Bank exercises strict control over the banks. This reduces and at times eliminates the risk involved in forex trading of commercial banks.
- State Bank has designated the cut off points, depending on kinds of transactions, and commercial banks not allowed crossing without permission. This too, if done, has

penalties which banks usually avoid because it can reduce rating of bank and hence its standing.

5.2 CONCLUSION

- Different banks use different methods for handling and reducing the different risks in which one is foreign exchange hedging where banks make contract with other banks and take forward rate for needed currency. With this banks reduce their future losses.
- Other methods are interest sensitive gap management and duration gap both of them are used for interest rate risk. They are important for reducing the risk, performance and profitability of the bank.
- Swapping of interest rate and currency also plays crucial role in the operations of the bank.
- The financial institutions are exposed to various risks when trading in foreign exchange and foreign currencies; the nature and complexity of which has changed rapidly over time. The failure to adequately manage these risks exposes financial institutions not only to business losses, but may also render them unsuccessful in achieving their strategic business objectives. In the worst case, inadequate risk management may result in circumstances so catastrophic in nature that financial institutions cannot remain in business.
- Although rapid developments are taking place internationally in this area, our banks have yet to come up with a solid framework for risk management. Some of the banks have made progress in this area, but they differ significantly in relation to the expertise and the sophistication of systems in place for risk management. In some financial institutions, it has been considered primarily in an operational sense, while others practice a more structured approach towards risk management.
- Banks should have contingency plans for any unexpected or worst case scenarios.
- The adoption of the guidelines will also facilitate the banks in their preparation for the implementation of New Basel Capital Accord in due course. Once the New Basel Accord is introduced in Pakistan, these guidelines will converge with the requirement of the Accord and would become an enforceable regulation. The banks are also expected to

provide necessary training to their concerned staff in risk management through Institute of Bankers or other training institutions / experts having expertise in this area.

- The medium-term objective of developing an efficient and vibrant forex market continues to be an important priority within the overall framework of development of financial markets. Naturally, the pace and sequencing have to be determined by both the domestic and international developments.
- The unique features of forex markets, legal, institutional and technological factors, and developments related to macro-economic policies would govern the path of moving towards the medium-term objective, without sacrificing freedom in tactical measures to respond to unforeseen circumstances in the very short-term.

5.3 RECOMMENDATIONS

- Banks should setup special committees to study thoroughly the New Basel Accord so that it can be implemented efficiently and prove effective for the banks.
- The objective of a stable, realistic exchange rate, which does not erode the competitiveness of Pakistani exports, can only be realized if the SBP has adequate reserves and can intervene at times to achieve this objective. In the long term we have to maintain or enhance Pakistan's share in the world markets and this market share cannot be allowed to slip away due to volatility or violent swings in the exchange rate. A proactive policy of Reserve management helps Pakistan in maintaining the competitiveness of its goods and services in the world economy.
- Adequate foreign currency is needed at the time when debt-servicing payments fall due to avoid a default. Unlike in the past when the State Bank and the Government had to raise expensive commercial loans to make these payments, gradual accumulation of reserves through non-debt creating means to a sufficiently comfortable level avoids the panic in the market and obviates the need for contracting additional debt for the country.
- The global crackdown on Hundi network will lead to the collapse of the kerb market premium, a reversal of market devaluation expectations. All of this will set the basis for accelerating liberalization of the foreign exchange market and particularly the removal of segmentation between the interbank and kerb markets.

- There are some limits on freedom accorded to banks such as ones on borrowing and investing overseas; ceilings on interest rates and maturities of non-resident foreign currency deposits and these could be reviewed at appropriate time, with a view to liberalizing them prudently.
- Setting up a forex clearinghouse should be considered and it is essential to design it on par with other leading clearing systems in the world.
- Hedge known future obligations - this is the strategy that by default almost all banks use.
- Use the time between the recognition of the foreign exchange exposure and the time that the foreign currency will be needed, to achieve the lowest price of the foreign currency. This can normally be most effectively achieved by a predetermined strategy that sets levels and trigger points to achieve purchasing targets.
- SBP should hedge their foreign exchange reserves by using different derivative methods to reduce risk (like exchange rate risk and interest rate risk) and can also minimize cost of holding foreign exchange reserves.

APPENDIX

QUESTIONS ASKED DURING INTERVIEWS

1. On what basis do you allocate these reserves/resources to the different regions where you operate?
2. Which currency is most used for opening LCs?
3. Which risk factor do you consider as most important or significant in case of LCs?
4. What is the basis for including a currency in your forex reserve portfolio?
5. Have you ever been influenced by SBP in your decision for maintaining reserves at particular level? If yes, state what?
6. What is the impact of payments of any form by any party (government, companies etc) on your forex?

7. Which kind of payments has the major proportion (debt – by company or government, oil payments)?
8. Which currency do you prefer for investment?
9. How do you hedge floating exchange rate and fixed exchange rate investment in bonds?
10. What factors force you for overbuying and taking risk?
11. What are the risk factors that you are exposed to in this long position?
12. How do you hedge this risk (by taking what steps and measures)?
13. What measures do you take to hedge risk in an environment where your exposure is more?
14. Are you encountered or affected by central banks or governments rules and regulations in foreign country?
15. Has there been a decline in Hundi Operations in Pakistan?
16. What is the impact of Brokers or companies like Western Union's on forex rates and transfer through commercial banks?
17. In your opinion, what is the proportion of funds transferred through Hundi and that from commercial banks?
18. What steps do you take to counter risk that result from this illegal transfer of funds?
19. Does the government provide you with any kind of support in your efforts to overcome and hedge risk due to Hundi operations?
20. Risk on forex rates and reserves due to increased imports and their payments?
21. In your opinion what are the weaknesses in the present system for forex trading?
22. What are the recommendations and measures that should be taken in light of these weaknesses for improvement?

