(NIMS)

NUST Institute of Management Sciences

MBA 2002

FINAL RESEARCH THESIS

PROSPECTS OF FUTURE FLOW SECURITIZATION IN PAKISTAN (PRACTICAL ASPECT)

Thesis Advisor:

Ms. Fauzia Janjua

Submitted by:

Ahmed Bilal Siddiqui

Roll # 106

NUST Institute of Management Sciences, Tamiz-ud-din Road, Rawalpindi Cantt.

PROSPECTS OF FUTURE FLOW SECURITIZATION IN PAKISTAN
(PRACTICAL ASPECT)

By

AHMED BILAL SIDDIQUI
2002-NUST-MBA-102

NUST INSTITUTE OF MANAGEMENT SCIENCES
NATIONAL UNIVERSITY OF SCIENCES AND TECHNOLOGY
RAWALPINDI

AUGUST 2004

BISMILLAH

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ 96-1

IN THE NAME OF ALLAH THE MOST BENEFICIENT THE MOST MERCIFUL

DEDICATED TO MY NATION WHICH HAS EVERY THING WITH THEM EXCEPT SINCERITY

HYPOTHESIS

Prospects of future flow securitization in Pakistan. Whether it is possible to carry on future flow securitization in Pakistan. If yes than which areas are suitable for this type of securitization. What are the benefits; limitations and disadvantages if any?

ACKNOWLEDGEMENTS

All praise is due to almighty Allah the most merciful and the most beneficent who bestowed upon me health, power of communication and opportunities to successfully complete my thesis. Countless salutations be upon the Holy Prophet (SAW), the most perfect and a torch of guidance and knowledge for humanity as a whole.

I express my deepest gratefulness to my advisor, Ms Fouzia Janjua whose constant encouragement and superb guidance made this study a success. She helped me a lot in my thesis. I offer sincere thanks for her help and efforts.

Heartfelt thanks are extended to my committee members Mr. Naukhez , Mr. Hammad Ashraf and Mr. Sabir Jafri for their kind guidance and supervision during my research work.

Special Thanks are extended to Mr Ayyaz Ahmed who despite of all his commitments being the EVP of Askari Leasing helped me through out my thesis and made this effort a success.

Finally I m thankful to all the people who bear me during my thesis work. My family which was so encouraging towards me all the time, my friends who were kind enough to discuss with me the findings of this paper and finally each and every person of my institute who helped me one way or another.

Ahmed Bilal

MBA 2oo2

NIMS

Table of Contents

Fore Word: 1
Scope of Study: 2
Methods 3
Expected Results 4
LITERATURE REVIEW 5
CHAPTER # 1 5
1.1. Definition: 6
1.2. Process: 8
1.3. Purpose: 9
1.4. Typical Asset Characteristics: 10
1.4.1. Cash-flow: 10
1.4.2. Security: 10
1.4.3. Homogeneity: 10
1.4.4. No executory clauses: 10
1.4.5. Capacity: 11
1.4.6. Independence from Originator: 11
1.5. Securitisation Credit: 11
1.6. Corporate Credits: 12
1.7. SPV Credit Analysis: 12
1.8. Operations of SPV: 13
1.9. Parties Involved: 14
1.10. Typical Rating Concerns: 15
1.10.1 Credit Risk: 15
1.10.2. Solvency: 16
1.10.3. Tax Risks: 16
1.10.4. Corporation Tax: 16
1.10.5. Stamp Duty: 16
1.10.6. Special Risks: 17
1.10.7. Set Off and Related Risks: 17
1.10.8. Executory Contracts: 17
1.10.9. Unsecured Creditors: 18
1.10.10. Contractual Failure: 18
1.11. Required Steps: 19
1.11.1. Review: 19
1.11.2. Asset Analysis: 19
1.11.3. Transaction Analysis: 20
1.11.4. Legal and Tax: 20
1.12. Cost of Funds or Capital? 21
1.15. Accounting: 22
1.16. Risk Allocation: 22
1.17. Hedging: 23
1.18. Tax Advantages: 23
1.19. Tax Status of the Issuer: 24
1.20. Systems Issues: 24
1.20.1. Prior to Completion of the Transaction: 24

1.20.2. Completion of the Transaction: 24
1.20.3. Post Completion of the Transaction: 25
1.21. Methodology: 26
1.22. Transfer of Assets in Securitisation: 27
1.22.1. To whom should the Assets be Transferred? 28
1.22.2. Is a Transfer of Assets Necessary? 28
1.22.3. How should the Assets be Transferred? 28
1.22.4. What are the Methods of Transfer? 29
1.22.5. Which of these Methods should be Followed? 29
1.22.6. What needs to be done to Ensure a Transfer or Assignment? 29
1.22.7. What are the problems with assignment or sale? 29
1.22.8. True Sale Question: 30
1.22.9. Why is a True Sale Required? 30
1.22.10. What needs to be Done to Achieve True Sale? 30
1.22.11. What if a Transfer is not a True Sale? 31
1.22.12. What kind of Receivables can be Subject of a True Sale? 31
FUTURE FLOW SECURITIZATION 32
CHAPTER # 2 32
2.1. Motivations in Future Flow Securitisation: 34
2.2. Risks in Future Flow: 34
2.3. Bankruptcy risk 35
2.3.1. Legal issues in future flow securitization 35
2.3.2. Accounting for future flow securitisation: 36
2.4. Other methods of mitigating sovereign risk: 36
2.4.1. Political risk insurance 36
2.4.2. Making use of preferred creditor status: 36
SECURITIZATION IN PAKISTAN 37
CHAPTER # 3 37
3.1. Introduction: 38
3.2. The Leasing Sector: 38
3.3. Telecom: 39
3.4. Market Performance: 41
3.5. The Way Ahead: 43
SECURITIZATION PRACTICAL ASPECT (CASE STUDY) 45
CHAPTER # 4 45
4.1. Which Assets should be Securitized? 47
4.2. For how much Time should they Securitized? 48
4.3. What should be the Rate of Return? 48
4.4. What Risks are Involved? 48
4.5. Portfolio of Sales Tax Receivables for Securitization 49
4.6. Structure of the Transaction: 52
4.6.1. Application: 52
4.6.2. Parties to the Transaction: 52
4.6.2.1. .SPV Limited - *(As buyer of the receivables):* 52
4.6.2.2. Originator - *CBR (as seller of receivables):* 52
4.6.2.3. Service Agent - *CBR:* 52

4.6.2.4. Security Trustee – *Habib Bank Limited*: 52
4.6.2.5. Collection Agent – *Habib Bank Limited*: 53
4.6.2.6. Performance Guarantor to the SPV- *Ministry of Finance Government of Pakistan:* 53
4.7. Issuance of Securities & Related Matters: 55
4.7.1. Source of Payment to Security Holders- Purchased Receivables: 55
4.7.2. Investor Eligibility: 56
4.7.3. Basis of Allotment of Securities: 56
4.7.4. Minimum Subscription: 56
4.7.5. Redemption of Securities: 56
4.8. Risk Factors & Mitigation: 65
FINDINGS 67
CHAPTER # 5 67
5.1. Benefits of Future Flow Securitization in this Particular Scenario? 68
5.1.1. Time Value of Money: 68
5.1.2. Optimal Utilization of Resources: 70
5.1.3. Govt Can Launch a Mega Project: 70
5.1.4. Cost of Capital (Compare to lending institutions): 70
5.1.5. Money will Remain in the Country: 71
5.1.6. Early Developmental Projects: 71
5.2. Limitations of Future Flow Securitization: 72
HYPOTHESIS 76
CONCLUSION 77
CHAPTER # 6 77
Bibliography: 79

Fore Word:

Financial gurus are considering securitization as a financial instrument of the new millennium and rightly so because it has solved the problem of limited debt of many financially mediocre companies. Now even government of different countries is using it to lessen their financial problems.

Securitization made its debut on US agency mortgage-backed markets in the late 1960s. Some twenty years later, US finance companies originating non-mortgage assets (namely, auto loans and credit cards) adopted the technique as an off-balance sheet funding mechanism, in turn launching the asset backed market.

Securitization essentially implies creation of securities, generally, any process by which securities i.e. tradable capital market instruments are created, is securitization. How ever, in present day capital market usage, the term is implied to include securities created out of a pool of asset, normally receivables, which are put under the legal control of the investors through a special intermediary created for this purpose called special purpose vehicle or SPV. The securities are liquidated on the primary strength of the assets in the pool.

As we will be discussing future flow securitization in this paper so let's shift the focus on this concept. Mexico was the first country to securitize future flows; the transaction goes back to telephone receivables of Telecom Company in 1987.

The distinguishing feature of future flow securitization is the fact that the asset being transferred by the originator is not an existing claim against existing obligors, but a future claim against future obligors. The claims are yet to be created against obligors who are yet to be identified. Examples can be export receivables, Government revenues and public utilities receivables.

Scope of Study:

We are a developing country under tremendous foreign and internal debt burden. What happened in past was not our fault because we were not there but now we should at least try to better our present for an excellent future. Getting militarily stronger is no more the rule of game. Getting economically undefeatable is more important.

We do not have enough resources to meet even our expenses. So to meet our own expenses we need finances rather cheaper finances. Future flow securitization is one of the sources to get cheaper finances without pledging any thing. If the exporting companies start securitizing their future flows from exports they would get money cheaper than any other source same is the case with the public utilities and government revenues. Most important is the last one because government always remains in need of money to meet expenses this will give them a much cheaper resource than International Monetary Fund and World Bank.

Paktel is one company which has securitized its future flows in recent past. They have taken a step others need to follow it after properly analyzing its consequences.

Methods:

As future flow securitization is a new concept so firstly we need to find out the methods to answer our research question. I will be following the below mentioned sequence to complete my research in the best possible manner:

- Getting hold of any previous study on future flow securitization.
- Identification of Suitable Pakistani Industries of exports by visiting Export Promotion Bureau.
- Identification of suitable public utilities by visiting their offices and later analyzing their expected future flows.
- Classification of most appropriate method of revenue collection by the Government of Pakistan and analyzing that against the requirements of future flow securitization.
- Historical data is of great importance for future flow securitization so gathering of historical data would be one of my prime tasks in completion of this research paper.
- Thorough internet search.
- Comprehensive Book study.

Expected Results:

It is not possible to say any thing for sure right now about the findings of this research paper. But still we can predict few out comes. It will be a break through if it proved to be successful as far as government revenues are concerned reason being that any decision by the government affects the whole nation. Similarly future flow securitization in public utilities will be of great benefit to the ultimate consumer because less cost of capital means less operating expenses and fewer burdens on ultimate consumer. Success of future flow securitization in export industry will eventually improve the national economy.

LITERATURE REVIEW

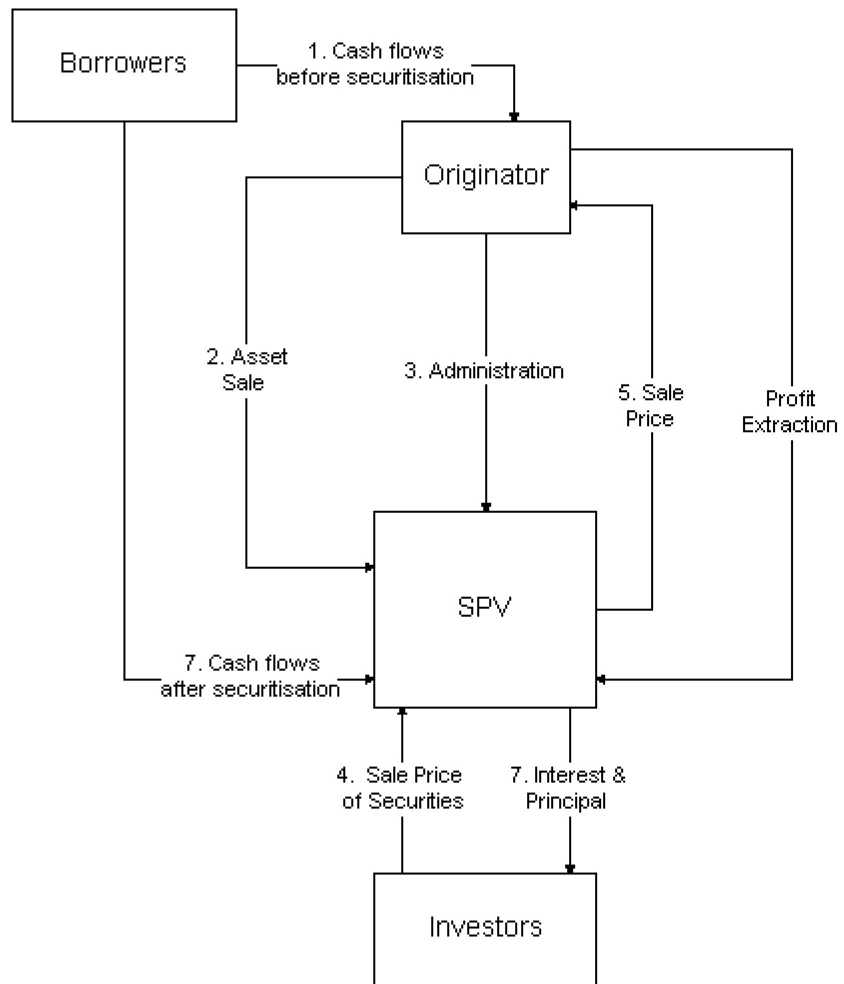
CHAPTER # 1

1.1. Definition:

Securitisation is a method of funding receivables of whatever kind (mortgage debts, leases, loans, credit card balances etc...). It involves producing bearer asset-backed securities which can be freely traded (and which are normally rated) secured on a portfolio of receivables. Not all receivables can be securitised, and not all originators are capable of meeting the requirements of the rating agencies.

The basic technique requires the rights to the receivables to be transferred to a special purpose company (referred to as the "Issuer") which then purchases or arranges credit enhancement, and then issues rated debt.

There are a number of varieties of "securitisation" and a number of different structures. However, there is a common theme to all of these transactions which is illustrated in the following diagram.


Borrowers
1. Cash flows
before securitisation
Originator
2. Asset
Sale
3. Administration
5. Sale
Price
Profit
Extraction
SPV
7. Cash flows
after securitisation
4. Sale Price
of Securities
7. Interest &
Principal
Investors

1.2. Process:

1. Assets are originated by a company, and funded on that company's balance sheet. This company is normally referred to as the “Originator".
2. Once a suitably large portfolio of assets has been originated, the assets are analyzed as a portfolio, and then sold or assigned to a third party which is normally a special purpose vehicle company (SPV) formed for the specific purpose of funding the assets. The SPV is sometimes owned by a trust, or even, on occasions, by the Originator.
3. Administration of the assets is then sub-contracted back to the Originator by the SPV.
4. The SPV issues tradable "securities" to fund the purchase of the assets. The performance of these securities is directly linked to the performance of the assets - and there is no recourse (other than in the event of breach of contract) back to the Originator.
5. Investors purchase the securities, because they are satisfied (normally by relying upon a rating) that the securities will be paid in full and on time from the cash flows available in the asset pool. A considerable amount of time is spent considering the different likely performances of the asset pool, and the implications of defaults by borrowers on the corresponding performance of the securities. The proceeds upon the sale of the securities are used to pay the Originator.
6. The SPV agrees to pay any surpluses which arise during its funding of the assets back to the Originator, which means that the Originator, for all practical purposes, retains its existing relationships with the borrowers and all of the economics of funding the assets (i e: the Originator continues to administer the portfolio, and continues to receive the economic benefits (profits) of owning the assets).
7. As cash flows arise on the assets, these are used by the SPV to repay funds to the investors in the securities.

1.3. Purpose:

Securitisation is one way in which a company might go about financing its assets. There are generally seven reasons why companies consider securitisation:

- to improve their **return on capital**, since securitisation normally requires less capital to support it than traditional on-balance sheet funding;
- to raise **finance** when other forms of finance are unavailable (in a recession banks are often unwilling to lend - and during a boom, banks often cannot keep up with the demand for funds);
- to improve **return on assets** - securitisation can be a cheap source of funds, but the attractiveness of securitisation for this reason depends primarily on the costs associated with alternative funding sources;
- to **diversify the sources of funding** which can be accessed, so that dependence upon banking or retail sources of funds is reduced;
- to **reduce credit exposure** to particular assets (for instance, if a particular class of lending becomes large in relation to the balance sheet as a whole, then securitisation can remove some of the assets from the balance sheet);
- to **match-fund** certain classes of asset - mortgage assets are technically 25 year assets, a proportion of which should be funded with long term finance; securitisation normally offers the ability to raise finance with a longer maturity than is available in other funding markets;
- To achieve a **regulatory advantage**, since securitisation normally removes certain risks which can cause regulators some concern, there can be a beneficial result in terms of the availability of certain forms of finance.

Establishing the primary rationale for the securitisation activity, is a vital part of the preparation for a securitisation transaction, since it influences the sorts of administrative tasks which need to be developed as well as the transaction structures themselves.

1.4. Typical Asset Characteristics:

Assets which can be securitised easily have a number of characteristics:

1.4.1. Cash-flow:

A principal part of the asset is the right to receive a cash flow from a debtor in certain amounts (or amounts defined by reference to a market or administered rate) on certain dates ie: the asset can be analyzed as a series of cash flows.

1.4.2. Security:

If the security available to collateralize the cash flows is valuable, then this security can be realized by the SPV. For instance, for a mortgage loan, there is security over the property and other collateral, which will make a significant contribution towards recovering any losses which might otherwise arise.

1.4.3. Homogeneity:

Assets have to be relatively homogeneous - this means that there are not wide variations in documentation, product type or origination methodology. Otherwise, it again becomes more difficult to consider the assets as a single portfolio.

1.4.4. No executory clauses:

The contracts to be securitised must work, even if the Originator goes bankrupt. Certain clauses are therefore difficult to include in a securitisable contract -eg: in a photocopier lease, the inclusion of a clause stating that the Originator will maintain the photocopier would make that lease difficult to securitise. These sorts of contract are normally referred to as "executory contract.

1.4.5. Capacity:

It must be possible for the necessary transactions which are needed for the securitisation to take place in relation to the assets concerned - for instance, if the assets contain specific prohibitions against assignment, then they will not be securitisable in the traditional sense.

1.4.6. Independence from Originator:

The on-going performance of the assets must be independent of the existence of the Originator. This tends to be a wider restriction than the example given above about executory contracts. A number of technical matters can arise, for instance, if asset yields are quoted only by reference to the Originator (eg; as the Originator's rate), then this will cause a structural difficulty in the event of the Originator's insolvency (ie: what now is the rate that the assets yield?).

1.5. Securitisation Credit:

Understanding why securitisation works is fundamental to understanding the nature of the task which has to be completed by the Originator.

Securitisation works because rating agencies are prepared to assign ratings to the liabilities of the SPV. As described above, the performance of these liabilities is determined by the performance of the assets which the SPV owns - hence the securities are normally described as "pass-through" securities (as the cash flows and credit risks are passed through from the assets to the securities directly).

Consequently, the starting point for the credit analysis is an analysis of the assets.

1.6. Corporate Credits:

Prior to the securitisation, the assets which are to be securitised form part of a corporate balance sheet. In simple terms, each company has a different "credit personality", which is a function of its own management style, the quality of the assets which make up the balance sheet and the types of liabilities which the company has. Taking these three items together establishes the credit standing of the company.

A normal company has very few restrictions upon its ability to do something rash - there are plenty of examples of companies which have prejudiced their own long-standing creditworthiness with an ill-judged acquisition or foray into an inappropriate market. Similarly, the mixture of assets which makes up a balance sheet may not be well understood (or fully analyzed) by the market. There may be residual dependencies within the balance sheet which are not disclosed - as the amount of information about a company is often restricted to that required to be given by law. Finally, the balance sheet may be stable, but cash flow is critical - and there are often few restrictions on corporate liquidity management. A number of otherwise successful businesses have failed as a result of liquidity mismanagement.

1.7. SPV Credit Analysis:

There are a number of key criteria, which the SPV will adhere to, which are not attributes that apply to a normal company. Principally they relate to a series of activities and conditions which a securitisation company has to meet before a rating can be given to any liabilities issued by it. These include:

- prevention of trading outside funding the assets and servicing the securities - so that the SPV cannot endanger the transaction by introducing new and different risk factors;
- sub-contracting all services required to maintain the SPV and its assets - eg: administering its receivables, company secretarial work;

- SPVs are not permitted to have any employees or (normally) to have general fiduciary responsibilities to third parties (eg: acting as a trustee);
- any person who contracts with the SPV is required to agree not to sue the SPV in the event that the SPV fails to perform under the contract (unless that person is "senior" ranking and effectively rated);
- all of the SPV's liabilities (present and future) should be quantifiable, and shown to be capable of being met out of the resources available to it, including corporation tax, advance corporation tax and any value added tax;
- the extent to which the SPV is reliant on third parties to meet its obligations should be minimised (and in some circumstances limited to a reliance on either AAA-rated or on other bankruptcy remote companies only);
- funds which are due to the SPV have to be separated and ring-fenced as soon as they are received (to the extent that this is possible).

In this way, assets which formed a part of a corporate balance sheet (supporting perhaps an overall credit at a low level) can be extracted, ring-fenced and put into a controlled environment, such that they are capable of supporting an AAA.

1.8. Operations of SPV:

Since the SPV cannot have any employees, the administration of the SPV's assets has to be wholly subcontracted. One of the principal documents which regulates the SPV is therefore the Administration Agreement. This is a contract, normally between the SPV and the Originator (who acts also in an administrative capacity), which describes all of the different tasks which are necessary to permit the SPV to conduct its business. These range from

- the collection of cash each day;
- operating bank accounts;
- enforcing agreements with the underlying debtors (eg: collecting on security and chasing borrowers who are in arrears);
- company secretarial matters (managing licences, producing statutory returns);

- accounting;
- taxation (in the UK this normally extends to Corporation Tax, Advance Corporation Tax, VAT, MIRAS, withholding taxes, and Stamp Duty);
- reporting - to investors, rating agencies and trustees;
- pool management (dealing with requests for additional funds, changes to the asset contracts etc..);
- management of related insurance (MIG, buildings insurance, payment protection and so on).

One of the reasons why the securitisation process is so difficult is the requirement to track through all of the ways in which the Originator conducts its business. This flows from the desire to understand all of the risk factors which can affect the SPV, and is also simply a result of the need to document that administrative process.

1.9. Parties Involved:

A transaction normally involves the following parties:

- Originator and Administrator
- Lead Underwriter who purchases the debt issued by the SPV (and sells it to eurobond investors)
- Structuring Team either involving personnel from the lead underwriter and/or other advisers
- Two sets of lawyers, at least one of whom is a securitisation specialist
- Trustee and Trustee's lawyers representing the interests of the noteholders in the event that there is (a) an enforcement event (things go wrong) or (b) any requirement to change or amend the documents or procedures after the transaction completes;
- Rating Agencies required to undertake an analysis of the risks associated with the transaction and to award a credit rating to the debt issued

- Originator's accountants to agree accounting treatment for the transaction, to verify the analysis and existence of the assets involved and to confirm work undertaken to show solvency
- Credit Enhancement Providers and their lawyers transactions often involve a third party fronting some of the risks associated with the assets
- Standby Servicer and their lawyers a third party prepared to administer the assets in the event that the existing servicer fails or is incompetent.
- Clearing Bank and its lawyers running the originator's and the Issuer's bank accounts, all of which normally require new mandates and a Bank Agreement is also set up to regulate the operation of all aspects of the accounts
- Banking Facility Providers and their lawyers often there are requirements for additional banking facilities, eg: liquidity facilities or guaranteed deposit arrangements .
- Hedging Providers and their lawyers assets often need some form of hedging, either using swaps, caps or both
- Paying Agents, Agent Banks, Common Depositary etc.. a whole host of organisations with mysterious Euromarket responsibilities

1.10. Typical Rating Concerns:

1.10.1 Credit Risk:

Rating Agencies really only deal with credit risk as a commercial matter (ie: they will make an assessment of credit risk). All other risks have to be structured out, dealt with beyond doubt or shown to be sufficiently remote. Sufficiently remote normally means inconceivable. Any residual concerns which are not specifically analysable as credit risks will involve serious costs for the structure.

1.10.2. Solvency:

Both rating agencies need to feel comfortable that the seller of the assets is solvent and is expected to remain solvent for a period of two years from the date of the transaction. Proving solvency to this standard is not a straightforward exercise. The legal definition of solvency is a 20 page paper, and the tests which are necessary to show that a company is solvent can be tortuous. A true solvency analysis will also take into account contingent assets and liabilities (including deferred tax) which are not normally shown on the face of a balance sheet, and will require a comprehensive and detailed analysis of the balance sheet and projected cash flows.

1.10.3. Tax Risks:

The rating agencies require tax, accounting and actual cash surpluses to be in step (or to the extent out of step, so that it does not matter) throughout the transaction and in a variety of tax, interest rate and credit environments.

1.10.4. Corporation Tax:

Since the Inland Revenue does not give advance rulings on the likely tax treatment of different structures, the rating agencies normally require the structures to be analysed across all potential tax treatments.

On the Anglo transaction, for instance, it was determined that there were 9 different potential tax treatments for the transaction. Each had to be analysed, and the 3 principal tax treatments had to be modeled in detail.

1.10.5. Stamp Duty:

If stampable transfers are involved, then it would be normal for the transfers to be completed offshore. However, the rating agencies normally consider that the assets could be repatriated (if the trustee was required to enforce the security) and therefore provision has to be made to pay any stamp duty which COULD then become payable. If more than one transfer has been made, then double, or even triple stamp duty provision can be

needed. This is a real capital cost to the transaction, but careful management and structuring can enable the capital so required to be used efficiently.

1.10.6. Special Risks:

Each structure has to address different problems. Sometimes the answer to these problems is empirical (ie: the risk is included in the analysis of the transaction and quantified). However, some points can only be dealt with by legal analysis and an opinion. The extent to which the law firm involved is prepared (on occasions) to be slightly "sporting" can be critical.

1.10.7. Set Off and Related Risks:

Set off can occur in a variety of ways for instance: lessees could have deposited money with an originator of the assets (who then becomes insolvent), or lessees could have paid for maintenance of equipment (which is then not carried out). Even if there is no legal justification for the set off (ie: the lessor is wrong), it may still have to be taken into account in the structure.

Similar risks relate to the position of the Issuer in the event that there is a liquidation of the administrator. A critical aspect of the structure will be the consideration of the liquidator's rights in this circumstance can the collection of the Issuer's receivables (and their payment to the Issuer) be interrupted or stopped?

1.10.8. Executory Contracts:

Contracts which impose obligations upon the lessor are not generally securitisable. An example of an obligation would be procuring that maintenance is carried out, or agreeing to collect funds on behalf of a third party. The concern arises from a view that, were these obligations to be carried out poorly, then the lessor would be in default, which could then permit the lessee to avoid his obligations. A lessee may also have the right to reject the replacement of the lessor with a third party. Essentially the problem is that the contract becomes personal to the particular lessor and not generic.

However, there are certain techniques and credit enhancement structures which could be used in these circumstances.

1.10.9. Unsecured Creditors:

The rating agencies are also concerned to ensure that either the Inland Revenue or HM Customs do not become unsecured creditors to any part of the transaction structure in other words, that there are known liabilities to either body which might not be met at any future point. This is considered to give an excuse to "go after" the Issuer or the structure as a whole to try to recover assets which have been sold to the Issuer and unravel the deal.

A detailed investigation of the deferred tax positions of the originator and any group companies is therefore required. Plans have to be made to show how any resulting liabilities are proposed to be paid, given certain assumptions about origination levels and credit losses.

1.10.10. Contractual Failure:

Even if a party has committed in contract to do XYZ, will they actually do it? On the Anglo transaction, officers of both the trustee and the clearing bank were required to confirm separately to Moodys that if their respective organisations agreed in contract to do something, then they would actually do it.

1.11. Required Steps:

1.11.1. Review:

The rating agencies will wish to visit the originator/administrator to assess the quality of the management, the way that the company is set up and to review the administrative procedures.

Prior to the visit, it is normal practice to prepare a file on the company including financial information, procedures, company history, senior staff biographies and example contracts. Collating and preparing this information normally takes several weeks.

1.11.2. Asset Analysis:

This is the one risk which the rating agencies are prepared to take a commercial view on. This view is based upon an analysis of the asset pool proposed to be securitised, and a review of the historical performance of the originator's assets based upon certain assumptions. Generally the golden rules are:

- present your data appropriately (detailed advice is required on this point, since the exact approach should be closely linked to the way that the transaction is to be structured), and
- generate as much data as possible irrelevant data can be discarded, but data which is missing is impossible to replace; rating agencies, in the absence of data, make conservative guesses (eg: 100% default rates, no recoveries etc..).

Once they have reviewed this information, the rating agencies will make an assessment of their worst case expectations as to the performance of the portfolio (normally absolutely dismal, of course). The structure then has to be designed to ensure that, should these losses appear, the rated debt is paid in full and on time.

1.11.3. Transaction Analysis:

This involves the production of detailed computer models of the transaction, which are then used to determine the way in which the structure will behave in different stress environments. Typical variables are: credit loss levels, delinquency levels, interest rates, corporation tax rates, VAT rates etc.. Each rating level normally has associated with it a certain combination of stress assumptions, becoming more stressful for higher ratings.

Models are used differently by the two rating agencies: S & P require that the model demonstrates that noteholders will receive all amounts due on time using the appropriate stress assumptions for that rating. The model normally has to be audited, and S & P require a copy of it which they review in detail.

Moody's will not normally rely on models produced by third parties, and would seek to write their own. However, lease transactions are too complex to permit them to take this approach. On the Anglo transaction, for instance, they used our model, but treated its results with some circumspection. Their view seemed to be not that the structure had to meet certain minimum levels of stress (as S & P) but that the structure should be set up to deal with a variety of combinations of assumption, and that in certain circumstances, these assumptions could show a default.

S & P's approach means that, once the structure and the model is agreed, it is possible to be reasonably certain as to the required levels of credit enhancement for each rating level. Moody's approach is less empirical, and this means that there can be no certainty that the credit enhancement levels are appropriate.

1.11.4. Legal and Tax:

It is now normal for the rating agencies to require detailed opinions on the transaction addressing both legal and tax risks. These opinions are extremely difficult documents for lawyers to write, since the levels of comfort required are higher than those which would be necessary from a commercial perspective. This is one of the expensive elements of a transaction.

For the ALPS transaction (aircraft leases), for instance, a separate legal opinion had to be procured for each jurisdiction in which an aircraft could land result: 118 legal opinions. From a rating perspective, the intrinsic value of the aircraft was a key part of the credit analysis and therefore the aircraft have to be demonstrated to be recoverable if there is a default on the lease.

On the Anglo transaction, the tax analysis was so complex that the only way that sufficient comfort could be given was to offer nine alternative tax treatments for the transaction. The relevant partner of Clifford Chance was fairly happy (at a commercial level) as to the likely tax treatment of the transaction but at a rating level (100% certainty), he could only be certain that it would be one of the nine. This meant that the tax opinion ended up the wrong side of 80 pages.

1.12. Cost of Funds or Capital?

Securitisation structures can be designed to achieve different aims. A key structural issue is the extent to which the originator of the assets is prepared to sacrifice return on assets for taking less risk (and therefore putting up less capital).

The extreme position could be illustrated by examining some of the early mortgage-backed securities. By purchasing a pool policy from an insurer (a policy insuring the issuer against suffering credit losses) with a minimal deductible, it was possible to set the transaction up with virtually no capital commitment from the originator. The resulting gearing was normally in the region of 200:1. Clearly, the premium which had to be paid to purchase such a policy meant that the cost of funds associated with the transaction was higher than it might have been.

The alternative would be to retain all of the commercial risk associated with the assets by putting up a sizeable amount of capital. Since the credit enhancers are therefore taking less risk themselves, the cost of funds would be lower.

1.15. Accounting:

The key decisions relate to whether the transaction is to be onbalance sheet or to have a linked presentation, and how the investment (if any) in the Issuer is to be shown on the originator's balance sheet. This can become a critical area, particularly for banks and building societies, since the regulators normally follow the accounts in their treatment of the transaction, and for companies concerned about gearing.

1.16. Risk Allocation:

The Issuer will normally only assume the credit risk on the receivables. All other risks usually remain with the originator. The warranties given on the sale of the receivables to the Issuer are therefore normally rather more extensive than those given on a commercial transaction. For instance, warranties are given about legal risks (eg: relating to the CCA) and enforceability (that the contracts are enforceable in accordance with their terms). The originator therefore often needs to be prepared to concede what appears to be a variety of unreasonable and noncommercial points.

The exact allocation of risk between originator and Issuer is also a function of the type of credit enhancement chosen. If a senior subordinated structure is used, then the amount of risk which remains with the originator is normally higher than if, for instance, a financial guarantee structure is used. If the originator is paying a premium to a third party specifically to assume risk in the transaction, it would be reasonable to expect the assumption of more than mere credit risk by that party.

However, it should always be remembered that in commercial terms, the SPV is an extension of the originator - and so fighting risk allocation battles can often mean taking funds from one pocket and putting them in the other. Getting the balance right is the key - too little risk transfer, and the transaction will be on-balance sheet, too great and the transaction may not complete!

1.17. Hedging:

Whatever the characteristics of the assets, sufficient hedging has to be in place to permit the full and timely payment of the Issuer's rated obligations. With fixed rate leases and floating rate notes, for instance, a number of hedging structures are required to ensure that the Issuer is not exposed to interest rate movements.

Accurate and efficient hedging forms a critical part of the transaction economics. The Anglo transaction was a first, not only in terms of involving leased assets, but also in the hedging structure used, which was designed by Risk Limited. Previous transactions had used caps or strips of swaptions to achieve what is considered by the rating agencies to be a "perfect hedge". However, we were able to demonstrate that, for the Anglo transaction, no interest rate options of any kind were required, saving option premiums and reducing the capital needed in the transaction by several million pounds.

1.18. Tax Advantages:

The first issue is ensuring that the existence of the Issuer, and the contractual arrangements contemplated, do not involve either significant tax advantages or costs. Tax advantages are likely to give the Inland Revenue the excuse to challenge the structure, and these tend to give the rating agencies the opportunity to raise concerns about the structure as a whole.

This is principally an issue with leasing transactions. Two structures have broadly been used in public transactions: the DAF structure and the Anglo structure.

There is quite a contrast between the DAF structure and the Anglo structure as regards the tax effects. In DAF, the lease agreements were effectively recharacterised as simple receivables and the leased assets (the vehicles) became treated as stock (with no resulting capital allowances). The entire basis for the taxation of the leases was changed.

For Anglo, the overall amount of tax paid by the group should not change as a result of the transaction, since the securitised leases are still expected to be taxed as leases (with another part of the group claiming the tax allowances).

1.19. Tax Status of the Issuer:

As a result of the perverse application of some of the Inland Revenue's dicta, it is also conceivable that tax losses can get stuck in the Issuer which could produce a real tax cost for the transaction. The key debate centres around whether the Issuer is a trading company or an investment company for tax purposes or in the case of the Anglo transaction, which of the 9 potential tax treatments is most likely to arise.

Tax planning is a large part of the structuring process. The rating agencies will assume that the worst possible tax treatment of the Issuer will apply in their analysis.

1.20. Systems Issues:

These are numerous and complex and largely depend upon the precise transaction structure contemplated, the nature of the assets and the nature of the Originator's business. A typical summary of systems and processes involved would be as follows:

1.20.1. Prior to Completion of the Transaction:

- Analyse the assets prior to completion of the transaction, select provisional lists.
- Manage the audit process (provision of information, reports, liaison with auditors).

1.20.2. Completion of the Transaction:

- Select the final list of assets, reflect the ownership change in the system, produce completion reports, post accounting entries. Repeat processes required for substitution.

1.20.3. Post Completion of the Transaction:

- Store the ownership of the receivables showing clearly which receivables are securitised and which are not.
- Set up a reconciliation process to manage the first few days of the transaction whilst cash payments are not being correctly directed (for instance, it takes 3 days for transmissions to BACS to be updated to reflect the change in ownership of the assets).
- Separate cash receipts relating to securitised receivables from those which belong to the originator (for direct debits, possibly separating receivables at the point of transmission to BACS).
- Split cash receipts into different types (principal, income and other amounts: VAT service charges and so on). Track payments received in advance of their due date, and allocate the same to outstanding payments at the appropriate time.
- Store transactions between Originator and the SPV (date of sale, price paid, amount outstanding, accrued interest, arrears of income).
- Deal with changes to any of the underlying receivables contracts (which may change a contract's value, outstandings or payment profiles). This can then result in a requirement to make incremental provisions, cash payments to the SPV or simply to reverse the change (some are likely not to be permitted under the terms of the Transaction documents).
- Establish procedures to track any assets sold in breach of warranty, to calculate the repurchase price and to effect the repurchase.
- Run the securitisation provisioning policy, which will normally be different to that of the Originator.
- Ensure that the accounting requirements can be met. These typically require that the SPV's accounts can be produced using the SPV's accounting policies, and also that the consolidated or linked presentation accounts can also be produced using the Originator's accounting policies. Often there are different accounting bases used which means that adjustments are required (for instance, between the rule of 78 and constant yield accounting methods).

- Update financial control processes so that they operate on a multi-company basis rather than on a single company basis, particularly in relation to bank reconciliations.
- Set up a periodic (usually quarterly) reporting cycle to produce the required administrator's reports and to complete the calculations typically required in order to run the transaction (ie: manage the liabilities of the SPV). This involves systems time, the production of dedicated reports, and the attention of key personnel within the organisation.
- Set up reconciliation systems to allow the amount of cash profit extraction from the securitisation to be reconciled to the amount of originator's own profit recognition policy (which will, in all likelihood, be a different amount).

1.21. Methodology:

To decide whether or not securitization is appropriate, there are four key determinants which need to be made:

- What are the corporate objectives, funding cost, capital, accounting, tax etc.
- Is the originator and its assets of a sufficient and consistent quality?
- Is there sufficient time available resources and commitment to complete the transaction.
- Are the assets suitable? This involves the risk of consideration of the risk characteristics of the receivables proposed to be used and the possible transaction size. Not all portfolios of receivables are sensible to securitize, for instance risk concentrations of any kind should be avoided and certain receivables carry additional risks with them, relating to liquidity, interest rate, foreign exchange etc.

Once a company has determined that it is possible and desirable to complete a securitization and has assessed its own capabilities in relation to work required of a securitization transaction, then the public aspects of the transaction can begin:

- Formal selection of assets to securitize
- Agreement on a structure
- Agreement on a realistic time table
- Documenting the structural approach, production of a preliminary documents and systems specifications setting out how the transaction should work from every one's perspective
- Selecting counterparties and underwriters
- Contacting the rating agencies
- Formally appointing the lawyers

1.22. Transfer of Assets in Securitisation:

The basic idea in securitization is to create a security which is based on , or derived from the assets of the originator, such that the security is not a claim against the originator but a claim against such assets.

In other words, the originator *securitizes* (meaning converts into securities) his assets.

Obviously enough, this would necessitate a transfer of assets by the originator to the benefit of the investors.

The following are the key issues relating to transfer of assets:

1.22.1. To whom should the Assets be Transferred?

If the assets were to be transferred to a single person, say a single investor, such as in case of direct or discrete portfolio transfers, there is no problem transferring the assets directly to the investor or acquirer.

However, in most securitizations, the investors are many. Besides, the resulting security is going to be marketable: in other words, the investors will be a nebulous, uncertain group. Hence, it is necessary to bring in a conduit to hold the assets for the benefit of the investors. This conduit is called the **special purpose vehicle**. See more about the special purpose vehicle **here.** Note that in many cases the SPV may be much more than a simple conduit.

1.22.2. Is a Transfer of Assets Necessary?

In most securitization transactions, assets are transferred in favour of investors. However, in several securitizations, the assets might be pledged/ mortgaged or otherwise made available to the investors. Several securitizations are structured with a number of preceding SPVs, with transfer being involved at some stage followed by loans or hypothecation at the later stages.

The essential idea is to allow the investors a privileged, preponderant right over the assets being securitized: that is what will distinguish securitization from collateralised lending.

1.22.3. How should the Assets be Transferred?

The legal methodology of "transfer" of assets is achieved by a sale of the subject assets. If the asset is receivables, such transfer is often called **assignment**.

1.22.4. What are the Methods of Transfer?

Transfer of assets could be either by way of :

- novation, that is, alteration in the terms of the original contract with the obligor.
- participation, that is, creation of a right in favour of the transferee, in the proceeds of the assets.
- assignment, that is, full legal transfer.

1.22.5. Which of these Methods should be Followed?

To achieve full legal transfer, the proper method is assignment or sale.

1.22.6. What needs to be done to Ensure a Transfer or Assignment?

This is the "true sale" question. That is, in order for the assignment to be regarded as a proper sale or legal transfer, it must comply with some conditions, which differ from jurisdiction to jurisdiction.

1.22.7. What are the problems with assignment or sale?

As the assignment or sale is made, mostly, in respect of receivables, which is a right against a third party, the following legal problems may be faced, depending on the jurisdiction involved:

- notification to the obligors/ consent of the obligors
- stamp duty

1.22.8. True Sale Question:

True sale is at the very heart of legal issues in securitization. If securitization is a true sale, the investors get a legal right over the receivables. If it is not a true sale, investors may be either at par with unsecured lenders, or even worse.

The true sale question is also the foundation of off-balance-sheet accounting treatment, regulatory relief, etc.

The genesis of securitization lies in giving the investors rights over specific assets of the originator, such that the investors are not affected by the performance, or bankruptcy of the originator. This would obviously necessitate that the investors, or the SPV which is a conduit on behalf of the investors, has legally acquired the assets.

Here are the important questions regarding true sale:

1.22.9. Why is a True Sale Required?

To allow investors an unqualified right over the assets being securitized. True sale forms the very line of distinction between securitization and collateralised lending.

1.22.10. What needs to be Done to Achieve True Sale?

The requirements for true sale may:

- be laid down by the law of land
- be laid down by Courts
- be implied from judicial history/ legal tradition
- be inferred from international practice of securitization industry.

Several countries have enacted specific laws on securitization which also define "true sale".

There are several common law rules that establish a true sale. For example, the rulings from both USA and UK - for some of these rulings.

1.22.11. What if a Transfer is not a True Sale?

If the transfer of assets for the benefits of investors is not a true sale, it might mean:

- the investors are unsecured lenders
- the transfer is regarded as creating security interest in favour of investors; so the investors are secured lenders (whether such security interest is perfected or not will depend on the procedure relating to perfection of security interests)
- worst of all, since the transaction would not have been backed by loan documentation, the investors may not be regarded as lenders as well - meaning, they might only have an equitable right to recover their money but would not stand as unsecured lenders.

Hence, the consequences of the transfer not being a true sale could be really disastrous.

1.22.12. What kind of Receivables can be Subject of a True Sale?

This again is a question to be answered with reference to local law. Normally, the receivables should be existing and identifiable. Sale of future receivables may take place as a promise to sell in future. Sale of unidentifiable receivables might only create an interest in a pool of receivable, not transfer the receivables.

FUTURE FLOW SECURITIZATION:

CHAPTER # 2

Securitisation of future flows is one of the most exciting areas of application of securitization, particularly from emerging market countries. A number of Latin American, African and emerging market originators have future flows securitisation to be attractive as a device for off-shore funding.

Mexico was the first country to securitize future flows - the transaction goes back to securitisation by Teléfonos de México S.A. de C.V. of telephone receivables in 1987.

The distinguishing feature of future flows securitisation is the fact that the asset being transferred by the originator is not an existing claim against existing obligors, but a future claim against future obligors. In other words, the claims are yet to be created, against obligors who are yet to be identified. Examples can be: export receivables (normally crude exports), future royalties, hotel revenues, sports receivables, etc.

Most of the future flow securitisations are by originators from emerging markets, whose offshore borrowing abilities are stymied by the sovereign rating of the country where the originator is stationed. For example, if a Brazilian originator having export revenues were to raise offshore money, the international rating of the originator is capped at the rating of the country, even though the domestic rating of the originator may be a AAA. In other words, such an originator will either be not able to source cross-border funding at all (from investors who as a matter of policy do not invest in below-investment grade securities) or would have to pay a very high cost.

Future flow securitisation essentially aims at piercing the rating of the sovereign and having a security of the originator rated above the rating of the sovereign. If, in the example above, the originator is an exporter, say exporting oil to US buyers, and if he securitises the oil exports such that the receivables are trapped and deposited in an account in New York, which is assigned to the SPV, the investors would:

- not be subject to exchange risk, as the receivables are in foreign exchange
- not be subject to sovereign risk as the receivables have been assigned by way of a true sale outside the country of the originator.

The only right the sovereign has is the right of redirecting the exports, which can always be rated.

2.1. Motivations in Future Flow Securitisation:

An originator in a future flow securitisation would look essentially at two motivations:

- does it allow the originator to borrow more than under traditional funding methods;
- does it allow the originator to borrow at lesser cost than under traditional funding methods.

There is no certain answer to either of these two questions, but the economics of any future flow deal should be tested on the above. It is possible that a future flow securitisation may allow the originator to borrow more, since, while a typical traditional lender looks at the assets on the balance sheet (say, receivables which have fallen due), a future flow investor looks at receivables which are not on the balance sheet.

A future flow transaction may even allow the originator to borrow at lesser costs, for reasons discussed above, particularly in case of cross border financing.

2.2. Risks in Future Flow:

While future flows securitisations try to minimise the risk hinging on the sovereign, they do not minimise the following risks:

Performance Risk Every future flow securitisation is subject to performance risk, that is, the risk of the originator continuing to be in business, produce, and, as in the example above, export.

While this risk cannot be avoided, a future flow transaction must certainly put in two mitigants:

- The receivables in question must be such which arise out of an existing framework, and with a minimal performance by the originator, the framework can result into receivables. An ideal common place example can be: **we have the cow, but we have not milked it** ! The idea is - as long as we have the cow, it may be milked, whether by the originator or someone else. But if the originator has neither the cow nor the milk, he is really talking about **securitisation of dreams**. Let us apply this to real life situations - say securitisation of a crude mineral. The originator owns the framework, say the mine, and all he has to do is to extract the mineral and export it. This is a fit candidate for future flow securitisation. But think of exports of steel by an integrated steel plant - there is too much of performance risk there. Such cases, where the originator has to create something and then export it, are not fit cases for securitisation. There have been securitisation of such revenues as well - but there have also been cases of default - such as the Mexican steel maker *Ahmsa*.
- The receivables in question must sufficiently over-collateralise the investor's outflow, so that in an apprehended event of default, an early amortisation trigger may save the transaction. Early amortisation triggers have saved certain transactions during the Asian currency crisis.

2.3. Bankruptcy risk: Future flows securitisations cannot be bankruptcy remote, as existing asset securtisations can be. This is easy to appreciate as at any point of time, the assets in existence, that is the receivables that have been created, are not enough to liquidate the investors' claims.

2.3.1. Legal issues in future flow securitization

Though most future flows are designed as "true sales" of future receivables, there are two major legal problems that need to be answered:

- In many countries, a future receivables is an unidentifiable debt that does not exist today, and therefore, cannot be assigned. Existence or identifiability of a

receivable is required for assignment. For more details on this, refer to my comments relating .

- It is strongly advised that the investors' rights over the receivables are further enhanced by a security interest on the framework from which the receivables arise, for example, the mine from which the minerals will be extracted, or the aircraft from which aviation revenues will be generated etc.

The law relating to future flows securitisation is not clear in most of the countries where future flow securitisations have taken place. In no country so far, the test of "true sale" in a future flow securitisation has been tried in Courts. Therefore, it is still a gray area in law and investors better take precautions.

The model assignment law suggested by UNCITRAL seeks to permits future receivables assignment as well

2.3.2. Accounting for future flow securitisation:

The amount received in a future flow securitisation should never be put off the balance sheet upfront, as there is no existing asset that has been transferred. The amount raised should be shown as a liability.

FAS 140/ IAS 39 apply only to transfer of financial asset, and an asset is an existing right to receive, not a future right. Hence, transfer of a future flow cannot result into an off-balance sheet funding.

2.4. Other methods of mitigating sovereign risk:

2.4.1. Political risk insurance - several bodies have started political risk insurance for debt offers from emering markets, thus competing directly with future flow securitisations.

2.4.2. Making use of preferred creditor status: By involving some international agencies as a conduit, so that the sovereign will not disrupt transactions with a preferred creditor. See for example, in case of a Turkish lease securitization -

SECURITIZATION IN PAKISTAN

CHAPTER # 3

3.1. Introduction:

ABS was previously governed by a bare law and restrictive prudential regulations that have since been amended for banks and DFIs by the State Bank of Pakistan(SBP). These guidelines cap total exposure of a bank/DFI towards securities issued by a SPV at 5% of its own paid up capital or 15% of the total value of the ABS issued by the SPV-which ever is less. Further, the aggregate exposure on account of ABS is limited to 20% of the total paid up capital of the bank/DFI. This will encourage banks/DFIs to (a) invest in and sell-down these ABS, i.e. to churn their ABS portfolio to stay within the 20% cap and to (b) actively trade in ABS to develop a secondary market, rather than to simply purchase these ABS and hold them till maturity.

Pakistan however, suffers from a plethora of bad debts arising in a market not least exacerbated by an increased propensity for corporate insolvency, corruption and insider trading. Therefore, good governance is the buzzword echoed to attract investment in a growing economy where the fledgling market amounts to a paltry Rs.100 Million (approx. US$1,666,666) with only two major ABS transactions to date.

3.2. The Leasing Sector:

Earlier in June 2002, the specialized Companies Division of the SECP processed the registration of First Securitization Trust as the first special purpose vehicle under the Companies (Asset Backed Securitization) Rules, 1999. This trust has been set up to raise funds for Pakistan Industrial Leasing Corporation Limited (PILCORP) up to rupees one hundred million through issuance of debt instruments against the Securitization of PILCORP's lease receivables. The said transaction was arranged by Aqeel Karim Dhedi Securities (Pvt) Limited (AKD) and Orix Investment Bank Limited to provide funds to PILCORP for retiring its debt obligations. In emerging markets like Pakistan, where volatile economic cycles and sudden shocks are translated on the asset portfolio, protection against deteriorating credit quality is very important. This unstable nature of Pakistan’s economy has highlighted the importance of a strong capital base which can provide protection against unanticipated losses. Furthermore, substantial capital provides

a leasing concern with greater flexibility to leverage its balance sheet. On the other hand, for leasing companies in developed markets, deterioration in the asset quality usually occurs over the long run, thus enabling them to increase general reserves/provisioning against potential losses over a period of time. A serious issue plaguing the leasing sector is the high rate of non-performing leases and loans (NPLs), a situation that can be attributed primarily to the inadequacy of risk assessment procedures and, to a lesser degree, limited industrial growth that has led to sectoral concentration. Leasing across a spectrum of industries reduces the risk of impairment in the asset quality. Strict credit policies and continuous monitoring of the portfolio are looked upon favorably by credit rating companies and accounts are reviewed closely to establish a company's exposure in each sector, which if exceeds 20% of Net Investment in Leases (NIL) prompts a further examination. Similarly, a drag on ratings may occur if exposure to a single client exceeds 15% of total equity. SECP is paying increasing attention to this factor and has recently proposed an amendment in the rules that govern the leasing sector by restricting exposure to a single party to 30% of unimpaired capital and reserves instead of the earlier limit of 20% of NIL.

3.3. Telecom:

Most recently, the SECP has granted registration to Securetel-SPV Limited, a wholly owned subsidiary of United Executors and Trustees Limited, to operate as a special purpose vehicle under the Companies (Asset Backed Securitization) Rules, 1999. Securetel envisages mobilization of funds for Paktel Limited -a local cellular telecom- by issuing TFCs. Of the total sum of Rs840 million, TFCs worth Rs640 million would be offered as pre-IPO and Rs200 million in IPO. The TFC is rated "A" (single A) by PACRA, is for 3 year tenor and carries profit at SBP discount rates plus 200 bps with a cap of 16 per cent and floor of 12 per cent for the first year and 11.5 per cent for the last two years. United Bank Limited has acted as consultant for the ABS transaction. This securitization would enable Paktel to replace its short-term foreign currency debt with medium-term local currency debt. Considering the fall of the greenback following 9/11, the transaction would improve Paktel's liquidity position by reducing foreign exchange losses.

Securetel purchased a portion of Paktel's receivables and issued ABS notes in March 2003. Paktel in turn expects to utilize the proceeds in retiring partly its existing loans of United Bank Limited of Rs750 million and Pak Kuwait Investment Company's Rs240 million. Nearly 99 per cent shares in Paktel are held by the Luxembourg based Millicom International Cellular S.A, which is a fairly large holding company with 18 cellular operations in 17 countries. Another major player, Orascom Telecom is also expected to assign its nationwide receivables to a foreign bank in Pakistan. Analysts at IP Securities (Pakistan) said that with the falling rate of returns on National Savings Schemes (NSS) and Government Securities for the general public and financial institutions, investment avenues were falling short and the facilitation of innovative instruments was needed. Paktel had suffered huge exchange losses till the financial year 2001, due to foreign currency borrowings, a significant portion of which had been paid off through internal cash generation and short-term loans. This had led to high reliance on short-term borrowings. Paktel had therefore decided to issue medium term securitized TFCs to rationalize its capital structure and to correct imbalance in asset liability maturity profile.

The telecom sector itself has seen substantial activity in structured finance. World CALL Payphones Limited is one of Pakistan's fastest growing telecom companies, with an installed base of over 5,000 smart card payphones throughout Pakistan. World CALL needed to raise Rs. 345 million in new equity financing to fund a major expansion plan, including 8,000 additional card phones and a proposed wireless local loop network supporting 50,000 additional phones. Following the unsuccessful attempts of another securities firm to affect the offering and reopen the Pakistani IPO market, after a dry spell of over two years, World CALL appointed AKD Securities as its financial advisor to raise the necessary funds.

Realizing the potential upside for well funded private companies in Pakistan's increasingly deregulated telecom sector, AKD underwrote the offering. After leading a Rs. 195 million pre-IPO placement with institutional investors, AKD generated demand for the IPO and as a result World CALL's Rs. 150 million IPO was heavily

oversubscribed and the company received the funds necessary for it to continue on its growth trajectory.

3.4. Market Performance:

The country has already achieved a moderate level of capital mobilization through the bond and equity markets at 25 and 11 percent of gross domestic product (GDP) respectively, at the end of FY02. However, the figures are deceptive as government issues dominate the bond market – with corporate bond market accounting for only 0.6 percent of GDP.

A Five-year bond issued in 1988 by the Water and Power Development Authority (WAPDA), a statutory corporation, was Pakistan's first corporate debt. The issue carried a coupon of 13.5 percent and raised Rs 3.1 billion exceeding the target of Rs 2 billion. Since then, WAPDA has raised Rs 23.2 billion with seven issuances, the first six guaranteed by the Government. However, only the third and sixth issues, both of 10-year maturity, are listed on the two stock exchanges of KSE and Lahore Stock Exchange (LSE). The last three issues between 1993 and 1997 failed to raise the targeted amount because of limited investor interest and the fairly illiquid secondary market.

As early as 1985, privately placed TFCs issued by development finance institutions (DFIs) had been in existence. However, it was not until February 1995 that the first public TFCs issued by Pakistan's largest paper manufacturer were listed on the stock exchange. The listing signaled the birth of a corporate debt market and was swiftly followed by three others, with yields of between 17.8 and 19 percent, bringing the stock of listed TFCs to a little more than Rs 2 billion. While listed TFCs were not approved securities for commercial banks SLR, non-bank financial institutions (NBFIs) were allowed to invest in TFCs for SLR from May 1997 onward.

In September 1997, additional incentives in the form of tax exemption (on the 10 percent withholding tax) were granted to TFC holders, including corporate entities such as banks, giving a boost to the investor base of TFCs. However, six months later, the withdrawal of part of the tax exemption, leaving only individuals tax exemption, dealt a heavy blow to

the fixed income market. While it was expected that long-term securities would be priced relative to government bonds, in reality TFCs pricing (coupon and price) was based on the National Saving Schemes (NSS). The reason is twofold: first, secondary market for long term government papers was not in a stage where their yields were long-term benchmark rates; and second, NSS constitutes more than a quarter of all domestic government debt and is aimed mostly at the public, which the TFCs, through listing at the stock exchanges, were also targeting. This put the TFC issuers at a disadvantage in raising finance through this instrument.

However, to provide a more enabling environment, the government took some important steps. Most prominent were changes in National Saving Schemes (rationalizing rates and banning incremental institutional investment in April 2000), and the launch of the Pakistan Investment Bonds (PIBs) with the aim of providing a benchmark for long-term securities. With the fall in interest rates, and more importantly, the cut in NSS rates since mid-1999, the effective benchmark for the pricing of corporate bonds has fallen sharply.

Since then, the market has picked up steeply and approximately 32 new issues were launched, approximately 25 were launched since FY02. Also in the wake of falling interest rate scenario and limited quality investment options, TFCs provide an attractive opportunity for the investors. However, secondary market for these issues largely remain dormant due to lack of liquidity and absence of market makers.

In order to make issues more flexible and affordable for the investors, issuers are adding different features from shelf registration to the green shoe option to TFC structure. Use of shelf registration implies that the issuer can split the TFC issue into tranches, which is useful for periodic financing requirements of the issuer and also allows optimal pricing of the individual tranche. Similarly, the green shoe option allows the issuer the right to retain the over subscribed portion of the IPO. However, the issuer has to specify the amount it would retain under this option in advance. A very interesting development is the gradual evolution is the pricing structure of the TFCs. Starting from the plain vanilla structure with fixed coupon rates, the market has witnessed an increasing number of bonds with floating structures.

Indeed, AKD Securities is Pakistan's largest player in structured finance within Pakistan. Being a pioneer in the Pakistani financial markets, AKD has been actively involved in structured finance, venture capitalism, mergers and acquisitions and the equity markets of Pakistan. They advised and arranged a Rs.1.8 Billion TFC issue of a major synthetics company to finance an acquisition which was then the largest issue of its kind by a private sector company in the history of Pakistan. AKD was responsible for the complex structuring of the first ever TFC to be issued using the acquired assets as the initial security for the instrument. AKD underwrote the entire issue to enable the client to complete the transaction having successfully placed the largest ever private sector issue with leading financial institutions.

3.5. The Way Ahead:

Pipeline ABS projects are still a problem for the SECP and securitizing Pakistan International Airlines (PIA) domestic receivables remains an issue to be resolved. It is hoped that practices of good governance and transparency can overcome the accusations of financial mismanagement and corruption attached to the national carrier. In spite of credit problems PIA has managed to keep afloat by pledge financing their receivables and issuing TFCs. The future however, is encouraging following the 2002 Guidelines. DFIs are preparing to consolidate the market while the SECP assures the facilitation of a strong MBS market having registered a 75% increase in bank housing finance schemes since the issue of the guidelines in November 2002. There are also indications from the SECP and a Japanese holding company towards negotiating the securitization of Small & medium enterprise receivables which analysts say, promise higher yields. Recent technical assistance by the Asian Development Bank has enhanced capacity to generate revenue amongst SMEs which capture a fairly large export market in Pakistan.

Pakistan is expected to see a marked increase in structured finance and successful transactions would inevitably spread out over a broad range of sectors. The call to foreign investors to inject funds and repatriate profits rings out clear as ever as the newly elected government tries to exercise its mandate. The growing market of trading corporations, banks, extractive industries and manufacturers has begun engaging legal counsel and

accountants to carry out feasibility studies and documentation for a variety of future flows including oil & gas royalties and credit card receivables. Although the recent divestiture by Fitch and the IFC from PACRA may be cause for concern, the SECP is confident that good governance and rating processes installed at PACRA and JCR-VIS are sufficient to secure the investor

SECURITIZATION PRACTICAL ASPECT (CASE STUDY)

CHAPTER # 4

Pakistan's economy has maintained the path of recovery and growth since February 2002. The marked improvement in macro-imbalances, particularly the balance of payments position and fiscal deficit, and a sustained low inflation are signs of economic stability. The stock of debt, and debt servicing requirement is reducing after successful negotiations with the principal lenders under the debt-rescheduling program. The reduced-level of spending on interest payments due to declining interest rates and healthy growth in CBR revenue collection have provided the much needed fiscal space to boost public spending on social sectors. With an improvement in domestic and foreign demand and the promise shown by real and financial sectors, there is optimism that the overall growth targets of the current fiscal year (CFY) will be achieved.

The core reason for the decline of our economy since independence in general and in the last decade in particular was our inability to meet our domestic expenses and as a result taking up loan from international lending giants. If we thoroughly analyze our past we will find that whatever loan we have taken actually increased our miseries. In the year 1999 we were about to default thanks to 9/11 and sound and consistent financial policies by the government that we were able to pull our selves back from this debacle. Right now We are indebt for about thirty five billion dollars which is a much better situation than the past when the this figure was about to reach forty billion dollars and the condition is improving day by day all we need is continuation of financial policies. But the question is should we wait for a miracle to happen or should we act as a proactive nation and derive new ways to meet our expenses, later will help our cause and fulfill Quaid's dream of a prosperous and forward looking Pakistan.

Now days finance has become a science. Financial institutions are spending a lot of money for deriving new financial instruments and for introducing innovative products to get maximum benefit out of them and for minimizing financial constraints.
Asset back securitization is one of those products which were introduced in late sixties and developed countries took full advantage of this fruitful financial innovation even underdeveloped country such as India took it to its optimal benefit. Few sectors of Pakistan also took initiative in this regard; paktel is one example of such initiatives.

In the past Government of Pakistan always looks towards foreign lenders whenever they need finances. Our experience with these lenders could not prove so successful. So there is need of deriving other ways, securitization is one of those ways.

It's being told in previous chapters that what is securitization and what are its implications. How it works and what are its advantages and what risks are involved in using it as finance generating tool. Here we are talking about future flow securitization.

Central Board of Revenue is a government owned organization responsible for collection of taxes from the public for the government. Taxes are the main source of revenue for any government, Pakistan is no exception. CBR has continuous inflow of taxes which is improving day by day. What CBR can do here is that they can securitize the future flow of sales tax which is less risky as compare to other taxes. Now there is need to answer few questions before going into details of this proposal.

- Which assets should be securitized?
- For how much time should they securitized.
- What should be the rate of return?
- What are the benefits of future flow securitization in this particular scenario?
- What risks are involved?
- What will be the accounting treatment?

Now let's answer the above mentioned questions one by one:

4.1. Which Assets should be Securitized?

This is the most important question of all the questions which are mentioned above. Reason being that it is directly related with the success of this project. As central board of revenue is a government organization responsible for collection of taxes from the people. There are number of types of taxes which it collects i.e. income tax, Sales tax, Custom duties etc. We have to choose the most appropriate one for our task. Income tax and sales tax are quite vulnerable than there is a lot of risk involved in it because they are related directly to customers while sales tax is an indirect tax so it involves less risk. Secondly

sales tax is the biggest source of revenue among all other revenue generation activities. So its being decided that we will go for securitization of sales tax. Now another question is that which assets should we securitized? We can not sell all the assets because we need some revenues for operations as well so we should go for fewer assets which are consistent in nature and are healthy as well.

4.2. For how much Time should they Securitized?

We need quite handsome amount for any mega development project. So we need to find out that how much time the selected assets will take to cover the sold amount. In this case it will not take more than five years.

4.3. What should be the Rate of Return?

Rate of return on the issued securities will be determined keeping in view the current discount rate of State Bank of Pakistan and the calculation of risk factors to which the transaction is exposed. In this case the biggest risk is political risk that whether the government policies will remain the same towards the tax collection or whether they will change. This risk can not be quantified. So we will assign some percentage to it keeping in view the past experiences of other companies which had gone for securitization of future flow of receivables.

4.4. What Risks are Involved?

As discussed earlier there is one major risk involved that is political risk which will be cater for keeping in view past experiences and the importance of this risk to this transaction.

4.5. Portfolio of Sales Tax Receivables for Securitization

Table 1 **Rs in millions**

Commodity	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Aerated Waters/Beverages	841.402	704.905	707.044	919.890	1,264.260	1,698.339	1,608.358	1,985.957
Air Compressor Fan etc	0.587	12.182	0.489	1.565	3.396	11.125	12.492	11.023
Auto Parts	49.354	96.068	572.510	534.434	728.911	811.731	1,004.337	977.110
Biscuits	188.823	205.986	209.095	199.774	187.023	252.051	279.248	336.369
Bitumen Natural	51.142	61.665	133.187	123.518	119.037	301.752	449.765	693.756
Cement	3,538.813	3,640.825	3,665.321	277.488	114.117	105.931	1,887.008	3,921.616
Ceramic Tiles	140.378	183.985	185.344	137.600	197.927	207.972	212.433	231.916
Cigarettes	1,991.613	2,269.835	2,679.721	2,437.381	3,270.402	4,052.413	4,259.377	4,565.889
Deep Freezers	122.933	146.710	117.637	229.726	248.532	305.989	264.217	282.195
Electrical Goods & Parts(Nos)	202.882	170.426	106.079	107.940	124.712	271.849	277.400	264.773
Explosives	44.727	45.519	52.139	32.663	42.444	59.218	72.281	91.570
Iron & Steel Products	674.068	79.336	1,189.327	18.249	46.125	70.372	74.339	58.438
POL Products	229.355	702.145	8.625	1,307.539	1,905.882	8,824.701	13,986.705	14,801.928
Power Looms(Grey/ Ticken Cloth)	5.238	1.118	54.274	179.172	177.374	241.908	527.934	649.108
Television Sets	157.110	126.840	189.229	3.038	9.782	9.281	35.712	36.693
Wires & Cables	351.592	408.829	209.925	117.410	176.386	277.808	222.209	223.802
Total	**8590.017**	**8760.302**	**10079.941**	**6627.383**	**8616.517**	**17502.439**	**23831.965**	**29468.143**

Grand Total = 113476.707 million rupees

Mean = 113476.707/8

= 14184.59 million rupees.

If we look at the total column of the above mentioned table we will find that except for one year that is 1997-98 there is a constant growth in the receivables of central board of revenue as far as sales tax are concern. So this is an ideal opportunity for the government to cash on it. Government can easily issue securities backed with these assets and can generate funds before time for developmental projects.

Now from here on wards I would be acting as the CBR personal who have been given a task to conduct a feasibility study of future flow securitization of CBR revenues which are mentioned above.

We have decided to securitize amount of 14500 million rupees or $250 million. Now the question is that why we have chosen 14500 million rupees to securitize. Let's answer this question in a systematic way.

Amount of Securitization = 14500m Rs

Period of Securitization = 5 years

Maximum amount paid in any year = 4553m Rs (Table 7) calculated on floor rate.

Minimum received amount in past 8 years in account of above mentioned portfolio

= 6628 m Rs.

Minimum received amount in past is approximately 1.46 times of the maximum required amount for this transaction in a year.

Average received amount in last 8 years = 14185 m Rs

Average received amount in last 8 years is approximately 3.2 times of the maximum required amount for this transaction in a year.

So above mentioned calculations shows that this is a highly viable transaction to carry on with.

4.6. Structure of the Transaction:

4.6.1. Application:

Central Board of Revenue (CBR) will sell and special purpose vehicle (SPV) will purchase the receivables for a consideration of PKR …14500…. Million subject to the terms and conditions set forth in the sale and purchase agreement. SPV will raise the finances for the sale price by issuing TFCs to various investors.

4.6.2. Parties to the Transaction:

The following parties are involved in this transaction:

4.6.2.1. .SPV Limited - *(As buyer of the receivables):*

A special purpose vehicle constituted under the companies (Asset Backed Securitization) rules, 1999 has been incorporated as a public limited company for the purpose of entering into this transaction.

4.6.2.2. Originator - *CBR (as seller of receivables):*

Central Board of Revenue (CBR) is the tax collection authority in Pakistan and is currently working under the umbrella of government of Pakistan.

4.6.2.3. Service Agent - *CBR:*

CBR under this role will act as the administrator of the purchased receivables under the service agreement executed between the company and CBR.

4.6.2.4. Security Trustee – *Habib Bank Limited*:

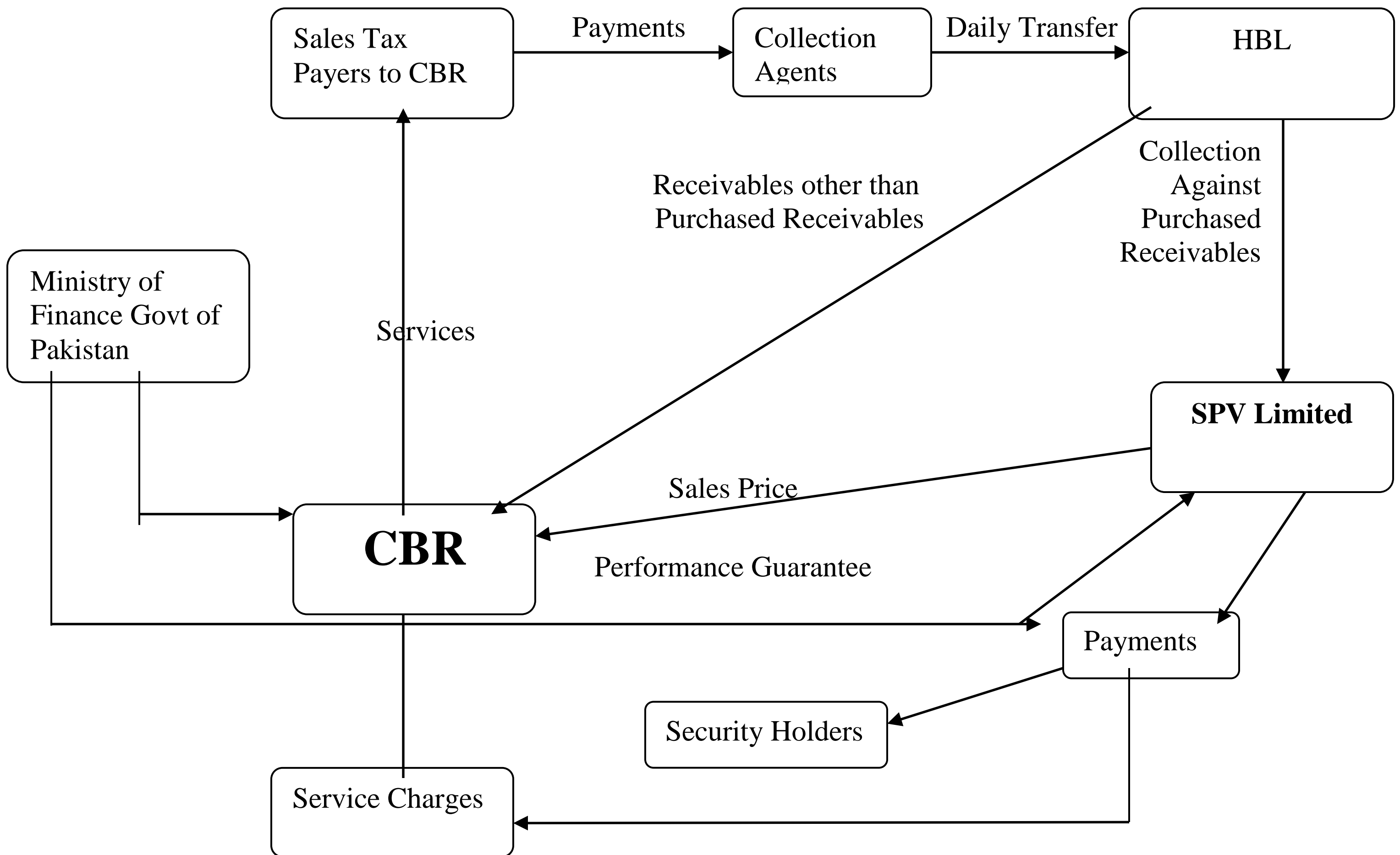
The trustee will hold and maintain the security on behalf of the investors.

4.6.2.5. Collection Agent – *Habib Bank Limited*:

Collection agent will be responsible for managing cash routing and collection procedures related to the transaction. From July 1 2005 to June 30th 2009 all sales tax payments for the items mentioned above in the table being routed through the collection agent.

4.6.2.6. Performance Guarantor to the SPV- *Ministry of Finance Government of Pakistan:*

Ministry of Finance Government of Pakistan is guaranteeing CBR's obligations to SPV under the sale and purchase and service agreement for the tenor of the transaction.



SPV limited a non bankruptcy remote special purpose vehicle has been incorporated under the companies (Asset Backed Securitization) rules 1999 as a subsidiary of Habib Bank Limited.

4.7. Issuance of Securities & Related Matters:

The total value of securities offered under this agreement comprises of Rs 14500 million or $ 250 million. These securities are instruments of redeemable capital under the companies' ordinance 1984 for the period of five years.

Terms:	Securities:
Amount	Rs 14500 million
Tenor	5 years
Listing	Karachi Stock Exchange
Profit & Principal Payment	Bi annually

The securities offered to general public will be having an aggregate face value of Rs 5000, Rs 10000, Rs 50000, and Rs 100000. The securities offered to institutional investors will be having a face value Rs 100000, Rs 1000000, and Rs 10000000.

4.7.1. Source of Payment to Security Holders- Purchased Receivables:

Collections made from the purchased receivables acquired by the SPV are the source of payment to security holders.

- Purchased receivables are basically all the receivables which CBR will collect in the period from 2005 to 2009 for all the items mentioned in the table 1.
- Any amount exceeding after making all relevant payments (Principal, Interest and service charges) will be return back to CBR by the SPV.

4.7.2. Investor Eligibility:

All Pakistani nationals and residents, provident, gratuity, pension funds and corporate entities are allowed to subscribe to the securities offered to the general public.

4.7.3. Basis of Allotment of Securities:

- Application must be made for securities of total face value of Rs. 5000, Rs 10000, Rs. 50000, Rs. 100000, Rs. 1000000, Rs. 10000000.
- Application for securities below the aggregate face value of Rs. 5000 shall not be entertained.
- An applicant is entitled to apply in any category.
- If securities applied for by such applicants are in excess of the securities offered to them the distribution shall be made by balloting separately within each category in the presence of representative of the Karachi Stock Exchange.
- In case of over and under subscription of categories, the applicants of over subscribed category will be allotted the securities of under subscribed category.
- Allotment of securities shall be subject to scrutiny of the applications.

4.7.4. Minimum Subscription:

The minimum subscription on which the directors will proceed to allot securities is the total amount of 14500 million rupees.

4.7.5. Redemption of Securities:

The securities holders will be paid principal and markup biannually on the payment date as specified in below mention tables. The amounts corresponding to payment dates on the following order of priority:

- Installment payment of securities (Comprising principal and mark up)
- Service charges payable to Central Board of Revenue as per the service agreement.

- Any amount in the SPV account after the above mentioned payments would be paid back to CBR.

Redemption Schedule for securities having an aggregate face value of Rs. 5000 is set out in the following table:

Table 2:

Face Value	Rs. 5000
Tenor	5 years
Profit Rate	Base Rate (R) + 2.50 % with floor and caps as follows: Floor: 10%P.a. Cap: 12% P.a.
Principal Redemption	Principal to be repaid in 10 biannual installments

Base Rate (R) shall be the State Bank of Pakistan Discount Rate.

The profit rate will be set on the last working day before the issue date for the securities due on the first redemption date and subsequently on the last working day prior to the beginning of each biannual period for the profit due at the end of that biannual period.

Total Amount Needed for This Transaction:

Table 2.1:

Biannual periods	Maximum Service Charges	Maximum amount needed for this transaction biannually	Total maximum amount needed for the transaction
1	71.5m	2,320,000,000	2391.5m
2	71.5m	2,233,000,000	2304.5m
3	71.5m	2,146,000,000	2217.5m
4	71.5m	2,059,000,000	2130.5m
5	71.5m	1,972,000,000	2043.5m
6	71.5m	1,885,000,000	1956.5m
7	71.5m	1,798,000,000	1869.5m
8	71.5m	1,711,000,000	1782.5m
9	71.5m	1,624,000,000	1695.5m
10	71.5m	1,537,000,000	1608.5m
Total	**715m**	**19,285,000,000**	**20,000,000,000**

Redemption Schedule for Set Securities of Face Value of Rs. 5000

Table 3:

Month from the issue date	Principal Amount Out standing	Maximum Expected Profit 12% P.a.	Principal repayment	Deduction of Zakat at 2.5%	Deduction of with holding tax at 10%	Maximum expected redumption @12% p.a.
0	5000					
6	4500	300	500	12.5	30	757.5
12	4000	270	500	12.5	27	730.5
18	3500	240	500	12.5	24	703.5
24	3000	210	500	12.5	21	676.5
30	2500	180	500	12.5	18	649.5
36	2000	150	500	12.5	15	622.5
42	1500	120	500	12.5	12	595.5
48	1000	90	500	12.5	9	568.5
54	500	60	500	12.5	6	541.5
60	-	30	500	12.5	3	514.5
Total		**1650**	**5000**	**125**	**165**	**6360**

The above redemption of amount is subject to deduction of zakat and with holding tax, if applicable.

Redemption Schedule for Set Securities of Face Value of Rs. 5000

Table 4:

Month from the issue date	Principal Amount Out standing	Minimum Expected Profit 10% P.a.	Principal repayment	Deduction of Zakat at 2.5%	Deduction of with holding tax at 10%	Maximum expected redumption @10% p.a
0	5000					
6	4500	250	500	12.5	25	712.5
12	4000	225	500	12.5	22.5	690
18	3500	200	500	12.5	20	667.5
24	3000	175	500	12.5	17.5	645
30	2500	150	500	12.5	15	622.5
36	2000	125	500	12.5	12.5	600
42	1500	100	500	12.5	10	577.5
48	1000	75	500	12.5	7.5	555
54	500	50	500	12.5	5	532.5
60	-	25	500	12.5	2.5	510
Total		**1375**	**5000**	**125**	**137.5**	**6112.5**

Redemption Schedule for Set Securities of Face Value of Rs. 10000

Table 5:

Month from the issue date	Principal Amount Out standing	Maximum Expected Profit 12% P.a.	Principal repayment	Deduction of Zakat at 2.5%	Deduction of with holding tax at 10%	Maximum expected redemption @12% p.a
0	10000					
6	9000	600	1000	25	60	1515
12	8000	540	1000	25	54	1461
18	7000	480	1000	25	48	1407
24	6000	420	1000	25	42	1353
30	5000	360	1000	25	36	1299
36	4000	300	1000	25	30	1245
42	3000	240	1000	25	24	1191
48	2000	180	1000	25	18	1137
54	1000	120	1000	25	12	1083
60	-	60	1000	25	6	1029
Total		**3300**	**10000**	**250**	**330**	**12720**

Redemption Schedule for Set Securities of Face Value of Rs. 10000

Table 6:

Month from the issue date	Principal Amount Out standing	Minimum Expected Profit 10% P.a.	Principal repayment	Deduction of Zakat at 2.5%	Deduction of with holding tax at 10%	Maximum expected redumption @10% p.a
0	10000					
6	9000	500	1000	25	50	1425
12	8000	450	1000	25	45	1380
18	7000	400	1000	25	40	1335
24	6000	350	1000	25	35	1290
30	5000	300	1000	25	30	1245
36	4000	250	1000	25	25	1200
42	3000	200	1000	25	20	1155
48	2000	150	1000	25	15	1110
54	1000	100	1000	25	12	1065
60	-	50	1000	25	5	1020
Total		**2750**	**10000**	**250**	**275**	**12225**

Redemption of Maximum Amount which the CBR need to Pay in this whole Process within the Time Period of 5 Years.

Table 7:

Month from the issue date	Principal Amount Out standing	Maximum Expected Profit 12% P.a.	Principal repayment	Total amount to be paid in one biannual installment
0	14,500,000,000			
6	13,050,000,000	870,000,000	1,450,000,000	2,320,000,000
12	11,600,000,000	783,000,000	1,450,000,000	2,233,000,000
18	10,150,000,000	696,000,000	1,450,000,000	2,146,000,000
24	8,700,000,000	609,000,000	1,450,000,000	2,059,000,000
30	7,250,000,000	522,000,000	1,450,000,000	1,972,000,000
36	5,800,000,000	435,000,000	1,450,000,000	1,885,000,000
42	4,350,000,000	348,000,000	1,450,000,000	1,798,000,000
48	2,900,000,000	261,000,000	1,450,000,000	1,711,000,000
54	1,450,000,000	174,000,000	1,450,000,000	1,624,000,000
60	**-**	87,000,000	1,450,000,000	1,537,000,000
Total		**4,785,000,000**	**14,500,000,000**	**19,285,000,000**

Redemption of Minimum Amount which the CBR need to Pay in this whole Process within the Time Period of 5 Years.

Table 8:

Month from the issue date	Principal Amount Out standing	Minimum Expected Profit 10% P.a.	Principal repayment	Total amount to be paid in one biannual installment
0	14,500,000,000			
6	13,050,000,000	725,000,000	1,450,000,000	2,175,000,000
12	11,600,000,000	652,500,000	1,450,000,000	2,102,500,000
18	10,150,000,000	580,000,000	1,450,000,000	2,030,000,000
24	8,700,000,000	507,500,000	1,450,000,000	1,957,500,000
30	7,250,000,000	435,000,000	1,450,000,000	1,885,000,000
36	5,800,000,000	362,500,000	1,450,000,000	1,812,500,000
42	4,350,000,000	290,000,000	1,450,000,000	1,740,000,000
48	2,900,000,000	217,500,000	1,450,000,000	1,667,500,000
54	1,450,000,000	145,000,000	1,450,000,000	1,595,000,000
60	**-**	72,500,000	1,450,000,000	1,522,500,000
Total		**3,987,500,000**	**14,500,000,000**	**18,487,500,000**

4.8. Risk Factors & Mitigation:

SR. No.	Risk Factors	Mitigations
1	The transaction described here in is a future flows securitization transaction which relies on the operational performance of central board of revenue. As we all know that the main operation of central board of revenue is collection of taxes so the success of this transaction is largely dependent upon the ability of CBR to collect revenues.	Government is continuously making improvements in its revenue collection methods this claim is evident from the near past performance of CBR. So we are quiet hope full that the same trend will continue in the future as well.
2	Rerouting of tax receivables by CBR to any other account.	Irrevocable instructions to all collecting banks of CBR and all other collection agents working on behalf of CBR have been given by CBR to transfer all collections made on behalf of CBR in connection with the required portfolio to HBL. As and when funds get collected into the collection account, the collection agent would transfer funds relating to the purchased receivables into the SPV account and the collections other than from the purchased receivables into an account designated by CBR. The SPV would have the right to appoint auditors to verify the CBR accounts once in a year.
3	In case of default of any other	Security trustee will ensure that no

	commitment made by CBR. There is a chance that the defaulters might enter claim on the receivables purchased by SPV.	objection certificates have been obtained from relevant charge holders of CBR.
4	**Generation & Collection Coverage:** <u>Receivable Generation Risk:</u> CBR fails to generate receivables up to base amount biannually. <u>Collection Risk of Purchased Receivables:</u> SPV purchases receivables up to the base amount in a quarter but collections are not made against it.	**1.** Based on the average historical figures of last 8 years, CBR has on an average generated receivables up to 3.2 times average the purchased receivables. **2.** Even if CBR only generate 50% of its estimated receivable biannually that would be enough to make the payments to the investors. Calculated on floor rate.
5	**Political Risk:** Political risk is inevitable in this transaction because tax policies are dependent upon the present government policies and in our country where political situation is highly vulnerable this risk is much higher.	There is not any concrete mitigation for this particular risk how ever it is expected that there will be no major change in any government policies as far as sales tax of above portfolio is concerned because this portfolio is one of the major sources for government revenues. Secondly CBR is bound to pay the stated amount even if the government changes.

FINDINGS

CHAPTER # 5

5.1. Benefits of Future Flow Securitization in this Particular Scenario?

5.1.1. Time Value of Money:

There are lots of benefits in using this type of financing I mean future flow securitization. The major benefit of this particular transaction is that one will have a huge amount of money today which we can only get after five years on one condition and that condition is that we need to save a certain amount of money every year by putting up huge amount in banks saving account that means by blocking that particular amount for five years. Now let see that how much amount we need to put in the bank:

Suppose we need 14500million rupees after five years and the current interest rate on which the banks are working at is 10% in situation 1 and 12% in situation 2.

Situation 1:

Amount required = 14500 million rupees

Period = 5 years

Interest Rate = 10%

P = A (PVIF)

14500 (.621)

= 9004.5 million rupees

Situation 2:

Amount required = 14500

Period = 5 years

Interest Rate = 12%

P = A (PVIF)

14500 (.567)

8221.5 million rupees

So as it is evident from both the situations that one need to put a lot of money in saving account to get the required amount after five years. There are certain disadvantages in this method of getting money:

- Money will stuck in the bank for a long time means that one cannot utilize that money. That money is actually blocked.
- Secondly the value of the required amount will not remain as it is as it is now because there are certain factors which in most of the cases and especially in case of our country affect the value of money over the period of time like inflation, currency exposure towards different risk.
- Than by putting money in any saving account especially in bank no one can guarantee you the consistent interest rate.
- The interest rate we have assumed in above mentioned situations are quite high compare to prevailing interest rates.

So if consider all the reasons we will find out that how much benefit central board of revenue is getting just by putting something on stake which is yet to come.

5.1.2. Optimal Utilization of Resources:

Now the question arises that what has certainly happened that we are getting so much of money in lump sum. There is only one answer to it that we are not doing any thing miraculous all we have one is that we get the switches of our mind on that how we can get best out of available resources and we have found future flow securitization as one of the tools which actually help us in optimally utilizing our resources.

We are not begging for loan from any one we are also not asking for any type of aid because we want to get our own resources utilized.

5.1.3. Govt Can Launch a Mega Project:

Government of Pakistan might not have found any time in the history of this country in which they can claim that we have enough money to fulfill the requirements of running the country or we don't need money. Same is the case we are confronting now days we need money to service our debt we need money to start mega projects.

So government of Pakistan with this money can launch a mega project that project can be related to any sector. Like we are in desperate need of putting money in education and health sector.

5.1.4. Cost of Capital (Compare to lending institutions):

In past when ever we need money we always look towards lending giants of the world. We all know that IMF and World Bank are the two biggest lending institutions of the world. Right now we are under tremendous debt burden. It's about thirty five billion US$ while our total economy is about two to three hundred billion$.

The biggest expense we make in a year is debt servicing which actually gives are very less space to survive. Almost fifty percent of our revenues are used in debt servicing so it gives us only fifty percent of the revenues to spend on our necessities.

Now we have some other options as well to generate money one of them is securitization. Let's have a comparison of lending money and generating money through securitization:

- The biggest advantage of securitization is that the liability of the originator is limited to the assets or receivables sold. If the debtor of the receivable goes into default originator is not liable to make payment from any other receivable.
- While if we look into the loan which we take from financial institutions we need to pay penalty in case we get defaulted.
- Financial institutions give loans on their conditions that spend this money in certain areas told by them.
- While in case of future flow securitization we would be free to utilize the money where ever we want.
- Usually these institutions advance loans on high interest rates.

5.1.5. Money will Remain in the Country:

This is one of the biggest advantages of future flow securitization that money will remain in the country. If we take loan from any financial institution we need to pay it back in dollars that means we will buy dollars in order to make the payment from the open market in the result the value of dollar will increase because of increase in demand and our currency value will detoriated.

5.1.6. Early Developmental Projects:

Government instead of waiting for money to come in future can start early developmental projects by utilizing the option of future flow securitization. Secondly we will not remain bound to any body that when people will pay money than we will start the developmental projects.

5.2. Limitations of Future Flow Securitization:

All though future flow securitization as a process is of great success in most of the cases all over the world but certainly there are few cases in which it has proved to be a debacle. The biggest limitation of future flow securitization is that who will rate the quality of asset and under what standards.

This paper was never so easy to write because it is dependent on the future flows of central board of revenue which is responsible for collection of taxes and taxes are considered to be the most risky receivables all over the world. But still I have put my best efforts to prove that securitization of sales tax receivables is possible despite of all the threats.

However there are few threats or risks which are inevitable and political risk is one of them. Its being long time since a government in Pakistan has succeed in completing its tenure so no one can provide guarantee that how much time this government will remain and whether the next government will continue the current governments policy or will abide by the promises made by the current government.

Developing investors' confidence is another limitation in the above mentioned case study. No doubt this particular transaction is giving high returns but people in Pakistan do not have much confidence in public sector organizations. So it would be a great task to attract investors for investing in this transaction.

Although Pakistan being an underdeveloped country is confronting with heavy debt burden, poor economic conditions, political instability, worry sum law and order situation, poverty and many other problems which does not give its leader much opportunities to think and find innovative ways to solve the problems of this populated and full of talent country. Poor economic condition is just an argument to hide inefficiencies of our leaders.

Reality is quite different, we have all the resources but we don't have leadership to guide us to utilize these resources and to create verve in us to establish ourselves as a respectable nation among the family of nations.

The purpose of this paper was to find out the practical aspect of future flow securitization by generating a real life case study. I had to options either to go with public sector or with private sector. In Pakistan as we have already seen in the previous chapters that private sector have already worked on future flow securitization but government sector is carrying on with their history of neglecting important changes in the world so I have opted for public sector.

Now it is very difficult rather in some cases it is impossible to get the data from such organizations but I appreciate the present government and its policies at least in this area they have worked very hard to change the attitude of public sector employees towards general public because central board of revenue has given me all the data without creating any impediments in my way.

I have tried to give a complete scenario of future flow securitization so that a lay man can also understand that what future flow securitization is all about. I have started with basic definition of securitization that what is securitization than from there onwards I have shifted my focus on future flow securitization which is the core topic of this research paper than after defining that what future flow securitization is all about and how it works I went to future flow securitization in Pakistan and than enter into the heart of this research paper that practical aspect by applying future flow securitization on the sales tax receivables of central board of revenue.

In this paper we have discussed just a single new way which can help us reducing our debt burden, which can help us to think that we are capable people we can do what ever we want. If a country like Singapore with a very little population can do it than why cant we? This research paper provides few results which we will discuss one by one:

The question in the beginning of the research was that whether future flow securitization is possible in Pakistan the answer is very simple that yes there is no hindrance in conducting future flow securitization in Pakistan. As there is a whole chapter on Future Flow securitization in Pakistan which already told us that there were some companies in the private sector which have opted for future flow securitization and they were quite successful in this experiment and they have used those generated funds quite successfully in either reducing there debt burden or what ever there need was.

But it is for the first time in Pakistan that some one has suggested that future flow securitization is not only possible in private sector companies but public sector organizations can also take full advantage of this innovative financial product.

Usually taxes are considered as the most risky assets to securitize. This has been also suggested by standard and poor credit rating agency. Reason being that no doubt people are bound to give taxes to the government but they are certain loop holes in tax collection system that it is easy to shun the related authorities.

But in this research paper we have tried to put those items In portfolio of assets for securitization which are healthy and their past record is also of high-quality so that investor does not hesitate while investing in this transaction.

Secondly we all know that government of Pakistan major source of revenue is sales tax earned from sale of petroleum products specially crude oil so we have included that particular source of revenue in our asset portfolio.

There would not be any taxation related matters to take care off in this particular transaction because CBR is not bound to pay any taxes rather it is authority responsible for collection of taxes.

This is one side of the face where we have securitized the taxes which government is going to receive. Now we look at the private sector we will find that companies can use this tool for getting rid of many of their major financial problems. Textile sector is on example we have more than ten billion dollars export and a major part of these exports consists of textile sectors production so textile industries can also use this tool to securitize their credit sales and take benefit of this wonder full tool.

Similarly cement sector is another sector which is dong quit well these days and seems to come out of recession very soon because government is taking interest in developing real estate business and reconstruction in Afghanistan is going on so there are ample amount of opportunities for this sector to grow so this sector can also take benefit from future

There are certain other sectors which can also join the race on this front like surgical items which have sufficient amount of exports and sports items which are also doing well as far as exports are concern. And any other industry which has future flows means receivables yet to come on regular bases can enjoy this financial tool.

HYPOTHESIS

Prospects of future flow securitization in Pakistan. Whether it is possible to carry on future flow securitization in Pakistan. If yes than which areas are suitable for this type of securitization. What are the benefits; limitations and disadvantages if any?

So in the end it is quite clear that there are ample opportunities for future flow securitization in Pakistan. Areas, benefits, limitations and disadvantages have been discussed earlier in the paper.

CONCLUSION

CHAPTER # 6

Pakistan as a country has every thing in it, it has ample resources in the shape of human capital, and it has ideal location, outstanding climate, hidden natural resources which are needed to be explored but still there is something which has jeopardized this great nation of more than one forty million people.

We have to identify that area that breaking point which is creating hindrances in the way of our development. To my knowledge that area is our attitudes. We all have an attitude problem, individually we are excellent performers but collectively we are a pity to watch upon. Reason being we always think for our own selves forgetting that this country and people living in this country are also part of our selves.

All we need to do is to find out the new ways and means which can be helpful in optimal utilization of resources with in the country. There is no need for going out side and begging for aid. Try to do every thing with the available resources inside the country.

We have all the resources all what is required is exploration of this resources and guiding human talent to explore such resources. Finance is just becoming a science new innovative financial products are coming every other day. We should also try to invent new financial products and only universities ca do this task successfully.

Bibliography:

- M.Y.Khan, P.K.Jain, “Time Value of Money”, Financial Management, pp 2.5-2.12.

- M.Y.Khan, P.K.Jain, “Capital Budgeting”, Financial Management, pp 5.40 - 5.46

- M.Y.Khan, P.K.Jain, “ Cost of Capital”, Financial Management, pp 7.8 - 7.10

- Securitizaiton by Paktel Limited. “Prospectus” Issued 2003.

- Industrial Alamanac 2002 VOL II.

- Samuel H.C, Joseph R, “Actuarial and Economic Aspects of Securitization of Risk”.

- Suhas Ketkar, Dilip Ratha, “Securitization of Future Flow Receivables”, Finance & Development, March 2001, Volume 38, Number 1.

- Tim Nicolle, “Introduction to Securitization”, Version Number 1.04.

- Meir Kohn, “The Capital Market before 1600”.

- CBR, “Quarterly Review”, Vol 2, No 2, Oct to Dec 2002.

- “Asset Back Commercial Paper” 2003 review and 2004 out look.

- CBR Statistical Journal, "Commodity Wise Selection of Sales Tax",1994-95
- CBR Statistical Journal, "Commodity Wise Selection of Sales Tax",1995-96
- CBR Statistical Journal, "Commodity Wise Selection of Sales Tax",1996-97
- CBR Statistical Journal, "Commodity Wise Selection of Sales Tax",1997-98
- CBR Statistical Journal, "Commodity Wise Selection of Sales Tax",1998-99
- CBR Statistical Journal, "Commodity Wise Selection of Sales Tax",1999-00
- CBR Statistical Journal, "Commodity Wise Selection of Sales Tax",2000-01
- CBR Statistical Journal, "Commodity Wise Selection of Sales Tax", 2001-02