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A Study on Quality Accountability Managing of Scheduled Commercial Banks in India

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ABSTRACT

Asset liability management is a significant task for banks and financial institutions because of volatile global financial markets, propagation of new financial products and changing regulatory environments. Asset-liability management of commercial banks may be defined as the concurrent development of all asset and liability position on the bank's balance sheet under deliberation of the different bank management objectives and lawful, managerial and market constraints, for the purpose of the enhancing the value of the bank, providing liquidity, and extenuating interest rate risk. Scheduled commercial bank in India plays a significant role in the distribution of credit and mobilization of deposits. This study has been carried to test the logic behind in the management of assets and liabilities of Indian scheduled commercial banks. Public sector banks, private sector banks, foreign banks are considered for the study. Three financial years starting from 2009 to 2011 have been selected and all banks balance sheet are analyzed for the sample period. In order to know the quantum of asset liability management canonical correlation analysis has been performed, redundancy factors show the effective management of assets or liabilities. This study concluded that all scheduled banks are effectively manages its assets and liability management is dependent to the asset management.

Key words used: Asset liability management, scheduled commercial banks, canonical correlation analysis, public sector banks, private sector banks, foreign banks.

1. INTRODUCTION

Banking sector in India plays pivotal role in mobilization of deposits and disbursement of loans to the different sectors of the economy. Commercial banks are important ingredients in the economic system to administer overall development of the nation. It is the prime duty of banker to maintain sound and efficient banking system to ensure financial stability. Financial stability can be manageable through proper designing of asset and liability in the company. Asset-liability management essentially refers to the practice by which a bank manages its balance sheet in order to set aside for alternative interest rate and liquidity scenarios. Banking business is related with accepting deposits and lending loans. Bankers are primarily deals with the money related products to satisfy the various needs of its customers. Bankers are always aiming to maximize profitability and trying to ensure sufficient liquidity to repose assurance in the minds of its depositors on their

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ability in serving the deposits by making timely payment of interest and repayment of their deposits. Timely meeting of all other liability commitment are important to them. To honor depositors and loan seekers demands, it is indispensable that banks have to monitor, maintain and manage their assets and liabilities assortment in a systematic manner taking into account the diverse risk involved in that arena.

Generally, banking business is exposed to credit, market, operational and reputational risks in view of the asset-liability renovation. In the midst of liberalization in the Indian financial markets over the last few years and increasing assimilation of domestic markets with external markets, the risks associated with banks' operations have become multifarious and huge, requiring strategic management. Indian financial markets have witnessed plethora of changes at fast pace over the last two decades. Concentrated competition for business concerning both the assets and liabilities, in concert with increasing precariousness in the domestic interest rates as well as foreign exchange rates, has brought pressure on the management of banks to preserve a good balance among spreads, profitability and long-term viability. With the view to study the asset liability management in Indian scheduled commercial banks, this study has been carried out.

2. STATEMENT OF THE PROBLEM

Banking business is now operating with the practice of accepting deposits or raising borrowings from the cheapest possible route. The deposits are accepted through fixed deposits, recurring deposits, savings bank account and current account. Numerous deposit schemes are coming with as many as possible features on the four types of deposit account. Mobilizing deposit or raising money is largely involves liquidity element and interest rate sensitivity. The banker is a privileged debtor than the creditor i.e. depositor of money. But the banker has to remit interest or principal amount as per the requests of depositor. The huge revenue generating assets are loans & advances and investments; revenue is received in the form of interest for loans and advances and interest or dividend from investments. The interest for the deposit is compensated from the interest income of loans & advances and investments. Deposits are short-term liabilities to the banks, which varies from one month to five years. Loans and advances are long-term assets to the banks, which varies from one year to several years. There is a chance for mismatch between liquidity of deposits and loans & advances.

It is imperative to balance the liquidity elements associated with the management assets and liabilities. At the same time, the banker has to face interest rate obligations, interest charged to loans and advances should be more than the interest given for the depositors. Interest rate subject to the economic pressure and performance, having well developed plan should be required for asset and liability management to ensure proper liquidity and interest rate management. As per the norms of RBI, bank has to kept cash and balances with RBI and other banks, investments in the form of fixed assets should be required to discharge its banking business. This strongly impairs pressure on the management of liquidity and interest rate issues with the asset-liability management. Effective use of income generating assets and liabilities will pave the way for the proper asset and liability management. Liquidity Risk is defined as the risk of not meeting the expected and unexpected

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current and future cash flows and collateral needs efficiently. This can be done without distressing the financial condition or daily operations of the bank. Asset liability management basically consists of managing liquidity and interest rate risks in an effective and efficient way. It has become the prime focal point in the banking industry, with every bank trying to maximize yield and reduce their risk exposure.

3. REVIEW OF LITERATURE

Gardner and Mills (1991) talked about the philosophy of asset-liability management as a part of banks strategic planning and as a reaction to the varying environment in prudential supervision, e-commerce and new taxation treaties. Their text provided the groundwork of subsequent discussion on asset-liability management. Haslem et al (1999) used canonical analysis and the interpretive outline of asset-liability management in order to recognize and interpret the foreign and domestic balance sheet strategies of large U.S. banks in the context of the crisis in lending to LDCs. The study found that the least beneficial very large banks have the largest proportions of foreign loans, yet they emphasize domestic balance sheet matching strategies. On the other hand, the most profitable very large banks have the smallest proportions of foreign loans, but, nonetheless, they emphasize foreign balance sheet matching strategies.

Vaidyanathan (1999) conferred issues in asset-liability management and intricate on various categories of risk that necessitate to be managed in the Indian context. In the past Indian banks were primarily apprehensive about adhering to statutory liquidity ratio norms; but in the changed situation, namely moving away from administered interest rate structure to market determined rates, it became important for banks to equip themselves with some of these techniques, in order to immunize them against interest rate risk. Vaidya and Shahi (2001) studied asset-liability management in Indian commercial banks. They suggested in particular that interest rate risk and liquidity risk are two key inputs in business planning process of banks.

Ranjan and Nallari (2004) used canonical analysis to examine asset-liability management in Indian banks. They found that state bank of India and associates had the best asset-liability management in that sample period. They also found that, other than foreign banks, all other banks could be said to be liability-managed; that is, they all borrowed from the money market to meet their maturing obligations. Private bank were found to be aggressive in profit generation, while nationalized banks were found to be excessively concerned about liquidity.

Financial sector reforms during the study period have also an impact on banks assets and liability decomposition. Debasis Bagchi (2003) in his paper "assets and liability information analysis of the Indian public sector banks" studies the behavior of the banks with respect to their capital adequacy ratio dynamics, by decomposing the financial statements. This study shows the evidences that banks re-organized their assets and liabilities to achieve higher capital adequacy ratios, and also that the assets re-organization was more pronounced than the re-organization of the liabilities. ALM is considered a strategic discipline as opposed to a tactical one (Choudhry, 2007).

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4. OBJECTIVES OF THE STUDY

Banking sector plays most significant role in the economic life and development of the nation. The strength of the financial system is strongly related to the soundness of its banking system. Banking activities creates money circulation for the process of production, distribution, exchange and usage of economic resources of a nation. For effective and smooth administration of money circulation requires sound asset and liability management in banks. Hence this present research work is carried out with the following objectives. These are:

- To analyze classification of different scheduled banks and its composition in the sample.
- To examine the asset-liability position and growth rate of assets and liabilities of scheduled commercial banks in India.
- To analyze the pattern of assets and liabilities movement of scheduled commercial banks.
- To investigate the asset and liability management to ensure liquidity and interest rate sensitivity.
- To examine the dependability of assets or liabilities on the asset liability management of scheduled commercial banks.

5. RESEARCH METHODOLOGY

The present research work attempts to analyze asset-liability management in scheduled commercial banks in India to determine its liquidity position, profitability and interest rate movements. This study consists of all scheduled commercial banks excluding regional rural banks. The banks are grouped as per its ownership pattern, that is, public sector banks, private sector banks and foreign banks. This study contains a sample of 27 public sector banks, 22 private sector banks and 34 foreign banks. The public sector banks consist of State Bank of India and its associate banks and all other nationalized banks. The data for the present study consist of the assets and liabilities of a sample of fifty-six banks with nation-wide operations in the study period 2008-09 – 2010-11. The data used for the study included the financial data of banks included in the sample. The required financial data is obtained from the Reserve Bank of India's website. This study is carried out as per the guidelines of asset-liability management issued by Reserve Bank of India on scheduled commercial banks.

This present study focuses canonical correlation analysis to evaluate the nature of asset-liability management of different scheduled commercial banks. For analysis purpose, the assets and liabilities of the banks are classified according to its types and quantum. The outcomes of the canonical correlation analysis are then construed in terms of connotation on profitability, liquidity and interest rate fluctuations. Canonical correlation is a multivariate technique and has been used to review the nature and strength of association between the assets and liabilities of scheduled commercial banks. The correlation between each set of assets and liabilities indicates relationship between assets and liabilities, but all of these correlations assess the assets influence on liabilities.

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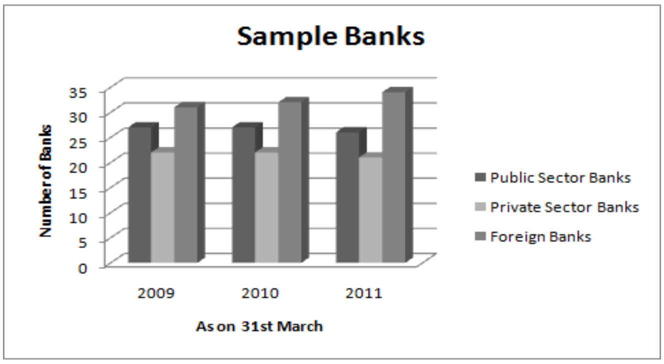
Canonical correlation analysis attempts to measure the linear relationship between two multidimensional variables. It finds two bases, one for each variable, that are most advantageous with respect to correlations and, simultaneously, it finds the consequent correlations. In other words, it finds the two bases in which the correlation matrix between the variables is diagonal and the correlations on the diagonal are maximized.

6. RESULTS AND DISCUSSIONS

ANALYSIS OF SAMPLE BANKS

The following figure narrates the selection and composition of banks in the sample period.

ANALYSIS OF SAMPLE BANKS



Source: www.rbi.org.in

FIGURE NO 1

It is clear from the above figure, the sample banks are belonging to three different classifications on the basis of ownership structure. In 2009, 27 public sector banks, 22 private sector banks and 31 foreign banks are included and total sample banks comes to 80. No change has been revealed as to public sector and private sector banks in 2010 and at the same time there is an inclusion of an additional bank in foreign bank category. The total banks considered for the study in 2010 is 81 banks. During the year 2011, there is an exclusion of one bank each in public sector and private sector and addition of two banks in foreign banks retains sample size to 81 banks. There is no partiality has been shown as to public sector, private sector or foreign banks. All the banks have to abide by the rules of and report to the Reserve Bank of India. Hence equality has been applied to all the classification of banks.

ASSET-LIABILITY POSITION OF SCHEDULED COMMERCIAL BANKS

The following balance sheet shows the asset-liability position for the years starting from 2009 to 2011. It helps to understand how financial resources obtained from various sources are transformed to investments, that is, various forms of assets during the sample period. The consolidated balance

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sheet of scheduled commercial banks gives full information about asset and liability position for the three years from 2009.

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CONSOLIDATED BALANCE SHEET OF SCBS IN 2009 (RS. IN CRORES)

ITEMS	AS ON 31ST MARCH 2009			
	PUBLIC SECTOR BANKS	PRIVATE SECTOR BANKS	FOREIGN BANKS	ALL SCHEDULED COMMERCIAL BANKS
1. Capital	13536	4241	25513	43289
2. Reserves and Surplus	194806	95428	34424	324658
3. Deposits	3112747	736378	214076	4063201
4. Borrowings	258406	137705	77486	473597
5.Other liabilities & provisions	186262	54005	93630	333897
TOTAL LIABILITIES	3765757	1027756	445129	5238642
1.Cash & balances with RBI	224141	57484	15642	297267
2.Balances with Banks and Money at call & Short Notice	131303	33947	31266	196516
3.Investments	1012666	306531	130354	1449551
4. Loans and Advances	2259212	575328	165385	2999924
5. Fixed assets	33743	9880	4738	48361
6. Other Assets	104692	28523	93556	174605
TOTAL ASSETS	3765757	1027756	445129	5238642

Source: www.rbi.org.in

TABLE NO 1

It is evident from the table 1, the capital position of foreign banks shows that three-fifth on the total capital of all scheduled commercial banks. It is ascertained from the above table that major funds are raised in the form of deposits from the general public for all three types of public sector banks, private sector banks and foreign banks. Borrowings from Reserve Bank of India and other banks are second largest source to the scheduled commercial banks. Other liabilities and provisions stand third largest source to the public and private sectors banks and this will be second largest source to foreign banks. Private sectors banks have enormous wealth through the plough back of profit and kept as reserves and surplus. It shows 22 times larger than its capital. Similarly public sector banks possess 15 times than their capital base. Foreign banks possess small history in the banking business in India and its reserve position is just 1.5 times than its capital position. The assets position shows the clear information about their investment pattern of its liabilities. It is mandatory to maintain 5-6% of total assets as cash reserve with RBI, this can be revised from time to time. It is strictly observed during the sample period, similarly, cash balances with banks and money at call & short notice also relies between 2 to 5% on the total assets. Loans and advances are the prime distribution method to the commercial banks and followed by investments. Investments in fixed assets and other assets may or may not yield direct return, but it is necessary to run the banking business. A little portion of amount is invested in the form of fixed and other assets.

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CONSOLIDATED BALANCE SHEET OF SCBS IN 2010 (RS. IN CRORES)

ITEMS	AS ON 31ST MARCH 2010			
	PUBLIC SECTOR BANKS	PRIVATE SECTOR BANKS	FOREIGN BANKS	ALL SCHEDULED COMMERCIAL BANKS
1. Capital	13544	4549	30527	48619
2. Reserves and Surplus	227458	115435	38649	381542
3. Deposits	3692019	822801	232099	4746920
4. Borrowings	313814	149350	68247	531412
5.Other liabilities & provisions	193992	58601	65839	318433
TOTAL LIABILITIES	4440827	1150736	435362	6026925
1.Cash & balances with RBI	270858	75866	19097	365821
2.Balances with Banks and Money at call & Short Notice	114400	38670	20559	173629
3.Investments	1215598	354117	159291	1729006
4. Loans and Advances	2701019	632441	163260	3496720
5. Fixed assets	34469	10239	4860	49568
6. Other Assets	104482	39404	68295	212181
TOTAL ASSETS	4440827	1150736	435362	6026925

Source: www.rbi.org.in

TABLE NO 2

The table 2 shows that similar kind of assets and liability position like its previous year. Maximum revenues are generated in the form of accepting deposits from the common public. Likewise, borrowings, reserves & surplus places second and third to the deposit mobilization. There is a little growth is happened in the capital of all banks. Other liabilities and provisions are increased than previous year to public and private sector banks. There is a slight deep resulted in the foreign banks. Assets side of balance sheet shows the use of financial resources of the bank, loans and advances are the biggest disbursement tool to the banker for the deployment of its funds. Balances with RBI and banks occupy almost 10% of total assets of the all scheduled commercial banks. The remaining resources are invested in the form of fixed assets and other forms of assets. This table insists that a slight growth in the assets and liabilities of all banks.

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CONSOLIDATED BALANCE SHEET OF SCBS IN 2011 (RS. IN CRORES)

ITEMS	AS ON 31ST MARCH 2011			
	PUBLIC SECTOR BANKS	PRIVATE SECTOR BANKS	FOREIGN BANKS	ALL SCHEDULED COMMERCIAL BANKS
1. Capital	19055	4805	35383	59243
2. Reserves and Surplus	271196	133784	45668	450648
3. Deposits	4372985	1002759	240689	5616432
4. Borrowings	395144	185984	92797	673925
5.Other liabilities & provisions	235438	70844	76992	383273
TOTAL LIABILITIES	5293817	1398176	491528	7183522
1.Cash & balances with RBI	352379	86111	20293	458783
2.Balances with Banks and Money at call & Short Notice	132225	31616	27365	191206
3.Investments	1328534	422020	165499	1916053
4. Loans and Advances	3305632	797534	195539	4298704
5. Fixed assets	36156	12980	4958	54093
6. Other Assets	138892	47915	77874	264681
TOTAL ASSETS	5293817	1398176	491528	7183522

Source: www.rbi.org.in

TABLE NO 3

The above table 3 furnishes information about the asset and liability position. The combined balance sheet of scheduled commercial banks witnessed higher growth in 2010-11 as compared with the previous year. This is in contrast to the trend observed during the last two years and signals a recovery from the divergent effects of global financial commotion. The higher growth in the combined balance sheet of scheduled commercial banks was contributed by all the bank groups except old private sector banks, which recorded marginal deceleration in growth. The highest growth was recorded by new private sector banks followed by public sector banks. Yet, as at end-March 2011, almost three fourths of the total assets of the banking sector belonged to public sector banks followed by private sector banks and its share comes to one-seventh in the total assets composition.

GROWTH OF ASSET AND LIABILITIES

Banking sector feeds financial food for the industrial development. Growth of assets and liabilities are essential to cope up the rapid industrialization and expansion. Hence, this study seeks the growth rate of assets and liabilities of the banks. These are presented in table – 4.

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GROWTH OF ASSETS AND LIABILITIES OF SCBS IN 2010 AND 2011

ITEMS	PUBLIC SECTOR BANKS (AS ON 31ST MARCH)		PRIVATE SECTOR BANKS (AS ON 31ST MARCH)		FOREIGN BANKS (AS ON 31ST MARCH)		ALL SCHEDULED COMMERCIAL BANKS (AS ON 31ST MARCH)	
	2010	2011	2010	2011	2010	2011	2010	2011
1. Capital	0.59	40.69	7.26	5.63	19.65	15.91	12.31	21.85
2. Reserves and Surplus	16.76	19.23	20.97	15.90	12.27	18.16	17.52	18.11
3. Deposits	18.61	18.44	11.74	21.87	8.42	3.70	16.83	18.32
4. Borrowings	21.44	25.92	8.46	24.53	-11.92	35.97	12.21	26.82
5. Other liabilities and provisions	4.15	21.36	8.51	20.89	-29.68	16.94	-4.63	20.36
TOTAL LIABILITIES	17.93	19.21	11.97	21.50	-2.19	12.90	15.05	19.19
1. Cash and balances with RBI	20.84	30.10	31.98	13.50	22.09	6.26	23.06	25.41
2. Balances with banks and money at call	-12.87	15.58	13.91	-18.24	-34.24	33.10	-11.65	10.12
3. Investments	20.04	9.29	15.52	19.18	22.20	3.90	19.28	10.82
4. Loans & Advances	19.56	22.38	9.93	26.10	-1.28	19.77	16.56	22.94
5. Fixed Assets	2.15	4.89	3.63	26.77	2.57	2.04	2.50	9.13
6. Other Assets	-0.20	32.93	38.15	21.60	-27.00	14.03	21.52	24.74
TOTAL ASSETS	17.93	19.21	11.97	21.50	-2.19	12.90	15.05	19.19

Source: www.rbi.org.in

TABLE NO 4

The table 4 presents growth of assets and liabilities for the years 2010 and 2011. Deposit mobilization is the prime source of banks; double digit growth is achieved by public and private sector banks but foreign banks lacked in the accumulation of deposits in both the years. At the same time external commercial borrowing rate is increased to all banks except foreign banks in the year 2010. In 2011, public sector banks are raised capital up to 41% than the previous year position. Reserves and surplus shows handsome increase in both the years. There is mixed trend of increase and decrease in other liabilities and provisions. Lending of resources in the form of loans and advances shows more or less 20% to public sector banks in both the years, but private and foreign banks achieved this rate of growth in 2011. The same kind of progress can be seen to the investments, cash and balances with RBI and other banks. All bankers are concentrating a moderate investment on fixed assets and it ranges from 2% to 26%. The above table strongly evidences that the rate of increase in deposit are equally distributed as loans and advances to the

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various sectors of the economy. Average growth of scheduled commercial banks are seems satisfactory during the financial year 2010 and 2011. This growth shows the strength of economic prosperity and highest possible industrial development can be possible in coming years.

RESULTS OF CANONICAL CORRELATION ANALYSIS

CANONICAL CORRELATION ANALYSIS OF ASSETS AND LIABILITIES OF BANKS

PARTICULARS	2009			2010			2011		
	PUBLIC SECTOR BANK	PRIVATE SECTOR BANK	FOREIGN BANK	PUBLIC SECTOR BANK	PRIVATE SECTOR BANK	FOREIGN BANK	PUBLIC SECTOR BANK	PRIVATE SECTOR BANK	FOREIGN BANK
Squared Canonical Correlation (R^2)	0.9992	0.9997	0.9999	0.9993	0.9999	0.9996	0.9995	0.9998	0.9999
CANONICAL LOADINGS: LIABILITIES									
Capital	0.849	0.745	0.332	0.068	0.564	0.642	0.546	0.257	0.221
Reserves and Surplus	0.534	0.283	0.637	0.455	0.396	0.057	0.350	0.294	0.325
Deposits	0.135	0.838	0.482	0.399	0.353	0.592	0.322	0.623	0.142
Borrowings	0.250	0.107	0.674	0.138	0.493	-0.254	0.351	0.194	0.321
Other liabilities and provisions	0.089	0.032	-0.165	0.193	0.402	0.184	0.138	0.225	0.245
CANONICAL LOADINGS: ASSETS									
Cash and balances with RBI	0.521	0.378	-0.312	0.554	0.224	0.384	0.410	0.199	0.349
Balances with banks and money at call	-0.369	0.342	0.344	0.342	0.213	0.311	0.233	0.419	0.240
Investments	0.388	0.459	0.590	0.823	0.582	0.931	0.139	0.624	0.284
Loans & Advances	0.149	0.228	0.391	0.399	0.563	0.627	0.524	0.329	0.595
Fixed Assets	0.464	0.339	0.423	0.428	-0.521	0.734	0.468	0.534	0.691
Other Assets	0.235	0.582	0.526	0.234	0.642	0.592	-0.204	0.263	0.169
Redundancy									
Assets (A)	0.035	0.049	0.023	0.099	0.126	0.215	0.064	0.166	0.195
Liabilities (L)	0.087	0.313	0.132	0.042	0.211	0.151	0.133	0.029	0.233
Independent Set	A	A	A	L	A	L	A	L	A
Dependent Set	L	L	L	A	L	A	L	A	L

The outcomes of the canonical correlation analysis are furnished in table 5, the bank groups are arranged in the following order that is, public sector banks, private sector banks and foreign banks. The results given in first row (R^2) are the measure of the significance of the canonical correlation. The computed values of canonical correlations were to be found significant. The strength of the

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association is measured with the help of canonical loading. This measures the percentage of variance linearly shared by an original variable with one of the canonical variable, if the loading falls greater than 40% is assumed to be significant. If the loading indicates negatively, it expresses that inverse relationship between original variable and canonical variable. For example, if any assets or liabilities have a loading of more than 0.40 indicates the strong correlation with the canonical variable.

If one set of variable is how and what extent redundant is measured through redundancy factors, information about independent and dependent sets are identified with the other set of variable. This will furnish complete idea about the fact that the bank is whether asset managed or liability managed. The above correlation analysis explains the maximum positive correlation of 0.931 and maximum negative correlation of 0.369. Investments of foreign banks during 2010 shows maximum positive correlation and cash balances with RBI and money at call & short notice is the maximum negative correlation happened in the year of 2009. Redundancy factors explain the asset and liability management for each class of banks. If the assets are managed properly, it is marked as ‘A’, whereas liabilities are managed well, it is designated as ‘L’ in the independent set. The letter ‘A’ or ‘L’ noted in the dependent set is assumed as dependent of independent set. The results of canonical correlation analysis shows for the period of three financial years to three different scheduled commercial banks. Public sector banks assets are properly managed in the year of 2009 and 2011. Private sector banks assets are properly managed in the year 2009 and 2010. Similarly assets of foreign banks are properly managed than its liabilities in the year of 2009 and 2011.

While taking liquidity aspect of asset-liability management, the focus on fixed assets and deposits are necessary. Parking investments in the form of fixed assets involves possible liquidity issues and interest rate sensitivity. Fixed assets are bearing low liquidity and interest-rate-neutral whereas deposits and borrowing relatively includes short-term deposits liquidity elements and largely affect interest rate sensitivity. For all banks, fixed assets from the asset side of balance sheet and deposits & borrowings from the liability side of balance sheet expresses significant presence in the canonical loadings. It indicates the proper usage of fixed assets and deposits in the management of assets and liabilities. This trend continued to the three years and for all banks. During this study period, all the banks are actively manages their assets and liability management is dependent upon the how well the assets are managed.

7. CONCLUSION

The banking system in India has undergone notable changes over the preceding two decades. Regulatory environments are supports lot for the development of banking habits among common people and have opened up new vistas for banks to enhance its revenues. Simultaneously, global financial turmoil and increased demands for the banking services induces us to study the asset and liability management of banks. Financial stability of commercial banks is largely depends on the effective management of its assets and liabilities. In this study, hardly 81 banks under three classification that is, public sector banks, private sector banks and foreign banks considered to analyze asset-liability management. Performance of scheduled commercial banks are studied for each financial year, while looking liability side of the balance sheet, the growth was driven mainly by borrowings, capital and other liabilities and provisions. The capital accumulation is done

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through issue of shares and contribution from the Government to the public sector banks. Private sector banks and foreign banks are raised through issue of ownership and credit instruments. The consolidated balance sheet furnishes that acceleration in the growth of deposits enhances the total liabilities position. This could be resulted due to the prevailing higher interest rate in the economy. Public sector banks leads among the all scheduled commercial banks in the accumulation of deposits. Similar trend can be seen for the borrowings and all other liabilities. Private sector banks and foreign banks and lacked to maintain consistent growth in the deposit mobilization and borrowings accumulation. Disbursement of credit and investment growth rate also consistently maintained for public sector banks than the private and foreign banks. Overall performance shows the public sector banks have rich asset and liability exposure to meet its liquidity and interest rate sensitivity than private and foreign banks. Canonical correlation presents various significant empirical evidences, which explain the dependency involving in asset and liability movements. There is strong canonical correlation between asset and liability movement, indicating high asset-liability dependency. There is consistent trend persists in canonical correlation for public sector banks, private sector banks and foreign banks. There is a positive correlation exists among the different set of assets and liabilities given in the balance sheets of scheduled commercial banks. It is evident from the canonical correlation analysis, scheduled commercial banks were actively managing its asset and liability and liability management is largely depends on the management of assets.

8. REFERENCE

[1] Gardner, M.J. and Mills, D.L. (1991), "Managing Financial Institutions: An Asset/Liability Approach," 2nd Ed., The Dryden Press, Chicago

[2] Haslem, J. A., Scheraga, C.A. and Bedingfield, J.P. (1999), "DEA efficiency profiles of U.S. banks operating internationally," International Review of Economics & Finance, Vol. 8, Issue 2.

[3] Ranjan, R. and Nallari, R. (2004), "Study of Asset Liability Management in Indian Banks Canonical Correlation Analysis," Spandan.

[4] Vaidyanathan, R. (1999), "Asset-Liability Management: Issues and Trends in the Indian Context," ASCI Journal of Management, Vol.29, No.1. pp.56-69.

[5] Vaidya, P. and Shahi, A (2001), "Asset Liability Management in Indian Banks," Spandan.

[6] Debasis Bagchi (2003), "Assets and Liabilities information analysis of the Indian Public sector banks", Fifth Annual Conference on Money and Finance, held at Indira Gandhi Institute of Development Research (IGIDR), Mumbai.

[7] Choudhry, M. (2007), "Bank Asset and Liability Management: Strategy, Trading, Analysis", Singapore: John Wiley & Sons.

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