

Money and Banking
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Lecture - 34

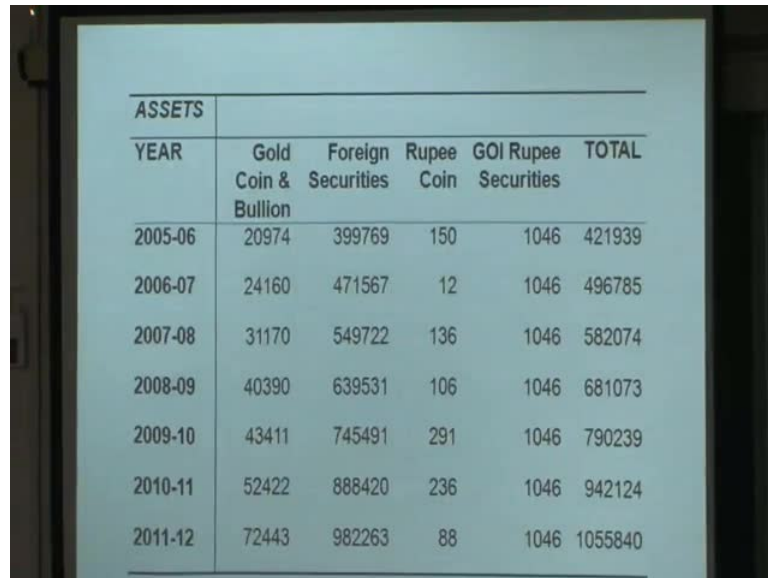
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Table IV.1
Reserve Bank of India Balance Sheet
Issue Department (Rs Crore)

<i>LIABILITY</i>			
<i>YEAR</i>	<i>Notes in Circulation</i>	<i>Notes held in Banking Dept</i>	<i>TOTAL</i>
2005-06	421922	18	421940
2006-07	496775	11	496786
2007-08	582055	20	582075
2008-09	681058	16	681074
2009-10	790223	16	790239
2010-11	942107	17	942124
2011-12	1055828	12	1055840

First issue department, remember RBS issue department, which issues currency? And since it issues currency it is their liability, so look at the liability table of the issue department. 99 plus percentage is notes in circulation, and a little bit of that notes that they have issued lies with the banking department. Hardly anything, issue departments job is to issue currency, using a system called managed paper floating currency system, which I taught you. So, what you see here is this, now looks at the assets of the banking department, balance sheet. If you talk about there are assets and liabilities, so let us look at the assets of the... Why they issued this currency?

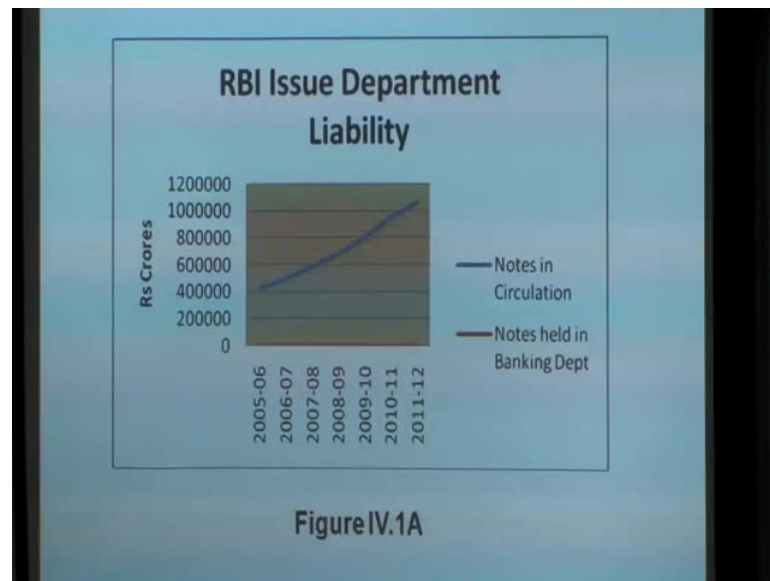
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ASSETS					
YEAR	Gold Coin & Bullion	Foreign Securities	Rupee Coin	GOI Rupee Securities	TOTAL
2005-06	20974	399769	150	1046	421939
2006-07	24160	471567	12	1046	496785
2007-08	31170	549722	136	1046	582074
2008-09	40390	639531	106	1046	681073
2009-10	43411	745491	291	1046	790239
2010-11	52422	888420	236	1046	942124
2011-12	72443	982263	88	1046	1055840

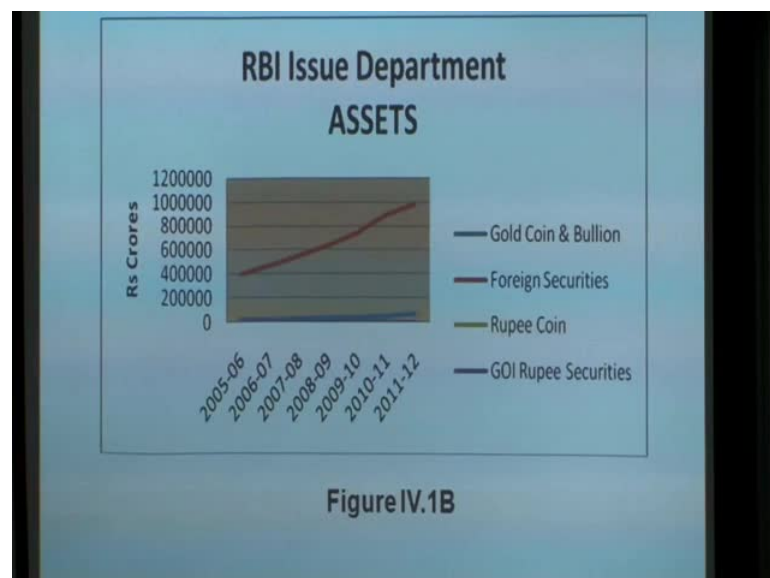
Backed by what, you we will see, what you get? There are four items mentioned in the assets, four columns, that they hold gold coin and bullion, foreign securities, rupee coin, government of India securities. Government of India securities like a 1046, 1046, 1046 these are those adhoc treasury bills, which were converted into console like thing with a fixed interest rate have still not been repaid returned. You remember this 1046 is that number, no new fresh treasury bills are with the issue department because PDS take care of them and the market takes care of government of India treasury bills. RBI has no devolvement, RBIs devolvement is nill nill 0.

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So, now if you plot them as you see notes in circulation, the chart will only show one line notes in circulation in the liability of the RBI; and if you plot the various assets that RBI issue department, holds you will see that the red line dominates which are foreign securities.

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That is, what is dominating. One confusion I have are the foreign securities imply that, RBI is investing in foreign securities, whatever reserves they have surplus, they have my only problem is, where are the foreign exchange assets, where are they lying? Maybe

foreign securities is the word they are using which also include the foreign exchange assets of the RBI. I have a feeling, alright? Because foreign exchange assets are an important part of RB is living it is reported in the places like newspaper etcetera. How much assets they have dollar etcetera reserves?

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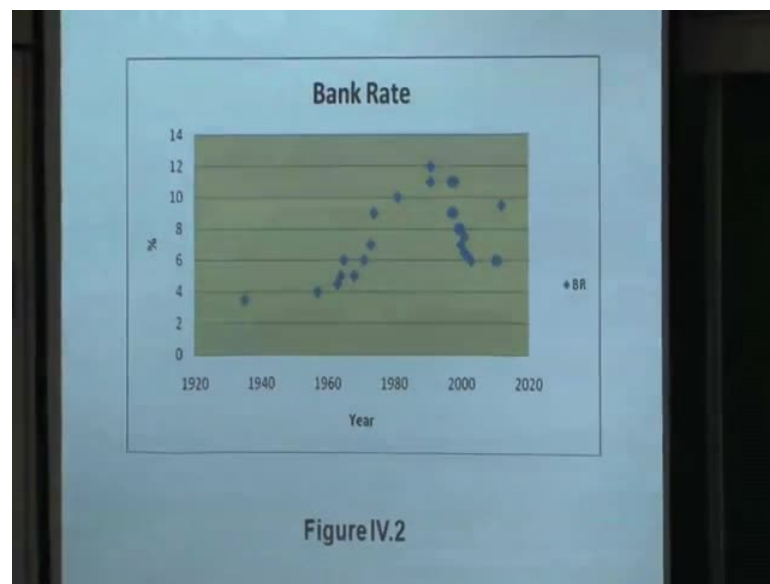
Year	BR
1935	3.5
1957	4
1963	4.5
1964	5
1965	6
1968	5
1971	6
1973	7
1974	9
1981	10
1991	11 11 to 12
1991	12
1997	11 11 to 9
1997	9
1998	11 11 to 9
1998	9
1999	8
2000	7 7 to 8
2000	8
2001	7.5 7.5 to 6.5
2001	6.5
2002	6.25
2003	6
2010	6
2011	6
2012	9.5

Now I go to, I did not go to the banking department here, but now I go to the bank rate. Well the bank rate earliest information I have on bank rate of reserve bank of India was right after its formation before it was nationalized in 1935, the rate was 3.5 percent. Now, over years it has gone up and it has gone up significantly and it reached the maximum. What I see from the data, so mixed rich the maximum of 12 percent in 1991, it remained 12 percent and then it did not change. Then only 1997 it changed to 11 and then eleven to 9, 1997, 9 it fell, but it is very interesting after many, many years.

Since 2003 bank rate has remained 6. So, all these past years when I have been teaching students have been telling them, bank rates have not changed at all, but suddenly 2003 6 2003 2000 last data 9.5 bank rate . So, RBI has been following a contractionary policy, quite a bit even using bank rate they have raised the bank rate. Now, this, there are two sides of of this coin bank rate or interest rate. On the one hand it is a cost, if you are paying it and if you are earning it, it is a return for loan giver interest rate, is a return for a loan taker interest rate, is a cost you have to pay the interest rate.

So, bank rate is, you know this is a very important thing on CRR, banks are getting a lot of return because bank rate is used CRR cash commercial banks get a return from RBI on the other hand if commercial banks are borrowing from RBI bank rate is very high very tight monetary policy essentially. So, it is interesting after 2003 bank rate has changed in 2012. Now, this is the cluster scattered diagram, you can say you will see in bank rate.

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It was there suddenly, there is a one observation, way up there that is the 9.5 percent observation, but it went up in the mid 90 s and then came down bank rate. If you draw a line it is very clear, it goes up and then comes down.

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Year	CRR	CRR Range
1962	3	
1973	7	3 to 5 to 7
1974	4	7 to 5 to 4
1976	6	4 to 5 to 6
1977	6	
1981	7.5	6 to 6.5 to 7.5
1982	7	7.5 to 7.75 to 7
1983	8.5	7 to 7.5 to 8.5
1984	9	8.5 to 9
1987	10	9 to 9.5 to 10
1988	11	10 to 11
1989	15	11 to 15
1993	14	15 to 14.5 to 14
1994	15	14 to 14.5 to 15
1995	14	15 to 14.5 to 14
1996	11	14 to 13.5 to 11
1997	10	11 to 10.5 to 9.5 to 10
1998	11	10 to 10.5 to 10 to 11
1999	9	11 to 10.5 to 9
2000	8.5	9 to 8.5 to 8 to 8.5
2001	5.5	8.5 to 8.25 to 5.5
2002	4.75	5.5 to 5 to 4.75
2003	4.5	4.75 to 4.5
2004	5	4.5 to 4.75 to 5
2007	7.5	5 to 6 to 7.5
2008	6	7.5 to 8.25 to 8.5 to 8.75 to 9 to 6
2009	5	6 to 5
2010	6	5 to 5.75 to 6
2011	6	
2012	4.75	6 to 5.50 to 4.75

Table IV.3
(Year End) CRR

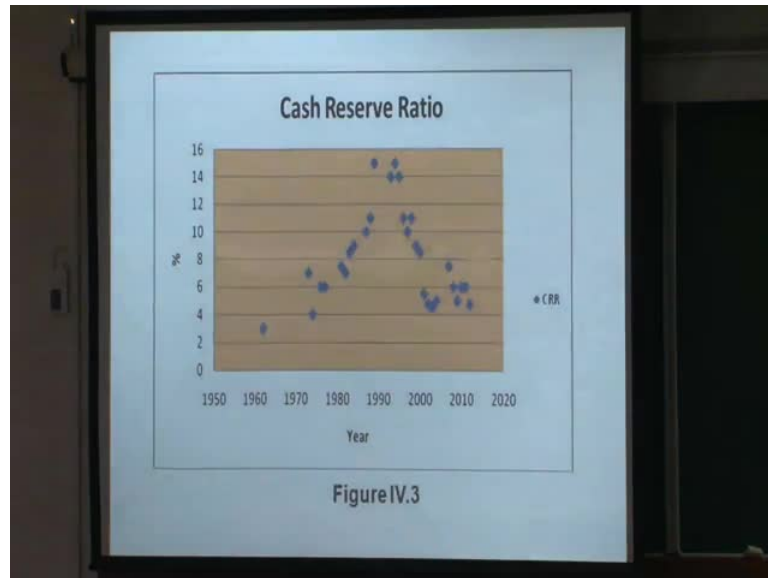
Now, I come to CRR. Earliest information on CRR, I have is 1962, 3 percent and then you see a CRR range ascent, CRR range means within a year CRR has been changed so many times, within a year. So, you take for example, a year like 1994, CRR reached the maximum, 15 percent. CRR reached the maximum, bank rate maximum is 12 percent I think, CRR is 15 percent. Look CRR reached the maximum and then it has come down it has come down CRR has been coming down. Look at the first, second column 15, then 14, 11, 10, 11, 9, 8.5, 5.5, 4.7, 5, very low CRR 4.5.

Then look CRR steadily going up 2007, 7.5 2008 CRR 2009 CRR is less, but it went up and down a little bit. 2006 2008, lot 2008, the CRR changes look 7.5 to 8.25 jumped. Came down to... No went up farther to 8.5, CRR 2008, that difficult year, RBI is continuously probing and trying to set the correct CRR. Amazing, how many times it has changed in a year, 7.5 to 8.25 to 8.5 to 8.75 just like the way, bank rate changes in other countries. Decimal 1 fourth of a decimal point, it changes, 2.5 maximum 0.5, just that the way CRR is changing.

So, in India CRR is very much operated like a bank rate, in other countries, our bank rate has changed once. In recent times which is very unusual, but it has CRR changed to 8.75 to 9. It went up to 6, 9 to 6 it dropped, my goodness, it is unbelievable. Then it has remained at 6, then at 5, 6 to 5 it became then, there is some changes 2010, 6 to 5 to 5.7, 5.6, it reached the maximum 11.6 2012 CRR has gone down tremendously, 4.75, huge.

So, they have relaxed monetary policy now, in 2012. It is more or less steady in 2008, 9 the final number. So, it reached a peak in the 90 s CRR and then came down.

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So, if you plot the CRR, this is the kind of a scattered diagram you will get. It peaked somewhere in the 90 s just like bank rate, they all came down. So, the country went through a very tight monetary policy in the 90 s reached it and then it had relaxed. There have been temporary tight monetary policy, 2008, 9 etcetera, then it has been relaxed again, it has come back to its normal position. It is very low now, 4.75, all right?

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Table IV.4
OPEN MARKET OPERATIONS

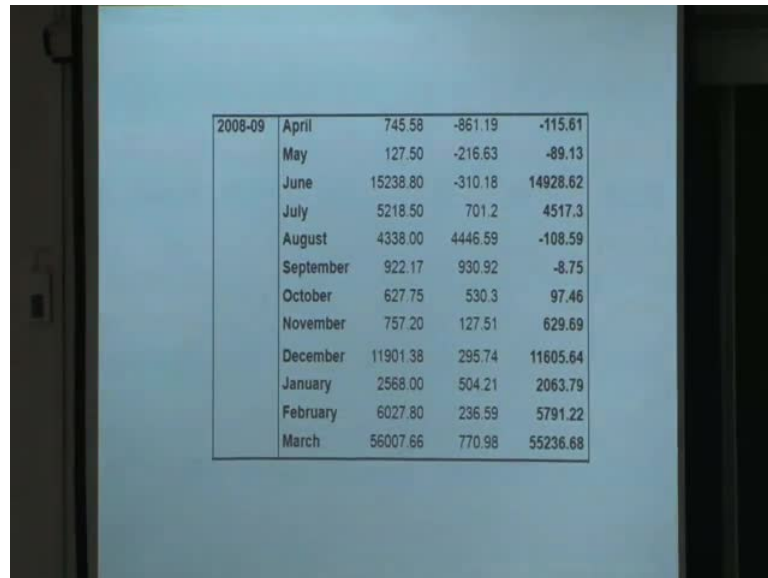
Month End		Rs Crores		
		Government of India Dated Securities – Face Value		
YEAR/MONTH		Purchase from Market (+)	Sale to State Govts (-)	Net Purchases (+) / Net Sales (-)
2007-08	April	10.00	-332.24	-322.24
	May	0.00	-742.8	-742.8
	June	0.00	-254.86	-254.86
	July	25.00	-656.74	-631.74
	August	0.00	-456.28	-456.28
	September	15.00	-413.35	-398.35
	October	0.00	-539.93	-539.93
	November	0.00	-184.51	-184.51
	December	5485.00	-167.44	5317.56
	January	2535.00	-2577.82	-42.82
	February	2660.00	-290.27	2369.73
	March	2780.00	-970.93	1809.07

Next, now open market operations very funny open market operations. I have found data on two columns, whenever they are pumping in money it is purchased from the market. Look there is a plus sign, plus means what? Purchase from the market means pumping in money, injection of funds into the system. When RBI is buying bonds from you, buying back it is giving cash to you in return, so money is injected into the system. But, whenever it came to so, expansion of monetary policy is always purchased from the market and then whenever it came to absorption, it is always a sale to state government it says, very interesting.

So, the purchase from the market is happening through banks, non banks, voluntary investments in government securities, voluntary investments. India today does not require injection of funds, system has enough liquidity. So, if a system has enough cash what do you do? You invest. So, government bonds are an avenue to invest, equity funds, fixed deposits, they put money. So, you see having enough liquidity in the system government is not going for open market purchase at all, sorry open market sale market sale of securities. In that sense, all right?

It is not given, voluntarily they are buying, but there is a conscious open market operation that has been reported is the purchase that is, when there were there was a request for more funds to be injected into the system went for a purchase. Now, open market sale of securities, that policy open market operation seems to be RBI is operating only with the state governments sale to state governments. So, whenever state governments have surpluses, this also says whatever state governments are doing well, together. Look at the numbers January 2007, 8 state governments a huge amount of sale, 2577, otherwise it is a three digit number in hundreds. Hundreds of crores thousands of crores state government 2007, 8 financial year January 8 January. I am talking about then, February, March 2008, 9 2008, 9 no no I am sorry, I am giving you.

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2008-09	April	745.58	-861.19	-115.61
	May	127.50	-216.63	-89.13
	June	15238.80	-310.18	14928.62
	July	5218.50	701.2	4517.3
	August	4338.00	4446.59	-108.59
	September	922.17	930.92	-8.75
	October	627.75	530.3	97.46
	November	757.20	127.51	629.69
	December	11901.38	295.74	11605.64
	January	2568.00	504.21	2063.79
	February	6027.80	236.59	5791.22
	March	56007.66	770.98	55236.68

Now, here it is very interesting, this minus number is missing. The day I have a problem here with the data, you understand I have a problem with the data here, I am very sorry minus number is missing, that is my excel sheet is creating problems. I will correct that and send it to you. There is a minus number in the third column missing because if you see the total, the last column that has to be a minus number. So, there is a data problem, I forgot to put the minus number, minus means what? Minus means you are reducing liquidity in the system, so there is a sale of securities open market sale going on from the RBI side. So, there is a minus.

Now, you see one thing here the large numbers of minus this is a plus number. In June 2008, meaning what? A lot of money was injected into the system, all right? Lot of money injected into the system. Look, December huge amount of money injected into the system, March 2009 huge amount of money injected into the system, so in a recession you would expect the liquidity to dry up in a system. Not so much foreign exchange earnings are coming, if foreign exchange earnings are coming they get converted into cash.

So, the cash starts floating in the system, so this is a recession which is connected with the world, lot of foreign exchange earnings coming, lot of foreign direct investment coming, lot of portfolio investment coming, liquidity dries up in the system. You can see, I am sorry about this third column, it will be a minus number, that is incorrect. You can

put the minus number, yourself in your mind, I will correct it and send it to you with a minus number. I do not know why it happened, but it is clearly that is a lot of plus number in the last column, which is correct. Plus number means a lot of liquidity pumped into the system, huge amount of liquidity. Two particular months you can see, 11,605 crores in December then the following 2009 January 55,236 crores pumped into the system next .

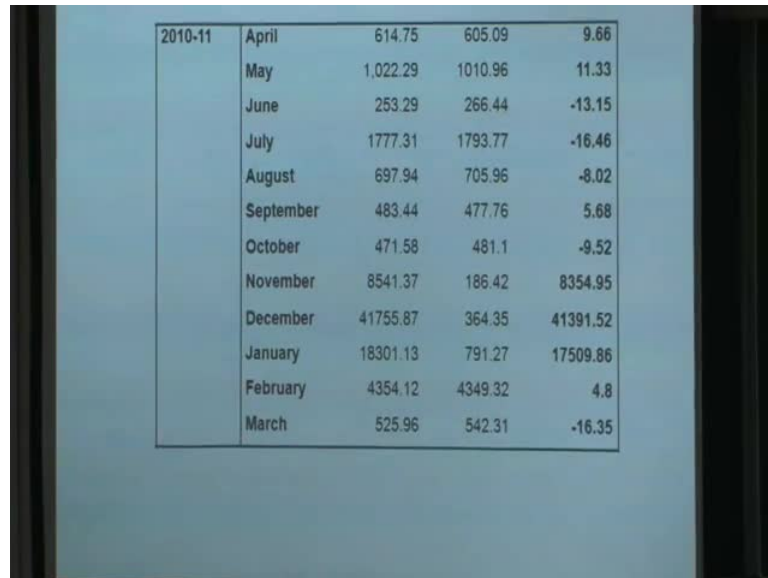
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2009-10	April	21130.00	747.03	20382.97
	May	15374.40	207.91	15166.49
	June	6765.60	315.25	6450.35
	July	7724.37	2479.71	5244.66
	August	13462.09	982.68	12479.41
	September	14111.64	243.85	13867.79
	October	2497.9	1415.89	1082.01
	November	777.7	601.74	175.96
	December	920	284.85	635.15
	January	1194.09	1200.78	-6.69
	February	306.48	310.65	-4.17
	March	1135.52	1141.02	-5.5

I am very sorry minus number it went on like that 2009, 10. System is receiving thorough open market operations a lot of money, 12,000, 13,000, 1000 here 20,000 in April 2009, 10. System is receiving a lot of money. Finally, in January you have a minus number liquidity is enough in the system. January of 2010, so 2008 whole of two 2009 calendar year, 2010 January easing of liquidity, enough system. So, it is getting continued infusion of cash into the system, but again I am repeating there is one error in this diagram.

In this chart is this the third column should have a minus number, which is missing because if you have a minus number then the net turns out to be this. Minus number is missing, I do not know why my excel sheet does not have the minus number? It is my fault of course, because this is copying from the excel sheet I have some work to do this evening, I will then correct the file and then send it to you . 9, 10 then 10, 11 again 10, 11.

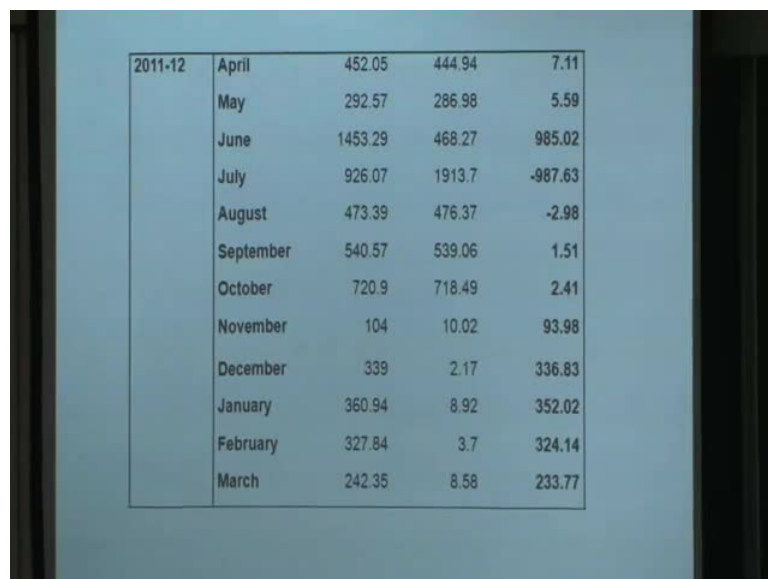
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2010-11	Month	Value 1	Value 2	Value 3
	April	614.75	605.09	9.66
	May	1,022.29	1010.96	11.33
	June	253.29	266.44	-13.15
	July	1777.31	1793.77	-16.46
	August	697.94	705.96	-8.02
	September	483.44	477.76	5.68
	October	471.58	481.1	-9.52
	November	8541.37	186.42	8354.95
	December	41755.87	364.35	41391.52
	January	18301.13	791.27	17509.86
	February	4354.12	4349.32	4.8
	March	525.96	542.31	-16.35

November 10, January 10 ease again November 10 November then December 41,000 then 17,000 in January of 2011 huge infusion of cash 3 months that is very unusual. If you look at the data even 3 years back, you will see this has never happened . So, when recession hits you can see, how the money market gets affected the liquidity dries up. It requires infusion of cash from outside the system which is RBI.

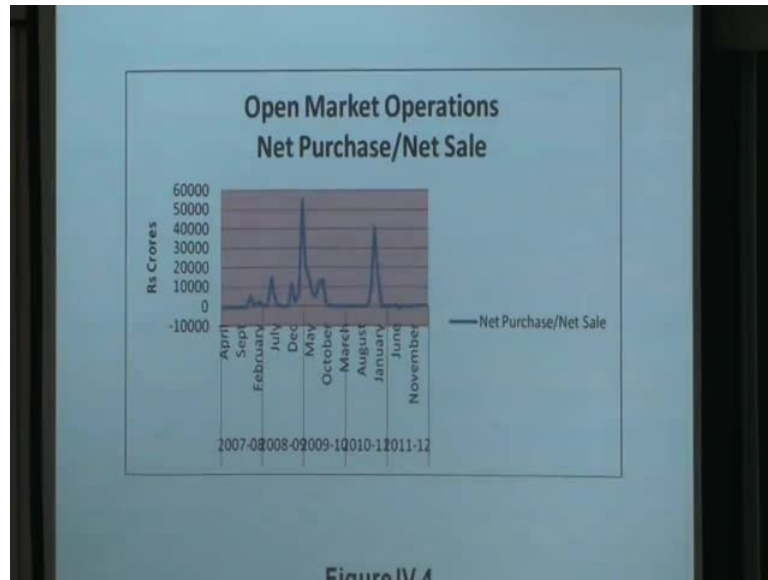
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2011-12	Month	Value 1	Value 2	Value 3
	April	452.05	444.94	7.11
	May	292.57	286.98	5.59
	June	1453.29	468.27	985.02
	July	926.07	1913.7	-987.63
	August	473.39	476.37	-2.98
	September	540.57	539.06	1.51
	October	720.9	718.49	2.41
	November	104	10.02	93.98
	December	339	2.17	336.83
	January	360.94	8.92	352.02
	February	327.84	3.7	324.14
	March	242.35	8.58	233.77

10, 11 then, 11, 12 not bad, there is some infusion of cash of course, but in hundreds, three digits not bad, but 11, 12.

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So, now if you plot it this is what you get. There are clear two spikes, when the infusion of cash took place quite a bit December 2008 and then January around January 2010, 11 that means 2011 January there was a December, January around that time, tenth December, eleventh January there was a infusion of cash. Two spikes, clearly two spikes huge amount of infusion. Otherwise it is very close 100 crores means not much. hundreds of crores, thousands of crores is a large amount. It is very much close to x axis and you can see the data has a minus number also, which means enough liquidity

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Table IV.5A
Loans, Advances and Investments of the RBI to Government and Non-government Institutions (except Com Bills and other Assets)
(Rs crores outstanding)

Year	Scheduled		Scheduled		NABARD	IDBI	EXIM	Others	Total
	Central Govt	State Govts	Com Banks	State Co-op Banks					
1998-99	2873	1493	2894	13	5560	2000	752	4291	15510
1999-00			962	15	5884	1740	697	11541	20859
2000-01			5980	27	6580	1440	617	9104	23748
2001-02			3785	35	6059	1110	532	5086	16607
2002-03			1258	21	4947	0	0	3125	9351
2003-04			0	0	1270	0	0	256	1526
2004-05			45	5	5019	0	0	90	5159
2005-06		86	1488	7	2998	0	0	167	4660
2006-07			6245	0	0	0	0	340	6585
2007-08			4000	0	0	0	0	579	4579
2008-09			11728	0	0	0	0	9834	21562
2009-10		558	42	0	0	0	0	3222	3264
2010-11		729	5031	30	0	0	0	504	5565
2011-12		228	6325	0	0	0	0	2693	9018

Now, I come to loans advances and investments of the RBI to government nongovernmental, non government institutions, except commercial bills and other assets. Rupees crores outstanding, commercial bills and other assets the discounting is ignored here, loans advances and investments of the RBI. One thing you can see, central government column, blank state government . Then scheduled commercial banks of course, they are continuously interacting, active column, third column, scheduled commercial banks, third column.

Scheduled cooperative banks state co operative banks then Nabard Nabard an IDBI and Exim banks, these three columns Nabard, IDBI and Exim bank you do notice one thing that Nabard has been has received assistance since 2005, 6 after that no assistance, that means 6 more years, 6 years have gone by. But IDBI received assistance in 2002, 3 after that 0 assistance 7 years 2002, 3 9 years and Exim bank so they are running very well, they are functioning autonomously.

What are the others, there may be all sorts of other institutions where RBI gives refinancing facility, many many non banks are there also, other than these non banks where RBI gives assistance. They help set up like sometimes these industry construction bank of India, various non banks are there where RBI gives assistance. So, this is RBI assistance and one thing you notice you basically notice two things here, that the governments have not been borrowing much from RBI, not much assistance at least coming year end outstanding amount.

Scheduled banks of course, will have a lot of assistance scheduled bank number borrowing from RBI is the highest 11,728 crores India every time it shows every where, any data you touch in the money market at least same thing will be with the capital market also. If you study, you will get the numbers then IDBI Exim bank and Nabard borrower commercial banks and others others who are the others who get assistance. I do not have the detailed list RBI sets up many non bank organizations sometimes through IDBI or somebody, sometimes directly. And therefore, these assistance continues to others, so other than banks there is this others column nothing else is significant, now nothing else is significant. Okay?

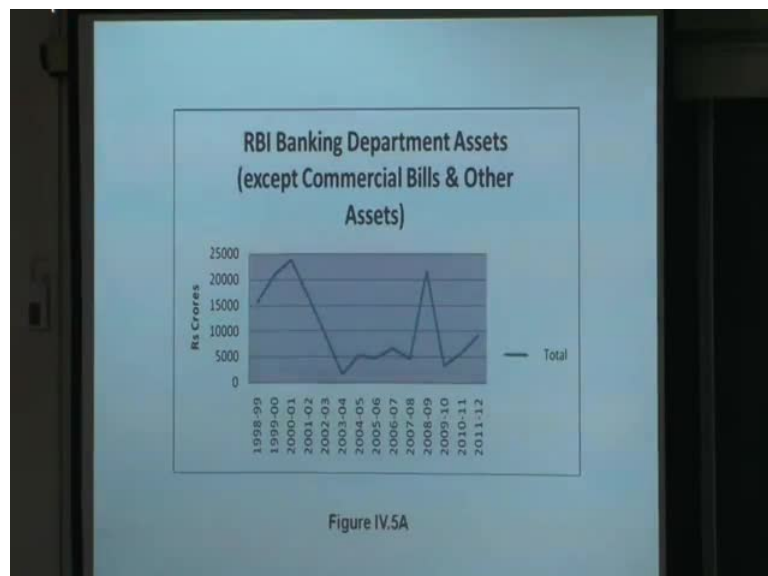
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Table IV.5B
RBI Assistance to Non-governmental Institutions
(Rs crores outstanding)

Year	NABARD, IDBI & EXIM		
	Co-operative & Commercial Banks		Others
1998-99	2907	8312	4291
1999-00	997	8321	11541
2000-01	6007	8637	9104
2001-02	3820	7701	5086
2002-03	1279	4947	3125
2003-04	0	1270	256
2004-05	50	5019	90
2005-06	1495	2998	167
2006-07	6245	0	340
2007-08	4000	0	579
2008-09	11728	0	9834
2009-10	42	0	3222
2010-11	5061	0	504
2011-12	6325	0	2693

Now, non government institution . If you, I put them together there for cooperative commercial banks, Nabard etcetera and I put the others a column, if I make then and other assets. These are the assets of its known as you will get this data, which I should have told you.

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Year	Scheduled		Scheduled		NABARD	IDBI	EXIM	Others	Total
	Central Govt	State Govts	Com Banks	State Co-op Banks					
1998-99	2873	1493	2894	13	5560	2000	752	4291	15510
1999-00			982	15	5884	1740	697	11541	20859
2000-01			5980	27	6580	1440	617	9104	23748
2001-02			3785	35	6059	1110	532	5086	16607
2002-03			1258	21	4947	0	0	3125	9351
2003-04			0	0	1270	0	0	256	1526
2004-05			45	5	5019	0	0	90	5159
2005-06		86	1488	7	2998	0	0	167	4660
2006-07			6245	0	0	0	0	340	6585
2007-08			4000	0	0	0	0	579	4579
2008-09			11728	0	0	0	0	9834	21562
2009-10		558	42	0	0	0	0	3222	3264
2010-11		729	5031	30	0	0	0	504	5565
2011-12		228	6325	0	0	0	0	2693	9018

These loans advances investments of the RBI to the government, non government institutions etcetera are all done by the banking department. So, if RBI is giving loan it will be shown as an asset of the banking department. So, now what I did was, I plotted except commercial bills and other assets. There is something called other assets in the banking department, balance sheet, issue department balance sheet, items banking department item .

They have a column there data called other assets, which is not very clear to me, not others other assets they call it. So, except that and commercial bills when I plotted this is the graph that comes out to be the asset structure of the banking department, it is very high around 2000, 1998, 99 around 2000, 2001 it peaked. All right? And then went on 2003, 4 again it peaked in 2008, 9 you see that? So, 2002, 2001 why did it peak a lot of assistance was given by RBI, which is counted as assets of the banking department. You can look at it from two points of view these are assets of banking department RBI asset asset on the other hand it also reflects, how much other institutions are borrowing from RBI? That is why this asset is created if other institutions are borrowing a lot, why are they borrowing a lot?

Why they do not have the money, a commercial bank is doing business by giving out loans, but these loans are so called productive loans, that is normal banking operations, but RBIs assistance is not normal banking operations. RBI assistance is help now that

assistance is looked upon as an asset of the RBI banking department. But you can see a spike here too, RBI assets somehow was very high abnormally in 2002, 2001 and again in 2008, 9. 8, 9 we understand the recession set in, so RBI was there to help out many institutions in the country.

Now, do I have this kind of a data in this diagram in 2, yes. 20800, 1999, 2000 and then 2002, 2001 this number is very high, it remained around that place 16,000 or something then it dropped and then again it went up in 2008, 9. So, there was some assistance that was required in the beginning of the new millennium, end of last millennium new millennium from RBI. You can call that RBI is assets banking departments assets, that is fine, but there was assistance that was required. Then it was again required in 2008, 9. So, this few slides here relate to banking department of the RBI .

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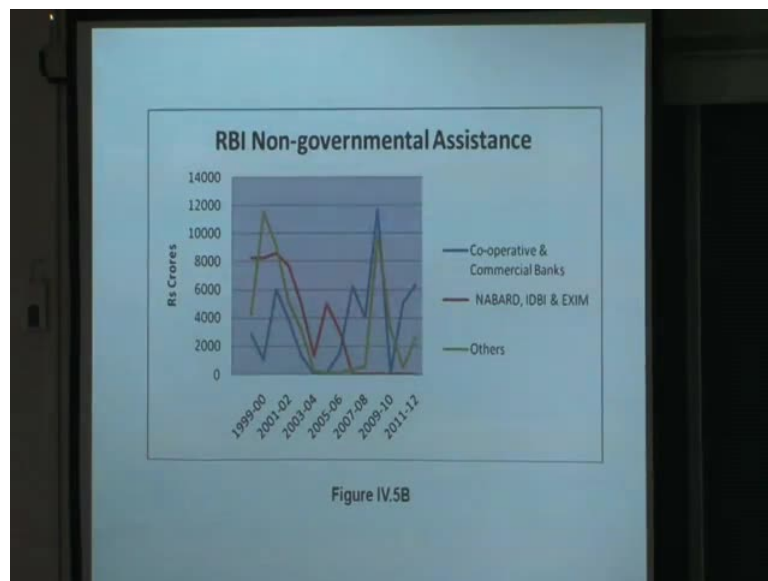


Figure IV.5B

Nongovernmental institutions have done this assets, I have shown you, nongovernmental assets it had to club them you can you can look up these individual lines. Blue line dominates commercial banks and a green line dominates, as I told you right now. You can clearly see the green line and the blue line are dominating, two lines, the red line is gone. Red line was Nabard, IDBI, Exim etcetera. So, this others and cooperative and commercial banks borrowing are the important ones nothing else is there, RBI does not lend money to anybody else.

(Refer Slide Time: 27:39)

Table IV.6
Statutory Liquidity Ratio

Year End	SLR	Range
1949	20	
1964	25	
1970	28	26 to 28
1972	30	29 to 30
1973	32	
1974	33	
1978	34	
1981	35	34.5 to 35
1984	36	35.5 to 36
1985	37	36.5 to 37
1987	37.5	
1988	38	
1990	38.5	
1993	34.7	6 changes
	5	
1994	31.5	3 changes
1997	25	

Non then SLR, statutory liquidity ratio. Earliest data I have on SLR is 1949 after RBI was nationalized, SLR was created before the plan started, this is very interesting information. SLR was created by RBI before the 5 year plans began, because 1949 I have a data 20, then you can see it had an abnormal rise SLR to 38.5 percent in 1990 38.5 SLR . Bank deposit net demand and time liabilities 38.5 percent SLR and God knows how much CRR was? So, where did banks have cash to create loans? 38.5 percent s l r compulsory investment .

Then there is some CRR cash which was very high those days and then the banks have to keep cash for your and my money withdrawal like we go to bank and withdraw cash for our use. It is our money then, how much percentage would remain with banks to give out loans. Very little, amazing the tight monetary policy and in a in a situation when the country had the worst economic situation, it is very interesting. I told you earlier this point, amazingly tight monetary policy was to be pursued was has been pursued by RBI in the past, when the economic situation is worst these are the worst kind of a situation.

So, SLR being high means captive market investments are forced by banks because government was in need of money, desperate need of money. These are captive market investments they were doing, SLR high means that all right? CRR high means a tight monetary policy, SLR high a reflex type monetary policy, but all the reasons motivating factor there I think is that the government needs cash and it forces banks to invest

because SLR is just not cash. SLR if you look up SLR definition that I taught you, it has a lot of contains a lot of investment, captive market investment, in government securities etcetera, all right?

So, this is the SLR data, but now SLR. See 1997 somebody told me last year sir it has become 24, I do not have that information, I found since 1997 SLR is standing still at 19 from 1997 onwards at 25 percent. SLR is just sitting there at 25 percent all right? Which is a pretty high number still, but it has come down from 38.5 percent. Now, this is the SLR plot the scattered diagram. You can see its kind of an SLR peaking somewhere

(Refer Slide Time: 30:45)

Table IV.7
Minimum SCC Rate

Year	SCC Rate	General
	Minimum Rate	Minimum Rate
1971-72	12	
1972-73	12	
1973-74	12.00-13.00	10.00-11.00
1974-75	14.00-15.00	11.00-13.00
1979-80	15.50-18.00	12.5
1980-81	16.70-19.5	13.5
1981-82	17.5-19.5	
1983-84	16.5-18.00	
1985-86	16.5-17.5	
1987-88	16.5	
1988-89	16.5	16
1991-92	19	19
1992-93	17	17
1993-94	15	14
1994-95	18.11	15

Now, the final data sheet I have is a very funny one, is the selective credit control rates, the minimum rates, I have found and the general minimum rate given to the banks at which they can create general loans and selective credit control is when RBI says food item, specific food items oil seeds, sugar, there is a minimum rate at which you will give out loans, all right? Tightening it, so it is a discriminatory credit policy that RBI asks or forces banks to listen to. You can see here is that 1994, 95 ninety it is free, in fact I have been told that except sugar some items of sugar, some types of sugar there is no of selective credit control.

And recently government of India received a report submitted by the famous economist who is a friend of doctor Manmohan Singh, Rangarajan, famous economist Rangarajan

he submitted a report saying abolish all these various kinds of controls you have on sugar. So, I have been told it is free except for sugar or one more item and there was a report submitted to government of India. I mean the cabinet recently the work done by that economist. What you see here is very interesting 91, 92 selective credit control rates are merged nearly with the general rate. So, they are getting rid of selective credit control in the 90 s, but it was a big thing when I was a student.

Selective credit control and restrictions on loan creation by banks. RBI would tell the banks this will be your priority area at least 30, 35 percent of your total loans should be in the priority area, whether you like it or not. And they would specify the priority areas maybe paddy, maybe wheat, maybe sugar, maybe some industries, agro based industries, some proper industries and then the bank is free. So, the bank was choked with all kind of restrictions. If I give out loan, I cannot give at my free will, total amount of loan should always have a percentage share in this area, whether I like it or not .

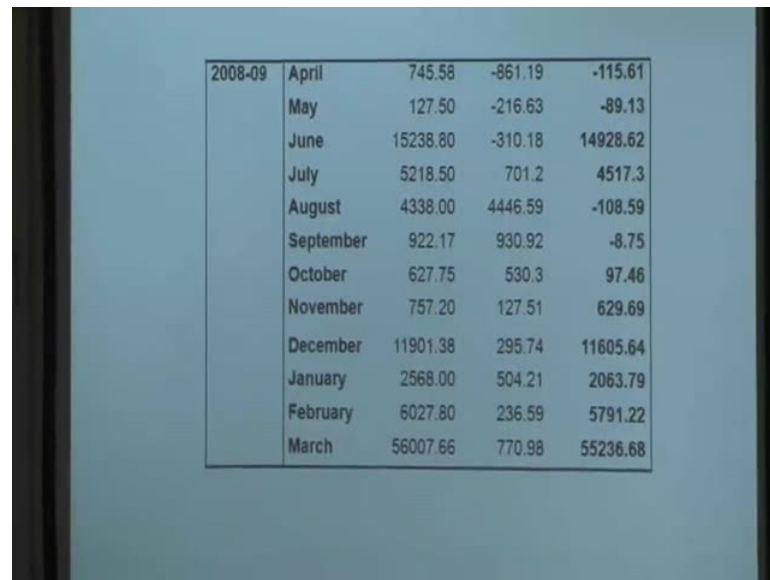
The one thing you see here when selective credit control was very active in 74, 75 when I was a student around that time. It was pretty high than compared to the general minimum rate in the country. It was always above it, so if you have to borrow for certain things for few months, sometimes banks would charge a higher interest rate. Now, it has remained above it, I do not have the general rate which probably remained 13.5 throughout this blank, space probably means 13.5 throughout these years. Selective credit control rates have been very high and then around this time 98, 1988 89 it is coming close, 91, 92.

So, selective credit controls have been taken off, there is no difference between the interest rates. That does not mean other kinds of selective credit controls did not exist. There are other kinds of selective credit controls also. The minimum margin requirement, if you open your notes you will see that, one is interest rate, one is the minimum margin requirement, one is the total amount you can give to somebody, all right? So, there are various kinds of selective credit controls, this is with respect to the interest rates, that banks would charge when they give you a loan on specific items.

You can see it has merged and then it has been set free in 94, 95 and I found from RBI documents one or two items are just involved, were involved. In one of them probably out of these two items, one of them was going away, all right? So, this concludes this

topic regulatory institutions in India about reserve bank operations and I have pretty comprehensive data for you. I will send the file, but there is a minus sign missing. So, I will put the minus sign there in which one? Open market operations, the plot is correct, the last column is correct, except from when did I make the mistake?

(Refer Slide Time: 35:24)



2008-09	April	745.58	-861.19	-115.61
	May	127.50	-216.63	-89.13
	June	15238.80	-310.18	14928.62
	July	5218.50	701.2	4517.3
	August	4338.00	4446.59	-108.59
	September	922.17	930.92	-8.75
	October	627.75	530.3	97.46
	November	757.20	127.51	629.69
	December	11901.38	295.74	11605.64
	January	2568.00	504.21	2063.79
	February	6027.80	236.59	5791.22
	March	56007.66	770.98	55236.68

July 2008, 9 2008, 9 July third column minus sign excel sheet minus . I do not believe this, I have never done this kind of a mistake anyway. First column, second column is class, which is the injection of funds always and absorption of funds have taken place via state governments. And the minus number all right? Then if you have a minus number, you see the third column data is coming out is correct. Third column data will be correct, if you have a minus third column fourth column data will be correct, if you have a minus in the third column. You will see that, then the numbers are correct. So, this is one error and one thing I have not done, I have forgotten this is also a very big error.

(Refer Slide Time: 36:32)

Year	Scheduled		Scheduled		NABARD	IDBI	EXIM	Others	Total
	Central Govt	State Govts	Com Banks	State Co-op Banks					
1998-99	2873	1493	2894	13	5560	2000	752	4291	15510
1999-00			982	15	5884	1740	697	11541	20859
2000-01			5980	27	6580	1440	617	9104	23748
2001-02			3785	35	6059	1110	532	5086	16607
2002-03			1258	21	4947	0	0	3125	9351
2003-04			0	0	1270	0	0	256	1526
2004-05			45	5	5019	0	0	90	5159
2005-06		86	1488	7	2998	0	0	167	4660
2006-07			6245	0	0	0	0	340	6585
2007-08			4000	0	0	0	0	579	4579
2008-09			11728	0	0	0	0	9834	21562
2009-10		558	42	0	0	0	0	3222	3264
2010-11		729	5031	30	0	0	0	504	5565
2011-12		228	6325	0	0	0	0	2693	9018

Forgotten to put the 0 values there, first two columns. The second and the third column, there will be 0 values. 2873 central government borrowing and then 0 values and the state government borrowing 0 values, the way I put the 0 values here. There is a 0 value missing.