Economics for Managers

Session 24-27| 22-Sep-2019

GAURAV GUPTA

Dr Sandro Rasgado • 3rd+

Chair Dent, DMD, PGCert Impl, PGDip Rest Dent & Prosth, MSc Esthet Rest Dent & ...

1d

The WBS Executive MBA is ranked in the world's top 20 by the Financial Times. Fantastic how many concepts and theories were brought in and discussed with my new peers from different business backgrounds and cultures. Strategic leadership skills that surely will cause an immediate impact in our workplaces.

#mba #emba #warwick #wbs #healthcare #dentistry

Nicola Gomme · 2nd
Making the hiring process more human
4h · Edited

First week of my MBA at Warwick University = done!

Feeling inspired already thanks to brilliant lecturers and awesome colleagues. Here goes the first assignment...

#MBA #warwickuniversity #backtoschool #fingerscrossed #education #postgrad

University of Warwick - Warwick Business School

Keith Warburton • 2nd

I help you and your company work more successfully...

13h

Great to be back at **University of Warwick - Warwick Business School** yesterday evening addressing a group of part-time MBA students.

We spent the evening looking at the cultural aspects of developing effective global stakeholder relationships.

The part I enjoy most is hearing the 'war stories' from the MBA-ers. These ranged from differences in presenting ideas in France and the UK, through to the challenges of gaining respect as an expat in a new country.

A great evening - and the pizza was good as well!

Sarah Jackson Monica Garcia-Romero

#MBA #stakeholderengagement #globalbusinessculture

Caroline Egan • 2nd

WBS Global Alumni Careers & Engagement Manager at...

7h

Another fabulous evening in Dubai with @UniversityofWarwick-WarwickBusinessSchool and @UniversityofWarwick alumni based in the region! Huge thanks to our speakers, Muhammad Qureshi of Bahrain Economic Development Board, Fahmi Jabri of Honeywell, and Malaika Ashcroft of Standard Chartered Bank for sharing their career stories and insights with a packed (and rapt) audience...followed by a lively networking event which lasted until midnight!

Today's Agenda

- Assignment 4: 2 hours
- Monetary Policy & the Financial System: 2 hours

The Financial System

- https://www.youtube.com/watch?v=PHe0bXAIuk0&t=984s

Typical Balance-Sheet of a non-financial firm

Assets		**Liabilities**	
Item	Amount	Item	Amount
Receivables from buyers	30	Payables to Suppliers	20
Machinery/ Building etc	50	Short-term Borrowing	20
		Long-term Borrowing	20
Cash/ Near-cash	20	Owner's Capital + Reserves	40
Total	**100**	**Total**	**100**

Typical Balance-Sheet of a Bank

Assets		**Liabilities**	
Item	Amount	Item	Amount
Loans	73	Deposits	90
Investments	21		
		Short-term Borrowing	2
Building	2	Long-term Borrowing	3
Cash/ Near-cash	4	Owner's Capital + Reserves	5
Total	**100**	**Total**	**100**

Banking is a risky business

1. Owner's contribution very low
2. Timing mismatch between assets & liabilities
3. Liabilities have to repaid whether or not loans are paid back
4. Erosion of confidence can cause a bank to collapse

The Money Multiplier

Fractional reserves system of banking

1. Shyam places a time deposit of Rs 100 in his bank account
2. His bank has several customers like Shyam
3. The bank knows that only 10% of people will come to withdraw their deposits, rest will likely roll-over
4. RBI requires Shyam's bank to place this Rs 10 with it in safe custody
5. That means the bank can lend 90% of Shyam's deposit to Vijay who wants to buy a house

This is how 'fractional reserves' system of banking works and banks create several rounds of deposits on the initial deposit of Rs 100 by Shyam. These deposits are in turn used to create new rounds of lending.

Mathematical expression of Deposit Multiplier

1. Original deposit = 100
2. First round of lending = (1- r) x 100
3. Second round of lending = (1- r)^2 x 100
4. Third round of lending = (1- r)^3 x 100

o

o

Total Deposits = [1 + (1 – r) + (1-r)^2 + (1-r)^3 + …] x 100

= (1/r) x 100 = 1000

From Deposit Multiplier to Money Multiplier

The deposit multiplier effect is affected:

1. Negatively if Vijay's builder decides not to deposit the entire Rs 90 into his bank account (cash-deposit ratio "cr")
2. Negatively if the RBI thinks that the 10% assumption is too low & increases the safe custody requirement to 12% (higher reserve requirement "r")
3. Negatively if the banks are averse to lending the entire 90% (excess reserves "er")

Money Multiplier = $(1 + cr) / (cr + r + er) <$ Deposit Multiplier = $(1/r)$

Money Multiplier- India

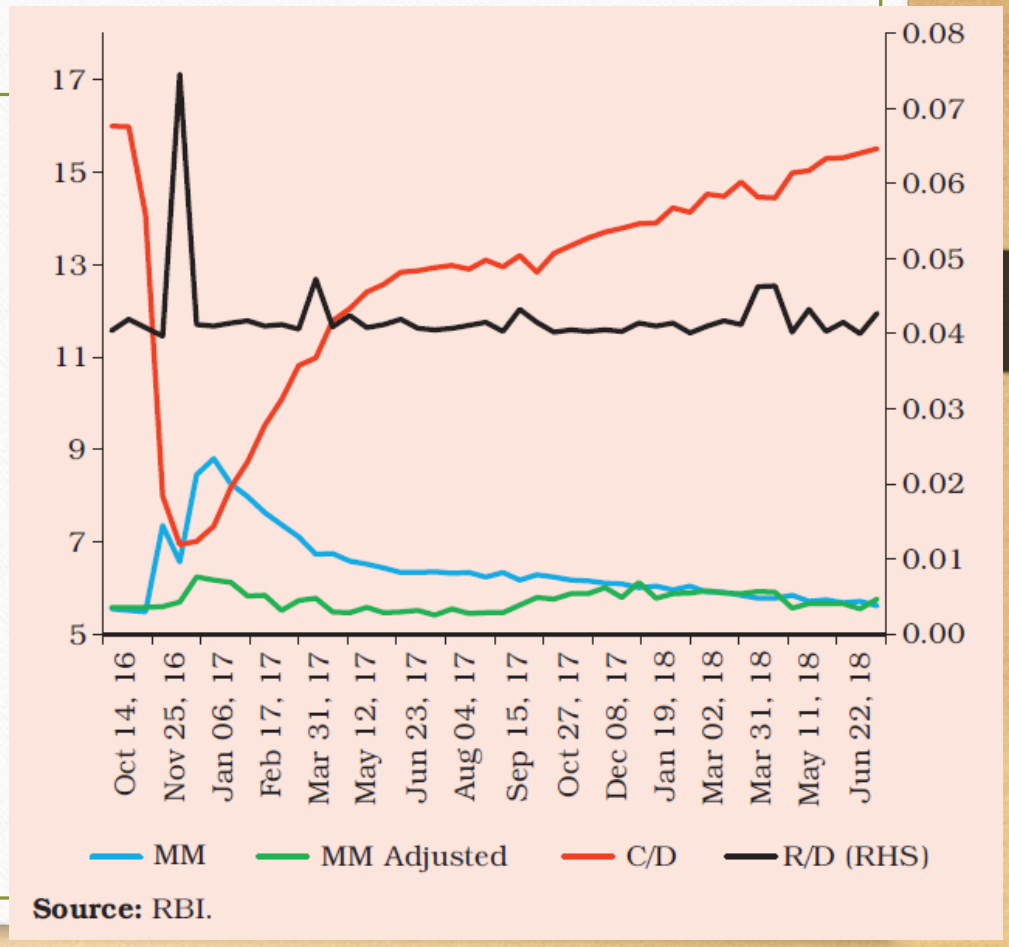
Money Multiplier = M3/ Reserve Money = 5.7x

Currency-deposit (cr) = 0.15

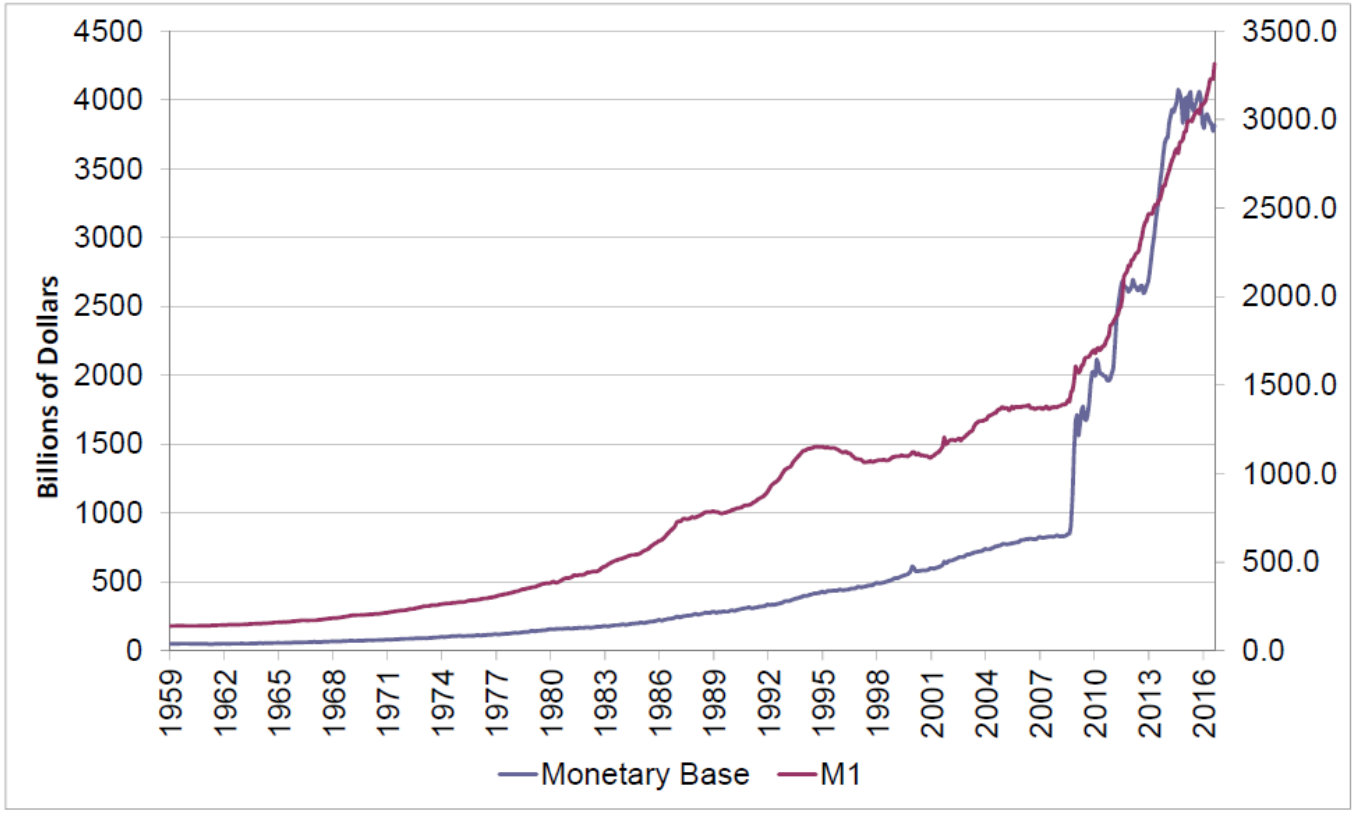
Reserves ratio (r) = 0.045 (CRR)

Excess reserves (er) = ~ 0

$$\text{Money Multiplier} = \frac{(1 + 0.15)}{(0.15 + 0.045)}$$



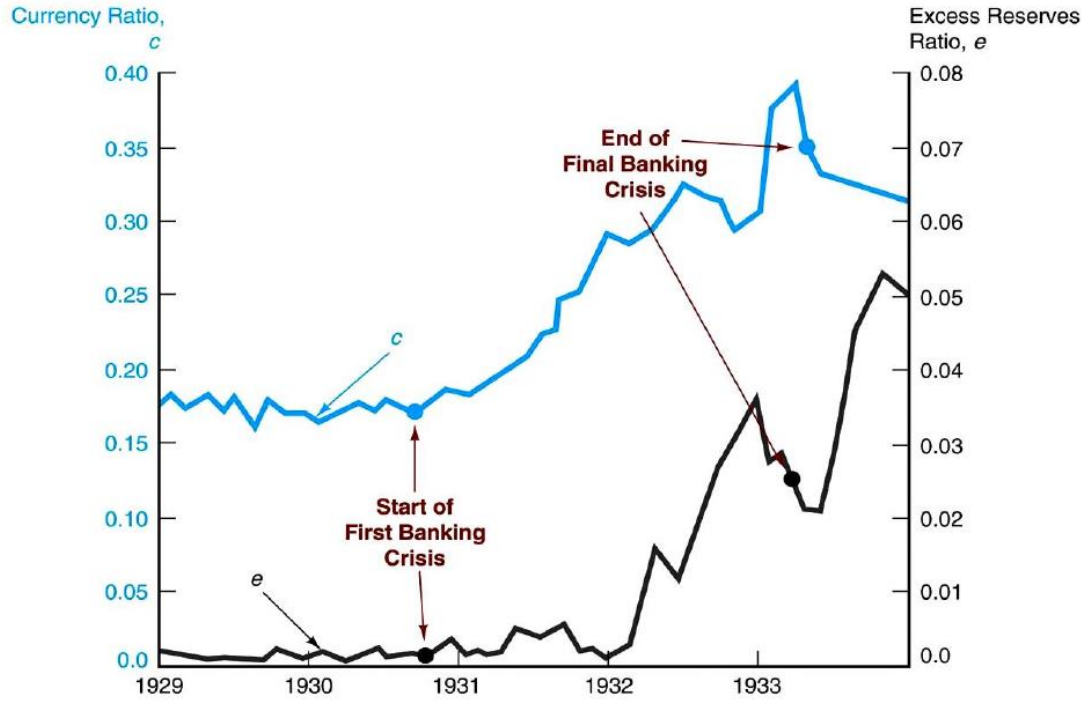
Multiplier- USA during GFC



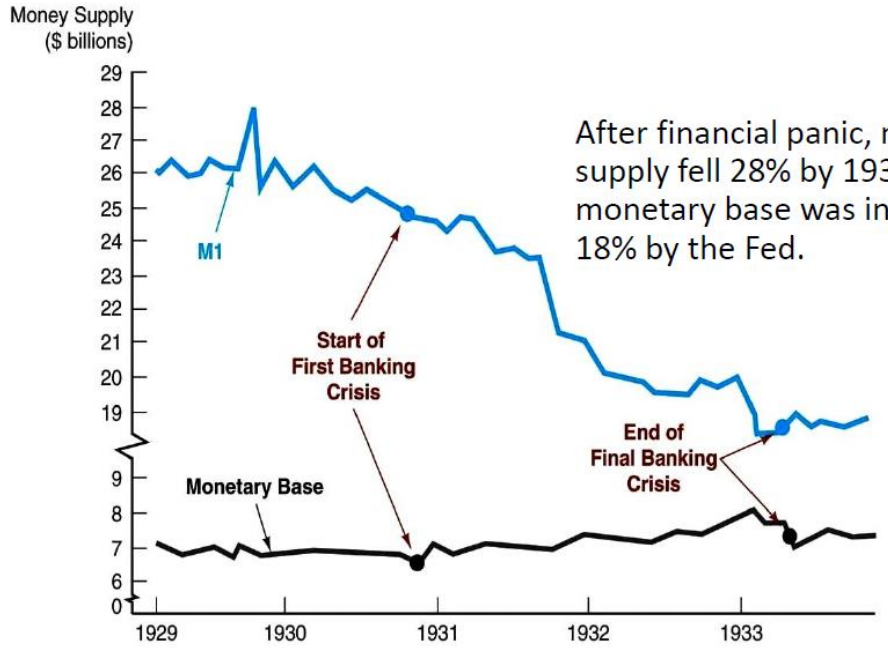
Multiplier- USA during Great Depression

Bank Failures and Great Depression (1929-1933)

Excess Reserve Ratio and Currency Ratio



M1 and the Monetary Base, 1929-1933



After financial panic, money supply fell 28% by 1933 although monetary base was increased by 18% by the Fed.

RBI – Monetary Policy

Building blocks we studied

1. Money Multiplier ~ 5.7x
   - Reserve Money ~ Rs. 27 lakh crores (only RBI can create)
   - M3 ~ Rs. 154 lakh crores (deposit multiplier at play)

2. Balance-sheet of a Bank

Assets		**Liabilities**	
(SLR) Investments	21	Deposits	90
Loans	73	Borrowings	5
		Equity	5
(CRR) Cash Reserves with RBI	5		
Total	**100**	**Total**	**100**

- Single bank: withdrawal of deposits > repayments of loans ~ borrow in the Inter-bank call money market from surplus banks
- Many banks/ Banking system: withdrawal of deposits > repayments of loans ~ borrowing rates shoot up

Does it mean the banks are left to manage on their own?

Monetary Policy in India

1. What is the goal?

   Maintain price stability while keeping in mind the objective of growth

2. Who sets the inflation target?

   GoI in consultation with RBI, every 5 years

3. What is the inflation target?

   4% CPI (+/- 2%)

4. What is the policy instrument used by RBI?

   Repo/ Reverse Repo rate (under Liquidity Adjustment Facility)

5. What is the operating target?

   Weighted-average Call Rate (WACR)

Monetary Policy in India

5. How does it all work?

RBI **sets the Repo Rate** based on assessment of **current & evolving** macroeconomic situation (output gap, inflation outlook, global eco conditions)

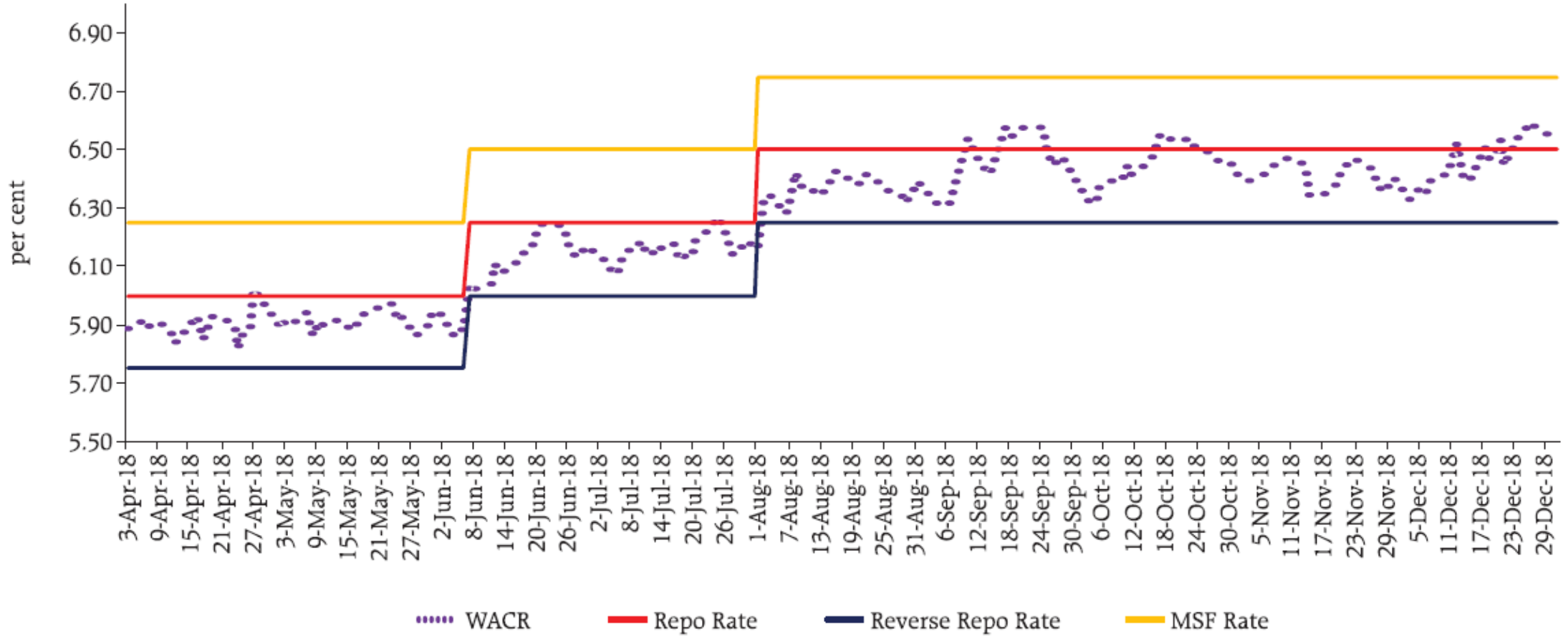
Modulates liquidity conditions to anchor money market rates around Repo

Short-term rates are expected to influence **long-term rates** as well

Interest rates directly influence **Aggregate Demand** (Consumption, Investment)

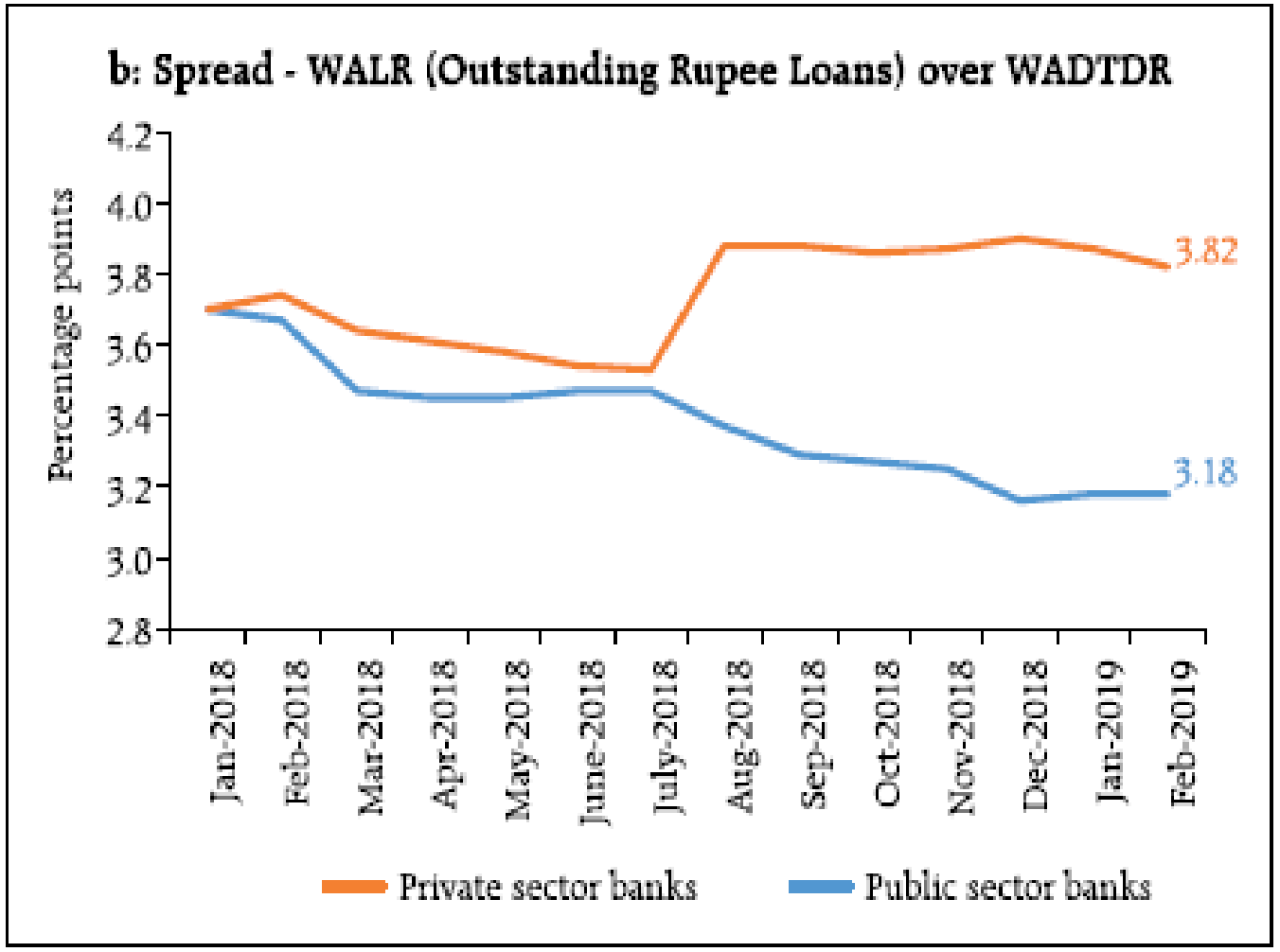
WACR

Chart 5: Policy Corridor and WACR



Source: RBI.

Lending rates/ Spreads



Next session

- Assessment # 5 (test)
- Wrap-up/ Summary