



# NeoBanks - Future of Banking?

## Previously on FoF...



### Money & Banking - Presentation by Rajeev Thakkar

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PPFAS Mutual Fund

Financial Opportunities Forum (May 19, 2016) Traditional banking is here to s

# Agenda

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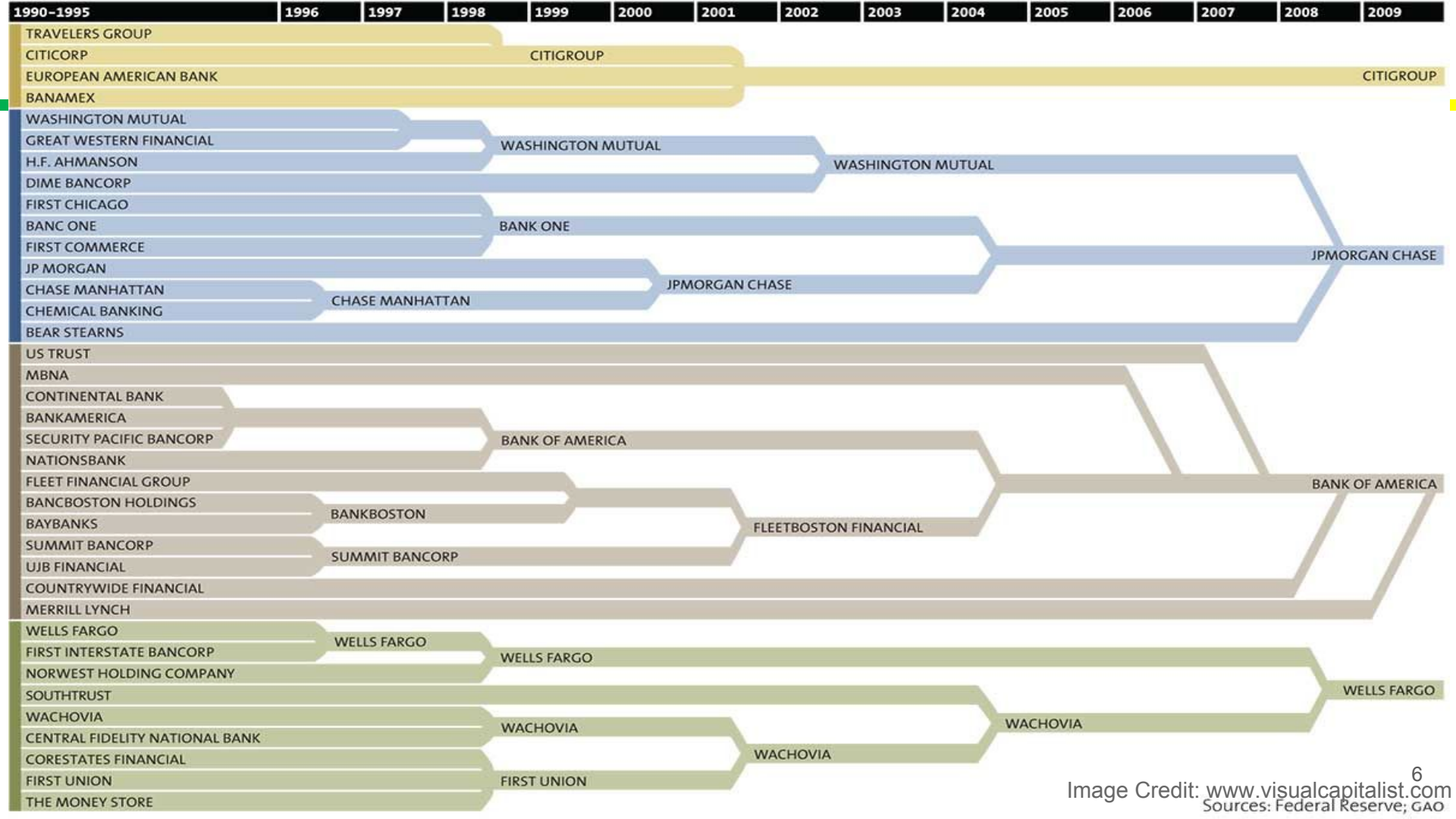
- Traditional Banks
  - History of Banking Industry
  - Business Model of Traditional Banks
- NeoBanks
  - Understanding NeoBanks
  - Deeper Dive into a NeoBanks
- Comparing Business Models
- NeoBanks - Future of Banking?

# History of Banking Industry

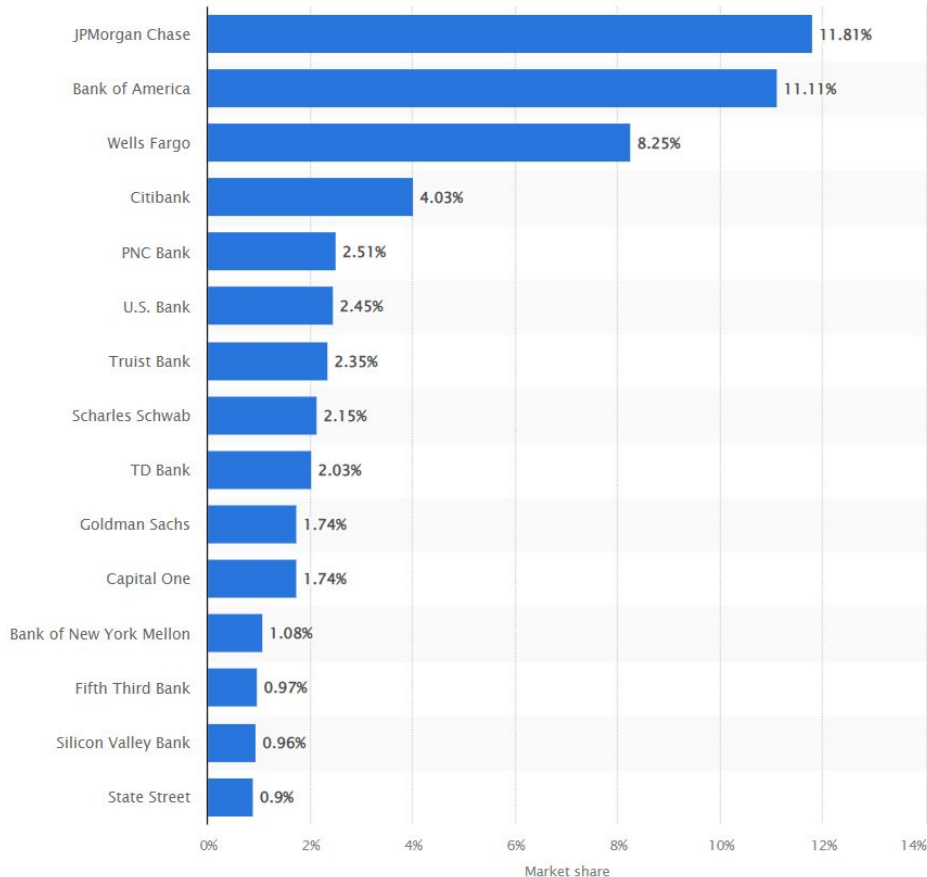
- As old as civilisation
- Bank is an Intermediary which connects those with excess funds (depositors) with those in need of funds (borrowers)
- Diversifies the Depositors risk by pooling
- Makes money on the interest rate differential
- Offers other related services for additional income
- Evolved over time into a well regulated industry

# History of Banking Industry - USA

- Banking Before 1863
  - Free Banking Era
- 1863 - 1913
  - National Banking Act
- 1913 - 1933
  - Federal Reserve Act
- 1933 -1980
  - Glass-Steagall Act
  - Banking Act
- 1980 - 2008
  - DeRegulations
- 1998 - Current
  - Basel Norms
- 2008 - Current
  - Dodd-Frank Act

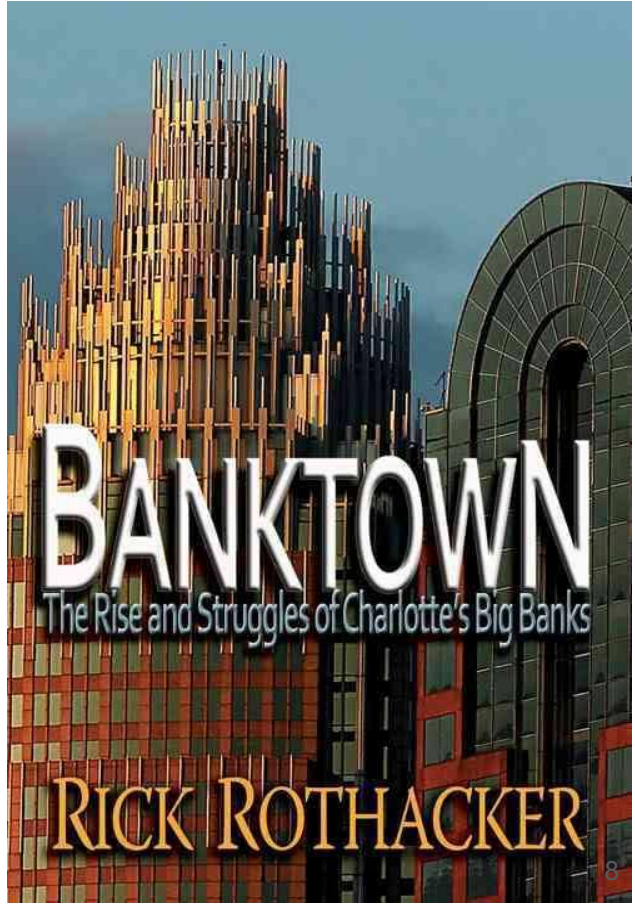
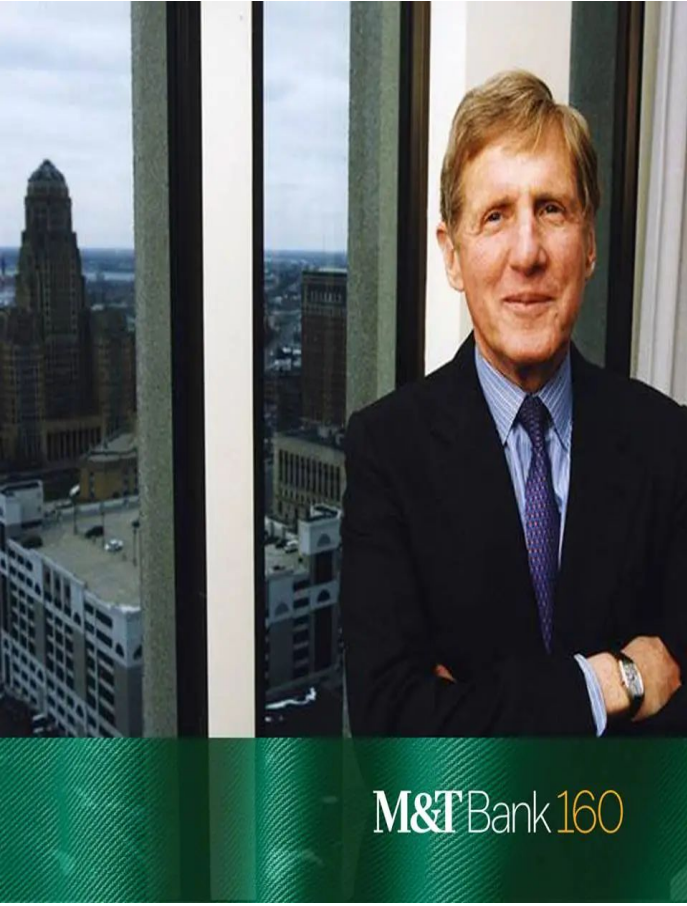
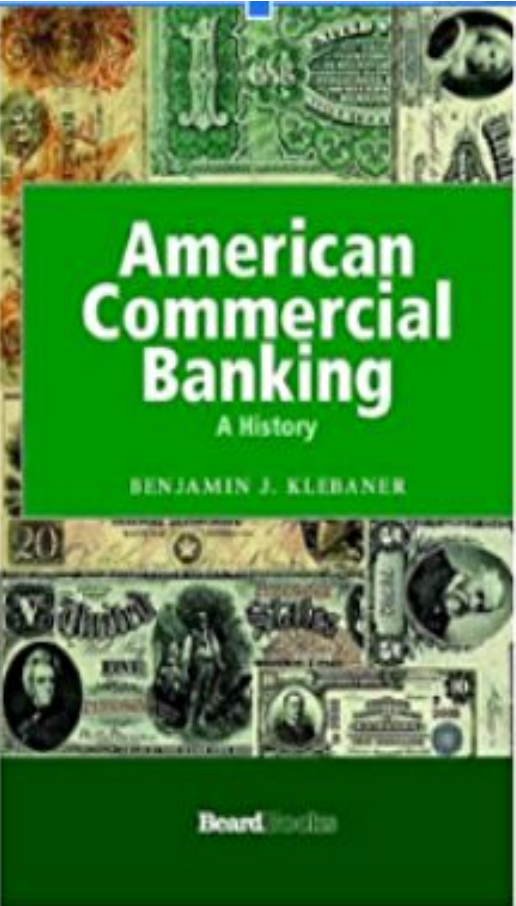


# History of Banking Industry - USA - Current situation



- 4,236 FDIC insured commercial banks in USA as of CY2021.
- Top 15 Banks account for 54% Market Share
- Large number of region focused banks

# History of Banking Industry - USA





# History of Banking Industry - India

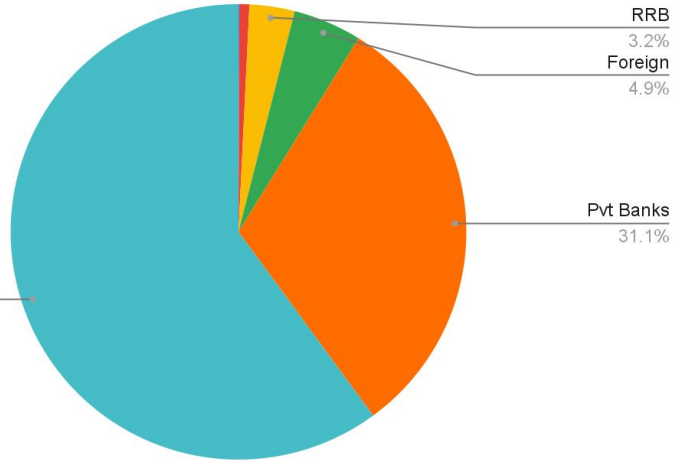
- 1700s - 1969
  - Trade and Commerce Driven
- 1969 - 1991
  - Nationalisation
- 1994 - 2014
  - Brand New Banks
- 2010 - 2020
  - NPA Mess
  - Financial Inclusion
- Current Situation

# History of Banking Industry - India - Current situation

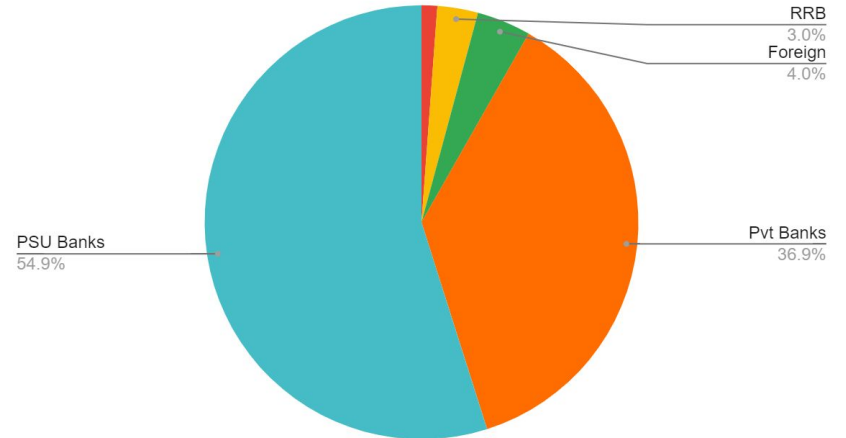
Scheduled Commercial Banks  
(137)



Deposits Market Share



Loans Market Share



Source : RBI

# History of Banking Industry - India

THE INSIDE STORY OF  
INDIAN BANKING



SANDIP SEN

TAMAL BANDYOPADHYAY  
Foreword by Y. V. REDDY, former Governor, Reserve Bank of India

A  
BANK  
for the  
BUCK



THE NEW BANK MOVEMENT  
& the untold story of  
THE MAKING OF INDIA'S  
MOST VALUED BANK

JAICO

"Tamal brilliantly captures a story of hope and what it takes to lift millions of Indians out of poverty" Deepak Parekh, chairman, HDFC Limited

TAMAL BANDYOPADHYAY



**BANDHAN**  
THE MAKING OF A BANK

Foreword by KAUSHIK BASU

**BAD  
money**

Inside the  
**NPA Mess**  
and How It Threatens the  
Indian Banking  
System

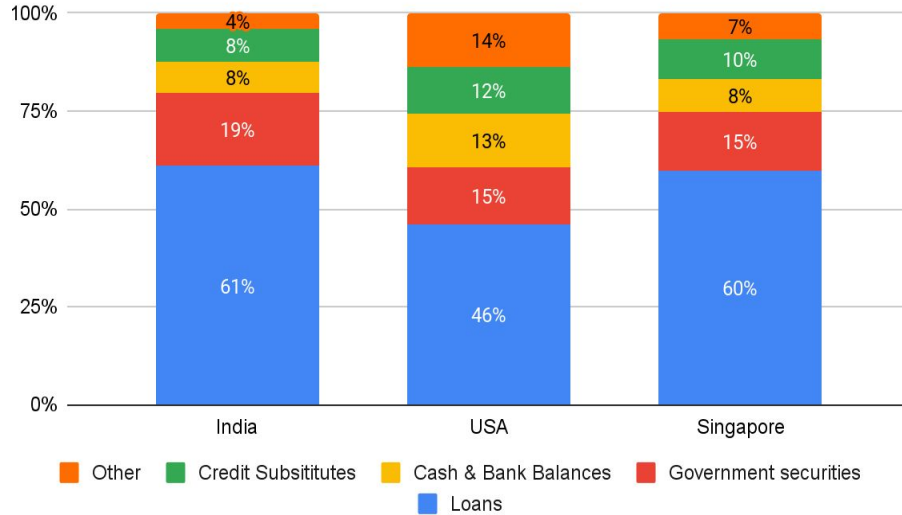
VIVEK KAUL

# Traditional Bank Business Model

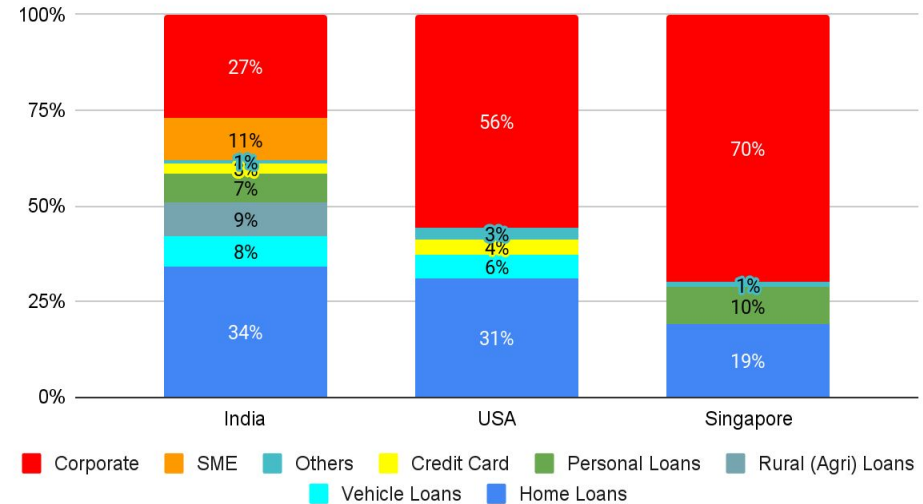
- Branch Driven - Physical Touch Points
  - Expensive to setup branches and pay salaries of employees
- Relationship - Cross Sell
  - Fee Income
- Full Service Banking
  - Not Cost efficient to bank on single line
- Internet Banking
  - Still Required Branch Visits

# Traditional Bank Business - Assets & Liabilities

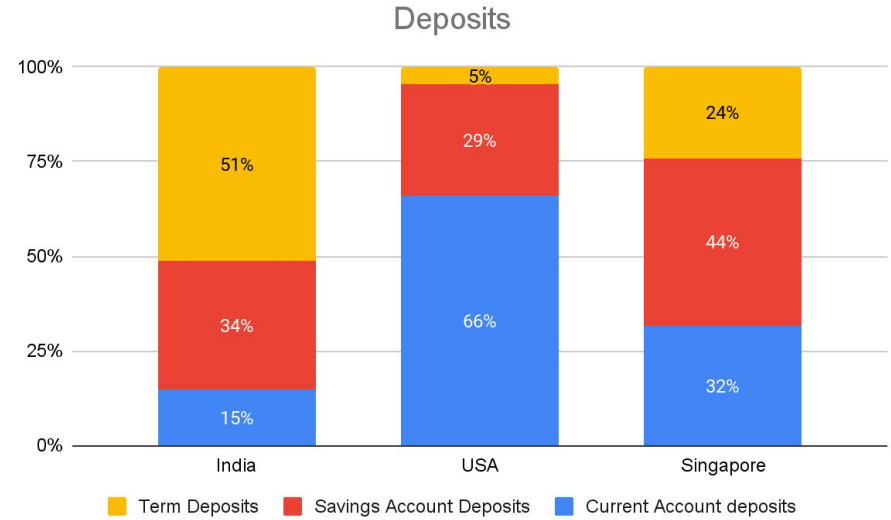
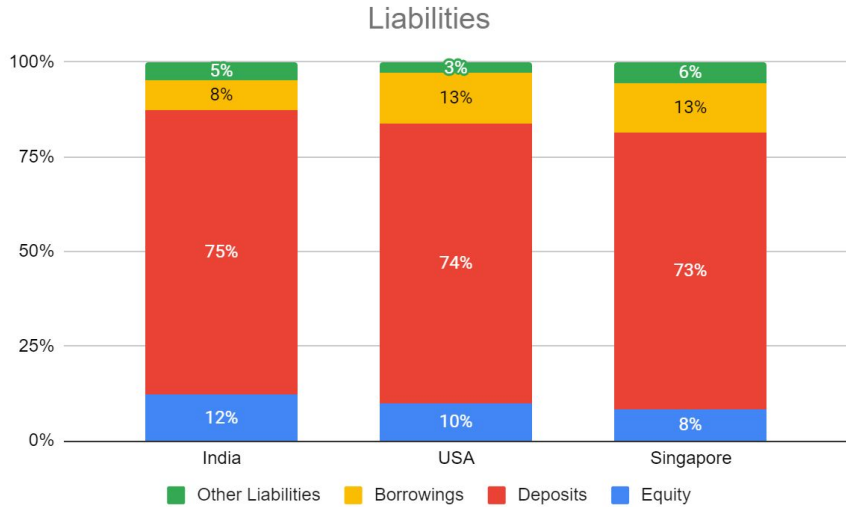
## Assets Breakup



## Loans Breakup



# Traditional Bank Business - Assets & Liabilities



## Traditional Bank Business - RoTA Chain

| RoTA Chain  | India         | USA           | Singapore     |
|---|---------------|---------------|---------------|
| Interest Income / Avg Total Assets                  | 6.54%         | 2.04%         | 1.50%         |
| Interest Expense / Avg Total Assets                 | 2.95%         | 0.20%         | 0.26%         |
| <b>Net Interest Margin (NIM) / Avg Total Assets</b> | <b>3.59%</b>  | <b>1.84%</b>  | <b>1.24%</b>  |
| Other Income/ Avg Total Assets                      | 1.40%         | 2.20%         | 0.88%         |
| Op Exp / Avg Total assets                           | 2.02%         | 2.77%         | 0.97%         |
| Provisions / Avg Total Assets                       | 0.65%         | -0.21%        | 0.01%         |
| Tax / Avg Total Assets                              | 0.55%         | 0.29%         | 0.14%         |
| <b>RoTA</b>   | <b>1.77%</b>  | <b>1.12%</b>  | <b>1.02%</b>  |
| Leverage  | 8.29x         | 10.7x         | 12.25x        |
| <b>RoE</b>  | <b>14.68%</b> | <b>12.00%</b> | <b>12.50%</b> |



# NeoBanks



# Understanding NeoBanks

- Branchless digital only banks with no physical presence
- All services are online
- Tech savvy - Platform approach to banking
- Mostly focused on retail and SME
- Expected to have Lower Operating and Credit Costs
- Additional sources of revenue through Platform approach



## HONG KONG

- Livi VB (Granted a licence in 2019)
- Mox (Granted a licence in 2019)
- ZA Bank (Granted a licence in 2019)
- WeLab Bank (Granted a licence in 2019)
- Ant Bank (Hong Kong) (Granted a licence in 2019)
- Fusion Bank (Granted a licence in 2019)
- Airstar Bank (Granted a licence in 2019)
- Ping An OneConnect Bank (Granted a licence in 2019)

## THAILAND

- TMRW by UOB (2019)\*
- ME by TMB (2012)\*

## MALAYSIA

Up to five digital banking licences to be Issued

## CAMBODIA

- Liiv KB Cambodia (2016)\*

## SINGAPORE

Up to two digital full bank (DFB) licences and three digital wholesale bank (DWB) licences to be issued

## VIETNAM

- Timo by VPBank (2016)\*
- OCTO by CIMB (2018)\*
- YOLO by VPBank (2018)\*

## SOUTH KOREA

- K-Bank (2017)
- Kakao Bank (2017)
- Toss Bank (Granted a licence in 2019)

## JAPAN

- Japan Net Bank (2000)#
- Seven Bank (2001)#
- Rakuten Bank (2001)#
- SBI Sumishin Net Bank (2007)#
- Jibun Bank (2008)#

## CHINA

- WeBank (2014)#
- MyBank (2015)#
- XW Bank (2016)#
- aiBank (2017)#

## TAIWAN

- Richart! by Taishin International Bank (2016)\*
- O-Bank (2017)#
- KOKO by Cathay United Bank (2017)\*
- LINE Financial Taiwan (Granted a licence in 2019)
- Next Commercial Bank (Granted a licence in 2019)
- Rakuten International Commercial Bank (Granted a licence in 2019)

## AUSTRALIA

- ING Bank (1999)#
- Ubank (2008)\*
- UP by Bendigo and Adelaide Bank (2018)\*
- Volt Bank (2018: Restricted; 2019: Full)
- Xinja (2018: Restricted; 2019: Full)
- Judo Bank (2019: Full)
- 86 400 (2019: Full)
- IN1 Bank (2019: Restricted)

## PHILIPPINES

- CIMB (2019)#
- ING Bank (2019)#
- Tonik Digital Bank (2020)#
- RCBC will launch RCBC Digital in 2020#

# Understanding NeoBanks - Regulations






- For NeoBanks : Financial Inclusion, Competition and Efficiency
- Against NeoBanks : Systemic Risk, Privacy and Security
- Solution : Digital Banking License with restrictions

|  |                                  | Singapore  |                                       | Australia  | Mainland China                                     | Hong Kong   | India   | Korea   | Malaysia                        |
|--|----------------------------------|--|---------------------------------------|--|--|---|---|---|---------------------------------|
|  |                                  | DFB  | DWB                                   |  |  |   |   |   |                                 |
| Regulatory entity  |                                  | MAS  |                                       | ARPA   | CBIRC  | HKMA  | RBI   | FSC   | BNM                             |
| Digital bank licensing regime                                  |                                  | Yes  |                                       | No   | No   | Yes   | Yes   | Yes   | Yes                             |
| Policy objectives  | Financial inclusion              |  |                                       |  |  |   |   |   |                                 |
|  | Enhancing competition            |  |                                       |  |  |   |   |   |                                 |
|  | Improving efficiency             |  |                                       |  |  |   |   |   |                                 |
| Initial minimum paid-up capital                                |                                  | \$10.7 million (SGD 15 million)  | \$71.6 million (SGD 100 million)      | \$2.7 million (AUD 4 million) / 20% of adjusted assets | \$285 million (RMB 2 billion)                      | \$38.6 million (HKD 300 million)                                  | \$16 million (INR 1 billion)  | \$20.6 million (KRW 25 billion)                 | \$24 million (MYR 100 million)  |
| Regulatory sandbox   |                                  | Restricted DFB   | Not specified                         | Restricted ADI   | Not specified                                      | Not specified   | "In-principle" license  | 2-3 years grace period                          | Foundational Phase              |
| Ownership restrictions   |                                  | Applicants must be anchored & headquartered in SG and controlled by Singaporeans | Applicants must be incorporated in SG | Not Specified  | Maximum shareholding limit: 30%                    | Owned by bank/FI or IHC subject to certain supervisory conditions | Promoters need to hold at least 40% in the first 5 years                        | Non-financial investor can't hold more than 34% | Not specified                   |
| Business restrictions (during the sandbox stage, if it exists) | Specific cap on deposits         |  |                                       |  |  |   |   |   |                                 |
|  | Specific cap on credits          |  |                                       |  |  |   |   |   |                                 |
|  | Restrictions on deposit business |  |                                       |  |  |   |   |   |                                 |
|  | Restrictions on credit business  |  |                                       |  |  |   |   |   |                                 |
|  | Others                           | Not allowed to safeguard other FIs or conduct proprietary trading activities     | Not allowed to safeguard other FIs    | Assets should not exceed A\$ 100mn                     | Only allowed to manage Type II / Type III accounts | Not specified   | Not allowed to set up subsidiaries for providing non-banking financial services | Not specified                                   | Assets should not exceed RM 2bn |

# Understanding NeoBanks - Enablers

- Digital Access - Mobile and Internet
- Demographics and Economy
- Unbanked / Underbanked Population
- Infrastructure - eKYC, Payments Network
- Regulatory willingness
- Slow to adapt Traditional Banks
- Gamification of banking

# Understanding NeoBanks - India

|                 | Pureplay virtual banks (Neobanks)  | (Autonomous) unit of traditional banks   | Full-Stack (Licensed) Digital Bank  |
|-----------------|--|--|---|
| Description     | Standalone digital platforms that partner with incumbent licensed banks to offer tech driven niche / bouquet of products; differentiated on <b>better UX, value added services etc.</b><br>(Most Indian neobanks operate under this model) | <b>Neobanking operations of traditional banks</b> that function autonomously and compete with stand-alone neobanks through repackaging of existing offerings | Digital-only banks that have a <b>fully operational banking license</b> ; offers independent financial products and services, raise capital and lend on their own |
| Indian Examples |   |    | RBI is not allow this license in India  |
| Global Examples |   |    |    |

- Traditional Banks Opening Up - Eg: ICICI Bank
- Payment Banks - Eg: PayTM, Airtel Payments Bank and Fino Payments

# Understanding NeoBanks - India

Target Segment →

|                       |   | Target Segment             |                 |                    |                             |               |                   |
|-----------------------|---|----------------------------|-----------------|--------------------|-----------------------------|---------------|-------------------|
|                       |   | Horizontal                 | Vertical        |                    |                             |               |                   |
|                       |   | Gen Z / Millennial focus   | Teenagers       | Aspirational women | NRIs / Expats / Tourists    | Professionals | MSME              |
| Neobanking Features ↑ | Value Added Services & Innovative Features<br>Includes features such as PMF, assisted e-commerce & forex services | Jupiter<br>Revolut<br>freo |                 |                    | NORTH LOOP<br>Niyo<br>Zolve | OneBanc<br>Fi | OPEN<br>RazorpayX |
|                       | Basic Banking Services<br>Includes deposits and card services   | yono SBI<br>811            | fampay<br>JUNIO | mahila money       |                             |               | ZIKZUK<br>flobiz  |

# Understanding NeoBanks - Challenges

- Cost of Acquisition are still high for pure digital banks
- Tough to become the primary banker
- Regulatory restrictions hurt the ability to generate Income
- Limited to simpler products and revenue streams
- Underwriting history yet to be seen

# Understanding NeoBanks

- Digital Banking Strategy
  - HDFC Bank
  - ICICI Bank
  - Axis Bank
  - Kotak Bank

From the bestselling author of Augmented and Bank 3.0

## BANK 4.0

Banking Everywhere, Never at a Bank



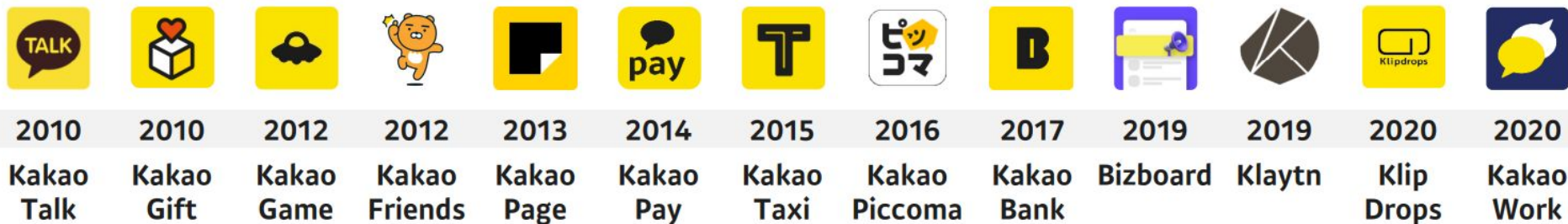
**BRETT KING**

[www.brettking.com](http://www.brettking.com)

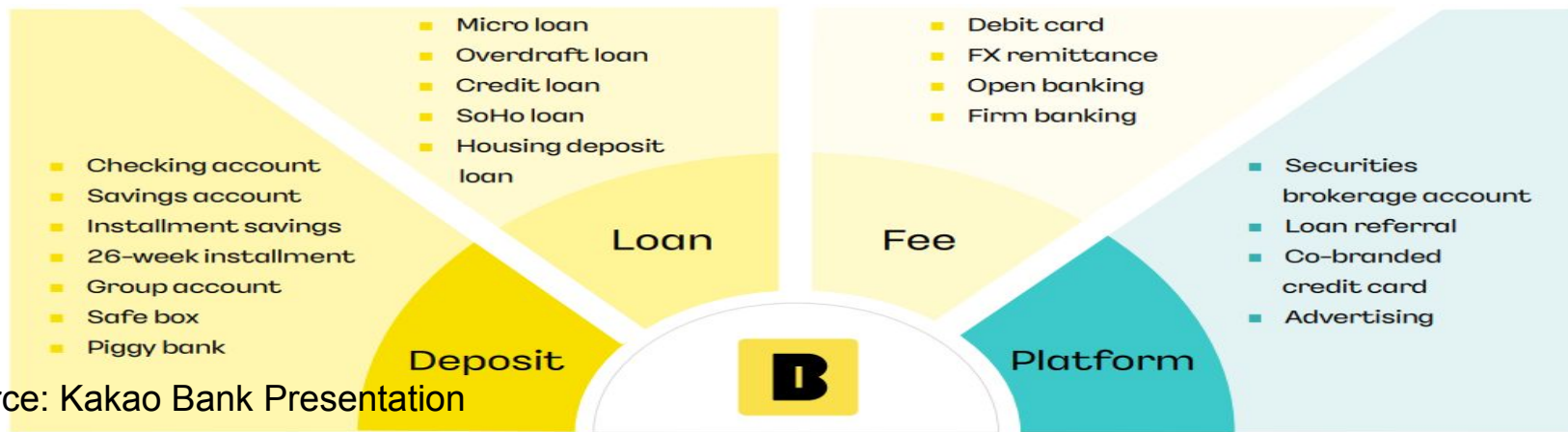




# Deeper Dive - Kakao Bank



- EcoSystem Advantage
- 18 Million accounts of which 50% are below age of 40.
- Claims 64% of working age population bank with them



Source: Kakao Bank Presentation

| Division | Key products/services | 2021 Contribution |
|----------|-----------------------|-------------------|
|----------|-----------------------|-------------------|

|                        |  |            |
|------------------------|--|------------|
| <b>Interest income</b> | Loan interest<br>Financial investment interest | <b>74%</b> |
|------------------------|--|------------|

|                   |   |            |
|-------------------|---|------------|
| <b>Fee income</b> | Debit card<br>Firm banking<br>Open banking<br>FX remittance | <b>16%</b> |
|-------------------|---|------------|

|                        |   |           |
|------------------------|---|-----------|
| <b>Platform income</b> | Securities account<br>Loan referral<br>Co-branded credit card<br>Advertisement mini | <b>9%</b> |
|------------------------|---|-----------|

|               |   |           |
|---------------|---|-----------|
| <b>Others</b> | Gains on FX transactions<br>Gain on sales of loan | <b>1%</b> |
|---------------|---|-----------|

Source: Kakao Bank Presentation

| Division | Key products | Details <sup>(1)</sup> |
|----------|--------------|------------------------|
|----------|--------------|------------------------|

|            |                      |   |
|------------|----------------------|---|
| <b>Fee</b> | <b>Debit card</b>    | Increase in debit card transaction value (YoY +23%) |
|            | <b>FX remittance</b> | Increase in FX remittance volume (YoY +9%)          |

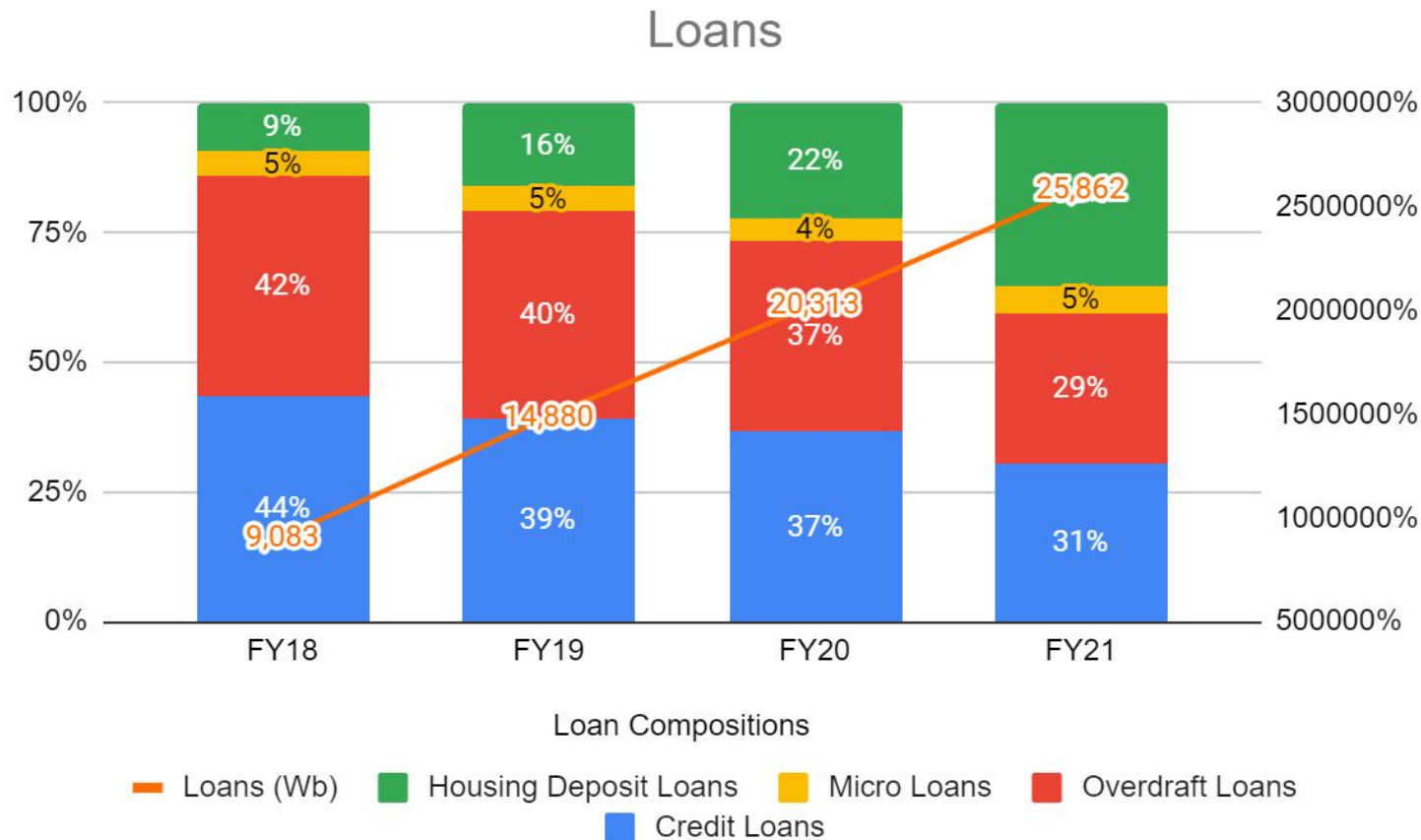
|                 |                               |   |
|-----------------|-------------------------------|---|
| <b>Platform</b> | <b>Securities account</b>     | 5 partners<br>(KB, NH, Korea Investment, Hana, Shinhan) |
|                 | <b>Co-branded credit card</b> | 5 partners<br>(Citi, Shinhan, Samsung, KB, Lotte)       |

|                 |                      |  |
|-----------------|----------------------|--|
| <b>Platform</b> | <b>Loan referral</b> | 16 partners<br>(8 savings bank, 7 capital co., 1 card co.) |
|                 | <b>mini</b>          | 1.15mn mini customers in the age of 14~18                  |

|                 |                      |                                      |
|-----------------|----------------------|--------------------------------------|
| <b>Platform</b> | <b>Advertisement</b> | Ad partnership & inventory expansion |
|-----------------|----------------------|--------------------------------------|

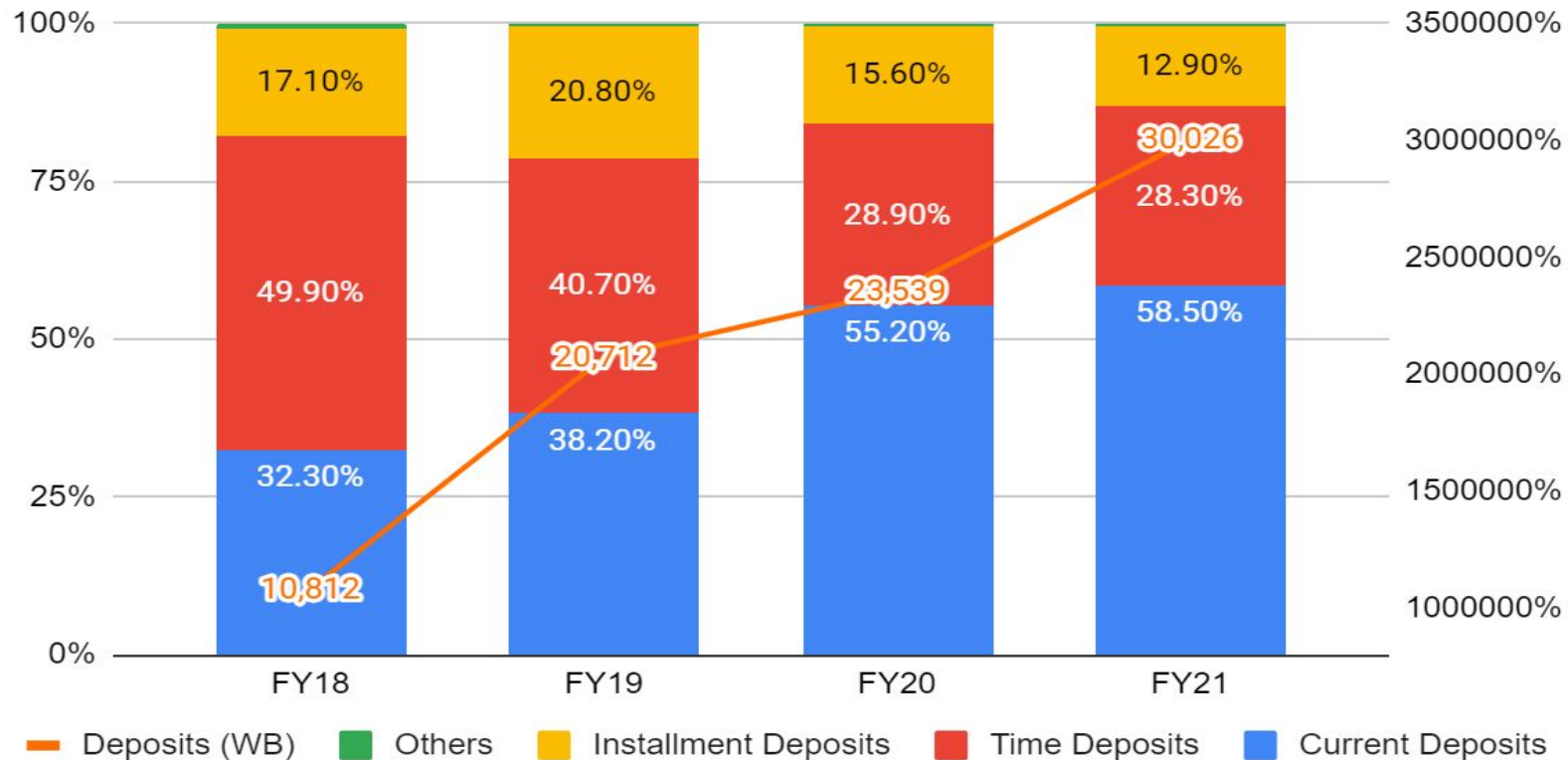
**Fee +  
=**

# Deeper Dive - Kakao Bank - Assets and Liabilities



# Deeper Dive - Kakao Bank - Assets and Liabilities

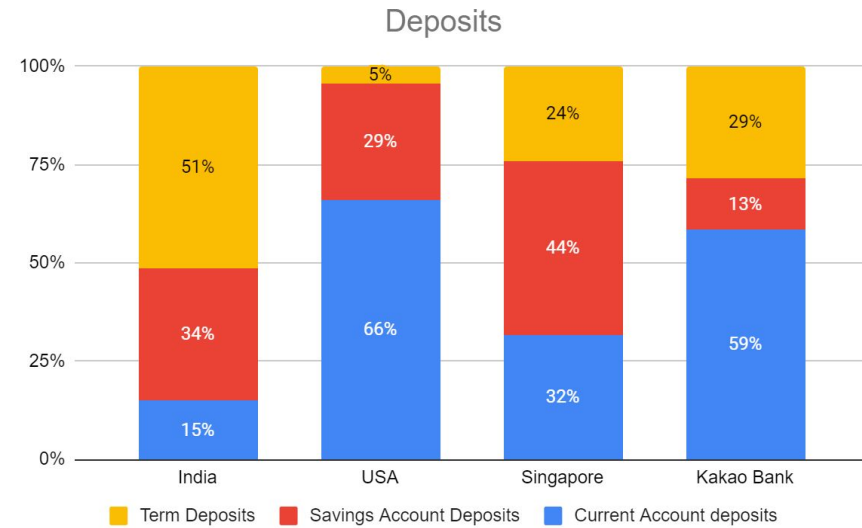
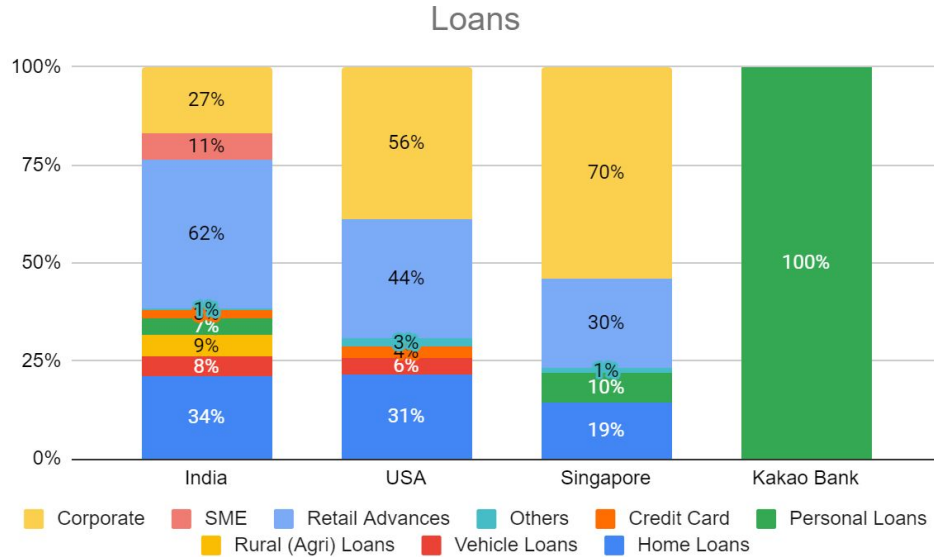
## Deposits



## Deeper Dive - Kakao Bank - RoTA Chain

| RoTA Chain  | FY18          | FY19         | FY20         | FY21         |
|---|---------------|--------------|--------------|--------------|
| Interest Income / Avg Total Assets                  | 2.42%         | 2.84%        | 2.43%        | 2.51%        |
| Interest Expense / Avg Total Assets                 | 0.91%         | 1.42%        | 0.78%        | 0.53%        |
| <b>Net Interest Margin (NIM) / Avg Total Assets</b> | <b>1.51%</b>  | <b>1.42%</b> | <b>1.65%</b> | <b>1.98%</b> |
| Other Income/ Avg Total Assets                      | 0.67%         | 0.98%        | 0.83%        | 0.89%        |
| Op Exp / Avg Total assets                           | 3.15%         | 3.53%        | 2.51%        | 2.28%        |
| Provisions / Avg Total Assets                       | 0.12%         | 0.21%        | 0.25%        | 0.29%        |
| Tax / Avg Total Assets                              | 0.00%         | 0.00%        | 0.04%        | 0.17%        |
| <b>RoTA</b>   | <b>-0.17%</b> | <b>0.08%</b> | <b>0.46%</b> | <b>0.65%</b> |
| Leverage  | 10.63x        | 12.36x       | 11.03x       | 7.53x        |
| <b>RoE</b>  | <b>-1.84%</b> | <b>0.97%</b> | <b>5.08%</b> | <b>4.91%</b> |

# Comparing Business Models - Assets and Liabilities



# Comparing Business Models - RoTA Chain

| RoTA Chain  | India         | USA           | Singapore     | Kakao Bank   |
|---|---------------|---------------|---------------|--------------|
| Interest Income / Avg Total Assets                  | 6.54%         | 2.04%         | 1.50%         | 2.51%        |
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# Valuing a NeoBank

- Traditional Bank - P/BV
- Cost of Acquisition and payback period
- Average Revenue per user
- Active Customers x ARPU - Cost of Acquisition and Servicing



# NeoBanks - Future of Banking?

- Traditional Banks Still have an advantage - Deposits and Customers
- Adapt to remain competitive
- Digital Banks within traditional banks
- Act as a base bank for digital banks

Dont have to panic but be on the lookout...

# References

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- Neobanking in India: The Matrix Upgraded - Redseer Report
- Rise of Digital Banking Licences - The Asian Banker
- Nu Holdings S1 filings
- Kakao Bank Annual Reports and filings
- Paytm and Fino RHPs
- RBI, US Fed
- Sell side Reports

Thank You

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Questions?