Issue 03, March 2019

CENT PERCENT

Monthly Newsletter by Group Treasury

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Understanding Liquidity and its Power

Liquidity is the amount of money that is readily available for investment, asset expansion or debt servicing. Money can be fetched in any time at any price. Concern is the cost of that fund. If it is brought into your portfolio at unreasonable or outrageous price, or the asset in exchange of the money is disposed at great discount, then it should not be regarded as liquidity. Liquidity consists of cash, securities, notes and bonds, and any other asset that can be sold quickly and reasonably valued price. High liquidity means the abundance of these assets. Low or tight liquidity is when cash is tied up in non-liquid assets. It also occurs when interest rates are high since that makes it expensive to buy money.

Liquidity in Banking Sector:

The central bank manages liquidity with monetary policy. It measures liquidity with the money supply. It guides short-term interest rates to affect long-term Treasury yields. Central bank may influence liquidity by massive scale intervention like open market operations (OMO), Repo-Reverse Repo mechanism, and foreign currency buy-sale in interbank market. When there is surplus liquidity, rates are low, capital is easily available. Low rates reduce the risk of borrowing. That makes more investments look good. In this way, liquidity may create economic growth. Government borrowing and fiscal measures can deeply influence banking sector liquidity, especially in short tenor.

Extreme Cases of Liquidity Scenario

High liquidity means there's a lot of capital. Too high surplus in market is termed as liquidity glut. It develops when there is too much of fund looking for too few investments. That leads to inflation. As cheap money chases fewer and fewer profitable investments, then the prices of assets increase. Surplus liquidity induces reckless marketing of loans by bank. On the other hand, investors speculating higher profit in future go for investments in lemon projects. As the ventures go defunct and don't pay out their promised return, investors are left holding worthless assets. Panic ensues, resulting in a withdrawal of investment money. Prices plummet, due to mad rush of sell before prices drop further. That's what happened with mortgage-backed securities during the subprime mortgage crisis in 2008. This phase of the business cycle is called an economic contraction and recession.

A liquidity trap usually occurs after a recession when monetary policy doesn't create more capital. Families and businesses are afraid to spend no matter how much credit is available. Workers who are anxious about losing jobs hoard their income, pay off debts, and save instead of spending. Businesses fear demand will fall off even more, so they don't hire or invest in expansion. Banks hoard cash to write down the bad loans and become even less likely to lend. Deflation makes them wait for prices to fall further before spending. As this vicious cycle continues spiraling downward, the economy is caught in a liquidity trap. It eventually may leads to a recession again.

Constrained liquidity is the opposite of liquidity glut. It means there isn't a lot of capital available or that it's expensive. It's usually a result of high-interest rates. It can also happen when banks and other lenders are hesitant about making loans. Banks become risk-averse when they already have a lot of bad loans on their books. Bank such cases fight for customer deposits. Interest rates may go up and affect investment growth. If the liquidity pressure is sourced from government spending activity, then it may crowd out private investment and leads to inflation.

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Understanding Liquidity and its Power

Liquidity Effect

Liquidity effect refers broadly to how increases or decreases in the availability of money influence interest rates and consumer spending, as well as investments and price stability.

Interest Rates: It is essentially the cost of borrowing money, rise and fall based on the total amount of available money in the financial system at any given time. If interest rates rise too far because of limited money in the system, for example, it can lead to an economic slowdown. If interest rates fall too far because of money availability, it risks unhealthy levels of inflation. To moderate these two possibilities, the central banks intervene with monetary policy and other direct and indirect measures like open market operation (OMO). In OMO, central bank can buy securities to add available money into the system or sell them to remove money from the system with the goal of maintaining moderate interest rates.

Consumer Spending: Rising interest rates that make it more expensive to finance purchases tend to lead consumer purchasing to level off or decline. This can help prevent bubbles -- rapid swells in property or stock prices followed by a massive collapse -- from developing in a given economic sector, such as housing. By contrast, higher liquidity and lower interest rates make it easier to finance purchases. This liquidity effect can help to spur consumer spending and create growth in a recessionary economy. We saw American monetary authority Fed lowered interest rates following the 2008 crash for the purpose of creating consumer and business spending, although the results were mixed.

Investment: As with consumer spending, business investment often increases or decreases based on interest rates. In principle, low interest rates encourage businesses to invest in infrastructure and hire additional employees because the financing costs less. Additionally, such expansion should coincide with increased consumer demand spurred by the same lower interest rates. As interest rates rise, businesses invest more cautiously because rate increases can signal an impending slowdown in consumer spending. Rising interest rates also serve as a check against unsustainable expansion in business and industry.

Price Stability: Price stability or inflation balancing is one of major goals of central bank. In this context, price stability, refers to product and service prices rising over time. The object is for those prices to rise in step with the pace of economic growth. If prices rise faster than the pace of economic growth, it restricts consumers' ability to buy some products and economic growth slows. If prices rise slower than the rate of growth, it creates overconsumption that cannot be sustained over the long term.

Bangladesh Scenario

Bangladesh is still in emerging stage in terms of financial system. Its two capital markets are yet to flourish to a reasonable scale. Up until now, the core source of fund for private sector investment as well governments fiscal activities is banking industry. But banks in Bangladesh are not in comfortable situations due to various internal and external reasons ranging from governance failures to policy variations by governments.

At present in Bangladeshi banking industry, we are experiencing a liquidity pressure both in local and foreign currency market. Causes are multiple and complexly inter-twined. Not all are truly economical. For instances, we saw recently a withdrawal pressure of government funds from private banks that created an artificial liquidity crisis. This bumped up the interest rates for both deposit and loans. Citing the case of a new comer private bank, many government organizations scrambled up for withdrawing their deposits, including those for development programmers, from private banks. Situation still did not improved as worth of mention, even after a government circular to govt. bodies about rationing funds (50-50) amongst private and state owned banks.

Besides, overall deposit growth was not also at par with credit growth. This happened due to significant amount sale of national savings certificates during the period. Market Liquidity showed moderately shrinking trend. Total liquid assets of the scheduled banks decreased and stood at Taka 255.17 Bln as of December, 2018 end which was Taka 264.27Bln at the end of June, 2018. Meanwhile, in April'18, Bangladesh Bank decreased CRR of banks by 100 basis point to 5.50% which reduced daily liquidity requirement in non-interest bearing account for the rest of the year.

As we experienced during last one year, LCs for import have been increased substantially compared to export and remittances earning of country. Besides, Government is financing some of its mega projects from its own source. To meet up the import payments, banks' cost is increasing. Over the year of 2018, Bangladesh Bank sold $2.35 Bln to interbank, supporting banks for their import payment and literally mopped up surplus BDT fund from market. However, this could not turn the scenario, as local taka is still depreciating slowly but ceaselessly.

Though, foreign exchange reserve showed almost steady path, the current reserves (less ACU liability) is able to pay import liability of 6.13 months; according to the average of the previous 12 months (Jan 2018 to Dec 2018) import liability is of USD 5.04 billion per month on an average basis. However, just one year ago, it was sufficient to satisfy more than 07 months' need of import payment. This is also fuelling the liquidity pressure.

Country's money supply (M2) growth fell to 9.41% in December 2018 which was 10.69% at December 2017. As country's current account balance already suffered greater deficit, we found the reflection of the scenario in macroeconomic data, where country's NFA (net foreign asset) did not grow as compared with NDA (net domestic asset) over the recent period. Since, global economic scenario favoured US dollar and dollar denominated assets, LIBOR is also in uptrend.

We believe, in at least coming two quarters of 2019, bankers' headache will be liquidity pressure, falling interest rate spread, pressure of FC loans, regulatory pressures for ADR/IDR, off balance sheet commitment, increased compliance of liquidity indicators and obviously the price bargaining of commercial customers. Our anticipation is that overall CAMELS considerations and ALM dynamics will have combined effect on the race for liquidity amongst scheduled commercial banks. In days ahead, it is quite likely that instead of being a source of liability and expense for bank, liquidity might play the role of ultimate asset in disguise.

Brexit: Where do Things Stand?

Britain has around a month before it is due to leave EU on March 29, 2019. With less than a month to go before the United Kingdom is due to leave the European Union (EU), the fog of Brexit continues to obscure the country's future.

The British government still can't seem to consent to a formal arrangement with the EU on the terms of the UK's withdrawal and their future relationship. PM Theresa May is attempting to renegotiate a disputed point in a draft bargain she has concurred with Brussels called the "backstop", which intends to maintain a strategic distance from the making of a hard customs border in Northern Ireland.

PM May is scheduled to inform parliament about her talks with EU leaders on February 27, when MPs will again vote on her updated draft deal. If MPs do not agree with the deal, they could reject it again. And what will happen after that? These are some of the options.

No Deal:

If Parliament fails to agree to a deal without anything else subsequently happening, the default position would be a no-deal Brexit. According to the existing law, UK must leave EU on March 29, 2019.

Major Renegotiation:

A complete renegotiation could take place which would be time consuming and would require to delay Brexit with an extension of Article 50. But the extension would be possible only if all EU countries agree at a vote of the EU Council. Second, the government would have to amend the "exit day" definition in the EU Withdrawal Act.

Another Referendum:

The government could go for another referendum alternatively. But the referendum couldn't happen immediately. A new legislation needs to be passed to make a referendum happen and there would have to be a statutory "referendum period" before the vote takes place.

Call for General Election:

Theresa May could decide to hold an early general election for winning a political mandate for her deal. But similar to the "renegotiate" and referendum plans, this option could also involve a request to the EU to extend Article 50 and two-third majority of the MPs.

Another No-Confidence Vote:

Another motion of no confidence in the government can be raised by opposition party at any time. If most MPs vote for the motion, then it begins a 14-day countdown. If in that period the current government or any other alternative government failed to win a new vote of confidence, then an early general election would be called automatically.

It is mentionable that, The European Court of Justice has ruled that UK has the right to unilaterally revoke Article 50 to cancel Brexit without the consent of other EU countries. So, the option of cancelling Brexit is still open. But the government being so committed to Brexit, it's the most unlikely possibility. (Source: BBC)

Commodity Market

Commodity	Unit	31-Jan-19		20-Feb-19		Changes
Crude Oil	USD/Barrel	$	53.8	$	55.9	3.92%
Coal	USD/	$	98.8	$	93.9	-4.96%
Rice	USD/cwt.	$	10.6	$	10.0	-5.75%
Wheat	USd/bu.	$	516.5	$	496.0	-3.97%
Soybean oil	USd/lb.	$	30.2	$	30.1	-0.3%
Raw cotton	USd/lb.	$	74.4	$	72.2	-2.97%
Gold	USD/Ounce	$	1,325.2	$	1,346.8	-1.63%

Oil price has continued to increase showing optimism about U.S.-China trade talks as well as the cut in production revealed by Saudi Arabia. Though the rise can be affected by report of the Energy Information Administration revealing crude oil inventories jumped by 3.6 million barrels in the week ended February 8th compared to estimates for an increase of 2.7 million barrels.

Thermal coal, which emits a lot of greenhouse gases as a power source, is not a favorite with environmentalists and policymakers. As a result, several major coal producers leave the business. China, the world's largest consumer of coal, is rapidly moving away from coal-fired power to tackle air pollution. As a result, Australian thermal coal prices are expected to fall to $74 by 2020.

Gold price, on the other hand, is showing strong growth due to record demand in the market. in fact, for the first time since the end of Bretton Woods and, indeed, since the end of the Second World War, central bank buying of gold has increased. Equally, the case for gold purchases is boosted by the near-record levels of government debt in the US, which makes other potential risk-free assets more questionable and could increase inflation figures.

Agricultural products like rice, wheat, soybean oil and raw cotton, on the contrary, are showing declining trend of varying degrees.

Foreign Exchange Market

Import

Fresh opening of import LCs during July-November, 2018 decreased by 30.96 percent as compared to the same period of the previous year and stood at USD 24.68 billion. Of the sectorial distribution of total LCs opening, the share of industrial raw materials is 34.02 percent, intermediate goods is 12.96 percent, machinery for miscellaneous industry is 11.50 percent, consumer goods is 9.48 percent, capital machinery is 7.82 percent and petroleum and petroleum products is 7.38 percent during July-November, 2018.

Settlement of import LCs during July-November, 2018 increased by 9.49 percent and stood at USD 22.55 billion against USD 20.59 billion of July-November, 2017

LC outstanding in July-November, 2018 has reached to $39.68 Billion which is increase of 9.03 % Y-O-Y from July-November, 2017.

The projection of opening of import LCs and probable liabilities against back to back LCs are USD 13.75 billion and USD 2.97 billion respectively during January-March, 2018-19. The mentioned liability is around 61.27 percent of foreign currency holdings of banks as on January 23, 2019.

Export

Export Export in November, 2018 was $3.42 Billion which was $3.71 Billion in October, 2018 with a decrease of 7.79%. However export in July-November, 2018 has reached $17.07 Billion which is a 17.24% growth Y-O-Y from July- November, 2017.

Category-wise breakdown of exports shows that during July-December, 2018 exports of agricultural products (+66.80%), chemical products (+54.39%), specialized textile (+49.53%), plastic products (21.25%), woven garments (+17.48%), knitwear (+13.92%), engineering products (+7.93%) and frozen & live fish (0.73%) experienced positive growth. On the other hand, jute and jute goods (-26.66%) and leather and leather products (-14.18%), experienced negative growth during July-December, 2018 as compared to that of July-December, 2017.

Remittances

Total receipts of workers' remittances during July-December, 2018 increased by USD 0.56 billion or 8.06 percent to USD 7.49 billion against USD 6.93 billion of July-December, 2017. Receipt of workers' remittances in December 2018 stood higher at USD 1.20 billion against USD 1.18 billion of November, 2018.

Foreign Exchange Holding

The gross foreign exchange reserves of BB stood at USD 32.02 billion (with ACU liability of USD 1.15 billion) as of end December 2018, as compared to USD 31.06 billion (with ACU liability of USD 0.48 billion) as of end November 2018. The current foreign exchange reserves (less ACU liability) is sufficient to pay import liability of 6.13 months; according to the average of the previous 12 months (December, 2017-November, 2018) import liability is of USD 5.04 billion per month on an average basis. Earlier on December, 2018 the reserve was S32.01 Billion, It was $32.11 Billion on July, 2018.

Exchange Rate Movement

Exchange rate of BDT against USD has slight change at BDT 83.95/USD from BDT 84.20/USD at the middle of February, 2019 due to continuous monitoring and liquidity support by central bank.

A total of $0.22 Billion has been sold to the commercial banks on January, 2019, as a part of support and FX market stability, the BB Data showed.

Balance of Payment

Trade balance recorded a deficit of USD 6.66 billion during July-November, 2018 as compared to the deficit of USD 7.61 billion during July-November, 2017. Overall balance incurred a deficit of USD 0.84 billion during July-November, 2018 as compared to the deficit of USD 0.48 billion during July-November, 2017. A point to note is that, current account deficit has narrowed compared to the same period of the previous fiscal year, while the deficit in overall balance widened.

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Domestic Economic Insights

Deposit

Total banking sector deposit stood at BDT 1,009,981.00 crore in December 2018. Out of this deposit, demand deposit was BDT 110,076.00 crore and time deposit were BDT 899,904.70 crore. The overall BDT 83,804.50 crore or 9.04% is changed compare to December 2017. The banking deposit in December 2018 increased BDT 18,291 crore or 1.84% compared to November 2018.

Advance

The domestic credit recorded an increase of BDT 128,318.30 crore or 13.48 percent at the end of December 2018 against the increase of BDT 119,951.60 crore or 14.42 percent at the end of December 2017. Credit to the private sector and public sector recorded a growth of 13.33 percent and 14.70 percent respectively in December 2018 as compared to the same month of the previous year.

Broad Money Growth

The broad money (M2) recorded an increase of BDT 99334.40 crore or 9.41 percent at the end of December 2018 against the increase of BDT 101945.10 crore or 10.69 percent at the end of December 2017. Of the sources of broad money, net domestic assets (NDA) increased rose by BDT 98,658.00 crore or 12.46 percent but net foreign assets (NFA) increased by BDT 676.40 crore or 0.26 percent at the end of December 2018 as compared to the same month of the previous year.

Inflation

The twelve-month average general inflation decreased in December 2018 due to decrease in average food inflation offsetting the rise in non-food inflation. The twelve-month average general inflation was 5.54 percent in December 2018, which was lower by 0.06 percentage point than the target of 5.60 percent for FY19.

Interest Rate Spread

The spread between the weighted average interest rate on advances and deposits of banks increased to 4.23 percent and that of NBFIs decreased to 2.70 percent respectively at the end of December 2018 as compared to November 2018. Weighted average interest rate on deposits of banks decreased to 5.26 percent at the end of December 2018 as compared to November 2018, while the weighted average interest rate on deposits of NBFIs increased to 9.95 percent.

Liquidity Position of the Scheduled Banks

Total liquid assets of the scheduled banks decreased by 3.44 percent and stood at BDT 255,169.52 crore as of end December 2018 which was BDT 264,267.37 crore at the end of June 2018. The minimum required liquid assets of the scheduled banks were BDT 178,776.42 crore as of end December 2018.

Sectoral distribution of total liquid assets as of end December 2018 in the form of cash in tills & balances with Sonali Bank Ltd., CRR, excess reserves, foreign currency balances with Bangladesh Bank and un-encumbered approved securities were 6.13 percent, 23.24 percent, 6.36 percent, 3.68 percent and 60.59 percent respectively.

Capital Market Development

The Dhaka stocks observed marginal correction from first week in February. The investors mostly followed cautious stance after the central bank monetary policy .The opportunist investors exposed their buying interest on lucrative price levels in fuel & power, food, pharma and telecom sector stocks riding on the news of soaring foreign funds in the market. Moreover, some investors shifted their portfolios based on the latest half yearly earnings disclosures. However, selling of shares from bank, financial institution, textile and insurance sectors led the DSEX to close in red. Besides, a new share come in secondary market named Genex Infosys Limited in this week. Genex Infosys has gained 465% from its offering price of BDT 10 on introduction date.

BD to raise BDT 8.78 trillion from bond market by 2021

(News courtesy: BBN, Dhaka)

Bangladesh has taken a move to raise BDT 8.78 trillion from the bond market for achieving 8.0 per cent plus economic growth by 2021.

A tripartite committee has already been formed to boost the country's nascent bond market, particularly the corporate one, officials said.

The first meeting of the tripartite committee formed to submit recommendations for how to build a long-term debt market in Bangladesh was held at the central bank headquarters in Dhaka on Monday, with its chief Md Khurshid Alam in the chair.

The committee comprises senior officials of the BB, Bangladesh Security and Exchange Commission (BSEC) and senior private banker.

The meeting reviewed the latest overall bond market situation, suggesting providing incentives for both bond issuers and buyers in order to bring dynamism in the market.

Talking to the BBN, a senior member of the committee said they will fix the types of incentives that will be provided to bond issuers and buyers in the next meeting.

He also said the committee is trying to develop strategies for encouraging entrepreneurs to issue corporate bonds instead of receiving loans from commercial banks.

The corporate bond market in Bangladesh, however, remains at a nascent stage mainly due to disclosure rules and strict governance norms of the market, according to the central bankers.

For funds, corporate borrowers prefer to rely on banks instead of the bond market to avoid the need to comply with disclosure requirements and strict governance norms of market, they added.

The high cost of launching new debt products and high transaction cost of bond-registration fee, stamp duties, annual trustee fees and ancillary charges discourage entrepreneurs from issuing corporate bonds, they explained.

Currently, only one corporate bond — Islami Bank Bangladesh Limited (IBBL) Mudarba Perpetual Bond — is now traded on the country's prime bourse, the Dhaka Stock Exchange (DSE).

The size of nominal gross domestic product (GDP) is estimated to reach BDT 32.78 trillion by the end of fiscal year (FY) 2020-21 while the resource gap will hit BDT 8.78 trillion, according to the central bank.

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Money Market

Call Money Market

The transaction of call money volume in interbank is increasing gradually from starting of February 2019.The total volume of call money in February 11, 2019 was 6507.53 crore. If we observed the weighted average rate of call money market, the rate was little bit decreasing in the market. The rate of call money in February 11, 2019 was 4.23%. Major stake holder bank is recovered there from borrowing position comparing the end of January 2019.

National Savings Certificate

The sale of National Savings Certificates (NSC) during July- November 2018 stood at BDT 37059.67 crore which was 10.09 percent higher than the sale of NSC during July-November 2017. The net borrowing of the government through NSC during July-November 2018 was BDT 21661.93 crore against BDT 21172.07 crore of July-November 2017. The outstanding borrowing of the government through NSC as of end November 2018 stood at BDT 259428.45 crore.

Treasury Bill Bond Market

The weighted In February govt will borrow Tk. 2600 crore from Treasury bill and Tk 1000 crore from Treasury bond against Tk 1600 crore and 950 core maturity of Treasury bill bond.

The weighted average yields on 91-Day, 182-Day and 364-Day treasury bills increased to 2.74 percent, 3.31 percent and 3.90 percent up to February 10, 2019 compared to January 2019 respectively.

The weighted average yields on 2-Year, 5-Year, 10-Year BGTB and 20-Year BGTB increased and stood at 4.98 percent, 5.93 percent, 7.63 percent and 8.44 percent in February 10, 2019 from those of January 2019 while, the weighted average yields on 15-Year BGTB decreased slightly and stood at 7.68 percent. 14 days Treasury bill also decreased and stood on 2.15 in February 10, 2019.

BD to raise BDT 8.78 trillion from bond market by 2021

The Bangladesh Bank (BB) has calculated the resource gap taking into consideration the credit flow by banks, investment and fund flow from the capital market.

"In the absence of a sufficient large corporate bond market, an overly large burden of corporate lending is taken on by the banking system and creating maturity mismatch in the market," the central bank said in the study report.

In such an environment, the over-sized banking system becomes a fertile ground for crony capitalism, resulting in lax lending criteria and relaxed investment standards by companies, it added.

"The BB needs to ensure the strict credit disciplining so that the undue benefits of obtaining bank loan do not exist," recommended the study on 'BB's role in enabling corporate bond market'.

The central bank's board as a forum of relevant key actors can take the leadership role in the development of the bond market, it noted.

Regulator's Corner

DOS Circular No.-04 -Date: 08/10/2018

Objective of Risk Management Guidelines

This guideline is issued by Bangladesh Bank (BB) under section 45 of Bank Company Ain, 1991 with a view to provide a structured way of identifying and analyzing potential risks, and devising and implementing responses appropriate to their impact. These responses generally draw on strategies of risk prevention, risk transfer, impact mitigation or risk acceptance. However, BB considers compulsory for all banks to self-assess their risk profile and operational context, and customize their risk management architecture and approach to attain organizational goals while meeting the minimum requirements set out in the guidelines.

In view of BB, the objectives of the guidelines are given below:

- To promote better risk culture at all levels of the banks.
- To provide minimum standards for risk management practices.
- To improve financial soundness of individual banks and stability of the overall financial sector.
- To encourage banks to adopt and implement a sound risk management framework.
- To introduce important risk management tools and techniques for assessment and necessary treatment of various risks.

Risk management process is the systematic application of management policies, procedures and practices to the assessment, treatment, controlling, and monitoring of risk. The process should be an integral part of management, be embedded in the culture and practices, and should be tailored to the business processes of the organization.

Risk Strategy and Risk Appetite

A Risk Management Strategy provides a structured and coherent approach to identifying, assessing and managing risk. It builds in a process for regularly updating and reviewing the assessment based on new developments or actions taken.

Risk tolerance and Risk appetite are terms often used interchangeably: risk appetite describes the absolute risks a bank is a priori open to take; while risk tolerance relates to the actual limits that a bank has set. Risk appetite report plays an important role in cascading the risk strategy down through the institution. The report should be well-embedded and be consistent with the bank's capacity to take risk, taking into consideration the capital constraints, and potential profit and loss consequences.

A good practice includes the following:

- Regular review of risk appetite statement as a formal process;
- Top-down and bottom up processes to define risk metrics and risk appetite;
- Limit systems that are aligned with overall governance so that breaches are quickly flagged and appropriate counter-measures are taken.

TechTalk

Artificial Intelligence (AI)

Artificial intelligence (AI), sometimes known as machine intelligence, refers to the ability of computers to perform human-like feats of cognition including learning, problem-solving, perception, decision-making, and speech and language. Thanks to more advanced algorithms, data volumes, and computer power and storage, AI evolved and expanded to include more sophisticated applications, such as self-driving cars, improved fraud detection, and “personal assistants” like Siri and Alexa. Today, medical researchers are using AI to develop technology that will detect a range of diseases, improve radiology imaging, fine-tune radiation treatments, simplify DNA sequencing, and advance precision medicine for more individualized health care.

Importance of AI:

1. AI automates repetitive learning and discovery through data.
2. AI adds intelligence
3. AI adapts through progressive learning algorithms
4. AI analyzes more and deeper data
5. AI achieves incredible accuracy
6. AI gets the most out of data

Usage of AI:

1. **Health Care**: AI applications can provide personalized medicine and X-ray readings. Personal health care assistants can act as life coaches, reminding you to take your pills, exercise or eat healthier.

2. **Manufacturing:** AI can analyze factory IoT data as it streams from connected equipment to forecast expected load and demand using recurrent networks, a specific type of deep learning network used with sequence data.

3. **Retail:** AI provides virtual shopping capabilities that offer personalized recommendations and discuss purchase options with the consumer. Stock management and site layout technologies will also be improved with AI.

4. **Banking:** Artificial Intelligence enhances the speed, precision and effectiveness of human efforts. In financial institutions, AI techniques can be used to identify which transactions are likely to be fraudulent, adopt fast and accurate credit scoring, as well as automate manually intense data management tasks.

While Hollywood movies and science fiction novels depict AI as human-like robots that take over the world, the current evolution of AI technologies isn’t that scary – or quite that smart. Instead, AI has evolved to provide many specific benefits in every industry.

Artificial intelligence is going to change every industry, but we have to understand its limits. The principle limitation of AI is that it learns from the data. There is no other way in which knowledge can be incorporated. That means any inaccuracies in the data will be reflected in the results. And any additional layers of prediction or analysis have to be added separately.

Banking Trivia

Importance of Risk Management in Banking Sector

The banking industry is the one of the most important sectors in the economy. At the time of providing services like payment systems, credit intermediation, liquidity and settlements, asset transformation and money creation, the effective functioning of banks is a crucial tasks, banks also act as a “Financial Intermediaries” in the transactions, but this role is causing various kinds of risks to the banks.

Risk can be defined as "the impact of uncertainty on business objectives". If anyone has good risk management capabilities, he/she should be in a position to properly consider most of the issues that can stop his/her from being successful. Risk can rarely be fully eliminated so there is a level of analysis and judgment required in assessing any risk.

In this view, good risk management = good business decision making.

It is a fundamental capability of a bank to buy and sell risk every day. Usually, most of the risks that banks are facing in their business are on their balance sheet activities. Consequently, the balance sheet includes the risk related to the bank’s traditional and trading activities. The risk management concept begins with the discussion over why these risks should be managed. The risk management process can be summarized with the following three steps:

1. Identifying and assessing the potential risk in the banking business,

2. Developing and executing an action plan to deal with and manage these activities that incur potential losses,

3. Continuously reviewing and reporting the risk management practices after they have been put into action/operation.

The overall purpose of the risk management process is to evaluate the potential losses for the banks in the future and to take precautions to deal with these potential problems when they occur.

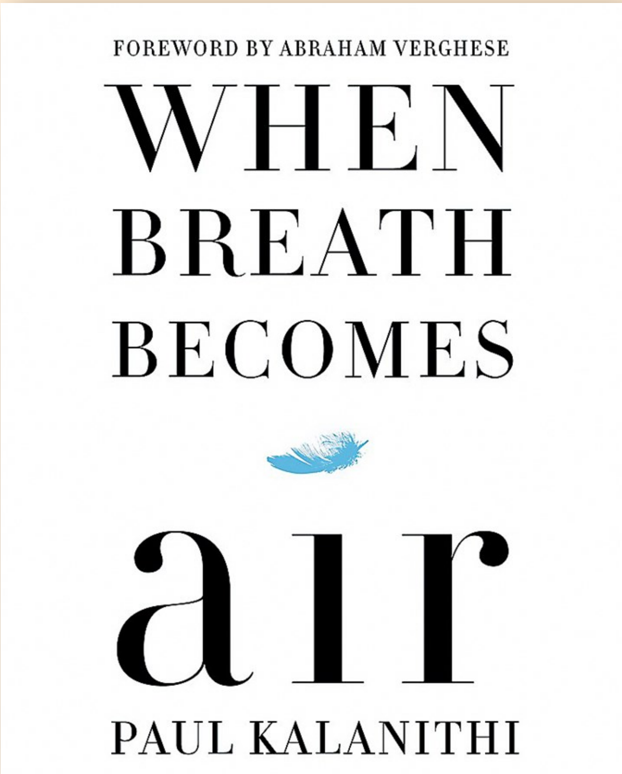
Banks are institutions that are also engaged in investment activities. Consequently, using the source of funds on the asset side which represents the investment activities, even they are subject to the price volatility. Hence, traditional banking activities can also be classified as investment activities because banks use their balance sheets to convert the deposits into credits. Both lending and borrowing are subject to market prices such as interest rates and exchange rates; moreover, it is also related to liquidity.

Bookmark

What makes life meaningful enough to go on living?

When Breath Becomes Air: Paul Kalanithi

This is a memoir of a neurosurgeon and neuroscientist at Stanford University who was diagnosed with stage IV lung cancer one year before completion of his graduation. He has written this book in his last year on the earth. Yet he uses the book to not only tell his story, but also share his ideas on how to approach death with grace and what it means to be fully alive.



In his forwarding for the book, Dr. Verghese, suggested not only reading this book but also listening to the overwhelming response it prompts in the heart of the reader. Finishing this book and then forgetting about it is simply not an option. There is so much here that lingers, and not just about matters of life and death: One of the most poignant things about Dr. Kalanithi's story is that he had postponed learning how to live while pursuing his career in neurosurgery. By the time he was ready to enjoy a life outside the operating room, what he needed to learn was how to die.

From the very childhood Paul Kalanithi was intrigued by literature. Through literature he searched meaning of life. He has graduated in literature from Stanford University. But literature alone can not provide answer for his query. So, to understand the meaning of life, he started studying medicine and ultimately neurosurgery. Medical profession was never just a profession to him. Rather, it was his own way to understand life and death and what makes life meaningful. In his words, "Before operating on a patient's brain, I realized, I must first understand his mind: his identity, his values, what makes his life worth living, and what devastation makes it reasonable to let that life end. The cost of my dedication to succeed was high, and the ineluctable failures brought me nearly unbearable guilt. Those burdens are what make medicine holy and wholly impossible: in taking up another's cross, one must sometimes get crushed by the weight."

"When Breath Becomes Air" is gripping from the start. But it becomes even more so as Dr. Kalanithi tries to reinvent himself in various ways with no idea what will happen. He can't gauge how much strength his body still has until he tests it, and sometimes the consequences are horrific. He no longer knows who he is or what he wants. His whole sense of identity is shaken. And for a terrible period when his oncologist is away, he is treated as a problem and not a patient by an inept medical resident who nearly hastens his death by denying him one of the drugs he desperately needs.

Part of this book's tremendous impact comes from the obvious fact that its author was such a brilliant polymath. And part comes from the way he conveys what happened to him — passionately working and striving, deferring gratification, waiting to live, learning to die — so well. None of it is maudlin. Nothing is exaggerated. As he wrote to a friend: "It's just tragic enough and just imaginable enough." And just important enough to be unmissable.