# EQUITIES, MUTUAL FUNDS, ETFS, & REITS

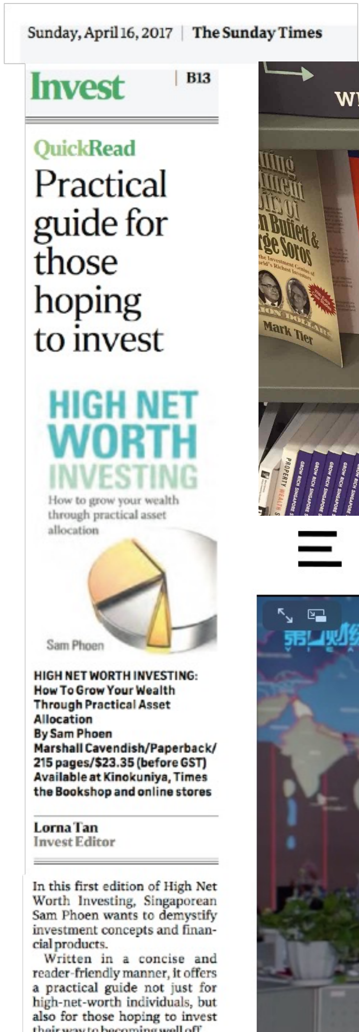
Sam Phoen

SMU Academy
2022

# The 4 "S" of Online Learning!

- Sharp!… turn on your video cam if you can so we could see how sharp you look, esp. when you speak!
- Shhhh… but we don't want to hear you typing/multi-tasking away, so mute your mic unless you are speaking to us!
- Shout!…wave frantically or type on chat or just shout… If you want to ask a question or share any views, 'cos I can't see every mini screens!
- Stretch… It's tough staying awake at home/online, so stretch as often as you want!  We will have regular short breaks and a much longer lunch break!

# Sam Phoen's Profile


Sunday, April 16, 2017 | The Sunday Times

Invest B13

QuickRead

**Practical guide for those hoping to invest**

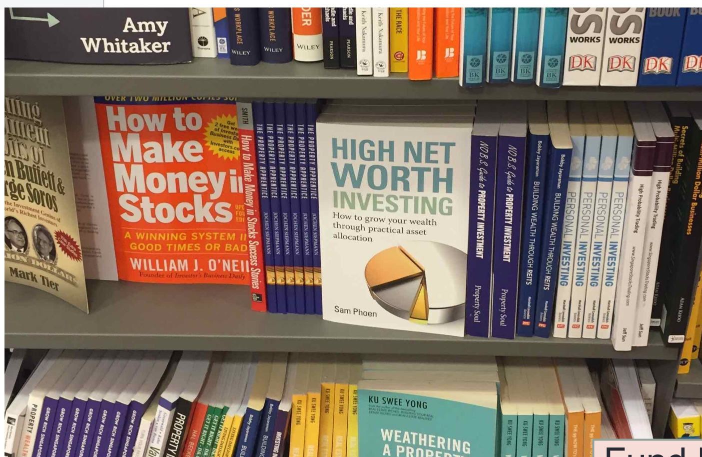


**HIGH NET WORTH INVESTING: How To Grow Your Wealth Through Practical Asset Allocation**
By Sam Phoen
Marshall Cavendish/Paperback/ 215 pages/$23.35 (before GST)
Available at Kinokuniya, Times the Bookshop and online stores

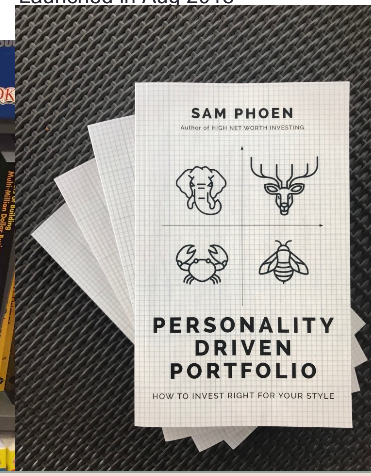
Lorna Tan
Invest Editor

In this first edition of High Net Worth Investing, Singaporean Sam Phoen wants to demystify investment concepts and financial products.

Written in a concise and reader-friendly manner, it offers a practical guide not just for high-net-worth individuals, but also for those hoping to invest their way to becoming well off.




Launched in Aug 2018





Launched Jan2019

Fund Manager,
China Global Markets,
Senior Relationship Banker,
Author, Consultant,
Trainer, Adjunct Lecturer


Shanghai 第一财经， 16 Apr 19


CNA Money Mind, 9 Sep 17

To find out more, add me at **LinkedIn**

# Learning Objectives

- Understand how to analyse publicly listed companies using various analysis techniques, including macro-economic, industries and fundamental analysis
- Learn the features, benefits, risks and differences in investing in equity mutual funds versus ETFs
- Introduction to how REITs work
- Apply equities trading strategies for different market conditions

# Class Schedule

## Valuing Equities

1 Macro-Economic Analysis

2 Industry Analysis

3 Fundamental Analysis


## Funds and REITs

4 ETFs

5 Mutual Funds

6 REITs

## Strategies

7 Stock Trading strategies

# VALUING EQUITIES

# Top-Down vs Bottom-Up Valuation

- Top-down
  - Economy, market and industry have a significant impact on the total returns for individual stocks
    - Macro-Economic Analysis
    - Industry Analysis

- Bottom-up
  - Finding stocks that will provide superior returns regardless of the market and industry outlook
    - Fundamental Analysis
    - Technical Analysis

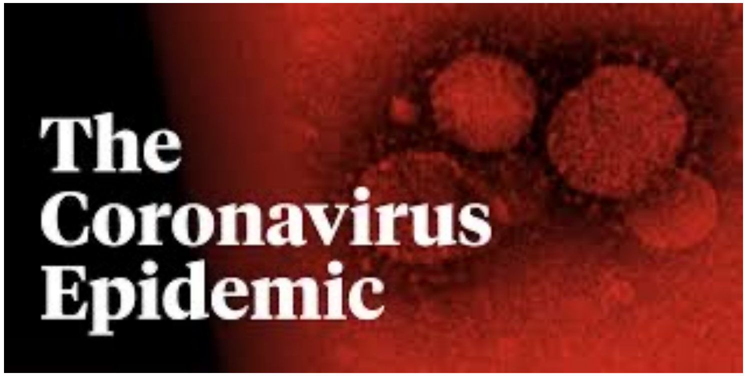
# MACRO-ECONOMIC ANALYSIS

# Macro-economic Analysis

- A Top-down approach to understanding a business begins with the global economy.
- Domestic businesses are seldom isolated and operate as part of the global economy.
- Domestic economies are also very exposed to its domestic conditions like growth rates, political stability, and currency risks.

# Global Economy

Russia-Ukraine War




Recovery from Covid-19

Rising Inflation and Rates

# Gross Domestic Product

- Most widely used single measure of a country's overall economic activity
- Measures market value of final goods and services produced domestically
- GDP figures typically expressed in real (i.e. inflation adjusted) terms, referred to as Real GDP growth rate

- Try this cool interactive page:

https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD

# Inflation

- Measured using the rate of change of the consumer price index (CPI), which represents the price of a basket of goods and services bought by a typical consumer

- Moderate inflation (~2%) is good for the economy, by encouraging people to spend rather than save, boosting economic growth

- High inflation or hyperinflation (>10%), usually due to high money supply growth or political turmoil, is bad. Domestic currency falls, and capital flows to other assets (e.g. Gold) and more stable countries

# Hyperinflation takes food off table for the needy in Zimbabwe


In a 2019 photo, security forces keep watch as shoppers queue outside a supermarket in Harare. Inflation soared to 191.6 per cent last month, up from 60 per cent at the start of the year. PHOTO: AGENCE FRANCE-PRESSE

## Ukraine war, compounded by black market for forex, has depleted value of currency

HARARE • With runaway inflation eating into incomes, staple foods have vanished from the tables of Zimbabweans like Ms Emina Chishangwe, who lives in a poor dormitory town south of the capital Harare.

"I can't remember the last time I ate meat. It has become a luxury for some of us," said the 57-year-old single mother of two adult sons.

Zimbabwe has the highest inflation rate in the world, according to Professor of Applied Economics Steve Hanke at Johns Hopkins University, who believes it can be remedied only by the full adoption of the US dollar.

The situation has quickly worsened this year as the Russian invasion of Ukraine, compounded by the black market for foreign exchange, depleted the value of the Zimbabwe dollar.

"The parallel market is to blame to a large degree for the spiralling inflation," AgriBank chief economist Joseph Mverecha told Agence France-Presse.

Zimbabwe's economy has been on a downturn for nearly two decades, marked by shortages of cash and food.

Distrust has led people to exchange their cash for US dollars, further driving down the local currency. Inflation soared to 191.6 per cent last month, up from 60 per cent at the beginning of the year, driving prices of goods ever upwards.

The rate dwarfs even the 41 per cent inflation in war-torn Ukraine.

A kilo of choice beef now costs 8,768 Zimbabwe dollars (S$33.90) and 5kg of chicken drumsticks 21,000 Zimbabwe dollars – the equivalent of a civil servant's average monthly salary.

Ms Chishangwe, who runs a vegetable stall in Chitungwiza town, and her sons have two meals a day instead of three, usually a thick cornmeal porridge called sadza and kale or tiny dried sardines.

Rising fuel prices forced Mr Edwin Matsvai to downgrade from a fuel-guzzling Toyota Land Cruiser to a more economic Honda Fit.

"My friends made jokes about me 'stepping down' when I made the change, but now some of them are considering following suit," said Mr Matsvai, a car salesman.

Petrol rose to US$1.77 (S$2.48) per litre this month from US$1.41 in January.

Zimbabweans endured and survived some of the worst hardships of 2008 when hyperinflation saw the central bank mint a one-trillion-dollar note. Growing discrepancies between incomes and cost of living, forcing people to make tough decisions of how and where they live, are taking a toll on mental health, according to specialist psychiatrist Isabel Chinoperekwei.

"I see many of them coming with depression, anxiety disorder and also alcohol abuse," said Dr Chinoperekwei, who has a private practice in Harare.

It is not just working professionals feeling the anguish.

"I have seen adolescents who have changed schools because their parents could no longer afford the schools they were going to," Dr Chinoperekwei said. "They find it hard to cope."

Many blame the country's leaders. "The old men have failed us," said Mr Matsvai, referring to the government. "If they don't act swiftly and fix the economy, it will cost them in next year's general elections."

Already in March by-elections, the long-ruling Zanu-PF party lost to the opposition Citizens' Coalition for Change (CCC), which was formed barely three months earlier.

The southern African nation is due to hold a general election next year. Analysts say the current political and economic landscape mirrors the crisis leading into the 2008 election, which saw former ruler Robert Mugabe nearly fall from power.

The risk of losing power in upcoming polls is now pushing Zanu-PF to "frantic measures" to halt price hikes that have plunged millions into deeper poverty, said economist Prosper Chitambara.

"The world over, no ruling party is expected to do well in an environment of chronic high inflation," said Mr Chitambara, of the think-tank Labour and Economic Development Research Institute of Zimbabwe.

Last month, Finance Minister Mthuli Ncube announced a raft of monetary policies including maintaining the dual use of the US dollar, adopted after the 2008 hyperinflation, and the Zimbabwe dollar reintroduced in 2019.

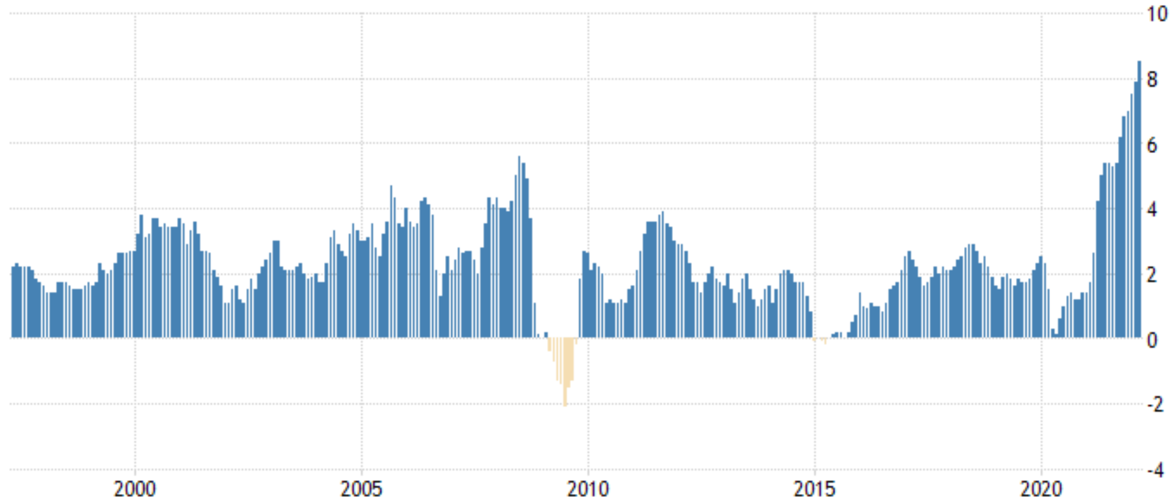
Minimum interest rates more than doubled to 200 per cent last week. The country is also introducing gold coins "as a store of value" starting July 25. But those are for the rich.

"The ordinary citizens, those who are struggling and living from hand to mouth are not going to afford it," said Mr Chitambara.

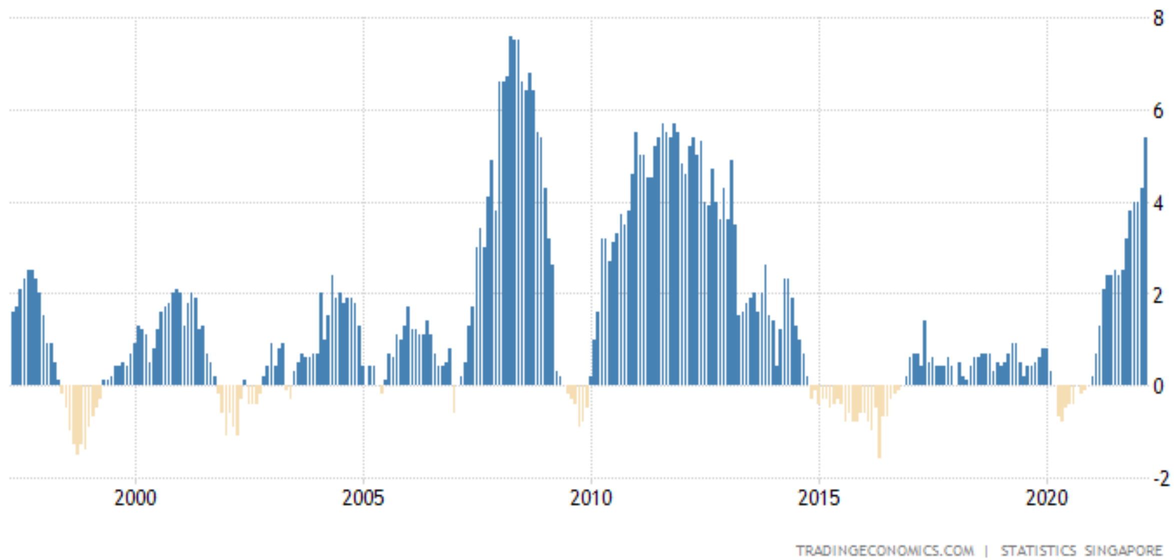
AGENCE FRANCE-PRESSE

# Singapore Inflation compared to the US

US Inflation Rate
~2-3% on average




SG Inflation Rate
<2% on average



31 May 2022

# Singapore: cost of living bites

Khoon Goh
Head of Asia Research, ANZ

In the interconnected global economy we live in events from the other side of the world, which may seem remote, can impact us in unexpected ways.

Pic: Khoon Goh's $5.50 chicken rice set, purchased at the Market Street Hawker Centre,

Local Business Insulated? No!

After decades of taking low inflation for granted, we now face not only higher inflation but possible shortages due to supply disruptions.

For ordinary citizens who think the Ukraine conflict does not impact on them, their next chicken rice meal says otherwise.

Take the humble chicken rice, a popular dish in Singapore which can be found everywhere in the city state - from hawker centres to upmarket restaurants and hotels. A set, which I had recently for lunch at the Market Street Hawker Centre, cost me S$5.50 or around US$4. That might sound cheap to Westerners used to paying more than $US10 for a plate but according to the Singapore Department of Statistics (DOS), the price of chicken rice has already risen by 4.2 per cent in the first four months of this year.

# Singapore’s Stats

Try this informative site:

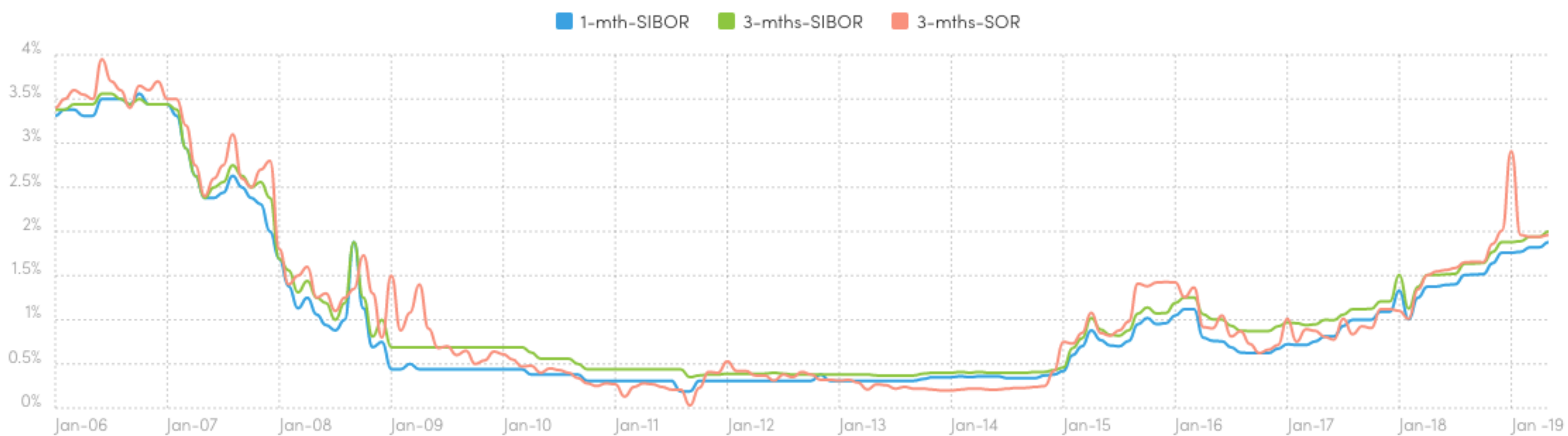
https://www.singstat.gov.sg/modules/infographics/economy

# Interest Rates

- Higher growth, inflation tend to lead to higher rates
- Reflect the cost of borrowing
- Impacts business performances via:
  - For the Firm
    - All things equal, lower interest rates imply less interest expense and higher profits
    - Lower interest rates reduce cost of capital, increasing viable investment opportunities
  - For Consumer
    - Lower interest rates reduce cost of current consumption (e.g. cheaper to buy a car on a loan)
    - Tend to spur spending, increasing sales for businesses

# Singapore - SIBOR versus SOR

- SIBOR (SG Interbank Offered Rate) – determined by the demand and supply of funds in the SG interbank market
- SOR (Swap Offer Rate) – derived from USD LIBOR, USD/SGD FX Swap rates
- SOR tends to be more volatile



Moneysmart.sg

# In Transition…

## TRANSITION FROM **LIBOR** TO **RFRs**

The need to transition from LIBOR to RFRs arises from the global shift to improve the robustness and integrity of financial benchmarks. As part of this shift, the UK Financial Conduct Authority ("FCA") which acts as the supervisory authority for LIBOR, has stated that it will no longer compel banks to submit rates used for the calculation of LIBOR after 31 December 2021. This means that LIBOR is expected to be discontinued after end-2021. As the Singapore Dollar Swap Offer Rate ("SOR") utilises USD LIBOR in its computation, the expected discontinuation of LIBOR by end-2021 will impact the sustainability of SOR.

## TRANSITION FROM **SOR** TO **SORA**

The Secured Overnight Financing Rate ("SOFR"), selected by the Alternative Reference Rate Committee put together by the US Federal Reserve, will replace the USD LIBOR, while the Sterling Overnight Index Average ("SONIA"), recommended by the Bank of England's Working Group on Sterling Risk Free Reference Rates, will replace the GBP LIBOR. As for SOR, the Association of Banks in Singapore and the Singapore Foreign Exchange Market Committee ("ABS-SFEMC") has identified the Singapore Overnight Rate Average ("SORA") as the most suitable interest rate benchmark to replace SOR.

# From SIBOR/SOR to SORA

- Demise of USD LIBOR necessitates move to SORA
- SORA is the rate for unsecured overnight interbank SGD txns brokered in SG daily between 8am and 6.15pm
- Volume-weighted (24banks) actual transacted rate based
- 1,3,6-month SORA compounded from past daily SORA

| Country/City | New Benchmark Rate (all based on real txns) |
|---|---|
| Australia | AONIA – RBA Interbank Overnight Cash Rate |
| Canada | CORRA – Canadian Overnight Repo Rate Average |
| Hong Kong | HONIA – Hong Kong Dollar Overnight Index Average |
| Japan | TONAR – Tokyo Overnight Average Rate |
| UK | SONIA – Sterling Overnight Index Rate |
| USA | SOFR – Secured Overnight Financing Rate |

# SORA

## OCBC launches first SORA-based home loan

By Kelly Ng
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@KellyNgBT

Singapore

OCBC has launched Singapore's first home loan referencing the Singapore Overnight Rate Average (SORA), an alternative benchmark rate, available to buyers of completed private properties with a minimum loan size of S$1 million.

This is another step in the industry's move towards adopting the SORA – the average rate of unsecured overnight interbank Singdollar (SGD) transactions brokered in Singapore – as the new interest rate benchmark for the SGD cash and derivatives market.

Compounded SORA rates, which are backward-looking overnight rates, are thought to offer more stability compared to forward-looking term rates commonly used for floating home loan packages in Singapore, such as the Singapore Interbank Offered Rate (Sibor). Forward-looking term rates are more exposed to market factors on a single day's fixing, such as quarter or year-end volatility.

OCBC's head of consumer financial services Sunny Quek said in a press statement on Monday: "We are pleased to launch the first retail SORA-pegged home loan as the industry takes steps to move towards referencing an overnight risk-free rate, which provides for greater stability and transparency."

The interest rate for OCBC's 90-day SORA home loan is calculated based on the simple average of the daily SORA rates over the past 90 calendar days ahead of the loan repayment period. This rate is updated every month, instead of every three months, for a particular loan.

To help customers better plan their finances, the bank will notify them in advance – at the start of every interest period – of the SORA-based interest rate to be paid for the coming month. This allows them to know upfront the exact interest rate to be charged for the coming month, as well as the instalment to be paid.

The applicable SORA-based interest rate for the first month is computed using the simple average of daily SORA rates on the day of loan disbursement and the preceding 89 days. This rate is then used to calculate the interest accrued for the first month.

This process is repeated every month, whereby the SORA-based interest rate is calculated again using the simple average of the past 90 days' SORA rates from the first day of the next interest period.

As an overnight lending and borrowing rate among banks, SORA lacks a term and credit risk premium. This results in SORA being typically lower than Sibor – at an average of 0.35 per cent, based on OCBC's computations using variances between the rates from Jan 1, 2019 to June 30, 2020.

OCBC's SORA loan package has a one-year lock-in period, which means customers can switch to another home loan package after a year at no cost.

Customers can also make pre-pay-

Business Times, 14 Jul 2020

## OCBC launches new Sora-pegged home loan

OCBC Bank has launched a home loan that is based on the three-month compounded Singapore Overnight Rate Average (Sora) that is published by the Monetary Authority of Singapore (MAS).

The three-month Compounded Sora Home Loan is available for all categories – completed properties, those under construction, new mortgages and existing ones being repriced.

OCBC's move reflects the industry's shift towards adopting Sora as the new interest rate benchmark for the Singdollar cash and derivatives market.

Sora refers to the average rate of unsecured overnight interbank Singdollar transactions brokered here.

OCBC's new Compounded Sora Home Loan replaces a Sora-based one launched on July 13 that based interest rates on a simple average of the daily Sora rates in the preceding 90 calendar days.

OCBC said it approved around $50 million in loans in the first two weeks of its launch.

Like the three-month Singapore Interbank Offered Rate (Sibor) home loan package, the three-month Compounded Sora deal has a two-year lock-in period. Customers can make prepayments of up to 50 per cent of the loan amount in the first two years with no penalty.

Mr Sunny Quek, head of consumer financial services at OCBC, said: "We received a positive response to the industry's first retail Sora-pegged home loan that was launched last month.

"This shows that consumers are receptive to Sora as the new interest rate benchmark for Singdollar markets."

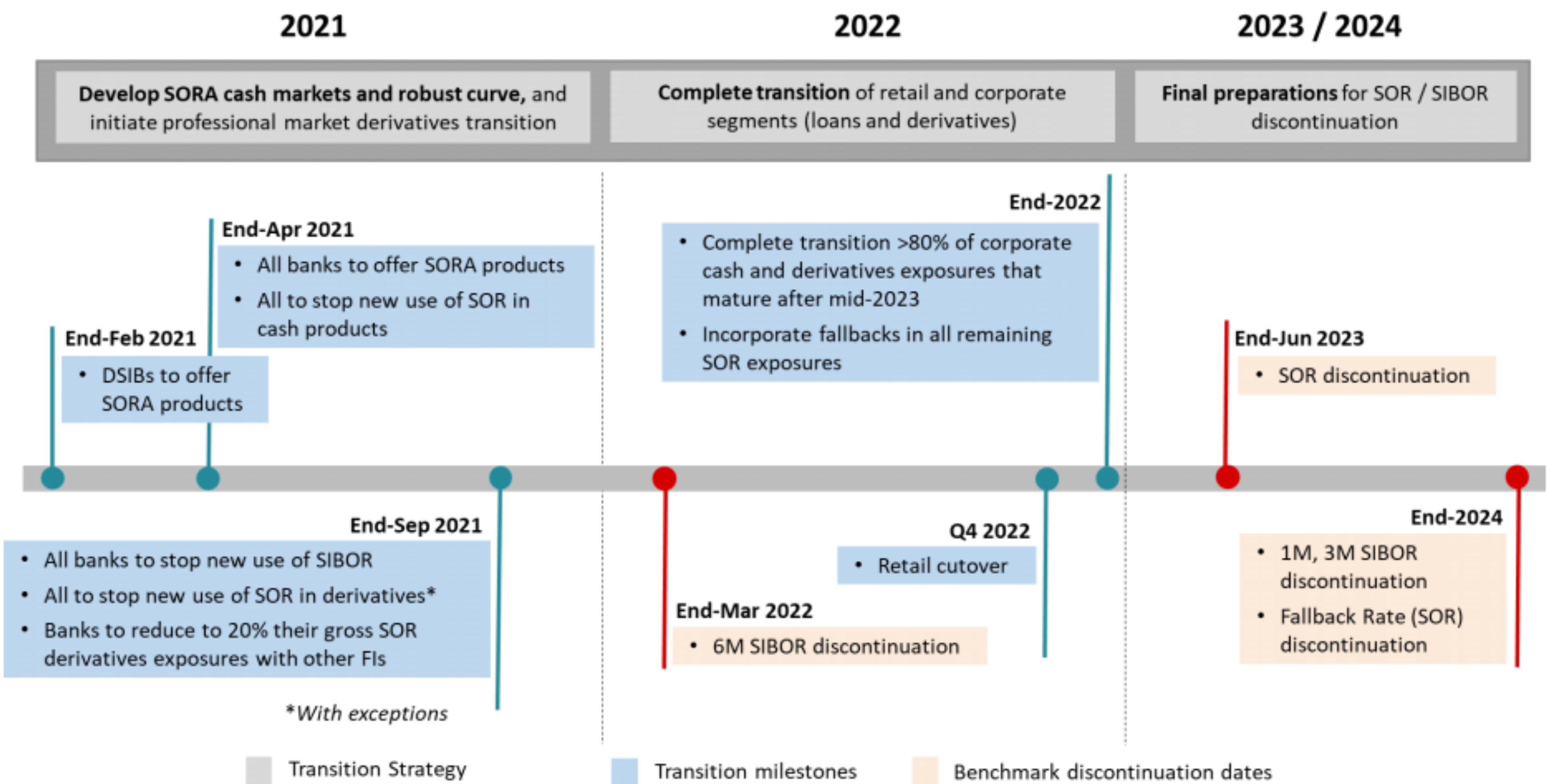
The MAS publishes Sora – as well as the compounded Sora rates for the one-, three- and six-month tenors – for a given business day by 9am the next business day.

OCBC's three-month Compounded Sora package will reference the three-month compounded Sora rate to calculate the monthly loan instalment, with the rate updated monthly instead of every three months.

Customers will be told the interest rate and instalment amount at the start of the month, with payment due at the end of the month, making it easier for them to plan their finances. THE BUSINESS TIMES

Business Times, 20 Aug 2020

# SORA - Transition




Association of Banks in Singapore

# Some banks' fixed-rate home loans now more expensive

**They act in anticipation of further US rate hikes; Sora-pegged loans relatively cheaper**

Home owners will have to fork out more for their fixed-rate mortgage payments as banks such as Citibank, OCBC and DBS raise their fixed interest rates. In contrast, floating interest rates pegged to the Singapore Overnight Rate Average or Sora have not moved as much. ST PHOTO: CHONG JUN LIANG

**Chor Khieng Yuit**
**Senior Correspondent**

Home owners will have to fork out more for their fixed-rate mortgage payments after some banks here raised their fixed interest rates in anticipation of further rate hikes in the United States.

Citibank was the latest to raise interest rates on its fixed-rate loans yesterday.

Citi's two-year fixed-rate loan is now at 2.45 per cent – up from 2.35 per cent – while the three-year fixed-rate loan has jumped to 2.65 per cent from 2.53 per cent previously.

A check by The Straits Times found that some of the other banks have also raised fixed rates as recently as this week.

OCBC Bank raised the rates on its one-year fixed-rate loan to 1.65 per cent, from 1.55 per cent.

DBS Bank's two-year fixed-rate package is now at 2.25 per cent, from 1.65 per cent last month, while its three-year fixed-flexi package is at 2.5 per cent, from 1.85 per cent previously.

UOB told ST that the rate for its two-year fixed-rate package is 2.35 per cent as of Thursday.

Meanwhile, floating interest rates pegged to the Singapore Overnight Rate Average (Sora) have not moved as much yet, with the exception of Citi, which yesterday raised the margin for its two-year Sora-pegged loans to 0.78 per cent from 0.7 per cent.

DBS and UOB have maintained their lending margins at 0.8 per cent, while OCBC has maintained it at 1.2 per cent for year one and 1.3 per cent for year two.

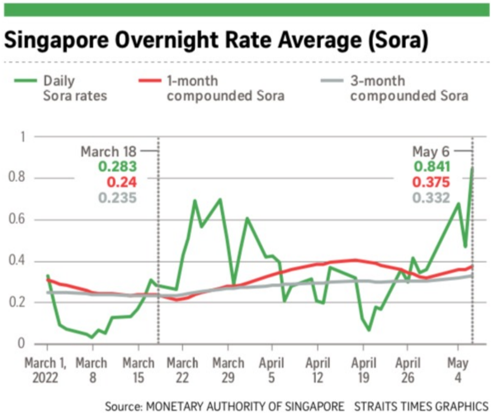
Sora is the interest rate benchmark for pricing mortgage loans in Singapore.

Banks typically charge either a one-month compounded Sora or three-month compounded Sora plus a lending margin for their Sora-pegged floating-rate loans.

The one-month compounded Sora is based on Sora rates over the past month, while the three-month compounded Sora is based on Sora rates over the past three months.

But why are fixed rates going up relatively faster than Sora-pegged floating rates?

DBS senior rates strategist Eugene Leow said fixed-rate loans are forward-looking over a period of time, such as two to three years. Hence, the rates have to take into account a more hawkish US central bank in the coming quarters.




Mr Roy Phua, head of mortgage business at Citibank Singapore, said that in a rising rate environment, fixed-rate packages are higher as funding costs for the medium term (two to three years) have priced in higher future interest rates.

As for Sora, Mr Paul Wee, vice-president of fintech at property portal PropertyGuru Group, said Sora-pegged loans have not moved as much because Sora is a backward-looking rate and is based on all the rates of past actual borrowing transactions in the interbank market.

Mr Clive Chng, associate director of mortgage broker Redbrick Mortgage Advisory, said that as banks have liquidity, they do not need to borrow from one another in the interbank market. If nobody borrows, the Sora rates of borrowing will be lower between banks, he said.

With fixed rates going up, but Sora-pegged rates not moving much, the gap between the two is widening. Citi's Mr Phua noted that the difference is currently in the range of between 1.15 per cent and 1.35 per cent, wider than the usual range of between 0.15 per cent and 0.25 per cent.

Mr Kevin Kwek, managing director of Asian financials and fintech at investment manager Alliance-Bernstein, said such a gap is fair, given current expectations of future rate hikes.

He expects the gap between fixed and floating rates to narrow when there is more certainty over the size and pace of rate hikes.

For now, because Sora-pegged loans are still relatively cheaper, Mr Chng recommends that home owners look at floating-rate Sora loans with a one-year lock-in period.

He said a one-year lock-in floating rate gives home owners the benefit of reaping interest savings from a lower Sora-pegged rate.

At the same time, they have the flexibility to reprice or refinance their loans a year later, instead of being committed to a loan rate for two to three years.

DBS and UOB have also come up with hybrid packages that allow home owners to diversify their mortgage rate risks across a mix of loan packages.

Mr Nelson Neo, head of home financing solutions at DBS Consumer Banking Group, said the bank's Two-In-One Home Loan package lets borrowers park a portion of their loan amount under a fixed-rate package, with the remainder under a floating-rate package, in ratios of 50:50, 40:60 or 30:70.

Ms Jacquelyn Tan, head of group personal financial services at UOB, said customers have been attracted to the bank's fixed-rate and floating-rate combination loans.

khiengchor@sph.com.sg

Straits Times, 7 May 2022

# Fiscal Policy

- Government actions that alter the levels of government spending and taxes
  - Trump reduced US taxes in Dec '17, benefiting wealthy individuals, banks and many corporations, leading to continuing US growth

## Individual tax rate

**Current law:** The top marginal tax rate is 37 percent for income over $518,400 for individuals and $622,050 for married couples filing jointly.

Rates are scheduled to increase to pre-Tax Cuts and Jobs Act of 2017 amounts after 2025.

**Donald Trump:** Enact a 10 percent middle-class tax cut, which reportedly could include lowering the 22 percent marginal tax rate to 15 percent. For 2020, the 22 percent marginal tax rate applies to income over $40,125 for individuals and $80,250 for married couples filing jointly.

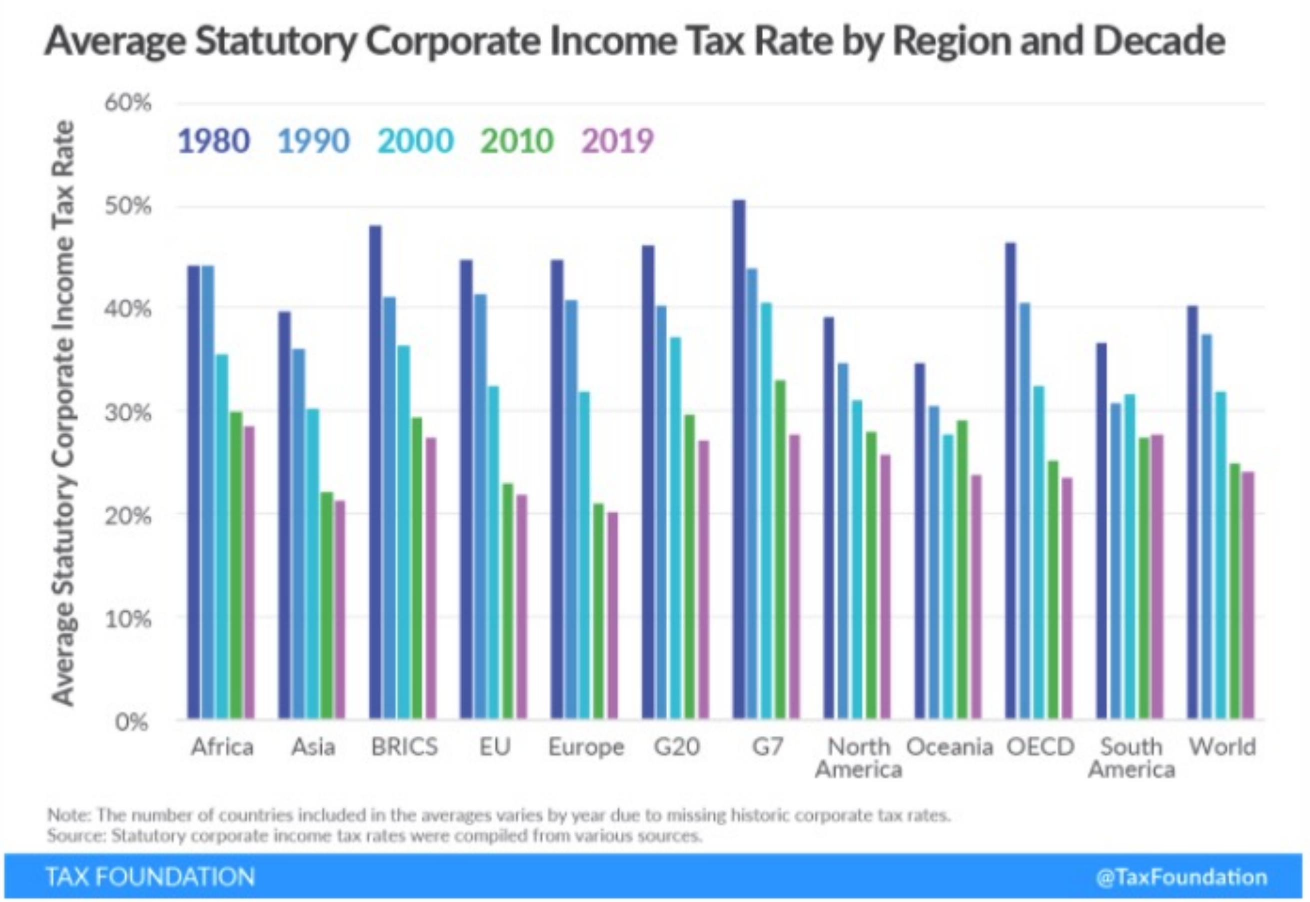
Extend the individual rates enacted by the TCJA that are scheduled to expire after 2025.

**Joe Biden:** Raise the top marginal tax rate to the pre-TCJA rate of 39.6 percent for income over $400,000.

Accountingtoday.com

# Fiscal Policy

- Falling Corporate Tax Rates over the years



# Fiscal Policy

## Nations agree to 15% minimum corporate tax rate

By Daniel Thomas
Business reporter, BBC News

8 October 2021

**Most of the world's nations have signed up to a historic deal to ensure big companies pay a fairer share of tax.**

A hundred and thirty six countries agreed to enforce a corporate tax rate of at least 15% and a fairer system of taxing profits where they are earned.

It follows concern that multinational companies are re-routing their profits through low tax jurisdictions.

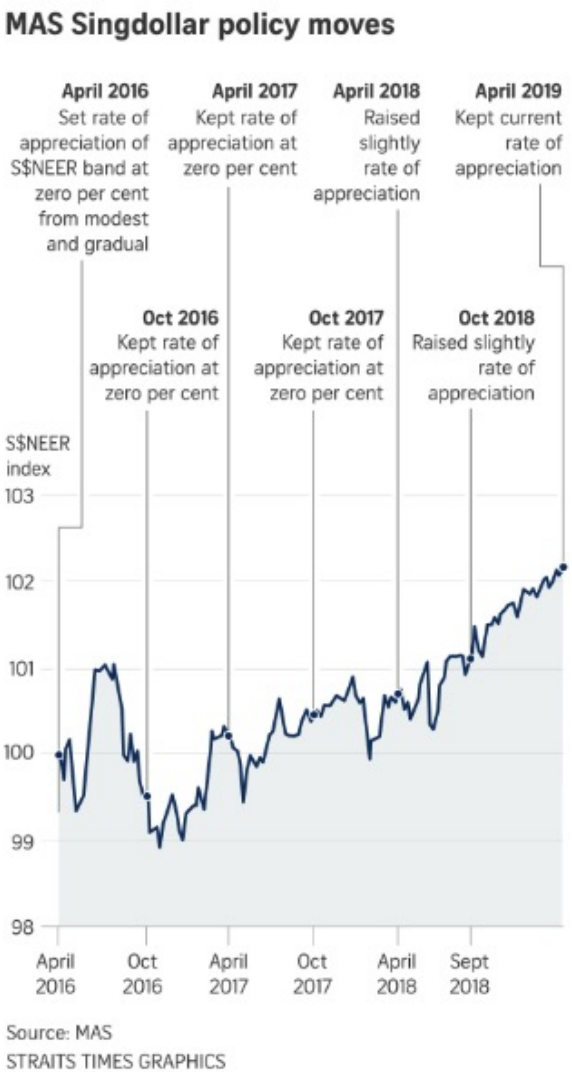
Countries including Ireland had opposed the deal but have now agreed to the policy.

# Monetary Policy

- Policy measures by Central Banks
- Interest rate regime is most common
- Typical stimulative measures when economy is weak is to lower rates, and vice versa
- Lower rates cheapen cost of borrowing by consumers and businesses, thus encourages consumption and business investments

# Singapore's Monetary Policy

- Centered on the management of Exchange Rate
- Basket, band and crawl (BBC) regime:
    - SGD managed against basket of currencies of Singapore's major trading partners and competitors
    - Managed float regime where SGD trade-weighted exchange rate is allowed to fluctuate within a policy band; center and slope of band are announced semi-annually (Apr and Oct)



# Singapore's Monetary Policy

**Discussion/Exercise**

- What did MAS announce after the most recent policy meeting?

- Did MAS do anything else recently?

# Singapore's Monetary Policy

## MAS Tools in Summary…

**Tools Explained**

These are the three MAS currency band tools

| | |
|---|---|
| Slope | The most frequently used tool, an adjustment to the slope of the trading band for MAS's basket of currencies is meant to reflect projections for expansion (upward slope) or weaker/stagnant growth (downward move or flattening) |
| Re-centering | Officials last re-centered the band (downward) in March 2020 -- effectively a devaluation of the currency as the pandemic-induced crisis was setting in. MAS last re-centered the band upward in 2011. This tool is meant to respond to more near-term pressures |
| Widening | This is by far the most rare tool deployed, used only twice -- in the aftermath of Sept. 11 terrorist attacks and during the Global Financial Crisis (and in each case restored less than two years later). Unlike the other two tools, it's meant to accommodate exchange-rate volatility rather than guide currency strength |

Source: Bloomberg

Bloomberg

Commentary

# *MAS acts to keep pace with global tightening tide amid rising inflation*

**Ven Sreenivasan**

Associate Editor

Economists here were expecting an off-cycle move by the Monetary Authority of Singapore (MAS), but not so soon.

Most had expected it to come after Singapore's latest consumer price data is released on July 25.

But MAS decided it had to move faster.

Singapore's central bank announced yesterday morning that it will re-centre the midpoint of the Singapore dollar nominal effective exchange rate policy band up to its prevailing level. There was no change to the slope and width of the band.

"This policy move, building on previous tightening moves, should help slow the momentum of inflation and ensure medium-term price stability," said MAS.

Unlike central banks of other countries, MAS tackles inflation by controlling the levers of the Singapore dollar. This is because of the extremely open nature of the Singapore economy.

The Singdollar is pegged and weighted against an undisclosed basket of currencies of Singapore's major trading partners.

MAS has been progressively tightening monetary policy as economic recovery consolidated and inflationary pressures picked up. The latest tightening is the fourth since October last year.

This comes as Singapore posted lower than expected growth of 4.8 per cent year on year for the April to June quarter, weighed down by weakening global and domestic demand for goods and services amid soaring inflation. Compared with the first quarter, the economy saw zero growth.

**Q** *Why has MAS been moving to strengthen the Singdollar?*

**A** Singapore is a small and open economy, where gross exports and imports of goods and services are more than 300 per cent of gross domestic product.

Almost 40 cents of every dollar spent domestically is on imports, so the exchange rate has a huge influence on inflation.

So, unlike other countries where the central banks adopt the interest rate as the policy target, MAS uses the nominal exchange rate as the intermediate target of monetary policy.

To counter rising inflation, MAS has strengthened the Singdollar by tightening monetary policy four times in the last 10 months.

A stronger Singdollar helps to directly reduce imported inflation and restrain export demand. This eases labour market pressures.

The effects of MAS' moves will dampen inflation over the next 12 months.

The four tightening moves are estimated to curb core inflation, which excludes accommodation and private transport costs, by an average of 1.2 percentage points each year.

But to appreciate the Singdollar to fully offset the impact of higher global prices, runs the risk of sharply curtailing economic growth and creating unemployment.

So, Mr Menon said the central bank's monetary policy "should be applied in a balanced and calibrated manner and not seek to completely offset inflation".

# INDUSTRY ANALYSIS

# Industry Analysis

- Three primary objectives: To understand…
  - The sensitivity of the industry to key macro factors
  - How the industry operates and the key performance metrics
  - The competitive structure of the industry

- Generally, an industry's prospects within the global business environment determines how well a firm fares, thus industry analysis precedes company analysis

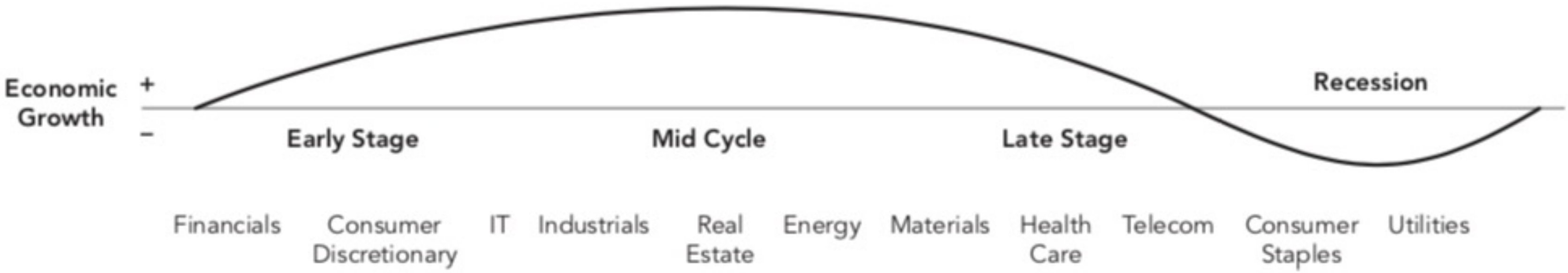
- Few companies can do well in an industry with poor outlook

# Industry Analysis

- Global Industry Classification System (GICS) has 11 economic sectors, which are groups of industries that have similar exposure to key economic factors
- Explore what the 11 sectors represent here https://www.msci.com/gics

# Sectorial Performance

Outperforming Sectors at various stages of an economic growth cycle:




Source: Personality Driven Portfolio by Sam Phoen

Select companies in industries/sectors that tend to do well at that stage of the business cycle!

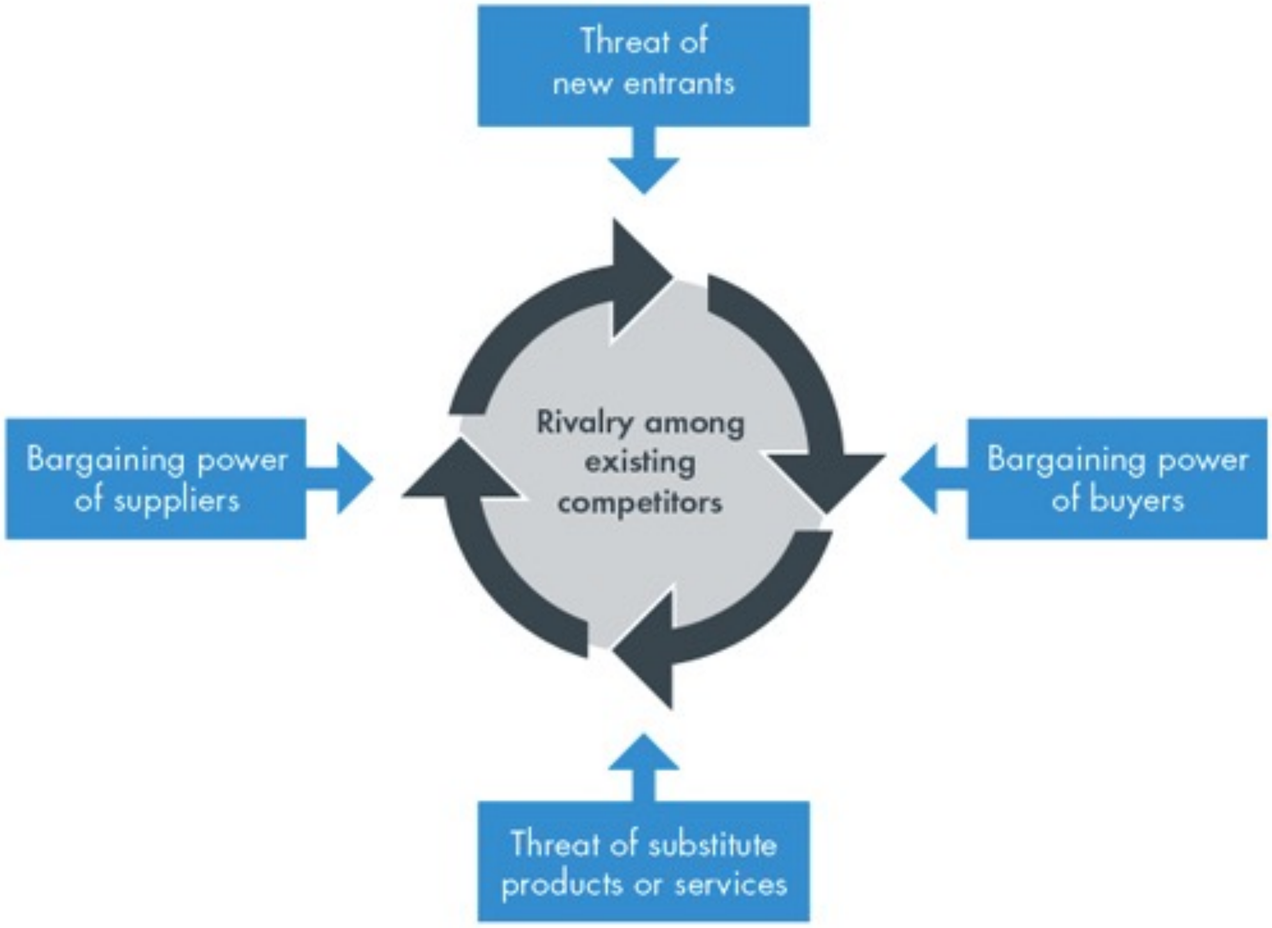
# Competitive Structure of the Industry

- Industry analysis must include an assessment of the intensity of industry competition

- Strategist Michael Porter highlights five forces that determine the degree of competition in an industry:

  1. Intensity of rivalry among existing competitors
  2. Threat of new entrants
  3. Threat of substitute products
  4. Bargaining power of suppliers
  5. Bargaining power of buyers

# Porter's Five Forces




Cgma.org

# From Industry to the Firm’s Strategy

- Firm’s profitability is not solely a function of industry profitability.
- Three common strategies found in winners of highly competitive industry:
  - Cost Leadership – low product costs, thin margins, but high volume sales
  - Product Differentiation – Unique attributes valued by customers who will pay a premium price
  - Focus – Supplies one segment of the market with exactly what they want, be it low cost or a differentiated product

# FUNDAMENTAL ANALYSIS

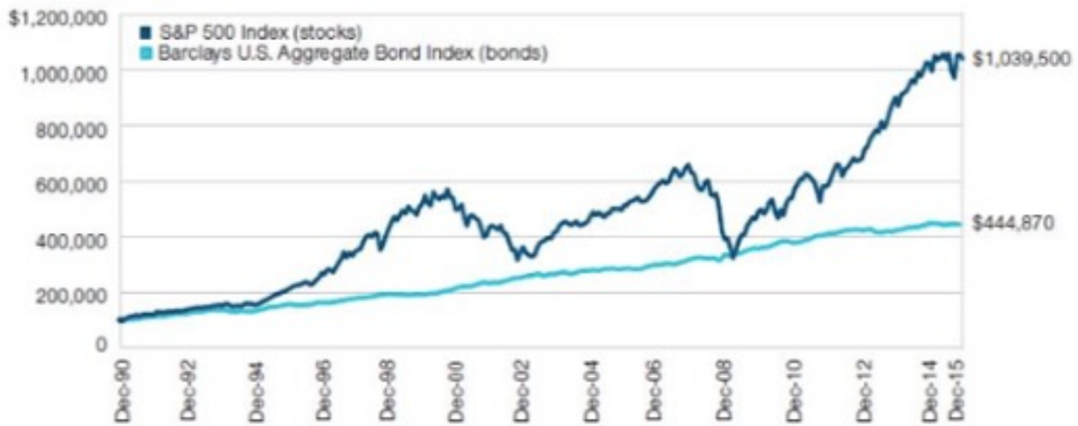
# Overview of Fundamental Analysis

- What is Equities?

- Valuing Equities
  - 2 Common stock valuation approaches
    - Discounted Cash Flow Techniques
      - Present Value of Cash Flows (PVCF)
      - Present Value of Dividends (DDM)
    - Relative Valuation Techniques

# What is Equities?

- Historically, equities outperform Bonds in the long run. Why?
- It is the value of assets owned by company after deducting the value of its liabilities
- Equities holders' claim on the company's assets rank after creditors and bond holders




The chart shows an investment of $100,000 from 12/31/90 through 12/31/15. Stocks are represented by the S&P 500 Index, and bonds are represented by the Barclays U.S. Aggregate Bond Index. This example is for illustrative purposes only. It is not possible to invest directly in an index. Past performance cannot guarantee future results.

*Source: T. Rowe Price Group*

# What is Equities?

- Historically, equities outperform Bonds in the long run
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- Equities holders' claim on the company's assets rank after creditors and bond holders

- Ordinary Shares – gives owner voting rights and share of profit after obligations, via dividends
- Preferential Shares – no voting rights, preferred over Ordinary shares in that profit is distributed to them first

# Valuing Equities

- 2 common stock valuation approaches

**Discounted Cash Flow Techniques**

- Present Value of Dividends
  - Dividend Discount Model (DDM)

**Relative Valuation Techniques**

- Financial Ratios – P/E, P/CF, P/BV etc

# Dividend Discount Model (DDM)

- The DDM valuation approach estimates the value of the firm from the dividends that the firm pays
- The stock value today depends on the dividends the investor expects to receive before the stock is sold
- The future selling price will depend on future dividends that the stock is expected to distribute

# Valuing Equities


- 2 common stock valuation approaches

**Discounted Cash Flow Techniques**

- Present Value of Dividends
  - Dividend Discount Model (DDM)

**Relative Valuation Techniques**

- Financial Ratios – P/E, P/CF, P/BV etc

# Relative Valuation

- Objective is to value assets based on how similar assets are currently priced in the market

- Relative valuation is popular because
  - Requires less assumptions compared to the DCF models
  - Simpler to understand
  - More reflective of current market valuation

- Disadvantages of Relative Valuation
  - Over/Under-valued – if market is over/under-valuing comparable firms, our relative valuation will similarly be skewed
  - Lack of transparency – underlying assumptions for the variables may not be immediately clear

# Relative Valuation Ratios

- To determine the value of an economic entity, we compare with similar entities on the basis of several relative ratios that compare its stock price to variables that affect a stock's value:
  - Earnings – Price/Earnings (P/E)
  - Book Value – Price/Book Value (P/B)
  - Sales – Price/Sale (P/S)

# Earnings Multiplier Model

- Let’s start with Earnings Multiplier Model, also more commonly known as Price/Earnings (P/E) ratio.
- P/E = Current Market Price / Earnings
- Analysts could use the most recent past earnings, often referred to as the Trailing 12-months (TTM) Earnings (EPS), and the ratio is sometimes called Trail or Historical P/E
- Or use expected next year’s earnings, and it will be called Future or Forecast or Forward P/E

# Earnings Multiplier Model

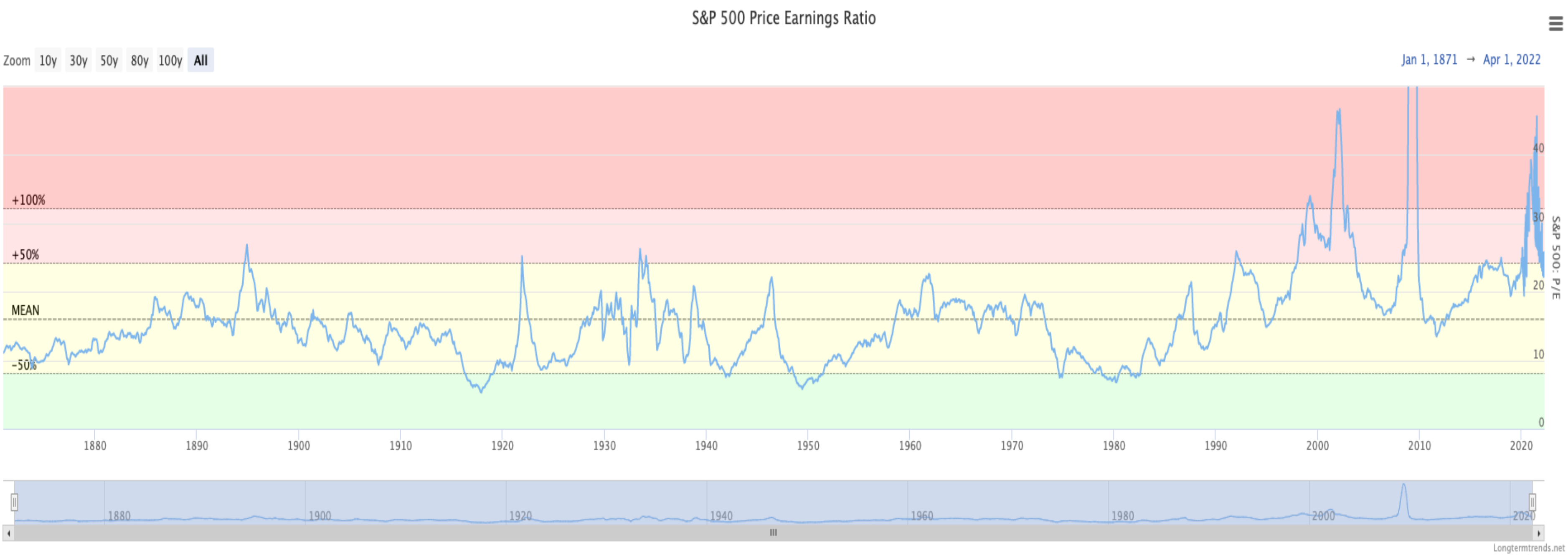
Common choices of *benchmark* for P/E:

- Average P/E for the company's peer group of companies within an industry
- Average P/E of company's industry/sector (e.g. GICS)
- P/E of a representative equity index

For all the above, get also the average PAST value of the P/Es

- A stock could then be compared with one similar company, average of the peer group companies, industry, or the representative index – to determine if its over/under valued
- It should also be compared to its OWN historical P/E

# US Market P/E




Longtermtrends.net

# Earnings Multiplier Model

- How do we adjust for expected earnings growth in P/E?

P/E-to-Growth (PEG) ratio
= (Stock's P/E) / (expected % earnings growth)

- Lower PEG is more attractive, all else equal

- PEG < 1 is used as a Value indicator sometimes

# Example: P/E of Comparables

You are evaluating the valuation of eBay.

Based on the data provided

1) Which is the most appropriate benchmark company for eBay?
2) Is eBay fairly valued?
3) Which is the most over-valued and under-valued company?
4) If you are to buy one of them, which would it be? Why?

| Company | Trailing P/E | Forward P/E | 5-yr EPS Growth forecast (per annum, in %) |
|---|---|---|---|
| Alibaba | 24.57 | 19.82 | 3.37 |
| Amazon | 61.34 | 44.78 | 38.4 |
| eBay | 14.66 | 13.28 | 14.14 |
| JD.com | 14.78 | 28.1 | 5.02 |
| Pinduoduo | N/A | 199.73 | -37.29 |
| Vipshop | 19.36 | 12.5 | 2.95 |
| Source: Yahoo Finance | | | |

# Price to Book Value

- "Book Value" refers to the fact that the measurement of value comes from accounting records or books, in contrast to market value
- Book Value per share reflects the investment that shareholders have made in the company
- Defined more precisely, we use just common shareholders' equity (Total Assets minus total liabilities) and also subtract any preferred stock
- So Book value refers to Book value of Equity

# When to use P/B?

- Book Value per share is good for valuing companies composed mainly of liquid assets, such as finance institutions and banks. These companies' BV may be close to their market values
- Book Value also used to value companies that are not expected to continue as a going concern
- Book Value is generally positive and can be used even when EPS is 0 or negative
- Book Value is more stable than EPS, so P/B may be more meaningful when EPS is abnormally high or low or highly variable

# Example: P/B of Comparables

You are evaluating the valuation of eBay.

Based on data provided in this table:

1) Is eBay fairly valued?
2) Which is the most over-valued and under-valued company?
3) If you are to buy one of them, which would it be?

| Company | Trailing P/B (mrq) |
|---|---|
| Alibaba | 0.64 |
| Amazon | 15.73 |
| eBay | 10.92 |
| JD.com | 0.6 |
| Pinduoduo | 2.59 |
| Vipshop | 0.61 |
| Source: Yahoo Finance | |

# Price to Sales

**When to use P/S?**

- Sales are less subject to manipulation than other fundamentals like EPS or Book Value, so P/S paints a different picture to P/E and P/B
- Sales are positive even when EPS is negative, so can be used at all times
- Sales is more stable than EPS, so P/S is more meaningful when EPS is abnormally high or low
- P/S has been viewed as appropriate for valuing stocks of mature, cyclical, and zero-income companies

# Example: P/S of Comparables

Be careful, Chinese e-commerce companies may not have meaningful/comparable "Sales" figures.

You are evaluating the valuation of eBay.

Which is the cheapest and priciest using P/S?

Based on all 3 ratios covered thus far, which is the most over-valued and under-valued company?

| Company | P/S (TTM) |
|---|---|
| Alibaba | 0.94 |
| Amazon | 3.88 |
| eBay | 3.69 |
| JD.com | 0.16 |
| Pinduoduo | 2.65 |
| Vipshop | 0.17 |
| Source: Yahoo Finance | |

# Other Common Valuation Ratios

- Cash Flow – Price/Cash Flow (P/CF)
- Dividends – Price/Dividends and Dividend Yield

- Instead of just using Price of stock, increasingly more are using Enterprise Value

Enterprise Value (EV) = Market Capitalization + Total Debt
– Cash and cash equivalents

- EV considers financial leverage, and more accurately reflects the takeover cost if a company were to be bought
- EV/EBITDA is by far the most widely used EV multiple

# Relative Valuation

**Discussion/Exercise**

- Using the P/B measure, which of the 3 local banks is the cheapest?
- Which local bank has the highest dividend yield?
- Which local bank stock would you recommend *your mother* to buy?

# Lunch Time!

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