WONGANOMICS

ECONOMIC CYCLE

Economic Lessons From Wongamania: Banana Economy

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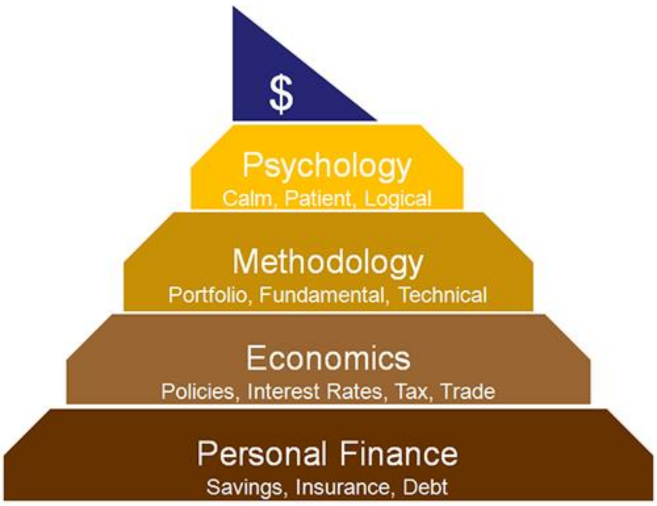
The journey towards financial mastery typically starts with learning about basic personal financial concepts such as budgeting, understanding the laws of compound interest and basic debt and risk management. Once most people have accumulated a sizeable pot of gold sitting, most people will start to venture towards riskier investment ventures such as stocks, properties and bond. Most people hope that their money will do all the work for us, generating sufficient income in order to enjoy the freedom to do what they feel like doing. This leap from personal finance to investment methodology is the riskiest one as individuals advance from a simple game of solitaire to a new stage filled with professional players. New investors are often thrown into the deep end of the pool without the proper knowledge and is often prowled upon by the various financial monsters waiting to take out the unwary financial adventurer.



Many will no doubt recall the boring economic theories that they have been forced to learn during their schooling days, of which, most of it have no practical use in the real world. They will rather focus on learning useful investment weapons such as fundamental analysis or technical analysis which will give them an edge to generate sustainable profits over the long run. One of the most important foundation of being a good investor is the mastery of economics, which is often neglected for investors climbing the wealth pyramid. The understanding of economics and politics of the world is essential to the improvement of an investor's investment performance no matter what kind of investment methodology a person may use. No man is an island and a person's investments will definitely be influence by a wide variety of external influence. Investors who took the short cut will not be able to anticipate and react rationally, when they are hit with economical and geo-political uncertainties.

George Soros is an example of a very successful investor who is able to master the use of global macroeconomic trends to become one of the richest man in the world. However, solely depending on global macroeconomic trends to make investment decisions is not recommended as it takes many years of learning and experience before they are able to master that. The mathematical application of fundamental and technical analysis is more useful for new investors as the analysis typically arrive at a definite "Yes" and "No" answer. Having said that, all investors should attain a basic understanding of economic concepts such as economic cycles, interest rates, inflations and GDP as this knowledge will have them improve the profitability of their personal investment decisions.

How This Book Came About

Wonganomics is developed as a result of a strong demand for the educational aspect of the Wongamania game series. Wongamania is a series of board and digital game, that aims to inspire financial learning through the use of the latest game design and gamification methodology. Unlike traditional educational games, the primary design philosophy of Wongamania is based on fun and entertainment while education is a secondary support feature. It is hoped that players who managed to destroy their opponents' investment portfolios through interest rate manipulation or political turmoil will be inspired to read more about how these events affect the investment world in real life. However, many has requested to hear from the designer's point of view and a more in depth illustration of the financial concepts imbued into the game. It is also much easier to read from a single source of material rather than scourging the internet for bits and pieces of information.

Previously, the staff of Capital Gains Studio who are demonstrating the games will share in more details on the educational aspects of the game but as the popularity of Wongamania soared over the years, it is decided that a more efficient way of sharing the educational aspect is needed. With the launch of Wongamania: Banana Economy, we have decided to publish a series of e-books to teach people about some of the lessons which they can learn from Banana Economy. Other than "Wonganomics: Economic Cycle", another book will be published in the near future, based on the personal finance side of Banana Economy.

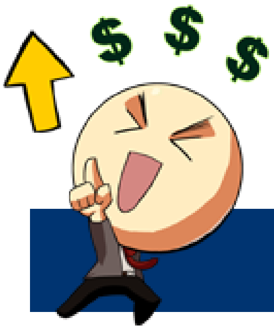
Who Is This Book For?

The purpose of this book is to illustrate some of the useful practical economic concepts for people who are just starting out to invest and is looking for a concise guide to the economic cycle, key economic indicators and the asset cycle. Other than some graphs and charts, there will be no complex calculations or formula and most of the concepts will be highlighted by easy to read historical economic scenarios. The book can be used as a companion text to economic board game Wongamania: Banana Economy and will help players to understand some of the underlying rationale behind the powers and effects of the various cards. There is no need for the reader to have played Wongamania: Banana Economy although reading this material after playing the game will vastly improve the learning experience. Lastly, this book can be used as an education guide for parents and educators who wants more in depth knowledge and real life examples which they can share with their children and students.

How is This Book Organized?

The first part of the book will describe the basic concept of an economic cycle and what happens during the different stages of the economic cycle. The next section will illustrate a few of the important economic indicators such as GDP, interest rates and inflation and how useful these indicators are in helping people in identifying which part of the economic cycle the country is in. After which, the book will examine the various asset classes and how they will behave during the different stages of the economic cycle. Lastly, the book will analysis the state of major economies around the world and which stage of the economic cycle they are currently in.

Along the way, the book will share insights on how the game designer gamify abstract financial and economic concepts into Wongamania and some of the financial lessons which the game designer hopes to impart to the gamers via a fun and interactive experience. These snippets may be of interest for designers who are looking for ideas and inspirations to create their own education game. This is after all, a book about dissecting the game of finance!



Chapter 1

The Banana Economy

Welcome to Banana Republic, a politically unstable country where the economy is controlled by political and business elites. You are one of the elites of this nation, and your objective is to stash enough money in an offshore trust fund in order to retire comfortably. Invest in Stocks, Properties and Bonds and exert influence on the government to manipulate the economy for your personal gain! Unleash the financial monsters such as Debtzilla, Inflationsaurus and Taxopus to destroy the wealth of your competitors. Do you have what it takes to survive in this cut-throat world of money mania?!

Setting the background story of Wongamania: Banana Economy was never an easy task. We wanted to create a game whereby players can be both a citizen and the government. The idea is to let the players learn how to accumulate wealth while navigating through the economic cycle, and experience the first-hand damages that can be wrecked on the economy as a result of their role in the game, as the government. The 2007 global financial crisis and the rise of “Too Big To Fail” gave us the inspiration to look at historical precedents whereby individuals become so powerful that they are both a citizen and has the ability to influence the government. The answer came from 19th century based on the economic term: Banana Republic. Banana Republic is the term used to describe the Caribbean nation of Honduras and during that period of time, how the monopoly banana trade created powerful individuals and corporations, that they literally control the economy and the government. The amount of economic history that lead to the creation of the countries associated with Banana Republic is related to the rise of America as an economic power after the devastation of the American Civil War. This helps readers understand the rise of other economic power houses such as Japan and China and help to deepen the understanding of how the economic cycle works.

The Banana Republic

The story of the Banana Republic began in 1870. Bananas were first introduced to America by a young Captain Lorenzo Dow Baker, who sailed from Jamaica to Boston with 160 bunches of yellow Jamaica bananas. Marketing the fruit as an exotic and rare fruit from the Caribbean, Captain Baker was able to make a 1000% profit on his cargo. The Americans fell in love with the fruit and demand for more Bananas poured in. Recognizing the commercial potential of this tropical fruit, Captain Baker bought more ships and expanded his Banana fleet.

Fresh out of the bloody American civil war during the 1860s, the American economy is in shambles. The war to abolish slavery of the southern states saw more than 1 million casualties and the infrastructure of the once rich southern states was in shambles. Investment war bonds used to finance the war for the southern states were forfeited and banks and railway companies were forced to go bankrupt. The wealth of the southern states came mainly from their fertile agricultural land and the slaves which worked on them. The slaves were liberated from their forced labor after the American Civil War and the cost of labor soared as landowners were now required to pay the former slaves a fair wage. The infrastructure needed to transport the agricultural goods to the richer and more populous northern states was also mostly destroyed after the war.

The south needed to restructure their economy fast and President Abraham Lincoln initiated the reconstruction of the southern states by building public schools and railways. The purpose is two folds, to educate the largely illiterate slaves and to improve the flow of trade between the northern and southern states. Corruption were rampant during that period of time and it took almost a century before the income of the southern states was able to catch up with the northern states

The post civil war years also heralded the arrival of the second industrial revolution as America, became one of the richest and most powerful nation in the world. The rise of the railway, telegraphs and telephone connected different parts of America and a journey from New York to San Francisco shortened from 6 months to 6 days. During this period of time, 27 million European immigrants rushed to America in pursuit of wealth and fortune, giving America a boost in productivity capacity. Opportunistic and entrepreneur young men such as Andrew Carnegie (steel & railway), John D. Rockefeller (Oil), JP Morgan (Banking), Thomas Edison (Electricity) were able to amass a huge amount of wealth and power such that they were able to exert considerable influence on the US government.

15 years after introducing the first Bananas into America, Captain Baker founded the Boston fruit company, which later merged with other major fruit companies to found the United Fruit Company. After the merger, the United Fruit Company literally monopolized the Banana import in America, controlling as much as 80% of the total import. This was also the period of time that bananas became extremely popular in USA due to its superior marketing and aggressive pricing tactics. By 1913, Bananas were seen as a “rare and delicious” treat and twenty-five cents allow a consumer to buy a dozen bananas, but only two Apples. The United Fruit company was able to price a bunch of bananas so cheaply, despite the fruit being an import from the tropics was due to their extremely powerful influence in the Caribbean countries. These countries were later to be referred as Banana Republics.

The first country that was transformed into a Banana Republic was Honduras. During 1911, Sam Zemurray, the founder of Cuyamel Fruit Company, a competitor to the United Fruit company saw an opportunity in Honduras to install a government which would be friendly to his company rather than United Fruit. He orchestrated a coup *d'état* against the Honduras government, along with General Christmas Lee, a mercenary and Manuel Bonilla, the ex-President on Honduras. The coup succeeded and Bonilla was re-established as the president with Cuyamel Fruit given land concessions and low taxes by the newly installed government. The United States government turned a blind eye to the coup as Honduras was under the strong influence of Great Britain at that point of time. USA, being an ex-colonial country a century ago, was trying to diminish the influence of Great Britain by preventing the spread of their control in the neighbouring Carribean states. Twenty years later, Cuyamel Fruit merged with United Fruit and Sam Zemurray later took over the control of United Fruit and turned his sight to the next country to add to his fiefdom: Guatemala

After War World II, the outbreak of the Cold War between the US and Soviet Union led to a scramble for influence of newly formed countries, freed from their colonial masters after the war. United Fruits, with their strong influence in the Carribean countries, was able to extend their influence into the United States government thanks to the Cold War.

During 1953, as the tension of the Cold War started to escalate, the United Fruit company was able to convince the US government that the newly democratically elected government of Guatemala was sympathetic towards the Soviet cause and had intention to transform the country into a Soviet satellite state. Backed by the Central Intelligence of America (CIA), United Fruit was able to incite a coup and installed a military junta friendly to United Fruit returning all the land back to United Fruit which was nationalized by the disposed government.

The 2012 book *The Fish That Ate the Whale: The Life and Times of America's Banana King* by Rich Cohen sums up the relationship between the US government and United Fruits perfectly during that period of time.

John Foster Dulles, who represented United Fruit while he was a law partner at Sullivan & Cromwell – he negotiated that crucial United Fruit deal with Guatemalan officials in the 1930s – was Secretary of State under Eisenhower; his brother Allen, who did legal work for the company and sat on its board of directors, was head of the CIA under Eisenhower; Henry Cabot Lodge, who was America's ambassador to the UN, was a large owner of United Fruit stock; Ed Whitman, the United Fruit PR man, was married to Ann Whitman, Dwight Eisenhower's personal secretary. You could not see these connections until you could – and then you could not stop seeing them.

The reason why these countries were able to be influence by a couple of banana merchants were the results of mismanagement by the government in a largely agrarian society. Sensing that the governments of the Banana Republics were weak and corrupted, the banana merchants were able to manipulate the politicians and laws to their advantage by acquiring cheap prime land for their banana plantations, and systematically deprive the natives their land rights. Without their land to grow their crops, the natives have no other ways to sustain their livelihoods as large scale manufacturing or service jobs were available to them at that point of time. The banana merchants were able to exploit the agrarian nature of these economies and hire the displaced natives at a cheap rate. They also built roads, railways, ports and communication infrastructure to facilitate the production of bananas, with the local government having little or no influence over these key infrastructures. Over the next decade, more and more resources were gathered towards the production of bananas such that the economies of the banana republics became dependent on the banana trade. Unlike other developing countries at the time which saw foreign investment from multi-nationals as a way to jump start their economy and provide better knowledge based jobs, the capital injection from the Banana companies did not assist in the growth of these economies as the companies did not have the incentives to train the locals to advance beyond its traditional labour intensive agricultural roots.

The influence of United Fruits started to wane towards the end of the 20th century due to bad management and a major hurricane in 1974 destroyed many of its banana plantations in Honduras. A huge scandal named Bananagate was later revealed by the US Securities and Exchange Commission in an attempt to bribe the Honduran President in a bid to gain export tax concessions. United Fruit was slapped with a huge fine by SEC. What was worse was that the scandal led to an outrage among Honduran citizens and a successful coup against the Honduran President removed a government friendly to United Fruit. The new government nationalized the railway network owned by United Fruit resulting in huge financial losses.

Over the next decade, the company changed hands a number of times and it was rebranded as Chiquita Brands International in 1990 and till date, is still one of the major banana and fruit producer in America. In the last decade, Chiquita had been trying to clean up its act in a sharp contrast to its long history of human rights abuses, although the ghosts of history continue to haunt the company in the form of lawsuits and fines.

Banana Economy: Corruption

In many countries, corruption is a problem that affects the proper governance of a nation and is often prevalent in Banana Republics. Excessive corruption undermines the trust towards the government and gives rich and influential individual excessive power. The downfall of many nations are often the result of corruption and decay within their ruling elite.

Banana Republic in Modern Context

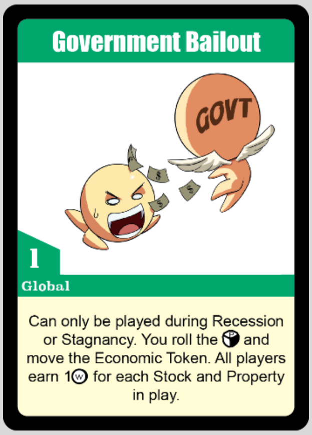
Kleptocracy*: A term applied to a government seen as having a particularly severe and systemic problem with officials or a ruling class taking advantage of corruption to extend their personal wealth and political power. Typically, this system involves the embezzlement of state funds at the expense of the wider population, sometimes without even the pretence of honest service.*

While the word Banana Republic traditionally refers to poor, corrupted 3rd world nations dependent on a single commodity for most of their exports, the word has been used loosely in recent years to describe Kleptocracy, too big to fail corporations and industries. The outbreak of the 2007 financial crisis gave a renewed life to the economic phase as economists, journalists and politician threw the word around casually to describe their country descent into a less desired state.

"Banana republic" was recently associated with the word "Too Big to Fail" during 2008 and it became a reference to describe how huge companies have come to influence the government so much that they can take excessive risk and make obscene profits, and yet still able to get away with it despite wreaking havoc on the general economy. Politicians and key government appointment holders are also seen as closely linked to the banks, which contributed to the perception of cronyism and Kleptocracy. At the peak of the financial crisis in 2008, Nobel award winning economist Paul Krugman described US as a “banana republic with nukes”.

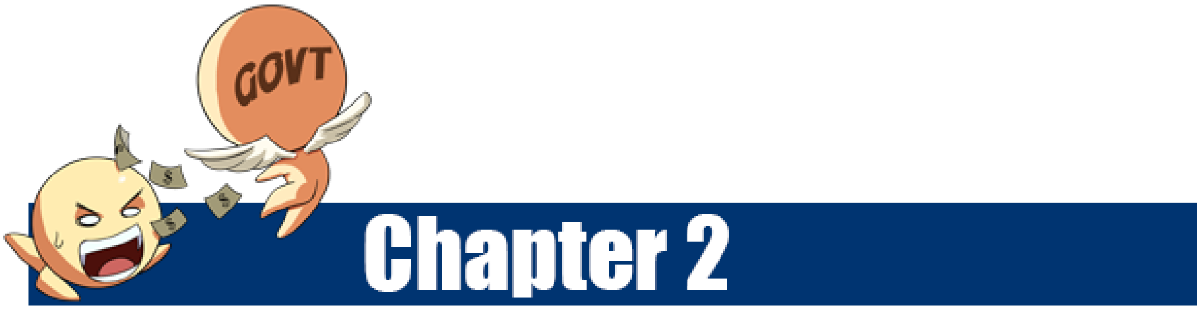
The financial crisis soon spread to Europe and some of the European countries which were irresponsible with their money were badly affected. One of the countries is Ireland. Ireland was once described as a “Celtic Tiger” for their stellar economic growth before the crisis was bailed out by the European Central bank and the International Monetary Fund. Their banking and property sectors had collapsed. The reason for their downfall was due to the fact that Ireland focused too much of their resources into the finance and property sector with little diversification into other sectors. Prior to their collapse, Ireland’s economy was propelled mainly by the foreign direct investments into banking and property. The closely linked banking and property sectors grew into a bubble state due lax supervision and regulation from the government, and were later bailed out without any penalties imposed on them. It is believed that the lax regulations on the financial sector was due cronyism and political connections between the government and the bankers, which resulted in angry citizens started calling Ireland a banana republic.

Banana Economy: Government Bailout



As the lender of last resort, governments often need to step in when the largest corporations in the country gets into financial problem to prevent the spreading of the damages to other related industries and companies. This buys time for the distressed institution to dispose of their assets and restructure the industry. Many a times, the bailout will prevent the deepening of a recession and increase the probability of a recovery.

The next wave of “banana republic” came along with the crash of the global commodity and oil markets in 2014. Countries that their economy became too dependent on the commodity trade suffered greatly as years of generous spending, thanks to hefty revenues from the commodity trade suddenly found their economies shrinking dramatically as the demand for commodity disappeared. Politicians and journalists in Australia, Brazil, Malaysia, Nigeria, South Africa and Venezuela have been throwing the word “banana republic” to describe the economic slow-down that respective countries are experiencing now as a result of the overdependence on the commodity trade.



The Economic Cycle

The economic cycle or also known as the business cycle is the process whereby a country goes through a cycle of boom and bust. Throughout the history of mankind, this cycle is consistent throughout all civilizations and every economic models. One of the most popular story is from the Bible where Joseph helped the Pharaoh of Egypt to navigate the country through seven years of abundance and seven years of famine. It is probably due to the very nature of human nature to become lazy and complacent when times are good, hardworking and competitive when times are bad, resulting in a society that will experience good times and bad. The economic cycle is often split into 4 different segment: Recovery, Growth, Stagnancy and Recession. Many has drawn parallels of the economic cycle to the 4 climate seasons of Spring, Summer, Autumn and Winter.

Recession

A recession is the result of falling economic activity in a country and this period of time will often see organizations going bankrupted, high unemployment and a collapse of confidence in the industries that have been driving the economy during the boom times. The stock market will decline rapidly and property prices will start to see steeper fall in both rental and prices. The government will reactively lower their interest rates and taxes in a bid to minimize the impact of the dampened economic activity. Governments who have been saving for the rainy days will be able to initiate government projects to try to offset the fall in corporate and personal spending and meanwhile, governments who have been spending excessively during the sunny days will now need to turn to external help like World Bank or the International Monetary Fund (IMF) for help. This is also often the time when the government or political party will be at the most risk of being overthrown, potentially leading to riot, social unrest and civil war. The safest assets in the country such as government bonds or gold will tend to appreciate in value. Recovery often occurs as resources are now freed to be reallocate to the next sector or industry that will now be the new driver of the economy.

Recovery

This is the stage whereby the economy starts to mend from a slump. The weaker companies which did not survive the downturn are shut down leaving more resources and market share for the surviving corporations. With a large amount of unemployed population, vacant properties and low interest rates, these corporations are now able to take advantage of these cheap resources and expand their market share more rapidly. The stock market will tend to rally strongly as corporations reflect better earnings growth. Meanwhile the property market will start to stir as the wealth from people getting jobs and improved company profits will allow companies to start occupying the empty units at a low cost leading to a gradual pickup in the property market. As the economy improves, the government will also start to withdraw its support from the economy.

Growth

As the economy gains traction and the population become more wealthy as a result of jobs and asset appreciation, the demand for goods and services will start to grow leading to inflation. Investors will look for new companies and technology to invest in leading to a rapid expansion to industry sectors which seemed to be the most promising at that point in time. For example, internet companies drove the boom during the late 1990s and the early 2000s saw the rise of banking and commodity related companies. In recent years, there is a rush into mobile technologies and online services platforms resulting in a sharp rise on the value of companies such as Twitter, Snapchat and Tinder. The stock and property market will appreciate in value rapidly and commodity prices may start to rise as a result in of property and infrastructure expansion to meet the demand of the growing wealth. Governments will start to become concern with the wealth eroding impact of inflation and start tightening money supply, most commonly associated with a rising interest rate or taxation. Bonds tend to do badly during this period of time.

Banana Economy: New Technology

Technological advancement is one of the key drivers of productivity in the world and there is often a prevailing technological theme in each cycle. From new oil exploration technology to the Apple iPhone, these technological advancement gives investors new opportunities which is reflected in this card.

Stagnancy

The overinvestment into productive industries will start to show and diminishing returns start to kick in. Every unit of investment will result in less and less improvement in productivity until productivity growth simply stops. The excessive investment has resulted in governments and corporations engaging in wasteful and extravagant projects such as building expensive tall skyscrapers and expensive but underutilized infrastructure projects. Industries that have built up too much capacity in anticipated of a now slowing demand will start to retrench their staff and close down their factories in a bid to boost their profitability. On the other end, the government will have risen interest rates or tax rates to the highest level in this cycle and corporations and individuals are now squeezed by both stagnant revenue and higher tax and financing cost. The stock market will start to dip in response to the falling profits and in the meantime, property prices and rental will stagnate. A tipping point is now needed to prick the bubble that has been built up during the boom years as fear and panic will push the economy into a recession. One of the clues to watch for as to when the bubble will burst usually comes from financial troubles of major corporations associated with the theme of that boom time. A good example to illustrate the excesses of the Stagnancy phase is during the Dot Com bubble crash in 2000. Dot Com companies spent lavishly on advertising despite not generating any profits and cities around United Stated raced to build the next Silicon Valley with network companies and state governments borrowing heavily to build “network cities”. Many of these excess capacities were left unused when the bubble burst leading to bankruptcies and underutilized infrastructures.

How Countries Manage Their Economic Cycle

Economic cycles and boom/bust scenarios are part and parcel of the evolution of economic progress and the purpose of all the governments is to minimize the impact of the extreme ends of the boom/bust cycle in order to prevent civil unrest. During Boom times, basic necessities such as housing, transport and food will become increasingly expensive and often will also lead to asset bubbles. The bigger the bubble, the worst the impact will be after the bubble burst leading to a great loss of wealth, and many unhappy citizens. Therefore, government tries to prevent or deflate asset bubbles before they cause too much damage to the society. However, the will of the politicians are often sorely tested as trying to reverse the effects of a bubble is often politically unpopular as this will result in a loss of wealth for the citizens.

In the case of a recession, politicians are always quick to act to reverse the tide of growing unemployment, falling property prices and rising corporate bankruptcy. Throughout history, wars, coup and revolutions were often started due to recessions and in could lead to a break-up of the country or risk invasion from neighbours. A society with too high unemployment or inflation will often lead to an unhappy population and that is normally bad news for the political leader in power.

Therefore, one of the key economic objective of any governments is to manage the extreme ends of the growth and recession phase of the economic cycle and to be prudent when times are good and be extravagant when times are bad. In order to manage the economic cycle, governments make use of two main policies: fiscal policy and monetary policy.

Fiscal Policy

Fiscal policy is the management of the economy using tax and government spending. Tax can come in many forms such as income tax, value added tax, property tax, corporate tax, import/export duties, road tax etc. The government can increase or decrease the various tax rate base on the economic sector that they wish to inflate or deflate. In the case of government spending, the government can increase spending via infrastructure building, cash payouts or increase the number of public servants. In order to decrease spending, the government can roll back welfare benefits, privatize national assets to raise cash or restructure government agencies to make public services more cost efficient.

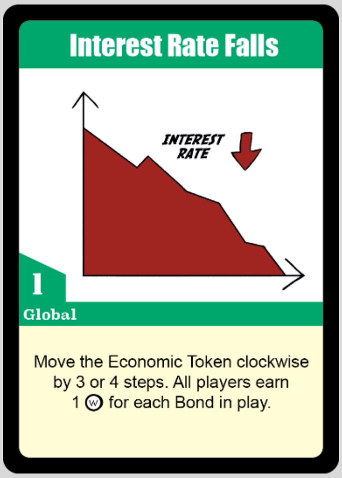
Banana Economy: Government Raises Tax

Tax increases, which is a form of fiscal policy can only be used during the Growth or Stagnancy phase of the game, reflecting the use of higher taxes to booster the coffers of the government to prepare for the lean times during the recession phase. A well planned tax policy will slow down the progress of the economic cycle maintaining the status quo of the economic cycle within the Growth, Stagnancy phase. However, in this case, the excessive use of taxes has raise the rile of Taxopus accelerating the economic cycle towards the Recession zone.

Monetary Policy

Monetary policy is the management of money supply which is commonly used by adjusting the interest rates and is often managed by the central bank of the country. The objective of monetary policy is to control the ease of accessibility of cash by businesses and individuals to spend or invest. Other ways to manage supply is via controlling the bank reserve ratios, managing currency fluctuations or engaging in quantitative easing. The traditional objective of monetary policy is to manage the inflation of the country, but in recent years, as a result of partisan politics whereby many developed economies are unable to initiate proper fiscal policies, the central banks have also taken over the lead to stabilize the aftermath of the 2007 global financial crisis via monetary policies.

Banana Economy: Interest Rate Falls



Interest rate can be manipulated within the game using 2 interest rate cards. The lowering of interest rates during the Recession and Recovery phase will help push the economy forward towards Growth. However, lowering interest rate during the Stagnancy phase may lead to asset bubbles which will accelerate the economy into a Recession when the bubbles burst. As a side effect, Bonds will appreciate in value as a result of a falling interest rate.

How The Economy Cycle Affects You

In the past, the duration of an economic cycle typically takes a longer duration as there is a more inefficient flow of information allocation of resources. With the advancement of technology and more efficient data collection, we are now able to understand the predict the flow of the cycle better. Government and central banks are able to make use of these indicators to take action and smooth the impact of excessive growth or depressive slumps. However, globalization has connected major economies resulting in a stronger contagion effect such that a major recession in a major economy will lead to a slump in other connected economies. The excessive debt holdings and the invention of complicated derivative tools magnified the speed and impact of the boom and bust cycle, often catching the unprepared retail investors off-guard. As a result, the traditional progression of the economic cycle from recession to recovery to growth may be disrupted as a result of external influence. These external disruptions may lead to sudden booms and crashes which may not be part of a typical economic cycle progression. Therefore, it becomes important for the man on the streets to understand the basic idea of economic cycle and how they can utilize this knowledge to build and protect their wealth.

By understanding the flow of the economic cycle better, the average citizen will be able to make better decisions in career, housing, debt and personal investments. Here are some of the decisions that an individual can make in the scenario of a possible recession:

- A career switch to a more defensive position like a government job or an essential corporate position which is least likely to be laid off.
- Renting instead of purchasing an apartment to stay or refinancing the mortgage to a variable interest rate to take advantage of a potential falling interest rate environment.
- Paying down of higher interest bearing debt.
- Building up a cash buffer to take advantage of the lower asset prices, whether for personal consumption or investments.
- Moving cash assets to other countries or gold should you think that your government has been overspending in the last cycle.
- Sending your child for overseas studies and making a decision to whether to accumulate the foreign currency now or later.

Essentially, understanding which stage of the economic cycle your country is in and the possible impact the how the next stage of the economic cycle will have an impact on every individual's personal finances and investments will help them make better financial decisions.

The next chapter will cover some of the important economic data and how they help investors and governments determine on which part of the economic cycle they are at.

Economic Indicators

Understanding the 4 stages of the economic cycle and their possible impact is the first step in understanding how the economic environment will affect an individual's personal finance. The next question that is always asked is often this: How do I identify the 4 stages of Economic cycle?

One of the problems in the identification of the different stages of the economic cycle is that there are many major and minor economic indicators, many of which needing specialized financial knowledge to understand and apply. The chief purpose of this book is to help readers identify the stage of the economic cycle via some of the commonly used economic which can be commonly found on the headlines of their local newspaper. Three commonly used economic indicators, GDP growth, inflation and interest rates have been selected and the book will explore each of them in more detail and spelling out how useful each indicator is. Other than the hard data, this section takes a look at geographical and political risks, which is also known as geopolitical risk, which can potentially disrupt the flow of the economic cycle.

Gross Domestic Product (GDP)

GDP is the official government estimate of the economic activity within in the country. It includes the value of all the goods and services produced within the country and it is usually collated on a quarterly basis. Rather than using the actual total value of the entire country, economists usually look at GDP growth which is a measurement of the change in economic activity as compared to the previous year. A positive GDP growth indicates that the economy is expanding and is normally associated with the Recovery, Growth and Stagnancy phase of the economy and a negative GDP growth is associated with a Recession. Economists usually define a recession as 2 quarters or 6 months of negative GDP. Refer to Appendix 1 for a list of economic regions and their GDP data for the past few years.

Banana Economy: Productivity Die

The Productivity Die in Banana Economy is an indication of the production capacity of the country within the game. The die is also the key driver of moving the economy from one stage of the economic cycle to another. As productivity may varies from time to time, the die has different numbers indicating the amount of goods and services produced by the nation.

Strength & Weakness of the Indicator

GDP growth is perhaps the definitive official indicator of which stage of the economic cycle the country is. However, making investment decisions based on the official reports from the government economic division is often not wise, due to the lagging factor in which the data is collected, analysed and announced. More often than not, by the time the government announced that the recession is over, the stock and property markets have already rallied strongly and the days where the best investment returns were made would be over by then. A good illustration is the recent 2007 recession as a result of the global financial crisis.

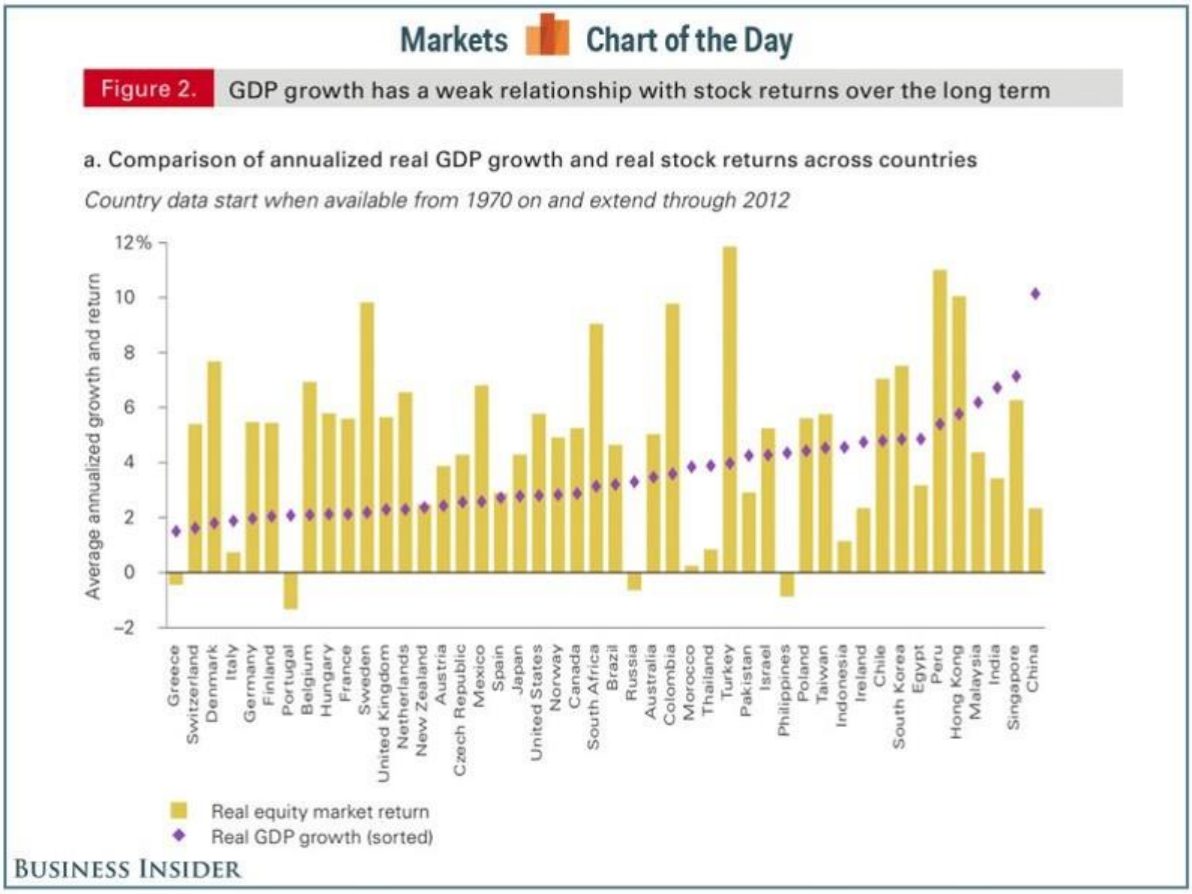
On September 2010, the US National Bureau of Economic Research announced that the 2007 recession ended on June 2009 (Recession), by which, the US stock market has already rallied 62% from the bottom which is reached on March 2009 (Recovery). However, the stock market continued to rally by another 90% from 2010 to May 2015 (Growth) where it has been going sideways ever since (Stagnancy).

It sounds like following the official government official statement is not too bad a deal since making 90% over the period of the next 5 years sounds attractive.

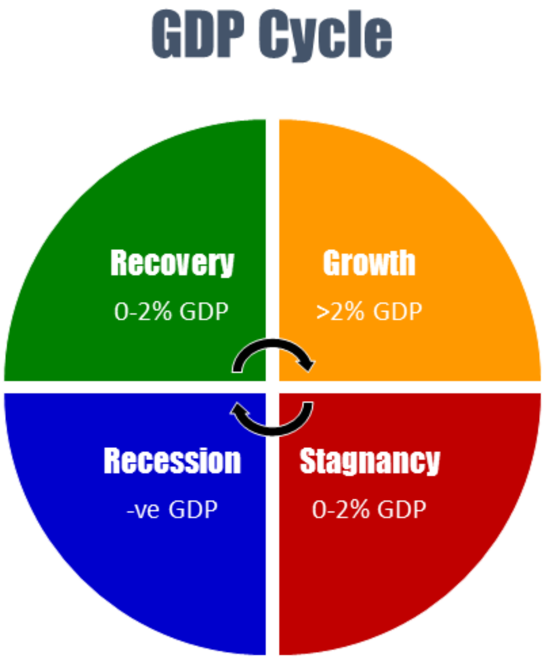
On December 2008, the US National Bureau of Economic Research announced that a new recession has begun on October 2007.

However, if you have followed the same announcement by selling off your holdings when the US NBER announced that recession has started, you will be making a huge loss as the stock market has plunged 42% from the peak, and your 90% profit will be eroded by the initial loss taking. At the end of the day, your investment portfolio will yield mere profit of 8% over a period of 7 years if you make your investing decision based on the official announcements.

This inaccuracy of GDP growth in predicting the stock market is consistent across the world with most of the research showing that there is only a weak relationship between GDP growth and stock market returns.



Given that usefulness of the GDP data is limited by the longer period of time needed to collate the data and the delay in the information being released to the public, investors will have to turn to other indicators as a better forward predicting gauge in helping investors understand which the stages of an economic cycle.



Inflation

Inflation is the gradual increase of price of goods and services as a result of:

- Economic growth, leading to people willing to pay for goods and services
- Rising production cost, due to rising wages, commodity prices or supply disruption for imported goods.

Inflation is normally collated each month by the government using a basket of daily use goods such as food, furniture, vehicles and medical services. The index used to calculation inflation is also called Consumer Price Index or CPI in short.

Inflation is a tricky double edged sword to tackle as different inflation growth rates will punish different segment of the society based on their rate of savings, debt burden and asset value.

- High inflation is advantageous to higher net worth group who has a large proportion of their wealth invested in higher risk stocks, properties and commodities as higher risk assets typically follows inflation trends
- High Inflation is disadvantageous to lower and middle income group whose majority of their wealth are parked in cash or conservative bond instrument.
- Deflation is advantageous to families who has most of their money parked in cash as they can purchase more goods and services with same amount of cash.
- Deflation is disadvantageous to people who has taken on debt to invest in high risk instrument as the value of their assets fall while the debt level remains constant.

In short, inflation will affect different individuals differently based on how they park their spare cash in different economic environment.

In expensive Asian cities like Singapore and Hong Kong, whereby home ownership is one of the most important criteria of setting up a family, persistent high inflation in property prices have priced the younger working adults out of the housing market, whereas the baby boomers, who purchased their property when prices are much lower and affordable many years ago are enjoying the rise in their property values and rental incomes. The baby boomers want the government to maintain the current inflation trend to maintain the value of their property while the young working adults want the government to deflate the property prices so that it is more affordable for them.

Banana Economy: Inflation

In the real world, inflation has two effects. First, it will increase the value of asset classes such as property. Secondly, it will diminish the value of cash savings, leading to savings in the bank to lose their purchasing power. The idea of the Inflation card in the game is designed to reflect real world mechanics. Players with assets are not affected as the rise in the value of their assets will offset the impact of inflation, while players without assets will be badly affected. While designing the illustration of this card, we thought about how Inflation should be represented. Than we saw the Cookie

Monster from Sesame Street and that became the basis of our design of Inflationsaurus.

Strength and Weakness of the Indicator

Inflation is generally considered as a lagging indicator of the economic cycle although it is much more sensitive as compared to GDP as it is measured on a monthly basis. The reason why inflation is a lagging indicator as the biggest contribution to inflation are usually due to rising wages. Wages typically contributes to two-thirds of a company operating expenses and rising wages will lead to companies having to raise product prices to maintain profitability. On the consumer end, rising wages will encourage people to buy more goods and services thus leading to a rise in prices as demand outstrip supply. Wages are also sticky, meaning that is easy to raise them but difficult to slash resulting in inflation a lagging indicator to predict recessions but quite an accurate indicator of when the economy is moving into the recovery phase.

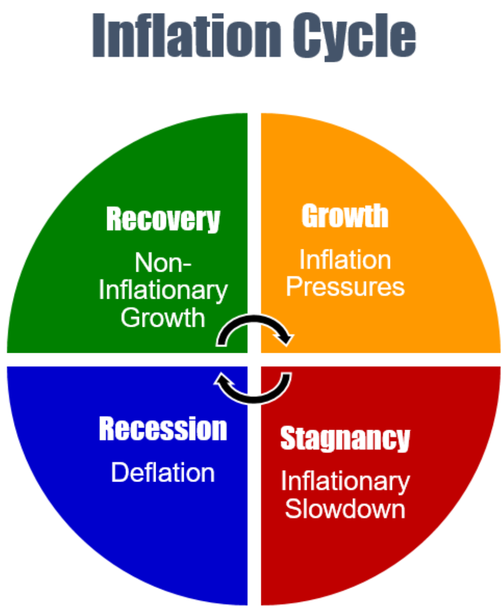
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
2016	1.4	1.0	0.9	1.1	1.0								
2015	-0.1	0.0	-0.1	-0.2	0.0	0.1	0.2	0.2	0.0	0.2	0.5	0.7	0.1
2014	1.6	1.1	1.5	2.0	2.1	2.1	2.0	1.7	1.7	1.7	1.3	0.8	1.6
2013	1.6	2.0	1.5	1.1	1.4	1.8	2.0	1.5	1.2	1.0	1.2	1.5	1.5
2012	2.9	2.9	2.7	2.3	1.7	1.7	1.4	1.7	2.0	2.2	1.8	1.7	2.1
2011	1.6	2.1	2.7	3.2	3.6	3.6	3.6	3.8	3.9	3.5	3.4	3.0	3.2
2010	2.6	2.1	2.3	2.2	2.0	1.1	1.2	1.1	1.1	1.2	1.1	1.5	1.6
2009	0	0.2	-0.4	-0.7	-1.3	-1.4	-2.1	-1.5	-1.3	-0.2	1.8	2.7	-0.4
2008	4.3	4	4	3.9	4.2	5.0	5.6	5.4	4.9	3.7	1.1	0.1	3.8
2007	2.1	2.4	2.8	2.6	2.7	2.7	2.4	2	2.8	3.5	4.3	4.1	2.8
2006	4	3.6	3.4	3.5	4.2	4.3	4.1	3.8	2.1	1.3	2	2.5	3.2
2005	3	3	3.1	3.5	2.8	2.5	3.2	3.6	4.7	4.3	3.5	3.4	3.4
2004	1.9	1.7	1.7	2.3	3.1	3.3	3	2.7	2.5	3.2	3.5	3.3	2.7
2003	2.6	3	3	2.2	2.1	2.1	2.1	2.2	2.3	2	1.8	1.9	2.3

US monthly inflation data 2003-2016 (US bureau of labor statistics)

During the 2007 Global Financial Crisis, the US economy lapsed into recession in the 4Q of 2007 and recovered on the 2Q of 2009. Based on the US monthly inflation data, the inflation of US is still persistently high despite a slow-down in economic activity and did not fall until the 4Q of 2008, a full year after the recession stage started. This is because the job losses in US only began in the 3Q of 2008 and peaked at the Q1 of 2010. The strict layoff laws in many developed countries, resulted in taking a longer time to retrench workers as compared to hiring them, which will have a direct influence of consumption and inflation figures.

On the other hand, inflation started picking up almost at the same time when the economy starts to recover as companies that survived the crisis saw a greater gain in their market share and started to expand and hire rapidly to capture market share, causing inflation to be a pretty spot on indicator of economic recovery.

Hence in general, the use of inflation to determine the stages of the economic cycle must take into consideration which stage is the economic cycle in, as it is often late in signalling a recession and relatively spot-on when identifying recovery and growth phases as a result of the stickiness effect of wages and employment.



Another weakness of the inflation is that it cannot be interpreted literally (-ve is recession, +ve is growth) and must be used in conjunction with the economic stage it is in. For example, inflation levels fell to zero in the US during 2015 and went into the negative territory briefly for a few months. However, economic growth is still decent for 2015 with a GDP growth of 2.5%. Inflation numbers can still swing to negative range during the recovery phase despite improving economic outlook due to 2 reasons:

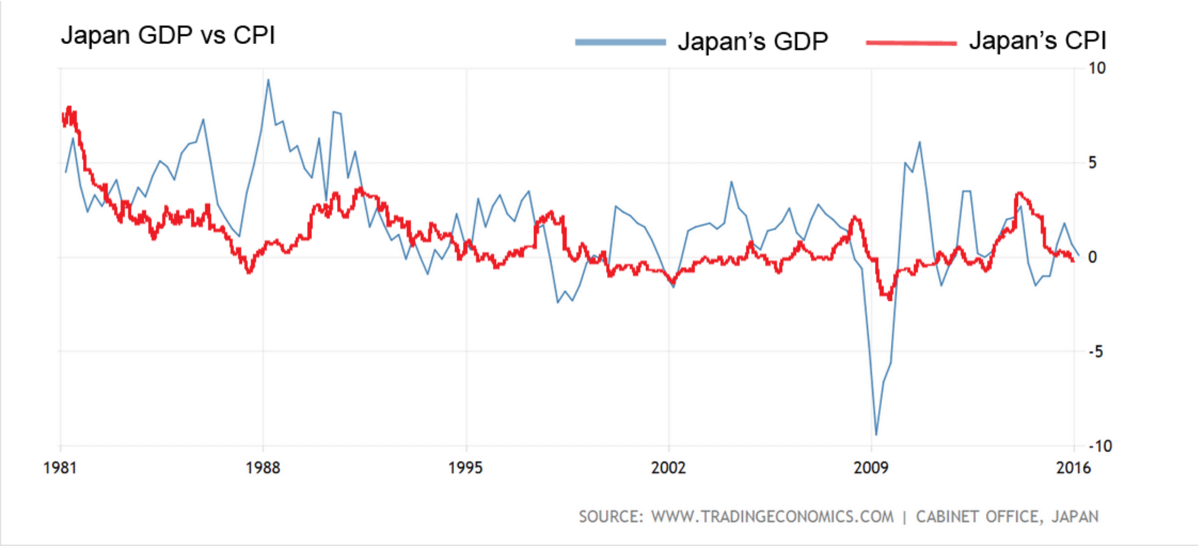
- There is usually still a huge inventory of unsold goods and services generated during the times of excess during the good times of the previous economic cycle. It takes time for companies to clear off these excessive inventory as they can sell the goods without raising prices.
- The previous recession is caused by excessive debt which result in consumers and corporations using the excess income generated to pay down the debt level, rather using it to consumer goods and services. Without consumption, inflation will slow down.

Japan is a classic case study of how an economy can still grow despite having zero to negative inflation after the implosion of the property and debt bubble in Japan during the 1990s.

In summary, Inflation as an indicator of which stage the economic cycle is in can be very useful, if the investor takes into consideration the time lagging factor at each stage of the economic cycle and when used with other indicators, will enhance its effectiveness.

Case Study: Japan's Deflation Trap

After the debt and property bubble collapse in late 1980s, Japan has been experiencing deflationary pressure ever since with its inflation hovering at around 0%. This is due to a combination of structural and cultural problems. From a structural point of view, Japanese are still paying off the high debt accumulated during the boom times of 1960-1980s, leading to little to no growth in consumption. Wages have also stagnated and an aging population also diminishes the spending power over the long run. Many Japanese who are in their retirement stage, are hoarding their savings and spending little to ensure that their retirement savings can last as long as possible. A combination of factors leads to persistent deflation which reinforce the Japanese unwillingness to consume as they can probably wait for a cheaper deal sometime down the road due to falling prices. This will lead to a persistent deflation spiral whereby savings become more valuable over time and Japanese are unwilling to spend and invest. However, before the economic crash in 2007, the Japanese economy experienced a brief spike of inflation, before falling into a sharp deflation as a typical characteristic of an economic cycle. This is an interesting case study of a country that stayed in the recovery stage post-recession for more than a decade before rotating into the growth and stagnancy stage which only lasted a year or two before crashing back into a recession and sharp deflation again. Therefore, it is possible for economies to be stuck in the non-inflationary stage for prolonged amount of time with negligible inflation and low growth and this is what is concerning the US and European economies at the current point of time after the huge property and debt bubble bursts during 2007 – 2012.



Interest Rate

Interest rate is one of the important economic indicators for identifying the stages of economic cycle and the trend of the interest rate direction also has a strong influence and predictive power on the future value of investible assets, especially for stock, property and bonds. Interest rate decisions are mostly decided by the central banks in each country. A central bank typically manages the currency, money supply, interest rate and is usually the lender of last resort to the commercial banks in the country. Central banks are usually managed independently to prevent political interference on the economic decision making process. As the management of currency and interest rates have huge repercussion around the world, the actions of major central banks are closely monitored around the world. Some of the most important central banks in the world often manages huge and influential economies, such as US Federal Reserve, European Central Bank, Bank of Japan and in recent years, the People's Bank of China.

Interest rate affect almost all aspect of the economy as the use of debt becomes a common financial strategy among corporations and individuals and central banks use interest rates as a means to smooth out negative economic trends. Central banks typically lower interest rate during recession and raises interest rate during growth stage to lower the rate of inflation.

Lower Interest Rate

- Consumers will have more disposable income as less interest payment is needed for mortgage and personal loans. Consumers are more willing to invest and spend their savings due to low returns on bank deposits. Benefits the younger consumers who have little savings but have long loan period to finance their spending.
- Companies are more willing to borrow money to expand their operations by investing in more technology, machine and rental space.
- Government can finance infrastructure project cheaply by issuing lower interest rate government bonds.
- Country currency will fall in relative value as investor will shift money to other countries with higher interest yield leading to more export competitiveness.

Risks and Implications of Low Interest Rate

- Prolonged period of low interest rate may lead to hyperinflation causing asset and debt bubbles
- Lower interest and lack of confidence of the country's trade balance may lead to a capital flight leading to sharp and uncontrollable depreciation of the country's currency

Higher Interest Rate

- Consumers will be more inclined to save while property owners who borrowed beyond their means to finance properties will no longer be able to afford their monthly mortgage payment. They will sell their property as a lower value as more property owners start to sell their respective properties leading to a fall in property prices. Benefit the older retirees as their savings can now last longer
- Companies will slow down or shelf their expansion plans and instead focus on paying down their existing loans to minimize the impact of higher interest rates will have on their balance sheet.
- Country's currency will rise in relative value as global investors move their funds into the country which is giving higher interest country. Used as a

measure to prevent capital flight as a result of a geopolitical situation such as sanctions, war, or trade deficit crisis.

Risks and Implications of High Interest Rate

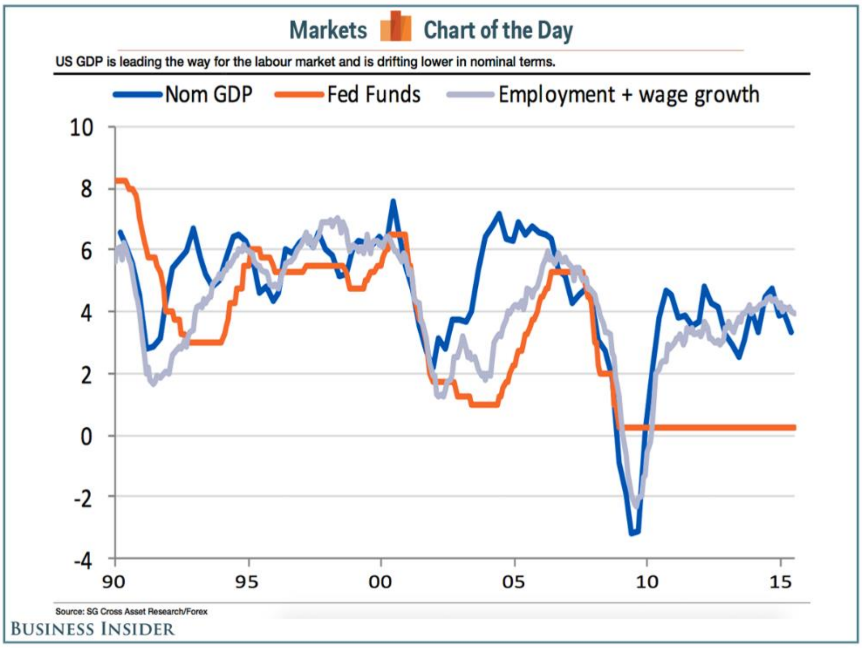
- Raising interest rate too quickly may stifle the economy by too much resulting in a sharp contraction of economic activity, rising unemployment rates and recession.
- Companies and individuals who are highly indebted will spend more of their income to service the interest, resulting in slower growth of their expansion plans or asset building.

Strength and Weakness of the Indicator

The accuracy of interest rate in predicting the stages of economic cycle stems from the fact that central bankers uses interest rate as a check and balance against possible future economic trends. For example, the interest rate will be lowered if the central banker observes a slow-down in economic activity and also believes that there will be a high probability of economic weakness in the near future.

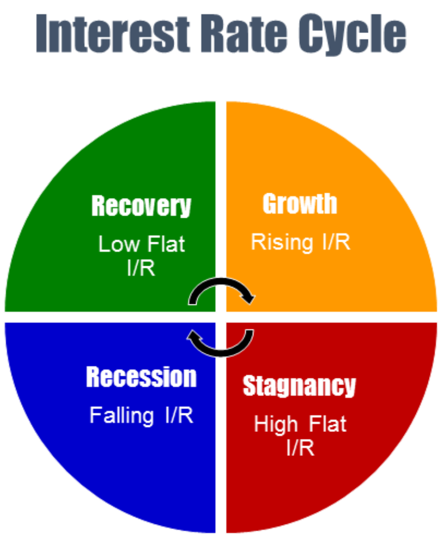
- During the 2007 global financial crisis, the US central bank started to lower the interest rate in October 2007, which coincide with the actual date of which US officially lapsed into a recession, which was only announced by the US National Bureau of Economic Research a year later.

- During the 2000 dot com crisis, the US central bank made an initial interest rate cut on May 2000 and started to cut much more aggressively on January 2001 from 6% all the way to 1% in 2003. The economy is declared to be in recession on March 2001.



Similarly, interest rate is often raised when the economy kicks off into the growth stage of the economy.

Therefore, as a rule of thumb, here is how interest rate can be used to determine the different stages of the economic cycle.



The greatest weakness of using interest rate to predict the stages of economic cycle is based on the judgement call of the central bankers. As interest rate is used as a forward looking instrument to stimulate or dampen economic activity, central bankers must use their experience, economic models and available economic data to make an informed decision on the direction of the interest rate. Should an error in judgement be made, it may create asset bubbles or unexpected crashes. These scenarios often occur in developing nations whereby the central bankers are relatively inexperienced and accurate data collection is often more difficult as a result of corruption and inefficiency.

Geopolitical Risk

Geopolitical risk as its name implies, is a disruption of the economic cycle due to natural disasters or political unrest. Here are some examples of geopolitical risks that lead to a significant disruption in the economic cycle.

1973 Oil Crisis (1973)

As a response to the Yom Kippur War whereby Egypt and Syria launched a surprise military offensive against Israel which was supported by the US and her allies, members of the Organization of Arab Petroleum Exporting Countries initiated an oil embargo against US and her allies. This resulted in a sharp spike in oil prices, causing in a serious economic shock and sparking off a stock market crash and a recession in US.

September 11 Attacks (2001)

The US economy which was already in recession due to the dot-com crisis was hit by the 9-11 terrorist attack which destroyed parts of New York City. The stock market fell 14% in a week and the US government spent US$5 trillion dollars waging wars in Afghanistan and Iraq. The recession was prolonged as a result of the attacks.

Banana Economy: Stock Market Crash

Stock market crashes can occur without any warning. A classic example is the 1987 Black Monday crash when the US stock market lost 45% within 2 weeks, leading to a slow-down in the economy for the next few months. The 9-11 attacks sent the economy back into recession just as it started to recover from the Dot Com crash.

Japan Tohoku earthquake and tsunami (2011)

In 2011, a massive earthquake and tsunami hit the eastern coast of Japan leading to a wide swath of destruction along the coastal areas. A nuclear meltdown in one of the nuclear plant affected by the tsunami led to one of the worst nuclear disaster in history. The total destruction of the disaster is estimated to be US$211 Billion making this the most expensive natural disaster in history. Japan, which was recovering from the 2007 financial crisis found themselves losing economic momentum as a result of the crisis.

Banana Economy: Natural Disaster

Most natural disaster do not have major economic impact as many of them did not occur in major economic or industrial areas. However, insurance companies are often adversely impacted in the case of a major natural disaster as they are often burdened with a huge insurance pay-out.

Brexit (2016)

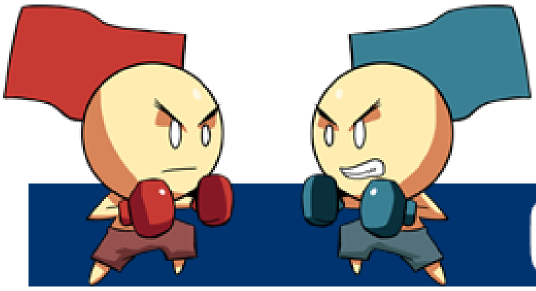
United Kingdom held a referendum for the nation to decide if they wish to stay or leave the European Union. Used as a political tool by UK prime minister James Cameron to quell the protest of the pro-exit faction in his political party, it was assumed that the citizens will vote to stay within the EU. However, the citizens voted to leave and the referendum created a major shock within the EU. As the politicians scrambled to sort out the mess, many economists predicted that a Brexit will lead to a mild recession in UK in the near future. The UK economy was one of the stronger economy within the EU and was steadily moving towards the Growth quadrant before being disrupted by this unexpected political crisis.

Banana Economy: Political Uncertainty

Political uncertainty can cause havoc to a nation's economic cycle. After a period of chaos and uncertainty, it can lead to a better or worse situation. Typically, the implication of political turmoil is more long term than short term, but there is often a short term knee jerking reaction in the financial market.

Investment is both an art and science. In science, you have all the economic data such as GDP, inflation and interest rate to help investors to gauge which part of the economic cycle the country is in. The art comes from the ability to recognize the effectiveness of the economic policies and potential geo-political risk that may disrupt the economic cycle.

The best lesson that you should take away from this chapter is that the future is pretty much unpredictable. It is dangerous to think that the economic cycle will move in certainty and one of the things you probably want to do as an investor is to learn to deal with uncertainty. By adopting an investment strategy that hedges you against unexpected events in the financial world is one of the key skill of a successful investor. The next chapter will help investors understand the behaviours of the 3 main asset classes, stock, property and bond and how they can be applied to hedge investment risk.



Chapter 4

Economic Cycle Investing

Identifying the different stage of the economic cycle is the first step in learning how to make use of an economic trend to help you in your investment decisions. “Let the trend be your friend” is one of the key concepts for any career, business and investment planning. The next question is, what is the optimal asset to invest in at which period of the economic cycle. In this chapter, we will help you understand the 3 basic asset classes, stocks, properties and bonds and some of the optimal buy and sell period along the economic cycle.

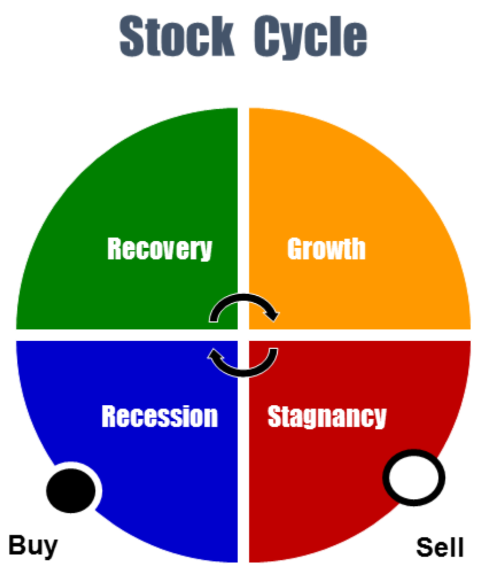
Stock

A stock or also known as equity is an indication of an ownership of a company and investors typically invest into a company wanting to have a share of the profit it will generate as a result of producing goods and services. As an owner of the company, investors can participate in the appointment of directors to manage the company, as well as financial decisions which will affect the profit sharing or fund rising activities of the firm. However, in most cases, retail investors often hold too little shares to have much influence over these matters and as such, retail investors often take extra care in assessing the capability of the current management and the profitability of the business model before investing in these companies.

Investors will tend to invest in companies that can generate more potential profits in the future and this will result in the value of the company’s stock to appreciate in value. In short, the more productive the company is, the more resources will be allocated via the stock market. As a result, the health of the stock market is a direct representative of the health of the economy and this results in the stock market performing their best in the growth phase whereby the productivity is highest at that point of the economic cycle.

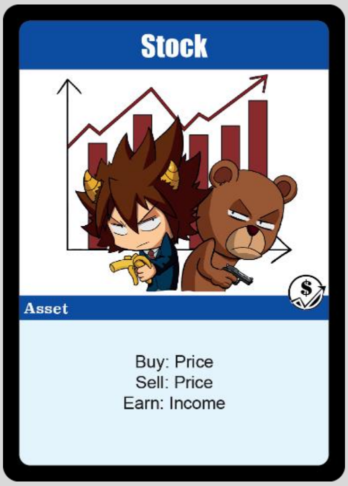
The situation whereby resources are directed to companies which can be more profitable in the future creates a trend whereby the stock index of a country becomes a forward indicator of the economy. Inversely, this is also true when the economic activity starts to slow down in the stagnancy phase. Profits of companies will start to fall and the price of their company stock will also fall, which is often the first signal of the economy lapsing into the stagnancy phase whereby productivity starts to flat line. As the revenue of company erodes from profits into losses, the value of the company stock will start to fall more drastically. This is an also an indication of the beginnings of a Bear market which often signals the movement of the economic cycle into the recession phase.

By definition, a Bear market is a stock market that has fallen at least 20% from its peak and economic weakness typically follows as the economy starts to clean up the excessive capacity and debt built up during the Growth period. As seen from the examples given in the GDP section, it is often too late to buy or sell stocks by the time official data of economic activity is reported. Therefore, a stock investor must learn to be forward looking and start taking protective measures against a possible Bear market as soon as the economy moves into the Stagnancy phase.



Banana Economy: Stock

The two animals that are most associated with the stock market is perhaps the Bull and the Bear. The Bull is an indication of a rising stock market as represented by how a bull gore a person into the sky. The Bear is often used to describe a falling market, as portrayed by how a bear paws its prey onto the floor and overpowering it.



On the flip side, the stock market will start to rally once the hostile operating environment starts to become favourable again for companies. Typically, it is not the improving demand for goods and services but rather, lower corporate expenses that will push the companies back into profit. These are some of the factors that will typically change in a recession:

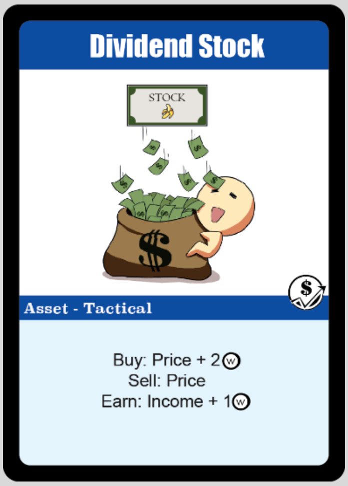
- Falling rental cost – Landlord prefers to collect a lower rental income than leaving it empty
- Falling wages – Companies typically retrench excessive staff or convince the staff to take a pay cut
- Lower interest rate – Companies are able to refinance their debt leading to lower interest expenses
- Government tax incentives or bail out – Government will typically lower the tax burden on companies and in the worst case scenario, bail them out in the if these companies are "too big to fail"

As company operating losses start to shrink in the later stage of recession, the stock market will move up again as investors pile in expecting to gain a share of the profit once the company reverse their losses. With a rising stock price and a fresh infusion of investment monies, companies that survive recession now have a bigger market share to grab and they start to expand aggressively, taking advantage of the favourable economy environment.

Taking a leaf from the same concept of getting out of the stock market just as the companies' profit starts falling in the stagnancy phase, investors should buy into the stock market during the recession phase as the losses of the companies start to shrink.

However, not all companies will suffer badly during the recession phase. Companies that provide basic goods and services such as transport, foodstuff and telecommunication will still continue to do well. These companies are known as consumer staples stock and generally give out high dividends as compared to the average stock. Investors who are not familiar with other asset classes tend to use this group of stock as a form of protection against the negative effects during the recession phase.

Banana Economy: Dividend Stock



In Banana Economy, Dividend Stock is more expensive to buy, just like the real world counter-part, as a result of the premium they command for their all-weather business model. The card also generates more income for the players and this will mute the impact of the recession phase. Players will tend to hold the Dividend Stock card during the recession phase as compared to other Stock cards.

On the extreme end, companies in fast growing sector such as technology or biotech are often referred as growth stock. These companies typically pay very little dividend as these companies often need the capital to fund their research capability in order to stay ahead of the innovation curve. The development of a new breakthrough product can easily push the value of these companies' stock sky high. The growth of these companies often marks the theme of the economic cycle at that point of time. For example, software and internet companies during the 1990s boom. Commodity companies during the 2000 – 2007 cycle. In the current cycle, the stars are represented by mobile hardware and software technology. The value of many of these growth stocks will often collapse during the recession phase as a result of over-capacity and over-investment during the boom times and investors should exercise caution while holding these stocks through the recession phase.

Banana Economy: Growth Stock

The design of the Growth Stock card makes it unprofitable to hold this stock for a long time but it can generate an enormous amount of profits if played correctly during the Recovery and Growth phase. Having said so, picking the right stock that becomes the next big thing such as Microsoft or Apple often requires a bit of luck and this is reflected in the roll of fate by the Productivity Die.

Property

A property, or also known as real estate, is a common term used to describe land or structure used for residential, commercial or industrial use. It is also considered as a basic need along with food, water and transport and is an essential productivity factor in any country. Unlike stock and shares, which offer the same benefits (dividends, voting rights) for every unit you own, a property unit can be quite different from another similar unit even they are developed by the same developer. There can be also sentimental, cultural, historical and religious considerations to some of these properties, making them unique, difficult to valuate and often not traded like a commodity like what investors do with stocks and shares. Therefore, the economics factors that affect the value of the property market in general may be similar to that of the stock market, but the way the property market moves along the economic cycle can differ greatly from the conventional economic cycle at times.

Here are some interesting facts for you to consider, based on the market cycles in US.

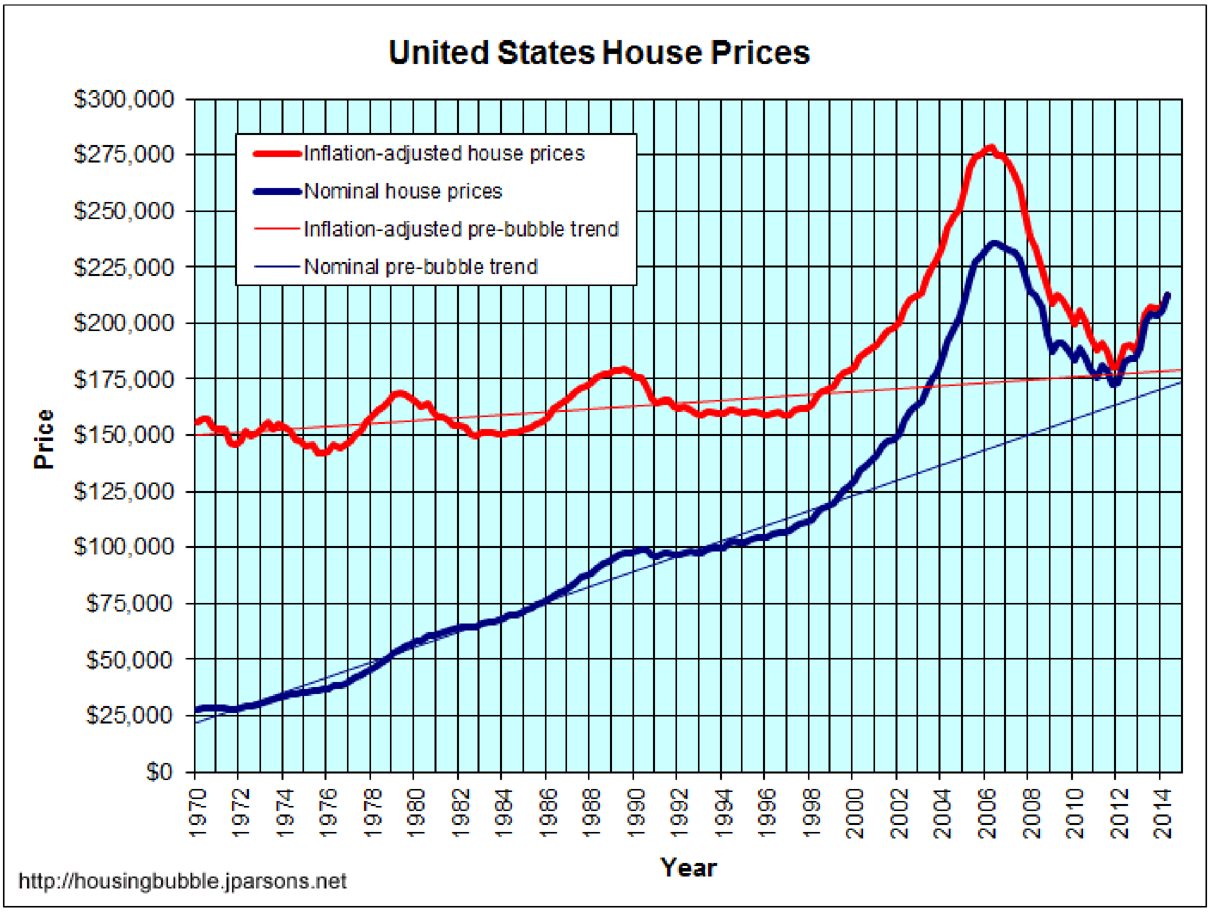
- An average property market cycle is about 18 years
- An average stock market cycle is about 9 years

Peaks in Land Value Cycle	Interval (Years)	Peaks in Construction Cycle	Interval (Years)	Peaks in Business Cycle	Interval (Years)
1818	--	--	--	1819	--
1836	18	1836	--	1837	18
1854	18	1856	20	1857	20
1872	18	1871	15	1873	16
1890	18	1892	21	1893	20
1907	17	1909	17	1918	25
1925	18	1925	16	1929	11
1973	48	1972	47	1973	44
1979	6	1978	6	1980	7
1989	10	1986	8	1990	10
2006	17	2006	20	2008	18

Source: Fred E. Foldvary, "The Depression of 2008"

There is an extremely long period of growth in property, especially after the days of Great Depression during 1925 lasting all the way past WWII to the 1970s. Long periods of growth in property prices, often occurs after a devastating recession or destructive wars where prices have fallen so much or there is a destruction in the actual properties. Similar examples can be seen around the world. Japan's property values went on a steady climb after the devastation during WWII and the bubble only burst during 1980s, lasting a good 40 years. China property market saw similar trends after the Cultural revolution, when the China government moved towards a more capitalistic economic model whereby land and real estate ownership which is used to be owed by the state is now available for ownership by private citizens during the 1980s. Property prices in China have not seen a significant fall for the past 30 years, which is similar to developments of other economic powers during their golden periods of economic developments.

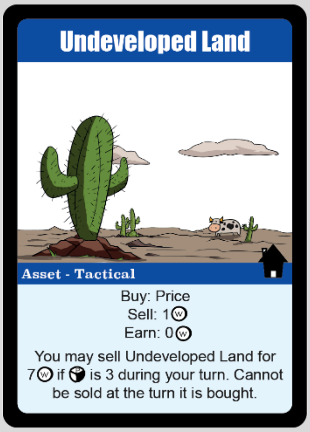
What is interesting to note for the property cycle in recent years is that with the exception of the 2000 Dot com bubble crash, many of the property down cycle coincide with the actual down cycle of the economic cycle. However, the 18 years' cycle pattern continued after the 1989s recession as property prices did not fall during the 2000 crisis. Hence during the dot-com bubble crash in 2000, the US economy slipped into recession and while the stock market went into the bear market territory, the value of the property market not only held its ground, but continued to move upwards. This resulted in two very interesting observations with regards to the impact of property prices to the economic activities.



The first observation is that recessions are typically worse when a fall in property prices is involved. That is probably due to the nature of property being a basic need as a residential home and a highly leveraged investment product. Property as a basic need means that the impact on the society is much wider, unlike the stock market, where the proportion of participation within a nation is often lower than that of the property market. Secondly, the generous amount of mortgage available for people to purchase or invest in properties make property a highly leverage financial product and like all highly leverage instruments, it cuts the pocket of the owner much more drastically than other non-leverage financial products. Hence, the year 2000 dot-com bubble recession is much milder as compared to the year 2007 great recession, when the trigger of the recession is due to a sharp fall in property prices.

The second observation is that the peaks in property value often precede the end of the economic cycle, which is often marked by the economy going into the recession phase. This means that property prices are a good indicator of the economic cycle, especially during the Stagnancy phase when property price starts to flatten along with the economy. Therefore, it is wise for investors to watch out for the possibility of a recession once the property prices in the country starts to move sideways.

Banana Economy: Undeveloped Land



Land investment is considered as a higher risk investment within the property category. It does not generate any rental income and it needs to be developed before any value can be realized from the land. However, in terms of capital gains, it is probably one of the highest among the property classes given its relatively higher risk. The potential of the land lies in how fast the nearby city develops and should the economic growth in the city fails to materialize, the value of the land will probably be hard to realize.

There are three major factors affecting the property market, supply, demand and interest rates.

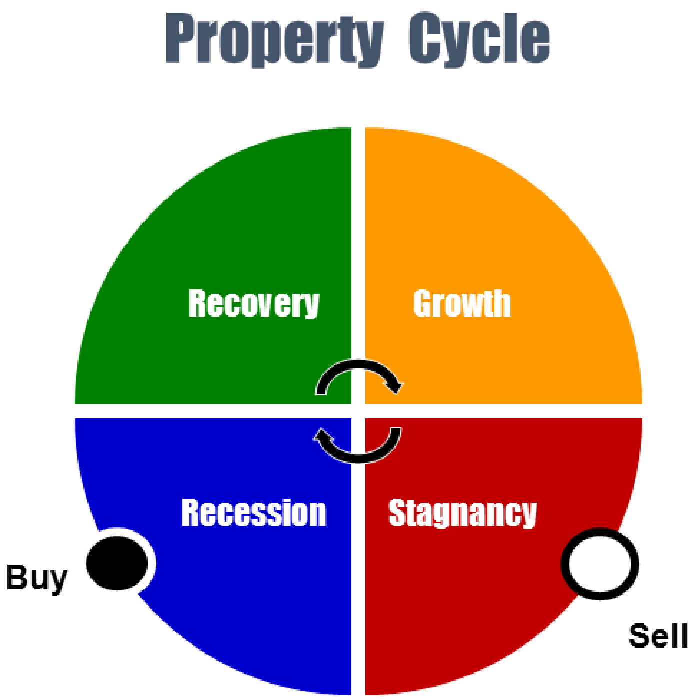
The first signs of trouble that the property marketing is moving towards the negative end of the property cycle is when supply of property starts to outstrip the demand. Here are the 3 phases that investors should watch out for which will often signal that the end of the property cycle is near

Phase 1: Rents which used to be increasing in an accelerating trend starts to decelerate.

Phase 2: Vacancies start to rise in all sectors and landlords have to lower the rent in order to attract new tenants. Lower rental income is better than no rental income

Phase 3: Rising interest rates or property related taxation as a result of a rapidly rising inflationary environment will normally be the trigger point for a fall in property values.

Phase 3 generally occurs during the end of the growth phase and at the start of the stagnancy phase when the government is actively trying to control the inflation rate. This is the time for investors who are invested into highly leverage and overpriced properties to try to exit.



A combination of falling rental income, falling property values and an increase in property financing due to higher interest and taxes will often lead to cashflow issues to greedy developers or investors who are overleveraged and this will often lead to fire sales and foreclosures, leading to a quick correction of property prices.

In general, the property market and the stock market typically follows the same trend over the long term. The main difference that the general prices of property tends to be smoother in the short term as compared to the stock market due to the nature of property not being traded as frequently as stocks. Therefore, it is much more possible to trade on the short term waves and fluctuation of the stock market than the relatively more inefficient property market.

Bond

A Bond is often issued by governments and corporations looking to borrow from the public, promising to pay back the full amount borrowed at the end of the period. The Bond issuer will pay a fixed interest payment over the period of the loan and the amount of interest they can charge is based on their credit worthiness which are rated by various rating companies such as Standard & Poor's, Moody's Investors Service.

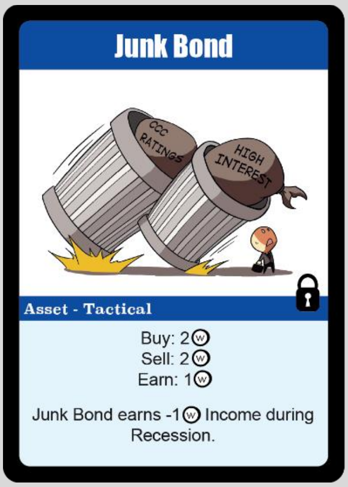
The ratings range from A to C with A being the best grade with the lowest probability that the Bond issuer renegade on their payment promises and C being the riskiest with a good probability that you will not get your original investment sum back. The interest returns of A grade bonds is often the lowest and the amount of interest which investors will receive will increase exponentially with the risk of default as the ratings move towards the C grade.

Moody's	S&P	Meaning
Investment Grade Bonds		
Aaa	AAA	Bonds of the highest quality that offer the lowest degree of investment risk. Issuers are considered to be extremely stable and dependable.
Aa1, Aa2, Aa3	AA+, AA, AA-	Bonds are of high quality by all standards, but carry a slightly greater degree of long-term investment risk.
A1, A2, A3	A+, A, A-	Bonds with many positive investment qualities.
Baa1, Baa2, Baa3	BBB+, BBB, BBB-	Bonds of medium grade quality. Security currently appears sufficient, but may be unreliable over the long term.
Non Investment Grade Bonds (Junk Bonds)		
Ba1, Ba2, Ba3	BB+, BB, BB-	Bonds with speculative fundamentals. The security of future payments is only moderate.
B1, B2, B3	B+, B, B-	Bonds that are not considered to be attractive investments. Little assurance of long term payments.
Caa1, Caa2, Caa3	CCC+, CCC, CCC-	Bonds of poor quality. Issuers may be in default or are at risk of being in default.
Ca	CC	Bonds of highly speculative features. Often in default.
C	C	Lowest rated class of bonds.
--	D	In default.

Source: Investinganswers.com

Banana Economy: Junk Bond

A non-investment grade bond that can pay higher interest than the average investment grade bond. In Wongamania: Banana Economy, Junk bond has a much higher interest as compared to the typical bond card. However, Junk Bond has a higher probability of defaulting on their interest payment or get their credit rating downgraded which lead to losses during the Recession phase.



In the context of discussion for this segment, we will be referring to the A grade bonds, often issued by sovereign nations which have a developed economy and a politically stable government. These A rated bond are often seen as a safe haven to economic crisis and often move in an opposite direction as oppose to stock and property as investors look for a safe place to park their money. However, Bonds with ratings that are B and below, often referred as High Yield Bond or Junk Bond, moves in a similar direction as the stock and property market as the survival of these governments or corporations are often in question during economic crisis.

From an investment standpoint, a bond is considered to be a lower risk instrument as compared to stocks or properties. A bond holder will have the first rights to the assets to a company that has declared bankruptcy while an equity investors have the second priority. This results in a higher probability that the bond holder to get some of their capital back in the case of a company's bankruptcy. From an income viewpoint, companies and governments are obligated to pay you your interest regardless of the revenue status of the entity, making the income stream from bonds much more predictable as compared to stocks or properties. Lastly, as a debt instrument, bond investors will receive their investment amount back in full even though the value of the bond may fluctuate in the open market between the time the bond is issued and the maturity date. This makes bonds the investment of choice during recessions and economic crisis, as highly rated companies and governments will continue to fulfil their investment obligations, while falling economic activity will put a dent on the asset value, rental and dividend income on stocks and properties.

There are many people who may misunderstand that the value of bonds remains constant from the time they invest in it to the time it is matured. That is not true. Bond values fluctuate on a day to day basis is currently the second largest financial market in the world, behind that of the currency market. However, unlike the easily accessible stock market, trading in the bond market still remains in the domain of financial institutions and governments due to the lack of proper public bond education and the huge transaction amount needed for each tranche of bonds.

Having said that, bond instruments are essential in the design of many financial products which are commonly available to retail investors, ranging from unit trusts, exchange traded funds, insurance saving plans and structured products. Therefore, it is important that retail investors understand the basic structure of bonds which will help them understand the suitability of these retail products in which bond is the main component of the structure of these products. In recent years, countries with citizens who are more financial literate are seeing an increasing interest in bond products, and the governments have taken initiatives to lower the investment threshold to allow retail investors to invest in them.

Given that most investors who are investing into bond products are probably not going to trade them and are looking for the stable interest income and capital protection from the maturity, why is it that there is a need to learn about the factors affecting bond prices?

As a safe haven, bond price is a good indication of the way governments and financial institutions view economic activity since they are the biggest participants in the bond markets. A high bond price and low interest yield often points to a pessimistic outlook to future economic activity. One of the most well-known economic indicator of a recession is the "inverse yield curve" syndrome whereby the short term interest rate is higher than the long term interest rate. This is an abnormality as a bond will attract more interest when the duration is longer as the investor takes more risk by lending the money for a longer period of time. A recession often occurs one to two years after the "inverse yield curve" syndrome occurs.

The two biggest factors that affect the value of bonds are the **government interest rates** and the bond issuer's **credit ratings**.

Interest rate is often adjusted by central banks to help smoothen the impact of the economic cycle, especially during the recession and growth phases. The interest rate will also determine the interest income of the newly issued government bonds. Let's assume a scenario whereby you invested in a bond which promises you 2% a year of interest payment.

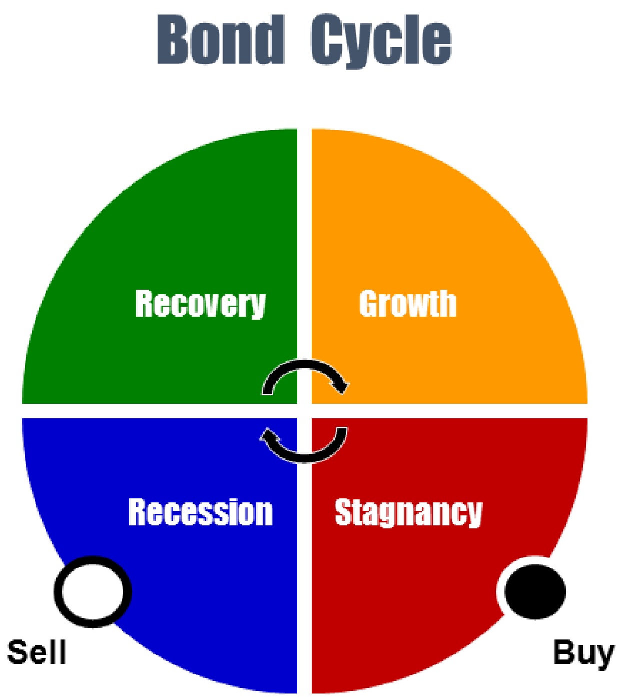
Value	Interest Rate	Interest Income
$100	2%	$2

As a result of falling economic activity, the central bank decides to lower the interest rate to 1% in order to stimulate more economic activity and now issues a new tranche of bond with 1% interest. Assuming you wish to sell the 2% bond which you still own, how much can you sell the bond for given that it is now more valuable as compared to the 1% newly issued bonds?

Value	Interest Rate	Interest Income
$200	1%	$2

Investors are now willing to pay up to $200 for your 2% bond which will result in the same interest income of the newly issued 1% bond. A small 1% fall in interest rate will result in a 100% capital appreciation of the value of your bond and the reverse is also true. A jump of interest rate to 4% will result in a 50% fall in the value of your bond. This is a simplistic scenario as there are other factors which will affect the price fluctuation of a bond such as bond duration, fees and liquidity.

At this point of time, an investor can choose to cash out and enjoy the capital gains or continue to enjoy the higher interest till the maturity date. However, given that central banks normally lower interest rates when economic activity is slow, it also means that stocks and properties will be relatively cheap at this point of time and astute investors will often sell off the more expensive bonds and reinvest the proceeds into stocks and properties.

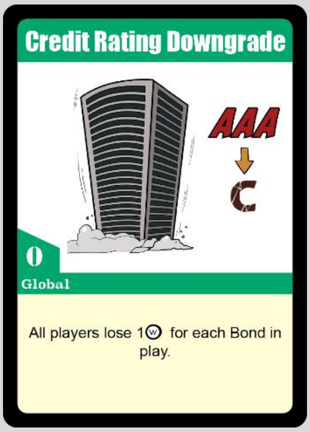


The other factor which will have an impact on the value of the bond is the credit rating of the institution issuing the bond.

A high credit rating often indicates that the institution has lower risk and it is able to issue bonds at a lower interest. However, should the institution's credit rating be downgraded, the institution will now have to issue bonds at a higher interest rate to compensate for the increased default risk that investors will have to take. As a result, any bond purchased before the credit downgrade will be affected and fall in value as investors are only willing to buy over your now higher risk bond. Inversely, an improved credit rating will increase the value of your bond.

Banana Economy: Credit Rating Downgrade

In Banana Economy, there are a few cards which will affect the value of Bonds, reflecting its status as a safe haven instrument. However, one of the biggest risk on Bond prices is a credit downgrade, and the impact of the downgrade is reflected in the game mechanics.



This provide investment opportunities in the area of distressed securities whereby countries undergoing financial crisis may see their credit ratings severely downgraded resulting in a fall in value of their government bond. Investors who believe that the economy will eventually recover can participate in the recovery by purchasing the government bond of the country and enjoy the capital appreciation and high interest yield.

The Asset Economic Cycle

With a better understanding of the economic indicators and how assets behave within an economic cycle, it is time to put all these together and examine the last economic cycle which occurred during year 2000 starting from the dotcom bubble to the 2007 great financial crisis.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Cash	4.7	1.7	1.7	1.5	0.9	0.5	0.4	0.4	0.6	0.5	0.4
Property	-9.7	10	18.5	2.3	-3.4	37.9	32.5	17.6	31.6	-12.9	-48.1
Commodity	N.A	44.9	29.1	-10.7	24.5	29.4	15.6	20.8	-4.0	22.0	-45.2
Global Equity	20.2	24.8	-10.5	-12.5	-25.8	28.1	8.5	9.6	8.8	0.5	-42.0
Global Bond	11.4	-4.3	7.4	8.2	9.5	10.2	5.0	-2.7	-1.6	2.7	4.9

Asian Financial Crisis (1998) · Dot Com Bubble (2000) · 11-Sep (2001) · SARS (2003) · Sub-prime Crisis (2007) · Lehman Collapse (2008)

Best Performing

Worst Performing

Recession (2000 – 2002)

From 2000 to 2001, the US central bank, headed by Alan Greenspan started to raise interest rates in an effort to cool down the soaring stock market which has been trading at stretched valuation as a result of the rise of internet stocks. The value of these internet stocks at one point in time, is worth more than traditional brick and mortar companies, while at the same time, not generating any profits nor owning any physical assets and goods. The technology heavy NASDAQ index lost 67% of its value by 2002 while the Dow Jones Industrial index lost 27% of its value. As the US economy slips into a mild recession, the US central bank lowered the interest rates from 6% to 1% during this period in an attempt to blunt the impact of the loss of wealth due to losses in the stock market. Bond prices, as a result of the sharp fall in interest rates, rallied sharply. Meanwhile, the US property market is relatively unaffected by the chaos in the stock market and rallied strongly as a result of the historically low interest rate.

Recovery (2002 – 2003)

With the interest rates at a historical low and the majority of the damage limited to the technology sector, the rest of the economy picked up very quickly with banking and real estate leading the way. At the same time, 4 major emerging markets, namely China, India, Brazil and Russia (BRIC) began to see rapid improvement to their economies due to a combination of huge population, resources and a surge of foreign investment. Commodity prices started to surge due to the historically low US interest rate and high demand from the BRIC nations.

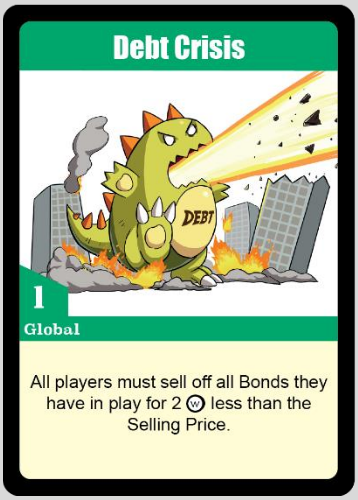
Growth (2004 – 2005)

Economic activities picked up across the world quickly, as all the regions around the world experienced a huge surge in growth. Property, stock and commodity prices saw double digit year on year returns. The US central bank started to raise interest rates to offset a sudden surge of inflationary pressure from wages and property prices. The rise of interest rates sparked off a correction in the US treasury market. Meanwhile, US financial institutions are able to design new complex financial products which are sold to institutions and retail investors around the world as a result of lack of regulatory oversight and many of them involves high risk mortgage loans.

Stagnancy (2005 - 2007)

The rise in interest rates came to a stop in 2005 as the sharp upward trend in stock and property started to moderate. The US GDP is growing at a comfortable 3-6% rate with inflation hovering at the optimal 3-4% range. Technology companies which were badly affected during the dotcom bubble generally recovered and new players such as Amazon, Google, Facebook and Apple started to rise from the ashes of the technology crash. The European economies which began to use a common Euro currency starting from 2002 saw rapid gains in their economies as the result of the common market. The BRIC nations saw a sharp rise in the proportion of their middle income class and demand for their exports from the developed world. In 2007, cracks started to appear in the ability of the property owners in US who has taken the advantage of the previously low interest rate environment and the minimal down payment needed to purchase a property. Defaults in mortgage payment started to rise as a small proportion of the overleveraged property owners started to default on their loans. At that point of time, many analysts dismissed the sub-prime mortgage defaults as a small issue, and should not affect the strength of the US economy. The first signs of the crisis did not origin from US and in fact, originated from UK. In August 2007, 3 hedge funds managed by French bank BNP Paribas reported liquidity problem and they were closed down as investors scrambled to withdraw their funds from these hedge funds. In a few months' time, the problem spreaded throughout US and Europe and these series of events sparked off the next recession and ending the current economic cycle.

Banana Economy: Debt Crisis



During the 2007 Great Financial Crisis, the key reason for the collapse of major financial institutions is due to the toxic sub-prime mortgage debt which has been sold as an investment package along with investment grade bonds. At the peak of the financial crisis, banks were reluctant to lend to each other, not knowing how much toxic asset the counter-party has, leading to a freeze up in the banking system. Banks which previously have a good credit rating are now deemed to be risky and their investment grade bonds are suddenly worthless. This toxic environment spread around the world, requiring governments to bail the largest institutions out to prevent a collapse in the global financial system.

The Recession Tipping Point

There is a saying in the investment world "The Bull walks up the staircase while the Bear jumps out of the window". What the saying meant is that upward trending stock market normally takes time to build and a stock market crash can come out of the blue as a result of a series of events. During the 2007 crisis, it started with 3 hedge funds getting into trouble. During the 2000 dotcom bubble crisis, it started with the blundered merger of 2 media giants, America Online and Time Warner. The disagreement between the newly merged company rattled investors and started the sell-off of technology stock. The 1990 recession was caused by a sharp rise in oil prices as the result of the Iraqi invasion of Kuwait.

In summary, there is no one common factor that trigger off a recession but there are often many warning signs for investors who are familiar with the different stages of the economic cycle. Investors who are able to recognize the signs of the stagnancy quadrant and took steps to protect their wealth are the ones who are in the best position to take advantage of the sharp discounts in asset prices when the recession strikes. Understanding the characteristics of asset classes during each phase of the economic cycle is another key in which investors are able to growth their wealth much faster. Given that most of the examples given here are related to the US economy, how can investors who are living in other countries apply these ideas to their local investment? Afterall, all countries have different cultural and economic structures that may not follow the steps of US. In the next section, we will examine some of the most important economic regions in the world, the state of their economies and their economic cycles.

Chapter 5

The Economic Cycle of Nations

Countries are different, each with its unique historical background, geography, culture, demographics and economic prowess. They each have their own unique economic cycles although the interconnected nature of today's globalized economies will still have a major influence on each other. For a small nation such as Singapore, it is even more important to take note of the developments of major economies and trading partners as they have a more than proportionate impact on a small and open economy. The different stage of the economic cycle of each nation gives investors an opportunity to invest into undervalued assets globally, especially during the times when the home nation is going through a stagnancy or low growth period whereby it is difficult to make profits for a prolong amount of time. The development of internet technology has enabled investors to now easily invest into the securities market around the world.

However, investing into another country brings about other sets of challenges, such as currency fluctuations and geo-political risks. Having said that, these challenges might be actually a blessing in disguise if your home country is the one that is experiencing the crisis: Your diversification of your investment abroad might be better protected than the ones you have invested in your home country.

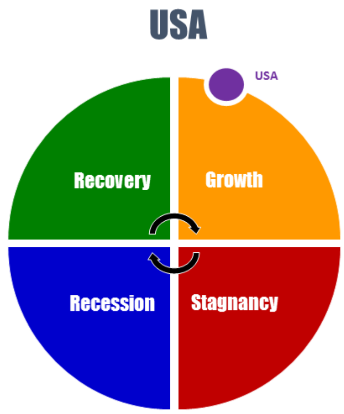
A simple investment strategy to invest globally is to invest in another country which is undergoing a different phase of the economic cycle. Invest in stocks and properties of countries that are undergoing recession and disposing some of the higher risk assets which you do not wish to keep from those countries that are going through the stagnancy phase.

This section will explain the characteristics of the different major economies around the world and the current state of their economic cycle at the point of time which this book is written.

United States of America (USA)

The largest economy in the world based on nominal GDP with the 3rd largest population in the world. It is a leader in technological innovation and imports the highest value of goods in the world due to its strong consumer market. It's currency, the USD is used as the de-facto trading currency of the world which result in a disproportionate influence in their economic power. The actions of the US central banks and the government is closely monitored by the governments and investors around the world as their actions will have an indirect impact on trade and asset value. For example, the rising of US interest rates during the 1990s is one of the indirect causes of the 1997 Asian financial crisis due to the fact that governments and corporations borrowed heavily in USD. The interest rise has created cash flow problems for institutions ill-prepared for the higher USD and interest payments. A healthy US economy also improves the economies of countries, especially for those that engage in regular trading activities with the US.

USA in 2016

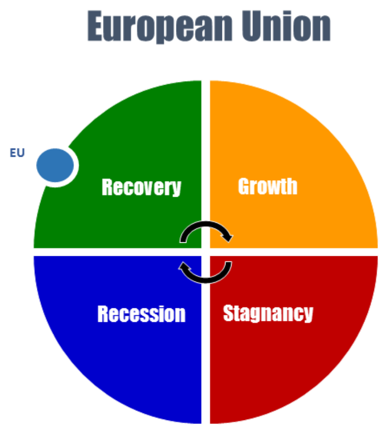


The US economy suffered a devastating recession from 2007-2008 and has been stuck in the recovery quadrant in the past 8 years as the economy attempts to write down the excessive debts accumulated as a result of the property boom and reckless risk taking in the financial sector. The US central bank has started to increase the interest rates, marking the graduation of the economy into the growth phase and the unemployment rate has decreased to the pre 2007 crisis level. The property market is seeing signs of recovery but on the other hand, the stock market has seen record highs.

European Union

The European Union (EU) consists of 28 European nations, with Germany, France, United Kingdom, Italy and Spain with the largest economies among all the EU nations. As a Union, the EU is considered to be the largest or second largest economy in the world with the 3rd largest population. The Euro dollar, which is introduced in Jan 2002, marked the beginning of one of the largest common markets in the world and was thought to be potential contender to replace the USD as the main reserve currency around the world. At its peak in 2008, the oil producing countries in the Middle East were contemplating switching to Euros as the preferred currency for the oil trade rather than USD. However, the flaws of the EU economic union were questioned during the 2009 European financial crisis. The monetary policy and interest rates of the EU is managed by the EU central bank although individual member nations can still issue their own bonds. On the other hand, the fiscal policies such as tax rates and government spending are still managed by the individual governments, creating an unstable balance between government spending and borrowing. A simple analogy in describing this problem is that of a supplementary credit card. The user of the supplementary card may not have the income or money to pay for the credit card spending but he or she is able to spend freely by leveraging on the credit ratings of the main credit card holder. This resulted in governments with weaker economic ability to spend beyond their means, leading to a crisis within the EU when these nations started to have problems paying their debts. The European financial crisis has threatened to split apart the idea of the EU common market as there has been pressure to remove the financially irresponsible countries, while the citizens of the more fiscally prudent countries are unhappy that they have to help bear the losses.

The European Union in 2016



After suffering from a recession and a series of crisis involving Portugal, Spain, Ireland and Greece, the EU zone finally saw some resemblance or recovery in 2016, moving out from the recession quadrant on the economic cycle. In an attempt to combat the recession, the EU central bank lowered the interest rate to a negative region and at the same time, executed a series of quantitative easing to further lower the cost of borrowing. The economic recovery is slow and painful with some member nations still seeing high unemployment and low economic activity. However, a referendum in the United Kingdom on the decision whether the UK should stay or leave the EU has shocked the world when the UK citizens voted to leave. As one of the largest economy within the EU, the exit of the UK from the EU will potentially lead to a sharp drop in economic activity due to political and economic uncertainties. It is still unknown as to what are the actual consequences of UK leaving the EU and whether this will disrupt the recovery process, pushing the EU zone back into recession remains yet to be seen.

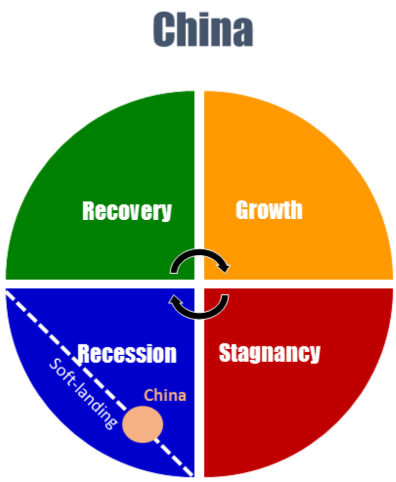
China

China is the most populous nation in the world with one of the largest GDP in the world. China started its economic transformation during the 1980s and the combination of government directed planning, huge population and foreign direct investment have rapidly transformed the country into an economic power house. China has been a close economy since its economic revolution and is relatively unaffected by the 2000 dot com bubble and the 2007 global financial crisis. However, the Chinese economy has been growing at a double digit rate until recent years, whereby it's export oriented strategy is throttled by the recessions and low economic activity in US, Europe and Japan. Wages, land prices and China Yuan have also risen tremendously in the recent years making China an increasingly expensive place for foreign firms to manufacture their products. In order to decrease the reliance of export based growth, the Chinese government has been working hard to transit the Chinese economic model into a more consumption based model, which will be driven by the rising middle class in China. The slow-down in the Chinese economy has affected other economies reliant on exporting commodities and services to China, such as Australia, Singapore and South Korea.

The relentless growth for the past 30 years has also resulted in bubbles forming in different parts of the Chinese economy, where property prices and corporate debt are of particular concern. In 2015, the Chinese stock market saw a bubble and a crash as a result of the government's drive to diversify company's funding, through encouraging retail investors' participation, as well as a short term gambling mentality from the man on the streets. The commodity market crash of 2014-2016 is also linked to the slow-down in demand from China and an overcapacity in production of raw material and oil as a result of an over optimistic expectation by commodity producers on the potential demand.

China in 2016

The Chinese economy is currently experiencing a soft-landing in the economy instead of a recession. A soft-landing means that the economy is going through a relatively low growth period without a fall in economic activity as defined by a negative GDP. In the economic cycle model, a soft-landing scenario is considered to be similar to the recession phase, without the more serious fallout of the recession phase. This is usually achieved by careful economic management by the government and the central bank and it is possible that mistakes can be made during this phase, causing the economy to bounce into the recession track.

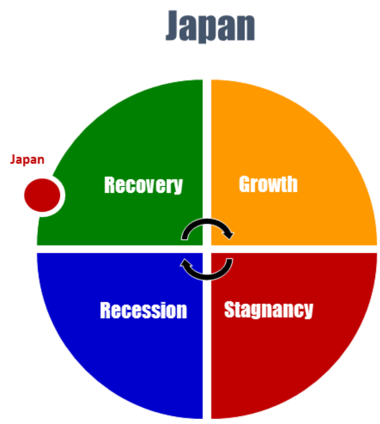


In the case of a soft landing, the Chinese economy will be able to avoid the negative effects of a property market crash and high unemployment, and swing the economy cycle back into the recovery phase. The Chinese central bank has lowered interest in 2016 in response to the stock market crash and the slowing economy, while the Chinese government has redoubled government spending to offset the slow-down in manufacturing activities. However, concerned about the possibility of creating an even bigger bubble in the property and corporate debt market, the Chinese government is proceeding with caution, targeting the stimulants at sectors that badly need support, while trying not to create a bigger asset bubble. Should the Chinese government succeed in soft-landing the economy, the Chinese will be able to bypass the recession quadrant of the cycle and going straight to the recovery quadrant.

Japan

Japan is the 3rd largest economy in the world, after China and USA. After experiencing a long period of rapid growth from WWII to the late 1980s, the Japanese economy has been stuck in a deflationary low growth environment resulting in the economy spending most of the time in the recovery and recession quadrant. The Japanese economy in the 21st century is still mainly driven by exports with little growth in domestic consumption. With little growth in their domestic consumption and a pacifist approach to their military power, the main influence of Japan still lies in her multi-national companies such as Toyota and Sony and the investments which these companies can bring to other countries. Having said that, the Japanese Yen is still one of the main trading currency in the world and the Japanese Yen is seen as a safe haven currency comparable to the USD. As such, the Japanese central bank plays an important role in the global economic market due to their ability to control the Japanese interest rates which will have a direct impact on the fluctuation of the Japanese Yen. In order to break Japan out from the deflationary spiral and low growth problem, the Japanese government has embarked on Abenomics, which involves getting more women into the workforce, stimulating the economy through fiscal stimulus (tax reduction, government spending), monetary easing (lower interest rates, asset purchase by central bank) and structural reform (encouraging woman to work, immigration reforms).

Japan in 2016



3 years after the implementation of Abenomics, the Japanese economy has seen some improvement but many of the advancement has been rolled back by crisis in China and the Brexit. The Japanese central bank has attempted to lower the Japanese Yen via a negative interest rate policy. A negative interest rate environment will result in depositors paying an interest on their cash savings and the objective is to encourage people to spend and invest. From a macroeconomic point of view, a negative interest rate will usually make the currency unattractive to global investors and thus lowers the value of Japanese Yen. However, the policy has backfired with Yen appreciating sharply as global investors prefer to park their money in Japanese Yen due to fears of potential investment risks in other financial markets despite having to pay a penalty. The Japanese economy is currently hovering in the recovery quadrant, with the rising Yen threatening its recovery, resulting in the Japanese economy lapsing back into a deflationary environment and diminishing the profitability of her exports.

Singapore

Singapore is a small open society with one of the highest GDP per person in the world. It has a low tax regime and is considered as a tax haven and an important wealth management hub. The Singapore government bond is 'AAA' rated by major rating companies and is considered to be one of the safest government bonds in the world. However, being a small and open economy with most of their goods and services imported from overseas, managing inflation and the economic cycle via interest rates adjustment has minimal impact as a big proportion of the inflation pressure comes from overseas. For example, should inflation rate in Singapore starts to rise, the government will intervene in the currency market to push the Singapore dollar higher so that the imported food stuff will become cheaper. One of the other causees of inflation in Singapore is due to land and real estate prices. Currency management will not have any impact on prices of property as it is a domestic problem. Instead of using interest rate, the government uses fiscal policies such as capital gains tax, property tax or setting regulations on how much mortgage a property buyer can borrow. Singapore makes an interesting case study on how a small country employs different set of fiscal and monetary tools to manage their economic cycle rather than the conventional methods which larger countries employ.

Singapore in 2016

The slowdown in the China economy, the commodity crash and banking woes have hit the growth prospect of Singapore badly. The low interest rates and influx of investment from neighbouring countries have push property prices rapidly higher by 60% from 2009 to 2013 while income has only increased by 30%. This prompted the government to implement a series of tax and mortgage limitation policies in 2013 and property prices have been falling in a controlled manner since then. Singapore is currently considered to be in the stagnancy phase with extremely low growth and a rising unemployment rate. The government is currently refraining from engaging in any simulative measures nor removing any of the property cooling measures during the 2016 government budget.

Portfolio Management Using the Nation Economic Cycle

Other than investing via the economic cycle using the Asset economic cycle whereby investors diversify and rotates around the stock and bond cycle, investors can consider investing in different countries, taking advantage of each nation's economic cycle. As the majority of the stock and property market gains occur during the recovery and growth phase, it makes sense to allocate a portion of your capital to these countries. It is also advantageous in terms of currency appreciation as a nation's currency will typically appreciate against other countries which are relatively worse off. This strategy will help investors whose country is in the stagnancy or recession phase where their profit potential in the risky asset classes is low.

The asset value is often at the lowest when a country undergoes a recession and it may be a good strategy to invest in countries in that phase. However, investing in another country during a recession phase is a high risk move that may backfire if an investor is not well versed with the workings of that country. That may be long term demographic and cultural issue which is hindering growth. One good example is the demographic problem of an aging population in Japan and the Japanese culture of saving, rather than investing or spending. In some other cases, the economic cycle of some countries are tied to a particular export that brings in the bulk of the wealth for the nation, such as Saudi Arabia (Oil), and their economic cycle may be tied closely to the economic cycle of that commodity. Other countries may be stuck in the recession phase for prolonged period of time due to political unrest, rampant corruption or armed conflict which was the case for China and Vietnam during the Cold War period. Therefore, it is possible that a country may be stuck in the recession phase of the economic cycle for prolonged periods of time as a result of civil wars and investing in these countries are not for the faint hearted.

On the other hand, countries which have seen prolonged period of strive may present huge opportunities when the conflict is resolved and becomes politically stable. This development will usually bring about a golden age of prosperity which may lead to a decade of long prosperity, with these countries staying within the growth quadrant for prolonged period of time. Countries such as Myanmar and Vietnam are examples of countries with such potential. Investors who are able to recognize and capitalize on these opportunities will be able to generate outstanding returns for many years.

The invention of internet and advancement of financial technology has enabled investors to have an easier access to global markets and with this, comes more opportunities as investors now have greater choices. However, investing in an offshore country also comes with a new set of risks and challenges, such as tax, regulations and currency risks. Having said that, understanding the basic fundamentals of the economic cycle can help to mitigate some of those risks. As long as there are positive economic trends buffering your sails, your boat will be able to move in the right direction, towards profitability.

Afterword

I love games. Even as a child, I was fascinated by all the possibilities that games can provide. English Chess, Chinese Chess, Animal Chess, Checkers were part of my stable of recreation during my childhood. Dungeon and Dragons, Magic: The gathering and Lone wolf book adventures came later, but these imported games were an expensive hobby for a young teenager in a typical middle income family. Thus, I started to create my own role playing games on an empty notepad and my friends and I had a great time pitting Japanese Dragonball characters with Western Dragons and Liches. Can you imagine shooting Kamahageke against a Dragon instead of your typical magic and arrows. How cool is that!

Little did I expect my inclination towards game theory and human behavior propels me towards one of the most intellectual global game in existence: The financial markets.

The financial markets consist of all the financial instruments such as stock, bond, commodity, currency, property and derivatives, each interlocking and affecting each other and is traded by millions of people around the world each with different talents, objectives and strategies. I will refer this great trading game as the Financial Market Game.

The Financial Market Game pits millions of players against each other with a very simple ironclad rule, earn as much money (points) from other players. There are so many strategies that a player can employ in this game and the playing environment evolves constantly, often disrupting any well-laid plans that a player has planned in advance. Imagine the stock market like a game of chess, except that the number of black and white tiles on the chess board can increase or decrease in numbers at any point of time, requiring the players to adapt and re-strategize on a constant basis.

The game of Chess is similar to the stock market and you require the same skills in order to become a master of the financial markets.

The chess pieces of a chess set stands for different asset classes. You need to understand the different characteristics and abilities of the Rook, the Knight and the Bishop in order to utilize them in the right circumstance.

The second skill that a master chess player needs to master, is understanding the black and white gridded playing board. The individual chess pieces are the stocks, bonds, commodities and financial assets that investors buy and sell at the same time. The playing board is like the economic environment in the real world, where the chess pieces (assets) operate in. Understanding how the board interacts with the chess pieces is crucial to becoming a Chess master.

The third skill is that of Chess strategies. There have been manuals on chess strategies to discuss about the various formations and ideas that you can use to pin down your enemies. These strategies are similar to the investment methodologies devised by investment masters throughout the years. Value investing, modern portfolio theories, and technical analysis are all part of strategies and methodologies that aim to help financial market players get ahead of the game.

The last skill is of course that of psychology. Chess masters, by varying the pace, the momentum and even facial expressions while facing off your opponents will have an impact on the final result on your game. Investment psychology has been acknowledged as one of the most essential aspect of a successful investor. Similar to a chess master, creating an oasis of calm in the middle of a crisis is the key of securing a victory.

Unlike a conventional tabletop or digital game, where all the rules of the game are fixed at upon creation, the rules of the game of financial markets constantly change and evolve. Investment bankers create new financial game assets such as derivatives and exotic swaps instruments and introduce them into the game. Regulators constantly update and change the ways that the financial game assets can operate within their own countries. Central banks and government introduce never seen before policies and strategies such as Quantity Easing and Negative Interest Rates in bid to stabilize their economies and promote growth.

To become a Chess Grandmaster, it takes at least 10,000 hours or around 7 years of study.

Considering the game of financial market, with its ever evolving rules, pieces and environment, it will definitely take more than 7 years for an investor to even call themselves a Master.

Embarking on this treacherous route to become a financial market game master, I started to teach and give workshop along the way to help those who just started on their journey on financial mastery. Financial game strategies are not the easiest subject to teach unlike Chess, whereby students can immediately pull out a Chess board to test out a recently learnt strategy with a ready opponent available. Learning is always at its best when the students are actively practicing what they have just learnt in the classroom. However, the game of chess takes around an hour or two to play out while the Financial Market Game takes weeks, months and years in order to see the results of your strategy and there is no definite end game. Other than a few short term technical analysis strategies, it makes trying out and practicing the strategies learnt in classroom a lot more difficult. It also does not take long before the participants to give up on a long term investment strategy in pursuit of a faster, but riskier short term strategy which they can see results faster.

Even a virtual trading platform, where it allows you to trade virtual currencies, takes time before you can see results as it is merely a reflection of the real world interaction of the Financial Markets Game.

In order to improve on my teaching methods, I started to design computer simulations and board games combined with essential economic and investing principles to engage my students. I created the Capital Gains Investment Game in 2007, which was later renamed to L.O.R.E (Laws of Relative Economics), and the game was an instant hit with the attendees of my talks. L.O.R.E is a historical simulation game that pit players against each other in a 20 years simulation which they have to make buying decisions among 4 asset classes and the players with the most points will get to win a jack pot of real money. The rules of the game can be explained in 10 minutes and the entire game takes around 1 hour to play. The number of players that can play the game can be anywhere from 2 to 300 people, with 300 the maximum crowd I have worked with so far.

Many participants approached me after the game expressing an interest to purchase a copy of the simulation to take home. That is when we decided to start Capital Games Studio in 2014 and Wongamania is developed as a response to the market demand for an economic simulation game. Shortly after we developed Wongamania: Classic. We started retailing the game on a small scale in the mass market, we were met with overwhelming positive responses and we manage to sell all our copies of Wongamania: Classic.

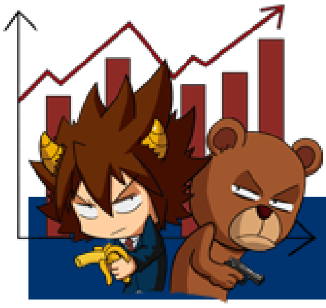
Without any proper game design education and a well-developed board game industry in Singapore, we stumbled through many parts of the design and manufacturing process. Wongamania: Classic has been developed through trial and error and we have been helped by many gaming, education and financial experts who pointed out the flaws of the game and areas which we can improve on. With all these feedback in mind, we decided to redevelop Wongamania: Classic into Wongamania: Banana Economy, incorporating some of the best ideas we have heard over the last one year.

As such I am sincerely thankful to all these people who have made the Wongamania Project possible and turning this into a success.

Firstly, I would like to thank the Capital Gains Studio team, Sam Chang, Yvonne Lai, Ashley Woo, Chong You, and Shawn Chan for believing in my vision and putting your sweat and tears to make this possible.

A big kudos to our illustrator Andy Choo and our graphic designer Made Lidya who help to re-imagined how the new Banana Economy will look like.

I would also like to thank our friends and advisors, who gave us insights into their fields of expertise in game design, marketing, technology, education and economics. A big thank you to all of you: Aw Xiu Xing, Yip Jie Ying, Jeffrey Lim, Jonathan Quek, Alvin Chow, Timothy Ho, Fiona Cher, Christopher Ng, Dominic Huang, Wong Koi Hin, Andy Ng, Victoria Lee, Alex Lee, Edwin, Lye Zhi Wei, Chan Cheng, Jimmy Ling, Evelyn Sim, Grace Soh, Mark Lee, Sebastian Wiradjarma.



Disclaimer

There are mentions of specific investment products and various investment approaches in this ebook. They should not be taken as investment advice, but rather be digested as an idea for the reader to pursue further, either through your own research or a consultation with a qualified and trustworthy financial advisor who operates with your interest at heart.

Appendix

Appendix 1: IMF Projection of GDP of Economic Regions

Latest IMF Projections (percent change)				
			Projections	
	2014	2015	2016	2017
World Output	3.4	3.1	3.4	3.6
Advanced Economies	**1.8**	**1.9**	**2.1**	**2.1**
United States	2.4	2.5	2.6	2.6
Euro Area	0.9	1.5	1.7	1.7
Germany	1.6	1.5	1.7	1.7
France	0.2	1.1	1.3	1.5
Italy	-0.4	0.8	1.3	1.2
Spain	1.4	3.2	2.7	2.3
Japan	0	0.6	1	0.3
United Kingdom	2.9	2.2	2.2	2.2
Canada	2.5	1.2	1.7	2.1
Emerging Market and Developing Economies	**4.6**	**4**	**4.3**	**4.7**
Commonwealth of Independent States	1	-2.8	0	1.7
Russia	0.6	-3.7	-1	1
Excluding Russia	1.9	-0.7	2.3	3.2
Emerging and Developing Asia	6.8	6.6	6.3	6.2
China	7.3	6.9	6.3	6
India	7.3	7.3	7.5	7.5
ASEAN	4.6	4.7	4.8	5.1
Emerging and Developing Europe	2.8	3.4	3.1	3.4
Latin America and the Caribbean	1.3	-0.3	-0.3	1.6
Brazil	0.1	-3.8	-3.5	0
Mexico	2.3	2.5	2.6	2.9
Source: IMF World Economic Output January 2016				