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Finding Alpha

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MOVIEPASS – INNOVATION OR INSOLVENCY?

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In a market where innovation is leading to ever-changing competitive advantages, new streams of service are constantly being introduced to consumers in an attempt to leave a lasting impression on the industry. This is precisely what MoviePass, a service that allows subscribers to pay a flat fee to view 1 film per day in theaters, tried to do in August 2017. The company lowered their monthly subscription rate from \$50.00 to \$9.95 after selling a majority stake to data firm Helios and Matheson Analytics Inc. (NASDAQ: HMNY) in an effort to amass a larger base of customers to collect viewing habits from. However, over 9 months later, the service's future is uncertain after the stock of their majority owner fell below \$1.00.



MoviePass Inc. was founded in 2011, and claims they are accepted at over 91% of theaters across the United States, despite their unimpressive approval rating of 17% on the usefulness of their affiliated-theater locator. Through varying mergers, acquisition and cash advances, HMNY became the majority owner of MoviePass at 91.8%. HMNY's board of directors has remained

adamant that MoviePass's future is a content-creation platform, rather than its current trend as a payment substitute to content-distribution. This has been demonstrated through their acquisition of Moviefone, a logistics site that communicates relevant film information to moviegoers. Although this acquisition has not directly affected MoviePass's service, it reinforces HMNY's mindset of analytics-driven marketing by providing another outlet through which they can collect moviegoers personal information.

According to an independent auditor of HMNY's annual report, there is "substantial doubt" that the company will remain in business, due in large part to the company's negative cash flow and large amount of accumulated debt as a result of recent subsidiary acquisitions, such as Moviefone and Zone Technologies. Further notes on HMNY's annual report reveal the company "did not derive any advertising or other revenues from [Zone Technologies] during the year ended December 31, 2017", and recorded about (US\$4.6) goodwill impairment on the acquisition, indicating their purchase did not meet its expected value.

Quarterly Income Statement (values in 000's)					Get Annual Data
Quarter:	Trend	1st	4th	3rd	2nd
Quarter Ending:		3/31/2018	12/31/2017	9/30/2017	6/30/2017
Total Revenue		\$49,443	\$6,770	\$1,173	\$1,141
Cost of Revenue		\$135,969	\$17,569	\$946	\$918
Gross Profit		(\$86,526)	(\$10,800)	\$227	\$223
Operating Expenses					
Research and Development		\$225	\$457	\$622	\$933
Sales, General and Admin.		\$19,710	\$27,674	\$2,243	\$1,600
Non-Recurring Items		\$0	\$6,257	\$0	\$0
Other Operating Items		\$1,271	\$650	\$438	\$434
Operating Income		(\$107,732)	(\$45,838)	(\$3,076)	(\$2,744)
Add'l income/expense items		\$117,229	\$31,829	(\$28,824)	(\$282)
Earnings Before Interest and Tax		\$9,497	(\$14,009)	(\$31,900)	(\$3,026)
Interest Expense		\$35,535	\$81,622	\$11,563	\$2,184
Earnings Before Tax		(\$26,038)	(\$95,631)	(\$43,463)	(\$5,210)
Income Tax		\$8	\$14	(\$3)	\$11
Minority Interest		\$31,222	\$4,850	\$0	\$0
Equity Earnings/Loss Unconsolidated Subsidiary		\$0	\$0	\$0	\$0
Net Income-Cont. Operations		\$5,176	(\$90,795)	(\$43,460)	(\$5,222)
Net Income		\$5,176	(\$90,795)	(\$43,460)	(\$5,222)
Net Income Applicable to Common Shareholders		\$5,176	(\$90,795)	(\$43,460)	(\$5,222)

From investigating HMNY's annual income statement, it can be seen that they expensed more than US\$98m in interest during the fiscal year of 2017 to finance their acquisitions and posted a negative net income of about (US\$146m). Despite reporting a US\$5m net income in Q1 2018, their operating income of (US\$107m) during that time gives a better indication of the high-capital nature of consumption of their services. Further investigation into their most recent balance sheet yields negative shareholders equity of (US\$39m), indicating the company has more impending liabilities than the worth of their assets. Although it is not

uncommon for new businesses to show negative shareholders equity and net income, due to the high-capital nature of MoviePass's intended direction of their service, their increasing liabilities should be a growing concern. In addition, 48% of the value of HMNY's assets are dedicated to Goodwill, "an intangible asset that arises when one company purchases another for a premium", which has already shown to be an unrealistic valuation based on adjustments made after Zone Technologies lack of revenue-yielding services.

After the publication of HMNY's annual report, investors have shown tremendous concern in the future of the company and appropriately anticipated insolvency, reflective of HMNY's share price reaching an all-time low, hovering around US\$0.40 at the beginning of Q2 2018. Unless HMNY is able to stay afloat and continue to grow MoviePass and their other subsidiaries into revenue-generating services, the company seems to be quickly approaching bankruptcy.

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8. <https://www.investopedia.com/terms/g/goodwill.asp>

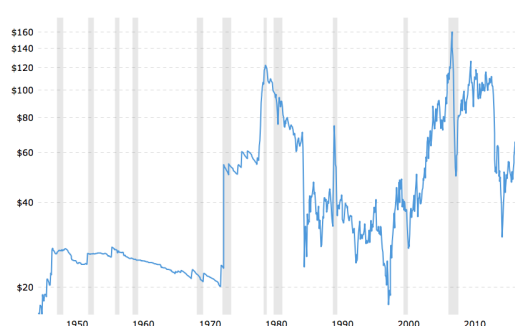
OPEC AND SURGING GAS PRICES

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JUNE 1, 2018

OPEC is the Organization of Petroleum Exporting Countries created in 1960, with a primary objective to keep oil prices stable in the midst of political turmoil in numerous countries. The formation of OPEC was a result of increasing competition between five of the largest oil exporting countries in the 1960's, particularly: Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. The 5 countries colluded as they understood that with increasing competition this would continue to drive the price of oil further down. So, through collusion they formed a cartel to restrict and regulate the supply of world oil to maintain profitability.

OPEC has 3 primary goals: keep prices stable, reduce oil price volatility, adjust the world's oil supply. With that said, OPEC has a significant amount of control on the price of oil; through generating 44% of the world's total crude oil supply, small changes can create international ripples that can affect both the price and the supply of oil.



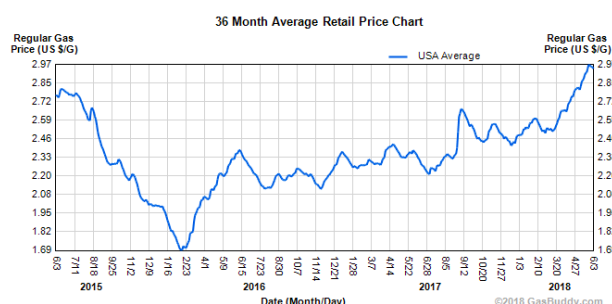
Graph 1: Crude oil prices quoted as a per barrel from 1946 to May 2018.
Source: macro trends.net

Through most of 2011 – 2014 oil prices remained relatively stable. Oil prices are typically quoted as a per barrel rate, and as such, the current price is approximately \$70 per barrel. The cost per barrel includes extraction, exploration and administrative expenses. Recent trends show that there was a 46% increase in the period starting from May 2017 and ending one year later, May 2018. This is primarily resulting from a decreased supply by OPEC in an effort to increase prices.

Alongside production cuts, there has been a great amount of geopolitical uncertainty in the Middle East, which happens to have OPEC's largest producing members.

Particularly, US President Donald Trump's withdrawal from the Iran Nuclear Deal on May 9th, 2018. Iran supplies approximately 4% of the world's oil, withdrawal from the nuclear deal has forced prices to rise. Sanctions that were placed on Iran in the past have been re-imposed in an effort to disarm their nuclear arms program. This event itself has had a significant impact on the production and cost of oil which immediately resulted in increased prices.

As a result of rising crude oil prices motorists internationally are seeing rising gas prices, because 72% of the cost in providing gas is associated with the cost of oil. Some other reasons for increasing gas prices have to do with summer season demand. With summer almost upon us, people increase the frequency of long-distance road-trips, thereby increasing the demand for gas and consequently causing prices to rise.



Graph 2: As evident from the graph, we are currently 36 month highs in the price of gas.
Source: GasBuddy

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TRUMP'S DODD-FRANK ACT ROLLBACK

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JUNE 3, 2018

On May 22, the House of Representatives passed a bill that revised some provisions of the Dodd-Frank Wall Street Reform Act, which was passed under the Obama Administration in response to the 2007-2008 financial crisis. The Dodd-Frank Act was passed to decrease risk in US banking activities. What does Trump's revision of Dodd-Frank Act mean for the US Financial Market?

The bill that revises the Dodd-Frank Act is called the Economic Growth, Regulatory Relief and Consumer Protection Act. To make an assessment on how the bill will impact the financial industry, we should first look at how it changes the Dodd-Frank Act passed in 2010.

What Changed and What Stayed the Same?

1. **Change:** Under the original Dodd-Frank Act, banks with assets over \$50 billion USD are subjected to strict **capital requirements** and Fed Reserve-conducted "**stress tests**". After the bill was passed, that threshold has been increased to \$250 billion USD.

Implication: According to USBankLocations.com, the increase of threshold from \$50 billion USD to \$250 billion means that only nine, instead of forty-three banks in the US will be subjected to the capital requirements and "stress tests". This implies that small and mid-sized US banks will have more freedom when it comes to lending and generate more revenue.

2. **Change:** The new bill exempts banks with assets less than \$10 billion USD from the Volcker Rule*, which bans depository banks from practicing **proprietary trading** as well as investing in institutional investors that are deemed risky, such as hedge funds and private equity funds.

Implication: Being able to trade with consumers' deposits means that banks can increase their leverage ratio and thus increase the potential for profitability. For the traders, they have more chances to earn bonuses. Exemption from the Volcker Rule might have an impact on the market as well. The involvement of more banks in the market increases liquidity of certain financial products.

* **Extra remark on the Volcker Rule:** Banks used to be major market makers, meaning that they could create and trade complex financial instruments and profit from selling them. These instruments usually involve risky securities such as commodity futures, derivatives, and swaps. Additionally, since many of these trades were "**over-the-counter**", the size of the transactions and the risk they pose to the financial system was little known. The Volcker Rule was created to prevent these trades, but it also came under harsh criticism because of two things: it restricts bank profitability, and it decreases liquidity in certain markets.

The bill brings about other changes, such as the right to free credit freezes, but the above stand out because of their potential impact on the the financial market and the risk present in the US banking system. However, while there are some changes, much of the core of Dodd-Frank was left untouched.

3. Stayed the Same: The core of the Dodd-Frank Act is setting up new regulatory institutions, such as the Consumer Financial Protection Bureau (CFPB), which regulates various types of lending. The legislation that was passed on May 22 did not change the CFPB or any other agencies set up by Dodd-Frank, meaning that the federal government's authority in regulating is not diluted. The bottom line is, banks still face much tougher federal regulation than before the 2008 crisis.

Should We be Concerned?

We have seen that the new bill allows depository banks to trade with consumers' money and freeing banks from stress tests. On paper, it seems that the Dodd-Frank rollback is another demonstration that history repeats itself. While the opponents of the bill certainly hold such opinions, one should not immediately jump to conclusions.

While accepting alternative credit scores might increase mortgage lending, the decision process in granting a mortgage involves more than a credit score. Mortgages can be still be denied based on salary levels and debt levels. Additionally, the CFPB, which is set up to regulate mortgage lending, is left untouched by the bill. While Trump's rollback might increase potential qualifiers, there is no reason to believe that this can lead to a subprime mortgage crisis.

On the other hand, it is impossible not to argue that allowing more banks to participate in trading does not increase consumer risk. With the new legislation, over 5000 banks in the USA with less than \$10 billion USD of assets are exempted from the Volcker Rule. This move has several pros, such as increasing the ability of banks' to profit and contribute to the economy, but it also creates new risks in the financial system. Nonetheless, the \$10 billion USD mark still keeps out most of the major players on the Street, and it's the community banks that have the most to gain.

Finally, we need to consider the exemption from "stress tests" and strict capital requirements for all banks with assets less than \$250 billion USD. June 2017 marks the first time since 2009 when all banks with asset holdings of \$50 billion USD or above passed the federal-conducted stress test. This implies that large banks have since then held enough capital to withstand a severe economic recession. With typical Wall Street fashion, the calls to ease regulations have increased, and the industry has finally got it. Among the banks that escaped strict regulations, i.e. those with asset holdings between \$50 billion USD and \$250 billion USD, there are some notable names such as Goldman Sachs and Morgan Stanley. It should be noted, however, that while easing regulations for these banks allow them to increase lending, they are still not allowed to participate in risky trading practices under the Volcker Rule.

The widespread consensus after May 22 is that the new legislation only tweaks the Dodd-Frank Act. Trump's promise to "do a big number" on Dodd-Frank was not fulfilled by the signing of the bill, and it certainly does not come close to "repealing" the Dodd-Frank Act. The answer to "should we be concerned" is mostly a "no", as the big players will still be under the strong authority of the Fed, and most of Dodd-Frank is left intact.

Remark on Dodd-Frank's Influence on Bank Profitability

At this point it is worth having a quick discussion regarding whether the Dodd-Frank Act was a rushed knee-jerk reaction to the 2008 financial crisis that eventually resulted in over-regulation. A good gauge on this is to look at the US bank profitability from after the crisis until now.

According to Bloomberg, US banks have reported record profits after the first quarter of 2018 in terms of net profitability dollars. Opponents of the new legislation used this to claim that that there is no need to ease regulation. This is not necessarily true, because there are reasons to believe that banks could have profited even more with less regulation.

High profits do not imply that the regulations are not limiting profiting ability. Factors such as corporate tax cuts, rising interest rates, general economic boom, and the return of volatility in the equity markets all helped the banks profit. Additionally, net profit in dollars do not tell the full story. With increased capital holdings over the last decade, the large banks' Return on Asset (ROA) is still not at the same level as their pre-crisis ratios, which might suggest that banks might be able to even report higher earnings with the restrictions of the Dodd-Frank Act.

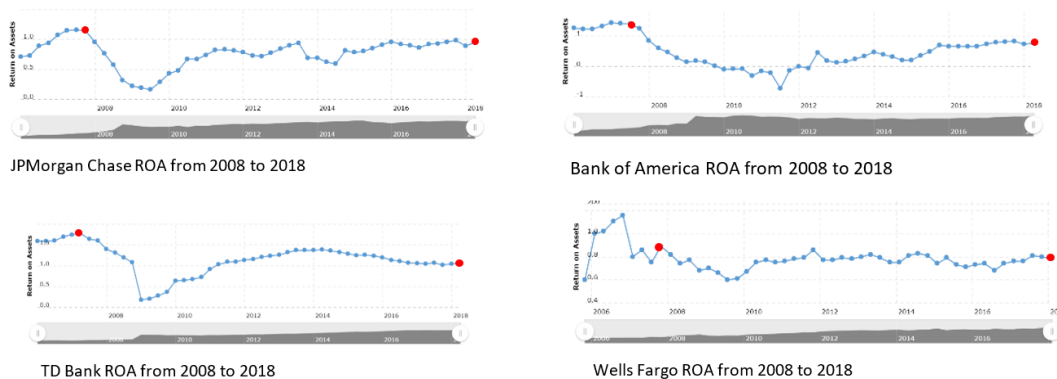


Figure 1: It's been almost a decade, what are the trends of the Return on Assets of the four largest banks in the USA?
Source: MacroTrends

Dodd-Frank certainly hurts the banks' ability to profit, thus, is a rollback justified? The answer will depend on your belief towards the banks' role in the economy and the importance of their profitability towards that end.

What is Next?

The passing of the legislation, though, might just be a start to a series of actions. The Republicans, who have long criticized the Dodd-Frank Act, which was passed under Obama administration, will still be keen to further roll back terms of the Dodd-Frank Act. On 30 May, the Fed has agreed to ease the Volcker Rule for large banks. The goal is to simplify the terms of the Rule and reduce compliance costs for large banks such as JPMorgan Chase, Goldman Sachs, and Morgan Stanley. While this is another win for the traders on the Street, is this indicative of a trend of de-regulating? It will be interesting to see whether President Trump will really deliver his promise to "do a big number" on Dodd-Frank and further revise terms of the biggest Wall Street Reform in history.

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WHY BLOCKCHAIN WILL CHANGE EVERYTHING

SIMON XIONG

MAY 31, 2018

Introduction to Blockchain

Contracts, transactions, and accurate record-keeping are fundamental elements of our economic system. Despite the rapid advancement of technology over the past few decades, record-keeping has lagged behind and many transactions still require paperwork and manual data entry (Bauerle, 2017). Blockchain, a new technology for secure record-keeping, is poised to revolutionize these processes and transform how companies operate in almost every industry.

How Blockchain Works

To understand the immense potential of blockchain, we need to first understand how it works. Bitcoin is a famous early application of blockchain and we'll use it as an example. Suppose one party sends Bitcoin to another. This is called a transaction, which is similar to a financial transaction involving real money. We can represent the transaction like this:

Transaction

from: 17p3BWzFeqh7DLELpodxt2crQjjsvDbC95
to: 1HEhEpnDhRMUEQSxSWeV3xBoxdSHjfMZJ5
amount: 0.1BTC

Figure 1.1: A Bitcoin transaction where one party sends 0.1 Bitcoin to another.

In order for this transaction to be official, it needs to be published onto the Bitcoin network.

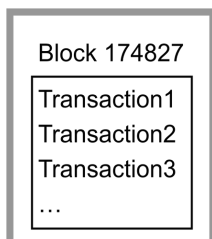


Figure 1.2: A block in the blockchain containing a list of Bitcoin transactions.

Transactions are not published one-by-one as they occur. Instead, they are grouped together and published in groups. A group of transactions is called a block (Nakamoto, 2008). If these transactions are stored in a traditional, centralized database system, they are at risk of being altered or deleted if a hacker gains access to the central system. If this happens a hacker could erase transactions that already happened, leaving the entire system in an inconsistent state. Blockchain ensures all transactions are protected from modification using the following features:

1. Cryptography

The contents of a block are transformed into a cryptographic string called a hash. Each block saves the hash of the previous block, creating a chain of blocks.

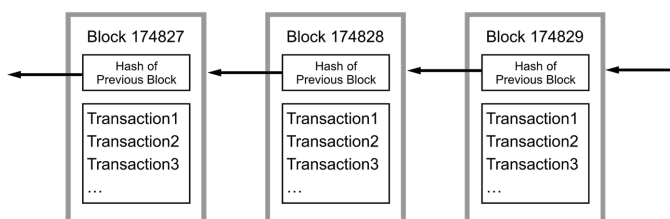


Figure 1.3: A chain of blocks where each block stores a hash of the previous block.

If the contents of a block changes, its hash will change, and it will no longer match the hash stored by the next block. This allows the blockchain to easily detect and protect against modifications.

2. Distributed Network

Blockchain is built over a distributed network rather than a central system. Each node in the network has a complete copy of the blockchain and additions to the blockchain must be verified and agreed upon by the majority of members in the network. (Satoshi, 2008) A hacker must not only gain access to the system, they have to take control of over 50% of the computing power in the network to alter a block and update the hashes of all following blocks, which is extremely difficult to do (Floyd, 2018).

A Permanent, Distributed Ledger

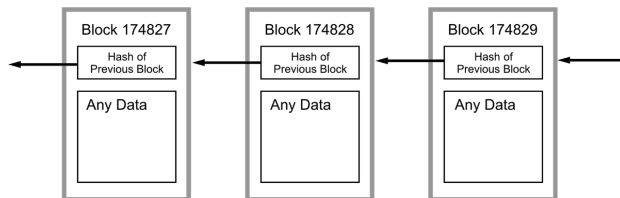


Figure 1.4: The general blockchain structure can securely record any type of data.

The true power of blockchain comes from its ability to store any type of information, not just Bitcoin transactions. This, along with the cryptographic and distributed nature of blockchain described above makes blockchain a system of record-keeping that:

1. Is cryptographically protected from modification after data is recorded.
2. Doesn't require a central authority to maintain and secure the system.
3. Can be shared across different companies.

How Blockchain Can Transform an Industry

Blockchain allows multiple companies to record transactions without requiring a trusted, central authority to ensure that transactions are verified and secure (Amazon, 2018). It has the potential to replace existing systems of record-keeping across all industries. We'll look at supply chain management as an example:

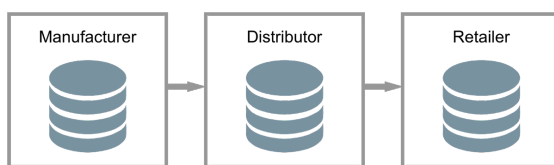
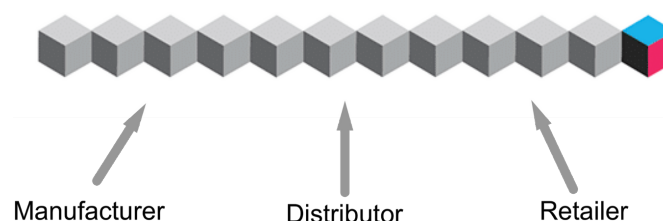


Figure 2.1: An example supply chain where each company stores data in a private database.

Companies in a supply chain keep many kinds of records such as shipments they received, items they sold, and invoices they paid. Each company records these transactions in a database system where data is siloed and private to the company. This results in enormous costs for intercompany transactions because companies have no access to each other's private ledgers and require a trusted authority to verify and cross-check records (Bauerle, 2018).

In addition, storing the data in a centralized system requires an authority to control access to the system. If the security of the authority is compromised, the data could be altered or deleted (Ray, 2017). Companies can avoid these transaction costs and security risks by saving records to a shared, custom blockchain.



The blockchain inherently protects records from tampering and deletion and provides a complete history of all changes to the data. Transactions are easy to verify because companies can reference the shared blockchain instead of cross-checking against each other's separate ledgers or waiting for a third-party to verify the transaction.

Some blockchains such as Ethereum can store executable code, known as smart contracts, which can be used to automate many of the processes involved in a supply chain. For example, items can be tracked using GPS and changes in destination can be sent to smart contracts running on the blockchain. When a shipment arrives at a port, their arrival will be recorded and a secure payment will be triggered automatically. Tracking the location of items through the supply chain also provides a history of how a product moved through the supply chain. For example, De Beers is using blockchain to trace diamonds from mines to consumers to verify their origin and authenticity (Lewis, 2018).

The Blockchain Market

The global blockchain market is expected to grow from USD \$411.5 million in 2017 to over USD \$7.6 billion by 2022 (ReportBuyer, 2017). Every industry that requires keeping accurate records, from finance, to supply chain, to real estate will be streamlined by the adoption of blockchain technology. Companies that serve as middlemen for financial transactions like (NYSE:V) Visa and (NYSE:MA) Mastercard could potentially be disrupted, which is why they've been investing heavily in blockchain research to understand the technology and stay ahead of the curve (Peterson, 2017).

On the other hand, some companies are well-positioned to take advantage of the growing blockchain market. A key obstacle to adoption is the technical expertise required to set up a custom blockchain for non-technology businesses. Instead of maintaining their own blockchain on in-house servers, companies will most likely create blockchains through a cloud service and interact with them via web APIs, which already have widespread adoption. For this reason, cloud services providers like (NASDAQ: AMZN) Amazon with AWS Blockchain and (NYSE:ORCL) Oracle with Blockchain Cloud Services could see huge growth in their blockchain segment over the coming years.

Conclusion

Blockchain is a secure way for organizations to record and share transactions. Its built-in cryptography and distributed nature protects data from being modified or deleted once recorded on the blockchain. This allows company to avoid the substantial costs of securing their data and relying on a middleman to verify transaction. In the coming years, we'll likely see a proliferation of custom blockchains on the cloud and a transformation of how companies record data and interact with each other.

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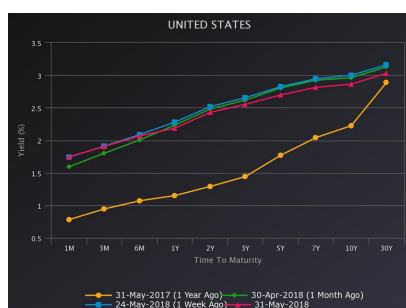
FLATTENING YIELD CURVE OF U.S TREASURIES

SHIRLEY XIAO

MAY 31, 2018

Flattening Yield Curve

U.S treasury bonds are marketable debt securities issued by the U.S government with time to maturity ranging from two months to thirty years. The yield curve of U.S Treasuries collects the yield rates of U.S Treasuries with different maturity dates. The graph below shows yield curves of U.S Treasuries in 2017 and 2018.



Graph 1: U.S Treasuries Yield Curves Chart

By comparing the yield curve in 2017 and 2018, the shape of the yield curve flattens with a generally increasing trend in yield rates. The difference between the yield on investments within two years and the yield on investments more than ten years has been narrowed as there is a huge decrease in the U.S treasury yield spread from 0.934% to 0.433%.

The yield curve flattened because the short-term interest rates increased more than the long-term interest rates in the past year. The short-term interest rates are determined by the Federal funds rate which is the interest rate that depository institutions charge each other to lend the Federal reserve funds overnight. Short-term bond yields are heavily influenced by short-term interest rates as investors always ask for a higher yield to compensate them for their opportunity costs. Since last year, the Federal Reserve Board of Governors has raised the interest rate three times which gradually lifted the rate from 1% to 1.75%. As a result, the short-term bond yields rose significantly as there was a huge increase in the short-term interest rates. Long-term treasury bond yields are determined by the market forces and less so on monetary policy. The long-term interest rates went up by almost 29.16% from 2.3% to 2.98% from May 2017 to May 2018. Since the short-term interest rates grew at a faster pace than the long-term ones, the yield curve flattened.

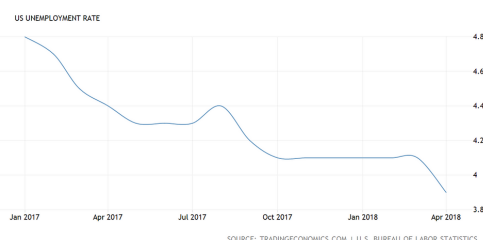
Current Situation

By May 31, 2018, the yield rate of U.S ten-year Treasury yield has reached to 2.83%. The current Italy political crisis and the trade tension between U.S and China have increased the uncertainty of the world's economy. The public is more willing to purchase U.S Treasuries as they are considered as the ultimate safe haven asset. As the demand for Treasuries increased, the prices of U.S ten-year treasury bonds raised and the yield rates of bonds dropped.

The current stable and strong U.S economy also attracts more investors to invest in the U.S market, causing an increase in the U.S ten-year treasury bond demand and leading a drop in the yield rate.



Graph 2: U.S GDP Growth Rate
2017-2018



Graph 3: U.S Unemployment Rate
2017-2018

Various sources of data including GDP growth rate, unemployment rate, and the wage growth show that U.S economy is continuously growing. For instance, Graph 2 above indicates there was a surge in U.S GDP growth rate since April 2017 and the growth rate maintained above two percent for the past one year. The unemployment rate as another important indicator of a country's economy has dropped by 9.3% in the last year in America. U.S economy presented a gradual growth based on the present data, and the stable and strong economy attracts investors to invest in the U.S market.

Future concerns

Although the lower 10-year treasury bond yields helped to ease the yield curve's flattening trend, the 2-year/10-year yield spread also presents record lows since the Great Recession. The expected increasing interest rate has triggered the concern that the inverted yield curve may occur. Specifically, as the interest rate rises, the short-term yield rates are pushed to increase too, and it may lead to the rates that are higher than the long-term rates. Usually, an inverted curve often precedes a period of recession. Investors will tolerate low rates now if they believe that rates are going to fall even lower in the future. (Kenny, 2018) If the return on the short-term investment is higher than the return of the long-term one, it is usually considered as an indicator that the recession may occur.

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