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DALHOUSIE INVESTMENT SOCIETY

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The Schooner

Trade of the Month

Position: IEF consists of U.S. Treasury bonds with tenors of 7-10 years which are sensitive to interest rate risk. IEF was at $114 when we placed the Iron Condor. Yields remained stable throughout the holding period due to the Fed's inaction in signaling rate hikes and the unlikely possibility of further monetary stimulus due to existing inflation worries. IEF remained within the short strikes of 110 and 116 and the trade was closed on 01/31/22 with a P&L of CAD 1,009,807.14 on a cost basis of CAD 545,223.22, or 185%.

Rationale: Since March of 2020, the Fed had been buying at least $80B in Treasuries and $40B in commercial and residential MBSs per month, and only began tapering in November. The fed funds rate has been near zero since the onset of the pandemic. Meanwhile, the Fed spent a large majority of 2021 trying to fight unemployment while facing an unusual job market; one with surging labour demand but many choosing to sit on the sidelines or retire.

When CPI inflation hit 6.2% in October the Fed remained persistent on the transitory narrative and focused its efforts on recovering the remainder of the 21 million lost jobs since 2020. At this point the Fed was between a rock and a hard place and had to choose between waiting for jobs to rebound and signaling an imminent rate hike. Fed chair Powell was up for renomination around this time, so he was in no rush to make any suggestions about hikes either. The only way to contain inflation is by hiking rates and the Fed will have to do that sooner or later. We now know the reality of inflation after YoY CPI hitting 7% in December and the Fed finally turning hawkish. This trade was a good short-term hedge against the inaction by the Fed.

Shashank Mukundan, Macro Trading PM
BComm'22

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DALIS President 2016/17

Modern Monetary Theory: A New Perspective

You've probably heard the three-letter acronym that makes everyone in finance shudder. No not NFT. Also not BTC. Modern Monetary Theory ("MMT") might be one of the least popular acronyms out there - it makes no one rich and it seems to be completely against the capitalist values the world of finance holds so dear. Some of this fear is born from conflating MMT with some of its largest promoters (AOC! There's another three letters feared by traders and bankers alike!). Before you write it off, I want to re-brand and explain the core tenets of MMT, exposing it for what it really is – a set of principles that allow us to better understand fiscal and monetary policy in a world of fiat currency. Most importantly I want to show you that MMT is not a magic word that allows politicians to justify unlimited spending. With that primer, here's my MMT Mount Rushmore, four things you need to know about MMT.

1) Countries cannot default on debt in their own currency

When you read this principle, maybe it seems obvious, but understanding it turns every fiscal policy debate on its head. Countries like the US, Canada, and Australia, who principally issue debt in their own currency, can always repay their debt. When we ask if government can spend money on a project, you do not need to ask "will we ever be able to pay it back?" Canada can always repay its debt in Canadian dollars (see point 2). Countries that have had serious inflation issues, like Venezuela, don't have this benefit – they issue a majority of their debt in USD. As a consequence, the more they borrow, the more their currency depreciates as they have to convert more and more to USD to pay back their bonds. Countries like Canada have an inherent advantage in their currency, why not take advantage?

2) Every dollar in our economy has been spent into existence (by the government)

Fiat currencies exist only by one method – government minting. Every dollar you own was spent into existence by the government, or as MMT likes to say "government deficits are public surpluses". The best way to understand this concept is from day zero of a fiat currency. The government mints $100, "spends" it (maybe they hire a crew to build a road) into the hands of its citizens. Now, the government "owes" $100, but the public has a surplus of $100 to spend as they see fit. As time goes on the government can choose (but does not have to) issue debt to change the economic environment. Government debt is not "borrowing" in the traditional way, it is converting outstanding Canadian dollars into interest bearing notes, there's a difference.

3) Taxes drive demand for currency

At this point half of you may be asking about how a made up currency, that is minted by the government and owed to nobody, can be the basis for a stable and healthy economy. Why not just use Bitcoin? Taxes. The current circle of policy thinking is that taxes are the governments revenue, their spending comes off of that and they are left with a surplus/deficit (that they fund with bond issuance). A MMT-er knows that Canada doesn't borrow the money they spend, they mint it as they need and issue bonds only to change the stock of outstanding currency. So why charge taxes? Taxes create a natural demand for currency, as every Canadian has to pay taxes in Canadian dollars. If you ever wonder why most businesses won't accept Bitcoin, its mostly because of this – they would have to convert it all back to CAD to pay their tax bill. As long as the government charges taxes in their own currency, there will be demand for it.

4) Government spending <u>should be</u> constrained (but not by deficits)

Here's where MMT gets a bad rap. Everyone thinks MMT means government spending should be unconstrained (why not if they don't borrow money?). The true theory behind MMT is that spending should be constrained by one factor – inflation. As long as a government can control inflation, they should spend in ways that benefit

their population. Political discourse needs to focus on how spending helps the economy when its struggling, without causing inflation. MMT isn't the golden ticket to spend, it's a new lens to evaluate spending. Can the government afford a new project? Yes, it always can. Can the government spend money without spurring inflation? Now that's the question that should be on everyone's mind.

The goal of MMT is to shift the political discourse from "how are we going to afford this?" to "does this spending make us better off as a country?". Once you unleash yourself from the constraints of deficits and debt ceilings, you can effectively create a spending policy that supports an economy in tough times and eases off when its running well. It doesn't mean an unconstrained budget, just a budget constrained by an actual problem, inflation. The next time you argue about government spending on CERB, deficits, and child care, keep this in mind – we can pay for it, we just need to ask if we should.

These are the building blocks of the MMT world, but they are not exhaustive. I recommend reading Stephanie Kelton's The Deficit Myth for the most readable overview of MMT, or (for the real nerds, like myself) Modern Money Theory by Randall L. Wray.

About the Author: Adrian was the President of DALIS in 2016/17 and went on to work at TD Securities on the Fixed Income trading team until 2021. He is now a J.D. candidate at the Schulich School of Law.

The End of QE

Spencer Osborne

As I sit down to write this, the Nasdaq has dipped well into correction territory and is down approximately 14.5% YTD, and in less than one month erased billions in what feels like the blink of an eye. For perspective, the S&P 500 is down 9.2% YTD, and the DJIA is down about 6.3%. For the readers of the 2021 October edition of the schooner, you'll be aware that I wrote about rising rates putting downward pressure on equities markets, and the specifically harsh environment this can create for the valuations of growth stocks. The market has started to see this play out, with high rates of inflation expected for an extended period, despite the predicted (at least) four rate hikes that may come throughout 2022. For those of you that attend our weekly DALIS meetings, don't worry, I won't speak too much on rates in this article. However, it is important to talk on the end of QE (quantitative easing); the Fed is now looking to end the purchase of new holdings this spring, leaving the market to fend for itself. A reminder for those of you unaware, up until as recently as November the Fed was adding $120B to their balance sheet a month. Not only will this support begin to leave the market, but we must consider the potential of the Fed to begin selling assets back into the market or let their holdings run off. JPMorgan has predicted that this could be so aggressive as to be a runoff up to $100B a month.

It's been a little over four years now since we saw tightening (QT) of QE like this, and for those that have forgotten it did start without any problems in October of 2017. However, this eventually led to bond spreads increasing and stocks dropping drastically going into the end of 2018 (giving us a brief bear market). With the market crashing and bonds slipping the Fed responded by phasing out QT early 2019. While admittedly it certainly isn't 2018 and we have significantly different circumstances, I'll take from the wisdom of John Templeton: "The four most dangerous words in the English language are: 'This time it's different'".

Let's get to the point you likely care about; what are investors to do in the ever-evolving economic environment. As spoke on previously in the Schooner, we'll see rate hikes that will harm valuations of companies (especially those deemed to be high growth). Combine this with QT, supply chain and production shortages, and the fact many countries seem to be getting eager to be rid of the restrictions that have come about due to the pandemic, this can cause a big shift in consumer habits. Looking carefully there are a couple sectors that can benefit in an environment with raising rates and bottlenecks, the obvious one being the financial sector. I doubt I need to sell anyone on the strength of the banking sector, especially here in Canada, but it goes without saying that increased rates can benefit banks and give them a large source of consistent revenue. This is similarly true for insurance companies and brokerage firms. Outside of finance though we can turn to consumer discretionary stocks, as we begin to find our footing again and inflation begins to be wrangled back in we can expect to see that consumers will have more ability to spend outside of the necessities. Other sectors I'm particularly bullish on is industrials and supply. As industrials get hit hard by supply bottlenecks, we'll see some downward pressure (especially in short term volatility). The good news for those of us that are willing to hunt for value (especially outside of large caps) is that we can reasonably predict this trend will come to an end in the next coming years, and this may very well give us a good opportunity to pick up some excellent companies for cheap. Lastly, it's hard not to mention the energy sector.

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With WTI sitting at over $85 it's difficult to argue that oil companies aren't making a handsome profit these days. With a commodity that will be in consistent demand for many years to come, it can be hard to pass up some of the deals in the market right now in O&G, especially with such appealing dividends. Renewables remain a good investment with consistent cashflow, and energy infrastructure that will need to be expanded for a variety of reasons leave a handful of potential opportunities within energy.

Carbon Markets: A Brief Industry Analysis

Ezra Laskar

"There are riches to be had in niches and the global commodities trade offers perhaps the best opportunities to establish niche financial markets" - *The World for Sale,* Javier Blas and Jack Farchy.

In February 2021, financial journalists Javier Blas and Jack Farchy combined their years of experience covering the energy and commodity sectors into their first book: *The World for Sale* . As the above quotation from their book's jacket note suggests, for Blas and Farchy, to see and to seize opportunities more quickly than one's competition – to create a market – is what singles out good commodities traders from average ones.

While this sentiment is considered important to the creation of good enterprise in general by business people outside of the commodities sector, namely by Peter Thiel in his bestselling essay on entrepreneurialism, *Zero to One*, it is indeed the case that the commodities market offers perhaps the best environment to establish new business frontiers. This is largely due to its unique structure and the highly discreet manner of the traders who operate within it: a make-up of complex apparatuses of shell companies and private multinational corporations through which billionaire commodity traders escape regulation with the aim to control the transfer of the earth's resources. Recently, the lack of scrutiny and government oversight which this sector has enjoyed for years has come under pressure as the threat of human-induced climate change becomes a growing concern for developed societies.

Over the past five years, there has been a steady increase in the calls for governments and businesses to enact policies necessary to attenuate the effects of human-induced climate change, which has topped mainstream media in both column inches and airtime. So far, the most successful initiatives have incentivized private sector participation by packaging carbon and greenhouse gas (GHG) emissions as financialized products which can be traded on open markets. These GHG reduction schemes in particular have been the focus of significant media coverage and are beginning to capture the attention of the public eye. This has served as the tailwind for the commodity market's burgeoning sector: carbon.

Primarily, carbon derivatives make up the available instruments traded on global commodities exchanges which, over the last three years, have grown faster than the NASDAQ, Gold, the S&P 500, and even Bitcoin. The leading paradigm for carbon offset - "cap-and-trade" - provides evidence that private sector incentives are the indispensable component of improved climate conditions and the development of carbon-neutral enterprise. More extensive and enduring developments in this space will likely result in the twofold expansion of the market for carbon into one of the top five industries by market cap and in like manner, further expand the horizon for capital investment.

So far, these trends can be observed in the performance of KraneShares Global Carbon ETF (KRBN), which posted a year-end gain of 107.69% placing it among the top-performing ETFs of 2021. Moreover, the value of the funds top holding, EU ETS Carbon Futures, posted gains of 197.47%.

Within this staggering performance is a narrative that reflects a larger (and an anticipated recurring) shift in business operation: the move towards carbon-neutrality. This is the market trend that has captured the attention of the commodities sector over the past few years. To harken back to Blas and Farchy's observations, the industry consensus is that this space is at best nascent, offering significant potential for innovative solutions and strategy from new capital investment.

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Book Review: Reminiscences of a Stock Operator

Quinton Luck

Reminiscences of a Stock Operator by Edwin Lefevre follows a fictionalized version of Jesse Livermore and his ride to riches, failure, and riches again. For those who don't know, and I did not know before diving into this book, Jesse Livermore was somewhat of a child prodigy in the late 1800's trading world. With the book initially being published in 1923, I was extremely grateful to have had a copy that converted the original dollar values to the 2020 equivalent. These conversions made it clear that Jesse was one of a kind, and if you want to learn from anyone you want to learn from him.

Through doing this book reviews I have discovered that I really enjoy being able to look back into how the industry used to function, and this book scratched that itch for me. Following Jesse as he runs the bucket shops dry was an interesting thing to learn about (as I did not know what they were before the book, bucket shop allowed traders to bet on the market without ever having to buy, or sell, securities). However, the way this book presented the learning was where I initially had criticisms, and still do have some criticisms. It read more like a trading textbook than a story (which in retrospect should not have been surprising given the synopsis literally says "Many traders consider Reminiscences the trading textbook"), but I found some parts difficult to get through. It was only after I talked about the book with people in the Rowe Book Club and Prof Rick Nason that I realized the importance of the lessons discussed in the book.

What I will say is this, given the age of the book it is nothing short of impressive that the strategies described still hold up and are being used today. If that is not a testament to the quality of content in this book, I don't know what is.

We shall send this book review off with a quote from the book, one that I think summarizes it pretty well. "It takes a person a long time to learn all the lessons of all his mistakes. They say there are two sides to everything. But there is only one side to the stock market; and it is not the bull side or the bear side, but the right side. It took me longer to get that general principle fixed firmly in my mind than it did most of the more technical phases of the game of Stock speculation."

I give Reminiscences of a Stock Operator 3.75/5 DALIS Boats

Family or Fortune, Why Not Both?

Hannah Boyd

According to the 'Gender Diversity in the Financial Services Industry' report by Mercer only 15% of women were represented at the executive level in finance, while only 26% of senior managers were female. The financial industry has become notorious for presenting a tougher work-life balance to its female employees, often driving women to make the choice: family or fortune? So, what does this mean for their place in the workplace?

As a woman looking to start her career in Finance it has been hard over the years hearing stories of successful females losing out on big bonuses, and advancements in their company because they carry this burden of having to support a child. According to Finance Monthly, "the motherhood penalty costs women around $16,000 in lost wages annually, and 25% of women have to go back to work two weeks after giving birth to keep afloat financially." For me, this statistic is mind-boggling as it almost feels like a penalty in your career to have a child and raise a family. Shouldn't the industry take two steps forward and support one's decision to love and nurture instead of taking two steps backward, leaving women to financially support a baby with no source of income coming in.

In 2019, Canada passed a policy called "use-it-or-lose-it" that focuses on encouraging more fathers to take paternity leave and allowing for "the other parent" to take an extra 5-8 weeks off. With this being implemented, we have seen little to no increase with less than half of the men in seven different countries likely to take time off, most prominently seen with Canadian men. Through this statistic, it is demonstrated that men hold themselves to a sense of pride being the "breadwinners" of the household and often don't put into perspective that there is a way to do both. My question lies with the idea of both parties taking some form of parental leave in a way that they are both able to co-parent the child at a young age as well as return to work if desired.

My proposition is focused on the aspect of a double parental leave where women aren't seen as "less ambitious or dedicated to their job" and men aren't seen as "weak, and too nurturing". With this implementation in place, men are seen to have a more significant relationship with their children, and their marriage is often seen to last longer. As for women, we go through university for a reason, and that reason is to graduate and find a great job in our designated career path. The idea that the women must stay home and look after the child while missing out on financial security, promotional opportunities, and advancements in their career is extremely disappointing. Instead of focusing on gender stereotypes, why don't we pivot and focus on how both the father and mother can take time off? It is proven to provide immense benefits to not only the children's relationship with their parents, the individual's loyalty to their company, and a double income scenario where both parties feel as though they are equally contributing to both the financial aspect and the nurture aspect as well.

The Vicuña Discoveries

Aidan Wood

Background

The recent acquisition of Josemaria Resources (TSXV: JOSE) by Lundin Mining (TSX: LUN), has shed light on an emerging copper-gold-silver district. The total cash acquisition cost sits at C$625 million for a proven and probable resource of 6.7 billion pounds of copper, 7 million ounces of gold and 31 million ounces of silver. While the property sits in Argentina, the Vicuña district also holds a presence in Chile and largely straddles the border along the Central Andes.

Three main projects owned by the Lundin Group currently make up the district. Filo de sol, Josemaria and Los Helados are the focus of Vicuña and share a combined measured & indicated (M+I) resource of 27 billion pounds of copper, 20.9 million ounces of gold, and 218 million ounces of silver. The three companies (Filo Mining, Josemaria Resources and NGEx Minerals) have a combined market cap of C$2.4 billion on January 31, 2022.

Resource Potential

Josemaria's pre-feasibility study (PFS) estimates forecast an average of 366 million pounds of copper production per year for years 1-3, followed by an average of 289 million pounds over the 19-year lifespan of the mine. To put this in perspective, BHP forecasts 309-375 million pounds of copper production at Olympic Dam in 2022.

Exploration potential is also massive in this largely unexplored district. Los Helados states an indicated resource of over 17 billion pounds of copper, and as indicated is converted to measured, the current C$290 million market cap of NGEx Minerals has a long way to run. Comparing Los Helados to Lumina Gold's Cangrejos project in Ecuador, Los Helados trades at an approximate premium of 26% based on market caps; C$230 million and C$290 million. However, both companies share a near identical M+I gold resource of around 10 million ounces, while Los Helados' copper resource is nearly 15 times larger (1.2 billion pounds at Cangrejos versus 17.6 billion at Los Helados).

Political Headwinds

While Chile remains the world's top producer of copper, the country is not shy of political headwinds. The recent election in December, 2021, resulted in a socialist leader, Gabriel Boric entering power. It is still unknown what sort of tax policy changes are coming, however Boric has stated that his party will increase revenue by raising mining, corporate, income and wealth taxes. The party has also demonstrated a clear prioritization of environmental protection over mining with the rejection of the proposed Dominga project in December.

Argentina also faces some jurisdictional challenges such as rapid currency depreciation, however the country has taken a pro mining stance since revoking mineral export taxes in 2016. Depreciation of the Argentine Peso has also been attractive to foreign investors. Argentina is very unexplored compared to their neighbour Chile, and within the current political environment, does this stand to change?

Vicuña and Copper Opportunity

As the world rapidly expedites the transition to clean energy and reduces carbon emissions, copper consumption is expected to surge due to its highly conductive nature. Electrical vehicles alone, require close to 3 times more copper than traditional gas vehicles. The exponential growth in industries such as renewable energy has led to Bloomberg forecasting a copper supply deficit of 4.7 million tonnes by 2030. Bridging this gap would require increased annual output of 10.3 billion pounds, or roughly 4 times the world's largest copper mine, Escondida's 2020 production of 2.6 billion pounds. Pair this with 6.8% inflation in the United States and we have a very bullish outlook on copper. An underexplored region such as the Vicuña district generates a massive opportunity for further discoveries and resource growth on the currently established properties.

International Opportunity Entering The New Year

Nick Francis

2021 was a confusing time for financial markets, with bullish investors disregarding red flags which, in previous years, could have caused a transition to a bear market. We saw factors such as historically high inflation rates, numerous global lockdowns, international supply chain weakness, micro-chip shortages, and the Evergrande debt crisis.

Despite ever-changing uncertainty, global markets had a year of rebound, recovery, and growth. Primarily North American equities experienced all-time highs and growth in sectors such as: energy, technology, financial, and real estate. Aside from China, international markets on average experienced correlated growth, but on a smaller scale. As a result, I see opportunity for portfolio stability as various international equities appear to be priced closer to fair market value than those in North America.

The past year's unpredictable growth has seemed to catch up to markets as the S&P 500 experienced historically the worst start to a year with a current return of -9.80%. From an international outlook, I anticipate that built up economic uncertainty will cause volatility to continue throughout Q1 2022 before we return to more stable equity prices. Consequently, I presume long positions in developed markets can act as a long-term portfolio hedge, while emerging markets can be used to take on more risk by applying derivative trading strategies to increase potential return.

Covid-19 regulations have controlled global markets over the past two years. With successful vaccination rates in the UK, the country has decided to lift all mandates aside from an isolation period if infected. Speaking with Global News, Prime Minister Boris Johnson states "as COVID becomes endemic, we will need to replace the legal requirements with advice and guidance urging people with the virus to be careful and considerate of others". Once the isolation mandate is dropped, labour rates will strengthen and coincide with supply chain improvements.

I am particularly fond of the long-term equity market in Europe. Although we may see volatility throughout the short term, high dividends will provide a fixed return on top of anticipated growth.

While I predict that developed international economies will record above trend growth, I obtain bearish projections on the short-term return within emerging markets. Take the largest emerging market for instance, China. There are apparent factors such as zero-covid policy, struggling property sector, and declining GDP growth forecast that may lead to volatile negative returns.

President Xi Jinping remains optimistic about China's 'Zero Covid Policy'. The totalitarian approach to Covid has continued to diminish the value of companies and deterred the ability to fulfill as a trade partner. As a result, GDP growth projections have decreased to 5.6% in 2022 which could have trickling effects on various markets around the world.

Despite annual GDP growth clocking in at 8.1% and beating analyst estimates, China's financial market stability has struggled throughout the last half of 2021. In the past, China has countered economic struggles with issuing stimulus leveraged from the property sector, which is said to compute 29% of GDP. Deriving from the Evergrande debt crisis, leaders are now hesitant to leverage with the struggling sector. I predict a correlation between equity returns and property sector performance, meaning that until the government can comfortably leverage real estate, equity markets will struggle.

Due to the current economic state, I feel as if it is wise to limit short term exposure to volatile North American markets. I would advise to rather focus on developed

international markets due to more accurate valuations and growth potential. The European markets can provide portfolio stability and UK equities in specific can structure a high dividend approach when highly allocated, creating larger cash flow. Emerging markets performance is often influenced at a greater magnitude by macro trends, creating opportunity to apply high risk derivative strategies.

Rick's Rant
Rick Nason, PhD, CFA

No Rubrics Please

Some of you of a certain age may remember paint by number kits. (Apparently, they still exist!) With a paint by number kit, you get a sketch with numbers on it, as well as a kit of paints in small containers – again with numbers on them. You fill in the numbered spots on the sketch with the similarly numbered paint blob, and at the end you get a poorly executed forgery that only a parent could love. No one, not even the most determined self-esteem building parent, ever bought a frame for a paint by number painting.

Rubrics are the paint by number kits of the academic world. They serve two purposes, and only two purposes; (1) allow brain dead students to absent mindedly pass away time by fooling themselves they are learning by doing a rubric based assignment, and (2) allow equally brain-dead robots called markers to assess the level of ability of the student to colour within the lines.

Business is a profession. That implies that it is as much about science as it is about art. To be successful in a business career you need a package of skills. Thoughtlessly obeying orders is not one of the in-demand skills though. If you examine the latest World Economic Forum Top Skills Needed list (www.weforum.org/agenda/2020/10/top-10-work-skills-of-tomorrow-how-long-it-takes-to-learn-them/) you will notice that mindlessly following a rubric is not on the list. In fact, the skills listed, including creativity, critical thinking, active learning, resilience, leadership, and reasoning are the antithesis of following a rubric. In all of the various jobs that I had in industry, never once was I handed a rubric. (Well, okay, once I was told to "make it rain", but I think we can all agree that would not pass muster as a rubric in a modern University – but perhaps I will try the next time a student cries to me that it is not fair to expect them to do an assignment without a rubric ...)

If you insist on having a rubric for your job, then I guarantee you that you are going to be replaced by a bot; with the exception of the case where the job is so low level, and of so little value that it is considered beneath the dignity of a bot.

Rubrics are the rage amongst those with advanced degrees in education. However, with a very tiny sample of exceptions, evidence suggests that an advanced degree in education is an oxymoron. I agree that education is about building capabilities, and part of that is building a student's self-esteem, but only those suffering from an extreme case of Dunning Kruger can build self-esteem through getting an acceptable score on a rubric based test or assignment. I argue that the students we should be most encouraging are actively demoralized by the forced baaaing with the rest of the sheep as they are flock-managed by a herding dog.

So let's let kids actually create their own pictures, and let's let students show their own creativity and critical thinking skills in completing assignments. No rubrics please!

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