WINTER 2016 NEWSLETTER

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Portland and Seattle

The economics club plans several off-campus events throughout the year where we visit and last term we went to Portland on January 15th and stayed in Seattle overnight on February 11th and 12th.

Portland

We all woke up at 5AM and carooled to the City of Roses with plans to do two things: meet with the team at RVK (a nationwide investment consulting firm) and tour the Portland Timbers stadium. The former gave us information on the investment consulting industry, while the latter gave us invaluable knowledge on the process of removing and replacing artificial grass on a turf field. RVK had nearly a dozen employees talk with us about their organization, their industry, career opportunities, and they even reviewed and gave feedback on our resumes.
Seattle

Every year the Economics club goes on a trip to Seattle to visit banks, the Federal Reserve and other businesses. Extra time is spent in the city bonding with the club members. This year we were not able to visit the Federal Reserve, but we did visited the Boeing manufacturing site. We also visited Liberty Mutual, KeyBank and Microsoft. At Liberty Mutual, the club members engaged with the employees and interns and learned about the work that employee’s do at the company. At KeyBank and Microsoft, we learned about their careers opportunities and the positions these firms have for undergrads. A former UO Economics Club Executive Board member, Nick Inouye, works at KeyBank and gave a presentation to us.
Is Buying a Lottery Ticket Ever Rational?

By: Dylan Crownover

With the recent PowerBall Lottery jackpot exceeding $1.5 billion dollars, the question of whether or not it was ever a rational choice to buy a lottery ticket arose for me personally. Computing an extremely rough expected value with some mental math I concluded, at the time, that with odds of 1 in 292.2 million dollars as a Bernoulli random variable it was rational to buy a ticket or two at the $2 purchase price for a ticket. Now call it naivety driven by intellectual laziness, or a result of imperfect information, the latter of which will surely offer more padding for my pride, but after revisiting this topic I’ve found my previous conclusion to be wholly untrue.

To begin my analysis on whether or not the lottery is ever rational, I set out to calculate the actuarially-fair break-even point for both the PowerBall and MegaMillions lotteries. The actuarially-fair break-even point is the point where the jackpot value is large enough so for the expected value to be equal to zero. In other words, it is a way of calculating the jackpot required to obtain an answer of zero when taking the sum of each potential outcome multiplied by the probability of the outcome occurring.

There are a series of prizes that can be obtained by non jackpot winners for various combinations of matching numbers with the winning ticket that had to be factored into this calculation. After including all possible outcomes and their probabilities I found that the break-even point for post-tax winnings for the PowerBall Lottery would have to be over $467 million and just shy of $200 million for the MegaMillions Lottery.
Now at first glance you may be thinking “$467 million? That’s it? The lottery jackpot is bigger than that all the time!” and while that is true, it’s not the whole picture. In the history of both lotteries there has been one occasion where a significantly large jackpot was awarded to a single winner. That winner was Gloria Mackenzie of Florida who won a pre-tax PowerBall jackpot of $371 million for the single highest post-tax winnings of $224 million. Meanwhile the highest post-tax winnings for the MegaMillions lottery was awarded to Steve Tran of California at $195 million, just short of the break-even point. So looking throughout past winners there has never been a winner that has reached the break-even point, although I highly doubt any of them are losing any sleep over the matter.

Given that no winner has won a jackpot at or above the actuarially fair break-even point, the obvious next step in the analysis was to determine what a more reasonable jackpot would have to be. Looking through past jackpot winners I found that commonly lottery jackpots are awarded to two or three winners. These winnings are subject to the federal income tax, with a top rate of 39.6% and any relevant state income taxes. Oregon has a progressive state income tax starting at 5.0% for the first bracket and 9.9% for the highest. Using this information I calculated the Jackpot range for the state of Oregon given two or three winners. With these considerations the PowerBall jackpot would have to, at a minimum, fall between $1,434,177,956 for two winners and $2,151,266,934 for three winners. Meanwhile the MegaMillions Jackpot would have to be $611,006,937 for two winners and $916,510,405 for three winners. Of course these are merely estimates for lower bounds that do not take into consideration deductions from the jackpot from smaller winnings or the potential of higher numbers of jackpot winners, so the actual amounts may be higher.

The main takeaways of this analysis were, first off, that no winner has ever won a jackpot that was actuarially-fair, and secondly that the necessary jackpot to all but assure an actuarially-fair result are much higher than what we have seen in the history of the lottery. The purchasing of a lottery ticket has yet to ever be a rational choice, but that does not mean that it couldn’t be. The lottery creates an interesting paradox of sorts; when enough people act irrationally in buying a lottery ticket, the resulting increase in the jackpot can make the action rational. So if you’re looking to act rationally, you should probably sit this one out and see what the irrational actors can do for you.
The Imploding Debt Dragon: Reasons to Short the Chinese Yuan By Ethan McCormac

Please note: this is semi-cheeky financial and economic analysis, not investment advice

Early in the term a question arose over what investment could be the next “Big Short”. This seemed a reasonable inquiry and particularly pertinent considering the release of the Michael Lewis book turned movie by the same name. However, and most remarkably, not only does the next big short currently exist, it may prove to be the bigger than the Housing Bubble. I am referring to the Chinese economy and by doing so rebuking twenty plus years of the Chinese growth narrative. Given, one cannot short an economy; so naturally one must use the next best thing. In this case, the next best thing is the Chinese currency, the Yuan.

What exactly is short selling? Known as a short, short selling, or shorting, short selling is the process of borrowing an asset for a stipulated amount of time and then immediately selling the asset on the market. When the stipulated time is nearing, the shorter will then buy back the asset and return the asset to the asset lender. In order to profit, the asset will have had to fall in price between the time of the borrowing and selling of the asset and the buying back of the asset. Ideally, the price difference is large and a profit is realized. Often, due to the sociological properties of financial markets, if many market participants begin short selling an asset, this process can become a self-fulfilling prophecy as more sales resulting from the shorting of an asset drive down its price. For the bulls, those long in the market (betting an asset will increase in value) and throughout much of US financial history, shorters were castigated as malicious speculators. Speculators that are bullish, also a trait usually attributable to views of the ruling political party, view the shorters, known as bears, as near traitorous. Throughout history, this has invoked nationalist tensions as the bears were portrayed as betting against America.

What are the risks? If the asset being shorted increases in value, the shorter could potentially lose large sums of money when the shorter (the borrower) has to buy the asset back in order to return it to the lender. Short squeezes are possible as well. A short squeeze occurs when the asset has increased in price despite many shorters shorting the asset. Due to the large number of shorts, there is an increased demand for the asset as shorters trying attempt to cover their short. Trying to cover their short refers to having to buy back the asset to return the asset to the lender. The result of a short squeeze, usually implemented by a formidable long investor or a central bank hostile to downward asset price or currency movements, can cause bankruptcies among the shorters. To mitigate these risks, it is possible to use synthetic shorts for certain assets. Synthetic shorts include long dated put options on stocks and credit default swaps (CDS) on bonds. These are considered synthetic because they do not actually borrow the asset to sell it at a later date, nor are the risks of a short squeeze as high. Therefore, these synthetics are often less risky due to the lack of borrowing involved in their execution. However, money can still be lost with synthetic options.
Why the Yuan? China has increased its total debt (government, financial, corporate and household) by 14 times since 2000 without a financial crisis. There has been no contemporary experience with deleveraging in the Chinese banking industry. Chinese non-performing loans (NPLs) are conservatively estimated by the Australian investment bank Macquarie to be at $3.5 trillion and expected to increase to $7.7 trillion over three years (Macquarie, 2015). However, official Chinese government data puts the figure at $300 billion (Reuters, 2015). A non-performing loan refers to a loan that is in default or is nearing default, but has not written off because it would entail capital losses and hurt quarterly earnings while simultaneously reducing the amount of bank capital on the bank’s books. Chinese government data is heavily goal-seeked by communist government officials; accordingly, actual data is difficult to find. Many loans are also kept in special purpose vehicles (SPVs) so as to appear off the books of Chinese banks. SPVs are a prominent example of shadow banking. Shadow banking refers to banking that is outside the scope of governmental regulation and during times of financial stress, these SPV financial accounts do not have access to government guarantees. However, the Chinese government is heavily involved in Chinese financial and industrial companies. Therefore, this makes the prospect of governmental debt relief much more likely (i.e. bailouts of bankrupt firms).

What kind of assets does China have? It is estimated that the Chinese have $3.2 trillion worth of foreign reserves (CIA World Fact Book, 2015), although China needs $2.7 trillion to operate its economy (IMF, 2015). Although 3.2 trillion may seem like a large number, if only 4 percent of the Chinese population takes out $50,000, which is the max amount allowed under the regime of Chinese capital controls, the reserves are gone. (Kyle Bass, 2015). In addition to foreign reserves, China also has a sovereign wealth fund. The China Investment Corporation has about $750 billion in assets that could be used to buttress NPL losses in the Chinese financial sector (China Investment Corporation Report, 2013). However, it should be noted that this $750 billion number is from before the collapse of the Chinese stock market and before the start of the global bear market now underway. Another prospective means to reduce the amount of NPL problems in the short run is to convert them to equity, however this would only work to shift the ultimate cost of writing off these NPLs into the future.

According to Kyle Bass, who accurately predicted the US Housing Crisis, “China’s banking system is a $34 trillion dollar ticking time bomb and when it explodes, Beijing will need to plug the holes.” Although he might appreciate the historical reference, Bass’s assessment likely does not even account for additional derivative exposure from failing counterparties during times of financial stress as credit rating downgrades from NPL losses may potentially trigger counterparties to post more collateral for their existing derivative contracts. The failure to post collateral after a credit downgrade may elicit further credit downgrades or may cause the fire sale of assets to meet collateral requirements, both of which in turn may result in more credit downgrades and collateral calls causing a vicious cycle of collateral calls and credit downgrades resembling the failure of Bear Sterns, AIG and Lehman Brothers in 2008.
How does China plug this NPL hole on the country’s banking balance sheets? One option to plug the hole is with foreign reserve holdings. However, if only 3 percent of total loans go bad, this wipes out all the Chinese foreign reserves and does not even amount to half of the $7.7 trillion estimate of NPLs by Australian Investment Bank Macquarie. Instead, China could simply print Yuan to cover loan losses, but this will lead to a rapid depreciation of the currency if trillions are injected. To fight capital flight, China could implement more capital controls, but this undermines confidence and discourages foreign investment resulting in downward pressure on the Yuan. This is part of the classic trilemma problem. Furthermore, China already has a collapsing stock market and a housing bubble of epic proportions including whole ghost cities amounting to tens of millions of unsold apartments. Potentially complicating matters further, the Chinese shadow banking industry (loans and assets obscured on bank balance sheets) is poorly documented and not very well understood. The Chinese shadow banking sector could pose unforeseen challenges in calculating NPLs and providing systemic debt relief. The extent of Chinese derivative contracts is unknown as well.

It is important to remember that since 2007 China has added $21 trillion of total debt to its balance sheet (Mckinsey, 2014), yet China has only increased GDP by $5.8 trillion (World Bank, 2015). Each dollar of debt has produced about 25 cents of economic growth. Also consider China has been the source of 33 percent of world GDP growth since the Global Financial Crisis. Knock on effects of a Chinese slowdown or financial meltdown could reverberate from Korean industry to Australia iron ore mining to global oil demand. Western economies would be affected as well, from the rising Vancouver/California/New York housing prices augmented by Chinese capital flight to European (specifically German) capital goods exports.

Does this make the Yuan a good short? Well yes, if you can afford short-term losses and are prepared for a protracted fight against a kicking and screaming Chinese central bank attempting short squeezes, arresting short sellers (yes, seriously) and implementing capital controls. Yes, if you think China is headed for a massive financial crisis in equities (already underway), housing debt, corporate debt, government debt and in foreign exchange markets. Yes, if you think Kyle Bass and George Soros (also shorting Yuan) not only know when to short a currency, but also have the financial prowess to encourage others to do so simply because they are. One interested in shorting the Yuan must also ask themselves: does a confident and competent central bank overseeing an adequately capitalized financial system take time out of its schedule to call Soros a “financial crocodile” (CNBC, 2016) despite him shorting a couple billion at most? Also, how has that same central bank handled other financial problems aside from prosecuting short sellers (at the point of a gun), faking numbers and simply issuing more debt (which will likely result in more NPLs)? Extra yes, if you think social unrest will occur as the economy slows and the communist government loses its perceived sense of economic omnipotence necessitating armed suppression of the Chinese population. Such suppression will cause further social unrest and result in even slower growth and larger financial problems. Early evidence of this can be ascertained from the number of strikes in China, which have rise from under 50 strikes in the first quarter of 2011 to over 600 strikes in the first quarter of 2015 (China Labour Bulletin, 2015).

Upon closer inspection of the Chinese growth narrative, it appears much of the Chinese miracle was more akin to a dragon-sized credit extension --acting as a veiled export machine subsidy-- overseen by a communist party ponzi pursuing a growth at any cost policy, rather than a uniquely red free market miracle. The bill is finally coming due and the debt dragon that has been fed trillions of arguably unsound loans is beginning to implode, thus putting the Yuan currency short firmly in play.
The (Split) Republican Ticket by Jean Ramirez

Elite members of the Republican party are in no position of endorsing Mr. Trump. Why would they? Mr. Trump has insulted members of congress, including those in the party he claims to represent. His bullish tactics, instead of hurting his image, has in fact increased his popularity among Americans who view it as bold and necessary. Strategic politicians craft their language very carefully while Mr. Trump "tells it like is," as many of his supporters claim. The only problem is his approach has divided the republican party.

How? After losing the 2008 election, the Latino vote became really significant to the Republican party. Instead of embracing this electorate change, the party became anti-immigrant. Once Mr. Trump insulted Mexican immigrants when he announced his candidacy, no longer did the party had a chance to undo the anti-immigrant sentiment they needed to avoid to win future elections. On the other hand, the same tactic has become popular among Americans who feel like they are no longer represented by their party. Here is where it becomes historical:

During the New Deal era Southern Democrats supported the safety nets created by FDR, but with one condition: that it only benefited white Americans. The Jim Crow south made it impossible for Black Americans to receive the benefits they needed to survive the great depression. Not until the Johnson’s administration did civil rights demands became laws. By then, this huge coalition began to look the other way, and in 1964 a party realignment transformed U.S politics. Southern Democrats and other Democratic conservatives felt like their party no longer represented them, in part because the Democratic party had embraced civil rights movement (which many white Americans were not in favor of). These disfranchised voters instead embraced a new Republican conservative platform based on law and order that labeled White Americans as law-abiding citizens, pinning minorities as agitators. During the 70’s and 80’s institutionalized racism replaced Jim Crow, arguably maintaining a racial hierarchy that placed white Americans at a significant advantage.

So what does this have to do with Trump supporters? Well after the great recession of late 2008, the unemployment level increased leaving middle class families financially unstable. No longer did a financial crisis affect only minorities, but this time it took a toll on all Americans. During this period anti-immigrant sentiment began to grow, further creating the notion that the government no longer represented everyone equally. Poor White Americans felt no longer represent by their representatives in congress. More profoundly, they no longer felt like their status as White America would provide a safety net for them. That is until Mr. Trump blamed the government, immigrants and other factors for this disparity. The message spread and resonated among others who felt the same way but couldn’t say out loud because it had a racist connotation.

The problem is, the Republican party accepted the fact that they needed the Latino vote. Except the anti-immigrant and xenophobic language Mr. Trump echoes at his rallies further alienates these necessary voters, but attracts many who feel otherwise. Mr. Trump’s popularity hurts the Republican party, but alienating him also alienates his supporters; a key demographic to Republicans. So what to do? not even Republican elites know.
Changes in Antidumping Filings and Duties  
_by Michael Enseki-Frank_

I gave a presentation on the thesis that I am writing for the Clark Honors College on antidumping (AD) duties. I wanted to show the club the process that goes into writing a thesis, including how to choose a topic and thesis advisor, and how to collect data. I also wanted to discuss the basics of AD duties.

Dumping occurs when a firm charges an export price that is significantly lower than the price that they charge in their own market. Sometimes dumping may be related to “predatory pricing,” in which a foreign company deliberately sells goods at a low price in order to drive out domestic competition. The two formal criteria for dumping are called “fair value” and “material injury.”

If the exporting firm is found to be charging a price that is below “fair value,” they may be subjected to a penalty. “Fair value” is meant to indicate the “ex factory” price of the good in the exporter’s market. By “ex factory” we mean the price of the good as it leaves the factory, i.e. before the addition of transportation costs and other things that might increase the price. If the exporting country does not sell the product in their own market, then the price of the good in a third country may be used. Another way to calculate fair value is through “constructed cost.” In this method the agency attempts to calculate the cost of producing one unit of the good, plus some overhead costs and profits. This information is requested from the firm that is accused of dumping, and providing this information can be costly and difficult. If the exporting firm refuses to provide this information, then the agency can use “facts available” to estimate the fair value, a calculation method that can be quite arbitrary.

The second criterion is meant to indicate whether the dumping activity has caused (or threatens to cause) material injury to the domestic industry. Various indicators of domestic performance may be used to calculate material injury such as productivity and employment. The agency is also supposed to establish a causal relationship, but this can be very difficult to prove. If the “fair value” and “material injury” criteria are met, then an antidumping duty can be implemented.
There are a number of types of penalties that can be levied. Ad valorem duties are calculated based on a percentage of the price of the good. Specific duties represent a fixed value charged for a certain amount of the good sold. Price undertaking occurs when a price floor is established. Sometimes the exporting firm may choose to cease exporting the good entirely due to these duties.

The number of countries with AD laws has proliferated over the past several decades, making this topic increasingly important for understanding international trade. My thesis will look at the behavior of countries that are in the early stages of developing AD laws, and how these laws affect AD petitions in those countries. This thesis was inspired by a paper entitled “Evolving Discretionary Practices of U.S. Anti-dumping Activity” written by my thesis advisor, Dr. Bruce Blonigen, which analyzed the evolution of the Department of Commerce’s use of AD laws. I hope that my presentation inspired other members of the club to consider writing an honors thesis.
We will be in Mackenzie 221 on Mondays at 6pm all spring term.

There will be pizza.
Bring your friends.

The Econ Study Room is in room 428 at the Knight Library on Mondays and Wednesdays from 4:00-6:00.

We have peer advising available in PLC 414 on Mondays and Wednesdays from 3:30-4:30.

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