

Cows in Control

Special Report – 2022 Vision and Forecasts



Introduction

In the wake of viruses, sky-high stock markets, record beef prices, and runaway grain prices, I thought I would take on the foolish notion of trying to make predictions of prices and themes for the upcoming year[s].

To start off and illustrate my folly in doing so, here are some quotes from some of the greatest investors and writers on the subject of making predictions:

"A fool thinks himself to be wise, but a wise man knows himself to be a fool"

- William Shakespeare

"We have long felt that the only value of [market] forecasters is to make fortunetellers look good"

- Warren Buffett

"In this business, if you are good, you're right six times out of ten. You're never going to be right nine times out of ten"

- Peter Lynch

"The [market] is never obvious, it is designed to fool most of the people, most of the time"

- Jesse Livermore

"The lips of fools bring them strife, and their mouths invite a beating"
- Proverbs 18:6

Well now, that being said, let's move on.

Let's look at various sectors and interject some projections and thoughts based on some technical analysis, some fundamental analysis, and some wild--- guessing. Hopefully it will be of interest to you and assist you with your planning and strategy-making in the upcoming year. If it sparks a fresh idea, I have done my duty.

All the best to you this new year!

Ryan Copithorne



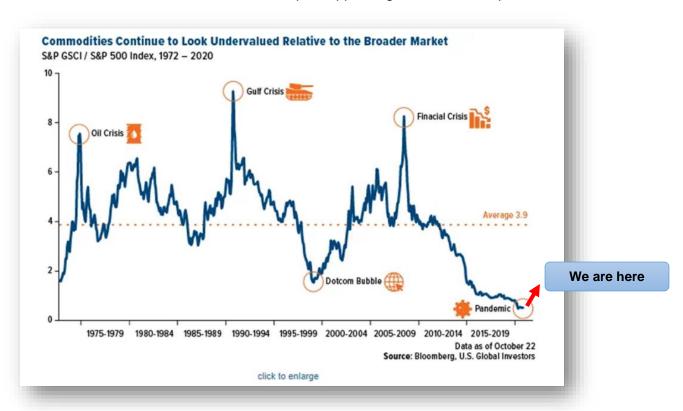
Contents

Commodity Price Inflation in general	3
Commodity price cycles	4
China and Russia	6
US dollar and Canadian dollar	8
Grain prices	9
Energy	12
Fertilizer	15
Farmland prices	16
Debt and interest	17
Stocks	18
The United States	19
Cattle (finally, but it is affected by all that other stuff!)	20
Upside case for cattle prices:	21
Risks to cattle prices:	22
Cattle on feed	22
Other meats	23
Themes to consider for 2022	24
Commodity inflation:	24
Keep cattle hedges up:	24
Balanced operations:	24
Carbon credits:	24
Fix or hedge your energy costs	24
Localize our markets	
Reduce debt	25
Succession Tsunami	25



Commodity Price Inflation in general

Commodity prices relative to other asset classes are still extremely undervalued. The little run up in prices this past year has not even blipped the radar on this stocks:commodities price chart below. Stocks can not continue to rise when input supplies tighten and rise in price.

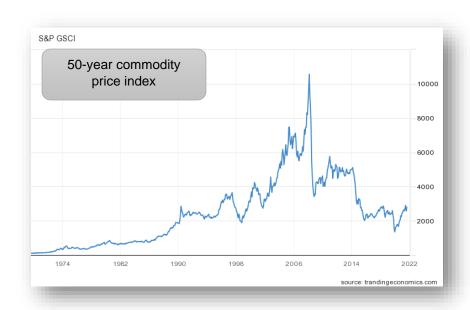


ESG investing, environmentalism, anti-oil, anti-commodity development. These attitudes of today's "Woke" society are for now the behaviours of people well fed and well supplied. When this trend reverses, expect the scramble for scarce commodities to focus attention away from digitalizing or electrifying everything, to where will the next meal come from, what will heat our houses, where will we get our supplies? This is the biggest trend of this forecast that I think you can bank on to some degree or another, even if it has fits-and-starts getting going.

On the chart next page, commodity prices are trading at levels not seen since the 1990's. Low interest rates and cheap easy money have caused commodity prices to depress. It has been too easy to borrow money to expand or start projects with easy lending.

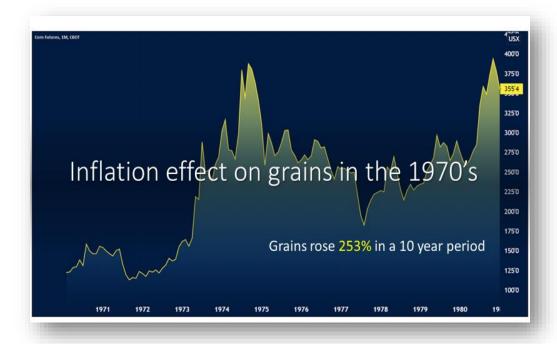
However, environmental regulations will kill that trend. Note that places like China have seen urban population go from 26% in 1990 to now over 64%, and the income shift that has occurred from that. Urbanization and demographic shifts from lower to middle and upper class are happening globally. As we started to see last year, commodity prices will become scarce and rise in value.





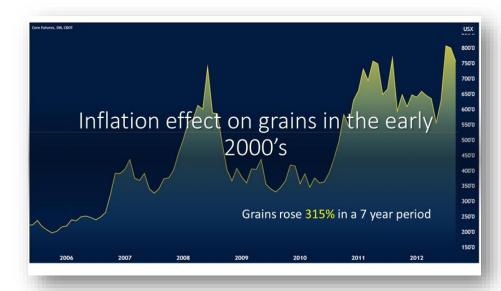
Commodity price cycles

Commodity price cycles are often 7-10 years long and can see massive upswings in prices over the duration with lots of volatility. In the 1970's grain prices rose 253% in a 10 year period...

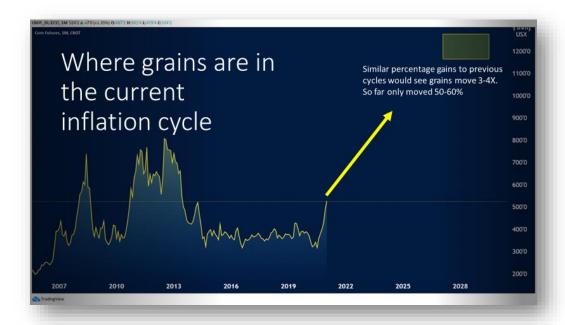




The next major commodity upcycle we saw was in the 2000-2008 period (or 2015 end date for agricultural commodities). During that period we saw grains rise 315% in a 7 year period.

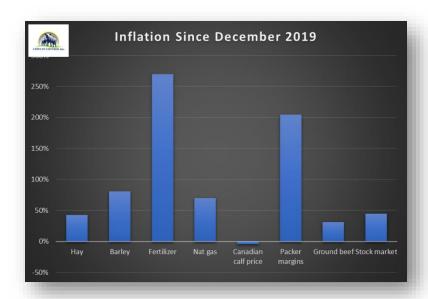


If we are again in a commodity super cycle, we have got a long way to go. These charts focus on grain, but most commodities trade in a similar fashion. Grains are up only 60% or so in this latest rally. Anything similar to prior cycles would suggest we are only just beginning to see higher commodity prices.





This commodity rally began in earnest during the Covid lockdowns of 2020 amid the trillions of dollars printed to battle Covid. Some items like fertilizer have skyrocketed over 200%, but most commodities still have had muted gains relative to prior cycles. Cattle prices have not moved at all...yet!



China and Russia

One of the biggest charts on my radar this year is the Chinese Yuan relative to the US dollar. It is breaking out higher after a 7 year down trend. Why does this matter? It will drive prices.





China is the largest consumer of commodities in the world now. They are also shifting from a production economy (produces cheap goods to export to the world) into a consumer economy (like the US). A consumer economy has a large middle class that likes to spend money.

In the 1970's China had a huge birth/population explosion. When those 1970's babies were working-aged in the 1990's, China dropped their currency and created factories for them to work in. A cheap currency allowed them to export cheaply, create jobs, and grow wealth rapidly.

Those citizens are now aging, and most are moved into the middle class. They don't want or need to work in factories. They want homes, cars, the luxuries we have in North America. China needs to find commodities and goods to satisfy their growing consumer appetite. The way to do that is raise the currency to give them global buying power.

On the previous currency graph, you can see how they let the currency rise during the last commodity run in the early 2000's. There is a good chance they will do so again and become aggressive major global buyers of commodities driving inflation once more.

This is all very bullish for commodity prices but a bit scary for us Western economies as we are now head-to-head competing for basic goods in short supply. Tensions arise from these types of competitions. The semiconductor shortage is the most obvious example. The looming war over Taiwan will remain a factor. The US dollar may be in trouble as well. China will move to establish its own currency to get off its reliance on the US dollar.





Also developing is the alliance between China, Russia and Iran. China needs Russia's energy, commodities and nukes. Watch for the growth of the old Soviet breadbasket to get support from Chinese investment through Russia. More and more ag products will come from East Europe.

China also needs Iran's oil so will be quick to defend it. There is a Triple Axis forming.

Europe, who is reliant on Russia's natural gas, is in an uncomfortable spot on where to put alliances. No wonder they are trying to get off fossil fuels.

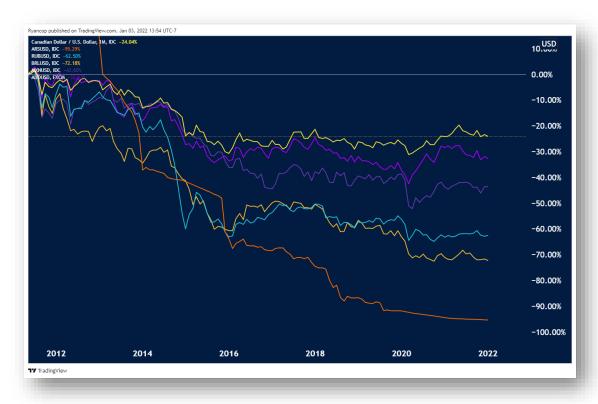


US dollar and Canadian dollar

Predicting the direction of the US and Canadian dollar is a fool's game, but it is one of the biggest influences on our commodity prices so let's look at it briefly

On the one hand, Europe is a train wreck of debt, energy shortages and fracturing socialist governments. So to compare the US dollar against the Euro, bet on the dollar any day. Now comparing the US dollar to other commodity currencies in an inflation environment, or against China that may manipulate its Yuan higher by selling US dollars, that is another story.

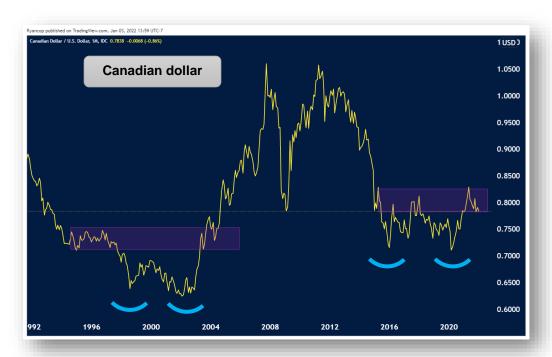
A lower US dollar would be bullish for commodity producing countries like Canada. Below are the currencies of Canada, Australia, Mexico, Russia, Brazil and Argentina since the last commodity peak. All down, 25-95% depending on the country. As commodity demand strengthens, the goods these countries sell will become more valuable as will their countries net worth and ultimately currencies to varying degrees. Betting long commodity currencies in a commodity scramble between the US and China could be lucrative.



In Canada, when our Loonie drops in value, our cattle prices generally rise in price as US buyers come looking for deals. The opposite can occur when our currency rises. Our cattle become more expensive to buy for foreign buyers and prices can drop.

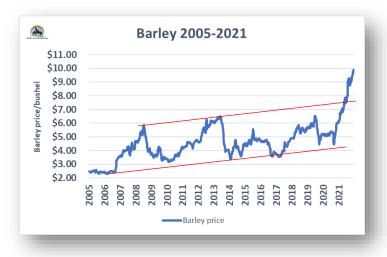


In the last commodity rally from 2000-2012, the Loonie rose from the low 60 cents to over par. Will we see a similar occurrence should a commodity super cycle rally occur? We are never sure, but the set up is looking good so far and we will be ready with Canadian dollar hedges should this occur (it is still scrambling in the breakout stage for now).



Grain prices

No need to remind you of the run in barley...





Corn prices have had their obvious blow out rally as well, but was it enough? Corn prices rallied to the old highs, and have since settled back 50-60% of its gains, a typical corrective set back. Now what?



We discussed earlier how the grains can move 2-300% higher in major commodity cycles. We are up about 60% right now. Fertilizer prices have spiked 250% higher, and corn is the largest user of fertilizer of the major crops.

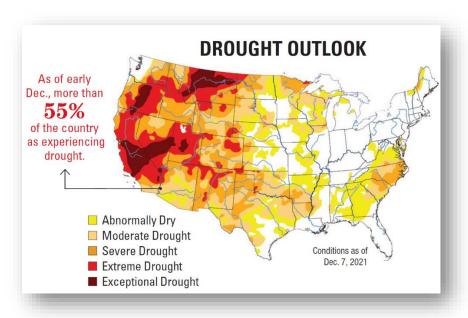
Note how many rallies and setbacks occurred between 2002 and 2012 before it finally peaked. So far, we have had only one blow off rally and a set back. This summer is projected as another La Nina year like last year, however with a different spin. Weather forecasters are pointing to cold weather in the Alaska peninsula which they say coincides with a dry Midwest in the corn belt, potentially drought by the summer of 2022. (Don't ask me, but they've been right so far predicting the droughts.)

A corn rally back to the old highs would not be out of the question for corn, dragging our Canadian feed grain prices higher with it. A break of the old highs creates a potential new high range of \$12 corn using prior measured moves as a guide.

According to the weather outlook, dry conditions in Canada and the northwest states should alleviate somewhat from last year, but the dry conditions will move into the mid west US states



where most of the corn is grown. Predicting weather is worse than predicting markets, so do what you will with the information...



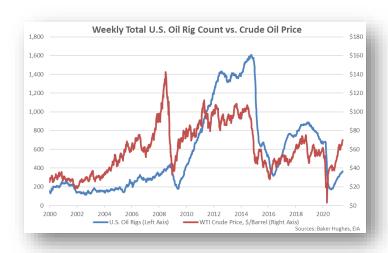
With barley trading near \$10/bu in Canada, calf prices are trading near their finishing breakevens. If grains drop, you can see where calf prices will go to. If grains continue to rise, we will need cattle futures to rise to counter that effect or calf prices could suffer.



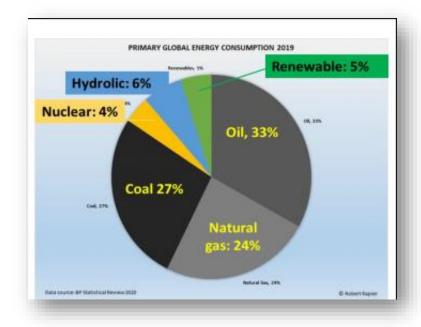


Energy

This winter has been a time to thank the good people that produce energy that heat our houses. Politicians are on a crash course to freeze us to death. Rig counts are down to a third of what they were in 2015 and not growing significantly even with the price of oil rising.



Government is shutting down coal, oil and natural gas production by 2030 using regulations, carbon taxes, cutting pipelines, prohibitions, and restricting investment in the space. Scary when that is what gives us 84% of our energy; and the alternative sources have yet to be built. Suicidal. The only cure for this situation is some cold nights and higher energy prices.





Over Christmas, it was cold. 94% of Alberta's energy generation was being reported from fossil fuels even though renewables are supposed to account for up to 15% of our capacity. Renewables don't function in mid winter arctic conditions as Texas learned last year. We would have froze to death if not for fossil fuels this Christmas.

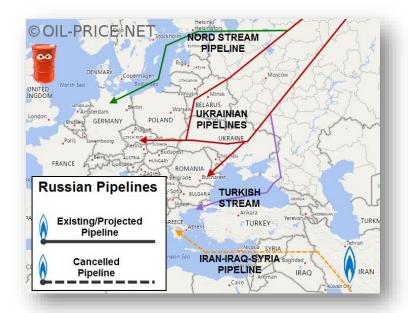
Gener	ation					26-Dec	-2021 at 19:36:0
Coal Capacity		Gas		Hydro		Dual F	uel
84.1%	2127 MW of 2530 MW	76.2%	7751 MW of 10166 MW	22.3%	199 MW of 894 MW	51.6%	80 MV of 155 MV
20.0% Reserve	2127 MW of 10645 MW	72.8%	7751 MW of 10645 MW	1.9% I	199 MW	0.8%	80 MV of 10645 MV
155	MW	102	MW	166	MW	0	MW
Biomas Capacity	ss	Wind		Solar		Storage	
72.6%	308 MW of 424 MW	7.9%	180 MW of 2269 MW	0.0%	0 MW of 736 MW	0.0%	0 MV of 50 MV
Current Gen	eration 308 MW		180 MW		0 MW		0 MV
2.9% Reserve	of 10645 MW	1.7% I	of 10645 MW	0.0%	UMWY	0.0%	of 10645 MV
17	MW	0	MW	0	MW	50	MW
Interc	hange						
BC		SK		MT		Temperature	
266	Importing MW	153	Importing MW	96	Importing MW	-28°C	
Summ	nary						
Generation		Interchange		Load		Pool Price	
10,645	MW	515	Importing MW	11,160	4.6% Imported MW	679.46	12/26/2021 19 /MW

More serious is the situation in Europe. Our gas prices in the North America are around \$3-4/mmbtu. In Europe they generally trade about \$3 higher than us at around \$6. This last fall, when Russia threatened to invade the Ukraine, nat gas prices in Europe got up to \$46/mmbtu. Ours popped to about \$6 and have recently lazily set back down under \$4.

With the de-escalation of Russian on Ukraine's borders, and 32 LNG (liquified natural gas) ships from the US landing in Europe, things appear to have cooled a bit. Prices have set back. The majority of the Europe's energy comes from Russia, and most of it through the Ukraine, a potential war zone. The much talked about Nord Stream pipeline projected to go from Russia to Germany through the North Sea is still in construction. The US and NATO are threatening sanctions on Russia if it doesn't leave the Ukraine. This situation is not over by a long shot.

If you can take natural gas from America at \$4 and sell it in Europe or Asia for \$27 and it costs \$3 to get it there, do you think we will stay at \$4 gas?





Nord Stream is in construction

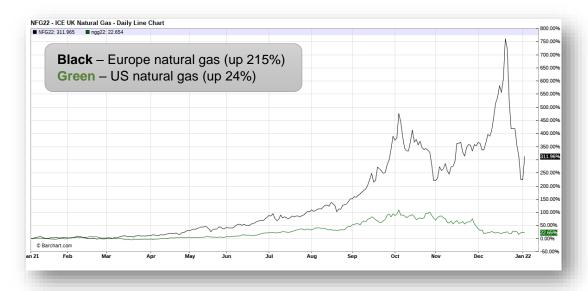
Middle East pipeline was cancelled

Ukrainian pipelines are in threat with Russia's potential invasion of the Ukraine

Turkey is in total economic collapse

No wonder Europe is so bent on Green energy!

European nat gas has bottomed at \$27/mmbtu while our nat gas is still under \$4. If the traditional \$3 spread holds, either our gas will go up substantially or Europe's must continue to fall. Which one will you bet on?



Be sure to fix your natural gas rates or seek hedges for nat gas, diesel, gas and energy prices. Oh, and don't forget Trudeau just jacked the carbon tax to \$50/MT from \$30/MT and plans to hike it to \$170/MT by 2050. My prediction is that tensions will not go away but get worse in the Ukraine, Russian wants the Ukraine. I see higher energy prices ahead.



Fertilizer

With high natural gas prices come high fertilizer prices. Couple that with some hoarding by China, supply chain challenges, production challenges due to Covid, and high grain prices, and we have a good old supply squeeze.



Though most analysts suggest the squeeze and high prices will last well into spring, the near vertical chart reminds me that vertical charts don't stay vertical for very long. It has stopped rising for now and if like any other commodity is due for a pullback. Whether we see cheaper prices at farm gate by spring is questionable, but looking at Urea prices and such, it does look like it could pull back, before likely going back higher again. Buy the dips in the market.

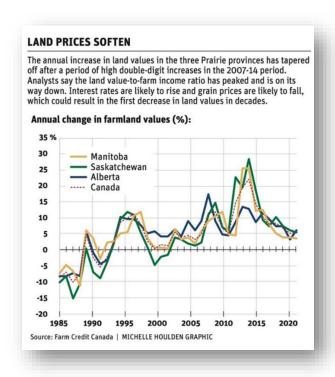
At the end of the day, hay prices will remain high with high fertilizer prices. Grain prices will be high as well not only because of the cost of fertilizer but the reduced yields when people cut back on fertilizer. Another potential rally in natural gas will also rally fertilizer prices once more.

When the world needs feed the most, it will have a hard time growing it. Finding ways to integrate livestock onto croplands will be the solution and discussion of the future. Regenerative agriculture techniques that reduce the need for synthetic fertilizers. Manure and nitrogen fixing legumes are fertilizer alternatives. Hopefully you can lead the charge here.



Farmland prices

I saw this Tweet from FCC and it was a head scratcher for me. FCC suggests farmland prices will fall as interest rates rise this year and grain prices "fall". Both of those seem likely reasons for farmland to fall for sure...if you believe that thesis. Maybe its an old Tweet? What if grain prices don't "fall" and interest rates don't rise as much as feared?



If we are in the early innings of a commodity super cycle, then farmland growth could be more like the 2000-2015 period on this graph. 2015 to 2021 has been a commodity sell-off.

Interest rates are definitely a headwind to farmland prices as we saw in the 1980's. However, there are a few significant differences between now and the 1980's.

First of all, the government didn't have near the debt levels it has today. Government can't afford to jack rates to 18% like they did in 1982 or they will default on their overwhelming debt.

Secondly, the 1980's came at the end of a decade long commodity *bull* run. In contrast, today, we are ending a decade long *bear* market in commodities. They are just beginning to rise.

Lastly, the fed has to protect its precious stock and bond market bubble. Rapidly rising interest rates will prick the bubble. It is not so simple as comparing today to the late 1970's.

Farmland in Alberta has risen by 8% per year on average since 1950 and yielded 1-2% in rent revenue. It's the best, most stable investment out there, own as much as you can.



Debt and interest

We won't go too deep here, but a talk about interest rates can help determine whether farmland is a good buy or not. Or, whether we should mortgage or buy with equity, take on more debt or get out of debt.

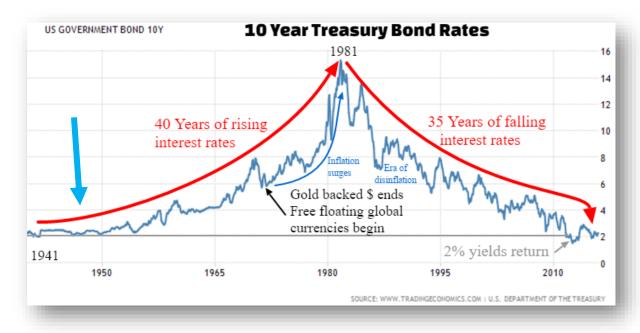
Interest rates are driven by the following factors:

- Central banks who set short term rates based on economic conditions
- Bond markets trading interest rates on bonds which are really just long-term money
- Government debt levels (government sells bonds in exchange for cash to spend)
- Perceived risk in the marketplace (the more risk, the higher the rates)
- Willingness of individuals, business, government to borrow more

In general, central banks control the short-term interest rates with their policies. Bond traders, government, businesses and individuals set the longer-term borrowing rates by their willingness to buy bonds or borrow 5, 10, 20 or 30 years out on things like house mortgages and such.

Governments just printed some \$60 trillion during Covid. Global debt is at \$226 trillion and that represents 256% of global GDP. That's right, there is 2.56 times more debt in the world than the world's total collective productive ability. Yay governments! Heck of a business they're running.

The Covid era has been much like the US in World War Two. They printed boat loads of money for the war effort, kept interest rates low (blue arrow below) and eventually paid most of it down at the end of the lucrative boom of the 1950's to 1960's era (with a little help from selling their gold reserves along the way).





We are now at all time low interest rates, but global governments can't afford to raise them. Otherwise, their game of cards is up, and swaths of indebted countries tied at the hip will have to default on their currencies and debts. China, US, Canada, Japan, and Europe in particular.

No, they keep rates low, encourage excessive borrowing, stock market manias, bond market bubbles, housing price bubbles, supply shortages, cheap commodities. Then they use Covid crises, carbon taxes, ESG and other economic inhibitors to try to put the brakes on inflation to keep it from getting out of control. Its called Modern Monetary Theory.

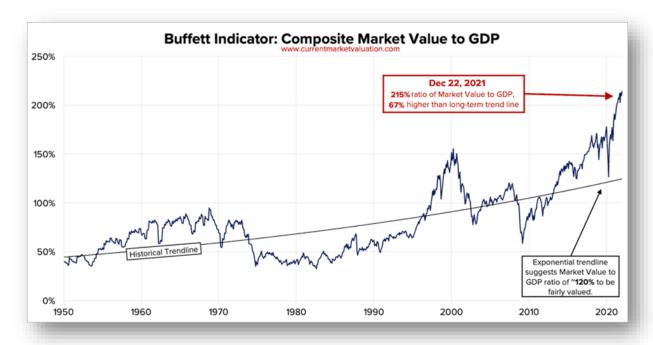
If the government can keep everyone playing this stupid game, rates should only rise a point or two over the next few years. On the other hand, if people look at the exorbitant stock market, house prices, bond prices, debt levels and regulations on their businesses and personal lives, and say "no more", the gig is up. Rates will skyrocket like they did in the 1980's, and we go into a default scenario. That's what is happening in Turkey right now.

The game will eventually end, it is just a matter of when, but they have been playing it a long time. They just keep propping it up with easy government money and low interest rates. I would suggest keeping your debt levels as low as possible, swapping debt for equity, and holding real assets (like farmland) that aren't overinflated (like Toronto houses or stocks).

Best I can do on interest rates.

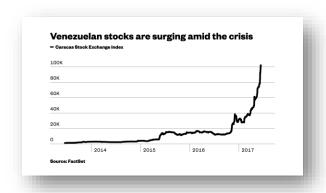
Stocks

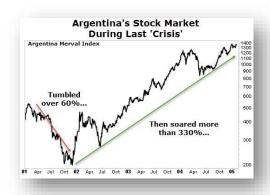
This is Warren Buffett's Value indicator for the stock market. Stocks in the US are valued at 215% more than the entire US's gross domestic product. That's all I will say about stocks.





I'll just add that a currency or bond crisis from printing too much money isn't always bad for the stock market. In fact, a bubbly stock market can be like an insanity weather gauge. Just look at Venezuela and Argentina's stock markets during their crises that saw the total collapse of their economies. Look familiar? I hope not.





The United States

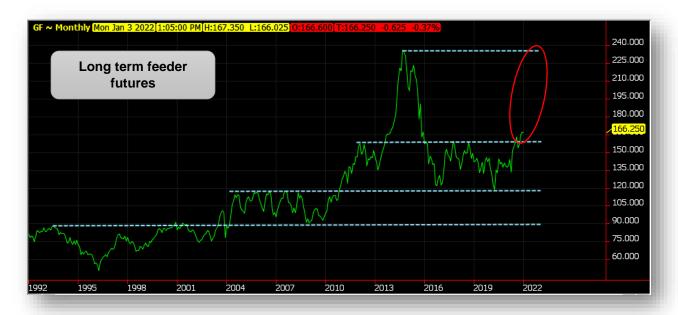
Here are a few things to comment about the US that could affect our cattle prices ultimately.

- 1. Biden's \$1B investment in packing space We've discussed this at length with clients, this is bullish cattle prices, but is definitely government encroachment in our industry, good or bad. It is possible the packing space will get over capitalized, overbuilt with government dollars and need to be baled out in a few years. The real challenge is finding more packing labour which they didn't address. Let's hope they don't blow the sector up. It is good they are addressing the competition issue.
- 2. Tariffs and protectionism as mentioned earlier, governments that are printing too much money will use lockdowns, taxes, tariffs, regulations and any other economic inhibitors to slow down inflation from their newly printed money. Watch for MCOOL, trade tariffs, BSE fears and other free trade barriers that could be used as tools to cool the economy, keep food cheap, and tax foreigners. They have already enacted a "Product of USA" legislation again which is a milder form of MCOOL.
- 3. Infrastructure spending and "Build Back Better" 3.5 trillion will enter the US economy under these initiatives. Couple this with China's Silk Road Initiative and that is a monstrous amount of global commodity usage and wealth redistribution. America boomed during the building of the interstate highways in the 1950's. We'll see how effective Green energy and other Build Back Better initiatives are at stimulating, but we won't ignore it. Should be good for cattle prices as it is inflationary.
- **4. Mid term elections** the mid term elections are next fall. It is possible US voters will get sick of "Sleepy Joe" and all the government spending and it is also possible the Democrats could lose the House of Congress. Watch for spending to get kiboshed in that sort of a deadlock, impeachment hearings (yes again), and likely stock markets to fall when the easy money taps go away in deadlock.



Cattle (finally, but it really is affected by all that other stuff!)

The most important thing to know about cattle is the chart below. Cattle are breaking out of a long sideways consolidation into a new trading range we saw once before in 2014/2015. A breakout usually involves revisiting the old highs as soon as possible.



If cattle head back to the old highs, we are looking at \$3/lb eight weights, \$3.50/lb calves, or \$2.10/lb slaughter prices in Canada at the high end. Current prices will serve as the bottom end of the range. That's a bit of a game changer, isn't it? Look how wide the trading range is!

The futures market has already priced in quite a bit of upside for our cattle even today...

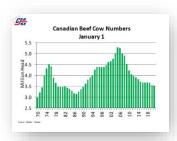


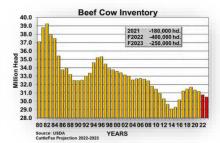
What's driving it?



Upside case for cattle prices:

1. Inventories – Cattle numbers are way down and dropping still. The 10-year cattle cycle is in full swing in the US. The lows in prices were around 2020. The highs are expected to be around 2025. Lower inventories will strengthen prices in the next 3-5 years.





2. **Demand** – Beef demand is still sky-high globally and rising. Choice cutout today near \$265/cwt should justify 15% higher prices alone over today's prices as tighter inventories pull margin away from packers back to the producers



- 3. Inflation as input costs rise for ranchers, prices will have to rise as well to offset more herd liquidation. Fertilizer is up 250%, grains are up 60%, fuel is up 40%, hay up 70%. Cattle will have to rise or this business will hollow out pretty quickly. Cheap grain, cheap cattle, and vice versa. Cattle futures have already started working on this problem.
- 4. Packing capacity the biggest hold back for North American cattle prices has been the lack of packing capacity in the US. They still have backlogs of 350,000 head of cattle and can use that excess supply to grind down cattle prices while raking record profits on the beef they sell. There is projected to be 8-10,000 head of new kill capacity coming on in the US which will alleviate the problem and shift leverage back to producers. In the next few years the ratio of cattle to packing capacity is set to dramatically decrease (note: this is before Biden's recent \$1B packing investment announcement):
 - **2021 109%** (e.g. 9% more cattle than packing space)
 - 2022 **-** 104%
 - 2023 99%
 - **2024 95%** (5% less cattle than packer availability, that's bullish!)



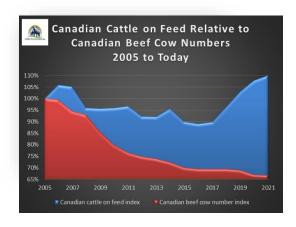
Risks to cattle prices:

Let's look at some risks because it can't all be upside. Though I think prices are going much higher, I also believe it will be a choppy line with lots of drops along the way. Here are some risks to consider:

- 1. **Demand destruction** the cure for high prices is high prices. Beef prices are soaring at record levels. Any hiccups in the economy or beef simply being too expensive relative to chicken and pork could alter the demand side of the equation.
- **2. Trade restrictions** watch for protectionism. MCOOL, BSE, trade tariffs, livestock reduction bills, methane taxes, what have you. Governments are heavily in debt, looking for things to tax, to keep food cheap, and ways to appease their overburdened tax base.
- **3.** Cold war the US is in a de facto cold war with China and Russia. Any escalation could take China off the market for North American product even if short term.
- **4. Drought** if we get back-to-back drought this year, more cattle could come to town and soften prices. A drought in the Midwest will cause grain prices to rise, hurting breakevens. Literal animal feed shortages could be an issue should droughts continue.
- 5. Plant strike/outage when 35-40% of our total packing capacity can be tied up by one plant, and two plants process 70-80% of our total supply in Canada, this is a risk. Cargill avoided a strike last month. Will other plant unions flex their muscles while they have the leverage to do so? Beef prices are high, plant profits are high, lives were lost during Covid and more importantly Cargill workers just got a huge pay raise by threatening a strike. Why not try? They are in the sweet spot to renegotiate. Plant shutdowns are becoming more of a risk as plants consolidate. We need more, smaller, custom plants. Biden's initiative was half right, we need something like that in Canada.
- **6. Cost inflation** if input costs keep rising faster than cattle prices can react, it may serve as a headwind to people wanting to buy cattle, thereby softening prices. Cattle futures prices should compensate for this but sometimes operate on a lag.

Cattle on feed

I wanted to address cattle on feed in Canada. Though our beef cattle inventories are down 35% from the peak in 2005, cattle in feedlots are up 10% over the same period.

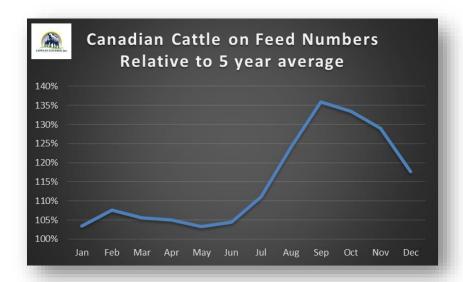


Beef cows down 35% (red) while cattle on feed up 10% (blue) since the 2005 peak in cow numbers



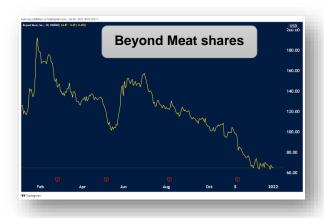
The drought in the Northern states as well as in Canada brought a lot of cattle into feedlots this summer and fall that normally wouldn't have been there.

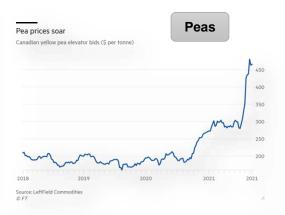
The graph below shows Canada had as many as 35% more cattle on feed than normal this year, but that number is now steeply dropping even though still at elevated levels. This could be considered as positive. Should the drought alleviate itself in the next year, cattle numbers in feedlots could drop significantly as less drought cattle come to town.



Other meats

The following two graphs illustrate the threat or non-threat of plant-based alternatives to meat. Look at the performance of Beyond Beef shares after some competition hit the market and a shortage of ingredients like peas. Its not all roses for alternative meats.







Themes to consider for 2022

Commodity inflation:

The best way to battle inflation is to produce or own real assets that appreciate during inflationary periods. Farmland, feed, cattle and other commodities. Unfortunately, many input costs are inflationary so it is imperative to limit input usage at the same time. Equipment, vehicles, labour, bought feed, materials and energy will all be headwinds to your profitability. Finding ways to let cattle maintain themselves without mechanical or human intervention is key to surviving inflationary environments. The other way is not to own the cattle and charge out your assets, labour and services at inflationary levels.

Keep cattle hedges up:

Though cattle prices appear to be headed higher, there are a tremendous amount of risks out there to derail that idea, even if short term in nature. Keeping hedges in place on marketable livestock is critical to surviving this type of volatility. Lock in when markets make new highs. Look to buy on dips in the market. Volatility in the new trading range will be more than we have grown accustomed to in the last 5-6 years. Use some insurance to hedge border risk.

Balanced operations:

The key to survival in the next few years will not be maximizing, but in optimizing operations. Cows and calves have great upside potential but are lousy in a drought or soft markets as they don't generate a lot of cash flow and are illiquid to sell. A mixture of yearlings that are easily liquid and can be sold in a drought, or easily added on a good year without having to add infrastructure, is a good plan. A mix of other livestock types is also a great idea if inclined, to diversify revenue streams. Growing feed is also critical as feed costs are going to remain high likely for a while. There may be more dollars in producing and selling feed than livestock in many cases. Both yearlings and feed are liquid assets that can be sold for cash flow in a pinch. Consider also mixing in some custom operations for adding to cash flow.

Carbon credits:

Under your cows is likely at least 10 acres or more of forage ground sequestering carbon. At \$50/ton carbon, those forages are sequestering \$50-200/acre of carbon annually and are sitting on a carbon bank in the soil of up to 200 MT's of carbon that no one is giving you any credit for. Please don't sell your carbon credits too cheaply or tie up your land in 20-year deals that tie up your carbon without paying fair and full value for it. This is an industry problem that is being ill addressed right now. We're sitting on a gold mine of carbon. The world has decided carbon is to be taxable and tradeable. We should be the bankers. Grasslands and cattle can offset the entire Canadian reduction mandates if they would give us credit for it. Don't give it away.

Fix or hedge your energy costs

The environmental movement is causing a disaster in the form of an emerging energy crisis. All forms of energy are going to get extremely expensive. You can't swap out 100% efficient fossil fuels for 30% efficient renewables without deficiencies. Especially in the time frames proposed.



Add in carbon taxes on top, and energy is set to be very expensive. We can hedge energy with the futures market, you can fix natural gas and utilities rates with your provider, and you can store fuel. Perhaps the best way to hedge is to reduce your dependency on it. Get cattle out of barns and yards. Reduce equipment and mechanized feeding. Try to get cows to graze as much of the year as possible. Move away from daily feeding. Share equipment with neighbours when possible. Less outbuildings. Reduce cattle hauling, sell off the farms when possible.

Localize our markets

In a politically unstable world, relying on exports can be dangerous. The solution is to not be reliant on them and focus on more local marketing. We need more smaller packing plants that allow custom processing. Ranch to retail. Local branding. Exports are important for our country, but we may have to focus on countries that won't one day align against us. Mexico, the US, Australia, and other commonwealth countries, CPTPP countries. Countries that are not subject to closure should trade wars or worse yet, cold wars escalate.

Reduce debt

Borrowing low interest money could produce substantial returns if we get a continuing inflationary environment. However, weigh the risk of debt defaults at the country levels and it could cause rates to spike higher unexpectedly. This is an era to be prudent with debt while global debt levels are 2.5 times what the world actually produces in a year. It's a time bomb.

Succession Tsunami

In 2017 Stats Canada reported the average age of the farmer to be 55 years old. There were more 70-year-olds than 35-year-olds in the business and 92% of farms had no written plan for who will take over when the operator retires. Assuming half of the people are approaching retirement age that means around \$245 billion in farmland or 50 million acres of farmland are likely going to turn over in the next 20 years. Who do we want to buy it? Bill Gates and his meat alternatives view on food? Are you and your operation ready for turnover? We need to work on solutions to getting young people engaged and involved. Young farmers and ranchers who understand the industry, or else the business and farmland will be gobbled up by people or corporations that may not share our views, values and beliefs.

Good luck out there this year! Give us a call if you have any questions, we are always pleased to assist how and when we can to keep you profitable and safe!

Any questions or inquiries, please feel free to contact

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