



The Bull market continues

I am looking at soybeans continuing to rally into **Sept 26th** time frame. This could be a short term high. I am now looking at SX23. We have two impulse waves off the recent lows. One is US\$ 1.52 in length and the other is US\$ 1.27.

I am still asking myself: are these reactionary waves or the beginning of a **FIVE** wave structure that would take us back to last summer's highs in the Feb 13th, 2023 to March 2nd, 2023 time frame. With the USA crop coming in "light", this means Brazil must step up and pick up the slack. If any hiccups in South

America due to triple dip La Niña or Murphys Law, the bull will extend into April 2024 as per Martin Armstrong's 8.6 year commodity cycle off of the late 2015 Bloomberg commodity index low and the March 2nd, 2016 soybean low.

I am fairly confident that April 19th, 2023 will be a significant low. This time frame links in with the 2008 high and also the July 5th, 2022 sell off in soybeans. I think there will be pressure in the market at this time, but very likely a buy of a lifetime if it sets up correctly.

If we get back to recent highs in SX22 such as the 15.30 to 15.60 area, I think you need to be a seller. Looking forward, if you are worried about a big South America crop, you do not need to sell or hedge SX 23. The Brazil grain traders will be using March and May 2023 contracts. You could just sell the May 2023 as a short term hedge this winter. If we get to 14.25 to 14.45 basis



SX23, at least go to the elevator or coop and sell 5000 bu of 2023 new crop for some peace of mind. Start somewhere..... For you options traders, there should be some opportunity to sell some OTM Calls this winter if SX gets up to 14.70 on a BR weather scare. I would not marry them, but I think we will see premium decay into April 2023 and there will be some opportunity there if the USDA keeps giving us Bullish news in future reports. I still think equities will be lower into 1st quarter of 2023, which means a strong dollar and commodities will have to fight their way higher.

Obviously, if we have any type of meltdown or new black swan in the world, the 12.15 area will be key basis Nov 23. Two closes below 12.15 and we need to re-evaluate. Given current fundamentals and carryovers, 12.15 should be a cement floor with rebar in it.

REGIÃO/UF	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22 Previsão (!)
NORTE	2,172.2	2,661.5	3,391.6	4,289.5	3,818.9	5,536.5	6,012.6	6,147.0	6,902.1	7,384.0	8,379.9
RR	10.4	33.6	56.4	63.9	79.2	90.0	117.5	108.0	151.6	210.0	285.0
RO	462.2	539.3	607.7	732.9	765.0	930.3	1,095.2	1,109.2	1,233.7	1,375.1	1,668.8
AC	-	-	-	-	-	-	1.5	4.4	11.8	16.4	20.4
AM	-	-	-	-	-	-	3.4	5.3	5.3	12.9	13.5
AP	-	-	-	-	-	54.4	58.3	57.5	59.3	12.8	17.2
PA	316.7	552.2	668.6	1,017.0	1,288.0	1,635.3	1,596.6	1,708.9	1,859.3	2,230.8	2,497.9
TO	1,382.9	1,536.4	2,058.8	2,475.7	1,686.7	2,826.4	3,140.2	3,153.7	3,581.1	3,526.0	3,877.1
NORDESTE	6,096.3	5,294.8	6,654.0	8,114.1	5,107.1	9,644.7	11,903.1	11,034.9	11,819.6	12,852.2	13,979.9
MA	1,650.6	1,685.9	1,856.8	2,099.6	1,250.2	2,473.3	3,025.8	2,992.1	3,130.3	3,285.6	3,573.6
PI	1,263.1	916.9	1,489.2	1,833.8	645.8	2,048.1	2,538.6	2,634.4	2,562.8	2,719.8	3,014.0
CE	-	-	-	-	-	-	-	-	-	-	-
RN	-	-	-	-	-	-	-	-	-	-	-
PB	-	-	-	-	-	-	-	-	-	-	-
PE	-	-	-	-	-	-	-	-	-	-	-
AL	-	-	-	-	-	-	5.5	4.5	4.5	8.8	6.9
SE	-	-	-	-	-	-	-	-	-	-	-
BA	3,182.6	2,692.0	3,308.0	4,180.7	3,211.1	5,123.3	6,333.2	5,403.9	6,122.0	6,838.0	7,385.4
CENTRO-OESTE	34,904.8	38,091.4	41,800.5	43,968.5	43,999.4	50,642.6	55,398.4	55,058.1	60,697.5	64,796.5	68,025.5
MT	21,849.00	23,532.80	26,441.58	28,018.59	26,277.5	30,709.3	33,200.9	32,958.9	35,884.7	36,521.8	41,490.2
MS	4,628.3	5,809.0	6,148.0	7,177.6	7,241.4	8,575.8	9,715.4	9,759.7	11,362.8	12,196.8	8,832.2
GO	8,251.5	8,562.9	8,994.9	8,625.1	10,249.5	11,110.8	12,222.6	12,097.9	13,159.4	15,785.9	17,389.9
DF	176.00	186.70	216.00	147.32	231.00	246.68	259.55	241.60	290.60	292.00	313.20
SUDESTE	4,656.3	5,425.9	5,033.9	5,890.6	7,591.1	8,151.5	9,157.2	8,613.9	10,131.1	11,321.1	11,767.0
MG	3,058.7	3,374.8	3,345.6	3,524.1	4,747.3	5,067.2	5,747.4	5,386.2	6,172.4	7,021.7	7,590.5
ES	-	-	-	-	-	-	-	-	-	-	-
RJ	-	-	-	-	-	-	-	-	-	-	-
SP	1,597.6	2,051.1	1,688.3	2,366.5	2,843.8	3,084.3	3,409.8	3,227.7	3,958.7	4,299.4	4,176.5
SUL	18,553.4	30,025.8	29,292.7	34,831.2	35,181.1	41,051.3	40,787.5	38,864.2	35,294.5	43,031.5	23,400.0
PR	10,941.9	15,912.4	14,780.7	17,210.5	16,844.5	19,922.2	20,044.9	16,921.5	21,598.1	19,880.1	12,250.3
SC	1,084.9	1,578.5	1,644.4	1,920.3	2,135.2	2,292.6	2,362.8	2,420.5	2,252.8	2,363.9	2,038.7
RS	6,526.6	12,534.9	12,867.7	15,700.4	16,201.4	18,836.4	18,379.8	19,522.2	11,443.6	20,787.5	9,111.0
NORTE/NORDESTE	8,268.5	7,956.3	10,045.6	12,403.7	8,926.0	15,181.2	17,915.7	17,181.9	18,721.7	20,236.2	22,359.8
CENTRO-SUL	58,114.5	73,543.1	76,127.2	84,690.3	86,771.6	99,845.4	105,343.2	102,536.2	106,123.1	119,149.1	103,192.5
BRASIL	66,383.0	81,499.4	86,172.8	97,094.0	95,697.6	115,026.7	123,258.9	119,718.1	124,844.8	139,385.3	125,552.3

The above is a soybean production table from Conab.

I think last year's soybean crop was likely a 148 MMT potential starting point given that they increased soy planted area to 41.5 M hectares for 2022.

I was thinking 42 M ha for 2023, but now that is too low. We are likely looking at 42.5 to 43 M ha for 2023. This means a potential starting point of circa 153 M tons for 2023.

If we look back 11/12 years, we see the drought year of 2011-2012. Brazil produced 66 million tons of soybeans.

If we measure from there and Brazil produces 153 M tons in 2023, that is a 130% increase in 11/12 years. Let that sink in.

If the USA corn crop continues to shrink in future reports, I fear we are looking at some strange Soy/Corn ratios for new crop 2023. SX/CZ

If corn is trading 7 bucks all winter and basis is doing all the heavy lifting, how can Nov 23 soybeans break below 14 bucks, for example?

I am sure someone with a Bloomberg terminal can help me here, but I am asking myself, with a big Brazil crop and slow demand, could we be dealing with a 1.8:1 or lower Soybean/Corn ratio by next spring?

We had an extreme like this during trade war if I remember correctly.

With expensive fertilizer and a big Brazil crop, I think we will have much to talk about this winter.

On the flip side, if Brazil or Argentina comes in 10 million tons light again because of La Niña 3.0, well then there is no rush to sell SX23.

We will be off to the races again buying acres again into spring of 2023.

If Brazil would come in 20 million light again, then we have not seen anything yet. Katie bar the door. This is pie in the sky thinking today, but worth keeping in back of our minds.

IMEA in Mato Grosso shocked me last week by increasing the corn production number. Bunge traders told me back in June that the MT crop potential was likely 45 MMT. In the end it did not matter that we lost 1-2 MMT in the Nova Mutum micro region. A large increase in planted area, genetics, and lots of fertilizer allowed productivity to offset any losses in other areas. We truly have a new paradigm in MT as per corn production.

I would like to close by thanking Simon Atkins with his help the past year in sniffing out the USA drought and above normal temps a year in advance.

I had old mentors from 30 years ago that gave me the 60 Deg in Feb in Des Moines as a leading indicator for hot and dry summer conditions. One never knows if it will be a full on drought or just a hit to APH. For the most part it was the latter. The funny thing is back home in Roso county, we will likely have better beans than in some parts of Iowa. 50 bu beans might be common along the Canadian border/RRV this fall. A 1 in 20 year event that finally worked out in our favor.

In defeat of Brazil, Europe gives green light to environmental sanctions

9/13/2022

The European Parliament approved this Tuesday, for the first time, the first resolution that establishes a kind of trade sanctions regime to be applied against Brazil on account of deforestation. The measure is a hard diplomatic defeat for the government of Jair Bolsonaro.

The proposal calls for European companies to ensure that the supply of meat, soy, cocoa and other products does not occur in a way that deforests forests. Importers will have to prove that the purchase of products will be from suppliers that comply with environmental requirements. An inspection will be established in this regard. But the rest of the production continues to be exported on a regular basis.

For the project to come into force, it still needs to be approved by each of the 27 EU member countries and negotiations will begin so that a final text is the subject of an agreement. But the step in Parliament was regarded as historic.

In the months leading up to the vote, the Brazilian government mobilized its diplomacy to try to prevent the establishment of the new commercial structure, with Itamaraty even suggesting that it was a violation of WTO (World Trade Organization) rules.

The Europeans' law is to prevent what they call "importing deforestation". In practice, what they want is to raise barriers to agricultural products that have been grown in recently deforested areas.

In other words: if it is proved that soy exported by Brazil was responsible for deforestation, the EU could increase the tariffs charged against national products.

Mirror of Brazil's isolation and the failure of environmental policy

Within Itamaraty, even though the law does not specifically mention Brazil, the initiative is considered a response aimed at the country and its exports.

The approval in Parliament is also seen as a confirmation of the failure of Bolsonaro's diplomacy, both in terms of environmental issues and in terms of the government's ability to negotiate Brazilian commercial interests abroad.

If progressive and environmental groups within the European Parliament defended the law, one wing insists the measure comes at a difficult time in the global food trade. With the war in Ukraine, grain supplies were affected and, within the European Commission, voices were raised about the need to re-establish the trade agreement with Mercosur and accelerate its implementation, which is currently paralyzed.

Even so, the new law passed by a large majority. There were 453 votes in support, against only 57 against and 123 abstentions.

Behind the scenes, the government of Jair Bolsonaro has led an offensive by emerging countries to try to prevent Europe from applying protectionist measures. In a letter sent to the European Commission, Brazil and a dozen developing countries warned that such barriers could violate international treaties.

For Brazil, commercial measures cannot be used to achieve environmental goals and threaten to deepen poverty, with no effect on forest conservation. The group also warns that the proposal could violate WTO trade agreements.

In the document, delivered at the end of July to the direction of the European Commission, emerging countries indicated that they are aware of the need to defend the environment. But "they regret that the EU has opted for unilateral legislation" rather than following established international agreements.

The group led by Brazil wants Europe to expand consultations with foreign governments, before applying the barriers. In the document, emerging countries also regret that the arguments presented so far by these countries have been ignored.

According to the letter, the process in Europe does not sufficiently take into account the local conditions of each of the regions, with a basis of criteria that would be "punitive". The group warns that the greatest risk is that such measures will cause "trade distortions and diplomatic tensions, without benefit to the environment".

The measures would also undermine the reputation of companies and will penalize producers in developing countries, especially small farmers.

The group also claims to be concerned about the discriminatory nature of the measures. According to them, such barriers can have a "negative" social impact and "economic consequences" for developing economies.

In addition to Brazil and Indonesia, the ambassadors of Argentina, Colombia, Ghana, Guatemala, Ivory Coast, Nigeria, Paraguay, Peru, Honduras, Bolivia, Ecuador and Malaysia signed the letter.

From Barrons:

Booming Gun Ownership Triggers Fears For Brazil Vote

By Eugenia LOGIURATTO
September 12, 2022

Wearing a black T-shirt stamped with the word "Bolsonaro" and a skull, Brazilian ex-cop Elitusaalem Gomes Freitas takes aim with his .40-caliber rifle and fires, savoring the smell of gunpowder as he nails his target.

Clutching his bulky black rifle at a firing range in the Rio de Janeiro suburbs, a handgun strapped to his thigh, Freitas proudly repeats one of far-right President Jair Bolsonaro's maxims: "An armed populace will never be enslaved."

Freitas is part of a demographic that has boomed in Bolsonaro's Brazil: since the former army captain became president in 2019, the number of registered gun owners has more than quintupled, from 117,000 to 673,000, as the administration has loosened gun-control laws.

There are now more civilian gun owners in Brazil than police -- 406,384.

That is making some Brazilians nervous as the country heads for a divisive presidential election on October 2 pitting Bolsonaro against his leftist nemesis, ex-president Luiz Inacio Lula da Silva (2003-2010), who leads in the polls.

Citing fears of election violence, the Supreme Court temporarily suspended several of Bolsonaro's gun-control rollbacks last week. The week before, the Superior Electoral Tribunal (TSE) banned voters from bringing guns to polling stations.

Like Bolsonaro, Freitas is no fan of the electoral authority, which the president accuses of allowing what he insists -- without evidence -- is rampant fraud in Brazil's electronic voting system.

After inspecting the white silhouette target he has just filled with holes, Freitas, 42, explains he is ready to take up arms if necessary to defend Brazil's "freedom."

"I can't allow half a dozen people (the TSE's judges) to decide our nation's destiny against the people's will. The right to bear arms is how we guarantee our freedom and defend our sovereignty against the internal enemy," he says.

But he adds there is nothing to fear from Brazil's burgeoning class of firearm owners.

"It's not about arming everyone. It's about giving good citizens the right to access a firearm and learn to use it." Security expert Bruno Langeani says hardliners ready to take up arms in the name of politics are a minority in Brazil.

But he emphasizes that "even a minority can cause huge damage if it's radicalized," pointing to the rioters who stormed the US Capitol last year after the election loss of ex-president Donald Trump -- Bolsonaro's political role model.

Langeani says the massive expansion of gun ownership in Brazil will be a "cursed inheritance" that could fuel violence for years to come.

"A civilian can now buy more powerful guns than the police," he says.

"Licensed hunters, sport shooters and collectors can in some cases own up to 60 firearms per person, including 30 assault rifles."

There are 4.4 million firearms in civilian hands in Brazil, a country of 212 million people, according to the Brazilian Public Security Forum.

One-third of them have expired permits.

Bolsonaro points to a fall in murders as evidence his gun policies are a success: last year, the number of homicides fell by 13 percent.

However, the number of murders with firearms increased by 24 percent, according to health ministry figures.

Around 1,000 shooting clubs -- members-only firing ranges -- have opened in Brazil since Bolsonaro took office, according to army figures cited by online news site UOL.

"When the government made it easier to purchase firearms, I said, 'We have to jump on this,'" says former policeman Marcelo Costa, president of the club where Freitas practices, Mil Armas (One Thousand Firearms), which opened four years ago.

Costa operates the club with his two sons, both in their twenties and both fellow gun enthusiasts. His wife, a psychologist, is licensed by the authorities to perform the mandatory psychological evaluations of all new members.

The club, which has strict security protocols, offers lessons for members, and legal advice for those who want to obtain a gun license.

Members can borrow or purchase weapons from the club's vast arsenal, with prices ranging from 5,000 to 20,000 reais (**US\$ 950-\$3,800**).

"It's like a shopping mall. We have everything," says Costa, who offers the option to buy guns in up to 12 installments with no interest.

Low-cost equipment developed at UFS facilitates grain quality assessment

Technology helps rural producer in decision making in farming



Innovative solution allows to determine grain mass and moisture.

Although Brazil is among the four largest grain producers in the world, with more than 60 million hectares of planted area, according to the IBGE (Brazilian Institute of Geography and Statistics), about 10% of all national production is lost in pre- and post-harvest phases.

Among the main causes for the losses is the lack of information on the physicochemical properties of the grains to guarantee productivity. It was thinking about the importance of using data in the processes of production, storage and commercialization of cereals that researchers from the Federal University of Sergipe (UFS) developed a system to evaluate the quality of grains, such as corn. The tool allows checking the apparent specific mass and moisture content.

According to the coordinator of the Laboratory of Machines and Motors (Lamot) of the Department of Agricultural Engineering at UFS, Professor Wellington Gonzaga do Vale, the innovative solution seeks to assist rural producers in decision making in the field.

“These data are indispensable in all stages of the production process, from the moment of harvest, during drying, in the storage procedure, in commercialization and industrialization, whether for human or animal consumption,” justifies the professor.



Professor Wellington do Vale coordinates the Laboratory of Agricultural Machines and Engines at UFS “The tool allows the producer to have greater freedom and agility in decision-making and to identify the right moment of harvest, when the grain has the ideal humidity for storage, avoiding losses and enabling greater profitability at the time of commercialization”, complements Wellington do Vale.

The Agricultural Engineering student at UFS, Agnaldo Santana dos Santos, worked on building the system for a year, through the Institutional Program for Initiation Scholarships in Technological Development and Innovation (PIBITI). Low cost, with good precision, and easy to handle, the equipment was modeled and printed in 3D.

The tool allows checking the properties of grains from temperature and mass sensors. Then, the collected data is sent for analysis on the computer or cell phone, through a bluetooth network or through an internet connection.

“The water content of the grains is usually checked using the oven method, which lasts around 24 hours. The system we developed can determine this property in less than a minute, making it possible to optimize time,” explains the student.



Student Agnaldo Santana dos Santos developed the innovative solution through PIBITI

Professor Wellington do Vale says that the objective is to introduce digital agriculture in a more accessible way to small rural producers and, consequently, generate more profitability, since existing equipment on the market is considered expensive.

The researcher also states that, after the tests at the Laboratory of Agricultural Machines and Engines at UFS, the goal is to validate the tool with corn producers in the interior of Sergipe in the harvest of the next crop, starting next October.