Eastern Europe



Will History Repeat

By Martín Armstrong November 2022



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Armstrong Economics

360 Central Avenue, Suite 800 St Petersburg, Florida 33701 +1 - 727 - 485 - 0111

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he greatest symbol of the old Iron Curtain was naturally the Berlin Wall. I personal went through Check Point Charlie with a friend to visit his family who had been trapped on the Eastern side. So, I experienced what it really was like and our cancel culture today is dangerously flirting with the very same atmosphere that existed behind the wall back then. Everyone listened to what you said and if it was against the state, you were in trouble.

After World War II ended in 1945, Europe was divided into Western Europe and Eastern Europe by the Iron Curtain. Western Europe promoted capitalist republics, not real democracies, and Eastern Europe came under the Communist influence of the Soviet Union and marched to the drums of Marxism.

After the collapse of the Soviet Union in 1991, Eastern Europe began to transition toward Western European ideals. It was actually Ukraine who pushed the USSR into collapse. The Eastern Europe shifting toward open market economies, private ownership, and the EU rather than the old Soviet Union. Wherever people were living simply became their property.

Countries with stable governments and industrial potential have been accepted into the EU and have expanding economies. Other countries that have not reached that level of economic development or political reforms have not been admitted into the EU yet continue to flirt with the idea including Ukraine.

The transition of former Soviet republics to capitalist systems has not been without difficulties, including unemployment, inflation, corruption, crime, and poverty. Political infighting has been evident in the transitioning countries that do not yet have a stable form of government or economy for that matter.

The breakup of former Yugoslavia was an example of how strong devolutionary forces can promote nationalism resulting in open war. The once stable country of Yugoslavia split into seven separate countries patterned after the nation-state concept. Bosnia remains the most diverse state, with a majority Muslim population which resided that thanks to the 17th century invasion of the Ottoman Empire. Crimea has still a large population of Tartars, which settled there with the Mongol Invasion of the region during the 13th century.

The breakup of Yugoslavia occurred as a result of a series of political upheavals and conflicts during the early 1990s. After a period of political and economic crisis in the 1980s, constituent republics of the Socialist Federal Republic of Yugoslavia split apart, but the unresolved issues caused bitter inter–ethnic Yugoslav wars. The wars primarily affected Bosnia and Herzegovina, neighboring parts of Croatia and, some years later, Kosovo.



After the Allied victory in World War II, Yugoslavia was set up as a federation of six republics, with borders drawn along ethnic and historical lines: Bosnia and Herzegovina, Croatia. Macedonia, Montenegro, Serbia, and Slovenia. In addition, two autonomous provinces were within established Serbia: Vojvodina and Kosovo.

Each of the republics had its own

branch of the League of Communists of Yugoslavia party and a ruling elite. Any tensions that arose from the ethnic diversity were solved on the federal level. In

this respect, the Yugoslav model of state organization, was a relative success. However, the ethnic hatreds were merely suppressed.

Nevertheless, Yugoslavia had experienced a robust period of strong economic growth with this period of ethnic and political stability up until the 1980s during the administration of Josip Broz Tito (1892–1980) who ruled from 1953 until his death on May $4^{\rm th}$, 1980. Tito was born to a Croat father and Slovene mother in the village of Kumrovec, which was then Austria–Hungary but today is in Croatia.

Following his death in 1980, that is when the economy began to weaken lacking confidence in the central governmental federal system. As Marxism was



Josip Broz (May 7, 1892 - May 4, 1980) President of Yugoslavia (January 4, 1953 - May 4, 1980)

beginning to reveal its structural faults, the left was simply unable to cope with rising economic and political challenges.

With the death of Tito, the Albanians of Kosovo started to demand that their autonomous province be granted the status of a constituent republic, starting with the 1981 protests. Ethnic tensions between Albanians and Kosovo Serbs remained extremely high over the whole decade, which resulted in the growth of Serb



Slobodan Milošević (1941 – 2006) President of Serbia (1989 - 1997)

opposition to the high autonomy of provinces and ineffective system of consensus at the federal level across Yugoslavia, which were seen as an obstacle for Serb interests.

Finally, in 1987, Slobodan Milošević (1941–2006) came to power in Serbia becoming president in 1989 until 1997 through a series of populist moves. He ended up with de facto control over Kosovo, Vojvodina, and Montenegro, with strong support among Serbs for his centralist policies. Milošević faced opposition by party leaders of Slovenia and Croatia, who also advocated greater democratization of the country in line with the Revolutions of 1989 in Eastern Europe.

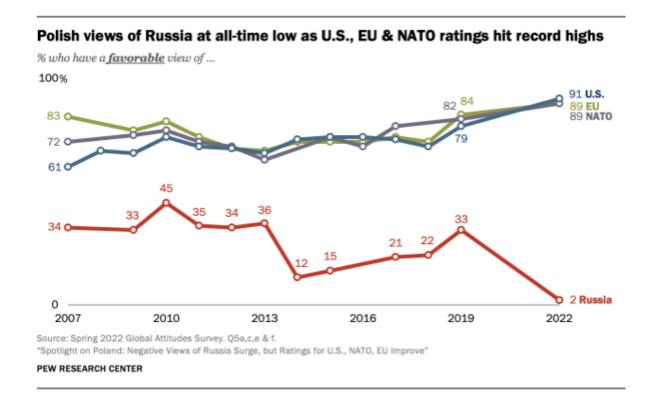
During 1990, the socialists (former communists) lost power to ethnic separatist parties in the first multi-party elections held across the country, except in Serbia and Montenegro, where Milošević and his allies won. Nationalist rhetoric on all sides became increasingly heated demonizing the other ethnic groups. Between June 1991 and April 1992, four constituent republics declared independence (only Serbia and Montenegro remained federated).

Germany took the initiative and recognized the independence of Croatia and Slovenia. However, the status of ethnic Serbs and ethnic Croats outside of their respective republics remained an unsolved issue. After a string of inter-ethnic incidents, the Yugoslav Wars ensued, first in Croatia and then, most severely, in multi-ethnic Bosnia and Herzegovina. The wars left economic and political damage in the region that is still felt there decades later.



The ethnic conflicts throughout the entire region remain. Recently, Germany has delivered an ultimatum to Serbia telling Belgrade it must choose sides between the EU and Russia. The people throughout that region into Montenegro support Russia. They are all aware of the distrustful Ukrainians and will never trust them knowing full well that the Ukrainian Neo-Nazis were never prosecuted and were instead protected by the American CIA. They do not trust the Ukrainians and this goes back centuries.

Poland v Russia



he attitude in Poland v Russia has turned dramatically anti-Russian ever since the invasion of Ukraine. The attitudes in Poland towards Russia are at all-time lows since Pew Research Center began tracking opinion on this question in 2007. The overwhelming negative opinions of the Russian state have reached 94% who now see Russia as a major threat. That is a dramatic rise up from 65% just in 2018.

The dramatic decline in any positive attitude with respect to Russia is music to the ears of NATO. They see Poland as a buffer against Russia to protect Europe as they are doing with Ukraine. Poland is a member of NATO and the European Union. On the contrary, about nine-in-ten Poles have a favorable view of the U.S., NATO and the EU, all of which represent the highest poll since 2007.

What is astonishing is that Poland has, according to Pew Research, an 82% confidence rating for U.S. President Joe Biden. Since they held only a 51% approval rating of Donald Trump, this raises the question if the Polish are also just pro-war and want to kill as many Russians as the Ukrainians.

Poland v Russia

In addition, roughly two-thirds in Poland see having a close relationship with the U.S. as more important than having one with Russia. Only 1% want a closer relationship with Russia, while 28% volunteer that both are equally important. Just three years ago, more than half of Poles (53%) offered that both relationships are equally important.



It was Hitler who invaded Poland and Russia invaded but occupied Poland only from September 17th, 1939. Unfortunately, 86 years from that time coincide with the people of international war coming around 2025. That aligns with 2025 when we have a Panic Cycle. If Poland is going to end up in war with Russia, it may appear at that time in 2025.

Czech Republic





[1/3] Demonstrators take part in a pro-government and anti-war protest rally in Prague, Czech Republic October 30, 2022 REUTERS/David W Cerny

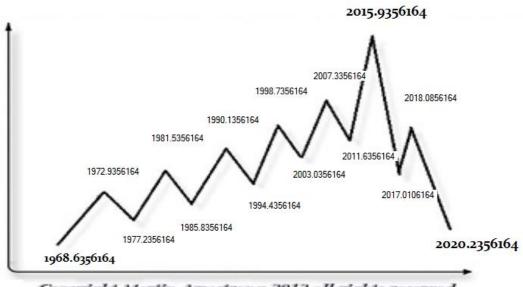
The Czech Republic is firmly anti-Russian. Tens of thousands of Czechs gathered in the capital on Sunday to demonstrate their solidarity with Ukraine and their support for democratic values.

The degree of hatred toward Russians in the Czech Republic was astonishing. Leading Czech politicians were in March 2022 calling for all property within the Czech Republic belonging to anyone who was Russian was to be indefinitely 'frozen' in violation of international law. The onus would be on the victims to "prove" that they are against the Putin regime. There are about 40,000 Russians living in the Czech Republic, plus others who have property or businesses there.



Pavel Fischer Czech Republic chairman of the Senate Foreign Affairs Committee

Czechoslovakia



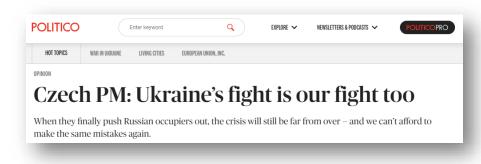
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The EU is increasingly being viewed as an evil, lawless, government. However, the Eastern European EU members are now even worse than the Western ones. They seem to go further violating international law trying to prove to the West that they are good little obedient vassals.

Fischer is violating every principle of what the EU was supposed to stand for – human rights. The Czech Republic has clearly begun a new cycle which began with the COVID Crash. They are themselves waging racism, prejudice, and in the

end, they are only bonding all Russians against the West for now being treated as scum.

Petr Fiala is the prime minister of the Czech Republic. He is firmly anti-Russian and we



can expect that they will be with Poland against Russia.

Greece v Turkey



News | Military

Could Greece, Turkey tensions spill into open conflict?

Greece and Turkey could come to blows ahead of elections in both countries next year, say experts on both sides.



The EU in its attempt to force compliance with EU policies against Russia are cutting across the historical norms in Eastern Europe. Serbia and Slovakia see the major of people are pro Russia. Even the tensions between Turkey and Greece, two NATO states, is rising. Once again, this is historical ethnic conflict that goes back to the days of ancient Athens v the Persians.

It was at the Battle of Salamis, (480BC), in which a Greek fleet defeated much larger Persian naval forces in the straits at Salamis, between the island of Salamis and the Athenian port-city of Piraeus. Ironically, just count the 8.6-year intervals since then and the target of 2022.6 which was August 7th, 2022. That is when Turkey came to an agreement since Turkey needs Russian cash, gas and business as Erdogan also looks to a dicey election in 2023 and a new incursion in Syria.

What is becoming clear is that Turkey will most likely side with Russia for Greece is its old archenemy who will be with the EU. Greek officials have admitted that relations with Turkey have reached a new historic low as both nations will face

Greece v Turkey

elections in June 2023. The likelihood of a military incident between Turkey and Greece in the Aegean or Eastern Mediterranean is significantly higher during 2023. This would trigger a wider conflict and may indeed expose a rift within NATO.

Some fear that President Recep Tayyip Erdogan would seek to create a national security crisis against its old ethnic and hated rival that would boost his popularity for the 2023 election.

Greek War of Independence (1821–1830), against the Ottoman Empire; First Greco-Turkish War (1897); Second Greco-Turkish War (1919–1922). Our model implies an all-out war to the death between Turkey and Greece is likely in 2027.

The Ottoman Empire officially ended in 1922 when the title of Ottoman Sultan was eliminated. Turkey was declared a republic on October 29th, 1923, when Mustafa Kemal Atatürk (1881–1938), an army officer, founded the independent Republic of Turkey.

It certainly appears that Turkey will attempt to resurrect the Ottoman Empire, which collapsed in 1922 by 2025.

Putin's Russia



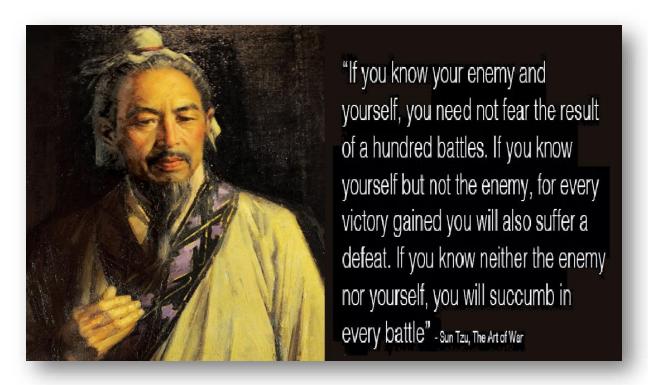
Thile the image of Putin created by the propaganda of the West is anything but just fake news, my deepest concern is that 31.4 years from the fall of the Soviet Union in 1991. I am concerned that if Putin is overthrown, the propaganda of the Western press makes it sound like everything will be back to normal. That is so far from the truth, it is not even funny.

As I have warned, the standard military tactic is that if you are going to invade a country, the first thing you do is take down the power grid. Then you attack the communications, and finally the water supply. Accomplish that, and it becomes easy pickings. The more we become dependent upon electrics for cars and currency, the harder a nation will fall under these tactics.

Moreover, Zelensky has been extorting money from the West by the ton. He defaulted on all dent and only in August did the rating agencies raise their ranking out of default merely because he promised to resume interest payments after 2024 – a totally impossible task.

This scenario painted by the West that Putin is somehow this evil madman is their standard war tactic. They used this one Iraq and they tried very hard to use it to justify invading Syria. These people are deranged and they think if they overthrow the head of state, the people will cheer and they will be given a ticker tape parade when they invade. That delusional view of their own magnanimous nature

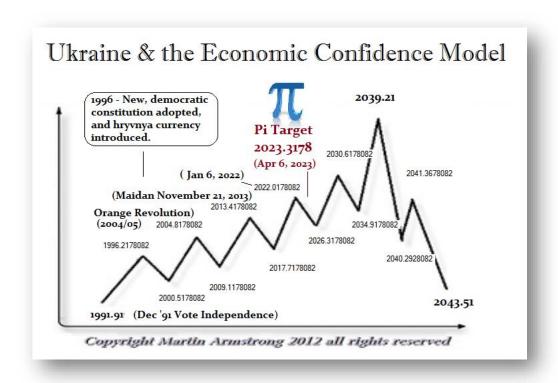
has yet to ever work even once. They are not the great champions of Democracy for the West is by no means a democracy anyhow – it's just a Republic. They have so demonized Putin that this image has been transferred to all Russians who should be exterminated for they are beyond rehabilitation.



The problem that exists is one of the primary rules in the Art of War is to know your enemy. With all the propaganda from the West, they have so distorted the truth thinking the Russian people will rejoice and welcome the surrender of the country to NATO, that nobody asks: What if that idea is wrong?

Putin is a historian. The great empire of Russia that he lamented was not that of Lenin and Stalin. He is the only Russian head of state to criticize Lenin as just being a Bolshevik. The Rus began in Kiev. That city to Putin was like London to the United States – the origin. That is why he did only what he said he would do – protect the Donbas. But the hardliners have been critical and demanding action, Only approaching 8.6 months into the war has Putin began to attack Kyiv with missiles and drones.

The great empire of Russia to Putin was that of the Tsars. Russia has the largest gold reserves of any country in the world in 1917. They either buried it or dropped it to the bottom of the deepest lake to prevent the Communists from getting control of the gold reserves. Nobody has ever found that gold to date.



The Pi Target from the fall of the Soviet Union will be April 6th, 2023. Zelensky stood up on February 23rd, 2022 and said he wanted to restore nukes in Ukraine in direct violation of all the agreements since 1991. The next day Putin invaded.

There is a serious question as to why the Western press has been putting out nothing but one-sided propaganda. I have been warned that my sources in Russia





are concerned that the hardliners behind the scene have been critical of Putin for **NOT** being more aggressive. Of course, there is the youth protesting over the war and the Western press has been happy to project only that image.

Today, for the very first time, the New York Times has actually reported what I have been warning about, that "Powerful, well positioned and ideologically committed, they want a much more aggressive war effort. "1

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¹ https://www.nytimes.com/2022/09/22/opinion/russia-ukraine-putin.html



John McCain, who never met a Russia he did not want to kill, was there at Maidan promising US support to overthrow Yanukovych and to create a revolution against Russia. It was John McCain who was pushing to fund the proxy way against Putin in 2014.

In December 2016 after Trump was elected, he traveled to Ukraine promising military support to wage war on Russia backing the neo-Nazis. Trump rejected that and that is why McCain hated Trump. McCain has been pushing war with Russia all along. It was the US-installed "interim" government in 2014 that began the civil war attacking the Donbas. The Biden Administration has rejected ever peace agreement even that regarding the one-China agreement. It was precisely to the day 31.4 years from June 4th, 1989 and Tiananmen Square incident that Biden reversed the policy on Taiwan. Biden has rejected the Minsk Agreement brokered by Germany and France to allow the Donbas to vote on their separation from Ukraine. Zelensky has refused to recognize that agreement at all as well as the Belgrade Agreement where Ukraine was to remain neutral.

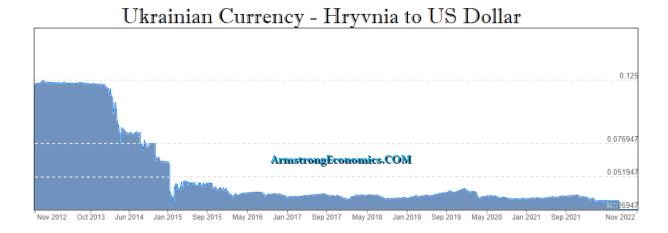




Zelensky promised peace and the end of corruption in order to win election. He has done the exact opposite once in power sacrificing his entire population on the orders from the Biden Administration that instructed him that there will be no negotiation for peace.

Zelensky even rejected Henry Kissinger's advice to let the Donbas vote. Zelensky would rather destroy his entire country than yield "one inch" to Russia of territory that has been part of Russia since the days of the Tsars.

I am deeply concerned that if Putin falls for any reason, we are looking at significant risk and our computer's forecast back in 2013 that Ukraine will be the hot sport, is exactly on track. Russia has its hawks just as we have had to endure John McCain who has supported endless wars for his personal vendetta. Despite his death, other has taken up the agenda and are working hard for war with Russia and the Hawks are doing in Russia and China right now. The smartest play they can make is to attack Taiwan and go fully into Ukraine simultaneously. The West is economically too weak to support a war on two fronts simultaneously. I cannot believe our world leaders are this stupid.



Despite all the propaganda, all we have to do is look at the currency. The Hryvnia went into a free-fall in 2013. That is when our computer projected that we would see Ukraine as the hot spot where World War III would emerge. That forecast many viewed as coming out of left field, we can see that the currency was reflecting the truth.

From 2013, capital began to flee Ukraine. They knew a revolution was coming and that the US neocons were behind it to transform Ukraine into a proxy war against Russia. The currency plummeted into a panic in 2015. It has been unable to recover despite the billions of dollars being poured into this most corrupt political state in Europe of not the entire world.

I have warned that Ukraine is losing and it is the MOST corrupt country in Europe if not the world. The Biden Administrations corruption from Hunter getting a job and Biden threatening prosecutors had to be fired investigating the company that hired his son, to now Biden is insisting that a Ukrainian should be put in charge of NATO. If anyone would launch a first strike, it would be a Ukrainian who are consumed with hatred of all Russians as they adhere to the Nazi agenda of ethnic cleansing.

Now, for the first time since the Russian invasion began, the Ukrainian government has simply seized private assets no different than most of the ruthless regimes such as Iran. They claimed under wartime powers they are seizing five "strategically important" companies for state and military use. Zelensky has declared he is imposing "de-oligarchization" reforms which amounts to just seizing the assets of the rich and public companies. He will not do the same to the neo-Nazis who are promoting this war to the death. He claims they are facing major corruption investigations so he has abandoned international law and pronounced them guilty without a trial or conviction. Ukraine is NOT a country to ever trust!

Putin's Russia

Ukraine is trying to claim territory that was NEVER Ukrainian and has been occupied by Russian going back to the days of the Tsars. Ukrainians hate Russians and the West has refused to ever address the human rights violation or sizing property based solely of ethnicity.

Zelensky has set in motion the total destruction of Ukraine for the US and NATO simply are using the Ukrainian people as cannon fodder in a proxy war they hope will weaken Russia so they can then invade Russia under the pretense of human rights.

Beware of April 2023.

Monetary History of Russia



Vladimir Sviatoslavich as Grand Prince of Kiev Symbol of Ukraine comes from this Coinage (980-1015)

he Russian Monetary System began also with cattle (skot) during the Kievan period. Skins of small animals and precious metals were used as fixed-value exchange rate based upon barter goods. Up until the end of the 12th century, cattle were the unit of account but commerce took place with the skins of small animals. Actually, furs became the common method of payment for they were valued in terms of cattle, but were much easier for transport and divisibility for small transactions. This made small furs much more suitable for money and they were also an important item of export. Written sources began to speak of such units of payment as kuna (marten's fur, from kunitsa, a marten), belka or veksha (squirrel), veveritsa (ermine) and nogata (fur with legs, from Arabic nagd, a good or full-value coin), and also of pieces of fur (resana), muzzle furs (mordka) and paw furs (lapka).

Monetary History of Russia

The word for silver was "serebro" which became more and more common to denote money as trade with the Byzantine world increased. The Old Russian words kuna and nogata, come from the old "fur money" or "leather money," thereby retaining their meaning as metal money began to emerge. The names continued in use even though the money began to change to metals given the trade with the Byzantine world. The Rus relied upon foreign produced money. Both Byzantine silver coins and the silver dirhems of the Arab Caliphate are found in Ukraine and parts of Russia confirming trade existed.

It is clear that there was a change from "fur money" to silver and the oldest Russian unit of value was the "grivna", which was based on the Arab coinage system. We begin to find only from the 10th century onwards that local coinage began to be struck and once this took place, then coins became the actual unit of payment in markets. This enabled the expansion of the economy and really the rise of Russia out of the barter age. The "grivna" became both a unit of account an money by weight. Its value equaled to that of 96 gold dinars (s[o]lotniki) or 144 silver dirhems (s[e]rebreniki).



The ruble has been the Russian unit of currency for about 500 years. It was the monetary reform system instituted by Peter the Great (b 1672;1682–1725) that was a century ahead of most others in that it was

Monetary History of Russia

based on the decimal system. The basic monetary unit, first coined in 1704, was the silver ruble of 100 kopecks. Other silver coinage consisted of the poltina (one-half ruble), polupoltina (one-fourth ruble), grivennik (ten kopecks), altyn (three kopecks) and kopeck. There were two copper sub-multiples of the kopeck: den'ga (one-half kopeck) and polushka (one-fourth kopeck); and three gold multiples of the ruble: double ruble, chervonets or "ducat" (about 2 and one-half rubles), and dvoinoi chervonets (double chervonets). Unfortunately, Peter's profligate expenditures steadily eroded most of the value of this otherwise admirable currency. Still, Peter's reforms made a lasting impact on Russia and many institutions of Russian government traced their origins to his reign.

The amount of precious metal in a ruble varied over time. In a 1704 currency reform, Peter the Great standardized the ruble to 28 grams of silver. While ruble coins were silver, there were higher denominations minted of gold and platinum. By the end of the 18th century, the ruble was set to 4 zolotnik 21 dolya (almost exactly equal to 18 grams) of pure silver or 27 dolya (almost exactly equal to 1.2 grams) of pure gold, with a ratio of 15:1 for the values of the two metals.



In 1817, the ruble was reduced from .986 find gold to .917. This would be further reduced to .900 by Alexander III in 1886. The gold 5 ruble weighed .1929 oz. This was actually nearly the same net weight of the 1802 issue at .986 fineness with a net weight of .1928 oz.

Russia Platinum 3, 6, and 12 Roubles of Nicholas I (b 1796; 1825-1855)



A profoundly original phenomenon was the striking by the Russian state of new platinum coins with the value of 3, 6 and 12 rubles from 1828 to 1845. Russia is the only country in the world that struck platinum coins for circulation composition 9 parts gold & 68 parts of "pure Urals platinum"

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In 1825, platinum coins were introduced with 1 ruble equal to $77\frac{2}{3}$ dolya (3.451 grams). The denominations were 3, 6, and 12 rubles.



On December 17th, 1885, a new standard was adopted which did not change the silver ruble but reduced the gold content to 1.161 grams, pegging the gold ruble to the French franc at a rate of 1 ruble = 4 francs.



This rate was revised in 1897 to 1 ruble = $2\frac{1}{3}$ francs (0.774 grams gold). A 15-ruble gold coin was issued with a weight of .3734 oz. Effectively, this was a revaluation whereas the coin was the same weight as the 10 ruble, which had been issued since 1886. The 5-ruble weighing .1867 of an oz under Alexander III from 1886 had been reduced to .1244 oz.

The ruble was worth about .50 USD in 1914.



1923 Communist Russia Gold - Chervonetz

With the outbreak of World War I, the gold standard peg was dropped and the ruble fell in value, suffering from hyperinflation in the early 1920s. With the founding of the Soviet Union in 1922, the Russian ruble was replaced by the Soviet ruble. The pre-revolutionary Chervonetz was temporarily brought back into circulation from 1922–1925



Before November 1st, 1990, the dollar cost 63 kopecks, but there was no opportunity to buy it at such a rate. November 1 of the year 1990 established a commercial rate of 1.8 rubles per dollar. The first trading session was opened on April 9, 1991, in one of the premises of the USSR State Bank, where a blackboard had providently been brought in order to record deals. Following the only concluded transaction (for 50 thousand cashless dollars) the ruble was for the first time ever rated commercially. The real exchange rate of the US dollar against the ruble made up 32.35 rubles per dollar. By the end of the year one dollar was estimated at 169.20 rubles under inflation of about 160% (the percentage is very approximate, as there is no accurate statistics). Prices were set free, people felt lack of products in shops, the USSR collapsed but the Russian Federation hadn't been formed yet. This period turned to be the time of troubles for former Soviet people.

At the same time stock exchanges entered the market, though the process of their formation was quite spontaneous. The first Russian Exchange was registered in May of 1990 and was called Moscow Commodity Exchange. November 21, 1990, Moscow Central Stock Exchange was the second on the list. The first valuable securities trading session in the USSR was held only several months later.

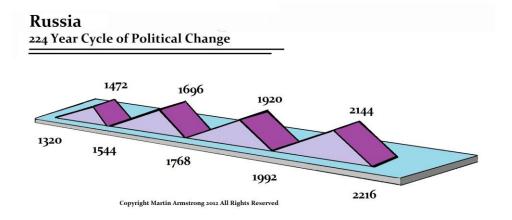
In general, by the end of 1991 Russia registered 182 commodity and stock exchanges. The RF left behind the whole planet by number of exchanges and variety of concluded transactions. That time Russian exchanges used to trade any possible commodities and security papers. When the Soviet supply system wrecked, exchanges took on a role as middlemen. The

Monetary History of Russia

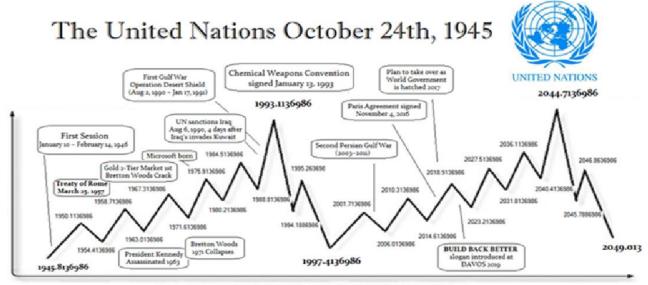
majority of goods were in deficit, even money: the president of the State Bank complained in his secret letter to M.S. Gorbachev that the Finance department failed to mint enough money to keep pace with inflation.

New Russian exchanges traded wood, sugar, paper, building materials, cars, computers and even bread! Very soon Russia numbered over 1000 exchanges, though most of them couldn't be called traditional stock structures, as essentially, they operated as trade fairs.

First rare bidders had to face an absolute lack of legislation regulating trading sessions and transactions. One of the most intrinsic legislative initiatives of 1990 happened to be the Commodity Exchange Activity Resolution of the RSFSR Cabinet Council. The resolution maintained the order of exchanges' registration and heir functions. The distinctive feature of laws passed then is their laconism. The most significant laws regulating the stock market appeared in December of 1991.



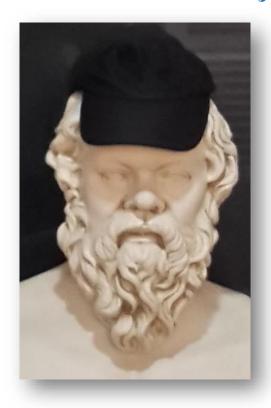
The collapse of the Soviet Union came right on schedule of the 224 Year Cycle of Political Change in Russia. Despite the chaos and the privatization of public companies, the market after the USSR collapse saw the rise of previous state-owned companies such as Gazprom. The oligarchs targeted the companies and bought shares from people who just needed to put food on the table. What is known is that January 18th, 1991, Russian embarked on capitalism despite the claims of the Western press and propaganda.



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Next year, 2023.21 (March 17th, 2023) is a turning point for the United Nations. This is when they should become more aggressive in their plot to seize control of the world politics. This will be the half cycle and it can very well unfold as the decline and fall of the United Nations thereafter.

Commentary



he following sections have been entirely written by Socrates. It is my hope that the analysis which Socrates is able to do will survive me. I have sought to teach it everything I have learned with respect to how to analyze markets as an international hedge fund manager who had to pay attention to everything taking place globally.

In addition, I programmed Socrates to allow it to do its own analysis on a global level and to learn from the world economy as it evolves over the centuries. Unlike opinions offered by human analysts, Socrates actually relies upon history and leaves no stone unturned. This is something human analysts simply cannot do because we are not machines and we make mistakes.

This has been my life's work. There are those who have done everything possible to try to discredit me or to try to ensure people will not pay attention to what I have created. They have gone to such extremes because they do not want something which actually provides unbiased analysis. They prefer the human analysis which can be bought and paid for if the price is right.

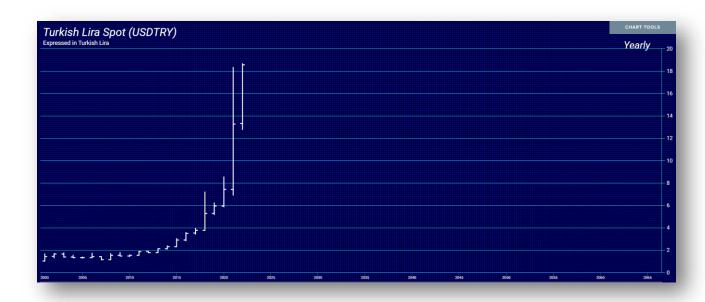
Commentary

Indeed, following the DOT.COM crash, the top brokerage houses paid huge fines for putting out fake research to profit from their own clients. My company became the top FOREX advisor in the world because the analysis was unbiased. When I was going to open an office in Europe, I went to lunch with the head of one of the Swiss banks in Geneva. I asked him what name we should use and I gave him a few examples all with the European flavor. He asked me to name on European analyst. I was embarrassed because I could not. He laughed and said there were none. He then explained that they all used my firm because we did not care if the dollar went up or down.

In Europe, after World War II, the politicians used the rise in their currency against the dollar as proof they did a good job. Thus, no professional analyst working for an institution was ever allowed to forecast a decline. Analysis in Europe to this day remains plagued by politics.

Socrates is not something many want to see in public use. They want to be able to feed misinformation to the public to support their own position be it political power or profits from trading. The one thing you can count on is that the analysis offered by any of the major institutions will never be in the interest of the public when it conflicts with their own positions.

Hence, it is my sincere hope that we will one day embrace unbiased analysis to better manage the world economy and, in the process, create a far better world for our posterity than we received from the last generation.



his market made a bull run from the low of 11459 made in 2008 for 13 years into a high established in 2021 at 183624. At this point in time, we have made a high last year at 183624. However, the major high since that low took place in 2021 at 68810. Presently, this market has rallied exceeding last year's high of 183624 reaching 186932 while holding last year's low of 68810.

On the Yearly Level, our first target for a turning point is 2022 with the opposite trend implied thereafter into 2024. This turning point also matched the turning point on the Economic Confidence Model implying it was significant (NOTE: this can be intraday or on a closing basis).

The strongest target in the Yearly array is 2031 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting 2021 until 2022 with each target producing the opposite direction for that 2-year period.

Thereafter, we see the next target coming into play as 2030 until 2031 with again each target producing the opposite direction for that 2-year period.

However, the important target during that period will be 2031.

The Turkish Lira has continued to make new historical highs over the course of the rally from 2008 moving into 2022. Distinctly, we have elected two Bullish Reversals to date.

This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, this market was in a protracted bullish trend since the major low took place back in 2008 with the high forming during 2021. Even so, we have not elected any Yearly Bearish Reversal to date from the turning point of 2021.

The last major low took place during 2008 which was 14 years ago.

YEARLY ANALYSIS PERSPECTIVE

Factually, in Turkish Lira, the last important low formed back in 2008, there was a rally into the important high established during 2021 which was a broad bull market run for thirteen years warning from a long-term perspective cyclically, there is a risk of a temporary pause in the uptrend become possible.

Recently on the yearly level, the market has rallied exceeding last year's high reaching 186932 intraday and we are still trading above 183624 right now with a positive undertone. At this moment, the market is trading still holding above support in a bullish posture.

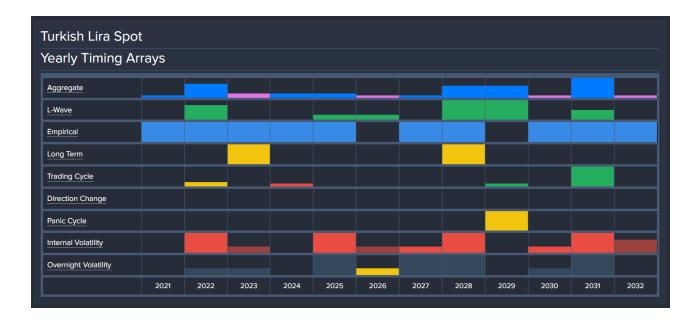
Right now, as stated, the market is trading above last year's high of 183624. Overall, the market has been in a long-term bullish trend. We have not elected any Yearly Bearish Reversals from that major high. Right now, the market is trading bullish above our yearly momentum indicators warning that support begins down at 62457.

Examining the yearly time level, we can now see that there is a 51% risk on the upside, where we show a clear downside risk factor at 80%. From a risk perspective,

resistance on a closing basis stands at 281418 whereas the risk on the downside begins at 37150.

YEARLY TECHNICAL ANALYSIS

2022/01/01	34431	36966	75345	90621	94453
2023/01/01	35952	38407	83252	95185	99976
2024/01/01	37473	39848	91159	99750	105498
2025/01/01	38995	41290	99067	104315	111021
2026/01/01	40516	42731	106974	108880	116544
2027/01/01	42037	44172	114881	113444	122067
2028/01/01	43559	45613	122789	118009	127590



YEARLY TIMING ANALYSIS

Probing into the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2022, 2028 and 2031. Centering on the patterns unfolding, we do see a prospect of a decline moving into 2022 with the opposite trend thereafter into 2028. This pattern becomes a possibility if the market closed back below last year's high of 183624 at a minimum. Closing this year above last year's high warns that a cycle inversion is possible with a rally into the next target.

YEARLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2025. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

YEARLY PANIC CYCLES

Nonetheless, our Panic Cycle target, for the next period to watch is during 2028. This is beyond the peak in the next Economic Confidence Model due in 2024. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

THE BROADER LONGER-TERM VIEW

Noticeably, the long-term forecast view recognizes that the current directional movement since the low made back in September 2017 has been an extended Bullish trend in Turkish Lira. This trend remains in motion as long as we hold above 82450 on a monthly closing basis. It is incredibly important to identify the broader trend for that is the underlying tone. It is wise to take position counter-trend only with this understanding of what you are doing.

INDICATING RANGE STUDY

Focusing on our perspective using the indicating ranges on the Yearly level in the Turkish Lira, this market remains moderately bullish currently with underlying support beginning at 72362.

Yearly Indicating Ranges

Immediate Trend bullish
Short-Term Momentum bullish
Short-Term Trend bullish
Intermediate Momentum bullish
Intermedia Trend bullish
Long-Term Trend neutral
Cyclical Strength neutral

TRADING ENVELOPE STUDY

NORMAL YEARLY TRADING ENVELOPE Last Close Was. 132673

Envelope Top... 50485 Internal AvgL.. 49975 Internal AvgH.. 72969 Envelope Btm... 31605

STOCHASTICS

The Stochastics are on the short term are in a positive position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

ENERGY MODELS

Looking at our Energy Models on the Yearly level, Immediately, our model continues to rally suggesting that a strong rally is likely.

REVERSAL COMMENTARY

Applying our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 186932. These Tentative Hypothetical Bearish Reversals would rest at 13900, 37163, and 58391, whereas a close below the previous low 68810 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

YEARLY FIBONACI COMMENT

YEARLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2021 HIGH:

Mon. 01/01/2024

Thu. 01/01/2026

Mon. 01/01/2029

Sun. 01/01/2034

Wed. 01/01/2042

Fri. 01/01/2055

Wed. 01/01/2076

Thu. 01/01/2110

Wed. 01/01/2165

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

YEARLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous HIGH at 183624

23% | 140289 38% | 113480 61% | 70144 78% | 39296

Fibonacci Percentage Golden Ratio Movements:

3% | 2024/01/01

5% | 2026/01/01

8% | 2029/01/01

13% | 2034/01/01

21% | 2042/01/01

34% | 2055/01/01

55% | 2076/01/01

89% | 2110/01/01

ECONOMIC CONFIDENCE MODEL CORRELATION

Here in Turkish Lira, we do find that this particular market has correlated with our Economic Confidence Model in the past. Our next ECM target remains Mon. Apr. 10, 2023. The Last turning point on the ECM cycle low to line up with this market was 2005.



QUARTERLY ANALYSIS PERSPECTIVE

On the Quarterly Level, our first target for a turning point is The Fourth Quarter 2022 with the opposite trend implied thereafter into the First Quarter 2023 (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Fourth Quarter 2024 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting the Third Quarter 2022 until the First Quarter 2023, but we do have a key target arriving also on the Fourth Quarter 2022 with each target producing the opposite direction for that 3-quarter period.

The next Quarterly Minor Bearish Reversal resides at 58380 whereas the next Quarterly Major Bearish Reversal is to be found at 88060.

This market on the quarterly level has been making new highs since the last low established 6 quarters ago which has been a series of successive advances. The last 4 highs have been progressively making higher highs implying we have had a bullish trend in motion for the past 43 quarters. The last high was made during the Third Quarter 2022. We did elect four Bullish Reversals which implies we have had a broad change in trend on this level. Meanwhile, our technical resistance stands at 193419 and it will require a closing above this level to signal a breakout of the upside is unfolding. Nevertheless, our technical support lies at 121989 which is still

holding at this time. At this moment, the market remains between these two projections leaving it neutral on a technical basis.

QUARTERLY INDICATING RANGE STUDY

Solely focusing on only the indicating ranges on the Quarterly level in the Turkish Lira, this market remains in a bullish position at this time with the underlying support beginning at 183624.

Quarterly Indicating Ranges

Immediate Trend bullish
Short-Term Momentum bullish
Short-Term Trend bullish
Intermediate Momentum bullish
Intermedia Trend bullish
Long-Term Trend bullish
Cyclical Strength bullish

More specifically in this market the immediate trend indicating range is bullish with the short-term momentum indicating range being bullish and the short-term trend coming in as bullish. On the intermediate level momentum is bullish with trend showing it a bullish posture. The long-term trend is bullish while the key Cyclical Strength is registering bullish.

Note: Normally, when the first two indicating ranges (Immediate Trend and Short-Term Momentum) turn bullish or bearish in a trend, we begin to see a change in direction.

QUARTERLY TRADING ENVELOPE STUDY

NORMAL QUARTERLY TRADING ENVELOPE Last Close Was. 184859 Envelope Top... 123929 Internal AvgL.. 121976 Internal AvgH.. 136584 Envelope Btm... 74779

QUARTERLY MOMENTUM MODELS

QUARTERLY MOMENTUM MODEL INDICATOR

Our Momentum Models are rising at this time with the previous low made 3rdQ/2021 while the last high formed on 3rdQ/2022. However, this market has rallied in price with the last cyclical high formed on 3rdQ/2022 warning that this market remains strong at this time on a correlation perspective as it has moved higher with the Momentum Model.

QUARTERLY STOCHASTICS

The Stochastics are on the short term are in a negative position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

QUARTERLY ENERGY MODELS

Looking at our Energy Models on the Quarterly level, Immediately, our model continues to rally suggesting that a strong rally is likely.

On our Tentative Hypothetical Models, we see that we have Quarterly Bearish Reversals that would be generated if we see another new high penetrating 185823. These Tentative Hypothetical Bearish Reversals would rest at 27902, 54511, 82470, and 127450, whereas a close below the previous low 166452 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

QUARTERLY FIBONACI COMMENT

QUARTERLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 07/01/2022 HIGH:

Sat. 04/01/2023

Sun. 10/01/2023

Mon. 07/01/2024

Wed. 10/01/2025

Fri. 10/01/2027

Wed. 01/01/2031

Tue. 04/01/2036

Sat. 10/01/2044

Mon. 07/01/2058

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

QUARTERLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous HIGH at 185823

23% | 141969

38% | 114839

61% | 70984

78% | 39766

Fibonacci Percentage Golden Ratio Movements:

3% | 2023/04/01

5% | 2023/10/01

8% | 2024/07/01

13% | 2025/10/01 21% | 2027/10/01 34% | 2031/01/01 55% | 2036/04/01 89% | 2044/10/01

QUARTERLY ANALYSIS PERSPECTIVE

On the Quarterly Level, our first target for a turning point is The Fourth Quarter 2022 with the opposite trend implied thereafter into the First Quarter 2023 (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Fourth Quarter 2024 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting the Third Quarter 2022 until the First Quarter 2023, but we do have a key target arriving also on the Fourth Quarter 2022 with each target producing the opposite direction for that 3-quarter period.

QUARTERLY HEDGING MODELS

HEDGING MODEL

From the Quarterly Hedging Model employing only the Reversal System, we are currently long since during the Third Quarter 2017 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis above the next Bearish Reversal on this level 88060. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.

QUARTERLY CURRENCY CORRELATION

The London IPE Gas Oil Futures did make a high in conjunction with the British pound on 04/01 yet in nominal terms the last high was created on 01/01 whereas

the high in Australian dollar took place on 04/01, a high in the Canadian dollar was established on 10/01, a high in the Japanese yen was established on 04/01, a high in the Swiss franc was established on 04/01, a high in the Euro was established on 07/01, and a high in the Chinese yuan was 10/01.

In terms of a Basket of Currencies, we see that here this market has declined both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 01/01 after the high in terms of a basket of currencies which came on 01/01 implying that this immediate rally is purely in domestic terms.

Turkish Lira Spot **Monthly Timing Arrays** Aggregate L-Wave **Empirical** Long Term Trading Cycle **Direction Change** Panic Cycle Internal Volatility Overnight Volatility Oct Nov Feb May Aug Sep

MONTHLY LEVEL

MONTHLY BROADER TREND VIEW

On a broader perspective, this market remains in an uptrend posture on all our indicators looking at the monthly level. We see here the trend has been moving up for the past 61 months. The previous low of 33889 made during September 2017 on the Monthly level has held and only a break of 181040 on a closing basis would warn of a technical near-term change in trend. The previous high made during October on the Monthly level at 186932 remains significant technically and only exceeding that level on a closing basis would suggest a reversal in the immediate trend. We have generated a buy signal so some caution is required.

MONTHLY TURNING POINTS

My primary targets on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for November, January 2023 and March 2023, August 2023. There is a likelihood of a decline moving into November with the opposite trend thereafter into January 2023. If the November high holds, then a decline into the next turning point may materialize. Otherwise, anticipate a rally into the next target should be expected if we make new highs.

MONTHLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2025. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

MONTHLY PANIC CYCLES

Nonetheless, our Panic Cycle target, for the next period to watch is during 2028. This is beyond the peak in the next Economic Confidence Model due in 2024. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

MONTHLY BEARISH REVERSALS

The key Monthly Bearish Reversal below the market remains at 166440. If this is breached on a monthly closing basis, then a further decline becomes entirely possible. If we penetrate that Reversal on a closing basis, then the next key support level to watch will be the next Monthly Bearish Reversal lies at 146880.

MONTHLY ANALYSIS PERSPECTIVE

Currently, we have broken below last month's low and that means we have generated a new What-If Monthly Bullish Reversal which lies above the present trading level at the general area of 16226 warning that this decline has still not punched through important overhead resistance. A monthly closing beneath this level will keep this market in a bearish tone.

HEDGING MODEL

On our Monthly Hedging Model Reversal System, we are currently long since February 2021 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis above the next Bearish Reversal on this level 166440. If you want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

On the Monthly Level, our first target for a turning point is November with the opposite trend implied thereafter into December which is also a Panic Cycle (NOTE: this can be intraday or on a closing basis).

The strongest target in the Monthly array is March 2023 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting October until March 2023 with each target producing the opposite direction for that 6-month period.

Monthly Level

Indicator Description... Trend

Immediate Trend BULLISH

Short-Term Momentum BULLISH

Short-Term Trend BULLISH

Intermediate Momentum BULLISH

Intermediate Trend BULLISH

Long-Term Trend BULLISH

Cyclical Strength...... BULLISH

Broader Trend BULLISH

Long-Term Cyclical Trend .. BULLISH

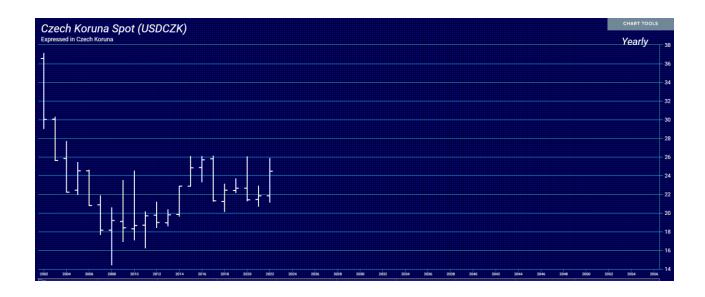
MONTHLY CURRENCY CORRELATION

The London IPE Gas Oil Futures did make a high in conjunction with the British pound on 09/01 yet in nominal terms the last high was created on 03/01 whereas the high in Australian dollar took place on 08/01, a high in the Canadian dollar was established on 06/01, a high in the Japanese yen was established on 08/01, a high in the Swiss franc was established on 08/01, a high in the Euro was established on 09/01, and a high in the Chinese yuan was 08/01.

In terms of a Basket of Currencies, we see that here this market has rallied both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 03/01before the high in terms of a basket of currencies which came on 05/01 suggesting that that this immediate rally is purely in currency terms.

MARKET RISK FACTOR

The Socrates Generated Commentary for Czech Koruna Spot



his market made a bearish decline from the high of 371410 made in 2002 for 6 years into a low established in 2008 at 143890. Since that low, this market has rallied for 13 years prior to this year. At this point in time, we have made a low last year at 206950. However, the major low since that high took place in 2018 at 201220. Therefore, the market has been primarily consolidating between the major high of 2002 and the key low in 2018. Presently, this market has rallied exceeding last year's high of 229230 reaching 258770 while holding last year's low of 206950. The major high took place during 2002 that was 6 years ago, which was a perfect 12-year panic cycle.

Maintaining a closing above our Momentum Projection residing at 238566 will signal that the market is finding strength right now. However, a higher closing would still leave the last low as a key target and the next turning point will be 2024. Yet, this market is also trading above our momentum resistance at 228526, which is providing support right now on a closing basis. This turning point also matched the

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turning point on the Economic Confidence Model implying it was significant (NOTE: this can be intraday or on a closing basis).

The strongest target in the Yearly array is 2022 which is this immediate year whereby we have so far exceeded last year's high and are trading above last year's closing. There are 2 Yearly Directional Change targets starting from 2021 to 2022 warning of a potential choppy swing period for these few Years. It does appear we have a choppy period starting 2021 until 2022 with each target producing the opposite direction for that 2-year period. Thereafter, we see the next target coming into play as 2024 until 2031 with again each target producing the opposite direction for that 8-year period.

However, the important target during that period will be 2031.

Keep in mind that given the significant decline of 20% from the last high established during 2020, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have NOT elected any Bearish Reversals thus far to date. The first Yearly Bearish Reversal comes into play at 212240.

While the historical perspective of the of this market included a decline from the major high established back in 2017 moving into a major low in 2018, the market has bounced back for the last 4 years. The last Yearly Reversal to be elected was a Bearish at the close of 2017.

This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, ever since the low of 2008, there have been 3 major lows with each being higher than the previous which is indicative of a protracted long-term bull market. The last major low was established back in 2018 with the high forming during 2017. This decline has thus been 1 year. We have exceeded the previous high of 2021, which was 229230 implying we may have at least a temporary low in place for now and we have not exceeded the previous major high of 261295. Distinctly, we have elected one short-term Yearly Bearish Reversal to date from the turning point of 2017.

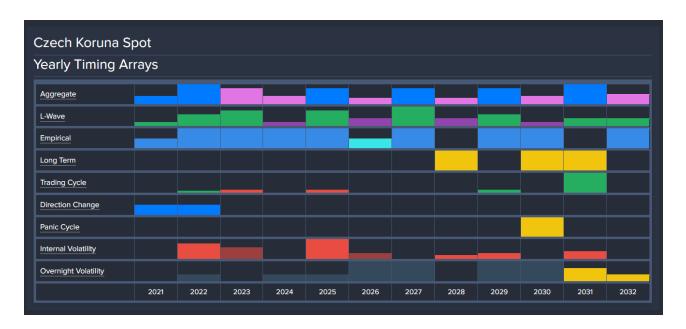
The last major low took place during 2008 which was 14 years ago. However, the last near-term low took place just 1 years ago in 2021.

YEARLY ANALYSIS PERSPECTIVE

On the yearly level in Czech Koruna Spot, the last important low was established during 2018 at 201220, which was down from during 2017. This market came to test the Yearly Bearish Reversal at 212240 bottoming at 206950 but failed to close below it. However, the highest closing was during 2016 at 257023 whereas the intraday high formed in 2017.

Right now, as stated, the market is trading above last year's high of 229230. At present, the market has reacted to the upside from the low made in 2018. Right now, the market is trading bullish above our yearly momentum indicators warning that support begins down at 237239.

Examining the yearly time level, we can now see that there is a 6.62% risk on the upside, where we show a clear downside risk factor at 13%. From a risk perspective, resistance on a closing basis stands at 261120 whereas the risk on the downside begins at 212240.



YEARLY TIMING ANALYSIS

Inspecting the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2022, 2025, 2027, 2029 and 2031.

The Socrates Generated Commentary for Czech Koruna Spot

We show a potential for a decline moving into 2022 with the opposite trend thereafter into 2025. This pattern becomes a possibility if the market closed back below last year's high of 229230 at a minimum. Closing this year above last year's high warns that a cycle inversion is possible with a rally into the next target.

YEARLY DIRECTIONAL CHANGES

The most critical model, the Directional Change Model target is during 2022. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

YEARLY VOLATILITY

Eyeing the volatility models suggest we should see a rise in price movement during January 2025. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

YEARLY PANIC CYCLES

However, our Panic Cycle target, for the next period to watch is during 2030. This is beyond the peak in the next Economic Confidence Model due in 2024. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

THE BROADER LONGER-TERM VIEW

Prospectively, the longstanding analysis recognizes that the major high and low in Czech Koruna Spot took place back in 2002. Since that time, the market rallied subsequently into 2002, but since then we have retested support for the past 20 years.

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Inspecting the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2022, 2025, 2027, 2029 and 2031. We show a potential for a decline moving into 2022 with the opposite trend thereafter into 2025. This pattern becomes a possibility if the market closed back below last year's high of 229230 at a minimum. Closing this year above last year's high warns that a cycle inversion is possible with a rally into the next target.

YEARLY DIRECTIONAL CHANGES

The most critical model, the Directional Change Model target is during 2022. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

YEARLY VOLATILITY

Eyeing the volatility models suggest we should see a rise in price movement during January 2025. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

YEARLY PANIC CYCLES

However, our Panic Cycle target, for the next period to watch is during 2030. This is beyond the peak in the next Economic Confidence Model due in 2024. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction. We never elected any Yearly Bullish Reversal from the Major Low of 2002 going into the high of 2002. This in itself warned that the market is very weak. We have not elected any Yearly Bearish Reversals from the reactionary high of 2002. This still implies that the market is holding support.

To date, this market has not breached any long-term support which begins at 212240 on an annual closing basis. Meanwhile, we have also not breached any long-term resistance which begins at 277300.

INDICATING RANGE STUDY

Looking at the indicating ranges on the Yearly level in the Czech Koruna Spot, this market remains neutral with resistance standing at 231343 and support forming below at 206240. The market is trading closer to the support level at this time.

Yearly Indicating Ranges

Immediate Trend neutral
Short-Term Momentum neutral
Short-Term Trend bearish
Intermediate Momentum neutral
Intermedia Trend bullish
Long-Term Trend neutral
Cyclical Strength neutral

TRADING ENVELOPE STUDY

NORMAL YEARLY TRADING ENVELOPE Last Close Was. 218414

Envelope Top... 277924 Internal AvgL.. 210864 Internal AvgH.. 248852 Envelope Btm... 151038

STOCHASTICS

The Stochastics are on the short term are in a positive position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

ENERGY MODELS

Looking at our Energy Models on the Yearly level, the historical high took place back in 2020 whereas the actual market high in price unfolded back in 2002. This is rather indicative of the fact that the broader term means that eventually higher highs will be carved out in the future. When Energy peaks BEFORE the high, this is indicative of a major high and a serious change in trend is likely to follow.

REVERSAL COMMENTARY

Applying our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 258770. These Tentative Hypothetical Bearish Reversals would rest at 170760, 201230, and 212360, whereas a close below the previous low 206950 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

YEARLY FIBONACI COMMENT

YEARLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2018 LOW:

Fri. 01/01/2021

Sun. 01/01/2023

Thu. 01/01/2026

Wed. 01/01/2031

Sat. 01/01/2039

Mon. 01/01/2052

Sun. 01/01/2073

Sun. 01/01/2107

Sat. 01/01/2162

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Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

YEARLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous LOW at 201220

23% | 248708 38% | 278086 61% | 325574 78% | 359379

Fibonacci Percentage Golden Ratio Movements:

3% | 2021/01/01 5% | 2023/01/01 8% | 2026/01/01 13% | 2031/01/01 21% | 2039/01/01 34% | 2052/01/01 55% | 2073/01/01 89% | 2107/01/01 144% | 2162/01/01

ECONOMIC CONFIDENCE MODEL CORRELATION

Here in Czech Koruna Spot, we do find that this particular market has correlated with our Economic Confidence Model in the past. The Last turning point on the ECM cycle low to line up with this market was 2018 and 2011. The Last turning point on the ECM cycle high to line up with this market was 2020 and 2017 and 2010.



QUARTERLY ANALYSIS PERSPECTIVE

On the Quarterly Level, our first target for a turning point is The Fourth Quarter 2022 with the opposite trend implied thereafter into the Second Quarter 2023 (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Second Quarter 2025 for a turning point ahead, at least on a closing basis. There are 5 Quarterly Directional Change targets starting from the Third Quarter 2023 to the First Quarter 2024 suggesting a choppy coiling period for 3 Quarters. We also see a convergence in the Array with both the Directional Change and Panic Cycle lining up for the same target of the Second Quarter 2025. This emphasizes the importance of this target as an event on the horizon. It does appear we have a choppy period starting the Third Quarter 2022 until the Fourth Quarter 2022 with each target producing the opposite direction for that 2-quarter period.

Keep in mind that given the sharp decline of 10% from the last high established the First Quarter 2020, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have elected 3 Bearish Reversals from the last high thus far to date. There are 5 Quarterly Directional Change targets starting from the Third Quarter 2023 to the First Quarter 2024 suggesting a choppy coiling period for 3 Quarters. We also see a convergence in the Array with both the Directional Change and Panic Cycle

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lining up for the same target of the Second Quarter 2025. This emphasizes the importance of this target as an event on the horizon. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

We closed the previous quarter at 250800. Immediately, the market is somewhat bullish on our indicating range models. The next Quarterly Minor Bullish Reversal stands at 222950 with the next Quarterly Major Bullish Reversal standing at 261300. The next Quarterly Minor Bearish Reversal resides at 189310 whereas the next Quarterly Major Bearish Reversal is to be found at 185960. Caution is now required for this market is starting to suggest it may rally further on a quarterly level.

This market on the quarterly level has been consolidating and moving higher since the low established during the First Quarter 2018. However, we did elect 3 Bearish Reversals from the high formed on during the First Quarter 2020 which provided the decline into during the Second Quarter 2021. Then we did manage to elect 3 Bullish Reversals which gestured the rally after the low of during the Second Quarter 2021.

QUARTERLY INDICATING RANGE STUDY

Solely focusing on only the indicating ranges on the Quarterly level in the Czech Koruna Spot, this market remains moderately bullish currently with underlying support beginning at 236980 and overhead resistance forming above at 252280. The market is trading closer to the resistance level at this time.

Quarterly Indicating Ranges

Immediate Trend bullish
Short-Term Momentum bullish
Short-Term Trend bullish
Intermediate Momentum bullish
Intermedia Trend bullish
Long-Term Trend neutral
Cyclical Strength bullish

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More specifically in this market the immediate trend indicating range is bullish with the short-term momentum indicating range being bullish and the short-term trend coming in as bullish. On the intermediate level momentum is bullish with trend showing it a bullish posture. The long-term trend is neutral while the key Cyclical Strength is registering bullish.

Note: Normally, when the first two indicating ranges (Immediate Trend and Short-Term Momentum) turn bullish or bearish in a trend, we begin to see a change in direction.

QUARTERLY TRADING ENVELOPE STUDY

NORMAL QUARTERLY TRADING ENVELOPE Last Close Was. 250800

Envelope Top... 288516 Internal AvgL.. 218820 Internal AvgH.. 233987 Envelope Btm... 169476

QUARTERLY MOMENTUM MODELS

QUARTERLY MOMENTUM MODEL INDICATOR

Our Momentum Models are rising at this time with the previous low made 1stQ/2022 while the last high formed on 3rdQ/2022. However, this market has declined in price with the last cyclical low formed on 1stQ/2018 and thus we have a divergence warning that this market is starting to run out of strength on the upside.

QUARTERLY STOCHASTICS

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

QUARTERLY ENERGY MODELS

Looking at our Energy Models on the Quarterly level, the historical high took place back during the Third Quarter 2010 whereas the actual market high in price unfolded back during the First Quarter 2002. This is rather indicative of the fact that the broader term means that eventually higher highs will be carved out in the future. When Energy peaks BEFORE the high, this is indicative of a major high and a serious change in trend is likely to follow. Immediately, our model has just turned positive after being negative warning that this market is likely to enter a rather strong rally.

QUARTERLY FIBONACI COMMENT

QUARTERLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2018 LOW:

Mon. 10/01/2018

Mon. 04/01/2019

Wed. 01/01/2020

Thu. 04/01/2021

Sat. 04/01/2023

Wed. 07/01/2026

Wed. 10/01/2031

Sun. 04/01/2040

Thu. 01/01/2054

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

QUARTERLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous LOW at 201220

23% | 248708 38% | 278086 61% | 325574 78% | 359379

Fibonacci Percentage Golden Ratio Movements:

3% | 2018/10/01 5% | 2019/04/01 8% | 2020/01/01 13% | 2021/04/01 21% | 2023/04/01 34% | 2026/07/01 55% | 2031/10/01 89% | 2040/04/01 144% | 2054/01/01

QUARTERLY ANALYSIS PERSPECTIVE

On the Quarterly Level, our first target for a turning point is The Fourth Quarter 2022 with the opposite trend implied thereafter into the Second Quarter 2023 (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Second Quarter 2025 for a turning point ahead, at least on a closing basis. There are 5 Quarterly Directional Change targets starting from the Third Quarter 2023 to the First Quarter 2024 suggesting a choppy coiling period for 3 Quarters. We also see a convergence in the Array with both the Directional Change and Panic Cycle lining up for the same target of the Second Quarter 2025. This emphasizes the importance of this target as an event on the horizon. It does appear we have a choppy period starting the Third Quarter

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2022 until the Fourth Quarter 2022 with each target producing the opposite direction for that 2-quarter period.

Keep in mind that given the sharp decline of 10% from the last high established the First Quarter 2020, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have elected 3 Bearish Reversals from the last high thus far to date. There are 5 Quarterly Directional Change targets starting from the Third Quarter 2023 to the First Quarter 2024 suggesting a choppy coiling period for 3 Quarters. We also see a convergence in the Array with both the Directional Change and Panic Cycle lining up for the same target of the Second Quarter 2025. This emphasizes the importance of this target as an event on the horizon. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

QUARTERLY HEDGING MODELS

HEDGING MODEL

From the Quarterly Hedging Model employing only the Reversal System, we are currently long since during the Second Quarter 2021 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis above the next Bearish Reversal on this level 189310. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.



MONTHLY LEVEL

MONTHLY BROADER TREND VIEW

On a broader perspective, this market remains in an uptrend posture on all our indicators looking at the monthly level. We see here the trend has been moving up for the past 16 months. The previous low of 206950 made during June 2021 on the Monthly level has held and only a break of 240640 on a closing basis would warn of a technical near-term change in trend. The previous high made during September on the Monthly level at 258770 remains significant technically and only exceeding that level on a closing basis would suggest a reversal in the immediate trend. We have generated a buy signal so some caution is required.

MONTHLY TURNING POINTS

I show a potential target on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for February 2023, May 2023 and July 2023. I show a potential for a decline moving into February 2023 with the opposite trend thereafter into May 2023. Looking ahead at February 2023, a continued advance becomes possible if this month's high is penetrated intraday.

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MONTHLY DIRECTIONAL CHANGES

The most critical model, the Directional Change Model target is during 2022. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

MONTHLY VOLATILITY

Eyeing the volatility models suggest we should see a rise in price movement during January 2025. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

MONTHLY PANIC CYCLES

However, our Panic Cycle target, for the next period to watch is during 2030. This is beyond the peak in the next Economic Confidence Model due in 2024. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

MONTHLY BULLISH REVERSALS

The key Monthly Bullish Reversal stands overhead at 257970. If this market rallies on a monthly closing basis above this level, then a breakout becomes possible. If we exceed that Reversal, then the next key resistance level to watch will be the next Monthly Bullish Reversal at 256540.

MONTHLY BEARISH REVERSALS

The key Monthly Bearish Reversal below the market remains at 228820. If this is breached on a monthly closing basis, then a further decline becomes entirely

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possible. If we penetrate that Reversal on a closing basis, then the next key support level to watch will be the next Monthly Bearish Reversal lies at 219220.

HEDGING MODEL

Employing our Monthly Hedging Model using our Reversal System only, we are currently long since April on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis above the next Bearish Reversal on this level 228820. If you want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

On the Monthly Level, with respect to time, there was a prospect of a inside session moving into October with a possible further decline thereafter into December (NOTE: this can be intraday or on a closing basis).

The strongest target in the Monthly array is May 2023 for a turning point ahead, at least on a closing basis. We have a Monthly Directional Change target due in January 2023. Our volatility models also target this date as well. It does appear we have a choppy period starting February 2023 until March 2023 with each target producing the opposite direction for that 2-month period. We have a Monthly Directional Change target due in January 2023. Our volatility models also target this date as well. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

Monthly Level

Indicator Description... Trend
Immediate Trend – Neutral –
Short-Term Momentum BULLISH
Short-Term Trend BULLISH
Intermediate Momentum BULLISH

The Socrates Generated Commentary for Czech Koruna Spot

Intermediate Trend BULLISH
Long-Term Trend BULLISH
Cyclical Strength....... BULLISH
Broader Trend BULLISH
Long-Term Cyclical Trend ... - Neutral -

MARKET RISK FACTOR

Czech Koruna Spot Risk Table									
	UPSIDE R	ISK D	OWNSIDE R	ISK					
MONTHLY	256540) 4.757%	228820	6.562%					
QUARTERLY	254708	3 4.009%	189310	22.69%					
YEARLY	261120 6.6	627% 212	240 13.33	%					



his market made a bull run from the low of 142850 made in 2008 for 12 years into a high established in 2020 at 341220. At this point in time, we have made a low last year at 282520. Presently, this market has rallied exceeding last year's high of 330780 reaching 449850 while holding last year's low of 282520. temporary low since the market is trading at 414060 above the previous Yearly closing 324380. Maintaining a closing above our Momentum Projection residing at 358883 will signal that the market is finding strength right now. However, a higher closing would still leave the last low as a key target and the next turning point will be 2027. Yet, this market is also trading above our momentum resistance at 345070, which is providing support right now on a closing basis. (NOTE: this can be intraday or on a closing basis).

The strongest target in the Yearly array is 2026 for a turning point ahead, at least on a closing basis. We have a Yearly Directional Change target due in 2021. This lines up with a turning point so in this case we can see at least an intraday event, or a turning point based on the close. It does appear we have a choppy

period starting 2030 until 2031 with each target producing the opposite direction for that 2-year period.

Keep in mind that given the sharp decline of 17% from the last high established during 2020, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have NOT elected any Bearish Reversals thus far to date. The first Yearly Bearish Reversal comes into play at 260800. We have a Yearly Directional Change target due in 2021. This lines up with a turning point so in this case we can see at least an intraday event, or a turning point based on the close. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

The Hungary Forint Spot has continued to make new historical highs over the course of the rally from 2008 moving into 2022. We have elected two Bullish Reversals to date.

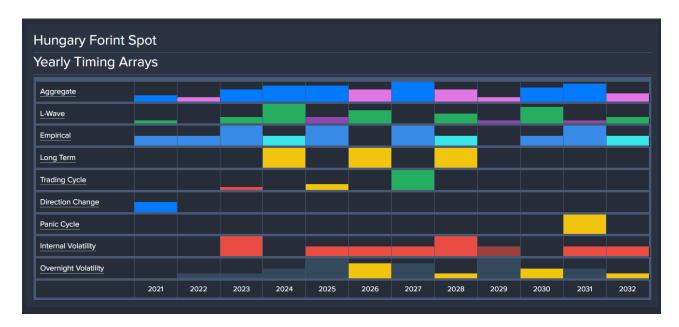
This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, this market was in a protracted bullish trend since the major low took place back in 2008 with the high forming during 2020. Distinctly, we have not elected any Yearly Bearish Reversal to date from the turning point of 2020.

The last major low took place during 2008 which was 14 years ago. However, the last near-term low took place just 1 years ago in 2021.

YEARLY ANALYSIS PERSPECTIVE

False forming the low during 2021. Right now, the market is trading bullish above our yearly momentum indicators warning that support begins down at 308170.

Examining the yearly time level, we can now see that there is a -.20% risk on the upside, where we show a clear downside risk factor at 37%. From a risk perspective, resistance on a closing basis stands at 330620 whereas the risk on the downside begins at 260800.



YEARLY TIMING ANALYSIS

Exploring the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2027, 2029 and 2031. Considering all factors, there is a possibility of a decline moving into 2027 with the opposite trend thereafter into 2029. This pattern becomes a possibility if the market closed back below last year's high of 330780 at a minimum. Closing this year above last year's high warns that a cycle inversion is possible with a rally into the next target.

YEARLY VOLATILITY

Dissecting the volatility models suggest we should see a rise in price movement during January 2026. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

YEARLY PANIC CYCLES

Nonetheless, our Panic Cycle target, for the next period to watch is during 2029. This is beyond the peak in the next Economic Confidence Model due in 2024. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be

either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

THE BROADER LONGER-TERM VIEW

Evidently, the wide-ranging forecast view recognizes that the current directional movement since the low made back in June 2021 has been a long-term Bullish trend in Hungary Forint Spot. This trend remains in motion as long as we hold above 291610 on a monthly closing basis. It is incredibly important to identify the broader trend for that is the underlying tone. It is wise to take position counter-trend only with this understanding of what you are doing. We need to see a monthly closing back above 417172 to confirm the uptrend will recommence.

INDICATING RANGE STUDY

The perspective using the indicating ranges on the Yearly level in the Hungary Forint Spot, this market remains moderately bullish currently with underlying support beginning at 302230.

Yearly Indicating Ranges

Immediate Trend neutral
Short-Term Momentum bullish
Short-Term Trend bullish
Intermediate Momentum bullish
Intermedia Trend bullish
Long-Term Trend neutral
Cyclical Strength neutral

TRADING ENVELOPE STUDY

NORMAL YEARLY TRADING ENVELOPE Last Close Was. 324380

Envelope Top... 359611 Internal AvgL.. 268900 Internal AvgH.. 309193 Envelope Btm... 159897

STOCHASTICS

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

ENERGY MODELS

Looking at our Energy Models on the Yearly level, Immediately, our model continues to rally suggesting that a strong rally is likely.

REVERSAL COMMENTARY

Engaging our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 449850. These Tentative Hypothetical Bearish Reversals would rest at 182400, 246480, and 289150, whereas a close below the previous low 282520 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

YEARLY FIBONACI COMMENT

YEARLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2020 HIGH:

Sun. 01/01/2023 Wed. 01/01/2025 Sat. 01/01/2028 Sat. 01/01/2033 Tue. 01/01/2041 Thu. 01/01/2054 Tue. 01/01/2075 Wed. 01/01/2109 Mon. 01/01/2164

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

YEARLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous HIGH at 341220

23% | 260692 38% | 210874 61% | 130346 78% | 73021

Fibonacci Percentage Golden Ratio Movements:

3% | 2023/01/01 5% | 2025/01/01 8% | 2028/01/01 13% | 2033/01/01 21% | 2041/01/01 34% | 2054/01/01 55% | 2075/01/01 89% | 2109/01/01

ECONOMIC CONFIDENCE MODEL CORRELATION

Here in Hungary Forint Spot, we do find that this particular market has correlated with our Economic Confidence Model in the past. Our next ECM target remains Mon. Apr. 10, 2023. The Last turning point on the ECM cycle low to line up with this market was 2018. The Last turning point on the ECM cycle high to line up with this market was 2020.

QUARTERLY ANALYSIS PERSPECTIVE



A closing below our Momentum Projection standing at 472620 will signal that we have a pullback possibly into the next turning point due in the Second Quarter 2023 leaving The Fourth Quarter 2022 as a temporary high. Yet, this market is still holding our Momentum support level resting at 401973, indicating the broader trend has not been negated at this moment. (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Second Quarter 2025 for a turning point ahead, at least on a closing basis.

The next Quarterly Minor Bearish Reversal resides at 281910 whereas the next Quarterly Major Bearish Reversal is to be found at 305230.

This market on the quarterly level has been making new highs since the last low established 5 quarters ago which has been a series of successive advances. The last 5 highs have been progressively making higher highs implying we have had a bullish trend in motion for the past 54 quarters. The last high was made during the Third Quarter 2022. We did elect three Bullish Reversals which confirms this has been an impressive reaction for now on this level. Meanwhile, our technical resistance stands at 447753 and it will require a closing above this level to signal a breakout of the upside is unfolding. Nevertheless, our technical support lies at 346084 which is still holding at this time. At this moment, the market remains between these two projections leaving it neutral on a technical basis.

QUARTERLY INDICATING RANGE STUDY

From a perspective using the indicating ranges on the Quarterly level in the Hungary Forint Spot, this market remains in a bullish position at this time with the underlying support beginning at 330780.

Quarterly Indicating Ranges

Immediate Trend bullish
Short-Term Momentum bullish
Short-Term Trend bullish
Intermediate Momentum bullish
Intermedia Trend bullish
Long-Term Trend bullish
Cyclical Strength bullish

More specifically in this market the immediate trend indicating range is bullish with the short-term momentum indicating range being bullish and the short-term trend coming in as bullish. On the intermediate level momentum is bullish with

trend showing it a bullish posture. The long-term trend is bullish while the key Cyclical Strength is registering bullish.

Note: Normally, when the first two indicating ranges (Immediate Trend and Short-Term Momentum) turn bullish or bearish in a trend, we begin to see a change in direction.

QUARTERLY TRADING ENVELOPE STUDY

NORMAL QUARTERLY TRADING ENVELOPE Last Close Was. 431720 Envelope Top... 393146 Internal Avgl.. 322650 Internal AvgH.. 350576 Envelope Btm... 257880

QUARTERLY MOMENTUM MODELS

QUARTERLY MOMENTUM MODEL INDICATOR

Our Momentum Models are rising at this time with the previous low made 3rdQ/2021 while the last high formed on 3rdQ/2022. However, this market has rallied in price with the last cyclical high formed on 3rdQ/2022 warning that this market remains strong at this time on a correlation perspective as it has moved higher with the Momentum Model.

QUARTERLY STOCHASTICS

The Stochastics are all in a bullish position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

QUARTERLY ENERGY MODELS

Looking at our Energy Models on the Quarterly level, the historical high took place back during the First Quarter 2012 whereas the actual market high in price unfolded back during the Third Quarter 2022. When Energy peaks BEFORE the price high, this is indicative of a major important high is forming and that we may see a serious change in trend to the downside thereafter. Immediately, our model continues to rally suggesting that a strong rally is likely.

Employing our Tentative Hypothetical Models, we see that we have Quarterly Bearish Reversals that would be generated if we see another new high penetrating 437160. These Tentative Hypothetical Bearish Reversals would rest at 267950, 284070, 291630, and 307250, whereas a close below the previous low 377790 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

QUARTERLY FIBONACI COMMENT

QUARTERLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 07/01/2022 HIGH:

Sat. 04/01/2023

Sun. 10/01/2023

Mon. 07/01/2024

Wed. 10/01/2025

Fri. 10/01/2027

Wed. 01/01/2031

Tue. 04/01/2036

Sat. 10/01/2044

Mon. 07/01/2058

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

QUARTERLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous HIGH at 437160

23% | 333990 38% | 270165 61% | 166995 78% | 93552

Fibonacci Percentage Golden Ratio Movements:

3% | 2023/04/01

5% | 2023/10/01

8% | 2024/07/01

13% | 2025/10/01

21% | 2027/10/01

34% | 2031/01/01

55% | 2036/04/01

89% | 2044/10/01

QUARTERLY TECHNICAL ANALYSIS

The market scored a new major high during the Third Quarter 2022 which is up 5 quarters from the last cyclical low. The projected resistance target was 424486 which we did exceed intraday stopping at 437160. Nevertheless, this projected resistance will stand at 452879 during the next trading session which we are trading below at this moment. The projected support target was 346643 which is

below the market and this will move to 354210 for the next trading session. We are trading above the Uptrend Channel which resides at 366285 which will move to 369070 for the next session. The new extended Uptrend Channel resistance stands at 439945 and exceeding this level will signal a strong breakout to the upside is possible.

Turning to our Energy Models, the fact that the market is making new intraday highs in price and our Energy Models are rising, this market is holding right now for the past 3 quarters. As long as our Energy Models hold above the former low made on 10/01/2021.

QUARTERLY ANALYSIS PERSPECTIVE

temporary high since the market is trading below the previous Quarterly's closing. A closing below our Momentum Projection standing at 472620 will signal that we have a pullback possibly into the next turning point due in the Second Quarter 2023 leaving The Fourth Quarter 2022 as a temporary high. Yet, this market is still holding our Momentum support level resting at 401973, indicating the broader trend has not been negated at this moment. (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Second Quarter 2025 for a turning point ahead, at least on a closing basis.

QUARTERLY HEDGING MODELS

HEDGING MODEL

Using our Quarterly Hedging Model based on the Reversal System exclusively, we are currently long since during the First Quarter 2018 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis above the next Bearish Reversal on this level 305230. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.

QUARTERLY CURRENCY CORRELATION

The London IPE Gas Oil Futures did make a high in conjunction with the British pound on 04/01 yet in nominal terms the last high was created on 01/01 whereas the high in Australian dollar took place on 04/01, a high in the Canadian dollar was established on 10/01, a high in the Japanese yen was established on 04/01, a high in the Swiss franc was established on 04/01, a high in the Euro was established on 07/01, and a high in the Chinese yuan was 10/01.

In terms of a Basket of Currencies, we see that here this market has declined both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 01/01 after the high in terms of a basket of currencies which came on 01/01 implying that this immediate rally is purely in domestic terms.

Hungary Forint Spot Monthly Timing Arrays Aggregate L-Wave Empirical Long Term Trading Cycle Direction Change Panic Cycle Internal Volatility Overnight Volatility Overnight Volatility Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

MONTHLY LEVEL

MONTHLY BROADER TREND VIEW

Overall, on a broader basis, looking at the monthly level on our models, this market is currently in a rising trend. We see here the trend has been moving up

for the past 16 months. The previous low of 282520 made during June 2021 on the Monthly level has held and only a break of 386470 on a closing basis would warn of a technical near-term change in trend. The previous high made during October on the Monthly level at 449850 remains significant technically and only exceeding that level on a closing basis would suggest a reversal in the immediate trend. However, we still remain below key resistance 414300 on a closing basis.

MONTHLY TURNING POINTS

Looking at timing, I see the key targets on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for March 2023, May 2023 and August 2023. Considering all factors, there is a possibility of a decline moving into March 2023 with the opposite trend thereafter into May 2023. Looking ahead at March 2023, a continued advance becomes possible if this month's high is penetrated intraday.

MONTHLY VOLATILITY

Dissecting the volatility models suggest we should see a rise in price movement during January 2026. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

MONTHLY PANIC CYCLES

Nonetheless, our Panic Cycle target, for the next period to watch is during 2029. This is beyond the peak in the next Economic Confidence Model due in 2024. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

MONTHLY BEARISH REVERSALS

The key Monthly Bearish Reversal below the market remains at 361060. If this is breached on a monthly closing basis, then a further decline becomes entirely possible. If we penetrate that Reversal on a closing basis, then the next key support level to watch will be the next Monthly Bearish Reversal lies at 331350.

MONTHLY ANALYSIS PERSPECTIVE

Currently, we have broken below last month's low and that means we have generated a new What-If Monthly Bullish Reversal which lies above the present trading level at the general area of 16226 warning that this decline has still not punched through important overhead resistance. A monthly closing beneath this level will keep this market in a bearish tone.

HEDGING MODEL

On our Monthly Hedging Model Reversal System, we are currently long since September 2021 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis above the next Bearish Reversal on this level 361060. If you want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

The Stochastics are on the short term are in a positive position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

On the Monthly Level, focusing in now on timing factors, there was a rational potential of a outside reversal moving into October with the opposite trend implied thereafter into December (NOTE: this can be intraday or on a closing basis).

The strongest target in the Monthly array is February 2023 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting March 2023 until May 2023 with each target producing the opposite

direction for that 3-month period. Thereafter, we see the next target coming into play as July 2023 until August 2023 with again each target producing the opposite direction for that 2-month period.

However, the important target during that period will be August 2023. Still, when we look at the next higher time level, we see that a high formed during Quarterly.

Monthly Level

Indicator Description... Trend

Immediate Trend - Neutral -

Short-Term Momentum - Neutral -

Short-Term Trend BULLISH

Intermediate Momentum BULLISH

Intermediate Trend BULLISH

Long-Term Trend BULLISH

Cyclical Strength..... BULLISH

Broader Trend BULLISH

Long-Term Cyclical Trend .. BULLISH

MONTHLY CURRENCY CORRELATION

The London IPE Gas Oil Futures did make a high in conjunction with the British pound on 09/01 yet in nominal terms the last high was created on 03/01 whereas the high in Australian dollar took place on 08/01, a high in the Canadian dollar was established on 06/01, a high in the Japanese yen was established on 08/01, a high in the Swiss franc was established on 08/01, a high in the Euro was established on 09/01, and a high in the Chinese yuan was 08/01.

In terms of a Basket of Currencies, we see that here this market has rallied both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 03/01before the high in terms of a basket of currencies which came on 05/01 suggesting that that this immediate rally is purely in currency terms.

MARKET RISK FACTOR

Hungary Forint Spot Risk Table
------ UPSIDE RISK ---- DOWNSIDE RISK --
MONTHLY...... 0 | 0.002% | 361060 | 0.787% |

QUARTERLY..... 487710 | 17.78% | 305230 | 26.28% |

YEARLY...... 330620 | -20.1% | 260800 | 37.01% |

The Socrates Generated Commentary for Polish Zloty Spot



his market made a bull run from the low of 20145 made in 2008 for 12 years into a high established in 2020 at 43080. Presently, this market has rallied exceeding last year's high of 42034 reaching 50582 while holding last year's low of 36364. focusing in now on timing factors, there was a rational potential of an Outside Reversal to the downside in 2021, that is reinforced by also a Directional Change Target. However, we also see that there is another Directional Change due in the next session and then the session thereafter warning this is a choppy period ahead given that the previous session was an outside reversal to the downside with a continued rally if this session's high 42034 is exceeded moving thereafter into 2024.

However, we are still trading above last year's settlement. To date, this have been a 4-year rally from the last low of 2018. We do see that next year will be a Directional Change so we can see a change in direction unfold. (NOTE: this can be intraday or on a closing basis).

The strongest target in the Yearly array is 2031 for a turning point ahead, at least on a closing basis. There are 3 Yearly Directional Change targets starting from 2021 to 2023 suggesting a choppy coiling period for 3 Years. It does appear we have a choppy period starting 2024 until 2028, but while we have a target arriving also on 2026, the key target remains 2024 with each target producing the opposite direction for that 5-year period. Thereafter, we see the next target coming into play as 2030 until 2031 with again each target producing the opposite direction for that 2-year period.

Keep in mind that given the sharp decline of 15% from the last high established during 2020, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have NOT elected any Bearish Reversals thus far to date. The first Yearly Bearish Reversal comes into play at 35210. There are 3 Yearly Directional Change targets starting from 2021 to 2023 suggesting a choppy coiling period for 3 Years. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

The Polish Zloty Spot has continued to make new historical highs over the course of the rally from 2008 moving into 2022. We have elected two Bullish Reversals to date.

This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, this market was in a protracted bullish trend since the major low took place back in 2008 with the high forming during 2020. Nonetheless, we have not elected any Yearly Bearish Reversal to date from the turning point of 2020.

The last major low took place during 2008 which was 14 years ago. However, the last near-term low took place just 4 years ago in 2018.

YEARLY ANALYSIS PERSPECTIVE

Factually, in Polish Zloty Spot, the last important low formed back in 2008, there was a rally into the important high established during 2020 which has exceeded the pure reactionary phase with a bull market run do far for twelve years. Since

The Socrates Generated Commentary for Polish Zloty Spot

the major high in this market, we have seen a post high consolidation period for the past one year. We have not elected any Yearly Bearish Reversals from that high of 2020.

Recently on the yearly level, the market has rallied exceeding last year's high reaching 50582 intraday and we are still trading above 42034 right now with a positive undertone. At this moment, the market is trading still holding above support in a bullish posture. However, the highest closing was during 2019 at 37924 whereas the intraday high formed in 2020.

Right now, as stated, the market is trading above last year's high of 42034. Overall, the market has been in a long-term bullish trend. We have not elected any Yearly Bearish Reversals from that major high. Right now, the market is trading bullish above our yearly momentum indicators warning that support begins down at 40247.

Examining the yearly time level, we can now see that there is a -.13% risk on the upside, where we show a clear downside risk factor at 26%. From a risk perspective, resistance on a closing basis stands at 41160 whereas the risk on the downside begins at 35210.

YEARLY TECHNICAL ANALYSIS

2022/01/01	33917	38248	45923	48868	70162
2023/01/01	33515	39541	46445	50920	73414
2024/01/01	33113	40834	46966	52971	76665
2025/01/01	32711	42127	47488	55023	79917
2026/01/01	32309	43420	48009	57074	83169
2027/01/01	31907	44713	48531	59126	86420
2028/01/01	31505	46007	49052	61178	89672





Probing into the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2024, 2026, 2028 and 2031. Centering on the patterns unfolding, we do see a prospect of a decline moving into 2024 with the opposite trend thereafter into 2026. This pattern becomes a possibility if the market closed back below last year's high of 42034 at a minimum. Closing this year above last year's high warns that a cycle inversion is possible with a rally into the next target.

YEARLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model targets are during 2022 and during 2023. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

YEARLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2023. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

YEARLY PANIC CYCLES

Nonetheless, our Panic Cycle targets for the period ahead to watch are during 2024 and during 2028. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

THE BROADER LONGER-TERM VIEW

Discernably, the far-reaching forecast view recognizes that the current directional movement since the low made back in December 2020 has been a long-term Bullish trend in Polish Zloty Spot. This trend remains in motion as long as we hold above 38080 on a monthly closing basis. It is incredibly important to identify the broader trend for that is the underlying tone. It is wise to take position counter-trend only with this understanding of what you are doing. We need to see a monthly closing back above 48239 to confirm the uptrend will recommence.

INDICATING RANGE STUDY

From a perspective using the indicating ranges on the Yearly level in the Polish Zloty Spot, this market remains moderately bullish currently with underlying support beginning at 38411 and overhead resistance forming above at 42794. The market is trading closer to the support level at this time.

Yearly Indicating Ranges

Immediate Trend neutral
Short-Term Momentum bullish
Short-Term Trend neutral
Intermediate Momentum bearish
Intermedia Trend bullish
Long-Term Trend neutral
Cyclical Strength neutral

TRADING ENVELOPE STUDY

NORMAL YEARLY TRADING ENVELOPE Last Close Was. 40290

Envelope Top... 45874 Internal AvgL.. 35466 Internal AvgH.. 41373 Envelope Btm... 24568

STOCHASTICS

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

ENERGY MODELS

Looking at our Energy Models on the Yearly level, the historical high took place back in 2020 whereas the actual market high in price unfolded back in 2020.

REVERSAL COMMENTARY

Looking at our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 50582. These Tentative Hypothetical Bearish Reversals would rest at 27247, 33077, and 36102, whereas a close below the previous low 36364 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

YEARLY FIBONACI COMMENT

YEARLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2020 HIGH:

Sun. 01/01/2023 Wed. 01/01/2025 Sat. 01/01/2028 Sat. 01/01/2033 Tue. 01/01/2041 Thu. 01/01/2054 Tue. 01/01/2075 Wed. 01/01/2109 Mon. 01/01/2164

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

YEARLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous HIGH at 43080

23% | 32913 38% | 26623 61% | 16457 78% | 9219

Fibonacci Percentage Golden Ratio Movements:

3% | 2023/01/01

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5% | 2025/01/01

8% | 2028/01/01

13% | 2033/01/01

21% | 2041/01/01

34% | 2054/01/01

55% | 2075/01/01

89% | 2109/01/01

ECONOMIC CONFIDENCE MODEL CORRELATION

Here in Polish Zloty Spot, we do find that this particular market has correlated with our Economic Confidence Model in the past. Our next ECM target remains Mon. Apr. 10, 2023. The Last turning point on the ECM cycle low to line up with this market was 2018 and 2011. The Last turning point on the ECM cycle high to line up with this market was 2020 and 2009.

QUARTERLY ANALYSIS PERSPECTIVE



A closing below our Momentum Projection standing at 53431 will signal that we have a pullback possibly into the next turning point due in the Fourth Quarter 2022

leaving was The Third Quarter 2022 as a temporary high. Yet, this market is still holding our Momentum support level resting at 46654, indicating the broader trend has not been negated at this moment. (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Fourth Quarter 2023 for a turning point ahead, at least on a closing basis. We have overall 2 Quarterly Directional Change targets ahead and 1 that also alians with a main turning point on the top line of the Array. Therefore, the target of should be an important target. This target in time is the Fourth Quarter 2022. Directional Change targets that align with the top line for turning points often unfold as the main cyclical events. It does appear we have a choppy period starting the Third Quarter 2022 until the Fourth Quarter 2022 with each target producing the opposite direction for that 2-quarter period. Thereafter, we see the next target coming into play as the Fourth Quarter 2023 until the Third Quarter 2024, but while we have a target arriving also on the Second Quarter 2024, the key target remains the Fourth Quarter 2023 with again each target producing the opposite direction for that 4-quarter period. We have overall 2 Quarterly Directional Change targets ahead and 1 that also aligns with a main turning point on the top line of the Array. Therefore, the target of should be an important target. This target in time is the Fourth Quarter 2022. Directional Change targets that align with the top line for turning points often unfold as the main cyclical events. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

The next Quarterly Minor Bearish Reversal resides at 37840 whereas the next Quarterly Major Bearish Reversal is to be found at 39160.

This market on the quarterly level has been making new highs since the last low established 2 quarters ago which has been a series of successive advances. The last 2 highs have been progressively making higher highs implying we have had a bullish trend in motion for the past 10 quarters. The last high was made during the Third Quarter 2022. We did elect four Bullish Reversals which implies we have had a broad change in trend on this level. Meanwhile, our technical resistance stands at 52650 and it will require a closing above this level to signal a breakout of the upside is unfolding. Nevertheless, our technical support lies at 45315 which is still holding at this time. At this moment, the market remains between these two projections leaving it neutral on a technical basis.

QUARTERLY INDICATING RANGE STUDY

The perspective using the indicating ranges on the Quarterly level in the Polish Zloty Spot, this market remains in a bullish position at this time with the underlying support beginning at 42034.

Quarterly Indicating Ranges

Immediate Trend bullish
Short-Term Momentum bullish
Short-Term Trend bullish
Intermediate Momentum bullish
Intermedia Trend bullish
Long-Term Trend bullish
Cyclical Strength bullish

More specifically in this market the immediate trend indicating range is bullish with the short-term momentum indicating range being bullish and the short-term trend coming in as bullish. On the intermediate level momentum is bullish with trend showing it a bullish posture. The long-term trend is bullish while the key Cyclical Strength is registering bullish.

Note: Normally, when the first two indicating ranges (Immediate Trend and Short-Term Momentum) turn bullish or bearish in a trend, we begin to see a change in direction.

QUARTERLY TRADING ENVELOPE STUDY

NORMAL QUARTERLY TRADING ENVELOPE Last Close Was. 49529

Envelope Top... 41438 Internal AvgL.. 40459 Internal AvgH.. 43395 Envelope Btm... 39914

QUARTERLY MOMENTUM MODELS

QUARTERLY MOMENTUM MODEL INDICATOR

Our Momentum Models are rising at this time with the previous low made 3rdQ/2021 while the last high formed on 3rdQ/2022. However, this market has rallied in price with the last cyclical high formed on 3rdQ/2022 warning that this market remains strong at this time on a correlation perspective as it has moved higher with the Momentum Model.

QUARTERLY STOCHASTICS

The Stochastics are all in a bullish position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

QUARTERLY ENERGY MODELS

Looking at our Energy Models on the Quarterly level, the historical high took place back during the First Quarter 2012 whereas the actual market high in price unfolded back during the Third Quarter 2022. When Energy peaks BEFORE the price high, this is indicative of a major important high is forming and that we may see a serious change in trend to the downside thereafter. Immediately, our model continues to rally suggesting that a strong rally is likely.

Turning to our Tentative Hypothetical Models, we see that we have Quarterly Bearish Reversals that would be generated if we see another new high penetrating 50582. These Tentative Hypothetical Bearish Reversals would rest at 37052, 37296, 37793, and 39109, whereas a close below the previous low 44783 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

QUARTERLY FIBONACI COMMENT

QUARTERLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 07/01/2022 HIGH:

Sat. 04/01/2023

Sun. 10/01/2023

Mon. 07/01/2024

Wed. 10/01/2025

Fri. 10/01/2027

Wed. 01/01/2031

Tue. 04/01/2036

Sat. 10/01/2044

Mon. 07/01/2058

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

QUARTERLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous HIGH at 50582

23% | 38645

38% | 31260

61% | 19322

78% | 10825

Fibonacci Percentage Golden Ratio Movements:

3% | 2023/04/01

5% | 2023/10/01

8% | 2024/07/01

13% | 2025/10/01

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21% | 2027/10/01 34% | 2031/01/01 55% | 2036/04/01 89% | 2044/10/01

QUARTERLY TECHNICAL ANALYSIS

The market scored a new major high during the Third Quarter 2022 which is up 2 quarters from the last cyclical low.

Using the Energy Models, the fact that the market is making new intraday highs in price and our Energy Models are rising, this market is holding right now for the past 3 quarters. As long as our Energy Models hold above the former low made on 10/01/2021.

QUARTERLY ANALYSIS PERSPECTIVE

temporary high since the market is trading below the previous Quarterly's closing. A closing below our Momentum Projection standing at 53431 will signal that we have a pullback possibly into the next turning point due in the Fourth Quarter 2022 leaving was The Third Quarter 2022 as a temporary high. Yet, this market is still holding our Momentum support level resting at 46654, indicating the broader trend has not been negated at this moment. (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Fourth Quarter 2023 for a turning point ahead, at least on a closing basis. We have overall 2 Quarterly Directional Change targets ahead and 1 that also aligns with a main turning point on the top line of the Array. Therefore, the target of should be an important target. This target in time is the Fourth Quarter 2022. Directional Change targets that align with the top line for turning points often unfold as the main cyclical events. It does appear we have a choppy period starting the Third Quarter 2022 until the Fourth Quarter 2022 with each target producing the opposite direction for that 2-quarter period. Thereafter, we see the next target coming into play as the Fourth Quarter 2023 until the Third Quarter 2024, but while we have a target arriving also on the Second

Quarter 2024, the key target remains the Fourth Quarter 2023 with again each target producing the opposite direction for that 4-quarter period. We have overall 2 Quarterly Directional Change targets ahead and 1 that also aligns with a main turning point on the top line of the Array. Therefore, the target of should be an important target. This target in time is the Fourth Quarter 2022. Directional Change targets that align with the top line for turning points often unfold as the main cyclical events. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

QUARTERLY HEDGING MODELS

HEDGING MODEL

On our Quarterly Hedging Model Reversal System, we are currently long since during the Fourth Quarter 2021 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis above the next Bearish Reversal on this level 39160. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.

QUARTERLY CURRENCY CORRELATION

The London IPE Gas Oil Futures did make a high in conjunction with the British pound on 04/01 yet in nominal terms the last high was created on 01/01 whereas the high in Australian dollar took place on 04/01, a high in the Canadian dollar was established on 10/01, a high in the Japanese yen was established on 04/01, a high in the Swiss franc was established on 04/01, a high in the Euro was established on 07/01, and a high in the Chinese yuan was 10/01.

In terms of a Basket of Currencies, we see that here this market has declined both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 01/01 after the high in terms of a basket of currencies which came on 01/01 implying that this immediate rally is purely in domestic terms.

Polish Zloty Spot

Aggregate

L-Wave

Empirical

Long Term

Trading Cycle

Direction Change

Panic Cycle

Internal Volatility

Overnight Volatility

Monthly Timing Arrays

MONTHLY LEVEL

Aug

MONTHLY BROADER TREND VIEW

Nov

Oct

Overall, on a broader basis, looking at the monthly level on our models, this market is currently in a rising trend. We see here the trend has been moving up for the past 22 months. The previous low of 36101 made during December 2020 on the Monthly level has held and only a break of 46019 on a closing basis would warn of a technical near-term change in trend. The previous high made during September on the Monthly level at 50582 remains significant technically and only exceeding that level on a closing basis would suggest a reversal in the immediate trend. We have generated a buy signal so some caution is required.

MONTHLY TURNING POINTS

Looking at timing, I see the key targets on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for November, January 2023 and April 2023, July 2023. Considering all factors, there is a possibility of a decline moving into November with the opposite trend thereafter into January 2023. If the November high holds, then a decline into the next turning point may materialize. Otherwise, anticipate a rally into the next target should be expected if we make new highs.

MONTHLY DIRECTIONAL CHANGES

Nevertheless, the most critical model, the Directional Change Model targets are during 2022 and during 2023. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

MONTHLY VOLATILITY

Exploring the volatility models suggest we should see a rise in price movement during January 2023. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

MONTHLY PANIC CYCLES

Nonetheless, our Panic Cycle targets for the period ahead to watch are during 2024 and during 2028. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

MONTHLY BEARISH REVERSALS

The key Monthly Bearish Reversal below the market remains at 42470. If this is breached on a monthly closing basis, then a further decline becomes entirely possible. If we penetrate that Reversal on a closing basis, then the next key support level to watch will be the next Monthly Bearish Reversal lies at 41430.

MONTHLY ANALYSIS PERSPECTIVE

Currently, we have broken below last month's low and that means we have generated a new What-If Monthly Bullish Reversal which lies above the present trading level at the general area of 16226 warning that this decline has still not punched through important overhead resistance. A monthly closing beneath this level will keep this market in a bearish tone.

HEDGING MODEL

Employing our Monthly Hedging Model using our Reversal System only, we are currently long since September 2021 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis above the next Bearish Reversal on this level 42470. If you want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

On the Monthly Level, our first target for a turning point is November with a possible further decline thereafter into December (NOTE: this can be intraday or on a closing basis).

The strongest target in the Monthly array is July 2023 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting October until January 2023, but we do have a key target arriving also on November with each target producing the opposite direction for that 4-month period. We have NOT elected any Bearish Reversals thus far to date. The first Monthly Bearish Reversal comes into play at 42470.

Monthly Level

Indicator Description... Trend

Immediate Trend - Neutral -

Short-Term Momentum - Neutral -

Short-Term Trend BULLISH

Intermediate Momentum BULLISH

Intermediate Trend BULLISH

Long-Term Trend BULLISH

Cyclical Strength..... BULLISH

Broader Trend BULLISH

Long-Term Cyclical Trend .. BULLISH

MONTHLY CURRENCY CORRELATION

The London IPE Gas Oil Futures did make a high in conjunction with the British pound on 09/01 yet in nominal terms the last high was created on 03/01 whereas the high in Australian dollar took place on 08/01, a high in the Canadian dollar was established on 06/01, a high in the Japanese yen was established on 08/01, a high in the Swiss franc was established on 08/01, a high in the Euro was established on 09/01, and a high in the Chinese yuan was 08/01.

In terms of a Basket of Currencies, we see that here this market has rallied both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 03/01before the high in terms of a basket of currencies which came on 05/01 suggesting that that this immediate rally is purely in currency terms.

MARKET RISK FACTOR

Polish Zloty Sp	oot Risk Table			
	UPSIDE RISI	K D	OWNSIDE	RISK
MONTHLY	51483	7.908%	42470	10.98%
QUARTERLY	. 52583	10.21%	39160	17.92%
YEARLY	41160 -13.7%	35210	26.19%	

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his market made a bull run from the low of 230520 made in 2008 for 8 years into a high established in 2016 at 859570. Since that high, this market has declined for 5 years prior to this year.

On the Yearly Level, our first target for a turning point is 2022 with a continued rally if this session's high 780500 is exceeded moving thereafter into 2024. This turning point also matched the turning point on the Economic Confidence Model implying it was significant (NOTE: this can be intraday or on a closing basis).

The strongest target in the Yearly array is 2028 for a turning point ahead, at least on a closing basis. It does appear we have a choppy period starting 2021 until 2022 with each target producing the opposite direction for that 2-year period. However, given that 2028 is a very strong target, this can produce an important event. Thereafter, we see the next target coming into play as 2026 until 2029, but we do have a key target arriving also 2028 with again each target producing the opposite direction for that 4-year period.

Keep in mind that given the sharp decline of 16% from the last high established during 2020, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have NOT elected any Bearish Reversals thus far to date. The first Yearly Bearish Reversal comes into play at 555550.

The Russian Rubles Cash has continued to make new historical highs over the course of the rally from 2008 moving into 2022. Clearly, we have elected two Bullish Reversals to date. Currently, the market has dropped back and is trading beneath the previous year's close warning of a potential correction in play. This is especially true since we are facing an outside reversal to the downside by penetrating the previous year's low as well.

This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, this market was in a protracted bullish trend since the major low took place back in 2008 with the high forming during 2016. Even so, we have not elected any Yearly Bearish Reversal to date from the turning point of 2016.

The last major low took place during 2008 which was 14 years ago. However, the last near-term low took place just 4 years ago in 2018.

YEARLY ANALYSIS PERSPECTIVE

Factually, in Russian Rubles Cash, the last important low formed back in 2008, there was a rally into the important high established during 2016 which has exceeded the pure reactionary phase with a bull market run do far for eight years. Since the major high in this market, we have seen a post high consolidation period for the past five years. We have not elected any Yearly Bearish Reversals from that high of 2016. During the post high consolidation period, we did make a correction low during 2018 and we have elected two Bullish Reversals from that low implying the market is showing some strength.

Recently on the yearly level, the market has rallied exceeding last year's high reaching 1542500 intraday. The market has fallen back from the high rather sharply by 60%, which warns we may have a temporary high at this time. From a trading perspective, this market has made an outside reversal to the downside warning

this a negative technical pattern. To date, we have a 2-year reaction low in place as of 2018, so we have consolidated for the past 3 years since that event. We have an outside reversal thus far exceeding last year's high and penetrating its low. We are trading above last year's close of 739656 currently at 610000 and we need to finish year-end above that level to imply a continued rally is possible. However, the highest closing was during 2015 at 725650 whereas the intraday high formed in 2016.

Right now, the market is trading below last year's low of 691110. Overall, the market has been in a long-term bullish trend. We have not elected any Yearly Bearish Reversals from that major high. However, we have seen a correction from that high for 2 years forming the low during 2018. At this time, the market is trading in a bearish position below our yearly momentum indicators warning resistance starts at 614151.

Examining the yearly time level, we can now see that there is a 31% risk on the upside, where we show a clear downside risk factor at 8.92%. From a risk perspective, resistance on a closing basis stands at 799140 whereas the risk on the downside begins at 555550.

YEARLY TECHNICAL ANALYSIS

2022/01/01	420640	690186	1557276
2023/01/01	434220	723020	1652045
2024/01/01	447800	755853	1746813
2025/01/01	461380	788686	1841581
2026/01/01	474960	821520	1936350
2027/01/01	488540	854353	2031118
2028/01/01	502120	887186	2125886



YEARLY TIMING ANALYSIS

Exploring the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2022, 2026, 2028 and 2031. Centering on the patterns unfolding, we do see a prospect of a decline moving into 2022 with the opposite trend thereafter into 2026. This is a realistic potential since we have already penetrated last year's low of 691110.

YEARLY VOLATILITY

Investigating the volatility models suggest we should see a rise in price movement during January 2030. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

YEARLY PANIC CYCLES

Nonetheless, our Panic Cycle targets for the period ahead to watch are during 2024 and during 2028. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

THE BROADER LONGER-TERM VIEW

Palpably, the larger study view recognizes that the current directional movement since the low made back in June 2022 has been a long-term Bullish trend in Russian Rubles Cash. We need to see a monthly closing back above 799735 to confirm the uptrend will recommence.

INDICATING RANGE STUDY

Looking at the indicating ranges on the Yearly level in the Russian Rubles Cash, this market remains moderately bullish currently with underlying support beginning at 708422 and overhead resistance forming above at 859570. The market is trading closer to the support level at this time.

Yearly Indicating Ranges

Immediate Trend neutral
Short-Term Momentum bullish
Short-Term Trend neutral
Intermediate Momentum bullish
Intermedia Trend bullish
Long-Term Trend neutral
Cyclical Strength neutral

TRADING ENVELOPE STUDY

NORMAL YEARLY TRADING ENVELOPE Last Close Was. 750782

Envelope Top... 790810 Internal AvgL.. 605339 Internal AvgH.. 747462 Envelope Btm... 269476

STOCHASTICS

The Stochastics are all in a bullish position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

ENERGY MODELS

Looking at our Energy Models on the Yearly level, the historical high took place back in 2016 whereas the actual market high in price unfolded back in 2016. Immediately, our model continues to rally suggesting that a strong rally is likely.

REVERSAL COMMENTARY

On our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 1542500. These Tentative Hypothetical Bearish Reversals would rest at 290000, 555563, and 608834, whereas a close below the previous low 691110 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

YEARLY FIBONACI COMMENT

YEARLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2016 HIGH:

Tue. 01/01/2019

Fri. 01/01/2021

Mon. 01/01/2024

Mon. 01/01/2029

Thu. 01/01/2037

Sat. 01/01/2050

Thu. 01/01/2071

Fri. 01/01/2105

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Wed. 01/01/2160

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

YEARLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous HIGH at 859570

23% | 656712 38% | 531214 61% | 328356 78% | 183948

Fibonacci Percentage Golden Ratio Movements:

3% | 2019/01/01

5% | 2021/01/01

8% | 2024/01/01

13% | 2029/01/01

21% | 2037/01/01

34% | 2050/01/01

55% | 2071/01/01

89% | 2105/01/01

ECONOMIC CONFIDENCE MODEL CORRELATION

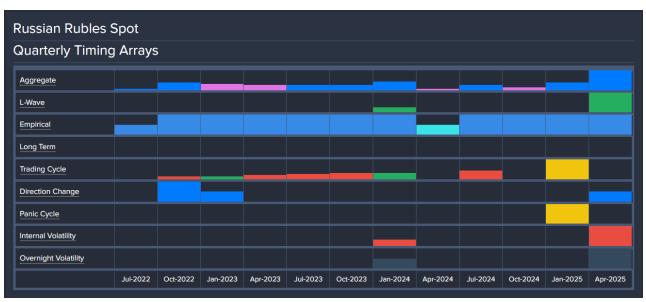
Here in Russian Rubles Cash, we do find that this particular market has correlated with our Economic Confidence Model in the past. Our next ECM target remains Mon. Apr. 10, 2023. The Last turning point on the ECM cycle low to line up with this market was 2018 and 2011. The Last turning point on the ECM cycle high to line up with this market was 2020 and 2009.

YEARLY CURRENCY CORRELATION

The NY Crude Oil Futures did make a high in conjunction with the British pound on 01/01 yet in nominal terms the last high was created on 01/01 whereas the high in Australian dollar took place on 01/01, a high in the Canadian dollar was established on 01/01, a high in the Japanese yen was established on 01/01, a high in the Swiss franc was established on 01/01, a high in the Euro was established on 01/01, and a high in the Chinese yuan was 01/01.

In terms of a Basket of Currencies, we see that here this market has declined both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 01/01 after the high in terms of a basket of currencies which came on 01/01 implying that this immediate rally is purely in domestic terms.

QUARTERLY ANALYSIS PERSPECTIVE



The strongest target in the Quarterly array is the Second Quarter 2025 for a turning point ahead, at least on a closing basis. There are 3 Quarterly Directional Change targets starting from the Fourth Quarter 2022 to the First Quarter 2023 warning of a potential choppy swing period for these few Quarters. It does appear we have a choppy period starting the Third Quarter 2022 until the Fourth Quarter 2022 with

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each target producing the opposite direction for that 2-quarter period. Thereafter, we see the next target coming into play as the First Quarter 2024 until the Fourth Quarter 2024, but while we have a target arriving also on the Third Quarter 2024, the key target remains the First Quarter 2024 with again each target producing the opposite direction for that 4-quarter period.

Keep in mind that given the dramatic decline of 66% from the last high established the First Quarter 2022, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have elected 4 Bearish Reversals from the last high thus far to date. There are 3 Quarterly Directional Change targets starting from the Fourth Quarter 2022 to the First Quarter 2023 warning of a potential choppy swing period for these few Quarters. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

The next Quarterly Minor Bullish Reversal stands at 1741790 with the next Quarterly Major Bullish Reversal standing at 1814290. The next Quarterly Minor Bearish Reversal resides at 328300 whereas the next Quarterly Major Bearish Reversal is to be found at 481360. Caution is now required for this market is starting to suggest it will decline further on a quarterly level.

This market on the quarterly level has been making a low. The Channel Technical Support rests at 492922 for the next session. A closing below that will signal a break to the downside once again. The Downtrend Line resistance stands above the market at 1697898 with our immediate projected resistance standing at 870250.

QUARTERLY INDICATING RANGE STUDY

From a perspective using the indicating ranges on the Quarterly level in the Russian Rubles Cash, this market remains in a bearish position at this time with the overhead resistance beginning at 624990.

Quarterly Indicating Ranges

Immediate Trend neutral
Short-Term Momentum bearish

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Short-Term Trend bearish
Intermediate Momentum neutral
Intermedia Trend bearish
Long-Term Trend bearish
Cyclical Strength bullish

More specifically in this market the immediate trend indicating range is neutral with the short-term momentum indicating range being bearish and the short-term trend coming in as bearish. On the intermediate level momentum is neutral with trend showing it a bearish posture. The long-term trend is bearish while the key Cyclical Strength is registering bullish.

Note: Normally, when the first two indicating ranges (Immediate Trend and Short-Term Momentum) turn bullish or bearish in a trend, we begin to see a change in direction.

QUARTERLY TRADING ENVELOPE STUDY

NORMAL QUARTERLY TRADING ENVELOPE Last Close Was. 592000 Envelope Top... 869569 Internal AvgL.. 633498 Internal AvgH.. 879551 Envelope Btm... 544365

QUARTERLY MOMENTUM MODELS

QUARTERLY MOMENTUM MODEL INDICATOR

Our Momentum Models are rising at this time with the previous low made 2ndQ/2022 while the last high formed on 3rdQ/2022. However, this market has declined in price with the last cyclical low formed on 2ndQ/2022 and thus we have a divergence warning that this market is starting to run out of strength on the upside.

QUARTERLY STOCHASTICS

The Stochastics are on the short term are in a negative position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

QUARTERLY ENERGY MODELS

Looking at our Energy Models on the Quarterly level, the historical high took place back during the Second Quarter 2022 whereas the actual market high in price unfolded back during the First Quarter 2022. This is rather indicative of the fact that the broader term means that eventually higher highs will be carved out in the future. When Energy peaks BEFORE the high, this is indicative of a major high and a serious change in trend is likely to follow.

Employing our Tentative Hypothetical Models, we see that we have Quarterly Bullish Reversals that would be generated if we see another new low penetrating 514850. These Tentative Hypothetical Bullish Reversals would stand at 698040, 743540, 753500, and 770540, whereas a close above the previous high 684500 would tend to suggest that these Tentative Hypothetical Bullish Reversals will then become fixed as long as the low holds thereafter for at least several days. Moreover, the election of any of these Tentative Bullish Reversals during that session would signal a bounce is unfolding and that such a low may stand. However, if we continue to make new lows, then these WHAT-IF Reversals will be replaced by a new set until the low becomes fixed.

QUARTERLY FIBONACI COMMENT

QUARTERLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 04/01/2022 LOW:

Sun. 01/01/2023

Sat. 07/01/2023

Mon. 04/01/2024

Tue. 07/01/2025

Thu. 07/01/2027

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Tue. 10/01/2030 Tue. 01/01/2036 Fri. 07/01/2044 Mon. 04/01/2058

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

QUARTERLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous LOW at 498750

23% | 616455 38% | 689272 61% | 806978 78% | 890768

Fibonacci Percentage Golden Ratio Movements:

3% | 2023/01/01

5% | 2023/07/01

8% | 2024/04/01

13% | 2025/07/01

21% | 2027/07/01

34% | 2030/10/01

55% | 2036/01/01

89% | 2044/07/01

144% | 2058/04/01

QUARTERLY TECHNICAL ANALYSIS

After the historical high was established during 2022, a major low was created during the Second Quarter 2022 at 498750 which was 1 quarter from that major high. Currently, the market has yet to retest this low during the past session.

Turning to our Energy Models, the market is making new intraday highs in price and our Energy Models are flipping from negative to positive. The low on our Energy Models took place 2 quarters ago. Therefore, this immediate rally may prove to be short-term unless this model begins to create new highs.

QUARTERLY TECHNICAL ANALYSIS

2022/10/01	687340	1051420	1417596	2797690
2023/01/01	693190	1068380	1437460	2841910
2023/04/01	699040	1085340	1457323	2886130
2023/07/01	704890	1102300	1477186	2930350
2023/10/01	710740	1119260	1497050	2974570
2024/01/01	716590	1136220	1516913	3018790
2024/04/01	722440	1153180	1536776	3063010

QUARTERLY ANALYSIS PERSPECTIVE

The strongest target in the Quarterly array is the Second Quarter 2025 for a turning point ahead, at least on a closing basis. There are 3 Quarterly Directional Change targets starting from the Fourth Quarter 2022 to the First Quarter 2023 warning of a potential choppy swing period for these few Quarters. It does appear we have a choppy period starting the Third Quarter 2022 until the Fourth Quarter 2022 with each target producing the opposite direction for that 2-quarter period. Thereafter, we see the next target coming into play as the First Quarter 2024 until the Fourth Quarter 2024, but while we have a target arriving also on the Third Quarter 2024,

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the key target remains the First Quarter 2024 with again each target producing the opposite direction for that 4-quarter period.

Keep in mind that given the dramatic decline of 66% from the last high established the First Quarter 2022, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have elected 4 Bearish Reversals from the last high thus far to date. There are 3 Quarterly Directional Change targets starting from the Fourth Quarter 2022 to the First Quarter 2023 warning of a potential choppy swing period for these few Quarters. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

QUARTERLY HEDGING MODELS

HEDGING MODEL

Using our Quarterly Hedging Model based on the Reversal System exclusively, we are currently short since during the Second Quarter 2022 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis below the next Bullish Reversal on this level 698040. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.

QUARTERLY CURRENCY CORRELATION

The NY Crude Oil Futures did make a high in conjunction with the British pound on 01/01 yet in nominal terms the last high was created on 01/01 whereas the high in Australian dollar took place on 01/01, a high in the Canadian dollar was established on 01/01, a high in the Japanese yen was established on 01/01, a high in the Swiss franc was established on 01/01, a high in the Euro was established on 07/01, and a high in the Chinese yuan was 07/01.

In terms of a Basket of Currencies, we see that here this market has been neutral both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 01/01 after the high

in terms of a basket of currencies which came on 01/01 implying that this immediate rally is purely in domestic terms.

Russian Rubles Spot Monthly Timing Arrays Aggregate L-Wave **Empirical** Long Term Trading Cycle **Direction Change** Panic Cycle Internal Volatility Overnight Volatility Oct Nov Feb Apr May Jan Jun Jul Aug Sep

MONTHLY LEVEL

MONTHLY BROADER TREND VIEW

Taking a broader view, this market is in a downward trend on all our indicators looking at the monthly level. Probing into the direction of this trend, we had been moving down for 3 months. Subsequently, the market has consolidated for the past 4 Monthly sessions. The previous high made during March on the Monthly level at 1542500 remains significant technically and only exceeding that level on a closing basis would suggest a reversal in the immediate trend. The previous low of 498750 made during June on the Monthly level has held and only a break of 556750 on a closing basis would warn of a technical near-term change in trend. We have generated a sell signal, so some caution is required.

MONTHLY TURNING POINTS

My primary targets on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for January 2023, March 2023, May 2023 and July 2023. There is a likelihood of a decline moving into January 2023 with the opposite trend thereafter into March 2023. Looking ahead at January 2023, a continued advance becomes possible if this month's high is penetrated intraday.

MONTHLY VOLATILITY

Investigating the volatility models suggest we should see a rise in price movement during January 2030. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

MONTHLY PANIC CYCLES

Nonetheless, our Panic Cycle targets for the period ahead to watch are during 2024 and during 2028. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

MONTHLY BULLISH REVERSALS

The key Monthly Bullish Reversal stands overhead at 758470. If this market rallies on a monthly closing basis above this level, then a breakout becomes possible. If we exceed that Reversal, then the next key resistance level to watch will be the next Monthly Bullish Reversal at 804080.

MONTHLY BEARISH REVERSALS

The key Monthly Bearish Reversal below the market remains at 481360. If this is breached on a monthly closing basis, then a further decline becomes entirely possible. If we penetrate that Reversal on a closing basis, then the next key support level to watch will be the next Monthly Bearish Reversal lies at 366680.

MONTHLY ANALYSIS PERSPECTIVE

At the moment, we have broken below last month's low and that means we have generated a new What-If Monthly Bullish Reversal which lies above the present trading level at the general area of 8480 warning that this decline has still not punched through important overhead resistance. A monthly closing beneath this level will keep this market in a bearish tone.

HEDGING MODEL

Using our Monthly Hedging Model based on the Reversal System exclusively, we are currently short since April on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis below the next Bullish Reversal on this level 758470. If you want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

The Stochastics are on the short term are in a negative position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

On the Monthly Level, our Forecast Array suggests that there was a practical likelihood of a outside reversal moving into October with the opposite trend implied thereafter into December which is a Directional Change (NOTE: this can be intraday or on a closing basis).

The strongest target in the Monthly array is January 2023 for a turning point ahead, at least on a closing basis. There are 4 Monthly Directional Change targets starting from November to January 2023 suggesting a choppy coiling period for 3 Months. It does appear we have a choppy period starting December until January 2023 with each target producing the opposite direction for that 2-month period.

Keep in mind that given the dramatic decline of 62% from the last high established March, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have elected 4 Bearish Reversals from the last high thus far to date. There are 4 Monthly Directional Change targets starting from November to January 2023 suggesting a choppy coiling period for 3 Months. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

Monthly Level

Indicator Description... Trend

Immediate Trend - Neutral -

Short-Term Momentum – Neutral –

Short-Term Trend - Neutral -

Intermediate Momentum (Bearish)

Intermediate Trend (Bearish)

Long-Term Trend (Bearish)

Cyclical Strength...... (Bearish)

Broader Trend (Bearish)

Long-Term Cyclical Trend .. - Neutral -

MONTHLY CURRENCY CORRELATION

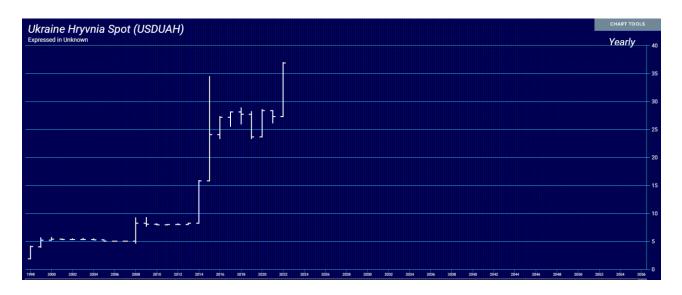
The NY Crude Oil Futures did make a high in conjunction with the British pound on 08/01 yet in nominal terms the last high was created on 03/01 whereas the high in Australian dollar took place on 08/01, a high in the Canadian dollar was established on 08/01, a high in the Japanese yen was established on 08/01, a high in the Swiss franc was established on 08/01, a high in the Euro was established on 09/01, and a high in the Chinese yuan was 09/01.

In terms of a Basket of Currencies, we see that here this market has rallied both in nominal and basket terms. In international terms, we have a divergence whereby this market last reached a high in nominal terms on 03/01before the high in terms of a basket of currencies which came on 05/01 suggesting that that this immediate rally is purely in currency terms.

MARKET RISK FACTOR

Russian Ruble	es Cash Risk Table	е		
	UPSIDE RISK	DC	WNSIDE RI	SK
MONTHLY	758470	24.33%	516180	15.38%
QUARTERLY	698040	14.43%	481360	21.08%
YEARLY	799140 31%	555550 l	8.926% l	

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his currency has decline sharply as we can see that dollar has made a bull run from the low of 385 made in 1999 for 16 years into a high established in 2015 at 3450. Since that high, this market has declined for 6 years prior to this year. Presently, this market has rallied exceeding last year's high of 2848 reaching 3700 while holding last year's low of 2608.

On the Yearly Level, our first target for a turning point is 2022, that is reinforced by also a Directional Change Target with a possible further decline thereafter into 2026. However, a break of this current year's trading range of 3700 – 2732 would warn of a possible cycle inversion given we have a target this year. This turning point also matched the turning point on the Economic Confidence Model implying it was significant (NOTE: this can be intraday or on a closing basis).

The strongest target in the Yearly array is 2022 which is this immediate year whereby we have so far exceeded last year's high and are trading above last year's closing. There are 2 Yearly Directional Change targets starting from 2021 to

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2022 warning of a potential choppy swing period for these few Years. It does appear we have a choppy period starting 2021 until 2022 with each target producing the opposite direction for that 2-year period. Thereafter, we see the next target coming into play as 2028 until 2031 with again each target producing the opposite direction for that 4-year period.

However, the important target during that period will be 2031.

Keep in mind that given the significant decline of 24% from the last high established during 2015, that if we continue to move in the same direction after one target, then the move will not subside until the next target in time is reached. We have NOT elected any Bearish Reversals thus far to date. The first Yearly Bearish Reversal comes into play at 770.

The Ukraine Hryvnia Cash has continued to make new historical highs over the course of the rally from 2008 moving into 2022. We have elected two Bullish Reversals to date.

This market remains in a positive position on the weekly to yearly levels of our indicating models. From a Historical Perspective, this market was in a protracted bullish trend since the major low took place back in 2008 with the high forming during 2015. Even so, we have not elected any Yearly Bearish Reversal to date from the turning point of 2015.

The last major low took place during 2008 which was 14 years ago.

YEARLY ANALYSIS PERSPECTIVE

Factually, in Ukraine Hryvnia Cash, the last important low formed back in 2008, there was a rally into the important high established during 2015 which has exceeded the pure reactionary phase with a bull market run do far for seven years. Since the major high in this market, we have seen a post high consolidation period for the past six years. We have not elected any Yearly Bearish Reversals from that high of 2015.

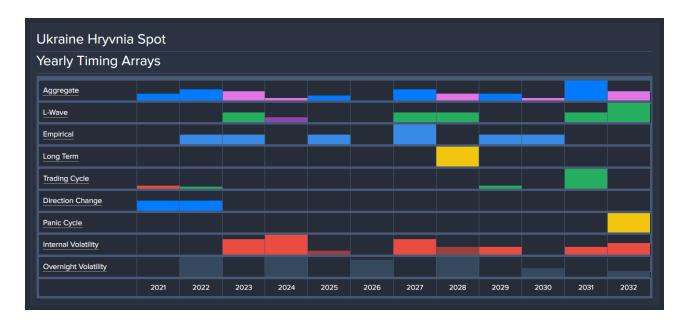
Recently on the yearly level, the market has rallied exceeding last year's high reaching 3700 intraday and we are still trading above 2848 right now with a positive undertone. At this moment, the market is trading still holding above support

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in a bullish posture. However, the highest closing was during 2016 at 2720 whereas the intraday high formed in 2015.

Right now, as stated, the market is trading above last year's high of 2848. Overall, the market has been in a long-term bullish trend. We have not elected any Yearly Bearish Reversals from that major high. Right now, the market is trading bullish above our yearly momentum indicators warning that support begins down at 2826.

Examining the yearly time level, we can now see that there is a -.23% risk on the upside, where we show a clear downside risk factor at 79%. From a risk perspective, resistance on a closing basis stands at 2831 whereas the risk on the downside begins at 770.



YEARLY TIMING ANALYSIS

Glancing at the longer-term yearly level, we see turning points where highs or lows on an intraday or closing basis should form will be, 2023, 2025, 2027, 2029, 2031 and 2033. Considering all factors, there is a possibility of a rally moving into 2023 with the opposite trend thereafter into 2025.

YEARLY DIRECTIONAL CHANGES

Focusing an important timing model, the Directional Change Model target is during 2023. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

YEARLY VOLATILITY

Searching the volatility models suggest we should see a rise in price movement during January 2030. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

YEARLY PANIC CYCLES

Focusing on the potential for sharp movement, our Panic Cycle target, for the next period to watch is during 2031. This is beyond the peak in the next Economic Confidence Model due in 2024. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

THE BROADER LONGER-TERM VIEW

Manifestly, the longstanding forecast view recognizes that the current directional movement since the low made back in November 2021 has been a long-term Bullish trend in Ukraine Hryvnia Cash. This trend remains in motion as long as we hold above 2695 on a monthly closing basis. It is incredibly important to identify the broader trend for that is the underlying tone. It is wise to take position countertrend only with this understanding of what you are doing.

INDICATING RANGE STUDY

Focusing on our perspective using the indicating ranges on the Yearly level in the Ukraine Hryvnia Cash, this market remains moderately bullish currently with underlying support beginning at 2590 and overhead resistance forming above at 2740. The market is trading closer to the resistance level at this time.

Yearly Indicating Ranges

Immediate Trend neutral
Short-Term Momentum neutral
Short-Term Trend neutral
Intermediate Momentum bearish
Intermedia Trend bullish
Long-Term Trend neutral
Cyclical Strength neutral

TRADING ENVELOPE STUDY

NORMAL YEARLY TRADING ENVELOPE Last Close Was. 2732

Envelope Top... 2298 Internal AvgL.. 2489 Internal AvgH.. 2919 Envelope Btm... 1438

STOCHASTICS

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator. Nevertheless, the short-term oscillator is entering a crash mode suggesting we may see a decline from here.

ENERGY MODELS

Looking at our Energy Models on the Yearly level, the historical high took place back in 2018 whereas the actual market high in price unfolded back in 2015. This is rather indicative of the fact that the broader term means that eventually higher highs will be carved out in the future. When Energy peaks BEFORE the high, this is indicative of a major high and a serious change in trend is likely to follow. Immediately, our model continues to rally suggesting that a strong rally is likely.

REVERSAL COMMENTARY

On our Yearly Hypothetical Models, clearly, we see that we have Yearly Bearish Reversals that would be generated if we see another new high penetrating 3700. These Tentative Hypothetical Bearish Reversals would rest at 789, 2371, and 2600, whereas a close below the previous low 2608 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

YEARLY FIBONACI COMMENT

YEARLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 01/01/2015 HIGH:

Mon. 01/01/2018

Wed. 01/01/2020

Sun. 01/01/2023

Sat. 01/01/2028

Tue. 01/01/2036

Fri. 01/01/2049

Wed. 01/01/2070

Wed. 01/01/2104

Tue. 01/01/2159

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Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

YEARLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous HIGH at 3450

23% | 2636 38% | 2132 61% | 1318 78% | 738

Fibonacci Percentage Golden Ratio Movements:

3% | 2018/01/01 5% | 2020/01/01 8% | 2023/01/01 13% | 2028/01/01 21% | 2036/01/01 34% | 2049/01/01 55% | 2070/01/01 89% | 2104/01/01

ECONOMIC CONFIDENCE MODEL CORRELATION

Here in Ukraine Hryvnia Cash, we do find that this particular market has correlated with our Economic Confidence Model in the past. The Last turning point on the ECM cycle high to line up with this market was 2015 and 2000.



QUARTERLY ANALYSIS PERSPECTIVE

On the Quarterly Level, our first target for a turning point is The Fourth Quarter 2022 with the opposite trend implied thereafter into the First Quarter 2023 which is a Directional Change (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Third Quarter 2024 for a turning point ahead, at least on a closing basis. There are 7 Quarterly Directional Change targets starting from the First Quarter 2023 to the First Quarter 2025 suggesting a choppy coiling period for 5 Quarters. It does appear we have a choppy period starting the Third Quarter 2022 until the First Quarter 2023, but we do have a key target arriving also on the Fourth Quarter 2022 with each target producing the opposite direction for that 3-quarter period. Thereafter, we see the next target coming into play as the Third Quarter 2024 until the First Quarter 2025 with again each target producing the opposite direction for that 3-quarter period.

However, the important target during that period will be the First Quarter 2025, yet the key target will be the Third Quarter 2024. There are 7 Quarterly Directional Change targets starting from the First Quarter 2023 to the First Quarter 2025 suggesting a choppy coiling period for 5 Quarters. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

We closed the previous quarter at 3693 which was in a very bullish position above all our indicating ranges. However, the monthly level remains somewhat bullish for now. The next Quarterly Minor Bullish Reversal stands at 3717. The next Quarterly Minor Bearish Reversal resides at 2530 whereas the next Quarterly Major Bearish Reversal is to be found at 2680.

This market on the quarterly level has been making new highs since the last low established 3 quarters ago, which is a turn to the upside for now. We did elect four Bullish Reversals which implies we have had a broad change in trend on this level. Meanwhile, our technical resistance stands at 3824 and it will require a closing above this level to signal a breakout of the upside is unfolding. Nevertheless, our technical support lies at 3108 which is still holding at this time. At this moment, the market remains between these two projections leaving it neutral on a technical basis.

QUARTERLY INDICATING RANGE STUDY

The perspective using the indicating ranges on the Quarterly level in the Ukraine Hryvnia Cash, this market remains in a bullish position at this time with the underlying support beginning at 2814.

Quarterly Indicating Ranges

Immediate Trend bullish
Short-Term Momentum bullish
Short-Term Trend bullish
Intermediate Momentum bullish
Intermedia Trend bullish
Long-Term Trend bullish
Cyclical Strength bullish

More specifically in this market the immediate trend indicating range is bullish with the short-term momentum indicating range being bullish and the short-term trend coming in as bullish. On the intermediate level momentum is bullish with trend showing it a bullish posture. The long-term trend is bullish while the key Cyclical Strength is registering bullish.

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Note: Normally, when the first two indicating ranges (Immediate Trend and Short-Term Momentum) turn bullish or bearish in a trend, we begin to see a change in direction.

QUARTERLY TRADING ENVELOPE STUDY

NORMAL QUARTERLY TRADING ENVELOPE Last Close Was. 3693

Envelope Top... 3078 Internal AvgL.. 2781 Internal AvgH.. 2998 Envelope Btm... 2526

QUARTERLY MOMENTUM MODELS

QUARTERLY MOMENTUM MODEL INDICATOR

Our Momentum Models are rising at this time with the previous low made 4thQ/2021 while the last high formed on 3rdQ/2022. However, this market has rallied in price with the last cyclical high formed on 3rdQ/2022 warning that this market remains strong at this time on a correlation perspective as it has moved higher with the Momentum Model.

QUARTERLY STOCHASTICS

The Stochastics are all in a bullish position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

QUARTERLY ENERGY MODELS

Looking at our Energy Models on the Quarterly level, the historical high took place back during the First Quarter 2017 whereas the actual market high in price unfolded back during the Third Quarter 2022. When Energy peaks BEFORE the price high, this is indicative of a major important high is forming and that we may see a

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serious change in trend to the downside thereafter. Immediately, our model continues to rally suggesting that a strong rally is likely.

Engaging our Tentative Hypothetical Models, we see that we have Quarterly Bearish Reversals that would be generated if we see another new high penetrating 3700. These Tentative Hypothetical Bearish Reversals would rest at 2411, 2485, 2657, and 2732, whereas a close below the previous low 2955 would tend to suggest that these Tentative Hypothetical Reversals will then become fixed as long as the high holds thereafter for at least several days. Moreover, the election of any of these Tentative Hypothetical Bearish Reversals during this next session would signal a decline is unfolding and that such a high may stand. However, if we continue to make new highs, then these Tentative Hypothetical Reversals will be replaced by a new set until the high becomes fixed.

QUARTERLY FIBONACI COMMENT

QUARTERLY FIBONACCI PROJECTIONS IN TIME

These are the Fibonacci Time targets for potential turning points ahead calculated from the 07/01/2022 HIGH:

Sat. 04/01/2023

Sun. 10/01/2023

Mon. 07/01/2024

Wed. 10/01/2025

Fri. 10/01/2027

Wed. 01/01/2031

Tue. 04/01/2036

Sat. 10/01/2044

Mon. 07/01/2058

Note: Once more, these are purely Fibonacci projections in Time. They should not be used independently, but they are more important as a correlation tool when the line up with the targets from our Timing Arrays.

QUARTERLY FIBONACCI RETRACEMENTS & PERCENTAGE MOVEMENTS

Here are the Fibonacci Percentage Retracements from the previous HIGH at 3700

23% | 2827 38% | 2287 61% | 1413 78% | 792

<u>Fibonacci Percentage Golden Ratio Movements:</u>

3% | 2023/04/01 5% | 2023/10/01 8% | 2024/07/01 13% | 2025/10/01 21% | 2027/10/01

34% | 2031/01/01 55% | 2036/04/01

89% | 2044/10/01

QUARTERLY ANALYSIS PERSPECTIVE

On the Quarterly Level, our first target for a turning point is The Fourth Quarter 2022 with the opposite trend implied thereafter into the First Quarter 2023 which is a Directional Change (NOTE: this can be intraday or on a closing basis).

The strongest target in the Quarterly array is the Third Quarter 2024 for a turning point ahead, at least on a closing basis. There are 7 Quarterly Directional Change targets starting from the First Quarter 2023 to the First Quarter 2025 suggesting a choppy coiling period for 5 Quarters. It does appear we have a choppy period starting the Third Quarter 2022 until the First Quarter 2023, but we do have a key target arriving also on the Fourth Quarter 2022 with each target producing the opposite direction for that 3-quarter period. Thereafter, we see the next target coming into play as the Third Quarter 2024 until the First Quarter 2025 with again each target producing the opposite direction for that 3-quarter period.

However, the important target during that period will be the First Quarter 2025, yet the key target will be the Third Quarter 2024. There are 7 Quarterly Directional

Change targets starting from the First Quarter 2023 to the First Quarter 2025 suggesting a choppy coiling period for 5 Quarters. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

QUARTERLY HEDGING MODELS

HEDGING MODEL

On our Quarterly Hedging Model Reversal System, we are currently long since during the Fourth Quarter 2019 on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Quarterly closing basis above the next Bearish Reversal on this level 2680. If you want to reduce the exit strategy then use the next Monthly Reversal if we reach the timing objectives.



MONTHLY LEVEL

MONTHLY BROADER TREND VIEW

Overall, on a broader basis, looking at the monthly level on our models, this market is currently in a rising trend. We see here the trend has been moving up for the past 11 months. The previous low of 2608 made during November 2021 on the

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Monthly level has held and only a break of 3690 on a closing basis would warn of a technical near-term change in trend. The previous high made during July on the Monthly level at 3700 remains significant technically and only exceeding that level on a closing basis would suggest a reversal in the immediate trend. We have generated a buy signal so some caution is required.

MONTHLY TURNING POINTS

Centering on time, I do see a prospective target on the Turning Point Model, defined as highs or lows on an intraday or closing basis, for January 2023, May 2023 and July 2023. Centering on the patterns unfolding, I do see a prospect of a rally moving into January 2023 with the opposite trend thereafter into May 2023. Looking ahead at January 2023, a continued advance becomes possible if this month's high is penetrated intraday.

MONTHLY DIRECTIONAL CHANGES

Focusing an important timing model, the Directional Change Model target is during 2023. This model often picks the high or low but can also elect a breakout to a new higher trading zone or a breakdown to a new lower trading level.

MONTHLY VOLATILITY

Searching the volatility models suggest we should see a rise in price movement during January 2030. We look to the turning points to ascertain the direction. Volatility targets reflect only greater price movement.

MONTHLY PANIC CYCLES

Focusing on the potential for sharp movement, our Panic Cycle target, for the next period to watch is during 2031. This is beyond the peak in the next Economic Confidence Model due in 2024. Keep in mind that a Panic Cycle differs from just volatility. This can be either an outside reversal or a sharp move in only one direction. Panic Cycles can be either up or down. Watch the Stochastics and the reversals to determine the best indication of the potential direction.

MONTHLY BEARISH REVERSALS

The key Monthly Bearish Reversal below the market remains at 2940. If this is breached on a monthly closing basis, then a further decline becomes entirely possible. If we penetrate that Reversal on a closing basis, then the next key support level to watch will be the next Monthly Bearish Reversal lies at 2780.

MONTHLY ANALYSIS PERSPECTIVE

Currently, we have exceeded last month's high so we have therefore generated a new What If Monthly Bearish Reversal which lies below the present trading level at the general area of 3650 and a month end closing beneath this level will be a sell signal for now.

HEDGING MODEL

By means of our Monthly Hedging Model using only the Reversal System, we are currently long since January on that close when we reversed our hedge position in this market. This position should be maintained provided this market remains on a Monthly closing basis above the next Bearish Reversal on this level 2940. If you want to reduce the exit strategy then use the next Weekly Reversal if we reach the timing objectives.

The Stochastics are in a mixed position. Keep in mind that this type of indicator tends to be more of a confirmation tool rather than a leading forecasting tool. Thus, it is more often than not just a lagging indicator.

On the Monthly Level, our first target was October with a possible further decline thereafter into December (NOTE: this can be intraday or on a closing basis).

The strongest target in the Monthly array is October for a turning point ahead, at least on a closing basis. We have overall 2 Monthly Directional Change targets ahead and 1 that also aligns with a main turning point on the top line of the Array. Therefore, the target of January 2023 should be an important target. Directional Change targets that align with the top line for turning points often unfold as the main cyclical events. It does appear we have a choppy period starting December until January 2023 with each target producing the opposite direction for that 2-month period. Thereafter, we see the next target coming into play as May 2023

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until July 2023 with again each target producing the opposite direction for that 3-month period.

However, the important target during that period will be July 2023, yet the key target will be May 2023. We have overall 2 Monthly Directional Change targets ahead and 1 that also aligns with a main turning point on the top line of the Array. Therefore, the target of January 2023 should be an important target. Directional Change targets that align with the top line for turning points often unfold as the main cyclical events. Don't forget, a Directional Change can also be a sharp dramatic move in the same direction, not just a change in direction.

Monthly Level

Indicator Description... Trend

Immediate Trend - Neutral -

Short-Term Momentum – Neutral –

Short-Term Trend BULLISH

Intermediate Momentum BULLISH

Intermediate Trend BULLISH

Long-Term Trend BULLISH

Cyclical Strength...... BULLISH

Broader Trend BULLISH

Long-Term Cyclical Trend .. BULLISH

MARKET RISK FACTOR

Ukraine Hryvi	nia Ca	ish Risk T	able		
UPSIDE RISK			DOWNSII	OF RISK	
MONTHLY		3873	4.845%	2940	20.41%
QUARTERLY		4697	27.15%	2680	27.44%
YEARLY	2831	-23.3%	770	79.15%	