

WORLD ECONOMIC OUTLOOK

WORLD FINANCIAL MARKETS - WORLD FINANCIAL STATE - TAIWAN - WAR IN UKRAINE

HUGHES ECONOMICS (HE) – Mid-December 2022

The current review below calculates probabilities for Financial Markets outcomes, the situation over Taiwan, the possibility of another depression and the war in Ukraine. All papers as below are available on this website as are various spreadsheets in **xlsx** format. All calculations below employed the **WEOMidDec.xlsx** spreadsheet using **LoHiProbs.xlsx** methodology. Note that the Low and High Probabilities in the tables below reflect the Low and High Pairwise Values and not the probability values themselves.

Probability calculations below for the scenarios outlined are explained in **Structuring Probability Assessments** available at <https://doi.org/10.17265/1537-1506/2020.05.003>. Also **Thinking Probabilistically** available at <https://doi.org/10.17265/1537-1506/2021.05.002>, **Thinking Probabilistically Revisited** available at <https://doi.org/10.17265/1537-1506/2022.01.001>, **A New Approach to Probability Assessment** available at <https://doi.org/10.17265/1537-1506/2022.01.003> and **Probability Assessment** available at <https://doi.org/10.17265/2328-2185/2022.05.006>. This last article summarizes the methodology used here.

WORLD FINANCIAL MARKETS

As stated previously, three possible scenarios are proposed for the next 6 months as listed below in order of increasing likelihood:

- **TINA**: There is no alternative, and the Dow rises significantly to 40,000+.
- **SQ**: Status Quo, no major moves for the Dow in the range 30,000 – 35,000. Current Dow is around 33,476.
- **BB**: Bubble bursts and Dow corrects to below 30,000 or a 10%+ correction

Recently the Dow has been moving above and below 34,000 with some 1%+ moves up or down. The current consensus seems to be the markets should prepare for a mild recessionary state over the next year to the end of 2023. **HE** has raised the probability for **BB** slightly at the expense of **SQ** as below.

PROBABILITIES ON WORLD FINANCIAL MARKETS FOR THE NEXT 6 MONTHS

Scenarios		Pairwise Range		Probabilities					More Likely Value
Events	Ratios	Low	High	Low	High	Average	%	Previous	
TINA	Base = 1	1.00	1.00	0.03226	0.02041	0.02633	3	3	Base = 1
SQ	SQ/TINA	10.00	12.00	0.32258	0.24490	0.28374	28	33	10.78
BB	BB/SQ	2.00	3.00	0.64516	0.73469	0.68993	69	64	2.43
				1.00000	1.00000	1.00000	100	100	

WORLD FINANCIAL STATE

Scenarios in order of increasing likelihood are as follows:

- **MB** or Mild Boom: Revamping of world infrastructure in light of Ukraine sees markets rise for 10%+ gains.
- **D** or Depression: High inflation and continued COVID pressures, policy mistakes and global financial collapse.
- **SQ** or Status Quo: All markets steady, significant but not rampart inflation, continued but containable COVID episodes.
- **MR** or Mild Recession: World activity falls, with problems from COVID, Ukraine, ESG factors & supply chain realignments.

PROBABILITIES ON THE WORLD FINANCIAL STATE FOR THE NEXT 6 MONTHS

Scenarios		Pairwise Range		Probabilities					More Likely Value
Events	Ratios	Low	High	Low	High	Average	%	Previous	
MB	Base = 1	1.00	1.00	0.01408	0.00752	0.01080	1	1	Base = 1
D	D/MB	10.00	12.00	0.14085	0.09023	0.11554	12	2	10.70
SQ	SQ/D	1.50	2.00	0.21127	0.18045	0.19586	19	18	1.70
MR	MR/SQ	3.00	4.00	0.63380	0.72180	0.67780	68	79	3.46
				1.00000	1.00000	1.00000	100	100	

Dire warnings on the world financial state by El-Erian and Roubini has led **HE** to raise the probability of **D** reducing that for **MR**. A positive development in the Ukraine war and/or innovative policy management by Central Banks could mitigate the dismal outlook

seen coming by the above commentators. While a recession now seems inevitable, it may be mild and of short duration. COVID problems remain a hurdle, particularly for China which is now almost 20% of the world economy.

TAIWAN

The scenarios for developments involving Taiwan from least to most likely are as follows:

- **TINO**: Taiwan invasion by mainland China with no aid from any country to help repel the invaders.
- **TIUS**: Taiwan invasion by mainland China and the US assists Taiwan in its defense, possibly with other allies.
- **NOTI**: No invasion of Taiwan but Chinese harassment of Taiwan continues.

The scenarios hold for the near future defined by the next 5 years.

PROBABILITIES ON TAIWAN DEVELOPMENTS OVER THE NEAR FUTURE

Scenarios		Pairwise Range		Probabilities					More Likely
Events	Ratios	Low	High	Low	High	Average	%	Previous	Value
TINO	Base = 1	1.00	1.00	0.03846	0.02000	0.02923	3	5	Base = 1
TIUS	TIUS/TINO	5.00	7.00	0.19231	0.14000	0.16615	17	21	5.68
NOTI	NOTI/TIUS	4.00	6.00	0.76923	0.84000	0.80462	80	74	4.84
				1.00000	1.00000	1.00000	100	100	

Probabilities show little change over recent months, but a small increase for **NOTI** is encouraging.

THE WAR IN UKRAINE

The ordering of scenarios below reflects **HE's** assessment of the relative likelihoods as in least to most likely:

- **RV** : Russian Victory or Russia effectively controls Ukraine.
- **UV** : Ukraine drives Russia out of Ukraine but loses Crimea to Russia.
- **NC** : Negotiated ceasefire with Ukraine possibly yielding some territory to Russia including Crimea.
- **OS** : Ongoing struggle on Ukraine territory.

PROBABILITIES ON POSSIBLE OUTCOMES TO THE WAR IN UKRAINE

Scenarios		Pairwise Range		Probabilities					More Likely
Events	Ratios	Low	High	Low	High	Average	%	Previous	Value
RV	Base = 1	1.00	1.00	0.01563	0.00990	0.01276	1	1	Base = 1
UV	UV/RV	3.00	4.00	0.04688	0.03960	0.04324	5	3	3.39
NC	NC/UV	10.00	12.00	0.46875	0.47525	0.47200	47	24	10.92
OS	OS/NC	1.00	1.00	0.46875	0.47525	0.47200	47	72	1.00
				1.00000	1.00000	1.00000	100	100	

There is more talk now as to what negotiations might bring raising the probability of **NC** as above.

BOTTOM LINES

In the US, the Democrats have cemented control of the Senate with a win in Georgia. Biden signalling he may step aside for a younger, electable Democrat in 2024 could help the US growth outlook as soon as mooted.

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