WORLD ECONOMIC OUTLOOK Hughes Economics - August 2020

In a previous WEO, 4 scenarios were outlined for the future world economy in the face of the Covid-19 outbreak. These scenarios with their probabilities were:

Bath-Tub recovery: prolonged unemployment and slow growth – 0.098 probability or 10% V-shaped recovery: fast return to pre-Covid-19 activity levels – 0.098 probability or 10% U-shaped recovery: only a few months of reduced activity, then normality – 0.345 probability or 35% New Normal: slow, steady growth from now on but with some reversals – 0.458 probability or 45%

Financial markets currently seem to reflect the idea that the Covid-19 outbreak has no implications for them. This seems irrational since world GDP has been predicted to fall significantly. The IMF as of June 24 projects world growth of -4.9% for 2020. This is much worse than the GFC of 2008. Perhaps financial markets are reflecting that the adage of "never waste a good crisis" or "creative destruction" holds true and economies will be more efficient after the changes enforced by the Covid-19 outbreak. There are, however, many reasons to believe the worst is yet to come and "the chickens will come home to roost" eventually. Drug development in the interim has been forthcoming but no breakthroughs seem imminent. Currently, "lockdowns" seem the best way to stem the spread of the disease but with implications for reduced economic activity. As in *Structuring Probability Assessments*, this "news" leads to the following scenario likelihoods:

SCENARIO LIKELIHOODS BASED ON "NEWS" TO DATE

Scenario	Pairwise Judgment	Compound Likelihood	Likelihood
Bath-Tub Recovery or BT	1.00	1.00	1/7 = 0.143
V- Recovery or VR	1.00	1.00	1/7 = 0.143
U-Recovery or UR	2.00	2.00	2/7 = 0.286
New Normal or NN	1.50	3.00	3/7 = 0.428
TOTALS		7.00	1.000

The "news" to date does not favour the first 2 scenarios with equal likelihood as in the above table. The "news" is judged to have twice the likelihood for UR over VR, so a fast recovery VR is unlikely. Similarly, the "news" has 50% more likelihood for NN over UR, making NN significantly more likely than UR. Given the estimated likelihoods based on the "news" to date, the posterior probabilities are shown below:

PROBABILITIES FOR A BATH-TUB, V OR U RECOVERY AND THE NEW NORMAL SCENARIOS

Scenario	Prior Probability	Latest "News" Likelihood	Joint Prob	Posterior Probability	Percent Probability
Bath-Tub Recovery	0.098	0.143	0.014	0.043	5%
V – Recovery	0.098	0.143	0.014	0.043	5%
U – Recovery	0.345	0.286	0.098	0.306	30%
New Normal	0.458	0.428	0.196	0.608	60%
TOTALS	0.999	1.000	0.322	1.000	100%

Note that percentage probabilities have been rounded with BT and VR only a 5% chance each at this time, down from 10% in June. Of course, the pairwise values shown in the first table above are subjective and different people will have different judgments. These pairwise judgments serve only to determine likelihoods en route to the "ballpark" posterior distribution which in this case gives a very low probability to the first 2 scenarios.

The calculations show a 60% likelihood that the "new normal" of slow and possibly irregular growth back to the pre-Covid-19 levels over the next 6-9 months to be the most likely outcome for the world economy at this time. This currently appears to be the case in China (*The Economist*, July 18^{th}). And there remains the question of whether the much higher debt levels for countries and organizations will be tolerated for long following any return to normality.