Proposals for the banking industry and the top of the line academic institutions

KENYAN ECONOMY PEAKING INITIATIVES

DR. DEBASISH BANERJEE - CEO & EXECUTIVE DIRECTOR

DeSamus,

ESTIMATED SOLUTIONS ON A SIMULATED STOCHASTIC MODE FOR THE MANUFACTURING INDUSTRY IN THE ECONOMY – the potential collaborative approaches between consulting, banking industry and the high end academic institutes forming the **TRIAD**



Dated: 27th June, 2022, Monday Nairobi, Kenya Dr. Debasish Banerjee PhD – Strategy and Chartered Engineer

Banking industry fundamentals – the derivatives for the manufacturing industry – <u>global simulated model</u>

The global conundrum on valuation and pegging benchmarks for the insurance and corporate pension have never ever been integrated into the mainstream operations of the businesses at the microenterprise level. The risk assessments and the concomitant performance indices inclusive of the residuals and the traction within a given economy to the vagaries of speculative trading, posturing and falsehood as well as outright fraudulent valuations founded on the sand of abstract conjecturing and precluding of objectivity.

The initiatives of Blackstone Synergy Consulting have been on the creation of a parametric grid with clusters of influence in heuristics variables to arrive at the optimality of solutions within a field of constraints.



RPA - RISK PRIORITY ANALYSIS - Asset Management efficiencies

ARSA - Asset Risk Stochastics Analysis

PRIORITY RISK FACTOR	AME - asset management efficiencies - differentials	IMPACT ON ASSET QUALITY	risk Number	Stochastic weight - PD (Bayesian in a true time series)	<u>Cluster</u> <u>influence</u> <u>risk</u>
1	Leveraging at >/=30% Capital outlay	Productivity and cost sheet demand at 15% higher than industry top 1% benchmarks	5	0.95	4.75
2	Plant & Machinery valuation - depreciated at 10 year old pricing regime	Real time valuation shall help peg the critical benchmarks of productivity, throughput volumes and cost of quality leadership	5	0.88	4.4
3	Sector specific (top 1%) deliverables on productivity, throughput volumes and cost of quality	Reliable and robust cash flows in distressing times, ability to absorb extended credit lines and distress prices, prudent accounting and organic growth	5	0.83	4.15
4	Technology - quality valuation	Key performance determinant and reproducibility of asset derivatives	5	0.91	4.55
5	Knowledge capital and EQ - emotional quotient of the enterprise	SDG - sustainable development goals	5	0.99	4.95
Asset Man	agement efficiencies - Cluste	er -1 dynamics	5.00	0.91	4.56



Parameter -1: Asset Management efficiencies - PARAMETRIC RISK - 5.0

This is a microeconomic parameter but with the cascading impact on the systemic aspects of the economy and consequently with the powers to influence the macro economy.

The stochastic process is on a true time series insulated from the vagaries of the macroeconomic influences and are focused on the derivatives of the sector and the risks of the enterprises. A cluster of enterprises forms the cohort for the evaluation and does represent the top percentile as well as the medium and lower percentiles to lend credibility to the sensitivity of the impact of best management and engineering practices within the organizations.

Parametric risk of 5.0 implies the highest risk on a scale of 1-5 within the ambit of the micro enterprise but the cascading effects have an exponential impact on an aggregation of a sector and across domains to eventually influence the derivatives of the macro economy in a larger way.



CRA - CRITICAL RISK ANALYSIS

CRSA - Critical Risk Stochastic Analysis

RISK - macroeconomic	RISK - SECTOR	RISK - microenterprise	risk number	Stochastic weight - PD (Bayesian in a true time series)	<u>Cluster</u> <u>influence risk</u>
Real incomes		OEE	4.5	0.99	4.46
Aggregate purchase volumes	Pricing equilibrium	Leveraging percentage on capital outlay	4.7	0.96	4.51
Clientele diversification and repeat purchase volumes	Inventory Inveft	ROI	5.0	0.88	4.40
Pricing sensitivity of the product	Inventory, layoff density and attrition levels with capacity utilization as the lead indicators	Operating profitability	4.8	0.97	4.66
Import substitution threat of the product		Fund flow syndrome - lead or lag in days	4.1	0.83	3.40
Systemic risks - Cluster	-2 dynamics		4.62	0.93	4.29



Parameter -2: Systemic risks – the elements therein – PARAMETRIC RISK – 4.62

The macroeconomic risks like shrinking real incomes, lower aggregation of purchase coordinates and supply chain infrastructural constraints are governed by the efficiencies within the value chains and the pricing equilibriums that converge on optimum demand within the dynamic constraints and the supply at various thresholds of systemic efficiencies.

Elevated levels of leveraging within the domains and burgeoning debt do increase the sensitivity of the pricing and the threats for product substitutes.

The downward decline is brought forth with the arteries of constraints like depletion of efficiencies in the factories, burgeoning debt and the intrinsic lowering of capacities within the cost sheet to absorb the distress pricing coordinates



DEFINING PERFORMANCE INFLUENCES

FUNCTIONAL DETERMINANTS RISK ANALYSIS (FDRA) - Risk of performance failures -Stochastic Analysis

Determinant -1 - product leadership	Determinant - 2 - engineering capacities for core and processes	Determinant -3 - skills and critical trouble shooting capacities	Determinant -4 - brand differentials through product engineering	Determinant -5: product innovations and research driven initiatives	RISK NUMBER	Stochastic weight - PD (Bayesian in a true time series)	<u>Cluster</u> <u>influence</u> <u>risk</u>
Plant maintenance - real time costs as a percentage of sales values	MTBF - meantime between failure implying capacities of engineers to effectively troubleshoot	Training program density - critical skill building initiatives	5-point brand differentials over the competition founded on the bedrock of	Product performances syndrome - elimination of client problems at site and upstream processes	5	0.97	4.85
Process quality breakdowns and rejects as a percentage	MTTR - meantime to repair implying workmanship and skillsets in the factory	Confluence loops of core and process engineering derivatives	COME - center of manufacturing excellence	Product innovations for economy	5	0.95	4.75



of plant utilization losses							
Client adverse feedback volumes and returns as a percentage of sales valuation	MTBA - meantime between engineer / technician / operator assists for the operations	Permeability of process control loops amongst the last line of defense in technician and operator cohorts		Product innovations for B2B and B2C customer confidence index and repeat orders density	5	0.98	4.90
Operator productivity	Month - on - month inventory (RM, Materials and Finished Goods) expenses accounting change percentage	Engineer managers' capacities in advanced comprehension of the processes, predicting outcomes founded on phenomenon analysis and qualitative assessment of trouble shooting	Cost sheet driven capacities to absorb distress pricing on the 40/25 conundrum: 25% net margin on 40% of empirical pricing regime as SDPM (simulated distress pricing modeling)	Research driven breakthroughs in operating processes or new products with valuation of improvements of client changing paradigms of preferences and validations	5	0.96	4.80



		capacities			
Consistencies in daily equipment productivity and throughput volumes	Month - on - month operating expenses accounting change percentage	Functional appraisal of plant and personnel on real time measures of data fidelity	5	0.99	4.9
Performance fa	ctors - Cluster	-3 dynamics	5.00	0.97	4.8

Parameter -3: Performance factors in the micro enterprises -PARAMETRIC RISK

5.00

The performance factors are governed by the core engineering principles and the ramifications on the overlaps in process engineering models; the amalgam of overlaps and the driving forces of knowledge capital and the concomitant **wisdom of integral** as explained in the accompanying articles and spreadsheets to illustrate the impact.



TRACTION OF RESIDUALS

FUNCTIONAL RESIDUALS RISK ANALYSIS (FRRA) - Risk of performance failures -Stochastic Analysis

Residual -1 - attritions within peoples' processes	Residual -2 - in process rejects	Residual -3 - costs of iterative processes and trials or experimentations	Residual -4 - knowledge capital gaps in effective trouble shooting	Residual -5 - client adverse feedback or rejects	RISK NUMBER	Stochastic weight - PD (Bayesian in a true time series)	<u>Cluster</u> <u>influence</u> <u>risk</u>
Real time appraisals based on quantitative indicators and low subjectivity	Institutionalizing trouble shooting mode through decision trees	Budgeting process and product failures	Core engineering - knowledge capital formation	Actual feedback, acceptance with discounts and outright	4.85	0.93	4.51
Incentives on high performance thresholds	Noise identification at various nodes	Budgeting trouble shooting iterations	Process engineering - knowledge capital formation	rejects meriting replacement			



Training scores	Noise reduction mechanisms in place and robustness	Budgeting advanced training programs	Advanced engineering mathematics - knowledge capital formation				
Training cycles	Noise reduction efficacy	Budgeting research	Heuristics and optimal solutions modeling - creation of the parametric grid and clusters of influences	Potential product substitutes	4.65	0.88	4.09
Migration of roles	Updates on processes and decision trees through management newsletters	Budgeting publications and conference presentations of key outcomes in the business process modeling	Process appraisal quantitative grid	SODSITIOTES			
Business tractio	n residuals -Clus	ster -4 dynamics			4.75	0.91	4.30



Parameter -4: Business traction for residuals – PARAMETRIC RISK – 4.75

Residuals are always a drag and are exemplified by the traction within the business process. This is essentially a microeconomic factor but the ramifications are fundamental arteries of the ubiquitous dynamics of the macro economy both in the immediate and medium runs with the long run seeing cataclysmic effects.

The heuristics of the residuals have been demonstrated in the spreadsheet illustrating the stochastic process with Bayesian bias.

algorithm



VALUATION ANALYSIS

FUNCTIONAL VALUATION RISK ANALYSIS (FVRA) - Risk of performance failures -Stochastic Analysis

Derived Value -1 - market share	Derived Value -2 - loyal clientele percentage	Derived Value -3 - vendor engineering cohort quality and reliability	Derived Value -4 - product leadership and brand recall	Derived Value -5 - SDG	risk number	Stochastic weight - PD (Bayesian in a true time series)	<u>Cluster</u> <u>influence</u> <u>risk</u>
Face value of the market share	Repeat orders percentage	Vendor capacities an knowledge capital commanded	Product innovations in existing product lines	Knowledge building training cycles	4.68	0.92	4.31
Perception of dominance in the brand	New referrals by loyal clientele cohorts	Vendor leadership in symposiums, conferences and peer reviewed	New product developments as a percentage of the product	WOI - wisdom of the integral wherein the derivatives of the operations get integrated into the brand differentials	4.77	0.94	4.48



visibility scenarios	publications	basket	and the corporate finance elements of the gamut of financial engineering			
Business Valu	ation - Cluster -5 dynamics			4.73	0.93	4.39

Parameter -5: Business valuation – PARAMETRIC RISK – 4.73

Valuation of the business is a major determinant within the ambit of the micro economy but domain aggregation and sector specific cumulative derivatives can bring in major changes in the economy and influence the lead indicators of the macro economy.

The structural aspects of valuation of an enterprise are illustrated in the stimulated grid and could become a hallmark referential for the future.



QUALITATIVE INTERVENTIONS AND THE REFERENTIAL IMPACT

- 1. The referential interventions of the Blackstone Synergy banking industry cohort are benchmarked against the triad of Blackstone Synergy, banking industry and the high end academic institutions in the field of engineering and business management.
- 2. The current states of risks in the Kenyan context are pegged at the top 1% of the performers in the domain. Yet the cumulative risks are at the brink of a contagion default.
- 3. The improvements are estimated at 19 and 28 basis points over the current scenarios founded on the stochastic stimulation.
- 4. The risks analysis for pension and insurance in the corporate context are also enclosed.
- 5. Classification of risks within the spectrum move in across severity to benchmarks of at par premiums.



STRUCTURAL ASPECTS OF RISK ASSESSMENT - parametric grid

<u>stochastic Weight - PD in a</u> <u>true time series with a Bayesian</u> <u>Cluster influence risk</u> <u>bias</u>

Cluster Priority Numbe r (CPN)	ASSESSMENT ELEMENTS of parametric impact	RISK NUMBER - parametri c (on a scale of 1- 5 with 5 having the highest risk in the spectrum	High risk states in manufacturin g - Default contagion	Blackstone Synergy - Banking industry probability of engineerin g turnaround and risk mitigation	Blackston e Synergy - Banking industry - High end academi c ecosyste m	High risk states in manufacturin g - Default contagion	Blackstone Synergy - Banking industry probability of engineerin g turnaround and risk mitigation	Blackston e Synergy - Banking industry - High end academi c ecosyste m
1	Asset Managemen t efficiencies	5.00	0.91	0.77	0.63	4.56	3.85	3.15
2	Systemic risks	4.62	0.93	0.84	0.79	4.29	3.88	3.65
3	Performance factors	5.00	0.97	0.67	0.57	4.85	3.35	2.85
4	Business traction residuals	4.75	0.91	0.72	0.64	4.30	3.42	3.04



5	Business valuation	4.73	0.93	0.75	0.68	4.39	3.55	3.22
						Basis points improvement s on current states	19.14	28.45



	ASPECTS OF RISK ASSESS	SMENT - parametric		DECISION GRID FOR PENSION AND INSURANCE VALUATION OF MANUFACTURING ENTITIES													
Cluster Priority Number (CPN)	ASSESSMENT ELEMENTS of parametric impact	RISK NUMBER - parametric (on a scale of 1-5 with 5 having the highest risk in the spectrum		VERE RISK - contagion on defo ad sweeping "Black Swan" effo		default and sweeping "Black Swan"		reduced risk than severity levels -		MODERATE RISK @ 110% reduced risk than severity levels - contagion on default and sweeping "Black Swan" effects		than severity levels - contagion on		tagion on			
	Asset Management efficiencies	5.00	-10	-7	-3	-7.0	-4.9	-2.1	-2.5	-1.8	-0.8	1.0	0.7	0.3	5.0	3.5	1.5
2	Systemic risks	4.62	-15	-10	-7	-10.5	-7.0	-4.9	-3.8	-2.5	-1.8	1.5	1.0	0.7	7.5	5.0	3.5
3	Performance factors	5.00	-17	-12	-9	-11.9	-8.4	-6.3	-4.3	-3.0	-2.3	1.7	1.2	0.9	8.5	6.0	4.5
4	Business traction residuals	4.75	-22	-18	-15	-15.4	-12.6	-10.5	-5.5	-4.5	-3.8	2.2	1.8	1.5	11.0	9.0	7.5
5	Business valuation	4.73	-20	-15	-12	-14.0	-10.5	-8.4	-5.0	-3.8	-3.0	2.0	1.5	1.2	10.0	7.5	6.0
			decision -		ial	decision - denial		the economy returns in the banking		n decision - <u>15 basis ponts</u> higher than the economy returns in the banking preferential lending rate							



CONCLUSIONS:

- 1. The economy is at the brink and is precipitated by the debilitating effects of the deficiencies in aggregates.
- 2. The contagion of default is the writing on the wall and is inevitable.
- There is no "Black Swan" effects in the horizon. The tilt is palpable and cannot be avoided; concerted efforts can only mitigate the cascading impact.
- 4. Stochastic processes on Bayesian bias as in a time series have yielded the simulated grid and is certainly not far off from reality in the backdrop of mathematical accuracy.
- 5. The solutions envisaged and suggested are the fundamentals of the revival programs; there are no more solutions in the system.

alsorithm