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VUCA Model in the Present Context of Indian Economy

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Abstract: ***Through the past decades, we find numerous terms in the popular business process and academic literature that refer to an increasing inability to grasp the world and deal with the things happening around us. The notion of VUCA= Combination of Volatility, Uncertainty, Complexity, and Ambiguity, characterising the nature of some difficult conditions and situations. Economic activities across the world depend on natural and human resources. The effect of global warming and climate change on the environment can be witnessed through increase in atmospheric CO_2 levels. This poses a grave threat to the goal of sustainable development. The future generation has equal right on our natural resources- water reserves, forest resources, mineral resources etc. The behaviour of the consumer is unpredictable. Markets plunge the moment there is a poor GDP forecast. The monetary policy committee of the RBI slashed policy rates on 4th Oct 2019 for the fifth consecutive timed and reduced its estimate of growth for t2019-20 to 6.1%. A number of commissions and committees have been set up for reforms in education but we are not producing our graduates and others in accordance with the conditions of demand of the employers and blame game starts that they are not employable. Demand prediction is not correctly available due to the behavioural change of the consumer and market conditions. The values are changing therefore people are taking loans in the name of business, investment, employment and economic activities, but they are not fulfilling the debt obligations. Non-performing assets and bad-debt of financial institutions are creating ambiguous conditions. RBI's assessments recognise a crisis in aggregate demand and its survey have noted a sharp fall in consumer confidence. This difficult situation has been examined in this research paper.***

Keywords: Volatility, Uncertainty, Complexity, Ambiguity and Macro indicators

1. Introduction

Timeless determination of economic variables, where there is no idea of the process of change, that is there is no place of uncertainty and ambiguity. It is assumed that there is no relationship between the preceding and succeeding events. Under dynamics, time is involved and that is why there is an importance of expectations and forecasting about the future for strategic planning. There are lagged values of the endogenous variables e.g. demand may not only depend on current period price (P_t) but also on the price of the previous period (P_{t-1}). The super-multiplier of Samuelson and Cob-web model both are based on lagged variables.

VUCA is an acronym that stands for Volatility, Uncertainty, Complexity, and Ambiguity. Volatility is the quality of being subject to frequent, rapid and significant change. Uncertainty is a component of that situation in which events and outcomes are unpredictable. Whenever a random experiment is carried out, there are two or more than two unknown but equally likely outcomes and the assigned outcomes determining success or failure are known as events. On the basis of statistical prediction, decision makers are able to sharply reduce the risk or uncertainty for working out a strategy or a gameplan. Risk averters can avoid risk by collecting more information and purchasing insurance (a financial instrument). Complexity refers to a number of factors that we need to take into account, their variety and the relationship. The more the factors, the greater their variety and the more they are interconnected, the more complex an environment is. Ambiguity refers to a situation where there is lack of clarity about how to interpret something. A situation is ambiguous, when information is incomplete, contradictory or too inaccurate to draw right conclusions. It refers to fuzziness and vagueness in ideas and terminology.

Any kind of state intervention into the economic affairs of a country was considered a hinderance in the normal functioning of an economy. According to classical economists, full employment (where all the persons of working age qualified, able and willing to work at the current wage rate found the job without any considerable delay) was a normal situation in the economy. Say's law of market was the central core of their analysis, hence there was no question of over production and unemployment in the economy. Price mechanism could bring the allocation of resources in an optimum manner. Wage rate, interest rate and price flexibility could automatically remove the conditions of disequilibrium in the economy. But in 1923, there was a situation of hyper inflation in Germany two world wars (1914-18, 1939-44), industrial revolution, breakdown of gold standard and the situation of great depression of thirties (1929-32) etc.

Prof Kenyes came on the scene with his philosophy of state intervention for the sake of saving, capitalism and recommended that the policies of compensatory spending, pump priming and autonomous investment in order to remove the deficiency in aggregate demand which is equal to demand for consumption goods plus demand forinverstment goods. There was a shift from micro economics analysis to macro economics analysis - study of aggregates in the economy. There are business cycles in an uncontrolled economy - generally found at regular intervals due to monetary and non- monetary factors. The observations were as:

1) Whatever is true to an individual may not be true for the whole economy.
2) Wages are not only cost but source of demand also.
3) Saving and investment both are dependent on rate of interest and income.
4) Saving is private virtue but a social vice.
5) There is leakage in the flow of income and expenditure and whatever is earned is not automatically spent on consumption.

V - Qualities of being subject to frequent, rapid and significant change in a volatile market.
U - Component of that situation in which all events and outcomes are inpredictable.
C - Involve a multiplicity of issues or factors and some of which are interconnected
A - Manifested in a lack of clarity and difficultly of understanding the situation is.

2. Literature Review

Volatility refers to the speed of change in an industry, market or the world in general. It is associated with fluctuations in demand, turbulence and short time to markets and it is well documented in the literature on industry dynamism. The more volatile world is, the more and faster things change. Uncertainty refers to the extent to which we can confidently predicted the future. Part of uncertainty is perce and associated with people's inability to understand what is going on. Uncertainty, through is also a more objective characteristic of an environment. Truly, uncertain environment are those that do not allow any prediction, also not on a statistical basis. The more uncertain the world is, the harder it is to predict. Complexity refers to the more of factors that need to be taken into account, their variety and the relationship between them. The more factors, the greater their variety and the more they are interconnected, the more complex environment is, under high complexity, it is impossible to full analyze the environment and come to a rational and logical conclusion. The more complex the world is, the harder it is to analyse. Ambiguity refers to the lack of clarity about how to interpret something. A situation is ambiguous, for example when information is incomplete, contradicting or too inaccurate to draw clear conclusions. In practice the four terms are related.

The more complex and violate an industry is, for example, the harder to predict and more uncertain it will be. Yet, all four represent distinct elements that make our environment - the world, a market, an industry harder to grasp and control. The distinct nature of these four elements can be further clarified by visualising them.

Volatility	Complexity
Characteristics: The challenge is unexpected or unstable and may be of unknown duration, but it's not necessarily hard to understand; knowledge about it is often available. Example: Prices fluctuate after a natural disaster takes a supplier off-line Approach: Build in slack and devote resources to preparedness - for instance, stockpile inventory or overbuy talent. These steps are typically expensive;your investment should match the risk.	Characteristics: The situation has many interconnected parts and variables. Some information is available or can be predicted, but the volume or nature of it can be overwhelming to process. Example: You are doing business in many countries, all with unique regulatory environments, tariffs, and cultural values. Approach: Restructure, bring on or develop specialists, and built up resources adequate to address the complexity.
Uncertainty	**Ambiguity**
Characteristics: Despite of lack of other information, the event's basic cause and effect are known. Change is possible but not a given. Example: A competitor's pending product launch muddies the future of the business and the market. Approach: Invest in information- collect, interpret, and share it. This world best in conjunction and structural changes, such as adding information analysis network, that can reduce ongoing uncertainty.	Characteristics: Casual relationships are completely unclear. No precedents exists; you face "unknown unknowns" Example: You decide to move into immature or emerging markets or to launch products outside your core competencies. Approach: Experiment. Understanding cause and effect requires generating hypotheses and testing them. Design your experiments so that lessons learned can be broadly applied.

The term first used in 1987, drawing on the leadership theories of Warren Bennis and Burt - Nanus - to describe or to reflect on VUCA of general conditions and situations. The US army war college introduced the concept of VUCA to describe the more V+U+C+A multilateral world perceived as resulting from the end of cold war. More frequent use and discussion of the term began from 2002.

Literature Gap

Indian Monetary policy committee projected GDP growth for 2019-20(current fiscal year) at 6.1%on October 4,2019.

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This report is unequivocal in recognizing a crisis of aggregate demand reflecting a slowdown in private consumption and inflow of funds to the commercial sector and economic head winds from global uncertainties. There is a shift from purchase of goods toward services thereby non essential spending is increasing. The current net perception on employment is also the worst - ever. The Central Bank (RBI) has GDP growth expectations for the year 2019-20 lowering from 6.9% to 6.1% is worrying. This is really a point to be examined in the light of worrying signal from the economy and correlate it with VUCA.

Research objectives

Main objectives are:

1) To relate VUCA characteristics in the light of the prevailing conditions of Indian economy.
2) To make its relevance with the present global market condition.

3. Research Methodology

This paper is not based on primary data and research methodology relates with the objectives. Paper is based on secondary data obtained from authentic and reliable sources e.g. daily standard newspaper, economic survey published by the GOI, RBI's reports and bulletins and standards website(taken only to get the true meaning of VUCA). Analysis is based on simple descriptive statistical tools.

Objective 1

The monetary policy committee projected GDP growth rate on 4-10-2019 is taken as the sharpest reduction in projected growth rate since the Monetary policy Committee's inception on october 2016 while Asian Development Bank has also revised its forecast from 7.2% to 6.5%(a 70 basis point reduction). The government has announced a cut in corporate tax rate which would lead to a revenue loss of Rs.1.45 lakhs crores.

Economics got implies an increase in GDP or a continuous and steady increase in national income. In fact it is an multivariable concept and is replaced by peoples's high standard of living, better food and housing, improved education and medical facilities, advance means of transport, communication information and technology, reduction in levels of poverty, unemployment and inequalities in the distribution of economic power, increase in productivity with advancement in science, technology and carrying out research in different fields, promoting human skills, participation of women and less advantages section pf society in decision making process and their empowerment, social security, and justice without any discrimination, sustainable and inclusive growth, conservation of natural resource for the future generation etc. there should be proper balance between wealth and welfare, development and pollution free environment.

Now, we are living in an era of liberalisation, privatisation and globalisation and that is why world has become a global village and its member are interdependent. A shock of sympathetic vibrations are experienced by all the countries of the world, whenever anything happens at the global level. 2008-09 economic crisis is one of the examples. Global growth rate has gone down from 3.97 per cent in 2000 to 3.6 per cent in 2018. The NDA government at the centre (2019 - 2024) has promised to make the Indian economy a 5 trillion dollar economy by 2024, which needs at least a growth rate of 8% per annum.

Macro indicators point a gloomy economic picture and worrying signals are slow down in private consumption, decline in credit growth , declaration of automobile sales. There is a slowdown in flow of funds to the commercial sector and economic head winds from global uncertainties are reflected from the capital RBI's consumer confidence survey and outstanding credit for industry consumer behaviour is rapidly changing (Refer chapter 2 of economic surveys 2018-19).

The current net perception on employment is also the worst ever, with 52.5% of the people reporting a decline in the employment. Growth in outstanding credit to industry in August 2019 was 3.9% after growing at more than 6 % for the past 5 months (March 2019 to July 2019). What is even more perplexing in the muted policy response of just a 25 basis point reduction in policy rate.

The Indian economy adopted an inflation targeting framework in 2016, where interest rate target were expected to balance growth and inflation. GST Collection have also fallen to an 18 month low in Sept. '19. Gross domestic saving have come down to a decade low from 23.6% of GDP in 2008 - 2009 to 17.2% in 2017 - 2018 (while investment particularly private is a critical engine of growth for in economy).

Table 1 highlights the state of Indian economy a volatile picture of half yearly GDP growth in percent.

Table 1: Highlights the state of Indian economy a volatile picture of half yearly GDP growth in %

Year	H 1	H 2
2013	6.2	4.8
2014	6.9	5.9
2015	8.4	6.5
2016	7.8	8.2
2017	9.1	7.3
2018	6.4	7.9
2019	7.5	6.2
2020	5.2	6.9

Table 2: Policy Rate and Projected GDP growth in percent

Month Year	Policy Rate	Projected GDP growth rate in %
Feb-19	6.24	7.4
Apr-19	6	7.2
Jun-19	5.75	7
Aug-19	5.4	6.9
Oct-19	5.15	6.1

Source- Daily Hindustan Times

1) Aug 17, 2019, page 19
2) Aug 31, 2019,page 1
3) Oct 5, 2019, pages1-10

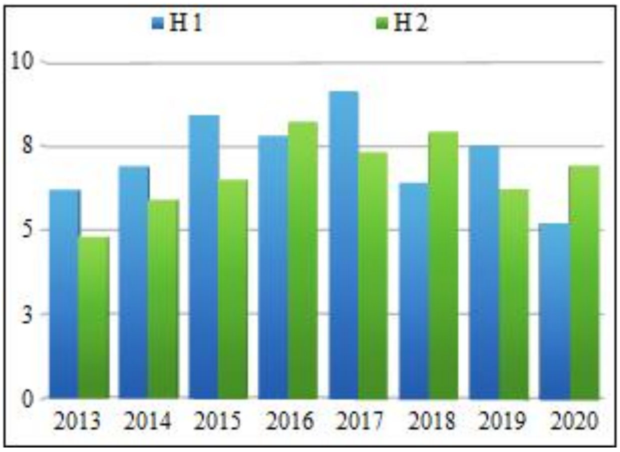
Thus macro- economic indicators are not showing their behaviour in accordance with the targets.

Objectives 2

India will soon overtake China as the World's most populated country. As per report published in Daily Hindustan Times dated 29th of March 2019, page 5, the following is the picture of income distribution in 2017.

Income	Percentage of population
Below 12 lakh p.a.	99.71%
Below 4 lakh p.a.	91.20%
Below 2 lakh p.a.	66.95%
Below 1 lakh p.a.	20.66%
Below 72000 p.a.	6.65%

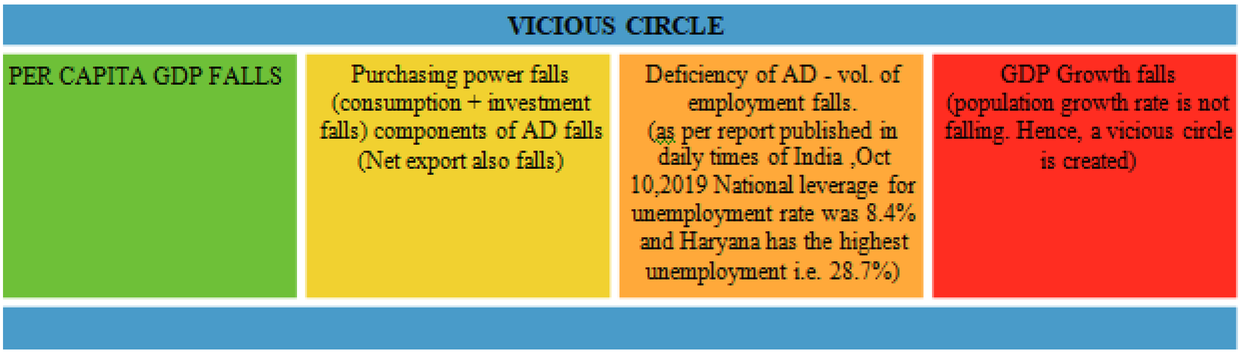
(Source CMIE)



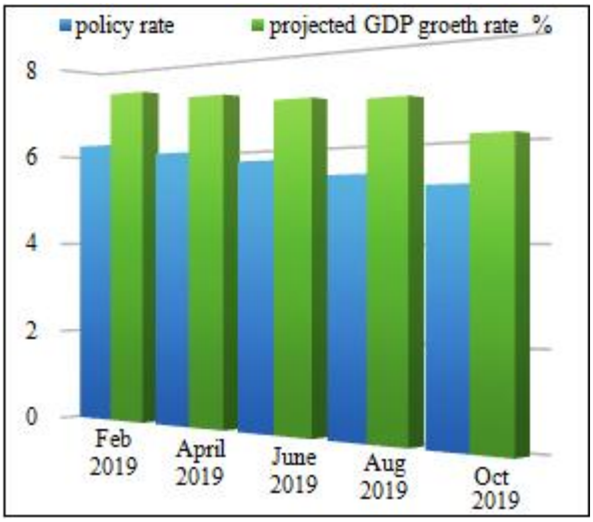
Global growth rate of population = 1.1%. p.a.
India's population growth rate = 1.2% .p.a.
=China (.5%) + USA(.7%)

This leads to

1) Retards investments require for higher future consumption
2) Creates overpressure upon country's natural resources
3) Tends to lower agriculture productivity.
4) Urbanization and environmental damages.



The NITI Aayog has warned that India's water is in a crisis situation. Water available per Indian declines every year, monsoons are becoming more erratic due to global warming and change in climate. India has 18% population of the world against 4%water resources.



4. Conclusion

VUCA model is quite relevant under the present circumstances when we are facing a difficult situation of uncertainly and confusion. The situation of economic slowdown can no longer be concealed. We have to face the reality. The estimation and forecasting of economic variables is difficult while leadership of any organisation expects estimation of future but there is confusion and chaos. In 2019, we expect slower growth in nearly 90% of the world. The global economy is now in a synchronized slow down- IMF chief Kristalina Geogieva –quoted from daily Hindustan Times, October 10, 2019, page 1. Hence VUCA model is a challenged and we must be ready to face it. There are substitutes for petrol but cross elasticity of demand for water is zero.

References

[1] Different issues of economic surveys, GOI
[2] Different issues of Hindustan times
[3] Some issues of Times of India (Daily)
[4] Different websites(only for VUCA)