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Leveraging Economic Growth: A SWOT Analysis

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LEVERAGING ECONOMIC GROWTH: A SWOT ANALYSIS

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ABSTRACT

India accounted for 30 percent or more of World GDP a little over a thousand years ago, a level no other country has attained anytime in history. Then came China's rise, and the pillages and plunders of invaders who literally raided India. The European colonizers came soon thereafter, continuing the loot of India more systematically. Today China has made up for lost growth and has emerged as the second largest economy in the world. India, under a democratic political framework with some devious and corrupt political actors, is struggling to make progress. The last five years has witnessed much nationalistic fervor and generated new hopes of capturing the ancient and historic economic aura and governance, and making more swift progress plausible despite COVID-19. This SWOT analysis, lists and discusses factors that encourage entertaining hopes of rapid growth. It also highlights constraints shackling even modest progress. Inspiring leadership can help realize the inner economic tiger that could enable a 10-12% annual growth for at least next ten years.

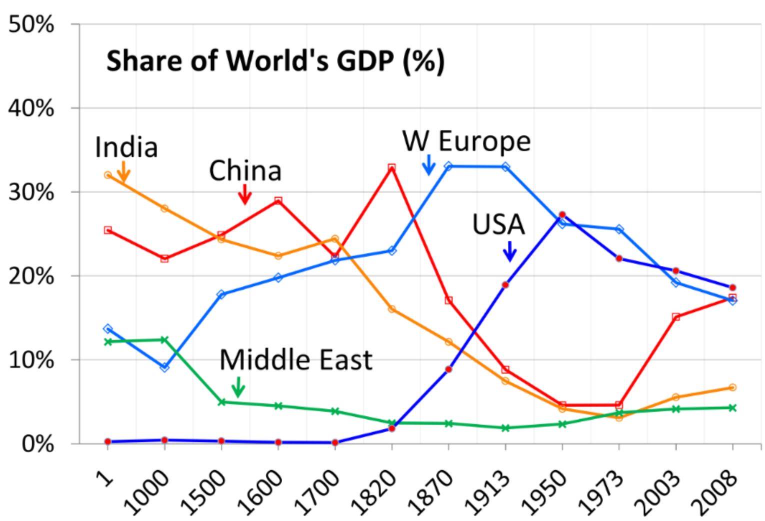
Key Words: World GDP Share, Indian Economic Growth, COVID-19

JEL Classification: B1-B3, O2, Q5

INDINA ECONOMY: THE MILLENNIAL PERSPECTIVE

Indian economy will be at least *Numero Tres* in terms of size of nominal Gross Domestic Product (GDP) right in our own generation if India continues to thrive as a fast growing nation state. And thereafter, if communist China and capitalist-oriented mixed economy of USA are not up to their boast, India will be *Numero Uno* like in fact it was, before the invasions and pillages of the past 1000 years. Past economic growth is meticulously tracked of by Nobel laureate economist Angus Maddison in his *magnum opus "The World Economy: A Millennial Perspective."* (Development Center, OECD 2001.) This paper looks at some ground realities that counsel us to regard such a prodigious exhilarating economic future about India's GDP with a heavy dose of skepticism. Also it looks at factors that encourage us **not** to dismiss such a majestic scenario as sheer naïveté because profound change is taking place in recent years giving even critics a glimpse of India's potentials.

Fig. 1 Maddison Retrospective and Perspective on India



Source: *Angus Maddison 2001*

India's emergence as a world power is plausible because a) the nation has been one such in the past and b) growing the economy swiftly is well within its capabilities. What is noteworthy in Fig.1 is

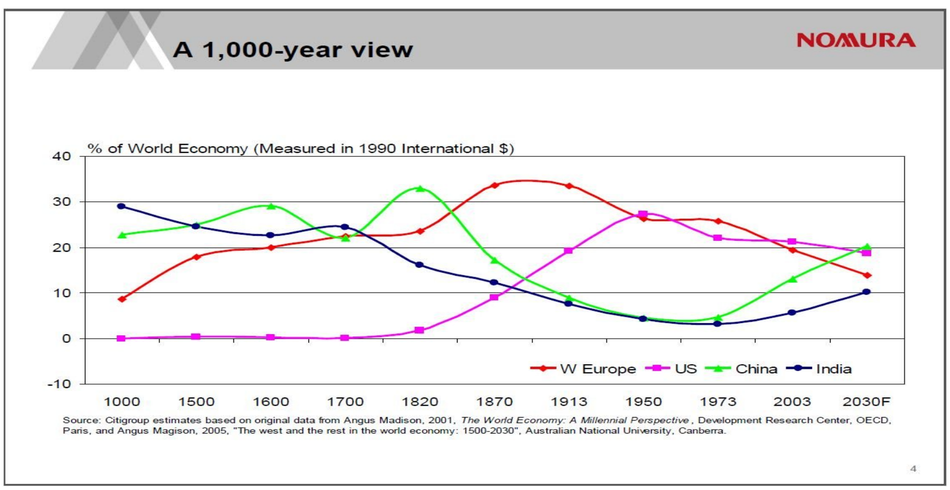
India's position as *Numero Uno* accounting for 30% of world GDP up until 1500 AD, and as *Numero Secundus* accounting for 25% till 1700. Thereafter invasions and colonialism dragged India's share down to 5% in 1973. Other historical factors and colonialism pulled down China's likewise (after 1870) down to the same level. Like China, India too is waking up to its true capability and potential after a long recuperation period. Nationalist self-esteem has again been welling up, egging on the populace to go for rapid economic growth at least till the basic needs like drinking water, food, clothing and shelter, health and wellness, education and a decent standard of living are reached to all citizens. Fig.2, again from Maddison, projects GDP growth till 2030 and shows a convergence of the GDPs of USA, China and W. Europe in 2008. W. Europe's share in world GDP starts to go down after 1950. This is mainly the European Union which is a group of countries and not a single sovereign state. That would leave India in the third position albeit at an unimpressive zig-zaging GDP growth touching \$10 T, which is double the envisaged \$5 T for 2024-25. Of course, in terms of purchasing power parity (PPP), India is already there, ranking third after USA and China. From \$5T to get to \$10T, effective 2025, the growth rate would have to be about 12 to 14%, which is within capabilities if all growth factors coalesce. India's economic future is riding on the materialization of swift growth. Ill-advisedly, all factors, in particular political cohesion for growth, are not coalescing and not leveraging the nationalistic zeal for rapid progress.

12% Growth

Fig. 3 projects what could emerge if Indian economy were to grow from now on at a steady fast clip as per the compounding Rule of 72. In the milieu that India finds itself today with a relatively slow 4.5% growth in the third quarter of 2019 some nay-sayer will say, all bets for economic growth are off. However, matter of fact, both framing and confirmation bias need to be avoided. What would be somewhat confounding about future growth are disagreements with not even a modicum of consensus on how to attain rapid inclusive growth. Some economists have still to accept that social wellbeing is more important than economic wellbeing, even as one targets total wellbeing. This makes one feel it is sheer naiveté to think of achieving the 12% rate imperatively needed to attain the targeted GDP and provide jobs to the unemployed millions in the working age population. And besides GDP there is also the intriguing prospect of not going by herd instinct and settling instead for Gross Domestic Happiness (GDH) after the $5 T GDP stage, pulling India out of the GDP rat race.

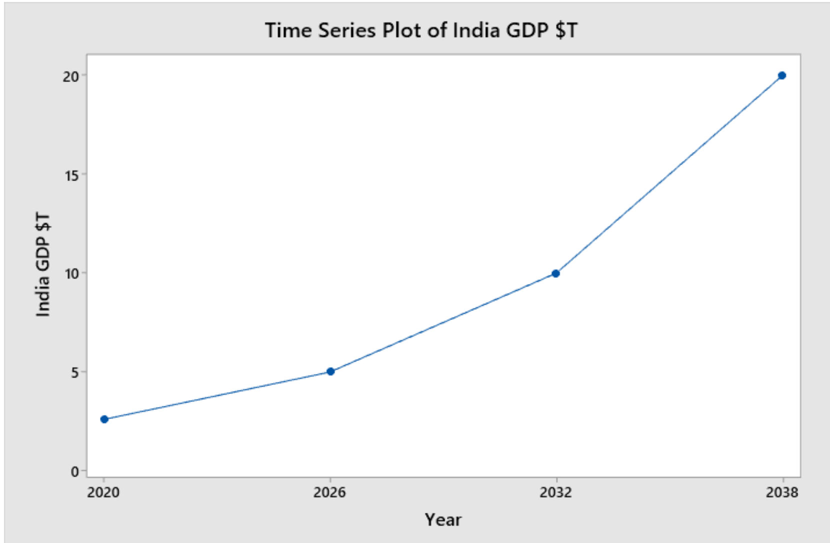
Wrangling for power, Tammany Hall politics, and obstruction of progressive economic policies, could only beget a subdued default rate of growth like now. Even this would be uncertain given the angst (or good cheer as of now) about oil prices, water shortage, global warming and cognitive dissonance about diminishing carbon foot print, tit-for-tat tariff build up, world trade problems, and frightening population growth and more recently COVID-19 logjam. In such a dystopian scenario, the 2018-36 growth blueprint for India's GDP is a humdrum hyperbole.

Fig. 2



Maddison-Nomura 1000-2030 Projections for Four Economies

Fig.3: India's GDP Doubling thrice during 2018-36 as per Rule of 72 Projections, in Tn. $



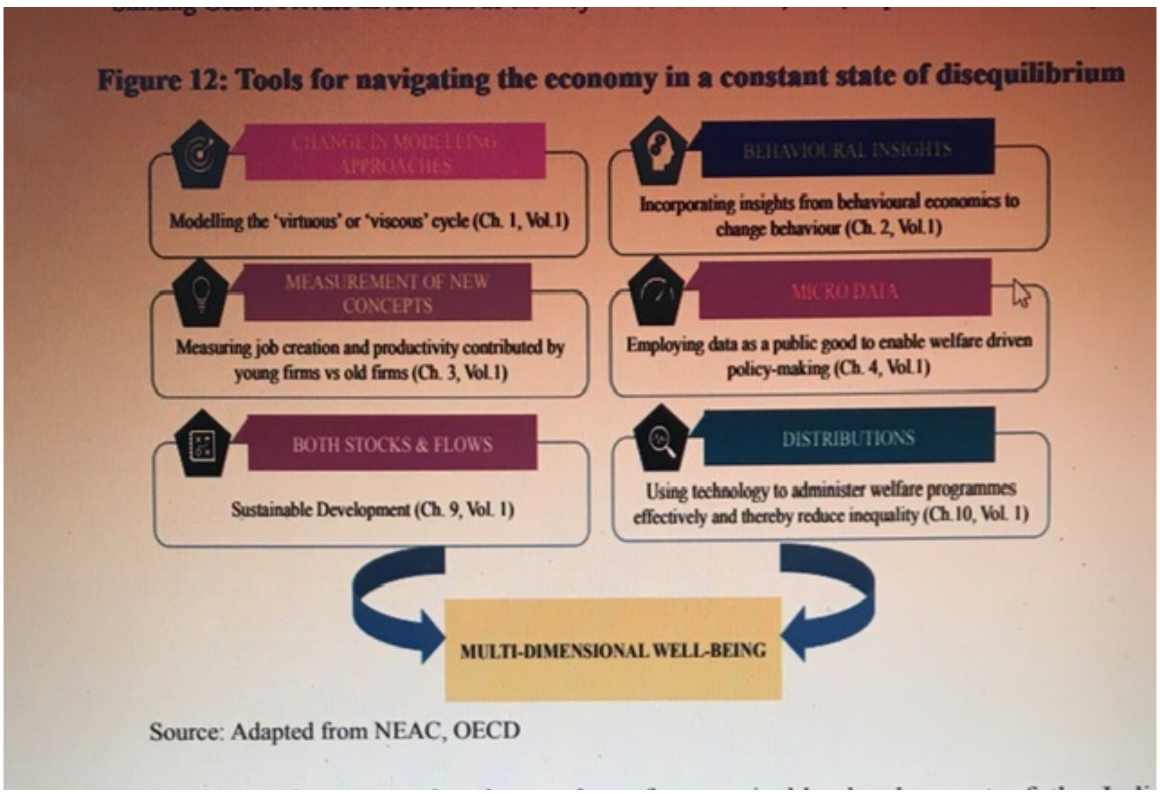
Source: *Rule of 72 Projections assuming a 12% Growth Rate*

'Blue Sky Thinking'

There is a diversity of views about the economy. Some of them congeal with what we know and some contradict. This paper has the limited objective of coming up with a narrative that entertains all views about strengths, weaknesses, opportunities and threats (SWOT), and then come up with a *Tertium Quid*. It is an unenviable task as far as Indian economy is concerned, at times making you feel you are gazing down an economic rabbit hole. The reader is warned that the list of SWOT items may appear disconnected as one goes from one item to another, but they nevertheless fit into the SWOT outlook. For uncommitted economists, labels like leftist, rightist and such others are mere meaningless stickers, and wisdom lies in going for best practices and policies, regardless who propounded them: Milton Friedman, John Maynard Keynes, Karl Marx, Minoo Masani or Mahalanobis. This fully resonates with the unfettered thinking or 'blue sky thinking' adumbrated in the Economic Survey 2018-19, in the matter of an appropriate economic model to achieve the $5-T GDP target by 2024-25 (Fig.4 below.) The Survey rightly emphasizes the real need to contextualize economic theories to Indian setting. K. Subramanian's diagram below from the

Economic Survey 2018-19 delineates sharply the Blue Sky Thinking in strategizing for economic action for the $5T goal in the context of a constant state of disequilibrium. This is original and unfettered ism-free rational approach, and laudable. It spells out the inputs into such thinking. It offers the right framework for navigating the socioeconomic uncertain world: willingness to recalibrate policies and strategy according to changing facts, borrowing as much as feasible from behavioral economics, measuring job creation and productivity of new and old firms, use of micro-level data as much as macroeconomic data, and deploying technology for delivering welfare.

Fig. 4 Proposed Model for Navigating Indian Economy in Disequilibrium



Source: *Government of India, Ministry of Finance, Economic Survey 2018-19, p.13*

Goldilocks Era

"Animal spirits" as termed by John Maynard Keynes has been unleashed in Indian economy since 2014 and it seems like a Goldilocks era of it. There is no better time to leverage these spirits to drive Indian economy full throttle for high-trajectory all-inclusive growth. The vast conviction and exuberance pervading the Union Government, the consumer public, as well as business, have been generating an investment surge. The Union Government has been into massive capital-formation in highways, ports, airports, railways, defense and ordnance industries, health care, power generation, rural electrification, river linking and cleaning and many others. This is in step and style with the fact that gross capital formation as a proportion of GDP is always high, at 40% around economic take off. In the economic armory of the government there are social behavioral change projects too, such as "Beti Bachav, Beti Padhav", Swatch Bharat cleanliness awareness and promotion, better tax compliance, fast switch to digital payments, minimal cash use and so forth. Some of these measures are rooted in the conviction that socio-economic capital formation, as much as physical asset build-up, is key to rapid growth. In some of these endeavors there is Public and Private sector Partnership (PPP). For the near term while an 8% growth rate is sensible, over the longer haul, a 10 or 12 % rate of GDP growth is feasible and essential to provide the escape velocity from the gradualist rates of the past for takeoff into self-sustaining growth. This is doable, if there is agreement about such an aspiration. Forgoing this perfect opportunity for rapid progress means forfeiting it for good because such are the current auguries for growth over the long haul, the animal spirits in particular. Short term predicaments should not cloud creative thinking about medium and long term opportunities and risks.

This paper tries to assemble facts that could help India emerge as a super-economic power accounting for 20-25 of world GDP, like it was before colonialism emaciated Indian economy. It also attempts a strategic SWOT road map. But the SWOT list covers crucial issues and facts, and not all. The current Indian Government has a large mandate acquired in the 2019 Parliamentary elections to take a good shot at rapid growth to attain a GDP of $5 Trillion by 2024-25, becoming the fifth largest economy in the world, ensuring an equitable distribution of growth opportunities. India has been worse than desperate and even frantic for freedom from the corrupt governments in New Delhi and more so in state capitals, feasting on permit-license raj. Big time corruption seems to have gone away at least in the Union administration. The perception is that in state governments corruption is widespread. The political mandate is an imperative either to achieve goals or else, lose the 2024 elections. There is thus a Damocles sword hanging over the government, pressuring it to lunge towards the $5T GDP goal. This is a huge helpful economic factor. In the SWOT analysis that follows, Strengths do have a flip side and they are dealt with in the Weakness side. The same goes for Opportunities and Threats. A SWOT matrix template is avoided in view of the nature of an economic SWOT analysis.

And before all that, as this paper goes to press, a new adverse issue in the form the Corona Virus (COVID 19) has raised its Medusa-like head, threatening the health of the nation, or more or less, even the planet's entire human population. This challenge will cost much in terms of considerable additional funds on medical infrastructure and supplies, medical services and more. Such costs would include loss of GDP growth, unemployment and other socioeconomic upheavals, depending upon how intense the virus outbreak is, how many get infected and how long its spell is on the world and Indian economy. There are positives too. As a nation that is leading the global fight against the Corona virus and has successfully imposed a lockdown to contain the virus spread with good prospects of flattening the COVID-19 curve even before it peaks, stable India may attract new capital from companies that are pulling out of China, and from nations that are otherwise beat-up by the disease. They may include companies like Amazon, Apple, Google, Facebook, IBM, Microsoft and others who already have considerable presence in India. More on this under Strengths and Weaknesses.

A. STRENGTHS

1. **Less Dependence on World Markets**

India will soon be a $3.0T economy and soon thereafter in 2024-25 a $5 T economy, assuming there are no new challenges other than COVID-19. In terms of PPP Indian GDP has been for some time the third largest in the world. Till recently it was the only large economy with the fastest rate of growth: 8%, surpassing turbo-charged China's. Unlike China, India has a low dependency ratio on world markets. This could be a big plus factor, 60 % of GDP being produced for domestic consumer consumption. Currently under the Prime Minister's Rs. 20 Lakh Crore Atmanirbhar Bharat Abhiyan (ABA) anti-COVID economic package, aimed at aiding those persons and businesses affected by social distancing and lockdown, it is proposed to spend roughly an amount approximating to 10 percent of GDP. This is the stimulous bundle of campaigns to salvage business and assist the common man. Government is pressuring business and consumers to promote, Make in India, Brand India and revive the *swadeshi* spirit and boost resilience. There could be however some loss of economies of scale and opportunities to cut costs. On a side note, this fact also explains the conflict that onion exports of 2.1 million/per year (worth ₹500 million) pose for price stability at home. Less dependence on world markets for full capacity utilization means that the Government cannot blame the external market downturn too much for the slump in domestic growth rates. The Government has reconciled itself to an 8% per annum growth in GDP into the future going by the performance of the economy in recent years (Fig. 4). It assumes a 0.7% annual increase in productivity, INR Rs. 75 per dollar, 4% inflation, a GDP of Rs. 375 lakh crores in March 2025.[1] The Government is playing conservatively safe till returns from five-year old investments start flowing in.

By way of stimulating economies, there is going to additional spending running into trillions of dollars by several countries especially America and Europe, leave alone India. India should be able to substitute itself in supply chains likely to be snapped in the aftermath of COVID-19. Liquidity should not be a problem. Central banks everywhere have been pressured by circumstances to take to quantitaitve easing, making credit cheap, and otherwise welcoming borrowers without severe lending caveats.

2 Services Sector is Key

Services account for over 61.5% of India's GDP, a share that belonged to the agricultural sector not long ago. The composition of GDP is, Services or tertiary sector with a GDP share of 61.5%, Manufacturing 23.1% and the Farm sector 15.4%. Services sector, together with the gig economy of personal contracts has emerged as the largest contributor to GDP. This is the same pattern that emerged in USA, China, Germany, Japan, UK, Russia, or most other developed countries as economic advance got into stride. The strength and advantage here is capital-output ratios are relatively low, compared to the manufacturing sector, demanding much less of capital so frantically needed in other key areas such as technical education, social welfare and other sectors, leave alone capital goods and business sectors.

3 Poverty is Down

Poverty reduction is no more a slogan and there is solid proof of millions of countrymen receiving incomes larger than existence wage ($1.90/per day). Several government initiatives have crossed the hurdles of delivering benefits over the last mile. Besides The Pradhan Mantri Jan Dhan Yojana (PMJDY) poverty alleviation has supplied more than 5 crore low priced cooking gas (LPG) cylinders (over 3 years). It is into supply of drinking water, sanitation (toilets) virtually all over India, Ayushman Bharat health care for the indigent covering about 500 million persons, the PM Kisan Sanman depositing Rs. 6000 directly into every farmer family's account, and their like. The PMJDY direct deposit of Rs. 3000 on average per annum in the personal accounts of about 371 million indigent persons is a classic example in poverty amelioration. The bank accounts come with a RuPay Debit card with an overdraft eligibility of Rs. 10,000 and Rs. 2 lakh accident insurance. The Yojana cuts out intermediaries and their *haftha*, and helps with direct 100 percent benefit transfers. More crucially it has brought about financial inclusion to 28.5% of the people at the bottom of the economic pyramid who were out of it despite years of striving to do it. According to the UN Development Report 2019, 640 million Indians were in "Multidimensional" poverty in 2005-6 and this went down to 365.55 million 2016-17, a reduction of 254.45 million. A communist country could pull perhaps more people out of poverty in a shorter time, but one wishes the term "multidimensional" included freedoms as we know them here, not just drinking water, nutrition, electricity, quality education and other material comforts. According to the World Data Lab poverty rate in India has come down from 14.4% in rural areas and 9.5% in urban areas in 2012 to 4.3% and

3.8 % in the rural and urban areas respectively in 2018. Thus there is a steep fall in the poverty rate and the number of extreme poor with incomes of less than $1.9 per day is estimated at 50 million. Much of this poverty reduction has been put through the triad of (JAM) Jan Dhan bank accounts, Aadhar biometric IDs, and Mobile cell phones in the current milieu of a digital revolution. According to the National Payments Corporation of India, transactions via the Unified Payments Interface (UPI), the country's flagship payments platform, grew by 25 per cent and crossed Rs 1 trillion in value in December 2018. However, at just 154 loans per 1000 persons it would appear that there is considerable scope for augmenting consumption and standards of living of the poor. Such augmentation could provide the key to catalyzing the economy to a tipping point for poverty removal. It would have to start with development of a credit reporting system to enable banks to lend. In this matter India is much behind developed nations although digital identity meets personal credit information needs to some extent. The foundation for the gig economy is laid thus.

4. Inequality

Inequality as reflected in the Gini coefficient has decreased as per World Bank data from 0.45 in 2004-5 to 0.339 in 2009. It is possible it has gone up again thanks to uncontrolled growth of black economy till the demonetization of the rupee in 2016, and other measures to curb tax evasion. Black money is generated continuously and is a perpetual flow in this respect. Like Simon Kuznets would say, market economy first lets income and wealth inequality increase, and then it reduces it. There is merit in saying: let the goose that lays the golden egg continue to do so, without expecting it to lay more than one at a time. The current government's policies such as the triad of Jandhan accounts, direct deposits into them and the mobile digital revolution are instruments for poverty reduction.

5. Economic and Social Behavioral Change

Behavioral economics (BE) lets go the diehard idea of the economy as a machine to tinker with, and instead highlights standards of government-public behavior that get things done. Behavioral change is being witnessed in tax compliance, enforcement of compliance behavior, nationalistic fervor with a can-do spirit, public awareness of recent past and of national ground realities. There have been profound cultural and political changes, with corruption confined only to State government departments with high contacts with the public such as construction and real estate, judiciary, police, licensing, permit issuing offices. The erstwhile corruption culture still pervades only in certain states with political parties proficient in such culture.

There is more interdisciplinary activity in the psychology-economics interface. There is somewhat visible success in changing economic behavior. It has moved away from taking advantage opportunistically to one of more accountability and identification with the larger national causes of rapid socio-economic advance. As an example tax compliance has improved considerably, the number of tax payers has more than doubled in recent years that coincide with Rupee demonetization, GST and changes in Insolvency-Bankruptcy Code. Strange as it may seem, this is in keeping with Abhijit Banerjee's theories of herd behavior, rumor mongering and rational behavior of economic agents charged with a revived and energized nationalism under a new political set up.[2]

Goods and Services Tax (GST) launched in July 2017 is a classic example of successful behavioral economics-based reform. It ended the tyranny of India's indirect tax architecture. 1300 different goods and 500 services were put under five buckets for the GST rate ranging from 0 % for basic essentials like milk to 28% for luxuries. There is pressure to go the Singaporean or Canadian GST way with just one tax rate instead of the five rates now. In India 17 different tax-upon-tax cascading taxes such as excise, customs, sales tax, service tax, octroi and so forth were fused into one GST. It saved on an average some 20% of conveyance time by ending the waiting time by trucks at state borders during which time they had to contend with harassment by Octroi staff and traffic police. This was a powerful incentive for compliance and thousands of untaxed companies started complying willingly.[3] Such agreement with tax law is of critical importance in India where the tax to GDP ratio is as low as 17% compared to 34% in European (OECD) countries.

BE makes evident what motivates people to change behavior: not fear, but factors like monitoring progress being made, instant rewards for compliance and social inducements. Trepidation caused by fear prompts inaction. Social incentives include mirroring behavior and the consequences of compliance and otherwise. In Britain in order to incentivate people to pay up taxes on time, the British tax authority publicized that 90 percent of people pay tax on time. With this information about an overwhelming majority of tax payers paying their dues on time, those that were delaying payments acted swiftly to join the herd, resulting in an increase in tax revenues of 5.6 billion pounds in a recent year. It certainly pays to use the BE card to make plans actionable.

6. Oil Prices are Lying Low

Transport costs will be lower than before on account of the precipitate fall in oil prices in the absence of demand, depressed by COVID-19. Lower oil prices will serve the automobile industry well by increasing the demand for vehicles fueled by gas. There may be a temporary harsher setback in sales for electric vehicles for the same reason. Overall, low oil prices will serve to reduce development costs by reducing import costs sizably, by augmenting foreign exchange reserves even while strengthening the rupee vis-à-vis the dollar, Euro, Sterling and other hard currencies. It may even incentivize investment in building large storage facilities for creating strategic oil reserves when prices are low.

B. WEAKNESSES

1. **COVID 19**

/A quick back-of-the-envelope computation of plausible losses due to the COVID 19 downturn

Table 1: Estimated COVID 19 Loss in GDP during 2020

Country	GDP 2019 in $ Billion	Avg. Weekly Loss in $ Billion	Number of Weeks Economy Down	COVID19 caused GDP Loss ($ Billion)
1. USA	21,439.45	412	7	2884
2. China	14,143.16	272	7	1904
3. Japan	5154.153	99	7	693
4.German	3863.344	74	6	444
5. India	2,935.270	56	7	392
6. UK	2,743.586	52	7	364
7. France	2,707.704	52	7	364
8. Italy	1,988.636	38	7	266
9. Brazil	1,847.020	36	6	216

10. Canada	1,730.914	33	7	231
World*	87,265.226	1678	6	10,068

*a) World GDP Average slowdown presumed at 6 weeks
b) Total Loss not aggregate of 10 countries,
Weeks shut down are mere estimates
Source: Computed by author from GDP Data in: IMF.org, World Economic Outlook, October 2019

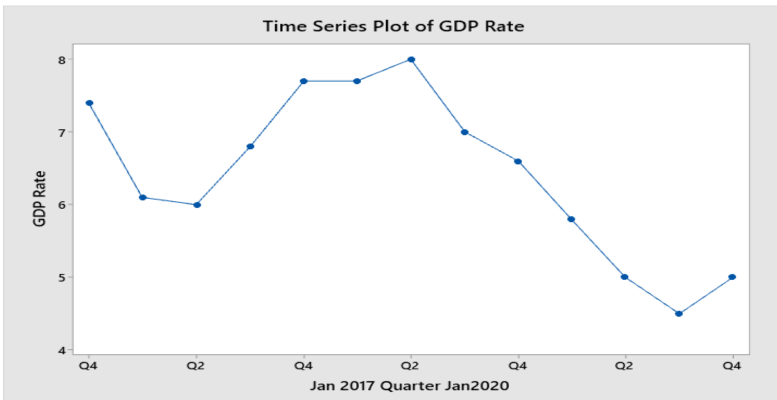
in economies would start with the annual GDP of any country, and then the computation of average per week GDP, and estimate how many weeks economies are held down by the for example, the steel or automobile industries with heavy linkages with the rest of the economy. In the absence of accurate data of individual sectoral closures and the latest output data, it is expedient to resort to the formula below for a ballpark educated guess of the loss due to the pandemic. The simple formula would be as follows:

$$\textbf{GDP Loss due to COVID 19} = (\mathbf{GDP_{y19}} \div \mathbf{52}) * \mathbf{W_d}$$

where, $\mathbf{GDP_{Y19}}$ is the nominal GDP for the year 2019 and $\mathbf{W_d}$ is the number of weeks the economy is held down or slowed down by the Corona Virus, and 52, the weeks in the year.

The fall in Indian GDP in the current calendar year, using the formula above, for illustrative purposes, assuming 7-week lockdown and $56 billion GDP per week, is $392 billion or about 14 % of GDP. China's is likely to be about $2.0 trillion and USA's about $2.9 Trillion. Longer the lockdown, larger too the GDP loss. By speeding up recovery one can reduce this loss. Job losses will definitely be disproportional to GDP declines. There are no easy tradeoffs between minimizing mortality due to COVID through lockdowns, and minimizing GDP loss by lifting lockdowns. India's current GDP is approaching $3 Trillion. India's population is 134 crores. About 50% of it or about 67 crores of people, is the working age population (WAP) in the age group of 16 years and 64 years, excluding those still in schools and colleges, housewives and those not seeking jobs. It may not also include those in jails or being incarcerated. Labor Force Participation rate – LFPR is about 50 percent of WAP according to the National Sample Survey office (NSSO) data. Thus, 50 percent of 67 crores or 33.5 crores is the LFPR. We are definitely not pressing into service this huge working age population that can yield a population dividend on which the country is banking on, for leapfrogging in an economic context. National infrastructure projects in construction, transport sector, linking rivers and many others need speedy execution. Other countries faced with a similar situation are known to disturb peace in (international) border areas and divert people's attention from life and death unemployment.

Fig.5 Slow Down in GDP Rates of Growth Jan 2017 – Jan 2020



Source: *S. Char Based on World Bank qtly. GDP data. Apogee is end II Q.2018 and nadir is III Q.2019. See Fig. 6 at the end.*

2 2020 Recession

The slowdown from July 2018 (Q2) as in Figs 5 and 6 cannot be classified as a recession, GDP did not contract, but its growth rate did. Also it is trending up. It is followed by declines in employment. There is need to realize that the main causes for this slow down are actually two elephants in the room: dearth of abundant unaccounted cash drained out of economy after notebandi and secondly fear caused by stricter enforcement of law, followed by less or nil inclination for cash transactions that intend to avoid GST and personal income taxes. A cache of resources in the large informal economy lies beyond the pale of tax authority. Purchases of big ticket items including housing is not happening. This vicious cycle or loop is completed by less demand, less investment, less borrowing and less lending. CMIE estimates that the share of investment as % of GDP is down from 30.71% in 2004-5 to 28.78% in 2019-20. In 2018-19 projects worth Rs. 20.74 T were dropped by mostly private firms. It is about Rs. 8 T in the first 6 months of 2019-20. New investment could break this vicious cycle provided such investment is in microeconomic businesses that are most affected. The government is also wanting to disinvest from banks and public sector units in which much capital has been sunk. It would also be economically wise to avoid sunk-cost bias such as continuing to fund subsidies to even well-off sections and reallocate resources for projects.

Table 2. Observed and Expected Counts for Global Rates

Glob Rate	Poisson Probability	Observed Count	Expected Count	Contribution to Chi-Square
<=2	0.310440	20	24.5248	0.83481
3	0.213953	16	16.9023	0.04816
4	0.190255	22	15.0302	3.23207
>=5	0.285352	21	22.5428	0.10559

|Chi-Square Test

Null hypothesis	H_0: Data follow a Poisson distribution
Alternative hypothesis	H_1: Data do not follow a Poisson distribution

DF	Chi-Square	P-Value
2	4.22063	0.121

The slowdown in India's GDP is not a unique phenomenon, but a trend the world over. A goodness-of-fit chi-square test of global rates gave this author a chi-square value of 4.221 (P-Value 0.121). This confirmed that they seemed to follow an unpredictable Poisson pattern which could perhaps be explained by the uncertainty in the global economy. T-test comparisons of observed and expected values of Indian growth rates gave a paired test T-value of 438.14 (P-Value 0.000) which could be interpreted to mean that there is enough evidence to reject the equality of the two GDP growth rates, with expectations of high rates driving the narrative to some extent, and so deceiving.

GDP growth rate has come down from a high of 8+ percent in quarter beginning July 2018 (Figs. 5 and 6) to about 5 - 6 % in Quarter ending Jan 2020 causing some alarm about sales of real estate, cars, jewelry, refrigerators, smart phones, and other big-ticket items which had seen better days before the assault on unaccounted money and the burst of asset bubbles. Even during festive seasons like Diwali the purchases have been down and minimal, except for gold, 30 tons of which was sold in a single day during the 2019 *Dhanteras* festival.[4] The price was Rs.38,275/10 grams.

That is some Rs.11840 crores of gold sales in a day! What conclusions can we draw about demand, MPC, savings, and foot loose fancy-free (unaccounted?) cash? However, the fall in sales of some items is precipitous, leading to layoffs, paycuts, lower earnings, and related negatives. Two consecutive declines in quarterly GDP is enough to call it a recession. Unemployment is at a record 45-year high.

Worrisome question: Is the Marginal Propensity of Consumption (MPC) going down and is savings again on the upswing? This is not the case. Between 2012 and 2018 the household savings rate has come down from 23.6% to 17.2%. Total savings rate was 30% in 2018, down from 35% in 2012. Savings of private corporations was a constant 10 to 12%, public corporations 4%, Government's -2 to 0%. There is thus a confirmation of the fall in incomes however transitional it could be,

FIG. 6 GDP GROWTH RATES

inevitably causing a significant slowdown of the economy. Where will resources for massive investments in all sectors come from? Interest rates are at a nine year low. The economy is being stimulated and borrowings will happen in a substantial manner probably even before the lockdown due to COVID-19 is lifted.

3. Global Warming

The bleak predictions of global warming due to man-made activities and catastrophic- events was dramatized by Greta Thunberg of Sweden where carbon footprints are taken so seriously that there is a 115 Euro charge per ton of CO_2. Everyone is talking about it, but not doing much to avoid a catastrophic scenario, like the Corona Virus in the health area, and time is running out. In the Euro region itself there is a move to levy a 10 Euro/per ton tax and is being opposed by business. Time is running out for taking coordinated action to reduce smoke pollution, to adopt alternative technologies, and reduce carbon footprints every which way. There is commitment to move towards carbon-neutral investments by 2050 by a group of world's largest asset-owners responsible for directing investments of over $2T USD. The International Development Finance Fund is raising $1T by 2025 for green energy funding in 20 least developed countries. In the midst of this, some countries like USA and Brazil are going back on the Paris Agreement.

Asset managers of assets totaling $34 T, in a survival mode thanks to floods and other disasters threatening their assets, are asking for urgent action: a) Let the price of carbon reflect the cost of carbon (damage) to the world climate. 2) Phase out fuel subsidies and c) Phase out thermal coal worldwide. It is necessary to repeat the remarkable success that attended upon ozone depletion, resulting in restoring the ozone layer by replacing chlorofluorocarbons (CFCs) by hydrofluorocarbons (HFCs) and again by HFC substitutes friendlier to the environment. Trifecta of factors call for urgent actionable items to reduce warming: a) natural disasters, b) dramatically lower costs of power production from wind and solar, and c) commitment to fill the vacuum left by turning back on the Paris accord. Gore's *Inconvenient Truth*, and the suggestions of the Intergovernmental Panel on Climate Change (IPCC) won Nobel Peace prizes in 2006. If not addressed, 3^0 Celsius global heating will happen by end of the century, whereas IPCC stated that temp rise above 1.5^0 is enough to cause significant and irreversible damage to ecosystem that supports human existence.

Between 2006-2015 Greenland ice shields alone lost ice mass at an average rate of 278 billion tons per year. It was 155 billion tons in the case of arctic ice sheet. Glaciers like in the Himalayas are losing 220 billion tons of ice every year. Glacier funerals are being observed in the European Alps. Since 1902 IPCC says Global Mean Sea level has gone up by 16 CM, the rate of increase doubling in the last ten years.

In 2018 China reduced CO_2 emissions per unit of GDP (emission intensity) by 45.8% from the 2005 level and increased the share of non-fossil fuels in primary energy consumption by 14.3%. India too has done well, achieving a 21% reduction in emission intensity as early as 2014, thereby achieving its pre-2020 voluntary target. Despite the recent controversy about Brazil letting the natural rain-forests burn down, it achieved a 58% emission reduction in a business-as-usual scenario set for it by NAMAs (Nationally Appropriate Mitigation Actions), overreaching its target of 36-39% reduction by 2020. Delhi's notoriety as the most polluted city defies the reduction achievements. Earth Overshoot Day indicating on which day more resources were used than the earth can generate, was July 29, 2019.

If planet earth's population reaches 10.9 billion 2050 according to the UN Population Fund from 7.63 billion now, one shudders to think of the consequences. Mahatma Gandhi (this is his 150th birthday year) said more than a 100 years ago: "The earth, the air, the land and the water are not an inheritance from our forefathers, but on loan from our children. So we have to hand over to them at least at it was handed over to us." This is easier done with much less population, than with more. He also said: "The earth provides enough to satisfy every man's need, but not every man's greed." Enormous responsibilities rest on all individuals. No one is exempt from minimizing carbon footprints. Meetings and sessions need to be conducted on Zoom or skype with web cameras. Air flights burn aviation fuel. Global warming is messing up with the regular schedule of rainfall and in recent years there is excess rainfall, flooding many cities. Mumbai had more rain than ever before in the past 65 years. Due to the precarious water supply and increasing population, quality of living standards are likely to come down drastically by 2050 for about 70 million people, per projections of the World Bank. 45% reduction in emissions is needed by 2030 to limit warming by the end of the century to 1.5^0 Celsius. Every country's future is tied up with everyone else's. As noted above, glaciers and ice in the sturdy Himalayas are melting and threatening large water volumes in the near future and dwindling water volumes in the mid and long-term. Without alternative sources such as sea water desalination, rain harvesting and so on, not just economic, but all-round advance would be severely impacted. Rising seas could also drown out cities, not just damage them.

Irony is Marathwada with serious water shortage, has a boom in sugar cane, a crop that is very thirsty for water. Market decisions about crops to be grown are made on noneconomic considerations. Sugar factories get numerous tax subsidies including for electricity and for fertilizers. Loans to sugar farmers have been written off by banks. Sugar business received $880 million in export subsidies. According to the World Resources Institute three-fourths of irrigated sugar cane production takes place in areas under "extremely high water stress." Will politics stop interfering with prudent socio-economic life-death decision-making?

4. Employee Retrenchment

Unemployment figures show that as per CMIE estimates it is 8.5 percent in October 2019 as compared to 7.2 percent in September 2019. At 8.5 % it is the highest since August 2016. 10 to 12 Million of young persons join the workforce every year. Also firms are letting go workers in large numbers due to automation, which is welcome in its boost to productivity, but not so welcome in retrenching workers. Role of AI can be scary if not prepared for it, but utilitarian if one is fully organized and primed for it. Also there is the paradox of acute shortage of plumbers, electricians, truck drivers, brick-layers, IT savvy programmers, and numerous other technicians trained as per needs of automobiles, trucks, earth-moving equipment, accountants and others. Rigid labor laws at times could also come in the way of winding up business.

5. Sustainable Model of Development

On a side note, growth for growth sake is the pattern for cancer cells. Growth could have a greater purpose. Economic growth is meaningless unless the common man is adequate with regard to not just the basics of life, but also health care and education. The basics have not been procured for them, wretchedly enough for the past 6-7 decades. And the truth is, India is losing out on even uncontaminated air and dirt-free drinking water for all. A state of affairs like this hardly offers options other than earmarking as much resources as needed for basics including clean air, unpolluted drinking water, hygienic toilets and quality education. Beyond that, India needs discussion about the pattern or model of economic development India to opt for, whether it should be as materialistic as in the West or China, or it should blaze a new trail in terms of Gross National Happiness or Wellness, not very unlike Bhutan's.[5] Critical to this discussion is the fact that India does not entertain geopolitical or economic or cultural hegemony, other than forceful defense of its borders against inane bellicose neighbors who have more to gain teaming up with India than by warring. India has no designs for a Belt and Road Initiative because it is redundant for the country's goals. Unpretentiousness saves India trillions of dollars yielding a higher marginal return internally. It is not a question of moral vs. materialistic development, but one of looking into the costs thereof, trading off one for the other.

6. Gross National Happiness (GNH > GDP)!

New thinking in development economics is what is called for, fully accounting for wellbeing of current and future generations and sustainable development. Economist Partha Dasgupta supported it.[6] Also needed is a critical look at what are needed and how much, without further exacerbating global warming. If the consensus is that after ensuring the basics of a wholesome life, which is anyway a long way off, India's growth should be less materialistic, more services oriented, more environmentally-friendly, shifting from fossil fuels to renewables and so forth, that would once again be a game changer not just for India but all others coming from behind. There is the classic trade-off between present consumption and greater future well-being for the coming generations, one being set off against the other. Is it moral, for this generation to burden the future generations with adverse aspects of global warming, and perhaps drive them out to colonize Mars?

Repeatedly it is mentioned that there is only one earth and it cannot support conspicuous consumption. It cannot sustain advanced country living standards for all peoples in developing and poor countries because of space and resource constraints.[7] Technology may avert Malthusian famines and tragedy including global warming, and help solve persistent issues through innovations over the long haul. Densely populated countries cannot however resort to escapism. Like Keynes said, in the long run we are all dead. In the meantime rationally, there may be serious struggles for air, water, energy, education services, food, health services, living space and other basics. Quality of life is already way down in many developed and developing countries including India and China, dragging down life expectancy. America and other countries have the problem of plenty, waste and endemic ennui in life leading to pointlessness, mindless gun proliferation and violence, opioid overdosing, and other forms of suicide which too have been dragging American life expectancy down. So what is the nucleus between scarcities and gluts? How do you avoid overindulgence? Hegemonic America, China, Russia and such others are driven by their Military-Industrial Complex that keeps boosting their military budget which, following Say's Law, does trigger wars.[8] India has been different, formidably defending the nation from Marxist fundamentalists on one side and religious fanatics on the other, and yet, keeping a tab on defense expenditures. Beating swords into plowshares would free enormous resources for mankind's progress.

C. OPPORTUNITIES

1. Citizen Engagement

Greater involvement of overseas citizens of Indian origin in India's growth and inflow of foreign currency are possible with unicorn firms sprouting all over especially in businesses like ecommerce, online education, cyber security and cloud services. The disinvestment in countries like China and others pummelled by COVID-19, is likely to find business openings in India. There is going to be monetary easing and pump-priming even at the risk of higher than 4% inflation and bigger budget deficits. The objective is stimulation of demand by depositing purchasing power in the hands of people.

2. Network Link Rivers

Linking rivers, rain-harvesting and water bodies offer opportunities to ensure round-the-year water supply even in deserts.

3. Farm Tax

Possible openings to tax agricultural incomes are likely. Subsidies to agriculture are in hundreds of crores. This is true of agriculture anywhere in the world. European Union spends $65 billion in annual farm subsidies. This farm patronage system has led to mafia-style grabbing of land to harvest the subsidies. In India, the truth about sugar mills and sugarcane fields has been known for 5-6 decades. There is political mafia-style grab of these farm assets. It is time to introduce farm taxes at least to partially offset the government deficits. Marathwada is accutely short of water, but earmarks much of scarce water to sugar cane not subsistence crops.

4. Research in STEM areas

Enormous research possibilities exist in STEM areas. The utilization of digital systems will sky rocket as more and business and governments transition from manual to online virtual techniques.In many organizations during the COVID exigency over 90 percent are working from their homes. That could become the new normal if the telecommunicatios infrastructure gets up to speed. There could be shortage of technically qualified persons to meet the demand.

5. New Supply Chain Alignments

Larger export possibilities could materialise especially in drugs and chemicals, somewhat boosted by the disdain about China's rigorous export efforts and trade wars. In the post-COVID-19 years, China may lose some American market. There could be post-Brexit opportunities and worries too. How well-prepared Indian business is to bag opportunities will be tested out soon.

6. Spread of Indiana

There is increasing world-wide acceptance of Indian living styles such as vegetarianism, yoga, ayurveda, especially in the post-COVID-19 period, and even Sanskrit. There could be openings for all: both people of Indian origin and others that master these disciplines. However, some of them are overcrowded areas of business endeavors.

D. THREATS

1. Tariff Wars

Tariff Wars have begun such as between USA and China and there could be a loss of America as a huge consumer unless India plays the cards smart.

2. Global Warming

Global Warming due to man-made activities and catasrophic events could slow growth. This has been dealth with at some length earlier under Weaknesses.

3. Adverse External Relations

Unhelpful attitude of neighbors like Pakistan in regard to using terrorist activity as a proxy war and forming a common market for sharing resources and augmenting alround prosperity could divert resources to defense.

4. Immigration from Poor Neighbors

Osmosis works against India, India being more well-to-do in real terms. Because of larger opportunities for personal growth and thanks to porous borders, imigrants from Bangladesh, Nepal, and possibly other countries slip into India and change demographics in places like Assam, changing the socio-economic and cultural dimensions of the area. There is much tension too.

5. Innovative Fiscal and Monetary Policy

In the area of innovative fiscal and monetary policy, somehow India is always tentative. The November 2016 Rupee Demonetization was an intelligent measure, though half-heartedly prepared and implemented. But together with other measures such as GST and the Insolvency and Bankruptcy Code (IBC) changes, tax compliance has been transformed from that of a corrupt third world counntry to that of a strictly-enforced and competent tax system, boosting the number of tax payers more than 200 percent. Another obsessive phobia is about debt as percent of GDP. The 10% spending for Atmanirbhar Bharat Abhiyan is a bold breakthrough from fiscal and monetary tradition.There is healthy concern about non-performing assets of banks, on an average of about 15 percent of total lending. In Switzerland, banks have lent to households and private corporations even upto 250 percent of GDP, by sharply cutting interest rates, unlike the European Union which is too slow to bring about such decreases in interest rates even in the face of strong recessive trends.

6. Millstone Around neck: Labor and Land Laws

Laws governing land and labor have been stuck in the mud of socio-economic milieu of more than hundred years, oblivious to ground realities of the 21st century. They have come in the way of rapid progress by miring issues in the situation prevailing a long ago, and in the process curtailing much enthusiasm of entrepreneurs from abroad wanting to bring their business to India. This could be one of the leading causes why businesses planning to migrate from China do not feel the gusto to make the items in India, using relatively much lower costs of production in India and cater to the Indian and foreign markets like they did in the past while deciding about investing in China. Reforming such labor and land laws, together with expediting decisions about environmental clearances could result in dramatically larger investments.

TERTIUM QUID: DISCOVERY OF INNER TIGER

The wellbeing of the nation becomes an overriding thought and most people without vested interests accept that. In India too this fact, together with a modicum of nationalism, explains the vast revulsion for 'business as usual' and the energetic backing for measures such as Demonetization, GST, Bankruptcy Code, Swatch Bharat, promotion of indigenous medicine including yoga. The Government has been constantly tapping into this wellspring of antipathy for 'business as usual' and support for progressive good causes.

The bottomline is that there is no stark choice or trade off between social welfare and private enterprise. It is a false choice. One can have a business friendly environment as well as social equality, if the trade off is well done. Switzerland has thus emerged as the richest country in the world with no truck with any ism, rightist or leftist, but going for pragmatist polices for booms and recessions. There is scientific confirmation that pursuit of selfish interests will not help beyond a limited extent. Ayn Randian pursuit of self-interest without being guided by broad social and national interests will jeopardize all interests just as most non-cooperative outcomes do in a game theoretic environment.[9]

The animal spirits economic story of the country needs to be sustained if its enormous potential is to be achieved. The exuberance that was mentioned at the outset is amply validated by the perceptible transformation of the Indian economy. Although a great deal more needs to be done for promoting distributive justice, prosperity is getting shared through direct benefit (last-mile delivery) transfers and productive jobs for the millions. An all-inclusive economy is emerging. This journey hopefully continues so that tempestuous times maybe avoided. Administrations could be empowered to help India emerge as a booming economic power. Citizen engagement and transparency bring about quality leaders.[10] Belatedly people are rediscovering that India is an economic tiger. It is only rational to expect citizens to let the tiger keep leaping to attain pre-colonial eminence.

END NOTES

[1] GOI *Economic Survey 2018-19,* page 4 footnote

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[5] While further research is definitely called for to discern what people want, at least some economically well-off communities must be aspiring for more wellness and happiness rather than more materials and services. Bhutan’s switch to GNH is narrated at: https://www.grossnationalhappiness.com/

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