



Economy and Financial Depreciation by Corona Pandemic from 2019 To 2021

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ABSTRACT

Although the pandemic is likely to reduce the value of some types of capital stock, other capital may become even more productive even after the pandemic. Businesses should pay attention to how the need for capital changes in the postpandemic world.

COVID-19 is likely to change the US economy in some profound ways. Workers who have become used to working remotely are likely to want to continue doing so (at least some of the time); businesses that saved money on travel and offices may want to lock in some of those savings. The impact on consumer spending is uncertain, but the possibility of future pandemics may dampen the long-term spending growth in areas that could be sensitive to new diseases, such as restaurants and recreation services.

That shift presents the US economy—as it is currently configured—with a problem. The country's capital stock—buildings, machines, and even ideas that power worker productivity—was designed for the prepandemic world. (See sidebar, “What is capital?” for the definition of capital as used in this article.) Some of that old capital will become even more productive and valuable postpandemic—but some of it may become less productive, or even useless. It's odd to think that capital equipment and buildings could suddenly lose their value. All capital depreciates over time as it is used.¹ Depreciation can take the form of physical deterioration (e.g., a machine wearing out) or obsolescence (e.g., a computer program being replaced with a more effective version). As a capital asset depreciates, it becomes less valuable. It may become less productive, or it may require the user to spend more on upkeep, or its output may become uncompetitive.

What happens then? If the value falls enough, the capital is “stranded.” There is a machine, or a building, or perhaps even an idea, but with no productive value, the machine or building or idea is useless. Ideally, the owners will write off the asset, sell it for scrap (if it has any scrap value), and move on.

Stranding happens more often than we might expect: The dynamic US economy is constantly forcing firms to write off what appears to be useful capital because demand has shifted or because better and more productive capital has entered the market. Anybody who has had to replace a “perfectly good” computer or smartphone in the recent past because the underlying software is no longer supported it will have experienced this.

COVID-19 may accelerate this process and will likely reduce the value of some capital types. Right now, much restaurant equipment (and the building space for restaurants) stands idle, many office spaces are empty, and some city busses and airplanes are parked. We are assuming, of course, that we will return to using this capital once the pandemic is over. But the postpandemic economy is likely to look different from the prepandemic economy. For example, many analysts are speculating that business air travel could decline significantly, as businesses learn to use virtual meetings effectively. This means that not all airplanes will come out of the hangar. Some may be parked forever and effectively become valueless. In other words, those aircraft will be stranded.

Just how much capital could be stranded after the pandemic? We measured the possible size of the affected capital stock using the Commerce Department's detailed measures for nonresidential capital. The department's Bureau of Economic Analysis publishes annual estimates of the nation's capital stock by type of asset. The bureau identifies about 20 types of assets, ranging from aircraft to warehouses. We classified these assets into three categories: assets that would be less productive in the postpandemic world, assets that would continue to be as productive as before, and assets that might become more productive. For example, we assumed that the increase in working at home would make office buildings less productive. That doesn't mean that there won't be substantial use of office buildings, but it does mean that the marginal product of an office building—the additional production an additional building could provide—might be substantially lower in the postpandemic world.

I. INTRODUCTION

Union Minister for Finance and Corporate Affairs, Smt. Nirmala Sitharaman presented the Economic Survey 2020-21 in the Parliament today. The key highlights of Economic Survey 2020-21, which is dedicated to the COVID Warriors, are as follows:

Saving Lives and Livelihoods amidst a Once-in-a-Century Crisis

- India focused on saving lives and livelihoods by its willingness to take short-term pain for long-term gain, at the onset of the COVID-19 pandemic
- Response stemmed from the humane principle that: Human lives lost cannot be brought back[1]GDP growth will recover from the temporary shock caused by the pandemic
- An early, intense lockdown provided a win-win strategy to save lives, and preserve livelihoods via economic recovery in the medium to long-term
- Strategy also motivated by the Nobel-Prize winning research by Hansen & Sargent (2001): a policy focused on minimizing losses in a worst-case scenario when uncertainty is very high
- India's strategy flattened the curve, pushed the peak to September, 2020
- After the September peak, India has been unique in experiencing declining daily cases despite increasing mobility
- V-shaped recovery, as seen in 7.5% decline in GDP in Q2 and recovery across all key economic indicators vis-à-vis the 23.9% GDP contraction in Q1
- COVID pandemic affected both demand and supply:

India was the only country to announce structural reforms to expand supply in the medium-long term and avoid long-term damage to productive capacities

Process Reforms

- India over-regulates the economy resulting in regulations being ineffective even with relatively good compliance with process
- The root cause of the problem of overregulation is an approach that attempts to account for every possible outcome
- Increase in complexity of regulations, intended to reduce discretion, results in even more non-transparent discretion
- The solution is to **simplify regulations** and **invest in greater supervision** which, by definition, implies greater discretion[2]
- Discretion, however, needs to be balanced with **transparency**, systems of ex-ante accountability and ex-post resolution mechanisms
- The above intellectual framework has already informed reforms ranging from labour codes to removal of onerous regulations on the BPO sector
- Pradhan Mantri Jan Arogya Yojana (PM-JAY) – the ambitious program launched by Government of India in 2018 to provide healthcare access to the most vulnerable sections demonstrates strong positive effects on healthcare outcomes in a short time
- PM-JAY is being used significantly for high frequency, low cost care such as dialysis and continued during the Covid pandemic and the lockdown

Initial measures of lockdown, social distancing, travel advisories, practicing hand wash, wearing masks reduced the spread of the disease[3]. Country also acquired self-reliance in essential medicines, hand sanitizers, protective equipment including masks, PPE Kits, ventilators, COVID-19

testing and treatment facilities. World's largest COVID-19 vaccination drive commenced on 16th January, 2021 using two indigenously manufactured vaccines.

A microgrid is a small-scale power grid that can function independently or in tandem with other grids. Distributed, localized, decentralized, embedded energy generation is the term for using microgrids. The microgrid is referred to as a hybrid microgrid if it can be combined with the area's main power grid. The problem with fossil fuels is that their prices are influenced by economic and political factors. This creates financial uncertainty for businesses and utilities that depend on it as their primary source of electricity. Despite the fact that fuel is widely available anywhere, logistics can be challenging, resulting in higher final costs and increased greenhouse gas (GHG) emissions. The VSC is operated by a leaky least mean mixed norm adaptive power management in the Grid Connected (GC) mode of operation. This control algorithm provides quick operation during the dynamic shift with low oscillations within the expected weight.

Renewable electricity costs have decreased in recent years and are now less expensive than gasoline without any subsidies. Since the end of 2009, solar PV module prices have dropped by about 80%, while wind turbine prices have dropped by 30–40%, raising the implementation of these technologies. Solar and wind power, on the other hand, face a major challenge in terms of intermittency. Batteries are being seen as a solution to the lack of stability of renewable technologies, as they can compensate for their intermittency, thanks to the declining cost of Energy Storage Systems (ESS). Batteries, on the other hand, are also costly and cannot completely compensate for irregular power generation. Most of electrical devices are now operated by AC mains under the current electrical grid. However, as green technology such as solar photovoltaic and wind power become more common in homes, DC microgrids can become a more cost-effective and reliable option.

Solar, EB (grid), and battery sources are operated by relay using a control algorithm that is dependent on the availability and demand of the source. The “plug and play” process is accomplished by simply inserting or removing a

source. The loads are divided into two categories in the system,

- Critical load (For example in the hospital operation theatre and ICU)
- Noncritical load (For example veranda, reception, and general rooms)

The key performance desire to turn on the critical load at any time without disrupting the power supply. When solar power (PV panel) is fully charged, it powers all loads and turns on the lights, while the batteries charge. Solar power production is limited during cloudy or rainy seasons, but it must feed power to critical loads while the non-critical load is disconnected from the supply to give power to the critical load. The battery is also a load in this case. The battery charges when the solar and EB (grid) are all turned on. Only critical loads can receive power from the battery. When the battery is fully charged, the trickle charging system is used to keep the battery at its highest charge speed. Since all of the components are DC, the conversion deficiency is minimized.

DISCUSSION

Global Effects

Developed economies are making strides in vaccinating growing shares of their populations, raising prospects of a recovery in those economies and, in turn, the broader global economy. However, a surge in diagnosed cases in large developing economies and resistance among some populations in developed economies to get vaccinated raise questions about the speed and the strength of an economic recovery over the near term. The economic fallout from the pandemic could risk continued labor dislocations as a result of lingering high levels of unemployment not experienced since the Great Depression of the 1930s and high levels of debt among developing economies. Job losses have been concentrated more intensively in the services sector where workers have been unable to work offsite. The human costs in terms of lives lost will permanently affect global economic growth in addition to the cost of rising levels of poverty, lives upended, careers derailed, and increased social unrest. Some estimates indicate that 95 million people may have entered into extreme poverty in 2020 with 80 million more undernourished compared to pre-pandemic levels. In addition, some estimates indicate that global trade could fall by an annual amount of 9.0% or slightly less in 2020 as a result of the global economic downturn, exacting an

especially heavy economic toll on trade-dependent developing and emerging economies. The full economic impact of the pandemic likely will remain unclear until the negative health effects peak. This report provides an overview of the global economic costs to date and the response by governments and international institutions to address these effects.

In India:

Saving Lives and Livelihoods amidst a Once-in-a-Century Crisis

- India focused on saving lives and livelihoods by its willingness to take short-term pain for long-term gain, at the onset of the COVID-19 pandemic
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- COVID pandemic affected both demand and supply:

India was the only country to announce structural reforms to expand supply in the medium-long term and avoid long-term damage to productive capacities. Calibrated demand side policies to ensure that the accelerator is slowly pushed down only when the brakes on economic activities are being removed[5]. A public investment programme centered around the National Infrastructure Pipeline to accelerate the demand push and further the recovery

- India became the fastest country to roll-out 10 lakh vaccines in 6 days and also emerged as a

leading supplier of the vaccine to neighbouring countries and Brazil

- Economy's homecoming to normalcy brought closer by the initiation of a mega vaccination drive:
- Hopes of a robust recovery in services sector, consumption, and investment have been rekindled
- Reforms must go on to enable India realize its potential growth and erase the adverse impact of the pandemic
- India's mature policy response to the 'once-in-a-century' crisis provides important lessons for democracies to avoid myopic policy-making and demonstrates benefits of focusing on long-term gains

RESULT

The Indian economy has been hit hard by the ongoing Coronavirus (COVID-19) -driven global crisis. As on 1 May 2020, about 25,000 people in India have been affected by COVID-19. With some variations, there has been an unprecedented rise in number of Corona patients across the world. A health crisis worldwide has generated a global economic crisis. The entire world is passing through great uncertainty. There are, primarily, two major challenges that the Indian economy is facing at this juncture. First is to save the country from the spread of Coronavirus, which is a health emergency. Saving lives is the principal concern of the Indian government. Second is to save the economy from the unfolding economic crisis due to the dual effects of the Coronavirus pandemic and the global and national lockdown. Countries across the world are facing serious consequences and damages to the economies.[6] According to the International Monetary Fund (IMF), many economies may face negative per capita income growth in 2020 due to the Coronavirus pandemic. In its recent forecast, the World Trade Organisation (WTO) indicated a clear fall in world trade between 13 per cent and 32 per cent in 2020, perhaps the highest fall since the Great Depression of the 1930s. The IMF has also slashed growth forecast for the Indian economy, projecting a GDP growth of 1.9 per cent in 2020. In its recent World Economic Outlook, the IMF does project a rebound in the growth of the Indian economy in 2021, at a rate of 7.4 per cent. So, there is hope! Although India has managed well till date in containing the spread of the virus, the COVID-19 pandemic has already disrupted normal economic activity and life in the

country. India's trade has been severely impacted. At the moment, businesses are very vulnerable to the unfolding economic crisis⁴. People have been facing a sudden loss in their incomes, causing a major drop in demand.^[7] To rescue the economy, India has announced a range of fiscal and monetary stimulus packages. The major aim of this stimulus is similar to the traditional Keynesian prescription of 'pump-priming', whereby income transfers to people having higher marginal propensity to spend can boost up the sagging demand.

CONCLUSION

Countries have to invest more in healthcare – both management and facilities. New social and behavioural norms – “social distancing”, “wearing masks”, “maintaining hygiene”, etc., are the new normal, and we have to adjust with such new norms amid the pandemic. India has an important role to play in the post-COVID-19 world, and it is immensely useful for the country to stay engaged in such global discussions. While there are substantial challenges and concerns, India must resist the temptation for quick fixes that do not address the underlying concerns and avoid permanent solution. Structural reforms are must and should continue to focus on strengthening the country's economic fundamentals—only then can they contribute meaningfully towards a more robust and resilient Indian economy. While everyone is facing unprecedented challenges, women are bearing the brunt of the economic and social fallout of COVID-19.^[8]

Women who are poor and marginalized face an even higher risk of COVID-19 transmission and fatalities, loss of livelihood, and increased violence. Globally, 70 per cent of health workers and first responders are women, and yet, they are not at par with their male counterparts. At 28 per cent, the gender pay gap in the health sector is higher than the overall gender pay gap (16 per cent).

Here's how COVID-19 is rolling back on women's economic gains of past decades, unless we act now, and act deliberately.

Economic crises hit women harder. Here's why:

- Women tend to earn less.
- Women have fewer savings.
- Women are disproportionately more in the informal economy.

- Women have less access to social protections.^[9]
- Women are more likely to be burdened with unpaid care and domestic work, and therefore have to drop out of the labour force
- Women make up the majority of single-parent households.

FUTURE OUTLOOK

Here are five steps that governments and businesses can take to mitigate the negative economic impacts of COVID-19 on women.

1. **Direct income support to women**
Introduce economic support packages, including direct cash-transfers, expanded unemployment benefits, tax breaks, and expanded family and child benefits for vulnerable women and their families. Direct cash-transfers, which would mean giving cash directly to women who are poor or lack income, --can be a lifeline for those struggling to afford day-to-day necessities during this pandemic. These measures provide tangible help that women need right now.
2. **Support for women-owned and -led businesses**
Businesses owned and led by women should receive specific grants and stimulus funding, as well as subsidized and state-backed loans. Tax burdens should be eased and where possible, governments should source food, personal protection equipment, and other essential supplies from women-led businesses. Economic relief should similarly target sectors and industries where women are a large proportion of workers.
3. **Support for women workers**
Implement gender-responsive social protection systems to support income security for women. For instance, expanded access to affordable and quality childcare services will enable more women to be in the labour force. Bridging the gender pay gap is urgent, and it begins by enacting laws and policies that guarantee equal pay for work of equal value and stop undervaluing the work done by women.
4. **Support for informal workers**
Provide social protection and benefits to informal workers. For informal workers left unemployed, cash transfers or unemployment compensation can help ease the financial burden, as can deferring or exempting taxes and social security payments for workers in the informal sector.

5. **Reconciliation of paid and unpaid work**
Provide all primary caregivers with paid leave and reduced or flexible working arrangements. Provide essential workers with childcare services. Unprecedented measures to address the economic fallout have already been taken, but comparatively few measures have been directed at supporting families grappling with paid and unpaid work, including care needs. More efforts are also needed to engage citizens and workers in public campaigns that promote equitable distribution of care and domestic work between men and women.

COVID-19 rendered the entire world economy and social life to a standstill. All countries diverted their resources to meet the pandemic crises. 'April 2020' became the month of 'global lockdown' with the world economy at a freeze. Global output witnessed the sharpest decline of 3.5-4.3% in the second quarter of 2020-21 as per the World Bank and the IMF estimates. The cumulative loss of GDP over 2020 and 2021 is estimated at around USD 9 trillion, which is greater than Japan and Germany's combined economies.[10]

India implemented intense lockdown at the start of the pandemic when India had only 100 confirmed cases, which characterized India's unique response in several ways. The lockdown affected most sectors with significant hits to construction, aviation, travel and tourism, financial services, retail, real estate & automobiles sectors. However, the initial stringent lockdown was critical to saving lives and the expected V-shaped recovery.

RBI has made an advance assessment of the GDP contraction of 7.5 % in fiscal 2020-21, an upward revision from an earlier estimate of -9.5%. Indian economy contracted by 23.9% in the quarter I and by 7.5% in quarter II due to the worldwide impact of COVID 19 virus. Our economy will record its lowest annual contraction since the last four decades. However, starting from July 20, a V-shaped recovery is expected, as demonstrated by the recovery in GDP growth in Q2 after the sharp decline in Q1, a sustained resurgence in high-frequency indicators such as power demand, E-way bills, GST collection, steel consumption, etc.

REFERENCES

- [1] Auerbach, Alan J. 1994, "The U.S. Fiscal Problem: Where We Are, How We Got Here, and Where We're Going." In NBER Macroeconomics Annual (Stanley Fischer and Julio Rotemberg, eds.). Cambridge, MA: National Bureau of Economic Research.

- [2] Auerbach, Alan J., William G. Gale, and Peter R. Orszag. 2003. Reassessing the Fiscal Gap: Why Tax-Deferred Saving Will Not Solve the Problem. *Tax Notes* 100: 567-584.
- [3] Ball, Laurence, Douglas W. Elmendorf, and N. Gregory Mankiw. 1998. The Deficit Gamble. *Journal of Money, Credit and Banking* 30 (40): 699-720.
- [4] Blanchard, Olivier. 2019a. Public Debt: Fiscal and Welfare Costs in a Time of Low Interest Rates. Working Paper 19-2, Peterson Institute for International Economics: Washington, DC.
- [5] Blanchard, Olivier. 2019b. Public Debt and Low Interest Rates. *American Economic Review* 109 (4): 1197-1229.
- [6] Biggs, Andrew G. 2020. Coronavirus Recession Could Cut Social Security Benefits for Near-Retirees. Philadelphia: University of Pennsylvania Pension Research Council.
- [7] Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. 2008. The 2008 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. Washington, DC: Center for Medicare and Medicaid Services.
- [8] Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. 2020. The 2020 Annual Report of the Boards of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. Washington, DC: Social Security Administration.
- [9] Committee for a Responsible Federal Budget. 2017. Trustgo: To fix the Debt, Start by Making the Trust Funds Solvent. April 3.
- [10] Congressional Budget Office. 2020a. Long-term budget projections [Data file]. Retrieved from <https://www.cbo.gov/system/files/2020-01/51119-2020-01-ltbo.xlsx>.