International Review of Business and Economics

Volume 9 | Issue 1 Article 4

2-20-2024

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Recommended Citation

Kukarni, Kishore Dr. and Dutta, Amitabh S. (2024) "Economic Effects of Pandemic on US and Indian Economies with Policy Actions in 2019-2023: A Comparative Analysis," International Review of Business and Economics: Vol. 9: Iss. 1, Article 4.

Available at: https://digitalcommons.du.edu/irbe/vol9/iss1/4

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Abstract

COVID 19 pandemic that started in February/March 2019, with happenings in Yuwan, China spread like a wildfire all over the world. All countries faced one of the worst economic challenges in recent centuries if not ever in the history of the mankind. Early predications were so severe and devastating that some forecasters predicted a death-toll of 100 million all over the world, as the virus was not only spreading fast but also had no solution for its serious fatal effects. It was evident that the patients were dying before getting any effective treatments and many of them were elderly individuals. Helpless world was looking around for devastation of human life that had second to none. All the medical revolution, pharmaceutical developments, advanced research techniques were unable to come up with any answer. Policy makers all over the world and especially in USA and India came up with the drastic solution of compulsory shut down of all economic activity in March and April of 2020. This paper will discuss two special cases, USA and India and observe more closely how policy steps were taken in these countries. More specifically we will analyze the fiscal and monetary policy actions in these years and compare the two economies.

The paper is divided into three sections: Section 1 focuses on US economic activity in these four years and Section 2 does the same thing for India's economy. In Section 3 conclusion is made that India's conservative actions in relative sense have enabled her to manage crisis better. It is evident in 2023 that moderate policy actions can be more helpful for a faster recovery as seen by how India became a fast recovery nation in comparative sense.

Keywords

Economics, US, India, Pandemic, Policy Actions

ECONOMIC EFFECTS OF PANDEMIC ON US AND INDIAN ECONOMIES WITH POLICY ACTIONS IN 2019-2023: A COMPARATIVE ANALYSIS

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This paper is to be presented in IRBE/SIAA conference in Surat, India in December 2023. Not for quotations, but written comments are welcome. Authors would like to blame each other for remaining errors and Prof Kulkarni is thankful to the College of Business, MSU-Denver for the financial support.

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The paper is divided into three sections: Section 1 focuses on US economic activity in these four years and Section 2 does the same thing for India's economy. In Section 3 conclusion is made that India's conservative actions in relative sense have enabled her to manage crisis better. It is evident in 2023 that moderate policy actions can be more helpful for a faster recovery as seen by how India became a fast recovery nation in comparative sense.

ECONOMIC EFFECTS OF PANDEMIC ON US AND INDIAN ECONOMIES WITH POLICY ACTIONS IN 2019-2023: A COMPARATIVE ANALYSIS

INTRODUCTION

The main purpose of this paper is to compare the policy actions taken in fiscal and monetary policy making in USA and India in pandemic years: 2019-2023. In this endeavor we also describe the economic situation in each country and point out that the extreme Keynesianism has entered into US' policy making while India is not far behind. It goes without saying that after the financial crisis of 2008, the fiscal policy in USA has become very aggressive in terms of increasing government spending. In fact, Kulkarni and Buedo (2021) show that President Obama was the most "Keynesian" US president ever. While US fiscal policy response to the pandemic was to be extremely expansionary, Indian authorities were moderately conservative in increasing government expenditure as well as for expanding money supply. In this paper we intend to compare the policy practices in these two countries and come up with a conclusion. Section 1 focuses on US economy data and explains the macroeconomic events. Section 2 repeats the analysis for Indian data and compares the economic events in India with that of USA. Section 3 makes the summary and concludes our findings.

Section 1: Pandemic Effects in US Economy

In January 2020 as the news and travelers arrived from Wuhan city, Hubei province of China, COVID 19 virus started spreading like a wildfire. On March 11, 2020 World Health Organization (WHO declared it to be a" Pandemic" of worldwide dimension with 2-3% expected fatality rate. As of June 8, 2020, more than 7 million confirmed cases were detected and 400000 deaths were reported from 213 countries and territories. The disease was beset all over the world as per the Journal of Infectious Diseases and Epidemiology article (DOI: 10.23937/2474-3658/1510146)

Ironically, prior to March 2020, US economy was on the path of continuous growth with high rate of improved technology. Unemployment rate was pretty low at 3.5 percent, as was inflation rate around 3.1%, and GDP growth rate was impressive with 3%. As the cases started increasing without warnings and unabated, warning signs came from all over. Initial predications were not only dire, but also were outright gloomy to the point of threatening the human existence. Something drastic had to be done as the hospitals started getting full, death rate peaked, confusion ensued, and expectations of the future were tremendously worrisome. As more and more rules came in. travel was restricted, and for 2-3 weeks the businesses were at standstill. While this was not unique to the US economy, the repercussions were significant as reduced economic activity made a retraction of GDP by 16 percent and unemployment figure skyrocketing to 15% on a monthly basis. Something extra-ordinary had to be done to answer

the challenge of historical proportion. The United States Congress and the President got together in a hurry to pass an emergency act the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) on March 25, 2020, which intended to offer aid of \$2 trillion to American citizens. This included such things as direct aid (payment checks to all taxpayers), free business loans, business direct aid among other handouts. While economic effects were significant, other social, political, medical. and psychological consequences were no less drastic. Clearly ne can easily conclude that this was the most devastating shock USA economy had ever received. In the Great Depression era, (1929-1933), it took four years to reach to the trough point of 25% unemployment, in this pandemic period unemployment reached to 25% (for the months of March 2023) in a matter of six weeks. Moreover, the expectations for the future were very gloomy, no one knew the severity of the pandemic, and much worse was expected than the present was offering. Mental and psychological stage of the population was the lowest in recent memory, much worse than WWII as some survivors could explain. So, the stage was set for policy makes to take unprecedented steps, and they did not hesitate doing that as our data in Table 1 show.

As we pointed out earlier, 2018, 2019 and the first quarter of 2020 were impressive days for the US economy. As can be seen in Table 1, inflation rate was very low, money supply M1 as well as M2 were growing at a stable rate, interest rates of all kinds were low. Mortgage rates were close to 3%, indicating abundance of financing available for houses as well as for business ventures. Even though national debt was growing by \$1 trillion a year, the unemployment rate was moderate, and GDP was close to \$22 trillion. There were no major worries for the

economy until first quarter of 2020. But as we summarize above, the COVID spread created a shock that was second to none. As people were losing jobs and not much income was created, the private expenditures were low creating a very moderate inflation rate of 1.4%. This was despite the supply chain constraints and the tremendous blockages created by slow international trade movement. One would have expected a much worse inflation rate than 1.7%, when the supply chains were broken. But people were not consuming as much, and therefore the aggregate demand was very low, creating a very small pressure on prices.

Monetary policy had already gotten into action of increasing money supply in 2020, as M1 increased by more than 50%, even if M2 was relatively stable. Fiscal policy was in action with CARES act as well as smaller tax revenues as less incomes were generated. This created a major pressure on budget deficit of around \$980 billion in 2020. Even if unemployment figure reached to more than 20% for a brief period in second quarter of 2020, the yearly figure was 8.05% a whopping increase from 3.67% of the earlier year. As international trade volume declined for exports as well as imports, the trade deficit figure for US economy stayed relatively same from 2019 to 2020,

The real policy changes are seen in 2021 as expansionism was quite visible in fiscal policy. The budget deficit increased to \$2770 billion, record breaking by any measure and a sign of willingness on the part of the Congress and the President to correct the economic problem by being more active. Fiscal policy was aptly helped by monetary policy which allowed money supply M1 to grow by more than 300%. This type of increase in money supply in one year, has not happened ever in the history, does not matter what are the reasons of measurements and expressions of M1 components. The US monetary was simply the policy of over zealous policy

makers who wanted to do everything possible to ignite the economy and get the ball rolling. This type of policy activism was not seen in many other economies. Naturally, the national debt increased from \$22 trillion in 2019 to close to \$30 trillion in a matter of just two years. It is \$33.83 trillion on November 29, 2023 at 9 AM (MST) according to www.usdebtclock.org. The fact was clear that borrowing by the government was seen as a viable method of controlling the pandemic. Election of President Biden only added the forces of expansionary fiscal policy making in 2021. Years 2022 and 2023 (until November) are dampening the record-breaking figure of \$2770 budget deficit but have not reduced it any more than \$1800 billion. By all accounts the fiscal policy makers have not gotten to the habit of controlling expenditures as yet. No wonder inflation figures went to 7% and 6.5% in 2021 and 2022, prompting Federal Reserve to set its sight on increasing interest rates (discount rate that is charged by Federal Reserve Banks for their loans to the Financial Institutions (FIs) from .5% to 3.5% in 2023. In 2023 the situation od macroeconomy looks much better thanks to the abatement of the pandemic. There are varied explanations of how and why the pandemic almost disappeared, but we shall not get into that here.

TABLE 1
UNITED STATES OF AMERICA

Years	2018	2019	2020	2021	2022	2023
Inflation Rate (Percentage)	3.5	2.3	1.4	7	6.5	3.7
Money Supply:						
M1 (in billions)	2,100	2,500	4,100	15,200	20,000	18,000
M2 (in billions)	12,320	14,430	15,396	19,357	21,562	21,100 (1.8
Budget Deficit (BD) in billions	650	780	980	2,770	1,380	projected)
Unemployment in Percentage Rate	3.8	3.67	8.05	5.35	3.61	3.7 (so far)
Trade Deficit (Exports/Imports)	629	593.08	578.79	627.5	861.71	650 (so far)
GDP in Trillions (Real)	20.5	21.38	21.06	23.31	25.46	25.46 (so far)

Per Capita Income National Debt (Public Debt in	59,259	65,120	63,529	70,219	76,399	78,259	
Trillions)	21.51	22.71	26.94	29.75	30.42	31.18	

INDIA

Years	2018	2019	2020	2021	2022	2023
-						
Inflation Rate (Percentage)	3.94%	3.73%	6.62%	5.13%	6.70%	N/A
Money Supply:						
M1 (in billions, INR)	32,787	36,883	44,099	51,382	55,271	
M3 (in billions, INR)	145,497	161,646	180,554	201,140	214,829	
Budget Deficit (% of GDP)	3.4	4.6	9.2	6.7	6.4	
Unemployment in Percentage Rate	43.92%	46.14%	43.25%	44.79%	45.86%	
Overall Bal. of Payments (USD, MM)	\$4,295.64	\$21,601.2	\$32,482.7	\$465.4	\$11,068.0	
GDP in Trillions (USD)	\$2,703	\$2,836	\$2,672	\$3,150	\$3,385	
Per Capita Income (USD)	\$1,891	\$1,944	\$1,814	\$1,962	\$2,085	
External Debt Gross (USD, MM)	\$521,202	\$563,963	\$563,756	\$613,149	\$612,002	

Section 2: Pandemic Effects in Indian Economy

In 2018, the economic picture in India was quite rosy. Inflation, at 3.94% was under control. While GDP growth had ticked down a bit from the previous year, growth in the manufacturing sector had helped the economy achieve a 6.8% higher level than 2017. This compared very favorably with the average world GDP growth rate of just 3.6%. In the Emerging Markets and Developing Economies (EMDEs) sector, India was joining China in being one of the above average performing countries.

The following year 2019, Indian government was filled with ambition and launched several programs to enhance various sectors of the economy. The official government budget for 2019-2020 talked about their vision for a \$5 trillion economy, driven by investment, both domestic and foreign. One such endeavor announced was the Pradhan Mantri Karam Yogi Maandhan program. This was to extend pension benefits to small shopkeepers and retail traders whose annual turnover was less than Rs. 1.5 crores (less than 15 million rupees, about USD 212,756 in 2019 exchange rate terms). It was estimated that about 30 million individual business owners would benefit from this program. Besides this, other schemes were launched to benefit industrial and investment development. Despite these infrastructure investment programs, inflation stayed at less than four percent, but GDP growth disappointed by falling below 5%.

Our data show that 2019 GDP growth was 4.68% over the previous year (some sources give the growth rate as being even lower, but the discrepancies may arise due to calendar year calculations versus the Indian government figures being April-March fiscal year numbers). The Indian government did increase the money supply to create more liquidity in the system, with M1 increasing a little over 11 percent and

M3 by just about ten percent. This step was nontraditional for the monetary policy by the Reserve Bank of India (RBI). However, the need of the hour wad to have some expansionary monetary policy to avert the forces of the pandemic. Migrants from big cities waling to the places of origin was the most challenging problem besides the deaths due to CORONA. As a result, Per capita income increased by a negligible 2.8%, so less than the inflationary increase over 2018.

Dr. Raghuram Rajan, the former Governor of the Reserve Bank of India (RBI), said "Growth is slowing significantly and there is currently little fiscal space available to the government to spend more. Corporate and household debt is rising and there is deep distress in parts of the financial sector. Unemployment seems to be growing. Repeated government allusions to the \$5 trillion economy by 2024, which would necessitate steady real growth of at least 8-9 % per year, starting now, seem increasingly unrealistic."

Then, along came COVID-19 – and like the rest of the world, the Indian economy struggled to survive through the pandemic. The spread of the virus became so terrifying, the Indian government ordered an immediate lockdown of business activity and personal travel. Like the entire global economy, in 2020 India's real GDP had to contract as well, with The Economic Times (India) stating in January 2022 that the contraction was just 6.6% and not 7.3% as first estimated in May 2021. According to our data estimates, Indian GDP contracted about 6.14%. Inflation almost doubled to 6.62%, and according to World Bank reports, unemployment was about 43%. The government increased M1 by 16.36% and M3 by 10.47% but per capita income still dropped by 6.68% as compared to 2019.

In 2021, the Government of India announced that the economy had had a V-shaped recovery from the COVID pandemic effects. The budget report said INR 35,000 crores had been allocated for the COVID-19 vaccine. India's GDP growth was a little over 9% according to World Bank sources. This growth was fueled by expansionary monetary policy with M1 increasing by over 14% and M3 by 10.23%, as well as an announcement of collateral free loans for Micro, Small, and Medium Enterprises (MSMEs). The

definition of MSMEs was changed so as to benefit more businesses. Per capita income bounced back to just about 2019 level and stood at USD 1,962.

In the Union Budget 2022-2023, the Government of India announced that 13 million MSMEs had been provided credit under the Emergency Credit Linked Guarantee Scheme (ECLGS), and that the ECLGS was being extended up to March 2023. Additional credit was announced would be made available to micro and small businesses under the Credit Guarantee Trust for Micro and Small Enterprises (CGTMSEs). Inflation which had fallen to 5.13% in 2021, increased by 6.7% in 2022. Monetary policy was moderately expansionary with M1 increasing by a little over 7% and M3 by 6.37%. Per capita income increased by about 6.3%, almost in pace with inflation.

While there are some numbers – official government details for the state of the Indian economy in 2023 are not available yet, it can safely be concluded that Indian economy is on the path of steady future growth. In November 2023 it appears that first time ever the Indian economy produced GDP of more than \$4 Trillion which is a substantial achievement. In fact with Germany and Japan having their GDP figures close to \$4.2 trillion. It is quite possible that with future growth of around 6 percent, India can take over both these economic giants to become the third highest GDP producing nation. Of course, with population of 1.4 billion, India's Per Capita Income (PCI) may lag with these economies substantially but having more than \$4 trillion GDP is by itself is a major achievement for Indian economy. So, we are left with a strong possibility of substantial steady future growth as well as an impressive rebound from the pandemic's negative shock.

TABLE 2 - % CHANGES YEAR AGO

UNITED STATES OF AMERICA

Years	2018	2019	2020	2021	2022	2023
Inflation Rate (Percentage)	3.5	-1.2	-0.9	5.6	-0.5	-2.8
Money Supply:						
M1 (in billions)	2,100	19.05%	64.00%	270.73%	31.58%	-10.00%
M2 (in billions)	12,320	17.13%	6.69%	25.73%	11.39%	-2.14% (1.8
Budget Deficit (BD) in billions	650	20.00%	25.64%	182.65%	-50.18%	projected)
Unemployment in Percentage Rate	3.8	-0.13	4.38	-2.70	-1.74	3.7 (so far)
Trade Deficit (Exports/Imports)	629	-5.71%	-2.41%	8.42%	37.32%	650 (so far)
GDP in Trillions (Real)	20.5	4.29%	-1.50%	10.68%	9.22%	25.46 (so far)
Per Capita Income National Debt (Public Debt in	59,259	9.89%	-2.44%	10.53%	8.80%	78,259
Trillions)	21.51	5.58%	18.63%	10.43%	2.25%	31.18

INDIA

Years	2018	2019	2020	2021	2022	2023
Inflation Rate (Percentage)	3.94%	-0.21%	2.89%	-1.49%	1.57%	N/A
Money Supply:						
M1 (in billions, INR)	32,787	11.11%	16.36%	14.17%	7.04%	
M3 (in billions, INR)	145,497	9.99%	10.47%	10.23%	6.37%	
Budget Deficit (% of GDP)	3.4	35.29%	100.00%	-27.17%	-4.48%	
Unemployment in Percentage Rate	43.92%	2.22%	-2.89%	1.54%	1.07%	
Overall Bal. of Payments (USD, MM)	\$4,295.64	-602.86%	50.37%	-98.57%	2278.22%	
GDP in Trillions (USD)	\$2,703	4.68%	-6.14%	15.20%	6.94%	
Per Capita Income	1891	1944	1814	1962	2085	
External Debt Gross (USD, MM)	\$521,202	8.20%	-0.04%	8.76%	-0.19%	

Section 3: Summary and Conclusion

As our tables point out, the response of expansionary fiscal and monetary policies to solve the problem of CORONA virus was much more drastic in USA than in India. The conservative nature of Indian policy response has kept the national debt problem at a much more manageable level. Unfortunately, we cannot say that about the USA economy where the national debt has climbed to around \$31 trillion leading to the debt/GDP ratio to more than 100%. This is crucial because if this ratio gets out of hand and becomes around 150% then the bond credit rating agencies will have to lower the rating of the US Treasury bonds from the current AAA. If that happens, then yield rates on the bonds must be higher which can bring in higher interest rates and a recession. National debt for the US government has now crossed \$33 trillion which should be worrisome for any economic observer. Fortunately for USA other countries are not doing as good a recovery as US economy has in last tow years. In fact, China for example, has lost the main pace of her GDP growth rate of 10% which she had for a long time. This has created not only economic challenges for China but also political difficulties. While USA recovery is good, India's recovery with official statistics is even better in 2023. As no one knows what the future holds, it seems to be an encouraging news that both countries are on a right path

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