



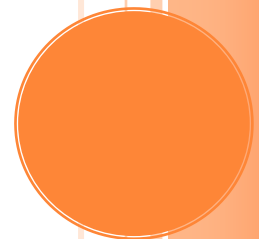
**MACROECONOMIC**  
Analysis & Policy Studies

**Business Cycles, Inflation and Unemployment: an MMT  
perspective**

Student Research Internship Report

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# BUSINESS CYCLES, INFLATION AND UNEMPLOYMENT: AN MMT PERSPECTIVE

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## Introduction

The central problem of any modern economy is the periodic tendency of fluctuations that disrupts the macroeconomic variables leading to massive downturns in economic activity. Conceptualised as business cycles, it is characterised by alternating peaks and troughs, with the latter being synonymous to fall in employment, income, standards of living and production volume of an economy. In essence, this disruption indicates a massive discoordination between the various interacting agents in an economy at a macro level. This fall in economic activity can either be due to exogenous factors like the lockdown induced recession due to the Covid-19 pandemic or endogenous factors like the bursting of the intense speculation fed US housing market in 2008.

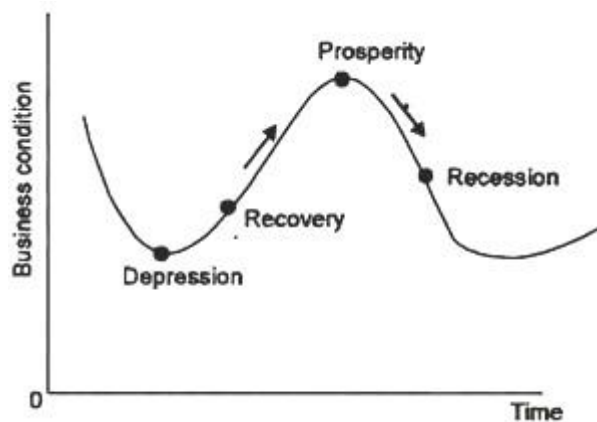


Figure 1: Phases of Business Cycle

Source: <https://www.economicdiscussion.net/>

## Towards a general understanding of Business Cycles

Schumpeter in as early as 1911 observed that there have been long and short waves of economic activity that can range from 40 months to 60 years, not as an average but in every individual case<sup>1</sup>. Mitchell and Burns in the 1946 work titled “Measuring Business Cycles” similarly described them as “Expansions occurring

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at about the same time in many economic activities, followed by similarly general recessions, contractions, and revivals which merge into the expansion phase of the next cycle; this sequence of changes is recurrent but not periodic<sup>ii</sup>.

A recovery from the trough phase, on the other hand, occurs when the recessionary vicious cycle reverses and becomes a virtuous cycle, with growing output generating job growth, rising salaries, and rising sales, all of which feed back into more output. Only by becoming self-feeding, which is assured by the domino effect pushing the revival across the economy, can the rebound last and result in a sustainable economic boom. One must also keep in mind that changes in indices of stock market are not the same although it helps in predicting the beginning and end of business cycles<sup>iii</sup>.

It's often not possible to quickly find these fluctuations over a long economic time series data, although specific events that induced recessions are quite observable to the layman. The Figure 2 shows a plot by Stock and Watson, of the natural log of the Index of Industrial production in US from 1920 to 2000. One can easily correlate the downward trends in this plot with signal events of the US economy like the 1930's "Great Depression". One way to bring the fluctuations into sharper focus is to filter the available time-series data through a band-pass filter, based on a centred moving average to obtain Figure 3 as shown below<sup>iv</sup>.

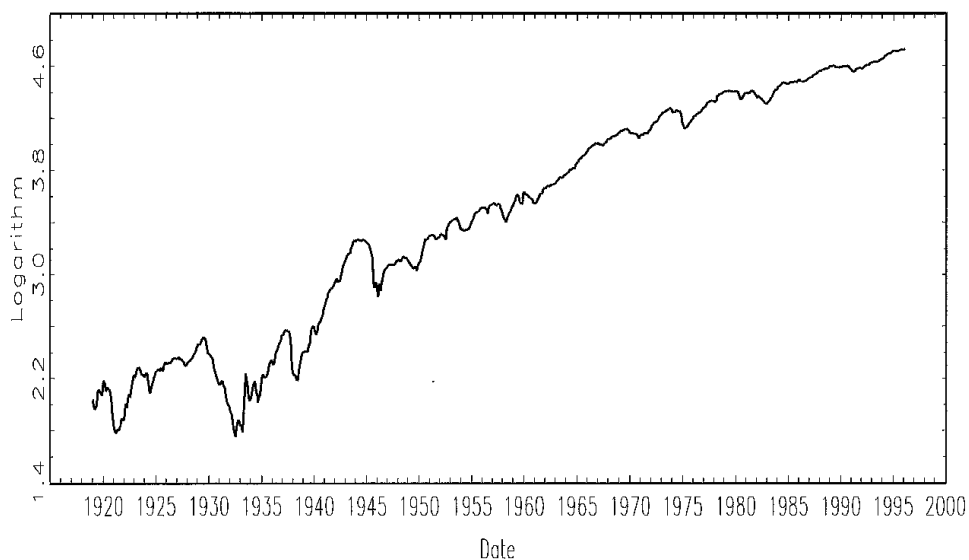


Figure 2: US Industrial production index (logarithm of levels)  
Source: Stock and Watson (1998)

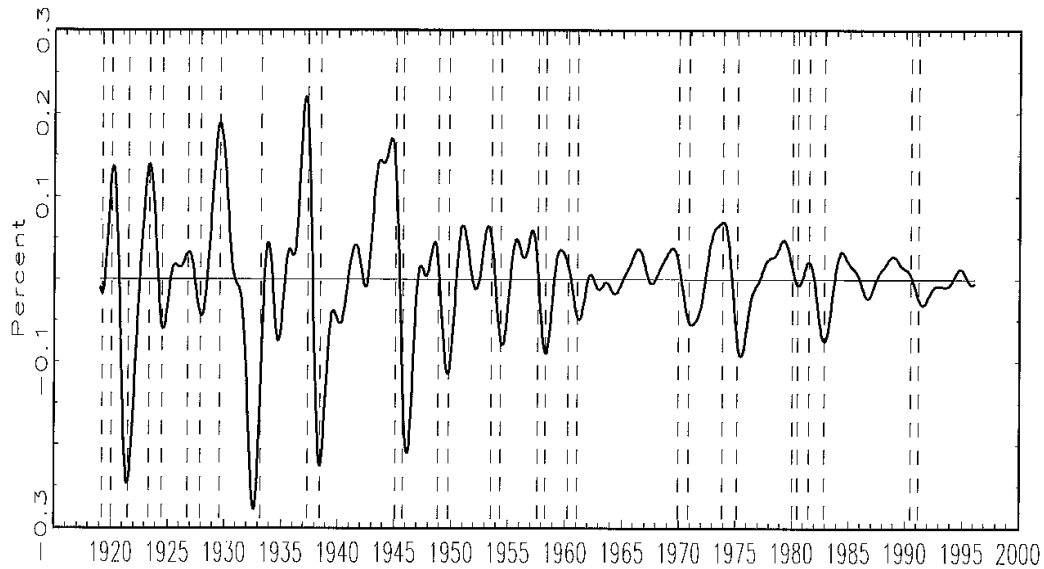


Figure 3: Business cycle component of US industrial production index  
Source: Stock and Watson (1998)

Such disruptions are not isolated events in a global scale; a disruption in a network will always create ripples of the same in other components. Likewise, the more globalised economies tend to become more widespread would the impact of a “trough” phase in one economy to other economies. The above examples, although US centric can be applied to developing economies like India as well – although the phases of fall and recovery are much more severe. Behera and Sharma used a band-pass filter on time series data on credit, equity prices, house prices and the real exchange rate from 1960 to 2018 to demonstrate the business cycle trends in India, as depicted in Figure 4 given below<sup>2v</sup>

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<sup>2</sup>Financial and business cycles are different concepts

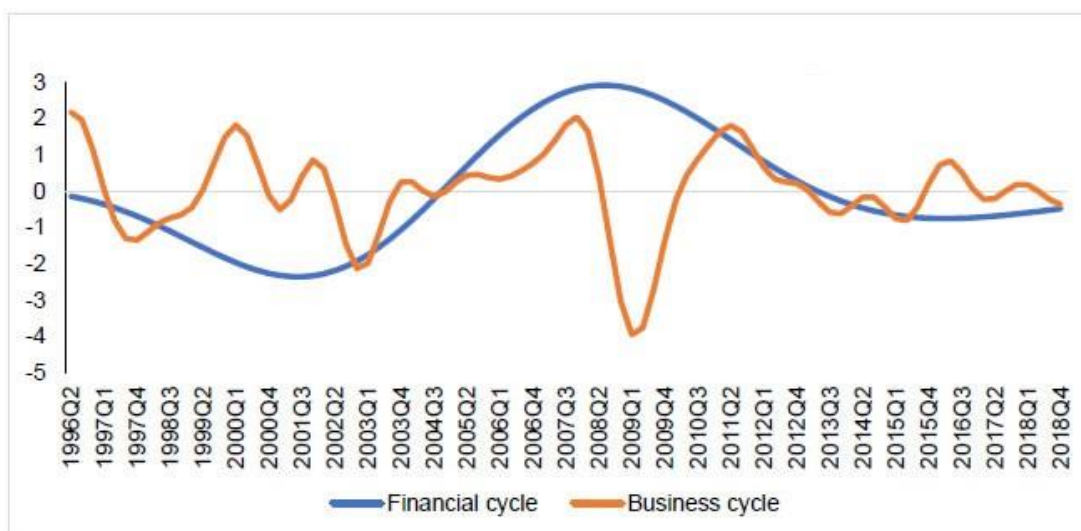


Figure 4: Financial and business cycles in Indian Economy  
Source: Behera and Sharma (2019)

### Mitigating fluctuations and MMT viewpoint

A traditional business cycle can be described as<sup>vi</sup>:

$$Y_t = g_t + Y_{t-1} + Z_t$$

Where  $g$  is the output growth,  $Z$  denotes random shocks, and  $t$  indicates the time subscript. Demand or supply shocks cause fluctuations. These result in a brief deviance from the trend, with growth then returning to the trend. As a result of the positive or negative shock, the growth path shifts upward or downward, indicating a business cycle expansion or contraction that eventually returns to the trend growth rate.

Ball and Mankiw point out that NAIRU or the natural unemployment rate is a crucial component of business cycle theory<sup>vii</sup>. Few economists would argue that changes in aggregate demand, such as those caused by monetary policy, cause inflation and unemployment to move in opposing directions, at least in the short run. Essentially, all central banks try to achieve price stability (acceptable positive inflation) by coordinating with the governments with an acceptable level of unemployment as trade-off. The monetary policy employed by a Central Bank is to influence the interest rates and reserves to achieve the same. As espoused by Milton Freidman, the Monetarist viewpoint argued that monetary policy alone could stabilize the economy and was opposed to fiscal policy interventions.<sup>viii</sup> The late 1970s US economy saw interest rate being kept

as high as 20% which although brought stagflation under control triggered two subsequent recessions that left millions unemployed.

The central banks today sort of accept that a certain amount of unemployment is necessary to keep inflation stable. Essentially, thousands if not millions are forced to sit outside of labour markets, suffering “traumatic mind states” that destroy not only one’s individual identity but also families, thereby creating a net social loss<sup>ix</sup>. According to MMT, adjusting Interest rates to low during bust to kick up the economy and high during the boom to cool down the same are “pro-cyclical” in nature and comes at the cost of high unemployment. The other side of interest rate is that they are directly related to the pay-outs received by the private sector via maturity of government bonds and similar instruments. This leads to additional spending in an already overheated economy causing inflation to spike-up. The same happens during recessions as low-interest rates cause the overall spending capacity to dip further. Hence MMT strives for greater role of fiscal policy in stabilising the economy and tame the business cycle.

During the 2008 financial crisis, the US Fed saw that monetary policy was having very less effect on its own. The subsequent measures of Quantitative easing only helped to widen the existing wealth inequality<sup>x</sup>. The unemployment rate has dropped from 9% to less than 4% with time, taking nearly seven years. For some, this is proof of monetary policy's ability to rebalance the economy following a recession. According to MMT economists, it shows the flaws in the conventional method to macroeconomic stability. A recession that could have been rapidly reversed with the appropriate budgetary prescription instead became the post-World War two era's longest and most severe one<sup>xi</sup>.

### **Is Unemployment inevitable?**

The trade-off between unemployment and inflation originates from the Phillips curve that hypothesizes an inverse relationship between unemployment rates and inflation. But post 2008, this relationship is increasingly in muddy waters as unemployment rates in developed economies were as low as 3.5% against an inflation rate that hardly touched 2%. What policies like NAIRU essentially does is that it uses unemployment buffer as a tool against inflation? Deflationary monetary policies successfully lower inflation, but they inflict enormous costs on the economy and particular demographic groups, which are

seldom estimated or addressed, according to evidence from the OECD's experience since 1975<sup>xii</sup>.

MMT argues for a federal job guarantee, which creates a nondiscretionary automatic stabilizer that promotes full employment and price stability. This also automatically eliminates other structural forms of unemployment like seasonal unemployment or frictional unemployment. Full employment means less than 2% unemployment, zero underemployment and zero hidden unemployment. Hence, the state at the federal level would guarantee anyone who cannot find job employment at a fixed wage, automatically setting the minimum wage in the market<sup>xiii</sup>.

This policy would then flatten the so-called Philips curve – where the trade-off between inflation and unemployment rate was determined. Essentially, this job guarantee creates a Buffer Stock of Employment (BER) and if inflation goes up over the government's target, fiscal and monetary policy result in employees moving from the inflating sector to the fixed-price job guarantee sector and results in stable inflation called the Non-Accelerating-Inflation-Buffer Employment Ratio (NAIBER)<sup>xiv</sup>. The basic logic is same as that of NAIRU, but here a person is not kept unemployed to for inflation targeting. Additionally, the nature of modern demand-constrained economies means that demand impulse by job guarantee would always lead to increased capacity utilization. Hence, the NAIBER will be lower than the NAIRU, which means that employment can be higher before the inflation barrier is reached<sup>xv</sup>.

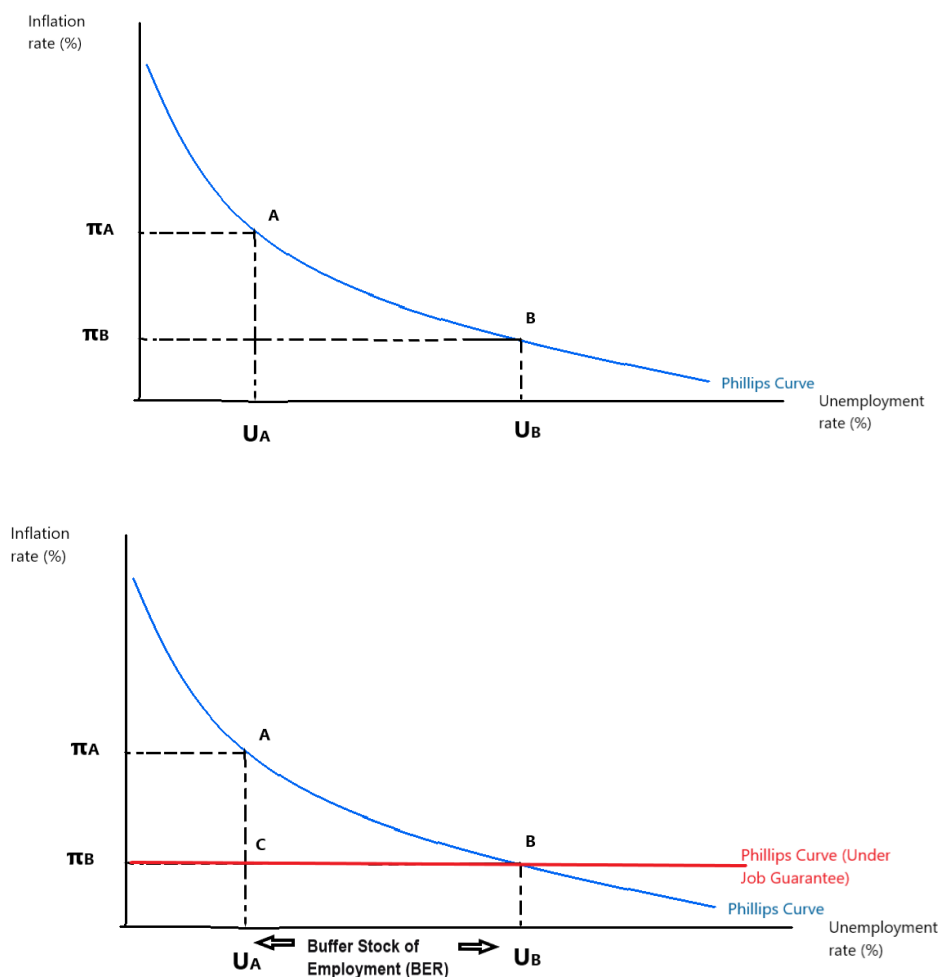


Figure 5: MMT view on Phillips Curve  
Source: Mitchell (2020)

Figure 5 shows the Phillips curve and shows the trade-off between low inflation rate and high unemployment, comparing points A and B ( $U_A < \pi_A$  and  $U_B > \pi_B$ ). With a job guarantee program in place we are actually shifting the economy to point C. The Red line shows the new Phillips curve and  $U_A - U_B$  showing Buffer Stock of Employment, where we can theoretically achieve low unemployment at a low inflation rate<sup>xvi</sup>.

## Conclusion

MMT economists point that that conventional policies have not only failed to mitigate business cycles but has also caused severe human hardships.



Using actual human livelihoods for inflation targeting by Central Banks is inhumane and has led to rising inequities over the decades. Since a state-supported job guarantee program supports incomes, the economy stabilizes more quickly than it would without the job guarantee. The downturn is less severe, and the recovery happens sooner. This buffer job offer acts as an excellent social security measure and provides valuable public goods in terms of the output they generate along with adequate skill redeployment that helps the laid off workers reenter the private job market when the economy recovers. Universal Basic Income or UBI, where a person receives a minimum allowance for living, is often suggested as an alternative pathway that offers the same benefits as job guarantee programs. But MMT views jobs as not a mere tool for survival but looks in broader sense of the holistic outcomes it offers in terms of net social surplus.

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