PP440E Case Study
Inflation Targeting Meets Emerging Markets[1]

Background reading

- Hyperinflation in Zimbabwe - https://www.telegraph.co.uk/news/worldnews/africaandindianocean/zimbabwe/3453540/Zimbabwe-hyperinflation-will-set-world-record-within-six-weeks.html

- New Zealand speech on inflation targeting- https://www.rbnz.govt.nz/research-and-publications/speeches/1999/speech1999-07-01#fnB4

- Turkish central bank governor sacked - https://www.ft.com/content/4f59b13a-9fc2-11e9-974c-ad1c6ab5efd1

- Central Bank Independence, Accountability and Transparency - https://blogs.imf.org/2019/11/25/central-bank-accountability-independence-and-transparency/

Videos

- Inflation by TED-Ed - https://www.youtube.com/watch?v=XNu5ppFZbHo&feature=emb_title

- Hyperinflation by The Economist - https://www.youtube.com/watch?v=GAi56aOTrIc

Academic Articles

- Bernanke, Ben S., Thomas Laubach, Frederic S. Mishkin and Adam S. Posen (1999) Inflation Targeting: Lessons from the International Experience, Princeton: Princeton University Press.

- Ellison, Martin, and Andrew Scott. 2020. "Managing the UK National Debt 1694–2018." American Economic Journal: Macroeconomics, 12 (3): 227-57.

- Mishkin, Frederic, S. 2000. "Inflation Targeting in Emerging-Market Countries." American Economic Review, 90 (2): 105-109.

[1] This case study was written by Dr Ethan Ilzetzki and Bhargavi Sakthivel

- Svensson, Lars E. O., 1997. "Inflation forecast targeting: Implementing and monitoring inflation targets," European Economic Review, Elsevier, vol. 41(6), pages 1111-1146, June.

Many countries around the world currently practice some form of inflation targeting and the following sections elaborate on the origins of inflation targeting, its implications and how it has been applied in developing countries.

1. Origins of Inflation Targeting

Inflation targeting is a monetary policy framework wherein the central bank explicitly acknowledges its goal of ensuring low and stable inflation in the economy as its primary long-run goal and does so by publicly announcing a target rate or target range for inflation rate over a time horizon, generally the medium-term (Bernanke et al 1999).

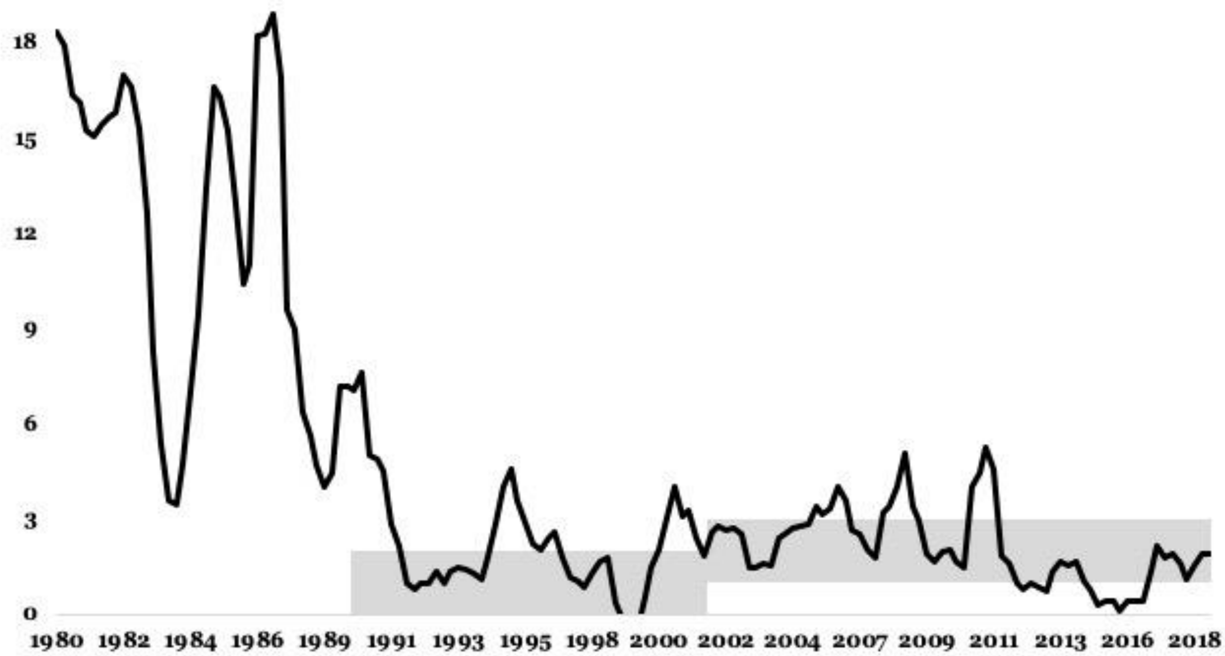
Why is low and stable inflation a desired policy objective? At the extreme, high inflation (or hyperinflation) can wipe out entire life savings, increase income disparities and impede economic growth. Imagine living in a world where the price of bread can double from the time you enter a shop to the time you reach the billing area. Countries like Germany, Zimbabwe, Brazil, Venezuela etc. have all experienced such events. Monthly pay checks are spent immediately to pay rent and buy groceries because the same money would be able to afford less with time. Hoarding of durable goods and speculative activity become common in such scenarios and US dollars (or other stable currency) and precious metals are preferred to holding domestic currencies which can lead to food shortages, riots and a massive slowdown of economic activity.

Inflation expectations can be self-fulfilling. If firms expect inflation to be high, they will raise prices, realizing their own fears. Similarly, if workers expect inflation to be high, they will demand pay increases, increasing firms' costs, and realizing the inflation that was feared. This type of inflation does not originate from any factor in the "real" economy and is purely wasteful. By setting a clear numerical target for inflation, a central bank may be able to avoid such self-fulfilling inflation spirals.

On December 19, 1989, the Reserve Bank of New Zealand became the first central bank in the world to officially adopt inflation targeting, when it announced that strictly maintaining inflation within the 0-2% boundary would be one of its key macroeconomic goals. The Reserve Bank of New Zealand Act 1989 which formalised inflation targeting was born during a time where New Zealand, like most countries around the world, was suffering from high rates of inflation.

Inflation targeting formally became a monetary policy target on December 19, 1989. Governor Roger Douglas announced in a TV interview on April 1, 1988 that policy will be aimed at reducing inflation to 0-1%, a move that was a surprise even to Reserve Bank employees. This policy change anchored inflationary expectations: an integral part of inflation targeting. In fact, Lars Svensson (1997) goes on to clarify - "Inflation targeting is shown to imply inflation forecast targeting: the central bank's inflation forecast becomes an explicit intermediate target." Figure 1 shows how New Zealand's inflation rate largely stayed within its target since the adoption of inflation targeting in 1989.

Figure 1: CPI inflation of New Zealand



The grey horizontal band represents the approximate inflation targets (0-2% from 1990 until 2002 when the target changed to 1-3%). Source: OECD

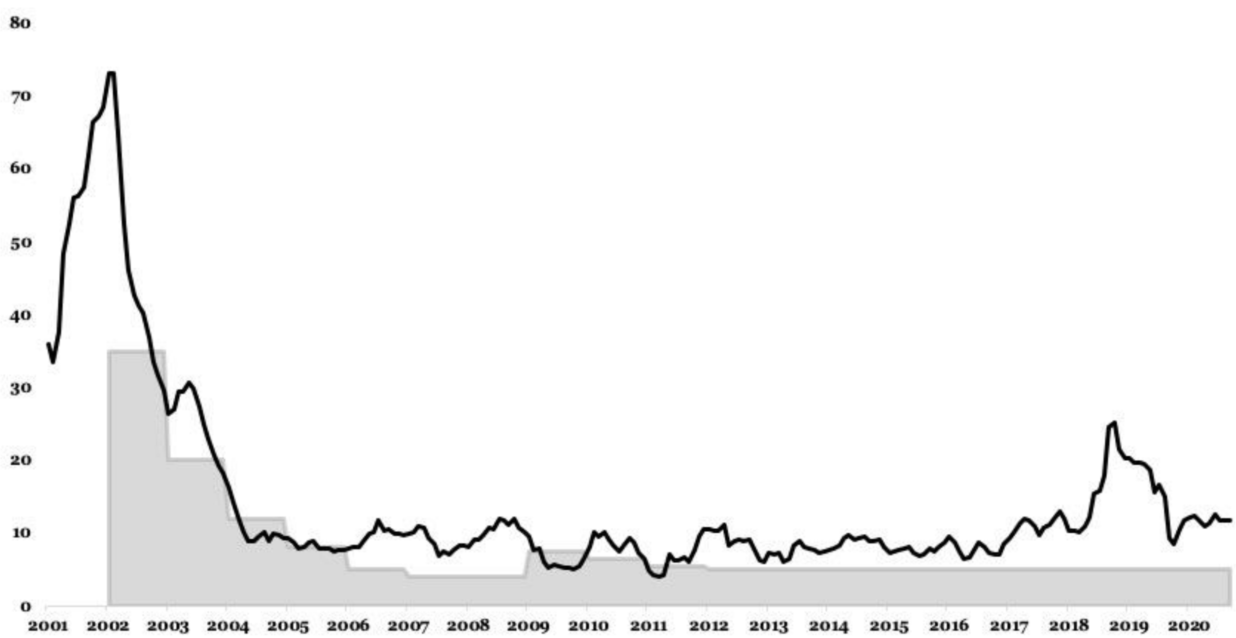
2. Turkey and Central Bank Independence

The case of Turkey provides an interesting counterpoint to New Zealand's experience. Turkey struggled with very high inflation rates through the 1990s. The Turkish Central Bank implicitly adopted inflation targeting at the end of 2001 and adopted an explicit inflation target starting January, 2006. Figure 2(a) shows that inflation rates did indeed drop in the early 2000s and stayed low until 2016. But Figure 2(b) illustrates that inflation was rarely within the inflation target range and by 2016, inflation was spiralling out of control.

In 2001, the Turkish parliament passed a law amending the laws governing the Central Bank of Turkey (CBRT), putting price stability at its primary objective. The law also attempted to increase the CBRT's independence from political influence. While elected officials would continue to set the Bank's policy *objective*, they would no longer have say on how the CBRT achieved these aims. This is known as "instrument independence" without "goal independence".

Figure 2: Inflation rate in Turkey

(a) 1980-2019. Vertical lines correspond to the informal and then formal adoption of inflation targeting. Source: OECD



(b) 2001- 2019. The grey line shows the inflation targets announced by the Central Bank of Turkey[2]. Source: Central Bank of Turkey

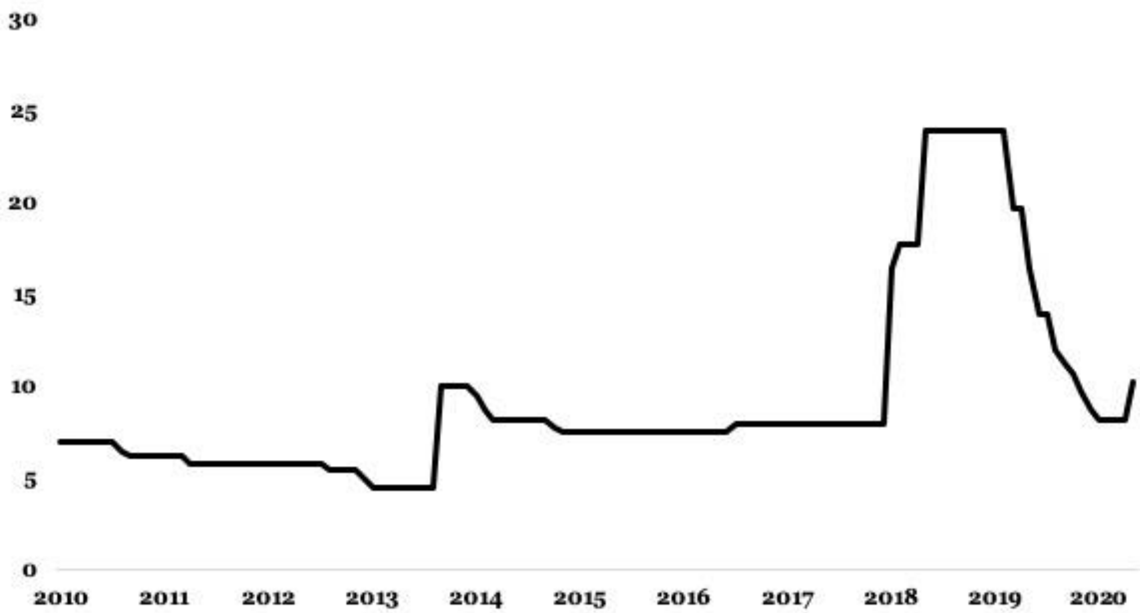
[2] Inflation targets are the annual targets per year, inflation rate is monthly data of year on year growth rates.

Central bank independence is largely viewed as central to central banks' success in stabilizing prices. Without independence, the central bank is hostage to the whims of elected officials who may be more concerned about using monetary policy to provide short-term stimulus to the economy, sacrificing the longer term objective of anchoring inflation expectations. Further, governments short of financing sources may seek to deflate away their debts through higher inflation.

The new arrangements did indeed give the CBRT substantial de jure independence and increased its transparency. The Monetary Policy Committee (MPC) started announcing its policy meeting dates from 2005. The inflation target itself is still jointly set by the CBRT and the Turkish government. This is a relatively common practice among central banks. For example, despite a great degree of central bank independence in the UK, the UK Treasury Bank is still the authority setting the Bank of England inflation target, while giving Bank instrument independence.

More important is de facto central bank independence, which eroded in Turkey the second decade of the 21st century. As inflation breached its target entered double digits in 2017, the central bank left its policy rate constant at 8% (see Figure 3). This is well below the response recommended for a central bank, who should raise its nominal interest rate by at least as much as the increase in inflation, to ensure that real interest rates increase and push inflation down. This lack of response occurred in the backdrop of immense political pressure to keep interest rates low. President Erdogan vehemently opposed any move to increase interest rates stating that *"interest rates are the mother and father of all evil"*[3].

Figure 3: Monetary Policy Interest Rate, Turkey



1 Week Repo Rate (Interest Rate) of Turkey. Source: Central Bank of the Republic of Turkey

[3] Reuters, May 2018

Nevertheless, in June 2018, the CBRT began raising interest rates, bringing them up to 17.75% in June and to 24% in September. Although this was a case of "too little too late" (inflation was by then heading towards 25%), inflation did come down during 2019. But the CBRT's actions had political repercussions. In July 2019, the Central Bank governor was sacked by a presidential decree and interest rates were decreased immediately after, essentially eliminating the central bank's independence.

"We told him repeatedly in economy meetings that he should cut rates...We told him that the rate cut would help inflation to fall. He didn't do what was necessary." President Erdogan was reportedly quoted in a meeting with the ruling party after a presidential degree replaced the Central Bank governor Murat Cetinkaya who had one year left in his term with the second-in command (Originally reported in the Turkish newspaper Hurriyet, July 2019)

Interaction between governments and central banks has long been prevalent and is most certainly not unique to Turkey. Even the European Central Bank, a multinational central bank renowned for its independence, is governed by politically appointed governors from its member countries and has seen political infighting in recent years. However, in emerging economies with weak institutions, these political pressures are of a different magnitude, as the case of Turkey illustrates.

3. A Comment on Monetary Policy and Public Debt

The case of Turkey illustrates the risks of allowing too much political influence in monetary policy decisions. Another view is that central banks in high-income countries have gone too far in allowing bureaucratic independence in such an important policy sphere. Shouldn't monetary policy be subject to democratic oversight like other policies in a democracy?

A related critique of the existing paradigm is that central banks have become too obsessed with price stability at the expense of other societal objectives. Many of society's ills could be solved with some extra financing. Perhaps central banks should come to the rescue and finance public investment, social spending, and other objectives.

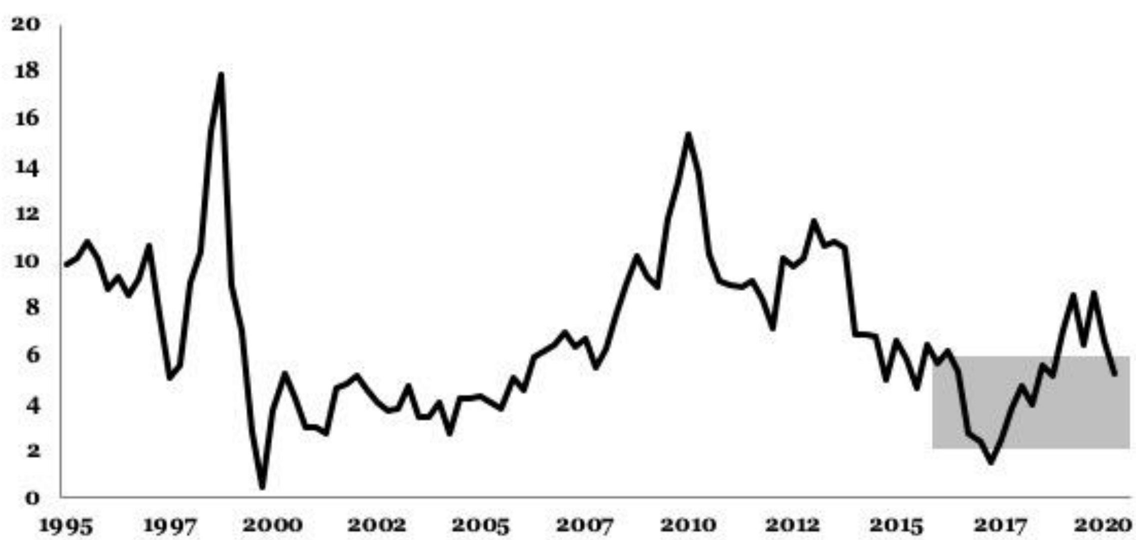
Critiques of this view point out that such a shift would lead to rates of inflation well beyond what we have been accustomed to in recent decades and point to the high inflation in the 1970s in developed economies and the hyperinflations of the 1970s and 1980s in the developing world. Further, the historical evidence shows little success in financing the budget with central bank money or by "inflating away" public debt (Ellison and Scott ,2020).[4]

[4] Most public debt is denominated in nominal currency units, but tax revenues tend to rise with inflation, so that higher inflation increases a government's ability to repay its debts.

4. India

India, one of the world's largest emerging market economies, adopted inflation targeting in 2016 after years of volatile inflation. The intention was to ensure that inflation stayed below 6%, with the explicit target specified as 4%. The central bank successfully remained within its target range in the first few years, but by early 2019 inflation was breaching the central bank's target (see Figure 4).

Figure 4: India's inflation rate



The grey bands start from 2016 when inflation targeting was first introduced. The inflation target is 4% and the tolerance limit is 2% so the range lies between 2% - 4%. Source: Organization for Economic Co-operation and Development

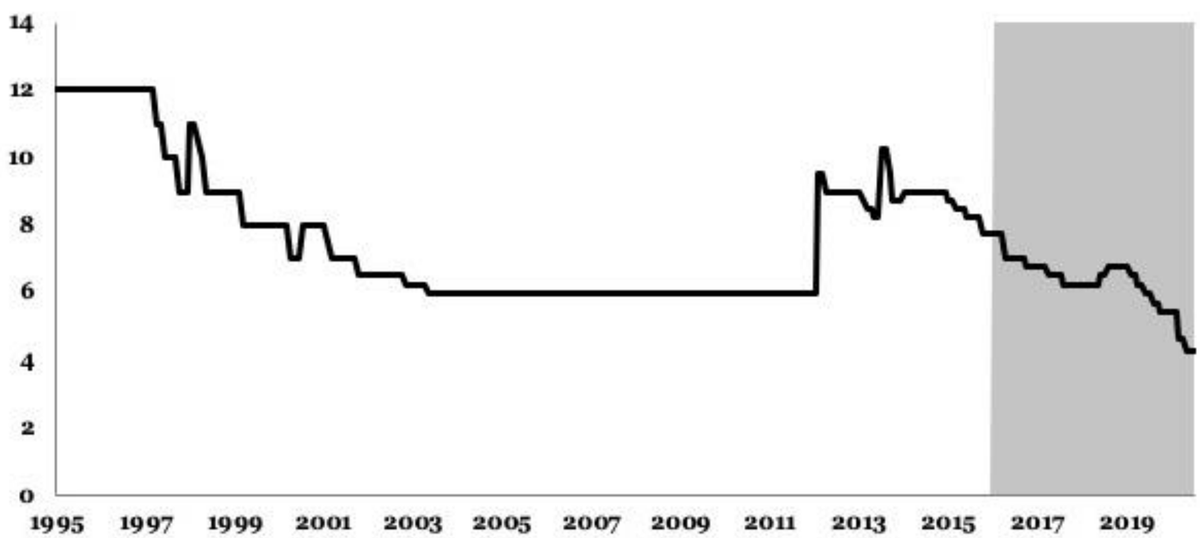
Historically, many developing countries attempted to gain monetary credibility by linking their currency to a foreign currency, such as the dollar. At the extreme, some countries have abandoned their currency entirely, as is the case in Ecuador. Recent years have seen a move towards inflation targeting in emerging economies. This has the advantage of giving the central bank greater flexibility to domestic conditions. On the other hand, the case Turkey illustrated that the success of this arrangement depends crucially on the central bank's credibility.

Absent the "anchor" of a foreign currency, inflation targeting appeared a desirable method to gain central bank credibility. However, the credibility of this arrangement requires the central bank to combat inflation even if it may be harmful to the economy in the short run. For example, inflation caused by an increase in the international price of imports is largely outside the central bank's control and a central bank may be tempted to accommodate these price increases.

RBI's actions in 2019 appeared to favour economic growth over keeping typical inflation within its target range. India's growth rate, which was 8.6% in 2016, slowed to around 5% in 2019 (see Figure 6). The slowdown can be attributed to various factors including India's currency demonetisation (replacing old currency units with new ones) in 2016 followed by a upheaval of its tax system. In order to boost the economy, the RBI has undertaken multiple rounds of policy rate cuts (see Figure 5).

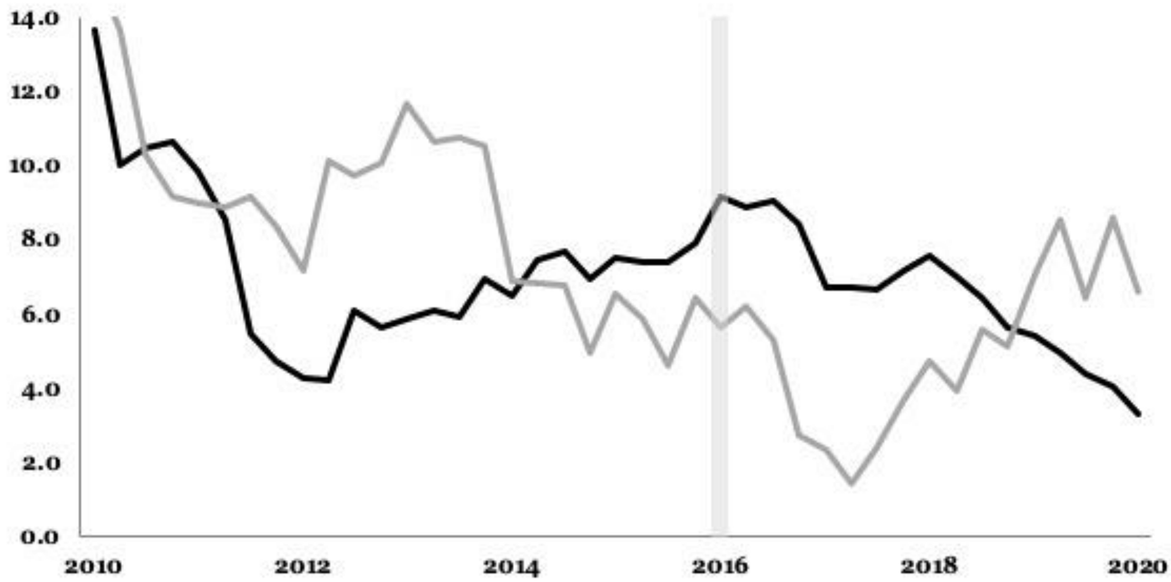
Not surprisingly, rate cuts boost demand and inflation has steadily increased. It eventually ended up breaching the 6% upper range limit in early 2019. An inflation targeting central bank that prioritises price stability's response would have been to increase policy rates to bring inflation back to target. But the RBI's whose preamble explicitly states that its objectives are to "…to maintain price stability while keeping in mind the objective of growth", chose to continue decreasing interest rates and boost the sluggish growth even as inflation continued to increase (see Figure 5 and 6).

Figure 5: Monetary policy interest rate (discount rate), India



The grey band starts from January 2016 when inflation targeting was first introduced. Source: International Monetary Fund

Figure 6: India's GDP growth rate (black line) and inflation rate (grey line).



Source: Organization for Economic Co-operation and Development

Glossary

- Consumer Price Index (CPI): Measures changes in the price level of a weighted average market basket of consumer goods and services purchased by households
- Repo rate: Repo rate is the rate at which the central bank of a country lends money to commercial banks. This is used by the Central Bank to control inflation.
- Fiscal surplus: Government revenue exceeds its expenditures
- Fiscal sustainability: Ability of a government to sustain its current expenditure and policies in the long run without defaulting.

Discussion Questions:

1. **Discuss the Reserve Bank of India decision to lower interest rates in 2019. Was this good policy? Was this consistent with its mandate?**

2. **Has inflation targeting overall been successful in bringing inflation down?**

3. **Overall, has inflation targeting been a success?**

4. **Is inflation targeting appropriate for developing countries?**

5. **What is the right balance between central bank independence and democratic oversight? Has central bank independence gone too far in high income countries or do we need more of it?**

6. **Is inflation really such a big problem? Are central banks too obsessed with inflation at the expense of employment and growth?**

7. **Does a country who issues its own currency have to worry about debt?**