

An optimal inflation rate for South Africa

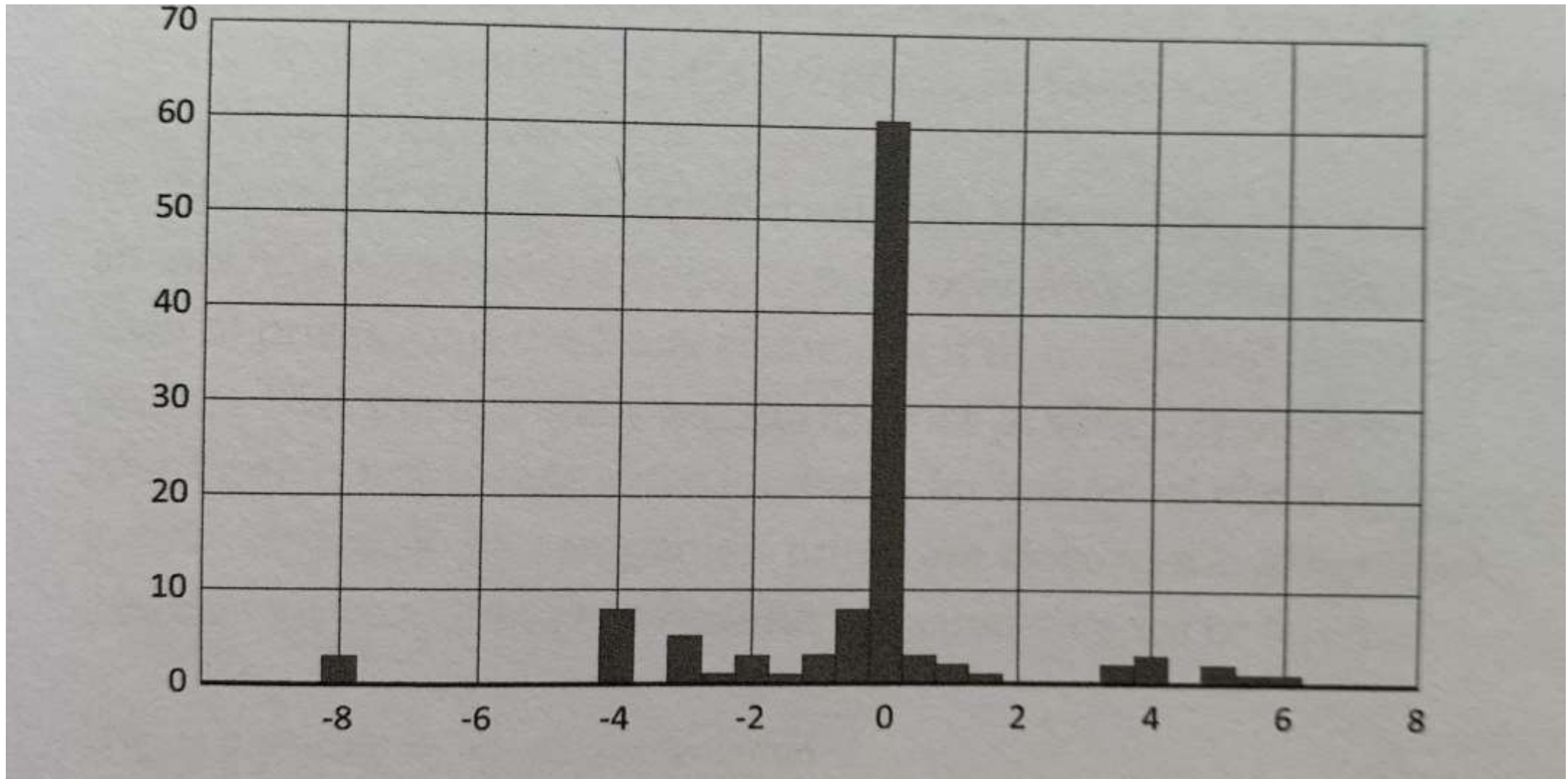
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Introduction

- New Zealand first country to adopt inflation targeting in 1990 with a 2% target
- Followed by Canada 1991
- And UK 1992
- Initial Choice of 2% fairly Arbitrary
- Currently there are 73 countries using inflation targeting some with targets up to 10%

So what does economic theory say Diercks (2017)



A contradiction

- Most studies recommend either a zero or negative target
- No central bank in the world has ever chosen such a target
- In my view when experienced Bankers disagree with economic theory it is almost inevitable that theory is wrong
- So what is it that most of these studies miss out

The Friedman rule

- Interest rates should be set so that people use as much money as possible given the assumption that money is free to create
- Hence interest rates should be zero
- If real interest rates are 2% then inflation must be -2% so that nominal rates are zero
- A pretty silly bit of theory

Benefits to growth of low inflation

- Barro 1996; Fischer 1993; Hess and Morris 1996 argue that lower inflation is good for growth
- They looked at a linear relationship between inflation and growth. Undoubtedly a move from 10% inflation to 5% is good for growth
- But you really can't extrapolate this and they had very few observations under 2%

Downward nominal rigidity

- Akerlof et al. (1996), argued that a little inflation allowed relative prices to adjust and inflation of zero would raise unemployment by 2.5%. This was a calibrated study however. This is sometimes referred to as ‘Greasing’ the wheels of the economy
- Adam et al. (2021), Adam et al. (2022), and Adam and Weber (2023), Give a much more sophisticated analysis looking at micro data sets for prices in different sectors. They find optimal inflation rates vary considerably by sector and economies. Agriculture has a near zero optimal rate while industrial was much higher. This did not allow for wage rigidities.

Government debt servicing and an incomplete tax system

- Historically inflation is an important part of the long term reduction in real government debt. A reduction in long term debt will imply a transfer in wealth from the government to bond holders.
- An incomplete tax system can also argue for a positive rate of inflation where inflation may compensate for tax avoidance and other problems in the tax system
- However these effects have to be extremely large to produce an inflation rate above 2%

The zero lower bound

- Andrade et al. (2019) is the key text here. A trade off between low inflation and the chance of hitting a zero interest rate and hence being unable to stimulate the economy. This is a function of the volatility of the policy interest rate, the real rate of interest and the target inflation rate
- There has been a lot of interest in the literature about the zero lower bound and a number of central banks have experienced this

The zero lower bound continued

- I calculate the volatility of interest rates for south Africa and there is little chance of hitting the zero bound even if the inflation target was lowered
- In addition central banks have not found the zero lower bound to be quite as important as the literature has. Negative interest rates, quantitative easing and forward guidance.

Bias in the inflation measure

- It is often argued that our measure of inflation is biased upwards
- Problems of constructing inflation measures and properly accounting for quality changes compound this.
- So when inflation is measured to be say 2% it may in reality be zero.

Matching the inflation target of trading partners

- There is a strong argument for a 2% target rate simply because that's what the major partners of South Africa do
- If the developed world run a 2% inflation rate and South Africa runs at 5% then on average the Rand has to devalue at 3% a year in the long run
- In fact since 2005 it has devalued around 5% on average per year but with very sharp deviations from this, which is not good for the economy

Experience of Changing the Target

- There have been a few instances where the target has been lowered, these have not shown any real costs.
- My paper estimates some basic Phillips curves for South Africa, typically (along with much of the literature) unemployment effects are small and insignificant
- But this misses the point that inflation targeting works through expectations effects, not raising unemployment,

Conclusion

- The benefits to growth of low inflation. Low inflation as opposed to high inflation is undoubtedly beneficial to growth, but, given the available data this is not an argument for zero inflation and a rate of 2%–3% inflation would probably attract all the benefits available in almost all economies, including South Africa.
- Downward rigidity in price setting. It is an accepted stylized fact that at least some prices are downwardly rigid, most notably nominal wages. Maintaining an optimal set of relative prices is therefore made easier if there is a moderate rate of inflation.

Conclusion 2

- The zero lower bound. The academic literature has devoted a lot of time to this effect and a broad consensus would be that a target rate of around 2% is optimal for developed economies
- Government debt servicing and an incomplete tax system. Any level of inflation acts as a tax on the economy. It is, however, a regressive tax and does not affect all members of society equally.
- Taken together, all these arguments seem to suggest that the lower end of the inflation target range in South Africa should be lowered so that the range should at least include 2% and that gradually, over time, actual inflation should be brought to the lower end of the range.