

On target: an analysis of Abenomics

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Introduction

What can one do when the economy has been experiencing stagnation and falling prices for two decades? Japan's Prime Minister Shinzo Abe hopes that his response, the three-pronged Abenomics is the correct answer that can pull Japan out of the "Lost Decades". Japan and the world are looking at this economic experiment with much intent, and this paper aims to answer the question on everyone's mind: "Is it working?" This paper attempts to do this by providing a preliminary assessment of these policies.

Japanese economic policy is an issue worth looking into for several reasons. Firstly, Japan's macroeconomic environment is an unprecedentedly challenging one; stagnation for over two decades, a deflationary period longer than that of the Great Depression of 1873 (Metzler, 2013), and a pessimistic corporate outlook. All this is further exacerbated by a diminishing demographic dividend.

Previous policy responses have been criticized as being insufficiently aggressive in tackling Japan's economic woes. This is where Abenomics comes in; three massive stimulus packages, aggressive monetary easing neither the US Federal Reserve nor the European Central Bank has dared attempt, and structural reforms to address underlying long term issues in the Japanese economy. If Abenomics works out, it will be credited with one of the most spectacular economic comebacks in history.

But Abenomics also has implications beyond the Japanese archipelago. Developed countries are fearing that they themselves will experience their own lost decade in the aftermath of the recession of 2007. Policymakers in economies such as the United States and the European Union have crafted policies which share similarities with Shinzo Abe's package. Should Abe's project fail, doubt will settle on their own policy responses as well. Will Abenomics success lead to its emulation in other countries? Or will it end up being a precautionary tale of macroeconomic folly? This is the question this essay tries to answer.

The "Three Arrows"

i. Monetary Policy Regime Shift

The first arrow of Abenomics brings about a shift in the monetary policy regime. A few major changes have been done here. Firstly, Abe has instructed the Bank of Japan to set an inflation target of 2% - a level that has rarely been hit since the early 1990s. This is a shift away from previous Bank of Japan policy, where the Bank has vigorously resisted any calls for higher inflation (Hausman and Wieland, 2014).

Secondly, a new bank governor has been appointed. Haruhiko Kuroda has been an aggressive critic of the previously passive policy of the bank. He is an avid supporter of Abenomics' aim of reflation, and has expressed willingness to spearhead "all-out efforts to utilize every possible resource" in order to overcome deflation (Bank of Japan, 2013).

Thirdly, the policy instrument has shifted away from the overnight policy rate to the monetary base. The new governor has described the tools as “Quantitative and Qualitative Easing (QQE)”. The Bank’s quantitative easing program would be the largest that has been attempted in economic history, and qualitative easing in the form of expectation management aims to support the efforts to combat deflation.

ii. Fiscal Stimulus

The second arrow consists of massive government spending packages, in an attempt to stimulate aggregate demand. While using fiscal policy to boost the economy is not a new idea, what sets it apart is its sheer size. There have been three stimulus packages so far; an initial package of ¥10.3 trillion, followed by another round worth ¥5.5 trillion in April 2014. More recently, an emergency package worth ¥3.5 trillion was passed in December 2014, as fears of recession and deflation reemerge (The Economist, 2014). How much firepower is left in this arrow is an open question however, as the burden of the government’s debt (around 240% of GDP) means that future fiscal stimulus will be constrained.

iii. Structural Reforms

Reforms to the supply side of the economy will constitute the third arrow of Abenomics. Japan’s economic problems are closely related to rigidities in key sectors such as energy and healthcare, relatively high costs of business and the country’s diminishing workforce due to low participation rates from women and an aging population. As to date, progress in this area has been relatively slow, and most of the spotlight has been on monetary policy and fiscal stimulus.

Abenomics and the IS-PC-MR model.

In order to explain the rationale and outcomes of Abenomics, this paper will use the New Keynesian IS-PC-MR model (Carlin and Soskice, 2005). We first use the standard model to explain Japan’s economic situation, then make some adjustments to account for the changes Abenomics has brought about. We then use the adjusted model to check the theoretical rationale for Abenomics. For pragmatic purposes, we will limit the modelling to a closed economy.

We start the typical case to describe Japan’s situation with a large negative demand shock (reflecting the abrupt stop of Japan’s economic rise in 1990). The large shock leaves output below equilibrium, and inflation below target. The central bank then forecasts the lower Phillips curve for the next period, and attempts to set a new interest rate based on the IS curve.

Here is where conventional monetary policy in Japan is rendered ineffective. The central bank has hit the zero lower bound on interest rates, and is unable to pick the desired interest rate to generate its best response output gap. This suboptimal response means that output is unable to increase much, and inflation remains low. This feeds into inflation expectations for the next period (modelled by the further lowering of the Phillips Curve), and we can see that inflation continues to spiral downwards for the following periods. This is the liquidity trap Japan has found itself stuck with for the previous two decades. In order to analyze Abenomics using the model, a few adjustments need to be made to reflect Japan’s situation.

a. The zero lower bound will be removed from the model, giving the central bank the ability to lower real interest rates as much as they want. This is reflected by the shift in policy instrument from the overnight policy rate to quantitative easing, which aims to influence the borrowing-relevant interest rate directly, rather than indirectly via the overnight rate.

b. We will start the medium-run equilibrium at a negative inflation rate, as this reflects the “deflationary equilibrium” that Japan has been experiencing. This is also a reflection of the Bank of Japan’s monetary policy, which has a vaguely define goal of price stability.

We will account for the first two arrows of Abenomics in the following ways;

- a. The fiscal stimulus will be modelled via an upward shift in the IS curve.
- b. The new inflation target will be reflected in a shift of the MR curve.
- c. The usage of quantitative easing is reflected in the removal of the zero lower bound.
- d. Supply-side policies cause an exogenous shift in the equilibrium level out output.

We start the modelling by simultaneous shifts in both the IS and MR curves, reflecting fiscal stimulus and a new inflation target respectively. This causes current output and inflation to be lower than the new medium run equilibrium, and the central bank forecasts the Phillips curve based on the new medium run equilibrium and lowers interest rates in order to increase both output and inflation. As the policy instrument is now quantitative easing, it can be said that the zero lower bound no longer constrains the policy maker. The next period sees the economy move to a point of higher output and inflation, and the central bank subsequently increases real interest rate gradually in following periods until inflation is at target.

Judging Abenomics

1. Output and Growth

Both the first and second arrows aim to revive Japan's economic growth, and a rise in output would definitely be welcome news. Since Abe's introduction of his economic policies, there has been an upward motion in both nominal and real GDP. Although the wide gap between the two underlines the worries over stubbornly low inflation, Abenomics is reasonably successful in boosting Japan's output. This can be seen especially in nominal GDP, which is trending towards pre-crisis levels.

In addition to large fiscal stimuli and quantitative easing, a few tailwinds are helping output figures as well. A depreciating yen as well as low commodity prices may help facilitate an export-led recovery. Private consumption and investment are also rising, albeit slowly, which is a welcome sign for the economy. However, headwinds threaten the progress of Abenomics. A consumption tax hike in 2014 may harm prospects, although indications so far suggest that the effects will not be as devastating as a previous hike in 1997. Secondly, a potential rebound of oil prices as a result of downwards overshooting may negate some of the positive effects low oil prices would have brought. Global demand still remains relatively weak, limiting the role of exports in driving the economic recovery (International Monetary Fund, 2015).

It is difficult to mention how much of that growth is attributed to Abenomics, rather than growth that would have happened even without the fiscal stimulus or quantitative easing. Most notably, some have argued that the growth rates are a result of the post Fukushima disaster recovery (Hayashi, 2014). That being said, forecasting agencies including the IMF have revised their growth forecasts for 2013 upwards, citing a stronger than expected effect that Abenomics has had on Japan's economy (International Monetary Fund, 2013). Other forecasters have similarly revised their forecasts upwards, and this can be taken as an indicative sign that Abenomics can rightfully claim to have contributed to this growth.

2. Inflation and Inflation Expectations

Deflation in Japan has not been sudden shocks, but has been rather mild, yet persistent. This has led to arguments that Japan has now entered a new deflationary equilibrium due to secular decline in potential growth (Nakaso, 2014). The "Conquest of Deflation" is a key aim of Abenomics, with an inflation target of 2% to be met by 2015. The question we now ask is "Is it working?"

Looking at the data, there has been an unmistakable upward trend in inflation, and the first arrow can claim credit in contributing to this. However, much of the inflation since 2014 has also to do with a recent hike in consumption tax. Discount those effects, and inflation for 2014 was at a low 0.5% according to the Bank of Japan's own estimates. As a response to this, the bank has further expanded its quantitative easing program in late 2014 as it races against time to meet its self-imposed deadline of 2015 to hit their inflation target. However, falling oil prices have all but dispelled any illusion, and the Bank of Japan has now revised their inflation forecast downwards, and are talking about meeting the inflation target in 2016 instead.

But looking at inflation alone does not tell the whole picture; expectations of inflation are just as important to Abenomics' success. Our IS-PC-MR model relies on consumers adapting their expectations (modeled by a shift in the PC curve) for the whole chain of events to work. What has happened in Japan, however, is that inflation expectations have been stubbornly low, inhibiting the effectiveness of previous monetary policy. A possible cause for this is the bank's credibility has been stained by its previous record, where policy measures to encourage inflation have been adopted half-heartedly, or rolled back prematurely (Kuttner and Posen, 2001; Ugai, 2007). This is where qualitative easing (as opposed to quantitative easing) by the Bank comes in, where the policymaker acts to influence consumer expectations on inflation directly by forward guidance.

Looking at the Bank data from conducting surveys with companies, it does seem that the bank's efforts in anchoring expectations have worked. On average, Japanese firms surveyed have an outlook for modest positive inflation in the short and medium run. Other measures of expected inflation such as the inflation swap rates have also gone up after the announcement of Abenomics. This gives the transmission mechanism for QQE much needed support (Hausman and Wieland, 2014). However, the latest survey in December 2014 returned a marginally lower rate of expected inflation. Surely enough, the eventually reported inflation rate was too low for the government's comfort.

I thus infer that the Bank is unlikely to hit its self-imposed deadline for meeting 2% inflation. However, Abe and Kuroda can take comfort in the fact that inflation expectations are relatively favourable, and that lower oil prices may have positive effects on the economy in the medium term despite causing deflationary pressures now.

3. Stock Market Indices

We now turn to the behavior of the Japanese stock market, namely the Nikkei index in reaction to Abenomics. The stock market is usually seen as an indicative gauge of success of the government's economic policy, and we can look at the index as an expression of whether the markets are confident in Abenomics.

Some readers may be hesitant to accept the usage of stock market indices as a reliable indicator of economic health, as a soaring index may be camouflaging shoddy fundamentals. In particular, stock markets primarily react to expected earnings rather than the real economy, and this may cause the stock market to be overly volatile to be any sort of reliable indicator. However, there are a few reasons to consider the index's indications.

Firstly, the stock market is a relatively reliable proxy to represent investor sentiment. Should investors feel confident in a country's economic prospects, their reaction will reflect in a rising stock market. By extension, this applies to confidence in a country's economic policy as well (Cliff and Brown, 2004).

Secondly, the stock market can influence consumption and investment via the wealth effect. Favorable stock market conditions can increase the stockholders wealth, and consequently increase consumption and investment (Porteba, 2000). A high stock market index may hence herald future growth in consumption, and thus economic growth.

The data shows a generally upward trend of the Nikkei index since the announcement of Abenomics in early 2013. This can be linked to Abenomics in several ways. Firstly, investors are confident in the government's aggressiveness to tackle economic problems, and this is reflected in bullish sentiment in the stock market. Secondly, the depreciation of the yen due to the Bank of Japan's quantitative easing program is helping Japanese companies improve their export sales, thus leading to higher profit margins. This is a good sign in the long run, as higher profits allow Japanese firms to undertake much-needed investment that may boost the long-run capacity of the economy. Shinzo Abe thus has good reason to feel pleased with the stock market movements as a vindication of his namesake policy.

A note on Structural Reforms

As structural reforms are relatively long term measures, it is premature to have any comprehensive discussion on them as of yet. However, it is clear that if Abenomics is to overcome Japan's economic malaise convincingly, the third arrow is arguably the most important one in Abe's quiver.

Some structural reforms are already beginning to surface. For example, the government is attempting to encourage more women into the workforce, thus working against a cultural background which is disadvantageous for women who wish to start a family. Closing the gender gap can lead to substantial economic gains, and Abe is hoping to pluck what seems to be a low-hanging fruit (Sekiguchi, 2014).

Structural reforms are also aimed at improving business conditions in Japan. Japan aims to enter the top 3 for the ease of doing business amongst OECD countries from its current position of 15. There is much scope for improving these conditions, such as reducing the time required to register a business, rationalizing the registration process and reducing corporate taxes amongst other measures. It is hoped that both domestic and foreign businesses will get a boost from these measures (Haidar and Hoshi, 2014).

Like any reform, resistance towards Abe's third arrow likely comes from within his own party's ranks. This is where Abe the politician needs to shine, to ensure that his party and the electorate are on board with the reforms he has in mind. Any gains from the first two arrows will be rendered meaningless if Japan's underlying issues are not resolved.

Conclusion

To conclude, we look back at the question we first set out to answer: "Is Abenomics working?" GDP has been on an upward trend since Abe took office, although a recent hike in consumption tax has impeded progress. Inflation is unlikely to hit the target of 2% in the coming year, although the government can take comfort in the fact that expectations of inflation have improved markedly. The stock markets have also largely reacted favourably to Abenomics. The answer thus seems to be a qualified yes, although we are arguably still in too early a stage to tell. This is especially true for the vital third arrow of structural reforms. Nonetheless, the data so far suggests that the answer may be "So far, so good."

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