

















# MONETARY POLICY TOOLS AT THE EFFECTIVE LOWER BOUND

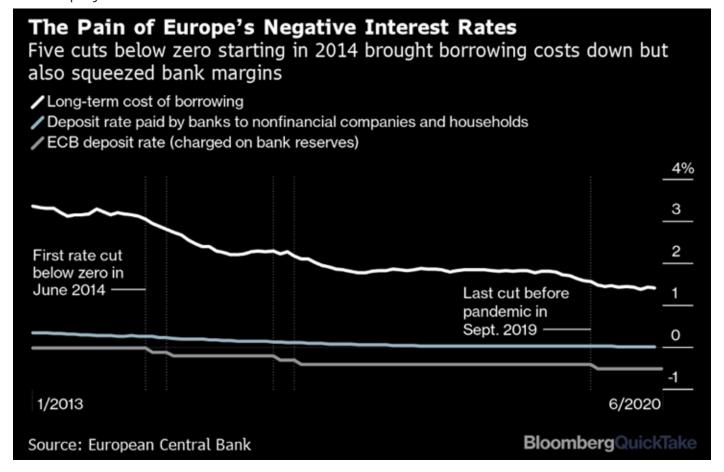
### BY GAUTAM

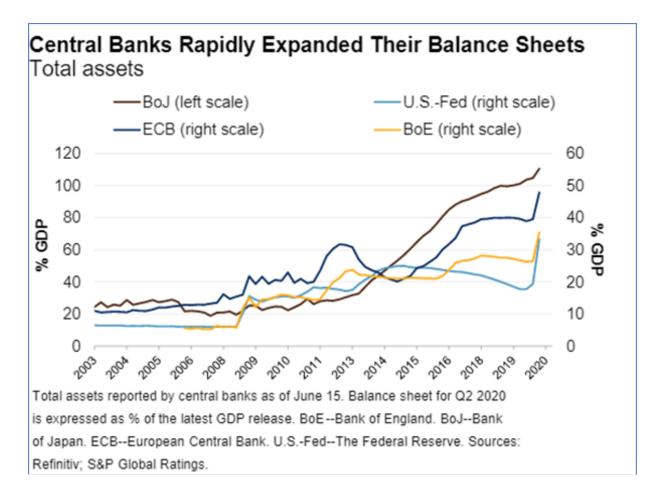
PGP 1 CANDITAET AT IIM UCKNOW

US Fed (0-0.25%) and BoE (0.1%) are already at what they regard as the effective lower bound, while ECB (-0.5%) and BoJ (-0.1%) are running negative interest rates. In this context, policymakers at major central banks are looking at various alternatives, including unconventional monetary policy tools to counter the effects of recessions on inflation and employment.

## **NEGATIVE RATES:**

Traditional wisdom dictates a lower bound on rates emerging from a flight to paper currency if rates are pushed too low. This lower bound is not exactly zero due to associated storage, transportation, and insurance costs. Central banks, including the ECB and BoJ, cut benchmark rates to sub-zero territory in response to anaemic growth and disinflation. While there's little compelling evidence of it restoring growth, negative rates have an unintended consequence on financial stability by squeezing bank margins





since banks are reluctant to charge negative nominal rates to household clients.

Inconclusive results and negative side-effects have cast doubts about the feasibility of this measure in its current form.

# **QUANTITATIVE EASING:**

Nearly all advanced economy central banks have purchased public and private assets by leveraging their balance sheets. In the past, QE achieved some of its goals by reducing systemic risk and improving market confidence. It stimulated economic growth modestly but failed at boosting credit growth and inflation since banks began hoarding liquidity instead.

# FORWARD GUIDANCE AND ADJUSTING INFLATION TARGETS:

Central banks use forward guidance to manage expectations and stimulate consumption and investment. These measures have generally been useful in reducing uncertainty. However, if markets doubt that central banks will follow through on their promise, the expectations are unlikely to adjust. Recently US Fed formally announced that it would treat its 2% inflation target as an average over the cycle by committing to tolerate periods of higher inflation and shifted its forward guidance to an outcome-based one.

Several experts and institutions have suggested an increase in inflation targets to manage expectations. This, however, remains scarcely tested since central banks remain wary of high inflation.

# **YIELD CURVE CONTROL:**

In 2016, BoJ pioneered yield curve control as a monetary policy measure by imposing a cap on 10-year yields. Since government bond yields are used as benchmarks for lending, it can help stimulate credit in the broader economy. The results have been mixed as it eased deflationary pressures while having a modest impact on growth.

Australia is experimenting with this measure since March 2020. ECB's bond-buying program in response to the pandemic has also been likened to YCC in all but name.

# LTROS AND TIERED RATES:

Central banks, including BoE, ECB, and even the RBI, have used long term repo operations, or a variation of it, to improve monetary policy transmission and boost credit growth.

In March 2020, ECB tweaked its TLTROs to enable banks to access funds at a rate lower than benchmark interest rates leading to higher margins for banks. Advocates of explicit dual-rate systems believe it can boost credit growth and economic activity while maintaining bank profitability.

# **CONCLUSION:**

Even though alternative monetary policy instruments, including QE and forward guidance hold theoretical promise, they have been mostly unsuccessful in reviving inflation over the last decade. Measures like YCC and dual rates are relatively recent additions to monetary policy toolkits. These unconventional measures target longer end of the curve to boost credit growth. Central banks also exercise swap lines, lending facilities, and regulatory powers to influence money flow.

Measures of last resort, including helicopter money and deeply negative interest rates, are suggested by proponents but seem infeasible in their current form. However, innovations like CBDCs may give policymakers greater control and enable the use of these tools.

### ABOUT THE AUTOR



Gautam is a 1st year MBA student at IIM Lucknow. He completed graduation in commerce from St. Xavier's College (Autonomous), Kolkata in 2018, and worked with J.P. Morgan's North

American Debt Capital Markets team for 2 years after that. He is currently a member of Credence Capital, tracking opportunities in BFSI and Pharma sectors

# **NEGATIVE INTEREST RATES**

### BY ABHA

CURRENCY AND EMERGING MARKETS DESK ON THE CORPORATE SALES TEAM AT JP MORGAN

# UNSUNG HERO OR JUST DOWNRIGHT CRAZY?

A seemingly counterintuitive strategy, one that turns everything we have known so far on its head, negative interest rates would in the simplest sense imply penalizing depositors. A natural question to follow would be why any lender would be willing to pay someone to borrow money. While the strategy does involve charging deposit holders, it is worth noting that for the most part the affected accounts have been those held by commercial banks at central banks. These accounts serve a dual purpose of cheque clearing along with satisfying central bank reserve requirements. A negative rate on these accounts is thus meant to discourage banks from keeping excess reserves with the central bank, and choosing to lend instead.

Despite its rather unconventional name, negative interest rates are essentially just an extension of conventional monetary policy tools. Highly stressful economic conditions can lead to situations where "normal tools" fail to create the impetus they were meant to. Take for example open market operations involving the purchase and sale of government securities by central banks. Ordinarily, during an expansionary monetary policy, the central bank would purchase these safe government securities, and in doing so would inject funds into the economy. This in turn would put downward pressure on

interest rates and encourage borrowing. But what happens when rates are already at zero? The obvious question would be why not focus on fiscal policy in a situation like this when monetary policy is so obviously constrained? The inconvenient truth, however, is that tough economic situations often have governments unwilling to let go of their budget surplus more than they already have to.

While one can most definitely argue both sides of almost any policy decision, we limit ourselves here to the dangers of negative interest rates. And like any other policy, this would not imply that the mechanism is flawed but rather that one must tread with caution. The risks associated with negative interest rates can be thought of from the perspective of three vital stakeholders – the banks, the public and the policy makers.

Low and falling interest rates have steadily squeezed bank profits, and this clubbed together with penalty charges imposed by central banks would only worsen the situation. In theory, banks could pass on the negative interest rate to their depositors, but the reality is far from this. Banks cannot risk losing depositors since these deposits form a part of both vital long term funding, and regulatory requirements. The asymmetry arises since customers on the hand can quite simply choose to transfer their deposits from checking accounts to saving accounts, fixed deposits, riskier assets or even withdraw the surplus to be held in cash. While some banks have responded to these decreasing margins through higher fees on payment transactions and account management services, others have resorted to lending and investing in

riskier assets which has led to higher capital costs, which was never the intention of the central banks.

Negative interest rates also have the effect of signaling to the public that the situation is so dire that conventional expansionary tools can no longer be used. This fear that the economy is tanking could lead to people reducing their spending further out of skepticism of worse times ahead. Finally, as Christian Noyer points out, this strategy might "induce a bias toward inaction among other policy authorities, such as regulatory, prudential and fiscal policymakers, if they believe the burden of policy interventions can be left to the central bank". While negative interest rates can cause large increases, and often even bubbles in asset prices such as housing, they often do not improve the broader economy and can be harder to unwind as compared to fiscal policies.

Regardless of which side of this fence you stand on, as with any other expansionary tool, one must be mindful of showing constraint and determination in normalizing these unconventional policies since pursuing this for too long could leave us incapable of propping up the economy when the next downturn invariably arrives.

The views expressed here are personal & do not necessarily reflect the views of any organization.

# **ABOUT THE AUTHOR:**



Abha is an Economics graduate from the University of Bristol, and has completed her Masters in Accounting and Finance from the London School of Economics. An alumnus

of IIM Lucknow (batch of 2020), she was also a member of the campus fund, Credence Capital.

Currently working at the Currency and Emerging Markets desk on the Corporate Sales team at JP Morgan by day, she is an aspirational runner and novice baker by night.

# ROLE OF MONETARY POLICY IN THE WORLD TODAY

### BY UMANG

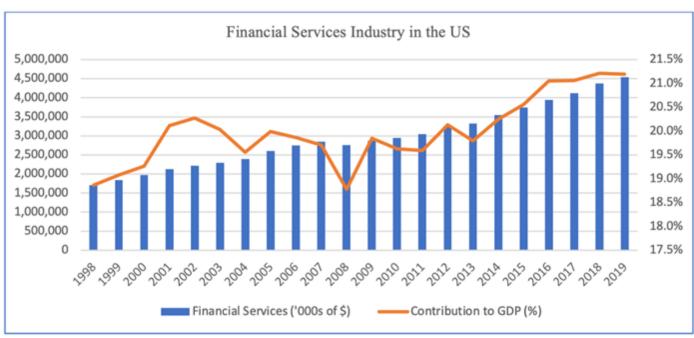
J.P. MORGAN, MUMBAI, IN FIXED INCOME AND FX MARKETS

In a world prone to frequent crises and heightened uncertainty premium, monetary policy has assumed a role that goes beyond the setting of domestic interest rates. This article focuses on two areas of expanded scope of central bankers (pivoted on the US Fed): supporting asset prices and facilitating dollar liquidity globally. The former was at its best display in March 2020 when the Fed announced the unprecedented move to buy investment-grade corporate bonds in the US. The latter role is codified as dollar swap lines with other central banks, meant to alleviate cross-border dollar shortage during times of market stress. The rest

of this article elaborates on the reasons for and importance of these two added responsibilities.

Financial markets have grown in importance as optimal allocators of capital and as an alternative feedback mechanism to policymakers (figure 1). In traditional economic models, households, firms, policy-makers, and intermediaries such as banks were the only agents that determined optimal economic policies. However, over time the growing importance of financial markets has led central bankers to pay close attention to asset prices, particularly of those that affect their primary monetary policy objectives. Active participation in financial markets by central banks is more visible now than ever before. The US

Figure 1



Financial services include banking, insurance, investment services, and real estate.

Blue bars use left hand axis, orange line uses right hand axis.

Data source: Bureau of Economic Analysis



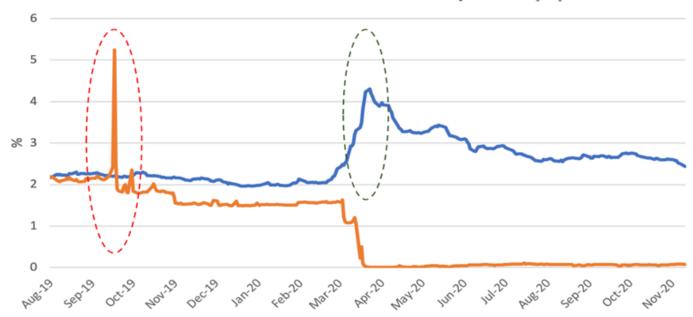


Figure 2

TGCR is tri-party general collateral overnight repo rate, in orange. Moody's Baa Corp Spread represents investment-grade corporate bond yield spread over 10-year US Treasury yield, in blue. Red annotation shows spike in repo rate in September 2019 that was followed by the intervention of US Fed to normalize the market. Green annotation shows the spike in corporate bond yield in the aftermath of COVID-19 crisis that was followed by the "announcement" from US Fed of their intention to buy IG Corp bonds to support the debt market.

Data source: FRED and NY Fed

Fed is by far the biggest participating central bank in the world - apart from flooding the US Treasury market with cheap money on account of Quantitative Easing, it took the novel step of buying investment-grade corporate bonds during the COVID-induced sell-off in 2020 (figure 2). Earlier in September 2019, the sudden seizure of repo market in the US was also eventually ameliorated by Fed's intervention, which is widely attributed to the inability of commercial banks to arbitrage away the repo spreads owing to their dwindled excess reserves (Duffie, 2020). The Bank of Japan is another central bank that buys bonds and equities in the form of Exchange-Traded Funds. As a larger share of the economy gets linked to organized financial markets, one can expect increased involvement of central banks in keeping asset prices (even equities!) from experiencing sustained dislocations.

Increased connectedness and international spillover of financial policies has necessitated central bankers to consider the implication of their decisions beyond their borders (Rajan, 2016). Given the dollar's pre-eminent role in cross-border current and capital account transactions, tackling shortage of USD during times of financial stress has become an added objective of the US Fed. When crisis strikes, US-based investors pull money out from apparently susceptible markets and emerging countries. Additionally, banks draw down their reserves to meet demands from depositors and corporations that need cash to continue operations. The FX markets of the worst affected countries typically react by sharply depreciating the local currency against the US dollar. Each country's central bank then steps in to supply dollars from its reserves to prevent runaway depreciation, and then stares at the possibility of depleting

its reserves in no time. Here is where the US Fed steps in as a lender of last resort; the dollar swap lines it establishes with non-US central banks are meant to supply dollars for immediate need, to be repaid later once the market conditions normalize. We witnessed this for the first time in 2009, and now more recently in 2020. While central banks make policies to serve their domestic objectives (typically targeting inflation and unemployment), their role in safeguarding international financial markets often goes under-appreciated. As countries continue to open up their current and capital accounts, and by extension impose fewer restrictions on cross-border mobility of money, such emergency swap lines will become invaluable in dealing with the ever-persistent risk of dollar shortages.

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# **ABOUT THE AUTHOR:**



Umang has been working at J.P. Morgan, Mumbai, in Fixed Income and FX Markets since 2016. His work involves dealing in cash and derivative products. He closely tracks local

and global macroeconomic developments and advises corporate clients on hedging market risks. He will soon move on to pursue doctoral studies in financial markets from the University of Iowa, USA.

# NEGATIVE INTEREST RATE: IMPACT ON BANKS

BY MITALI

IIM LUCKNOW II YEAR MBA FINANCE

Negative interest rates have now become a common sight. European Central Bank, Denmark, Japan, Sweden and Switzerland have experimented with negative interest rates. The idea behind having negative interest rate is to stimulate the economy. When the central banks set negative interest rate, banks in the economy are charged on saving extra sums. The banks can rather utilise the money as loans to people for both consumption and production purposes. However, there can be instances when banks do not follow this cycle. They might not be willing to take the risk of lending at a downturn where the risk of default is high. Thus, there isn't clarity on the effectiveness of negative interest rate. This can also weaken the currency of an economy as investment return is low, while they seem like an attractive lender option also. This would also make the currency stable and establish it as a safe haven currency. However, being a net exporter, it might not work well. Adding to this is the inflation level and the ability to further drive the economy by monetary policy is also impacted. But a peculiar problem that impacts the banks is the effect that negative rates have on the margin of financial institutions. The bank performance is hampered when the central banks keep interest rate negative. The banks typically earn by transforming maturity, they lend long and borrow short. When the rates become negative, they would have

to lend at very low levels to businesses but have to pay positive rate of interest to depositors as depositors would not keep the funds with the bank. This creates pressure on the margin. The banks would want to increase NII (Net Interest Income) by playing in volumes and undertake risky loan issuances. If the economic conditions are not too positive, the banks would be apprehensive to lend as the probability to default is high. Thus, with falling profits the banks will not be willing to lend large sums and hamper the impact of NIRP (Negative Interest Rate Policy). At the same time, short period of negative interest rates might not impact the banks performance as the volume will be high due

At the same time, short period of negative interest rates might not impact the banks performance as the volume will be high due to larger amount of borrowing. Whereas, long periods of negative interest rate would hurt bank performance. The evidence suggests that though the NIM(Net Interest Margin) of banks would fall they would still disburse

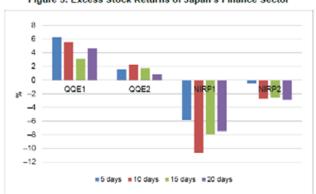


Figure 5: Excess Stock Returns of Japan's Finance Sector

NIRP = negative interest rate policy, QQE = quantitative and qualitative monetary easing.

Note: Excess stock returns are defined by daily stock returns of the finance sector minus daily returns of the Tokyo Stock Price Index (TOPIX). Normalizing their value on the day of the policy announcement to zero, we calculated their accumulated excess stock returns after the policy announcement.

Source: Datastream.

more loans to ensure they have volume support.

The impact can be seen by looking at the stock prices of banks (forward indicator)

along the time when interest rate turns negative.

When the BOJ announced negative interest rates.

Similar charts were seen for European Banks too. Thus, the impact of NIRP on the financial sector is not bright however there are several other conditions that can make the impact of monetary policy effective and in the direction that is required.

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# ABENOMICS WILL IT SURVIVE WITHOUT SHIZO ABE?

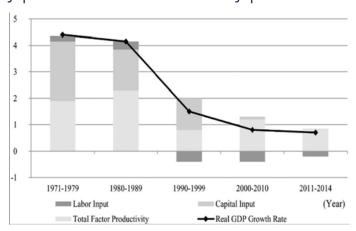
Decoding the economic and monetary policies of both countries?

### BY BHADRIK GOSAR

**EPGP STUDENT AT IIM AHMEDABAD** 

### **ABSTRACT:**

Japan was one of the performing economies 1970s-1980s when the average gap between a US citizen's income was bridged to 2.5 times to that of a Japanese. This gap earlier stood at 9 times during the early 1950s. Japan was emerging as "Asia's New Giant". But the twin bubbles in the stock market (1990s) and the real estate (2000s) coupled with the global financial crisis (2008-09), the tsunami in 2011and the breakdown of the nuclear reactor at Fukushima had put Japan's ambitions into a lurch. Japan achieved



an average real GDP growth rate of about 4% during the 1980s, but the growth rate declined to less than 2% during the 1990s and approximately 0.8% in the first decade of the 2000s. The country witnessed a phase of "Great Stagnation" since 1990s. This phase was characterized by widening output gap (~7%), low inflation rate (-ve 1.2%), asset price deflation, appreciation of yen (USD

1 = Yen 121 from USD 1 = Yen 261), stock market crash (Nikkei fell from 37724 in 1989 to 15066 in 1992), ageing population and high levels of unemployment (~3.1%).

# HISTORY OF THE INCREASE IN CONSUMPTION TAX:

In a trade-off to balance its deficit, reduce its debt, pay off pensions to the ageing population, Japanese governments have largely relied on consumption taxes in the past. However, historically, the Japanese have led to the deferment of their expenses in response to an increase in consumption taxes since the increase in taxes has not been commensurate to the rise in wages. The consumption tax increased from 3% to 5% in 1997 and from 5% to 8% in 2014. This has led to a deflationary trend in Japan.

### **DECODING ABENOMICS:**

The first administration of Prime Minister Shizo Abe started in 2006 but he resigned in 2007 after a series of scandals had erupted. However, he was re-elected in 2012, and this time with a determination to turnaround Japan's growth story. In early 2013, after two decades of economic stagnation, he unveiled a comprehensive economic policy package to sustainably revive the Japanese economy while maintaining fiscal discipline. This program became known as Abenomics.

The centerpiece of Abenomics has been the three "policy arrows" targeted at:

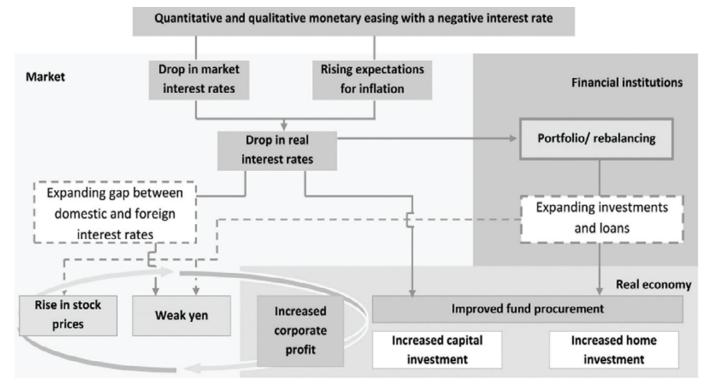
# Arrow 1 - Aggressive Monetary Policy with a goal to end deflation

- Various qualitative and quantitative easing techniques like the purchase of government bonds, negative interest rates, etc. were used by closely working with the Bank of Japan to achieve inflation of 2%.
- BOJ's holdings of Japanese government bonds increased 3.3 times from 2012 to 2016, from 1,253 trillion yen to 4,177 trillion yen. while the monetary base expanded 3.6 times in the period of just from December 2012 to August 2017. This was a remarkable increase

GDP growth rates of 3 and 2% respectively and reduce reliance on government debt. A series of "economic packages" were introduced mainly comprising of public spending on building and maintaining infrastructures, such as roads, bridges, and tunnels in the earthquake and tsunami hit areas (~USD 400 bn) and ~ USD 280 bn for the investment in the future program.

# **Arrow 3 - Growth Strategy:**

The main objectives of the growth strategy are to create an economic and business environment where active investment is undertaken, people can realize their potential to the fullest, new markets are created, and firms and people are integrated into the



compared to the 2.4 times over the 15 years from December 1997 to December 2012.

# Arrow 2 – Fiscal policy with the monetary stimulus:

The monetary stimulus was intended to support the fiscal stimulus with a target to make Japan a 600 trillion economy and primary surplus by 2020. This was to be supported by target nominal and real

world. Japan has been developing greater economic relations with the United States, Asia, and the European Union, thereby making its economy more dynamic. As of the end of June 2017, Japan had 15 Free Trade Agreements / Economic Partnership Agreements. The overall intention was to strengthen employment opportunities and make Japan an investment destination.

# IMPACT OF ABENOMICS FROM 2012 TO 2017:

- Reduction in real interest rate led to a correction in asset prices/stock prices. The reduced interest rates have led to a higher valuation of the stocks. Nikkei 225 stock index increased from 10230 in Dec'12 to 22764 in Dec'17.
- Further, it also helped achieve the depreciation of the Yen. (USD 1 = Yen 85 in Dec'12 to USD 1 = Yen 113 in Dec 17)
- It led to attracting investments that were well supported by government expenditures.
- The average annual growth of real GDP reached 1.3% from 2012 to 2017. Nominal GDP increased from Yen 494 trillion to Yen 546 trillion.
- Output gap reduced from -2.2% to -0.7%
- With a negative interest rate regime, it managed to expand its monetary base by keeping money in circulation.
- Private investments grew by 18% in nominal terms.
- Demand in the labor market has increased, and as of July 2017, the number of employed people had increased by 4 million. The unemployment rate fell to 2.9%
- Since 2013, Japan has experienced inflation every year, except in 2016, indicating that the economy has successfully broken out of deflation. CPI increased from 0.3% to 0.5%

# **KEY CONCERNS ON THE IMPACT OF ABENOMICS:**

• The general government debt to GDP ratio increased from 229% in 2012 to 237.6% in 2017, significantly higher than in Greece,

whose ratio was nearly 190%

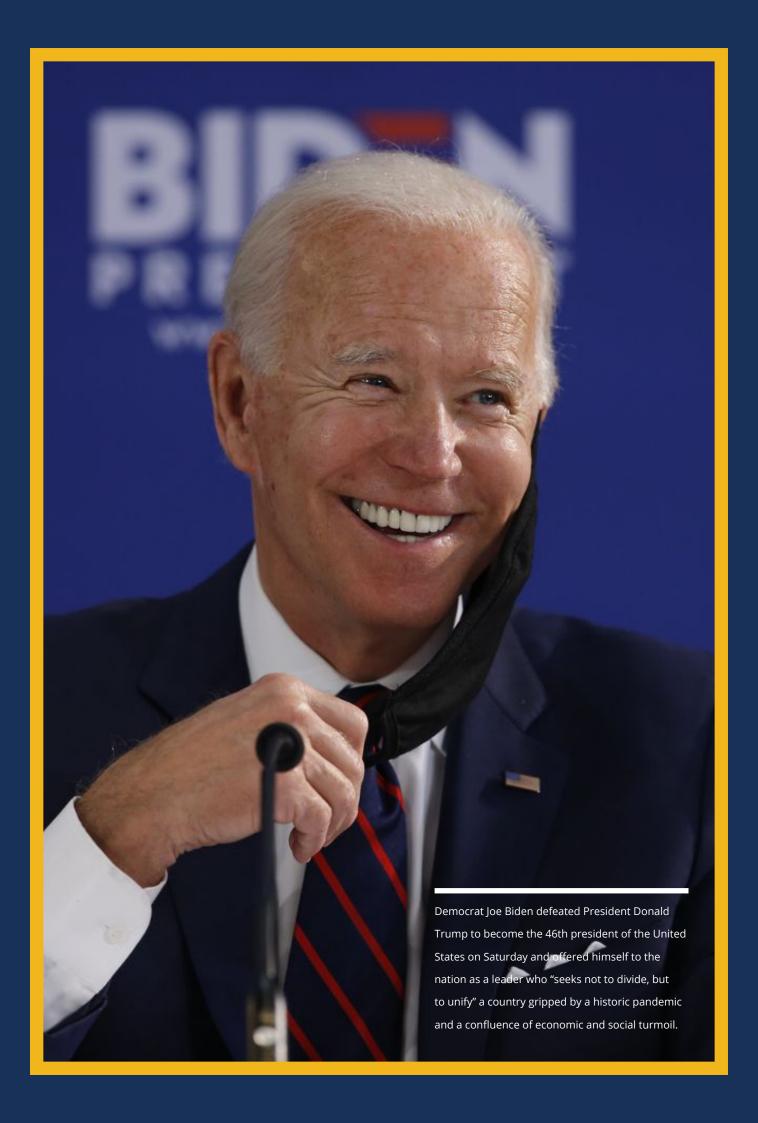
- The ageing population of Japan which is leading to payouts in the form of pension and long term healthcare programs, thereby reducing the growth potential
- Heavy reliance on domestic investors to buy/refinance debts.
- While Abenomics did help stabilize Japan by achieving inflation, increased GDP rate, depreciated currency, etc. However, with COVID 19 and Abe stepping down as Prime Minister due to his ill health, it would be an uphill task before Japanes government to maintain government spending, frequent fiscal stimulus packages, population aging, boosted gross general government debt, etc.

### ABOUT THE AUTOR



Bhadrik is a Chartered Accountant, Cost Accountant and Company Secretary by qualification with past experience in banking and stressed assets

industry. Currently he is part of second year of ePGP course with IIM Ahmedabad



# **BIDEN ECONOMICS**

# WHAT DOES A BIDEN PRESIDENCY MEAN FOR THE INDIAN ECONOMY?

## ARTICLE COURTESY OF FINSHOTS

Let's talk about trade. India has a trade surplus with the US. Meaning we export a lot more than we import from the country. While that's great news for policymakers in India, the Trump administration was always extremely concerned about the growing deficit. They believed this deficit could be cured if India stopped imposing heavy duties on certain American imports. They wanted us to open up our markets. But we were kind of sticky about this whole proposition.

And so, sick of India's protectionist policies and excessive duties on goods like dairy and motorcycles, the US decided to remove us from their Generalized System of Preferences (GSP) program in 2019. Think of GSP as a goodwill program initiated by the US in an attempt to do a bit of charity. If you are a developing country like India, the US will allow you to ship goods to their country at reduced tariff rates. Meaning Indian goods can be priced competitively and our manufacturers will have another market to tend to. But once we were kicked out of the program, the US simply stated that we didn't deserve to be a part of the GSP because we had failed to provide them with equitable and reasonable access to OUR markets.

This struck a nerve. Shortly after, we went ahead and imposed heavy duties on U.S.

products like almonds, pulses, walnuts, and fresh apples. And so, India-US trade relations went from bad to worse.

Ever since both countries have been trying to undo the damage. We have been trying to figure out how to placate the US while also trying to get them to reinstate full privileges under the GSP program.

Now some people believe, with Biden at the helm, things could move quickly. After all, Biden is a seasoned politician, unlike his more transactional predecessor Donald Trump. Even others contest that Biden has no reason to cede ground to India considering American interests are still his top priority. But despite the differing opinions, the general consensus is that the India-US trade deal is unlikely to materialize anytime soon. Most people think it might take another year or two. And that means we will just have to wait and see how things unfold.

Then there is the whole issue surrounding immigration. Every year, the US issues 85,000 H-1B visas to immigrants. Think of these visas as your golden ticket to paradise. If you're qualified enough and can get your hands on one of these bad boys, you can live in America, work in America and even apply for a green card (permanent residential status).

And Indian IT companies like TCS and Infosys often sponsor H-1B visas to many of its Indian employees. In fact, more than 70% of the visas tend to go to Indians.

However, a few months ago President
Trump signed a proclamation that
temporarily restricted certain foreign
workers from entering and working in the
US. These restrictions were applied to a
bunch of categories including H-1B visas.
And for Indians aspiring to work in the
US, this was a pretty devastating blow.
However, Biden has promised to reverse this
proclamation. He even announced that he
would expand the temporary visa program
(including the H1-B policy) to accommodate
more skilled foreign workers. So technically,
a Biden presidency is good news for Indian IT
workers.

And finally, there is Biden's position on Iran. For the uninitiated, the Islamic Republic of Iran has been pursuing a very ambitious nuclear program over the past few decades. When other major world powers got wind of this development, they weren't exactly pleased. Iranians were asked to hold back and they refused to comply. Obviously, the big boys retaliated and negotiations crumbled. Until, in 2015, all parties finally reached a mutually acceptable agreement. They called it-*The Joint Comprehensive Plan of Action (JCPOA)*.

Now it must be noted that the whole initiative was largely spearheaded by the Americans. More specifically, the Obama administration. Unfortunately, when Trump came to power, the US reneged on its promise and walked out of the deal. Since then, the US has been imposing crippling economic sanctions on Iran. And economic sanctions are always complicated. You see, the US government forbid all foreign financial institutions from

transacting with the Iranian central bank. This meant Iran could no longer engage with its primary trading partners since all official channels of payment were frozen. Now it's imperative to ask why foreign countries would comply with this diktat?

Well, most do it because they don't want to antagonize the Americans. They also do it because they can no longer use the US dollar to transact with Iran. And like most countries, India had no choice but to fall in line, despite the fact that we import a lot of Iranian oil. However, if Biden were to go easy on Iran, maybe we will have it easy transacting with Iran as well. And since, there's every indication he might in fact choose to negotiate with Iran, this could be a positive development for India.

In any case, for now, it's safe to say that his priorities will rest with the American people. But hopefully, as things improve back home and his focus shifts elsewhere, he will work on advancing India-US relations once again.

### ABOUT THE AUTOR



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# JAPAN CRAVING FOR INFLATION

BY SWAPNIL KARKARE

CHARTERED ACCOUNTANT AND PGD ECONOMICS, MEGHNAD DESAI ACADEMY OF ECONOMICS

Japan is infamous for its greying population, persistent deflation, prolonged recession and high public debt. Shortage of working-age population has directly affected consumption and general price levels. Persistent lower prices have affected public psyche: they perceive deflation as normal and expect it to continue. This has impacted incomes as

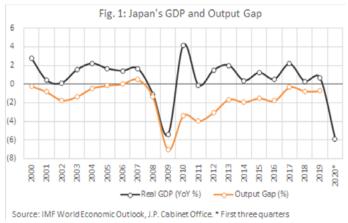
employees don't demand pay hikes, which in turn, affects prices of goods and services. Businesses have little incentive to invest in such economy leading to reduction in natural rate of interest, which then spirals into a vicious circle of economic problems.

In the late 2012, Mr Abe Shinzo assumed the office of Prime Minister and in great zeal aimed at "three arrows" in order to revive dwindling economy. They were: aggressive monetary easing, expansive fiscal policy and structural reforms, called as 'Abenomics'. The Bank of Japan (BOJ), under the leadership of Mr Kuroda (March 2013 onwards), coordinated with the government to achieve these goals.

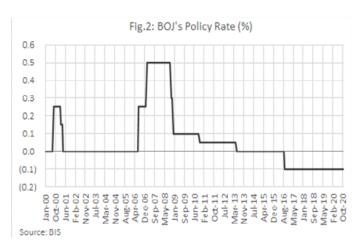
# ABE-KURODA PARTNERSHIP

Theoretically, large government spending and low interest rates influence inflation and can help in restarting economic engine.

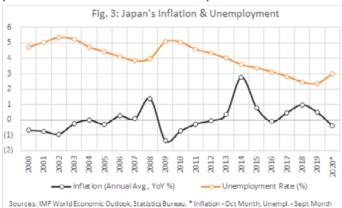
But Japan already has low interest rates (Fig 2) and high fiscal deficit and debt (Fig 4) leaving no room for further expansion.



Abe controlled additional borrowings (Fig 4 – Public debt remained constant after 2013) and implemented structural reforms which narrowed the output gap (Fig 1), improved

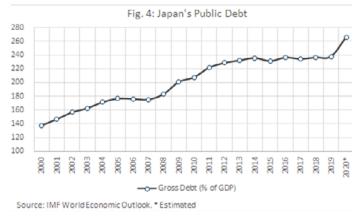


employment conditions (Fig 3), increased labour productivity and enabled corporate governance. These steps pushed corporate profits and stock markets upwards.



In order to increase the prices of goods as well as tax revenue, Abe increased consumption (sales) tax from 5% to 8% in April 2014 and to 10% in October 2019. But,

both times, it invited recession. Consumption tax is highly sensitive and an unpopular issue within public. These controversies date back



to 1989 when it was first introduced at 3% rate. Whenever tax rate has been increased, it was followed by large public outcry and recession, threatening incumbent PMs popularity. Yoshihiko Noda administration (prior to Abe's), however, facilitated tax system reform in consensus with opposition parties and accordingly planned tax hikes from 5% to 8% in April 2014 and to 10% in October 2015. Abe postponed tax hike to 10% twice before implementing it finally in 2019 in order to avoid unfavourable political and economic consequences.

He made changes in labour conditions and laws by initiating parental leave, child care services, allowing companies to employ part-time/contractual workers, equal-work-equal-pay rights, relaxation in immigration policies, etc.

We need to understand three distinct aspects of Japan to understand the success and failure of Abenomics. Firstly, Japan has a lifetime employment system, where a graduate is hired directly from school, who then undergoes on-the-job training, get seniority-based promotions and long-term care benefits under the assumption that he/she will stay until retirement. Such monogamous relationship with the firm does not stimulate efficiency and competitive

pressures. Lower salary expectations disincentivise companies to pass increased profits to employees. In addition to it, employing contractual labour proved costefficient to companies thereby reducing unemployment problem too. Secondly, Japanese corporate culture is sexist in different ways. Women are not treated at par with men, in terms of roles and pay. Women are forced to guit once they get pregnant and are discouraged to rejoin. During Abe's tenure, due to several women-friendly laws, female labour-force participation grew from 63% to 71%, higher than in America. But we still read reports of unfavourable working atmosphere and pay gap between men and women. Thirdly, Japanese population is homogenous due to its longstanding opposition to immigration and strict policies. However, in order to fix labour shortages, the government officially opened doors to lower-skilled foreign workers in April 2019. During Abe's tenure, the number of foreign workers in Japan more than doubled.

This year, Mr Abe announced his resignation a year before his tenure, amid pandemic. His approval rating was mere 33% just before his resignation. Consumption tax hikes and mismanaged pandemic contributed to his falling popularity.

Mr Kuroda, on the other hand, wanted to regain public confidence towards central bank. Prior to Kuroda, the biggest failure of the central bank was linking deflation with declining real potential growth and passing the onus of it's healing on the fiscal authorities. Such stance decreased public's confidence on BOJ which amplified the issue and made deflation-fighting exercise worthless. Kuroda focussed on effective communication and aggressive monetary easing through innovative measures elaborated in the next section.

# MONETARY POLICY EVOLUTION IN JAPAN

Post-GFC, we have seen central bankers using 'unconventional monetary policy tools', quantitative easing (QE) being the major one. These tools became quintessential to those central banks whose policy rates are near zero and therefore cannot increase money supply by cutting interest rates further. However, BOJ was the first to test the uncharted waters of zero interest rates and QE.

In 2001, when the economy started decelerating post bursting of Dot-com bubble, BOJ adopted quantitative easing (QE) along with zero interest rate policy. It shifted the operating target from short-term interest rate (call-rate) to current account balances of financial institutions maintained with itself. It committed to this policy until inflation (core CPI) is stable at 0% or more (also known as forward guidance). These measures increased balance sheet size of BOJ, reduced long-term yields, helped commercial banks in writing off bad loans and stabilised financial markets. BOJ suspended QE and reset the operating target from current account balance to call rate in March 2006.

Post GFC, the bank slashed interest rates and continued with QE with an aim to support corporate financing as well as maintaining financial stability, which included swap agreements with other central banks, and purchase of government bonds, commercial papers and corporate bonds. Hiroshi Nakaso, Deputy Governor of BOI (2013-18), stated that most central bankers followed these four approaches after GFC: i) shifting the operating target from short-term rates to the longer-term rates; ii) influencing the risk premium through purchases of risky assets, commonly known as qualitative easing in Japan and credit easing in US; iii) removing the zero lower bound approach

through introducing negative interest rates. Sweden's Riksbank was the first to adopt negative interest rates in July 2009; iv) reducing real interest rates by influencing people's inflation expectations.

Until 2010, BOJ adopted first two approaches through Asset Purchase Program and forward guidance. However, these measures did not stimulate the economy and the prices as expected. In April 2013, it adopted all the four approaches through its qualitative and quantitative easing (QQE) program that included negative interest rates and committing to 2% inflation target and purchases of large-scale government bond and other assets like ETFs. The key change was shifting the operating target from overnight call rate to the monetary base. These measures in consonance with fiscal policy improved the output gap, corporate profits and employment conditions, and also pushed the wages and prices upwards.

However, the economy faced deflation again around 2016 due to multiple factors like collapse of commodity prices, economic recession in Japan and slowdown in emerging economies. This time, BOJ modified QQE by introducing 'QQE with Yield Curve Control (YCC)' in September 2016. It included two components: i) setting short-term interest rate at -0.1% and targeting long-term interest rate at 0% through market operations; and ii) inflation-overshooting commitment, where the bank commits itself to expand monetary base until the annual inflation rate is 2% and stays above the target in a stable manner. Due to this policy, short term as well as long term yields fell without having to purchase large quantities of government bonds like during QQE 2013 program.

Japan finally came out of deflation through 2018 and 2019 but could not reach annual

inflation target of 2%. In 2020, the country was struck with Covid-19 pandemic which dismantled most economic levers, pushing Japan into yet another deeper recessionary and deflationary phase. Currently, the bank remains focussed on increasing money supply through supporting corporate finance, active purchases of ETFs and REITs, and accumulating enough local and foreign currency funds.

# CONCLUSION

Although Japanese economy was struggling to reach its target, all glimmers of hope have now been shattered by Covid-19.
Although Abe's successor, Mr Yoshihide Suga would probably continue Abenomics, fiscal policy will remain under pressure owing to demand for higher fiscal stimulus, economic recession, increased unemployment, increased social security spending, low revenue generation avenues and high public debt. BOJ, on the other hand, needs to restart its mission of building inflationary expectations and might have to innovate another weapon in its policy armour.

Japan's fight for inflation would probably continue for more time now but it remains a guiding star for many countries. Greying population is a common trend in Europe and US, but its openness towards immigration, relatively higher fertility rates and higher investments have saved them from Japan-like situation for now. But in the post-Covid world, managing economies will be an arduous task.

We have seen above how various factors like demography, culture, and behaviours shape public reactions and expectations which directly or indirectly impacts policy outcomes. As economics and policy enthusiasts one cannot overlook these factors and therefore, it is imperative to understand their role and function in each policy matter in any country

of study.

# **ABOUT THE AUTOR**



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# UNIT ECONOMICS MATTER, SCALABILTY OF UNIT ECONOMICS MATTERS MORE...MATTER, SCALAL

### BY RAGHAV BAHL

HEAD OF INVESTMENTS, INDIA AT ALIBABA GROUP

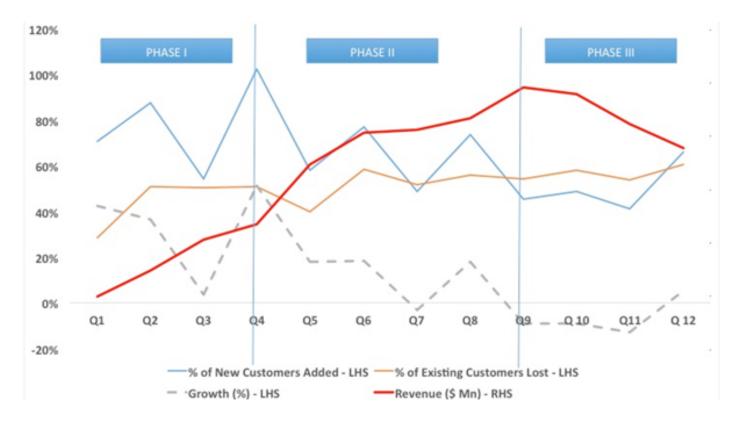
Before we jump to the example, let's define unit economics so that we are on the same page. UE has two components - CAC - consumer acquisition cost and CLTV – customer lifetime value. Truly valuable businesses that create I like entrepreneurs who think hard about the unit economics (UE) of their business from very early on in the post 'product - market fit' phase. Having said that, I love entrepreneurs who think not only about UE but also, the 'scalability of their unit economics'. Eliminating the jargon here, what I mean is that does the CEO think hard about how unit economics would evolve as the business grows? Is the management team geared towards testing UE scalability before putting precious resources (cash, human capital) behind rapid growth? I believe this is terribly important (as I demonstrate the same using the example of a public listed company) as hard lessons have been learnt by both public and private companies who scaled their businesses with a blind eye on the scalability of their unit economics – in essence, as they grew the business the unit economics suffered. Altering unit economics at scale is 100x more difficult (keep this in mind as I revisit

this below) than doing so early on and hence, losing sight here has resulted in catastrophic outcomes. The idea of this blog is to stress upon the importance of scalability of unit economics, suggest ways to test UE scalability before you actually put precious resources to grow the business and hopefully, discover pitfalls and set them right early on.

Sustainable equity value for shareholders have very large CLTVs and very low CACs – there is no exception to this rule!

- CAC is a how much do you spend to acquire a new customer
- CLTV is a function of how much you make in margins post all direct costs and how long you retain the customer. Customer retention health is often measured as % of customers lost or more commonly referred to as Churn (%)

The following charts describe the progress of a publicly listed company wherein the stock price has fallen off a cliff (high double digit drop since the company listed). The graph might look a little complicated at first but the following explanation should make it easy (if not, please let me know and I can think of an easier way of depicting the same)



Quick explanation of the graph below -

- Red Line represents \$ Mn revenues for the company. They are plotted on the RHS – (I have taken out the exact numbers on purpose)
- Blue Line represents the new customers acquired in the current quarter as a % total transacting customers in the previous quarter. Plotted on LHS
- Orange Line represents the existing customers lost in the current quarter as a % of total transacting customers in the previous quarter. Plotted on LHS.
- Grey Line depicts revenue growth which is the difference between the Blue and Orange lines. To illustrate this better, the new customers added in Q4 were 102% of the customers transacted in Q3 and the number of customers lost in Q4 were 51% of the customers that transacted in Q3 and hence, the revenue growth in Q4 over Q3 is 51%(assuming little or no change in spend per customer). Plotted on LHS.

# PHASE I - Q1 - Q4 - 'THE GOLDENPHASE'

As you observe above, Q1 – Q4 represents the golden period for the company. Revenue (red line) is growing at a fast clip. Growth (grey line) is being driven by the difference between new customers added as % of previous quarter's transacting customers (dark blue line) and existing customers lost as a % of previous quarter's transacting users (orange line). Company enjoys market leadership position. *Everybody is happy-the company raises more capital at crazy valuations – with this comes the pressure to grow faster!* 

# PHASE II - Q5 - Q9 - 'UNIT ECONOMICS CATCH UP'

Company pushes for growth – increases marketing spend, adds capacity. But growth is not responding as well as they would have liked – customers lost or Churn (%) remains high at 50-55% while the new customer addition is slowing down which means revenue growth is slowing down. The company responds through higher marketing spends which lifts the new customer acquisition but

churn is unrelenting in the business. I now go back to the point made earlier that altering unit economics at scale is 100x more difficult - imagine you have 100 transacting customers and 50% churn - you need to add 100 new customers to grow 50% – seems easy!. Now assume you have 100,000 customers and 50% churn, you need to add 50,000 customers to avoid de-growing - Phew! Churn takes over and revenue growth stalls. At this point, the company finds itself in an extremely difficult spot – the management needs to go back to the drawing board to understand and solve for for fleeing customers and also, understand the efficiency of new customer acquisition. Cash reserves are depleted with money spent on marketing. Public investors punish the stock! @UnitEconomicsCatchUp!

# PHASE III - Q10 - Q12 - 'BACK TO SOUARE ONE'

Company is in cash conservation mode trying to figure out unit economics! (back to square one) – churn remains high and as a consequence, company experience revenue degrowth.

## SO WHAT COULD YOU DO DIFFERENTLY?

Nothing rocket science! - the fundamental idea here is to be able to successfully experiment the scalability of your unit economics with a representative subset of your target market. This could be one geographic market or even with a particular target audience (based on past behaviour, demographics etc.) or a combination. Failing to scale unit economics in one geography, understanding the pitfalls and solving for them is far easier, cheaper and valuable in the long run. In the above example, 50% churn should have been arrested (maybe they did make an effort and failed). Having said that, if they did fail to arrest the 50% churn, they should have looked to dramatically reduce customer acquisition cost - this would have brought back the CLTV  CAC difference and allowed them to have healthy unit economics.

# **ABOUT THE AUTOR**



The above article has been taken from the blog "The Networth Effect" written by Mr. Raghav Bahl. The author is the Head of Investments, India at Alibaba

Group. The views expressed here are personal & do not necessarily reflect the views of any organization. For more articles authored by Mr. Raghav, please visit https://thenetwortheffect.com/



# ABENOMICS, ABE'S EXIT AND JAPANESE ECONOMY AMID CORONAVIRUS

### BY TANYA AGARWAL.

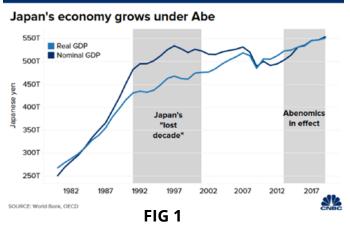
IIM CALCUTTA BATCH OF 2022, BBA(FIA) SSCBS'20

Japanese Prime Minister Shinzō Abe announced his resignation early September this year citing poor health. His set of policies, called Abenomics, have come under the spotlight again. Introduced to help the Japanese economy recover from the "Lost Decade" (1991 - 2001), the question is now

on how sustainable it will be in the face of a global pandemic. Using a combination of bold monetary policy, flexible fiscal policy and ambitious growth strategy to boost private investment, Abe bolstered Japan's stagnant economy. *Refer to Fig 1* 

# Following are the three main pillars of his approach:

• To make Japanese exports more attractive and generate moderate inflation (~2%),



additional currency, around 60-70 million yen, was printed.

- To achieve short-term growth and budget surplus in the long-term, he put the focus on new government spending programs.
- To make Japenese industries more competitive and to encourage private sector investments, he reformed various existing regulations. Some of them are corporate governance reform, making it easier for companies to fire ineffective workers, easing the process of hiring foreign staff in SEZs, implementing measures the help domestic and foreign entrepreneurs, and liberalizing the health sector. It also aimed at restructuring the pharmaceutical and utility sectors while modernizing the agricultural sector.

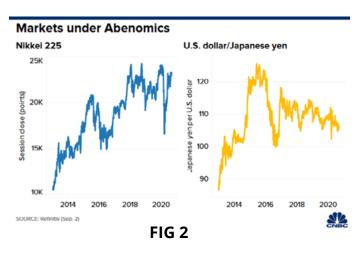
The linchpin of Abenomics, as described by economist Yoshizaki Tatsuhiko, was the Trans-Pacific Partnership (TPP) to make the Japanese economy *more competitive* through free trade.

# **EFFECT OF ABENOMICS**

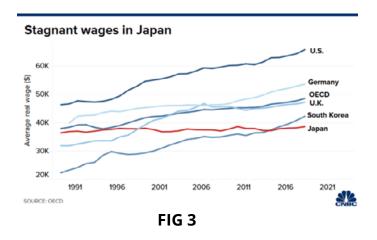
While Abe did help the Japanese economy recover, its size still falls short of around 600 trillion yen target set by Abe's government. However, his policies helped insulate the Japenese economy from the effects of COVID-19. However, according to the International Monetary Fund, Japan's GDP is

forecasted to decrease by 5.8% this year.

However, one area where Abenomics has undisputed victory is the large scale monetary easing by the Bank of Japan. Several steps, like asset purchase and yield curve control, helped to weaken the Yen but boosted stock prices, eventually accelerating the exports. *Refer to Fig 3* 



Buoyant stock market performance has led to stability in Yen and a significant increase in the profitability of large firms. However, this did not translate into an increase in household spending, leading to failure in achieving a 2% inflation target. *Refer to Fig 3* 



Nevertheless, the policy did bring an end to deflation in the economy. Japan is not the only economy facing this issue; other developed markets like the USA too are now seeing this challenge eye to eye. Refer to Fig 4

# Inflation misses target Chart show changes in the core consumer price index which excludes fresh food | Solution | Solut

The pandemic has contributed to further dampening of demand which may lead to deflation. Another way coronavirus is threatening the success of Abenomics is by tightening the hands of fiscal policy with burgeoning debt. One of the main pillars, increased government spending, had to be fueled by achieving a budget surplus, but the long term debt of Japan is only increasing. *Refer to Fig 5* 

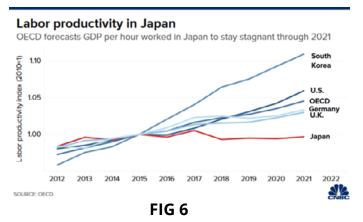
Japan's growing government debt

250
200
Greece
Italy
U.S.
U.K.

Germany

FIG 5

Finally, one area that Abenomics mostly left untouched is labour productivity issues. Fig 6



The significant challenges here include excessive bureaucracy and complex and undigitized admin systems.

# **WAY FORWARD**

Some of the goals of Abe's policies that remain unfinished include decreasing Japan's public debt and long-term structural problems such as excessive bureaucracy. His potential successor, Chief Cabinet Secretary Yoshihide Suga, has said he would push forward Abe's vision through Abenomics. However, the coronavirus has a limiting effect on drastic policy changes, thus slowing down any further reforms.

## **ABOUT THE AUTOR**



By: Tanya Agarwal, IIM Calcutta Batch of 2022, BBA(FIA) SSCBS'20

# EXPLAINER - YIELD CURVE CONTROL

### BY VARAD VYAPARI

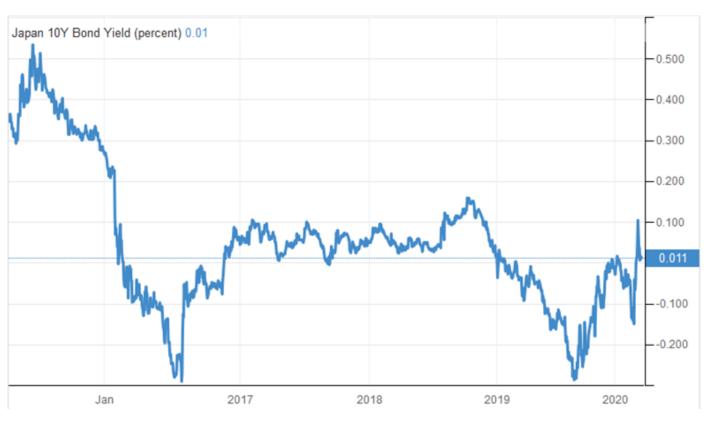
2ND YEAR MBA STUDENT AT IIM CALCUTTA

The debates about the effectiveness of QE (Quantitative easing) has led to the central bank and other economists exploring other alternatives. One of those is that of Yield Curve Control (YCC).

YCC enables the central bank to target specific yields corresponding to specific maturities and fix them as per their expectations/targets. Bank of Japan (BOJ) was the first to implement YCC in September 2016 when it targeted the overnight rate at -0.1% and the 10-year Japanese Government Bond (JGB) yield at 0%. This was to be achieved by

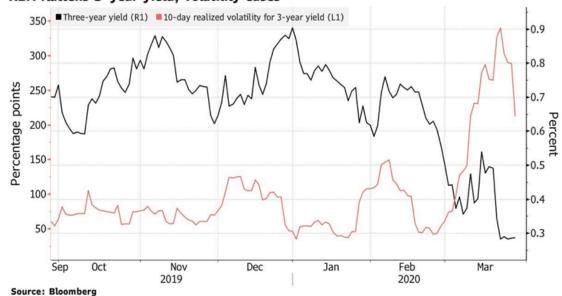
purchasing JGBs and lending at fixed rates. Japan has been plagued by low GDP and inflation growth rates since 1991. BOJ and the Japanese government have tried various stimuli including QE but to very less avail. YCC was implemented to specifically control the longer duration yields in order to keep the borrowing costs low to encourage economic activity and spending. The lower yields have helped Japan to cheaply fund its high fiscal deficits while carrying the world's highest debt/GDP ratio. YCC has also enabled BOJ to independent action while QE is largely a response to fiscal expansion

A few months ago, in response to the slowdown due to the COVID 19 pandemic, Reserve Bank of Australia (RBA) employed YCC to set a target yield of 0.25% on 3-year



Australian government bonds. The RBI too, through Operation Twist, deployed an indirect YCC mechanism by buying securities at specific maturities which helped keep the 10Y yield relatively unchanged even though federal borrowing soared. Other central banks have also shown readiness to use YCC as a tool to support and revive the economy. YCC enables swifter action than QE as the scale and timeframe of the bond purchases is relatively less uncertain thus increasing its attractiveness during times when imminent action is needed. Another advantage of YCC over QE is that if the bond yields organically fall in line with the targets, the central bank does not have to undertake massive bond purchases thus keeping the central bank balance sheets in check.

Command and Control
RBA flattens 3-year yield, volatility eases



There are many undesirable similarities too. Both YCC and QE can lead to certain scarcely avoidable market distortions. This is precisely why an emerging economy like India opted for indirect yield curve control to repose investors' confidence in its laissez faire policies amid rising fiscal debt. Another issue is that as central banks keep increasing their assets, flatter term structures make bond markets very tight and unattractive to investors and traders. YCC especially has

drastically decreased the trading interest in JGBs. Also, the effects of unwinding these assets (tapering) when economic growth starts picking up can lead to sudden spikes in yields as experienced during the Taper Tantrum of 2013 when yields shot up due to flash sale of US Treasury securities after Ben Bernanke, the then Fed Chair merely announced the possibility of the Fed tapering its QE program.

These negative externalities can thus have drastic repercussions further emphasizing that non-conventional policies should only be resorted to during desperate times with proper guidance in place to roll these policies back and not continue them while chasing the mirage of unsustainable growth.

Central banks around the world have however increasingly found it difficult to do so. David Plank. head of Australian economics at Australia & New Zealand Banking, presents a fitting "Hotel California" analogy - "That once you've started you can never leave."

### ABOUT THE AUTOR



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