

# Relevance of Quantitative Easing Model to Heal the Sick Indian Economy



R. Sarveswara Reddy, Ajjada Renuka, S. Nayamath Basha, Shaik Abdul Mazeed, O. Ayeesha

**ABSTRACT:** *The present situation of Indian economy is worse. The GDP growth rate is 5% which is very low compared to last five years trend. After a record fell down of short-term interest rates of commercial banks (below one percent), the Reserve bank of India has turned to quantitative easing (QE) to hold up economic growth. It is used by the government to amplify the supply of money in the economy. It leads to an increase in lending by commercial banks and spending by customers subsequently. On the other hand, these policies will boomerang greatly on economy and leads to extraordinarily high levels of inflation. If commercial banks fail to afford excess reserves, it may direct to unhinge in the money market. Simply it jeopardizes the entire economic system. To come out from this, Reserve Bank of India injects a fixed quantity of money into the economy by massive and unprecedented purchasing of financial assets from commercial banks and private entities. This leads to an increase in banks reserves. Quantitative easing is not a new word to the economic world; it is most popular from the times of great recession in US economy. There has been an explode of research on QE and its effects. Past studies tremendously agree that QE helps in ease financial conditions and there is no reason to doubt that it supports economic growth. It is not only very powerful in times of financial crisis, but also has a momentous effect in normal times. By and large, this research paper focuses on finding the reasons behind the slowdown of growth rate of Indian economy and provides the likely solutions to come out from the crisis.*

**Key Words:** GDP Growth Rate, Economic Crisis, Quantitative Easing, Reserve Bank of India.

## I. INTRODUCTION

The concept of quantitative easing has gain lot of momentum and importance in recent times. It has become an indispensable element in the economic system of any country.

It is one of the strategies adopted by Reserve Bank of India to induct new money into the country there by energizing the economy. It shows a greater impact on the economic growth rate. The RBI print or create more money to buy government securities from the market to lower the interest rates,

which show an adverse effect on financial institutions and force them to promote increased lending. If lending increases, the money circulation can automatically increases with same speed and tempo. Banks offer loans at very cheap or with nominal interest rates to businesses either to start or for expansion. On the other hand, it also encourages consumers to buy more necessities on credit basis as the interest rates are slashed down. In a nut shell QE promotes both consumption and investment.

## II. NEED FOR THE STUDY

The GDP growth rate for the current financial year is dull and stagnant (5%) in the June quarter compared to March quarter (5.8%), which is unprecedented in the history of Indian economy. In this troublesome time, The Reserve bank of India has to do the postmortem to find the reasons for financial sickness of economy. Generally there are two main reasons behind any economic crisis across the globe i.e. high interest rate and inflation. Now the causes for the present downfall in the pace of economic growth in India are also same. The only option to fuel the economy in this crisis times is quantitative easing because all other measures are failed to put the economy in the right track. In this research paper an attempt is made to prove that quantitative easing is the successful strategy/move in many of the countries while they faced economic crisis.

## III. REVIEW OF PAST STUDIES

Since 2010, an outsized amount of literature was found in evaluating straight effects of quantitative easing on economic crisis.

**Gagnon et al. (2011)** talk about liquidity or market functioning, channel for the diffusion of quantitative easing and lay down a mechanism for implementing in economy.

**Wright (2012)** finds that despite shocking results of quantitative easing on long-term interest rates and corporate bond yields, the results will perish really fast and growth rate can improve steadily.

**Christensen and Rosebush (2012)**, report shows that yields on longer-maturity bonds and other securities diminished on days when the Federal bank announced quantitative easing.

Manuscript published on 30 September 2019

\* Correspondence Author

**R. Sarveswara Reddy**, Research Scholar, Rayalaseema University, Kurnool-518004, Assistant Professor, Dr.K.V. Subba Reddy School of Business Management, Kurnool-518218, Andhra Pradesh.

**Ajjada Renuka**, Assistant Professor, CMR Engineering College, Medchal-501401, Telangana.

**Dr. S. Nayamath Basha**, Associate Professor, Shadan Institute for Computer Studies, Hyderabad-500004, Telangana.

**Shaik Abdul Mazeed**, Research Scholar (Part-Time), Yogi Vemana University, YSR Kadapa-516005, Andhra Pradesh.

**O. Ayeesha**, Assistant Professor, MarriLaxman Reddy Institute of Technology & Management, Dundigal, Hyderabad-500043, Telangana.

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an [open access](https://creativecommons.org/licenses/by-nc-nd/4.0/) article under the CC-BY-NC-ND license <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

## Relevance Of Quantitative Easing Model To Heal The Sick Indian Economy

Such effects are of short term in nature on market expectations later on it will shown a significant progress.

**Inman (2015)**, Quantitative Easing program was expanded as the medium-term outlook for growth and inflation in the deteriorated economic scenario of UK, partly as a result of growing concerns over the euro area economy.

### IV. OBJECTIVE OF THE STUDY

The linear objective of this research paper is to evaluate the impact of quantitative easing on the increased activities of lending by commercial banks and how these activities has contributed significantly to the economic growth.

### V. METHODOLOGY

To date, the enormous majority of QE purchases have been limited to government bonds, or government-

guaranteed bonds in the United States of America. The forecasted effects on the 10-year government bond yield of a QE purchases equivalent to 10 percent of GDP.

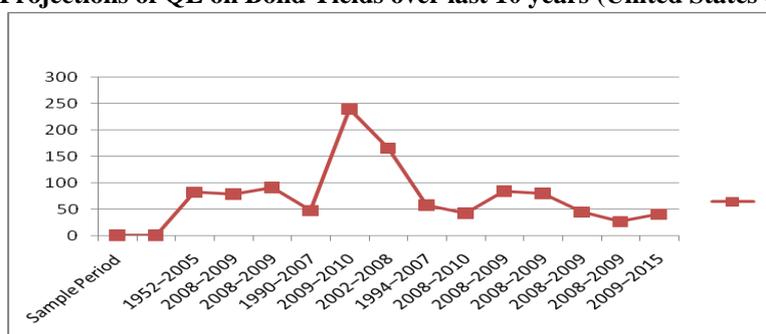
From the table-1 it is clear that a couple of studies on QE are event studies and time series analysis. Event studies would add up movements in bond returns when central banks of the different nations announce QE programs. Studies use different sizes of event “windows,” from 30 minutes to 3 days bracketing the announcements.

**Table-1: Projections of QE on Bond Yields over last 10 years (United States of America)**

| Financial Institutions      | Sample Period | Methodology        | Yield Reduction (basis points) |
|-----------------------------|---------------|--------------------|--------------------------------|
| Greenwood and Vayanos       | 1952–2005     | Time series        | 82                             |
| Gagnon, Remache and Sack    | 2008–2009     | Event study        | 78                             |
| Krishnamurthy and Jorgensen | 2008–2009     | Event study        | 91                             |
| Hamilton and Wu             | 1990–2007     | Affine model       | 47                             |
| D’Amico and King            | 2009–2010     | Micro event study  | 240                            |
| López-Salido and Nelson     | 2002–2008     | Weekly time series | 165                            |
| Li and Wei                  | 1994–2007     | Event study        | 57                             |
| Rosa                        | 2008–2010     | Event study        | 42                             |
| Neely                       | 2008–2009     | Event study        | 84                             |
| Bauer and Neely             | 2008–2009     | Event study        | 80                             |
| Bauer and Rudebusch         | 2008–2009     | Event study        | 44                             |
| Christensen and Rudebusch   | 2008–2009     | Event study        | 26                             |
| Swanson                     | 2009–2015     | Yield curve        | 40                             |

\* Source: (<https://research.stlouisfed.org/fred2/help-faq/>)

**Figure-1: Projections of QE on Bond Yields over last 10 years (United States of America)**



**Interpretation:** Often QE Programs shows a reasonable impact on financial markets by adding up the changes in yields generated by bonds. The following points are worth noticeable from the above table-1. Greenwood and Vayanos range the effect relative to the size of the Treasury market. The estimate here is based on the ratio of Treasury debt to GDP in 2015. These studies further differentiate between signaling effects and portfolio effects. The smaller estimate is for German bonds and the larger one is for

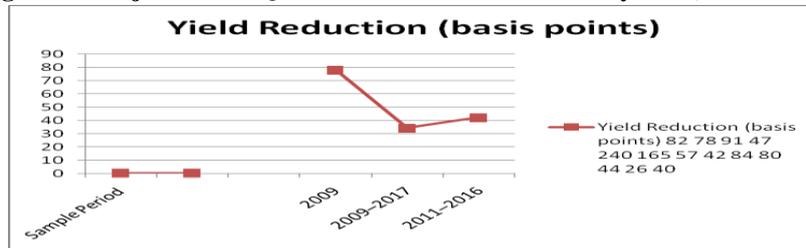
Italian bonds. The estimate is for an average of euro area bonds.

**Table-2: Projections of QE on Bond Yields over last 10 years (United Kingdom)**

| Financial Institutions                  | Sample Period | Methodology              | Yield Reduction (basis points) |
|---|---------------|--------------------------|--------------------------------|
| Joyce, Lasasosa, Stevens and Tong       | 2009          | Event study              | 78                             |
| Christensen and Rudebusch               | 2009–2017     | Event study              | 34                             |
| Churm, Joyce, Kapetanios, and Theodoris | 2011–2016     | International comparison | 42                             |

\* Source: (<https://research.stlouisfed.org/fred2/help-faq/>)

**Figure-2: Projections of QE on Bond Yields over last 10 years (United Kingdom)**



**Interpretation:** The above table reports the total effect of QE programs on bond yields. Few studies examine further and attempt to focus mainly on guidance about future short-term interest rates. The Significant factor of judgment enters into these projections, which totally

depends on other moves of treasury bonds at different maturity periods. As shown in table, Christensen and Rudebusch uncover comparatively tiny effects of QE.

**Table-3: Projections of QE on Bond Yields over last 10 years (Japan and Sweden)**

| Financial Institutions        | Sample Period | Methodology | Yield Reduction (basis points) |
|-------------------------------|---------------|-------------|--------------------------------|
| Fukunaga, Kato and Koeda      | 1992–2016     | Time series | 24                             |
| Middeldorp                    | 2013–2018     | Event study | 45                             |
| Altavilla, Carboni, and Motto | 2014–2018     | Event study | 44                             |
| Middeldorp and Wood (2016)    | 2018          | Event study | 41                             |
| De Rezende and Kjellberg      | 2018          | Event study | 68                             |

\* Source: (<https://research.stlouisfed.org/fred2/help-faq/>)

**Figure-3: Projections of QE on Bond Yields over last 10 years (Japan and Sweden)**



**Interpretation:** The other broad category of studies is time series analysis. In Japan and Sweden area, over a period of time a considerable growth can be observed in the listed financial institutions. There are 100 basis points in 1 percentage point. Majority of the studies represent an array of projections. The table visualizes the study’s preferred estimate if one exists; if not, it presents the midpoint of the range. For event studies, the normalization is based on GDP in the final year of the event.

## VI. CONCLUSION

Quantitative easing is directed to boost up the economy. QE strategy will be implemented by central bank of concerned nation, if and only if the economy is going through deflationary trend. It is done through buying government securities from the public and the banks at a very large scale which results in high liquidity in the market.

## Relevance Of Quantitative Easing Model To Heal The Sick Indian Economy

The working mechanism behind QE is as simple as that, where lending is done at a very low interest rate. It creates cheap money which encourages borrowings to stimulate the economy or to get out of recession. This cheap money is very much helpful for speculation and creates a bubble in the stock market, commodity market, bond market and the property market etc. There is great evidence that financial conditions of any nation's economy will become easy by QE bond purchases. Normal models of macroeconomics suggest that QE has a consequential positive effect on GDP growth rate and inflation. This is not only limited to periods of financial sickness but also in the general conditions.

QE is comparatively a very simple process in most of the economies of developed nations as they have a very strong bond market. Therefore when it has shown consistent results in the developed countries, it also works in the Indian scenario as our country also possesses a strong bond market. Hence it is advised to the government to consider the QE programs for curing the ill economy.

### REFERENCES

1. Altavilla, Carlo, Giacomo Carboni, and Roberto Motto. 2015. Asset Purchase Programmes and Financial Markets: Lessons from the Euro Area. ECB Working Paper 1854. Frankfurt: European Central Bank.
2. Bauer, Michael, and Christopher Neely. 2012. International Channels of the Fed's Unconventional Monetary Policy. Working Paper 2012-028A. Federal Reserve Bank of St. Louis.
3. Bauer, Michael, and Glenn Rudebusch. 2011. The Signaling Channel for Federal Reserve Bond Purchases. Working Paper 2011-21. Federal Reserve Bank of San Francisco.
4. Chadha, Jagjit, Philip Turner, and Fabrizio Zampolli. 2013. The Interest Rate Effects of Government Debt Maturity. BIS Working Paper 415. Basel: Bank for International Settlements.
5. Christensen, Jens, and Glenn Rudebusch. 2012. The Response of Interest Rates to US and UK Quantitative Easing. Economic Journal 122, no. 564: F385–F414.
6. Christensen, Jens, and Glenn Rudebusch. 2016. Modeling Yields at the Zero Lower Bound: Are Shadow Rates the Solution? Advances in Econometrics 35: 75–125.
7. Churm, Rohan, Michael Joyce, George Kapetanios, and Konstantinos Theodoridis. 2015. Unconventional Monetary Policies and the Macroeconomy: The Impact of the United Kingdom's QE2 and Funding for Lending Scheme. Staff Working Paper 542. London: Bank of England.
8. D'Amico, Stefania, William English, David López-Salido, and Edward Nelson. 2012. The Federal Reserve's Large-Scale Asset Purchase Programmes: Rationale and Effects. Economic Journal 122, no. 564: F415–F446.
9. D'Amico, Stefania, and Thomas King. 2013. Flow and Stock Effects of Large-Scale Treasury Purchases: Evidence on the Importance of Local Supply. Journal of Financial Economics 108, no. 2: 425–48.

### AUTHORS PROFILE



**R. SARVESWARA REDDY** Research Scholar, Rayalaseema University, Kurnool-518004, Andhra Pradesh Assistant Professor, Dr. KV Subba Reddy School of Business Management, Kurnool-518218, Andhra Pradesh  
**e-mail ID:** [saryumba@gmail.com](mailto:saryumba@gmail.com)



**AJJADA RENUKA** Assistant Professor, Department of Management, CMR Engineering College, Medchal-501401, Telangana. **e-mail ID:** [renuka.ajjada@gmail.com](mailto:renuka.ajjada@gmail.com)



**Dr. S NAYAMATH BASHA**  
Associate Professor, MBA Department, Shadan Institute of Computer Studies, Khairathabad, Hyderabad-500004, Telangana  
**e-mail ID:** [gandhi\\_basha@yahoo.co.in](mailto:gandhi_basha@yahoo.co.in)



[mazeed22@gmail.com](mailto:mazeed22@gmail.com),

**SHAIK ABDUL MAZEED**, Research Scholar (Part-Time), Yogi Vemana University, YSR Kadapa-516005 Assistant Professor, Dr. B R Ambedkar Institute of Management and Technology, Baghlingampally, Hyderabad-500044, Telangana. **e-mail ID:**



**O. AYEESHA**  
Assistant Professor, MarriLaxman Reddy Institute of Technology & Management, Dundigal, Hyderabad-500043, Telangana.  
**e-mail ID:** [ayesha.3355@gmail.com](mailto:ayesha.3355@gmail.com)