Working Paper No. 2018-01

India: Three and a Half Years of Modinomics

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Arvind Panagariya[1]

In May 2014, a new government led by Prime Minister Narendra Modi took office in India. In three decades, this was the first government to win an absolute majority in the Lok Sabha, the Lower House of the parliament. It was also the first time in India's history that the winning candidate had contested the national election predominantly on the platform of economic development. "Sabka Saath, Sabka Vikas," which translates as "Collective Effort, Inclusive Development," was the catch phrase Modi used to capture the imagination of the voters.

After three and a half years under what has come to be called Modinomics, where does the Indian economy stand? Although Indian print and electronic media ceaselessly run debates on different economic issues, we lack a unified account and assessment of the progress made by the government. The present paper attempts to fill this critical gap.

In Section 1, I begin with a brief account of the economy following the 1991 economic reforms with special attention paid to its state just before the Modi government took office. In Section 2, I discuss the overall performance of the economy including the GDP growth, macroeconomic developments and progress in attracting foreign direct investment. In Section 3, I offer an account of the key process and policy reforms introduced by the government. The discussion here

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shows that this has been a very active government, seeking change in wide variety of areas. In Section 4, I assess the criticisms of the government in three key areas: lack of robustness of growth; poor record of job creation; and ill effects of demonetization. In Section 5, I conclude the paper.

At the outset, I may note that while this is perhaps a fuller account of the three and a half years of the Modi government than available elsewhere, it is far from complete. In particular, to ensure that the paper is not unduly long, I have deliberately left out the areas of infrastructure, energy, agriculture, innovation, entrepreneurship, skill development and social sectors. Major developments have taken place in each of these areas but their coverage must await a separate paper.

1 The Legacy

The year 1991 was a watershed year in the economic history of India. That year, the country discarded its four-decade-old command-and-control model in favor of a pro-market development strategy. To be sure, the reform package included some bold reforms. For example, in one stroke, it put an end to investment licensing under which any significant private investment required a license specifying the product to be produced, its quantity and the location at which it will be produced. Similarly, it eliminated the import quota regime except in the case of final consumer goods under which import of a product required obtaining a license specifying the quantity of the product allowed to be imported. The reform package also genuinely opened the door to foreign investment, which had hitherto been permitted under extremely stringent conditions as a result of which hardly any foreign investment came into the country.

These major reforms in the 1991 package notwithstanding, the shift from the state-led to quasi-market-led development was gradual and spread over more than a dozen years. The existence of multiple layers of regulation in every conceivable area of policy and myriad bureaucratic controls coupled with India's contentious democratic polity meant that it took several years of sustained effort to put in place reforms necessary to generate significant supply response. The 1990s and early 2000s saw many of these reforms take root. As a result, beginning in financial year 2003-04, India finally transited into an 8% plus growth trajectory.[2] For nine years from 2003-04 to 2011-12, the real Gross Domestic Product (GDP) of the country grew at the annual rate of 8.2%.[3]

The bulk of the reforms that propelled India into this high growth trajectory were undertaken under Prime Ministers Narasimha Rao and Atal Bihari Vajpayee. The former served from 1991 to 1996 and the latter from 1998 to 2004. I have provided a detailed account of these reforms in my 2008 book, *India: The Emerging Giant*. In a nutshell, the reforms included opening the economy to foreign trade and investment; full current-account convertibility of the rupee meaning foreign exchange for imports of goods and services was made freely available; substantial liberalization of the capital account meaning that foreign investors could invest in India through a variety of instruments and Indian investors could borrow funds abroad more freely; end to investment licensing; allowing entry of private

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[2] Data in India are reported according to its financial year, which begins on 1st April and ends on 31st March. Therefore, financial year 2003-04 refers to the period from 1st April 2003 to 31st March 2004.
[3] GDP figures in this paper refer to what is reported as the GDP at market prices in the official statistics. Until recently, India reported the GDP at factor cost as its official GDP. But recently, it has switched to the practice of reporting GDP at market prices as its official GDP as recommended by the United Nations System of national Accounts.

companies in insurance, telecommunications and civil aviation, which had been public sector monopolies in the past; accelerated entry of private Indian and foreign banks in a sector otherwise dominated by public sector banks (PSBs); shift from controlled to market-determined interest rates; substantial rationalization of direct and indirect taxes; privatization of selected public-sector enterprises (PSEs); entry to large enterprises in numerous products previously reserved for exclusive manufacture by small-scale enterprises; and a new competition policy.

In May 2004, Bharatiya Janata Party (BJP) government of Prime Minister Vajpayee unexpectedly lost the parliamentary election to Congress-led United Progressive Alliance (UPA). The UPA served in office for ten years until May 2014. During these ten years, pro-market reforms received a major setback. To be sure, UPA did take some half-hearted measures qualifying as reforms during its first five-year term but it entirely abandoned them in the second term. It came to take high growth for granted and turned complacent. It chose to go for several populist measures that proved detrimental to sustaining the high growth.

Prominent among these measures were retrospective taxation, which greatly undermined investor confidence; reckless lending by PSBs on projects of dubious value, which eventually led to great weakening of their balance sheets; Land Acquisition Act of 2013, which made future land acquisition immensely costly and procedurally cumbersome; and systematic denial of environmental clearances to major infrastructure projects, which directly undermined growth. Breakout of multiple corruption scandals and general paralysis in decision-making in the central government reinforced the ill effects of these measures. Poor management of the exchange rate and 13 successive interest-rate hikes by the Reserve Bank of India (RBI) added fuel to the fire.

Between 2004-05 and 2007-08, fiscal deficit of the central government had been held down between 2.5 to 4% of the GDP. This fiscal discipline was lost in the subsequent years with the deficit escalating to 4.5 to 6.5% of the GDP between 2008-09 and 2012-13. Initially, in 2008-09, populist election-year spending such as farm loan waivers, hikes in salaries of government officials and the extension of a rural employment guarantee scheme from 200 poorest districts to the entire country raised the deficit to 6% of the GDP. Subsequently, rather than return to fiscal discipline, the government chose to maintain high expenditures on the pretext that it was necessary to combat ill effects of the global financial crisis. In reality, by late 2009, growth estimates were already showing signs of a steady recovery in growth making the fiscal expansion unnecessary and undesirable.

Predictably, these policy mistakes had serious negative effects on the economy. Beginning in the third quarter of 2010-11, growth rate fell for six consecutive quarters. With structural weaknesses having penetrated the economy deeply, even after bottoming out in the first quarter of 2012-13, growth did not recover in a robust manner. Based on the old GDP series in use at the time, the average GDP growth fell to 4.9% during 2012-13 and 2013-14, the last two financial years of the UPA. Later, when India shifted to the new GDP series, this figure was revised upward to 5.9%.

A major hike in oil price in the summer of 2008 and expansionary fiscal policy translated into double-digit inflation from 2008-09 to 2013-14. Alongside, the current-account deficit, which measures the difference between imports and exports of goods and services adjusted for remittances, ballooned to 4.3% in 2011-12 and 4.8% in 2012-13. With the RBI having abandoned the longstanding policy of managing the exchange rate and capital inflows being progressively liberalized, the United States dollar appreciated 26% against the rupee during the eleven months ending on 31st August 2013.

That the economy was sliding down rapidly was becoming apparent to India watchers. Referring to the slowing economic growth and political roadblocks to policy making, the Standard and Poor rhetorically asked in the title of a 2012 report, "Will India Be the First BRIC Fallen Angel?" In a similar vein, citing alarming macroeconomic indicators, an August 2013 story in the *Economist* concluded, "It is widely agreed the country is in its worst economic bind since 1991."

2 The Turnaround

It was under these difficult economic circumstances that the present government took office. Its immediate challenge was to restore macroeconomic stability and accelerate GDP growth. Going by the available estimates of various indicators, the government substantially met this challenge. While the scope for additional growth acceleration remains, an initial turnaround has surely been achieved.

During the three full financial years from 2014-15 to 2016-17, the GDP has grown at the annual average rate of 7.5%. This is 1.6-percentage points higher than the rate during the last two years of the UPA. It is also the highest among the major economies of the world. For the first time, India has surpassed China in terms of

GDP growth though, admittedly, it remains far behind the latter in terms of the levels of GDP and per-capita GDP.

In addition to achieving 7.5% growth, India has also seen the return of macroeconomic stability during the last three years. In spite of continuous pressures for large increases in expenditures by constituencies within as well as outside the government, the latter has stayed course on its fiscal consolidation plan. From 4.5% of the GDP in 2013-14, it has brought fiscal deficit steadily down to 3.2% in 2017-18. There have been no reversals along the way.

Early in its tenure, the government adopted a target of 4% inflation as measured by the Consumer Price Index (CPI) with 2-percentage point variation on either side of this target permitted. With this target at the center of monetary policy, the Reserve Bank of India (RBI) has successfully brought inflation down. It had stood at 10.1% in 2012-13 and 9.3% in 2013-14. During the three years of the present government, the rate has been successively brought down to 5.9%, 4.9% and 4.5%.

The current account deficit had also been high at 4.3% of the GDP in 2011-12 and 4.8% in 2012-13, though it did come down to 1.7% in 2013-14 under UPA. This important indicator has come further down to 1.3%, 1.1% and 0.7% in succession during the three years of the present government. The nominal exchange rate has been relatively stable with foreign exchange reserves rising from $312 billion in May 2014 to $380 billion in May 2017.

Foreign investors have reacted favorably to the improved economic environment. Total foreign direct investment (FDI) has risen from $36 billion in

2013-14 to $45 billion in 2014-15, $56 billion in 2015-16 and $60 billion in 2016-17. These figures compare with $118 billion worth of FDI in 2016 into China, which is now five times the Indian economy in terms of the GDP. Therefore, in terms of FDI as a proportion of the GDP, India has moved well ahead of China.

3 Process and Policy Reform

Not everyone agrees with this positive narrative of the Modi years. Indeed, polarized debates on the government's policies and accomplishments can be read each morning in Indian newspapers or viewed each evening on the Indian television. The latest of these debates was triggered by a decline in the growth during the first quarter of fiscal year 2017-18 to 5.7%. I will return to some of the more important of these debates below in Section 4.

Presently, in this section, I document the major process and policy reforms that the government has undertaken. While some of these reforms have yielded immediate returns towards raising the average GDP growth during the first three years to 7.5%, the impact of others, especially those of structural nature, will be felt only after three to five years. India's own experience testifies to the long lags between the introduction of structural reforms and their full impact on the economy.

As already noted, to ensure that the paper is not overly long, the discussion of process and policy changes in this paper is not exhaustive. In particular, it excludes areas such as of infrastructure, energy, agriculture, innovation, entrepreneurship, skill development, education and health.

3.1 Tackling Retrospective Taxation

The immediate tasks before the government upon taking office were to reassure investors and end the paralysis in the government.[4] During the last two years of the UPA rule, investors, especially of foreign origin, had been reeling under the fear of retrospective taxation. In 2012, the UPA government had amended the Income Tax Act of 1961 so as to empower it to assess large sums of taxes going back several years on companies. This had left foreign investors very nervous.

Therefore, one of the early acts of the government was to assure these investors that no new cases under the law would be opened up. In cases that had already been initiated by the UPA, the government took the judicious path of not pursuing them further once the High Court ruled in favor of the defendant. The result has been much more predictable investment climate in so far as taxation is concerned. The change has been instrumental in accelerating the growth of FDI in India.

3.2 Ending Bureaucratic Paralysis

The government also took early steps to end the paralysis in decision-making process that it had inherited. Environmental clearances were speeded up and the Prime Minister assured officers that they could take decisions without the fear of being charged with wrongdoing. He also intervened directly to improve coordination among different ministries. He established a system whereby the key ministry handling a particular issue makes a presentation to him with the top

[4] In an article published in this Journal soon after the Modi Government took office, I had written that ending retrospective taxation and bureaucratic paralysis were among steps crucial to jumpstarting the economy. See Panagariya, Arvind, "The Promise of Modinomics," *Foreign Affairs,* 10th June 2014.

bureaucrats of the other relevant ministries present. This allows him to sort out many inter-ministerial issues on the spot. The Prime Minister also works on a regular basis with the state Chief Secretaries to clear hurdles facing major projects. This approach has accelerated decision-making at the center and helped unblock a large number of stalled projects. For example, road ministry has seen 66 of the 73 stalled projects it had inherited from the previous government getting resolved.

3.3 Ease of Doing Business

The government has placed special emphasis on improving the ease of doing business. It has worked closely with states to cut red tape in area such as starting a business, issuance of construction permits, getting credit, protecting minority investors, paying taxes, enforcing contracts and resolving insolvency. The result has been much improved business environment with India moving from 142nd to 100th position between 2014 and 2018 in the World Bank's ease of doing business rankings. Indeed, business environment in the leading states such as Andhra Pradesh and Gujarat is far friendlier than reflected in this ranking since the World Bank collects all its data in Delhi and Mumbai, which rank less highly than these states in the Government of India's state-level rankings done according to criteria similar to those used by the World Bank.

3.4 FDI Liberalization

When the government came to office, foreign investors, especially those from the United States, considered a hike in the FDI cap in insurance from 26% to 49% as the litmus test of its will to reform. The government has not only delivered on this reform but gone on to open other sectors to foreign investors as well. It opened defense to foreign investors first setting the cap at 26% and then raising it to 49% through automatic route and 100% through approval route. The government has also permitted 100% FDI in marketing of food products produced in India; high-tech and capital-intensive activities in the railways; coffee, rubber, cardamom, palm and olive plantations; manufacturing of medical devices; e-commerce marketplace; and non-bank automatic teller machines.

3.5 Closure and Privatization of Public Sector Enterprises (PSEs)

After a lag of more than a decade, the government has initiated a program of closure of sick PSEs and privatization of those PSEs that do not serve a public purpose. Many sick PSUs have been entirely without any production activity whatsoever and yet have been kept alive by their respective ministries. As such, they have been a net burden on the exchequer. The process of their closure is complicated due to difficulties in the disposal of the land they own. Nevertheless, more than a dozen PSEs are now in advanced stages of closure. On the privatization front, the Cabinet has approved three lists of enterprises for strategic sales and put even Air India on the block. Unfortunately, however, key bureaucrats in the Ministry of Finance have been slow in moving the process forward, due to which no final sales have taken place as yet. But transactions advisers have been appointed for a number of PSEs and it is only a matter of time that outright sales of PSEs will be seen taking place.

3.6 Exit Policy

I have written for more than a decade that the process of exit of firms, especially large ones, is extremely complex and time consuming in India. Winding up of firms normally takes more than a decade and it is not unusual for the process to drag for two decades or longer. This difficulty of exit has serious implications for entry of new firms. Given the high exit barrier, potential entrants enter business only when they are nearly certain that they would survive. The present government has finally enacted the Insolvency and Bankruptcy Code of 2016, which allows winding up of firms in a time bound fashion much like the bankruptcy law in the United States. This law is now being used to bring to closure many of the non-performing assets of the public sector banks.

3.7 Direct and indirect Tax Reform

There has been progress in reforming both direct and indirect taxes. The lowest direct personal tax rate has been reduced from 10 to 5% with the view to discourage potential low-end taxpayers from evading tax payment and thus expand the tax base. A commitment has also been made to bring the corporate profit tax down to 25% from 30%. This change has already been put into practice for companies with turnover below 500 million rupees.

On the indirect-tax front, the Goods and Services Tax (GST) arguably represents the most important and politically difficult reform in India to-date. It took more than a decade of efforts by three different governments to complete and required a Constitutional amendment, several legislations and consensus among 29 states and the central government. For the first time in India's history, any given commodity or service is subject to a single tax rate nationally. The GST replaces numerous state and central tax by a single tax. This means that vehicles moving goods from one state to another no longer have to be stopped at the border for tax related matters. Though it has been widely criticized for its variegated structure across different commodities and services and for poor implementation, it remains a major accomplishment of the government. Within the democratic polity of India, no major reform is completed at one stroke. For example, trade reform was spread over nearly two decades and still remains incomplete. The same applies to the GST. With the major steps completed, a movement to fewer rates and better implementation can be achieved in the years to come. Some movement in this direction is already under way.

3.8 Reduction in Petroleum Subsidies

The government has made a concerted effort to bring down petroleum subsidies. Diesel and petrol prices were fully decontrolled from 1st January 2015. This only leaves kerosene and cooking gas subsidies as petroleum related subsides. Regarding cooking gas subsidy, the government has been increasing the price of gas cylinders by 4 rupees each month with the view that the subsidy will be entirely eliminated by the end of March 2018. There has also been substantial rationalization of kerosene subsidy with some states taking measures to become kerosene free. The total subsidy and under-recovery on petroleum products, which had stood at $2.25 billion in 2013-14, came down to $340 million in 2015-16.[5]

[5] See the press note by Press Information Bureau, Government of India dated 25th April 2016 and titled "Subsidy on Petroleum Products at http://pib.nic.in/newsite/PrintRelease.aspx?relid=141145.

3.9 Direct benefit Transfer using Aadhaar-based Verification

A major achievement of the government has been to rapidly spread the biometric identity program started by the previous government and known as Aadhaar. Today, with 1.1 billion Indians provided this identity, the coverage is almost universal except in the northeastern states. The government has been gradually spreading the use of the identity in the disbursement of social benefits via what is called the Direct Benefit Transfer (DBT) mechanism. A vast number of Centrally Sponsored Schemes including such major ones as the subsidy on cooking gas cylinders, sale of food grain at subsidized prices under public distribution system and payment of wages under the National Rural Employment Guarantee Act program are now being implemented through DBT mechanism. Biometric verification has meant that millions of ghost and duplicate cards that beneficiaries used to receive benefits multiple times in the past have been eliminated. According to the estimates provided by the government, savings attributable to DBT mechanism amounted to nearly $9 billion in 2016-17 alone.

3.10 Cooperative, Competitive Federalism

The government has also brought about a major change in the way the central government relates to states. In the past, the Planning Commission had exercised considerable influence over the allocation of developmental expenditures of the states through grants it gave the latter for their state plans. Accepting the recommendations of the Fourteenth Finance Commission, the present government

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I have converted the rupee figures in the press note into dollars using the exchange rate of 65 rupees per dollar.

replaced these grants by an increase in the share of the states in the central divisible pool of tax revenue from 32% to 42%. This change gave considerable freedom of expenditure to the states.

Alongside, the Prime Minister also replaced the Planning Commission by the National institution for transforming India or NITI Aayog with a markedly different mandate. As a result, the NITI Aayog has begun to play a catalytic role in intensifying both cooperation and competition among states. On the cooperation front, it identifies the best practices such as e-auction of agricultural produce in Karnataka, evidence-based policy making in Gujarat, school consolidation in Rajasthan and spread of broadband in Andhra Pradesh for adoption by other states. On the competition front, it has begun publishing outcome-based rankings of states in areas such as education, health and water.

Today, an intense healthy competition may be seen among chief ministers of different states in different areas. The NITI Aayog has also catalyzed reforms at the level of the state. For example, it has piloted a Model Land Leasing Act, which is being progressively adopted by different states to replace their antiquated tenancy laws adopted in the immediate aftermath of the Independence. The NITI Aayog has also promoted the reforms in marketing in agriculture and contract farming. These are areas in which the states have the exclusive right to legislate.

3.11 Assault on Corruption

In keeping with the promise of Prime Minister Modi during election campaign, the government has taken numerous steps to crack down on corruption beginning with the appointment of a Special Investigation Team on its first day.

Additional steps include enactment of a law regarding undisclosed foreign income and assets; amendment of the Double Taxation Avoidance Agreements with Mauritius and Cyprus; development of an understanding with Switzerland on getting information on bank accounts held by Indians in certain cases; amendment of the Benami Transactions Act; implementation of the Income Declaration Scheme 2016; demonetization whereby high denomination notes of 500 and 1,000 rupees lost their legal tender status overnight on 8th November 2016; and post-demonetization investigation of individual and company bank accounts and tax returns.

At the center, the government has ensured that no bribes are taken in the discharge of normal business. Transparent auctions have replaced bureaucratic allocations of various resources. The Prime Minister himself has assured public sector banks (PSBs) that unlike under the UPA, his government would not intervene in their lending activities in any form. These efforts have had visible success: whereas one corruption scandal after another had rocked the UPA, there have been no allegations of high-level corruption against the present government. While this positive record is widely acknowledged, there have been scathing criticisms of demonetization. I shall detail and evaluate these criticisms later in the paper.

3.12 Ease of Access to Services for Citizens

The government has also taken steps to improve the citizens' access to publicly provided services. It has introduced self-certification of copies of diplomas and degrees when applying for jobs. In the past, applicants had to find a senior government officer or a senior member of judiciary to have the copies of their diplomas and degrees certified, a rather costly affair especially for those residing in rural areas.

The government has also progressively moved the provision of numerous public services online thereby eliminating direct contact with officials, which is frequently the source of petty corruption. A digital application called Umang [Unified Mobile Application for New-age Governance] consolidates numerous services digitally provided by central, state and local administrations on a single platform. Currently, services provided by 39 entities including applying for passport; filing income-tax returns; paying various bills; accessing land records in certain states; accessing e-books and educational audios and videos; accessing agricultural extension services; and making appointments at government-run hospitals are available through Umang. Government has also created portal DigiLocker, which serves as a digital locker service and enables citizens to store 1 GB worth of official documents on the cloud. The service eliminates the need for carrying around documents in physical form.

3.13 Ending Open Defecation: The Swachh Bharat Mission

Though a discussion of social programs of the government is beyond the scope of this paper, the paper cannot afford to neglect mentioning briefly the Swachh Bharat Mission (SBM). In his first Independence Day speech, Prime Minister Narendra Modi announced the launching of the SBM beginning on 2nd October 2014, Mahatma Gandhi's 145th birth anniversary, and ending five years later on his 150th birth anniversary. The broad agenda of the SBM is a step jump in cleanliness in all its aspects in rural and urban India but its most important component is the end to open defecation. While efforts towards ending open defecation are not new, the progress achieved under the SBM is unprecedented. On 2nd October 2014, when the mission was launched, only 38.7% of rural households had toilets. By 2nd October 2017, this proportion had reached 71%. Though the program has been criticized on the ground that the existence of a toilet does not ensure its use, a recent survey by the government found that nine out of ten households with access to toilets are using them. The mission has genuinely caught on with officials at the state, district and lower levels of administration getting directly involved in bringing about behavioral change.

3.14 Budget-related Reforms

Many economists had argued for years that the distinction between plan and non-plan expenditures was artificial and counter-productive and should be discontinued. Plan expenditures had come to be seen as developmental expenditures and therefore more desirable and non-plan expenditure as current expenditures and therefore less desirable. This tilted the expenditures unduly towards plan expenditures. The reality, however, was that many of the large plan expenditures such as salaries of teacher and health workers were current expenditures while many non-plan expenditures such as those on law and order and judiciary had an obvious developmental angle. Keeping this in view, the present government has discontinued the distinction between plan and non-plan expenditures.

Similarly, many commentators had suggested for some time that there was no rationale for a separate budget for the railways. When the British started the practice, railways accounted for a very high proportion of the government expenditures but this was no longer the case. The government has acted on this suggestion as well and merged the railway budget with the general budget.

Finally, in the past, with the budget presented just a month before the beginning of the new financial year, allocations of expenditures to the states used to get delayed and valuable time for implementation was lost. With delays cascading over time, often states were unable to spend a large proportion of the funds allocated to them in the last quarter. To alleviate this problem, the government has begun the practice of presenting the budget a month earlier than in the past. This is expected to ensure that the central ministries are ready to disburse funds to the states and other spending agencies on the first day of the new fiscal year.

4 Criticisms and Response

Most commentators agree that the government has successfully placed the economy on a stable macroeconomic path. With threats of retrospective taxation and other arbitrary decisions receding into the background, investor confidence has returned. One indicator of increased confidence is the healthy growth in FDI. But the government is not without critics. Three criticisms stand out: growth is slower than the estimates by the Central Statistical Office (CSO); growth has been jobless; and the cost of demonetization has far exceeded its benefit. These criticisms require a close examination and response.

4.1 Growth is Slower Than the CSO Estimates

Early critics of the government argued that the official CSO estimates overstate GDP growth. The critique has two components: the new CSO methodology for estimating the GDP, introduced in 2015, has serious flaws; and the estimates do not match the ground reality.

In 2015, responding to complaints of various shortcomings of the old methodology of estimating the GDP, the Central Statistical Office (CSO) unveiled its new methodology. This methodology revised upward the growth rates based on the old methodology for years 2012-13 and 2013-14. It also pegged the advance estimate of the growth rate for the year 2014-15 at 7.4%. A debate was kicked off immediately with critics arguing that the new methodology overestimated growth rates.

Though critics have been highly vocal in pointing out flaws characterizing the new methodology, none has offered implementable solutions that would overcome these flaws. Nor have the critics argued that the new methodology represents a regress over the old one. A fair summary of various arguments is that the changes made by the CSO make improvements over the old methodology but there still remains substantial room for further improvement in the quality of data on which estimates are based.

It is also the case that critics provide no basis for their contention that the new methodology overestimates the GDP rater than underestimating it. Indeed, even if it could be established that the methodology overestimates the GDP, it does not automatically follow that it also overestimates the growth rate of the GDP. For this latter conclusion, it must be the case that the overestimation becomes proportionately progressively larger every year. Critics have come nowhere close to establishing this proposition. The inevitable conclusion is that the critics' claim that the CSO GDP estimates overstate growth is solely rooted in the dissonance they see between these estimates and their own subjective gloomier assessment of the so-called "ground reality." Any claims of overestimation of the growth rate on methodological grounds remain unsubstantiated.

But what can we say about the argument that the estimated growth rates are out of tune with the ground reality? Before I subject this argument to a critical examination, let me draw attention to an important relevant point that *The Economist* made a year ago when reviewing the book *Progress* by Swedish economic historian Johan Norberg. *The Economist* wrote, "People are predisposed to think that things are worse than they are, and they overestimate the likelihood of calamity. This is because they rely not on data, but on how easy it is to recall an example. And bad things are more memorable."[6] An examination of the evidence on which critics base their assessment of the ground reality reveals that there is much truth in this proposition.

Critics defend their gloomier assessment of ground reality by pointing to the poor performance of one or more sectors of the economy and to low rates of corporate profits, corporate investments and total investment. Invariably, these assessments have been subjective and partial with no effort at a comprehensive assessment of the economy. Worse yet, some of the indicators of poor performance that critics offer turn out to be false when assessed against hard statistics.

True, some of the legacy sectors such as textiles, steel and construction, which suffer from stressed balance sheets on account of bad investments made

[6] See *The Economist*, 3rd September 2016, "Better and better," pp. 70-71.

during the UPA years, have been performing poorly. But the poor performance of these sectors had already been incorporated into the GDP estimates for the last two years of the UPA. What has changed is the performance of sectors that did not suffer from stressed balance sheet. It is the superior performance of sectors such as two wheelers, automobiles, machinery sector, chemicals, pharmaceuticals, software and other services sectors that has pulled the overall growth rate up by 1.6 percentage points on average during the last three full years.

As regards the claims of low rates of corporate profits, corporate investment and the total investment, systematic data prove them false. In a recent article, I have documented that both corporate profits and corporate investment as proportions of the GDP have been higher on average in 2014-15 and 2015-16 than during years in which the economy had grown faster than 8% on average.[7] Systematic evidence also fails to support the claims by critics of a collapse in the total investment. True, the total investment as a proportion of the GDP has seen a small decline but it remains healthy at 30% of the GDP or higher.[8]

The release of GDP growth estimate for the first quarter of 2017-18 (April-June 2017) had reignited the debate on growth in the Indian media. At 5.7%, this growth happened to be the lowest quarterly growth under the present government. Moreover, it represented the fifth consecutive quarterly decline. These facts led to a return of the critics to the center stage of policy debate. The more extreme among

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[7] Data for 2016-17 are not yet available.

[8] For details, see Panagariya, Arvind, "Floor hasn't fallen through: Don't go by 'feel', economic data call for measured rather than precipitate action," Times of India, September 25, 2017 at https://blogs.timesofindia.indiatimes.com/toi-edit-page/floor-hasnt-fallen-through-dont-go-by-feel-economic-data-call-for-measured-rather-than-precipitate-action/ (accessed on 20th October 2017).

them went on to assert that the economy was in a “tailspin” and that India may be heading for a “major depression.” The criticisms assumed special significance because a former Finance Minister of the Vajpayee government had been at its forefront.

There are good reasons to view this round of criticisms with skepticism as well. In January-March 2016 quarter, GDP growth had touched the high of 9.1%. With the medium-term annual average growth rate at 7.5%, odds were heavily in favor of a downturn in the quarterly growth from this high rate. As such the fall in the growth rate in the following two quarters to 7.9% and 7.5% was hardly surprising. The main issue is why the decline continued for another three quarters instead of reversing itself. The explanation for this fact lies in two back-to-back supply-side shocks to the economy: demonetization in November 2016 and firming up of the expectation that the implementation of the GST would begin on 1st July 2017.

Demonetization on 8th November 2016 had rendered illegal 86% of the currency in circulation in the form of 500- and 1,000-rupee notes. The fact that despite such a large shock growth rate fell from 7.5% in July-September 2016 quarter to just 7.0% in October-December 2016 quarter and 6.1% in January-March 2017 quarter testifies to the resilience of the economy, not its weakness.

Under normal circumstances, most likely, the growth rate would have experienced recovery during April-June 2017 quarter. But the second shock—firming up of the expectation by the end of March 2017 that the implementation of the GST was imminent—prevented this recovery. Recognizing that no GST rebate will be forthcoming on indirect taxes paid on the inventory accumulated prior to 1st July 2017, retailers, wholesalers and manufacturers temporarily stopped or slowed down inventory accumulation. The result was a sharp reduction in manufacturing growth, which largely accounted for the fall in the overall growth to 5.7% during the quarter.

The CSO has now released the GDP growth estimate for July-September 2017 quarter placing it at 6.3%. The decline in the growth rate has thus been reversed and going by the commentary by analysts at various banks and other institutions, this trend is expected to continue. Nearly all forecasters place the growth rate for full fiscal year 2017-18 at 6.5% or thereabouts and for 2018-19 well above 7%.

4.2 Growth has been Jobless

The second major criticism of the government policies has been that they have produced jobless growth. In offering this criticism, critics have relied on two main sources of information: media reports of worker layoffs and employment creation estimates from a quarterly enterprise survey conducted by the Labor Bureau of the Ministry of Labor and Employment. Both sources of information suffer from serious problems.

Few informed analysts would disagree that any conclusion regarding job creation on the basis of media reports is patently unscientific. Indeed, since bad news sells a lot better than good news, it is job losses that get disproportionately greater play in the media. If one were to systematically analyze media reports, one is likely to find that in every year, job losses have outnumbered job additions. Correct evaluation requires scientific surveys that take into account all job creation and all job losses. Any claims based solely on news reports must be rejected.

As regards enterprise survey, in India, it too suffers from serious problems. This is because a very large proportion of the labor force in India is either self-employed or employed in very small enterprises that typically do not form a part of the enterprise surveys. Therefore, if self-employed workers find a job in a larger enterprise covered by the enterprise survey, no change in the total employment would have taken place and yet the survey would report increased number of jobs. Symmetrically, if a worker is laid off from a large enterprise and finds employment in a small enterprise that is not covered by the enterprise survey, we would conclude that the number of jobs has fallen despite no net change in this number.

The Labor Bureau enterprise survey on which many critics rely suffers from this and other flaws. It is confined to enterprises with 10 or more workers in a selected set of sectors. In India, these enterprises account for a very small proportion of employment. Even when we include all sectors, according to the Sixth Economic Census, conducted in 2013-14, enterprises with 10 or more workers account for only one-fifth of non-agricultural workers. By excluding the self-employed and employees of enterprises with less than ten workers each, the survey fails to cover four-fifth of non-agricultural labor force. This exclusion means that nothing from the survey allows us to say anything about the total employment.

The survey has other problems. Until December 2015, the selection of first-stage units in this survey was purposive rather than random. As a result, any inferences from sample units for the population are rendered statistically invalid.

Survey reports have noted this flaw but critics have paid no heed to it. Furthermore, the coverage of sectors and states in the survey has changed over time. This is particularly true between surveys conducted before and after 2015. Had the selection been done on a random basis, this would not matter. But this not being the case, comparisons of estimates over time are wholly invalid.

Claims of jobless growth by critics thus lack valid empirical foundations. In an economy in which disproportionately large number of workers are self-employed or employed in very small enterprises, only large-scale household surveys, which extend to the entire population, can offer reliable estimates of employment and unemployment. India has conducted these surveys every five years since 1972-73 and they do not support the hypothesis of jobless growth. Based on usual principal status of the worker, these surveys consistently place unemployment rate at or below 5% with limited variation over time. For instance, the unemployment rate was 4.9% in 2013-14 and 5% in 2015-16.[9]

Simple economic logic supports the hypothesis that rapid growth including that under the present government could not have been jobless. As a purely accounting matter, growth in the GDP is the result of growth in inputs and productivity. Studies overwhelmingly show that in the best of times, productivity growth does not contribute more than 3-percantage points to GDP growth. Therefore, a substantial proportion of the 7.5% GDP growth experienced during the

[9] The most complete and comprehensive estimates of employment and unemployment in India come from household-based large-scale Employment-Unemployment Survey (EUS), which the National Sample Survey Office (NSSO) has conducted approximately every five years since 1972-73. The EUS uses the population census as the sample frame and therefore covers the entire population. Although the last NSSO EUS was conducted in 2011-12, the Labor Bureau has been conducting a similar large-scale household survey with some modifications to the survey design approximately annually since 2010.

last three years has to have been contributed by growth in capital and labor. Recognizing that growth in capital has seen a slight deceleration during the past three years, as a matter of pure arithmetic, labor input growth could not have been any slower than during the earlier years of rapid growth.

Criticisms of jobless growth are thus seen to be without sound empirical or logical foundation. But it deserves noting that though the unemployment rate in India is low, the country does suffer from a serious long-term underemployment problem. Given the limited availability of social safety nets, nearly all adults in India must engage in some economic activity to survive. But there is not enough economic activity to genuinely employ most workers full-time at what is conventionally considered the normal level of effort. Therefore, often two or more workers are found performing tasks that one worker working full time at the normal level of effort could perform. As an example, if a plumbing job is to be done, frequently, two or more workers would show up. And as one of the workers performs the job, the others simply watch him do it.

To put the matter differently, a longstanding problem afflicting India since before Independence has been the lack of rapid growth in high-productivity, high-wage jobs for low-skilled or unskilled workers. In nearly all countries that have achieved rapid transformation in the post-Second-World-War era, such as Singapore, Taiwan, South Korea and China, these jobs have been created by export-oriented labor-intensive industries such as apparel, footwear, furniture and other light manufactures. With these industries highly fragmented, far too many workers in India remain self-employed or employed in tiny enterprises where their labor is grossly underutilized. Growth in the country has been driven by capital- and skilled-labor-intensive sectors such as auto, auto parts, two wheelers, machinery, petroleum refining, telecommunications, pharmaceuticals, information technology and finance, which create few jobs for the unskilled or low skilled. Consequently, underemployment of a disproportionately large part of the workforce inherited at Independence continues. This is a key weakness needing urgent redress.

4.3 Demonetization

I have alluded earlier to demonetization as one of the several measures that the government took to combat corruption. On 8th November 2016, the government discontinued legal tender status of two largest-denomination currency notes, Rs. 500 and Rs. 1,000, which accounted for 86% of the total currency in circulation at the time. Those holding the currency notes were asked to bring them to banks by certain date with banks authorized to convert small sums into new currency notes and take the rest as deposits with proper records of the transactions maintained. The logic behind the measure was that those holding unaccounted wealth in these large-denomination currency notes will not be in a position to explain the source of their wealth and therefore would choose not bring their currency holdings to banks. In this way, unaccounted wealth held in large-denomination currency notes would be expunged.

In the event, nearly all currency returned to the banking system. There are reports that those with unaccounted wealth in the discontinued currency notes found a variety of avenues to legally channeling them into the banking system but this remains to be verified. For initial several weeks, demonetization produced long queues at the banks. Because it took three months to adequately remonetize the economy, there was some dislocation of economic activity.

Commentators have offered three main criticisms of demonetization: (i) It led to substantial inconvenience to people who had to stand in queues at banks for long hours for several weeks; (ii) Economic activity was dislocated leading to a decline in the growth rate; and (iii) Because nearly all discontinued currency notes returned to the banking system, the objective of combating black money was not fulfilled.

In evaluating these criticisms, let me begin by noting that the government had surely anticipated that demonetization would produce long queues for some weeks. It took that risk in the belief that public at large was supportive of the government's resolve to combat corruption. That belief turned out to be true. In a country where queues for movie tickets or for collecting subsidized food grain at government shops can lead to arguments and squabbles, the long queues for weeks together triggered hardly any such incidents. The common man strongly welcomed the fact that a leader had finally come along who was willing to frontally attack corruption and the corrupt. The elite, who see an insult in having to stand in any queue, may have been appalled by those queues but the common man was happy that this time around the rich too had to stand alongside them to deposit their money and exchange old currency for new. The decisive victory of the party of the prime Minister in the Uttar Pradesh elections, which followed soon after, strongly suggests that people welcomed his assault on corruption.

In a similar vein, the government also understood that some temporary dislocation of economic activity would take place in response to the withdrawal of 86% of the cash from the economy. What is remarkable, however, is how limited this dislocation turned out to be. During two full quarters immediately prior to demonetization, growth had successively declined to 7.9% and 7.5% from 9.1%. During the quarter in which demonetization took place and the one that followed it, growth rate fell to 7% and 6.1%, respectively. These declines were far below what nearly all critics had predicted immediately following the announcement of 8th November 2017.

The first two criticisms mentioned above are, thus, greatly overstated. The crux of the matter, therefore, is whether demonetization achieved much success in moving the fight against corruption forward. Here critics have seized on the fact of the bulk of the currency having returned to the banking system as decisive evidence that no progress in this regard was made.

But this is a non sequitur since the lack of return of unaccounted cash to the banking system was only one among many avenues through which demonetization could have helped curb black money. While this avenue did fail to pen out, at least three other avenues opened by demonetization have successfully contributed to the fight against unaccounted wealth.

First, though nearly all money has returned to the banking system, it has returned with the name of the owner attached to it. The latter must now explain the source of his or her money. Those who have engaged in suspicious activities to hide the source are now under investigation and face the prospects of prosecution.

Already, the Ministry of Corporate Affairs has identified and de-registered 224,000 companies and disqualified 310,000 individuals for future directorship of companies as a result of the investigations triggered by demonetization. The Income Tax Department is undertaking similar investigations. As a part of its "Operation Clean Money," it has identified 100,000 "high risk" cases of tax evasion and picked 20,572 tax returns for detailed scrutiny.

Second, a vast volume of unaccounted money is held in real estate. In one stroke, demonetization cut the real estate prices by a quarter. This amounts to the destruction of 25% of the black wealth held in real estate.[10] The price decline and demonetization also make future accumulation of unaccounted wealth in real estate less attractive.

Finally, demonetization and investigations launched in its aftermath have sent a strong signal that the present government is fully committed to combating corruption and will not hesitate to take tough actions. This fact by itself promises to act as a deterrent to future corruption. With the effective cost of accumulation of black money thus having gone up, on the margin, we must see a decline in such accumulation in the future.

While contributing to the central objective of combating corruption in this manner, demonetization has produced several additional positive side effects. The currency in circulation has come down by 12 to 13% of its level on 8th November 2017 and the currency-to-GDP ratio now stands at a level similar to those in

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[10] Some critics respond that this has been harsh on honest house owners who have also seen the value of their houses decline by 25%. This is a false argument since the original increase in the housing prices itself was the result of large investments of unaccounted wealth in the real estate.

comparable countries. The amount of direct tax revenue collected and the number of income-tax payers have seen a significant rise. There has been a step increase in digital payments. Stone pelting in Kashmir and left-wing extremism in eastern states have witnessed a sharp decline due to the blow demonetization administered to financing of these activities.

5 Concluding Remarks

In this article, I have provided the first comprehensive evaluation of the economy during the first three and a half years of the Modi government. The article begins by summarizing the economic conditions under which the government came to office. It argues that having inherited an economy with low growth, high inflation and large fiscal deficit, the government has successfully stabilized it. During the first three years of the government, the economy grew 7.5% on average compared with 5.9% during the last two years of the predecessor UPA government.

The article goes on to summarize the key process and policy reforms introduced by the Modi government. This discussion shows that within three and a half years, the government has been able to considerably widen and deepen reforms. While some of these reforms have yielded immediate results, the effect of many structural reforms such as the Insolvency and Bankruptcy Act and the Goods and Services Tax will be genuinely realized over the longer time horizon of three to five years. The article also subjects to critical examination the arguments by critics in three areas: overestimation of growth rates, job creation and demonetization.

To limit the paper to a reasonable length, I have not discussed the progress made in infrastructure, energy, agriculture, innovation, entrepreneurship, skill development and social sectors. Nor have I discussed the reforms that the government must undertake during its remaining term and subsequently should it return to power following the 2019 parliamentary elections.[11] In the following I briefly touch on some of these reforms.

First and foremost, the government must advance and hopefully complete some of the reforms already in the pipeline. These include privatization of public sector enterprises that do not serve any public purpose including Air India; clean up of the non-performing assets (NPAs) and recapitalization of public sector banks; passage of the National Medical Commission Bill, which aim to breath new life into medical education both quantitatively and qualitatively; passage of the related bills on homeopathy and Indian medical systems education; and financial and academic autonomy to better-performing universities and colleges.

Once the government acquires majority in the Upper House of the Parliament, it must also get down to the business of wholesale reform of labor laws. This is necessary even if not sufficient to create an employment-friendly regime in the country. Also important is to revisit the reform of the pernicious land acquisition act that the government inherited from the UPA. Once NPAs have been dealt with and banks recapitalized, the government must consolidate public sector bank into five or six and gradually privatize them. A roadmap of how precisely the two tasks should be accomplished must be drawn. Many of the future reforms will have to be done at the level of the states and cities and this would require continued

[11] The recently brought out Three Year Action Agenda: 2017-18 to 2019-20 provides a comprehensive discussion of the desirable reforms in nearly all areas of policy. The interested reader must consult this document. It may be downloaded from http://niti.gov.in/content/three-year-action-agenda-2017-18-2019-20.

cooperation between the central government and states and between states and cities. Urbanization is going to be India's biggest challenge in the years to come and both central and state governments must cooperate to meet it.