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Numbers don't lie: There is a real jobs crisis

Surjit Bhalla's claim that "a large part of the so-called jobs crisis is because of demand for government jobs, not jobs per se" is without foundation. The NEETs have grown by a massive 20 million in just four years (2011-12 to 2015-16). Plus, there is the 10 million actual increase in the labour force. Just over four years, India should have created at least 7.5 million new non-agri jobs each year (which India had managed to create over 2004-05 to 2011-12); it actually created only 2.2 million

WE ARE REPEATEDLY told by government economists that there is no jobs crisis. Surjit Bhalla, till recently part of the PM's Economic Advisory Council, noted not to worry about slow growth of jobs, based on his employment estimates ('Gender equality & government jobs', FE, January 5; goo.gl/pLACMA).

People work, but don't have enough work to survive (let alone save for old age) on one source of livelihood, so they have at least one 'principal' means of livelihood, and one or more additional 'subsidiary' employment. Hence, Indian labour force surveys give us estimates of both principal and subsidiary status employment. Together, they constitute what is called the usual principal and subsidiary status employment (UPSS). A

foremost problem in Bhalla's calculations is reliance only on principal status employment, and the omission of subsidiary status, in his calculation of employment, labour force and unemployment figures. His estimates under-

Employment, unemployment, labour force and NEET (UPSS)

Employment and unemployment estimates	2004-05	2011-12	2015-16	2017-18*
Agriculture	266.2	230.4	225	222.4
Manufacturing	53.1	58.9	48.3	44.1
Non-manufacturing	29.6	55.2	61	64.2
Service	107.5	127.3	140.8	148.4
Total employment	456.5	471.8	475.2	476.9
Unemployed	10.7	10.3	16.5	21.8
Labour force	467.2	482.2	491.7	496.6
NEET (Age group 15-29 years)	70.3	83.9	103.3	115.6

Note: Estimates for the year 2017-18*, are projected figures under the assumption that all else remains unchanged. NEET = Not in education, employment or training. Source: Authors estimation using NSS and LB unit data

state the size of India's labour force and are generally misleading.

Estimates based on both principal and subsidiary status suggest the following (see the accompanying table).

The overall labour force (LF) is not growing at 12 million per annum. Never in India's history (except 1999-2000 to 2004-05 due to a baby boom in the early 1980s) has the LF grown by 12 million. So what appears to Bhalla like a discovery, most labour economists in India should have known for at least seven years.

Instead, it had grown by 2.1 million per annum during 2004-05 and 2011-12, and about 2.4 million per annum during post 2011-12 periods. The sharp increase in school enrolment (which he recognises).

The volume of open unemployment was almost constant at around 10 million until 2011-12, but (what Bhalla is innocent of is that) it increased to 16.5 million by 2015-16. Increased open unemployment post the 2011-12 periods suggests that those in education prior to 2011-12 would start searching for non-agricultural jobs—but did not find them.

Worse still, it shows up in a sharp increase in unemployment rate (UR) of the educated (based on our estimates of Annual Survey, Labour Bureau). The UR rose over 2011-12 to 2016 from 0.6% to 2.4% for those with middle education; 1.3% to 3.2% for class 10 pass; 2% to 4.4% for class 12 pass; 4.1% to 8.4% for graduates; and 5.3% to 8.5% for post-graduates. Even more worrying, for those with technical education, UR rose for graduates from 6.9% to 11%, post-graduates from 5.7% to 7.7%, and for vocationally trained from 4.9% to 7.9%. The more educated you are, the more likely you will be unemployed.

Bhalla has argued that "during those seven UPA years (2004-05 to 2011-12), only 10 million jobs were provided, or just 1.4 million per annum." Earlier, Bhalla claimed ('Politics and fake GDP analysis', FE, December 1, 2018; <https://goo.gl/rQPZhm>) that "...the lowering of GDP growth

2004-05 to 2011-12 was entirely expected. Primarily because of the surprise (sic) low employment growth between 2004-05 and 2011-12." For 2004-05 to 2011-12, he erroneously claims that NSSO data "reveal" a total job gain of "only 9 million."

Bhalla seems to believe all kinds of jobs, including in agriculture, are 'jobs' to be valued. For an economy at India's stage of development, an increase of workers in agriculture (that took place over 1999-2004) is a structural retrogression—in a direction opposite to the desired one. Between 2004-05 and 2011-12, the number of workers in agriculture fell sharply, which is good—for the first time in India's economic history. Until then, the absolute numbers working in agriculture had increased (even though the share of employment in farming was falling, slowly). Similarly, youth (aged 15-29 years) employed in agriculture fell from 86.8 million to 60.9 million (or at the rate of 3 million per annum) between 2004-05 and 2011-12. However, after 2012, youth in agriculture actually increased to 84.8 million till 2015-16 and even more since then (as CMIE data would attest). Bhalla is clearly innocent of such nuances. Job growth is lower in recent years than over 2004 to 2014.

Let us now deal with Bhalla's claim that only 1.4 million jobs were provided during 2004-05 to 2011-12 (or just <10 million total). Yes, that is true only if you deduct from total job growth in all sectors, those leaving agriculture (the less agri-workers is a good thing for the workers, agriculture and economy as a whole). What really matters for India at our stage of development is the growth in non-agricultural jobs. During that period, 51.2 million non-agri jobs were created, or 7.3 million per annum.

By contrast, post-2012, only 1.2 million per annum (or 4.8 million total) non-agricultural jobs were created until 2015-16, and then 1.75 million (3.5 million total) are likely to have been created (all other things remaining the same) till 2017-18.

What is most worrying is that manufacturing jobs actually fell in absolute terms, from 58.9 million in 2011-12 to 48.3 million in 2015-16, a whopping 10.6 million over a mere four-year period. This is consistent with the slowing growth in the Index of Industrial Production (IIP, which consists of manufacturing, mining, electricity). IIP had risen from 100 in 2004-5 to 172 by 2013-14 (in the 2004-05 series), and from a base of 100 in 2011-12 in the later series to 107 in 2013-14, but only rose to 125.3 in 2017-18. Slower industrial production recently is also suggested by other indicators (slower credit offtake, lower plant load factor). Declining manufacturing jobs is indicative of stalled transformation of the Indian economy.

What is tragic is the growing number of educated youths (age 15-29 years) who are "Not in Employment, Education and Training (NEET)". This number (which was 70 million in 2004-05; see table) increased by 2 million per annum during 2004-05 and 2011-12, but was growing by about 5 million per annum from 2011-12 to 2015-16, and if that later trend continued (as there is evidence it has) we estimate it would have increased to 115.6 million in 2017-18.

These NEET and unemployed youths together constitute the potential labour force, which can be utilised to realise the demographic dividend in India.

Bhalla's claim that "a large part of the so-called jobs crisis is because of demand for government jobs, not jobs per se" is, therefore, without foundation. There is a real crisis. Also, the NEETs have grown by a massive 20 million in just four years (2011-12 to 2015-16). Plus, there is the 10 million actual increase in the LF. In other words, just over four years, India should have created at least 7.5 million new non-agricultural jobs each year (which India had managed to create over 2004-05 to 2011-12); it actually created only 2.2 million. This is not counting the new non-agricultural jobs needed for agricultural workers wanting to leave agriculture; this number fell as construction growth fell sharply in the last few years.

● BLANKET DRUG PRICE CAP

How it does more harm than good

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The dream of quality healthcare, with blanket price cuts, seems distant

INDIAAIMSTO provide "affordable healthcare to all" by pursuing landmark reforms. In one such initiative, the National Pharmaceutical Pricing Authority (NPPA) fixed prices of drug-eluting stents (DES) and bare-metal stents (BMS) at ₹27,890 and ₹7,660, respectively. Does fixing prices make healthcare affordable? Yes. But is affordability all the Indian healthcare system needs?

The bigger picture: We must not forget that the Indian medical industry comprises only 1.7% of the world market. We are still significantly import-dependent. When the government capped prices of heart stents, high-end stents by leading global medical device companies started disappearing from the shelves. Where does that lead us to? A policy that deters foreign investment in this market does more harm than good. The two practices—fostering innovation and slashing prices—do not meet the goal of accessibility of quality healthcare. It leaves a patient in a confused state whether to be ecstatic or worried about the price cuts? Moreover, I find it quite shocking that we now have a blanket price for all kinds of stents, even though they vary as per the quality and patient needs. Before capping such an integral product in the medical sector, we should understand the basics.

Are all stents the same?

No. They vary as per safety, efficiency and deliverability in line with different patient needs. For instance, low-end and middle-end stents are used for simple blockages. But for complex blockages and for high-risk patients, we need high-technology stents.

A blanket price for cardiac stents is restricting the entry of quality and innovation in the market. I fear that patient safety is at stake with optimum quality stents disappearing from the domestic market.

Addressing the changing patient profiles

As no two stents are suitable for the same cardiac condition, why should their individual merit be priced in the same category of prices? New generation stents come with cutting-edge technology and target patient-specific needs; DES are coated with drugs to prevent re-narrowing of arteries. Depending on thickness, some stents are designed to give more radial strength for tough regions where stent expansion is key to ensuring long-term success. On the other hand, thinner stents can easily reach any part of the vessel and are comparatively less invasive.

Price-capping categorised all stents (both branded and unbranded) into a "one-size-fits-all" principle. This approach is not suitable for treating diverse patient profiles. Although the intent to make healthcare affordable is noble, it cannot substitute the need of the hour—the access to superior quality medical devices for better patient outcomes. As a doctor, I believe that fostering innovation took a nosedive when global research-based companies were forced to withdraw superior quality stents from the market. For instance, a covered stent can be expensive, but prevent complications like dysfunctions in an emergency procedure. Unfortunately, it has disappeared from the market after price capping.

Achieving access to healthcare is one thing, achieving access to superior quality healthcare is quite another. At a time when the world is adopting newer technologies to treat coronary artery diseases, we must invest in innovations rather than stalling a patient's right to choose a stent best suited for their condition. In the current scenario, the dream of quality healthcare, with blanket price cuts, seems distant. Price cuts can have exponential drawbacks on the road to patient safety and innovation. We need a conducive environment, where all stakeholders join hands and work towards keeping the dream of access to superior quality healthcare alive—an environment where policy decision should be based on the value of superior quality of technology. Healthy competition among medical device manufacturers would benefit patients with reduced costs. What we need is quality and efficacy, more than blanket price control.

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ONE HAS TO RECONCILE with reality. People, in general, are sceptical towards technological changes, be or personal lives. While they profess to lack vision, to see how these new technologies they are resisting could make their lives a bit easier. Today, technological innovations can disrupt entire industries or more. Blockchain is one such technology that is pegged to modernise digital infrastructure, thereby helping in reorganising data and assets. Across industries, blockchain solutions have become the buzzword for solving complex problems due to blockchain being decentralised, distributed, traceable, immutable, validated and verifiable. To this effect, according to the Blockchain Enterprise Survey, almost 65% of large enterprises—defined as those who employ a minimum of 10,000 staff—are actively engaged in blockchain deployment. As mentioned, though blockchain solutions are helping solve problems across industries, what we are not equipped for are the risks interlinked with these solutions.

Smart contracts based on blockchain are expected to reduce cost of transactions across industries, hence enticing corporates and governments. Potential

A framework for auditing blockchain

It's a must in today's digital and interconnected world

KUNAL PANDE

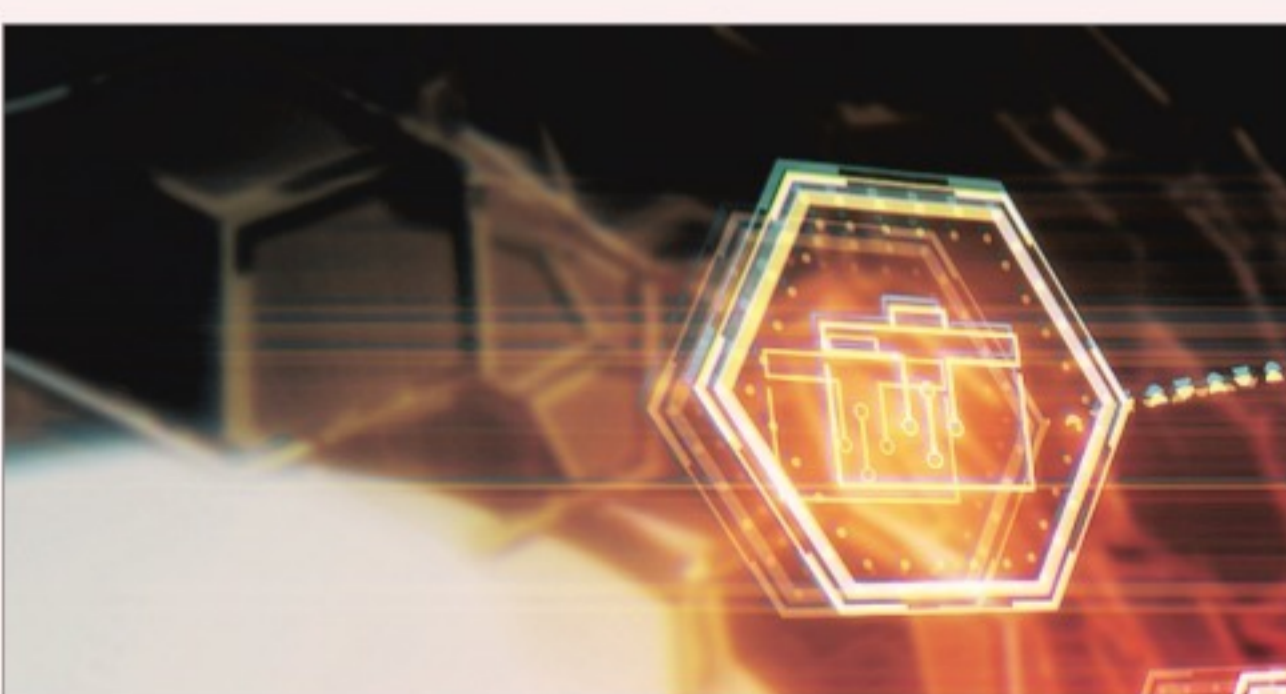
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application of blockchain is not just limited to finance, it ranges across a variety of sectors, right up to making an agricultural supply chain more efficient. Today, businesses around the globe, from big to small across each industry, are spending significant time and resources on blockchain solutions. Governments across the world, too, are now leveraging blockchain and the many advantages it has to offer.

That blockchain technology presents major opportunities for several sectors is rather apparent; however, it is not a fool-proof technology. Still at a nascent stage

of deploying blockchain, many organisations across industries are unaware of growing threats that can impact its security. Recent incidents such as Parity hack, Enigma hack, Decentralised Autonomous Organisation (DAO) incident and Bitfinex breach have made it clear that attackers can exploit this technology.

For example, in the healthcare sector, blockchain technology can be used to streamline the sharing of electronic medical records between patients and healthcare providers. Here, unencrypted personal health information (PHI) published in global transactions may put the sensi-



tive information at risk, leading to regulatory and legal concerns. Also, access to medical records requires a patient's private key, and as the patient is the only owner of the key, losing it implies losing access to the entire medical data. Furthermore, blockchain technology's irreversibility makes it difficult to implement the 'Right to be Forgotten', hence a patient would not be able to have the right for the erasure of his/her PHI. Such a scenario calls for an audit framework comprising: key generation and decommissioning, maintenance and governance, logging and auditing of key usage, management infrastruc-

ture, traceability and version control, and hash algorithm management.

Also, there are risks pertaining to commercially sensitive data transactions on blockchain platform. For instance, on a public blockchain in supply chain, any member of the public can obtain a full copy of the whole transaction history and use it without restriction. In case of a private blockchain, the information is shared among all the participating nodes, but if competitors are present on the same blockchain, they may be able to discover the commercial-in-confidence information stored in the blockchain platform,

thus putting sensitive data at risk. Lack of a governance model for blockchain, therefore, may lead to unresolved disputes over incorrect transactions or cross-border transaction flows.

Other concerns remain with respect to ownership, governance, dispute resolution, security and privacy around smart contracts, and the blockchain-based platforms themselves. The risks are amplified due to the absence of a central regulator or governing body to deal with disputes when they arise. Traditional models of audit fail to take into consideration many of the risks associated with blockchain-enabled processes, and hence the need for understanding the specific set of unique risks and development of an evolved auditing approach specifically for blockchain-enabled solutions.

To sum up, as blockchain continues to build significant momentum and the reality sets in, organisations cannot turn a blind eye to security and risk management any longer. While business executives are leading the way in utilising blockchain, they simultaneously need to re-examine processes and functions that have remained static for decades. Leveraging an effective audit framework could provide a solution to harness and mitigate a number of the unique risks that blockchain brings to the table.