

An Analysis of Indian Labour Regulations and Their Impact

Rachit Wadhwa

ABSTRACT

India has a huge labour force. Over several decades, many laws have been enacted by the central as well as the state governments to protect the interests of the workers. This has resulted in a multitude of labour laws in the country which is often alleged to disincentivize the entrepreneurs and the manufacturing establishments leading to a demand for reforming the Indian labour laws. Various empirical arguments with reference to the manufacturing sector have been advanced to support the simplification of labour laws and bringing more flexibility in the Indian labour market. This paper provides an overview of the various labour acts under the central government. For an overall macroeconomic view, data from the RBI is used to analyze the performance of the Indian manufacturing sector in the light of these laws. Using ASI data for various years, this study tries to evaluate the relative importance of the labour-intensive sector and capital-intensive sector in the Indian economy. The paper also examines whether the newly passed labour codes overcome the shortcomings of the existing acts. A detailed state-level analysis is also done using the labour ecosystem index. The study finds a strong positive association between the index values and the future growth in gross state domestic product. From the state level comparison, it becomes evident that a comprehensive set of labour market reforms must focus not only on labour laws but also on the various factors affecting employment and employability.

Keywords: labour laws, manufacturing sector, labour reforms, labour ecosystem, India

1. Introduction

“Is it possible that our best intentions for labour are not actually met by laws that sound progressive on paper but end up hurting the very workers they are meant to protect?”

- Dr Manmohan Singh

Labour is a fundamental factor of production. Laws related to labour are enacted to protect workers' interests. At the same time, it is essential to ensure that these laws do not discourage any manufacturing or entrepreneurial activity. In India, there are several laws with the best intention to protect labour rights. However, some of these laws are criticized to be contributing to labour market rigidities and preventing the emergence of large-scale

labour-intensive manufacturing firms. We analyze the prevailing scenario in the Indian manufacturing sector in the context of the central labour laws in section 2.

Since states can not only amend the central acts but also pass their own laws, the inter-state variations in labour regulation provide a platform to see how far it is correct to blame labour laws for the performance of the manufacturing sector. We focus on the entire labour ecosystem while comparing the states, i.e., instead of just analyzing the labour law environment, we also take into account several factors affecting the demand and supply of labour. This is done using the Labour Ecosystem Index in section 3.

Between 2019 and 2020, four new labour codes have been passed by the Government of India to simplify archaic laws and give a boost to economic activity. Since labour reforms are not just about increasing flexibility but also providing security to workers, we briefly review the four codes to see whether the workers' rights have not been compromised in the name of giving incentives to the businesses in section 4.

Labour markets are one of the most important factor markets to ensure the smooth functioning of the economy. By reviewing the central labour laws and state labour ecosystems, this study aims to check for any relation between the Indian labour regulations and relevant economic variables like GDP/GSDP and manufacturing sector output.

2. Labour Laws and the Manufacturing Sector

In India, there is a three-fold distribution of legislative powers. The three lists are Union list (only central/union government makes laws relating to subjects mentioned in this), State list (only the state governments make laws relating to subjects mentioned in this) and Concurrent list (both the central and the states can make laws relating to subjects mentioned in this). Labour belongs to the concurrent list. With the laws of both the central and state governments combined, the total number of labour laws in India is approximately 200 (Bhagwati & Panagariya, 2012). Table 2.1 gives an overview of the various labour acts under the central government.

Table 2.1: A Summary of Central Labour Acts

S. No.	Name of the Act	Long Title	Main Features
1.	THE EMPLOYEES' COMPENSATION ACT, 1923	Provide for the payment by certain classes of employers to their workmen of compensation for injury by accident.	- Provides social/financial security for the workmen who suffer employment injury, occupational death, etc. - Applies to establishments listed in Schedules II and III of the said Act but excludes establishments covered by the Employees' State Insurance Act.
2.	THE TRADE UNIONS ACT, 1926	Provide for the registration of Trade Unions and in certain respects to define the law relating to registered Trade Unions.	- Under this Act, the trade union is an association either of employers or employees or of independent workers. - It is formed on a continuous basis. - All kinds of interests – economic, political and social of its members are ensured by these unions. - The members of the trade union achieve their objectives through collective action and group effort.
3.	THE PAYMENT OF WAGES ACT, 1936	Ensure regular and prompt payment of wages and prevent unauthorized	Every employer must pay wages to all the employees that he employs. Every establishment with an excess of 1,000 people shall pay

		deductions and arbitrary fines from the wages. It also regulates the rate of payment for overtime work.	the wages within 10 days of work done. And all remaining employers shall pay the wages within 7 days. The act requires that wages should be paid to all employees without deduction of any kind except those authorized under this Act. • • Obliges every person responsible for Wage Payment to fix periods in respect of which such wages shall be payable. No wage period shall exceed one month.
4.	THE WEEKLY HOLIDAYS ACT, 1942	Provide for the grant of weekly holidays to persons employed in shops, restaurants and theatres.	• It ensures that every shop shall remain entirely closed on one day of the week and that day should be decided by the shop keepers formally. • The act grants weekly holidays to workers employed in shops, theatres, and restaurants without any deduction of wages.
5.	THE MICA MINES LABOUR WELFARE FUND ACT, 1946	Constitute a fund for the financing of activities to promote the welfare of labour employed in the mica mining industry.	• Mandates to deposit the proceeds of the duty of customs recovered during the month after deduction of the expenses, if any, for collection and recovery to Mica Mines Labour Welfare Fund on the last day of each month or as soon thereafter as may be convenient. • Allows the use of funds for purposes such as improvement of public health and sanitation,

			educational facilities, water supplies to the mica mine workers, etc.
6.	THE INDUSTRIAL EMPLOYMENT (STANDING ORDERS) ACT, 1946	Require employers in industrial establishments formally to define conditions of employment under them.	- It requires employers to formally define terms and conditions of employment under their establishments. - This Act applies to all those establishments where a minimum of 100 workmen have been employed.
7.	THE INDUSTRIAL DISPUTE ACT, 1947	Make provision for the investigation and settlement of industrial disputes, and for certain other purposes.	- By providing mechanism and procedure for the investigation and settlement of industrial disputes by reconciliation and arbitration, the act secures industrials peace and harmony. - It prohibits strikes and lockouts during the pendency of conciliation, adjudication settlement. - Industrial disputes can be referred to dispute tribunals either by the state government or by an agreement of parties related to the dispute.
8.	THE MINIMUM WAGES ACT, 1948	Provide for fixing minimum rates of wages in certain employments.	- It lays down the procedure for fixing minimum wages and for the appointment of advisory committees and boards. - The working hours under this Act for adult are fixed at 48 per week.

			• If any worker is employed for extra time then the wage paid to him should be double the normal wage. • The act aims to ensure access to basic needs, health and comfort for an employee. • The wages should be given according to the work done. • It ensures a decent living standard for workers. • In case the employer-paid wage is less than the minimum wage, the Act provides for a summary procedure for recovery of the balance and penalties.
9.	THE EMPLOYEES' STATE INSURANCE ACT, 1948	Provide for certain benefits to employees in case of sickness, maternity and employment injury and to make provision for certain other matters in relation thereto.	• Requires employees drawing wages up to a certain limit in establishments covered by this Act to be insured. Obliges the employer to make certain contributions in relation thereto. Requires the employer to register himself under the ESI Act and maintain prescribed records and registers in addition to the filing of forms with the concerned authorities.
10.	THE FACTORIES ACT, 1948	Regulate the working conditions in factories, to regulate health, safety welfare, and annual leave and	• It fixes the maximum hours of work at 48 per week and also limits work without a day of rest to 10 days. • The workplace should be kept clean and hygienic.

		enact special provision in respect of young persons, women and children who work in the factories.	• The factories should be fully fenced to ensure the safety of workers. Allowing children to work in hazardous and confined areas is not allowed. It provides the maximum hours of work for women at 9 hours per day. Women are prohibited to work between 7 pm and 6 am.
11.	THE PLANTATION LABOUR ACT, 1951	Provide for the welfare of labour and regulate the conditions of work, in plantations.	• The act applies to any land used for growing tea, coffee, rubber, cinchona or cardamom or any other land which measures 5 hectares or more and in which 15 or more workers have been employed on any day in the past 12 months.
12.	THE MINES ACT, 1952	An Act to amend and consolidate the law relating to the regulation of labour and safety in mines.	• This act applies to coal and mines workers and ensures their safety, health, and welfare. It prescribes the duties of the owner as managing mining operations and working conditions in mines. • The act prohibits work exceeding 9 hours a day and more than 48 hours a week. There must be at least 1 day of rest in the week. • In every mine, the first aid boxes should be provided for exigencies.

			- In mines, women are not allowed to employ in belowground work. - In case of occurrence of an accident, the owner of the mine shall inform such authority and within such time as may be prescribed.
13.	THE EMPLOYEES' PROVIDENT FUNDS AND MISCELLANEOUS PROVISIONS ACT, 1952	Provide for the institution of compulsory Provident Fund, Pension Fund and Deposit Linked Insurance Funds for the benefit of eligible employees in factories and establishments.	- Applies to every establishment employing twenty or more persons. - Places a liability on the employer and employee to make certain contributions to the funds mentioned after obtaining the necessary registrations. Requires maintenance of prescribed records and registers and filing of forms with the concerned authorities.
14.	THE WORKING JOURNALISTS AND OTHER NEWSPAPER EMPLOYEES (CONDITIONS OF SERVICE) AND MISCELLANEOUS PROVISIONS ACT, 1955	Regulate certain conditions of service of working journalists and other persons employed in newspaper establishments.	Lays down special provisions in respect of certain cases of retrenchment and payment of gratuity to working journalists. Specifies the working hours and allowed leaves.
15.	THE WORKING JOURNALISTS (FIXATION OF	Provide for the fixation of rates of wages in respect of working journalists	Constitutes a Committee to fix rates of wages in respect of working journalists.

	RATES OF WAGES) ACT, 1958	and for matters connected therewith.	
16.	THE EMPLOYMENT EXCHANGES (COMPULSORY NOTIFICATION OF VACANCIES) ACT, 1959	Provide for the compulsory notification of vacancies to employment exchanges.	- For every public sector establishment, the employer must notify any vacancy in any job in that particular firm to the prescribed employment exchanges. This Act doesn't apply to certain vacancies. Examples include - domestic service, unskilled office work, employment which has a total duration of fewer than three months, etc.
17.	THE MOTOR TRANSPORT WORKERS ACT, 1961	Provide for the welfare of motor transport workers and to regulate the conditions of their work	- It is obligatory to register, under this Act, for all eligible employers. The act prohibits work for more than eight hours a day and fortyeight hours in any week for adult motor transport workers. - The employer has to provide the prescribed medical facilities to its employees.
18.	THE MATERNITY BENEFIT ACT, 1961	Regulate the employment of women in certain establishments for certain periods before and after child-birth and to provide for maternity benefit and certain other benefits.	- Every woman is entitled to the payment of maternity benefit. This amount is to be based on the average daily wage rate for the period she remains actually absent. The maximum length of the period is prescribed as 12 weeks. - Every employer is supposed to prepare and maintain such registers, records and muster rolls in the prescribed manner.

19.	THE PAYMENT OF BONUS ACT, 1965	Provide for the payment of bonus to persons employed in certain establishments on the basis of profits or on the basis of production or productivity and for matters connected therewith.	- The act ensures that every employer needs to pay a bonus to every employee that he has employed. - The minimum amount of bonus is fixed at 8.33% cent of the wage earned by the employee during the accounting year or 100/- rupees, whichever is higher. - In both conditions, loss or gain, the bonus should be paid.
20.	THE BEEDI AND SIGAR WORKERS (CONDITIONS OF EMPLOYMENT) ACT, 1966	Provide for the welfare of the workers in beedi and cigar establishments and to regulate the conditions of their work and for matters connected therewith.	- If any person intends to use any place or premises as industrial premises, then he/she shall make an application in writing to the competent authority under this Act. The license granted under this Act would be valid for one financial year and should be renewed every financial year. - If any employee is discharged or retrenched without any reasonable cause, then he/she may complain to the competent authorities.
21.	THE CONTRACT LABOUR (REGULATION AND ABOLITION) ACT, 1970	Regulate the employment of contract labour in certain establishments and to provide for its abolition in certain	The Act applies to the establishment where at least 20 workers are employed even for one day during the preceding 12 months as Contract Labour. If the establishment is not registered or if the contractor is not licensed, then the contract

		circumstances and for matters connected therewith.	labour shall be deemed to be the direct workmen and the Principal Employer or the Establishment shall be liable for the wages, services and facilities of the contract labour, etc. - The act prescribes imprisonment for a maximum of 3 months and a fine of 1000/- for contravention of its provisions. The act protects the workers' interests in terms of wages, hours of work, welfare, health, and social security. The employer should provide basic necessities to the workers at the workplace.
22.	THE PAYMENT OF GRATUITY ACT, 1972	Provide for a scheme for the payment of gratuity to employees engaged in factories, mines, oilfields, plantations, ports, railway companies, shops or other establishments and for matters connected therewith or incidental thereto.	- The employer is entitled to gratuity payment at the rate of 15 days' wages for every year of completed service. This is subject to an aggregate amount of rupees 10 lakhs. - The employer is also supposed to obtain and maintain an insurance policy to fulfil his/her obligation towards gratuity payment.
23.	THE LIMESTONE AND DOLOMITE MINES LABOUR	Provide for the levy and collection of a cess on limestone and dolomite for the	Levies a cess for this Act on specified production of limestone and dolomite in any mine.

	WELFARE FUND ACT, 1972	financing of activities to promote the welfare of persons employed in the limestone and dolomite mines.	Allows the use of proceeds in the Limestone and Dolomite Labour Welfare Fund for purposes such as improvement of standards of living, sanitation, water supplies, etc.
24.	THE BONDED LABOUR SYSTEM (ABOLITION) ACT, 1976	Provide for the abolition of bonded labour system with a view to preventing the economic and physical exploitation of the weaker sections of the people and for matters connected therewith or incidental thereto.	- Any bonded labour system which exists before the commencement of this act stands abolished. After this act's commencement, no person can make any advance or compel any person to provide his labour which would come under the preview of the bonded labour act. - Any contract, instrument or agreement that binds any work or services of any person or his family members or dependents will be considered void.
25.	THE IRON ORE MINES, MANGANESE ORE MINES AND CHROME ORE MINES LABOUR WELFARE CESS ACT, 1976	Provide for the levy and collection of a cess on iron ore, manganese ore and chrome ore for the financing of activities to promote the welfare of persons employed in the iron ore mines, manganese ore mines and chrome ore mines and for	Levies a cess for Iron Ore Mines, Manganese Ore Mines, and Chrome Ore Mines Labour Welfare Fund on the production of iron ore, manganese ore, and chrome ore in any mine.

		matters connected therewith or incidental thereto.	
26.	THE IRON ORE MINES, MANGANESE ORE MINES AND CHROME ORE MINES LABOUR WELFARE FUND ACT, 1976	Provide for the financing of activities to promote the welfare of persons employed in the iron ore mines, manganese ore mines and chrome ore mines.	- Constitutes a fund called the Iron Ore Mines, Manganese Ore Mines and Chrome Ore Mines Labour Welfare Fund. - Allows the use of proceeds in the Fund for purposes such as improvement of standards of living, sanitation, water supplies, etc.
27.	THE BEEDI WORKERS WELFARE CESS ACT, 1976	Provide for the levy and collection, by way of cess, a duty of excise on tobacco issued for the manufacture of beedi.	Levies a cess for the purposes of the Beedi Workers Welfare Fund Act.
28.	THE BEEDI WORKERS WELFARE FUND ACT, 1976	Provide for the financing of measures to promote the welfare of persons engaged in beedi establishments.	- Constitutes a fund called the Beedi Workers Welfare Fund. - Allows the use of proceeds in the Fund for purposes such as improvement of standards of living, sanitation, water supplies, etc., to promote the welfare of persons engaged in beedi establishments
29.	THE SALES PROMOTION EMPLOYEES (CONDITIONS OF SERVICE) ACT, 1976	Regulate certain conditions of service of sales promotion employees in certain establishments.	Under this Act, the government of India can declare any industry or establishment as notified industry where the employees do any work relating to the promotion of sales or business or both.

			- The Act provides for registers and documents to be managed by every employer in such a manner as prescribed by the Act. - The court inferior to that of a Metropolitan Magistrate or a Magistrate of the first class is not allowed to try any offence punishable under this Act. The State Government can appoint inspectors for this Act by - notification in the Official Gazette.
30.	THE EQUAL REMUNERATION ACT, 1976	Provide for the payment of equal remuneration to men and women workers and for the prevention of discrimination, on the ground of sex, against women in the matter of employment and for matters connected therewith or incidental thereto.	- It put restrictions on the employer to create terms and conditions in a contract of service or work of labour contrary to equal pay for equal work doctrine. - Even if the workers are engaged for a day or a few days, this act is applicable to all workers. - The enforcement of the Act is done by the Ministry of Labour and Employment
31.	THE INTER-STATE MIGRANT WORKMEN (REGULATION OF EMPLOYMENT	Regulate the employment of inter-State migrant workmen and to provide for their	No principal employer of an establishment to which this Act applies shall employ inter-State migrant workmen in the establishment unless a certificate

	AMD CONDITIONS OF SERVICE) ACT, 1979	conditions of service and for matters connected therewith.	of registration in respect of such establishment issued under this Act is in force. - The act has made provisions for journey allowances to the interState migrant workman for a journey to his State from the place of work in the other State shall be payable by the contractor. - It shall be the duty of every contractor employing inter-State migrant workmen in connection with the work of an establishment to which this Act applies,- a. to ensure regular payment of wages to such workmen; b. to ensure equal pay for equal work irrespective of sex; c. to ensure safety and work conditions of workers; d. to provide medical care to workers as prescribed.
32.	THE CINE WORKERS AND CINEMA THEATRE WORKERS (REGULATION OF EMPLOYMENT) ACT, 1981	Provide for the regulation of the conditions of employment of certain cine-workers and cinema theatre workers and for matters connected therewith	- The Central Government may appoint conciliation officers for promoting the settlement of any dispute between a cine-worker and the producers of the film by notification in the Official Gazette. - The Central Government can also establish Tribunals called Cine-workers Tribunal by

			notification in the Official Gazette. - There should be a written agreement between the worker and the producer of the film for the workers to be employed as a cine worker. The Employees' Provident Funds and Miscellaneous Provisions Act, 1952, as in force, for the time being, shall apply to every cine- worker who has worked in not less than three feature films with one or more producers.
33.	THE CINEWORKERS WELFARE CESS ACT, 1981	Provide for the levy and collection of a cess on feature films for the financing of activities to promote the welfare of certain cine-workers and for matters connected therewith or incidental thereto.	Levies a cess for the Cine-workers Welfare Fund Act, 1981 every feature film. The rate should be between 10000 rupees and 20000 rupees (both inclusive).
34.	THE CINEWORKERS WELFARE FUND ACT, 1981	Provide for the financing of activities to promote the welfare of certain cine-workers.	- Constitutes a fund called the Cineworkers Welfare Fund. - Allows the use of the fund to provide financial assistance to cine-workers
35.	THE DOCK WORKERS (SAFETY, HEALTH	Provide for the safety, health and welfare of dock	"Dock worker" means a person employed or to be employed in any port on work in connection with the loading, unloading,

	AND WELFARE) ACT, 1986	workers and for matters connected therewith.	movement or storage of cargoes, or work in connection with the preparation of ships or other vessels for the receipt or discharge of cargoes or leaving port; • The Government can constitute Dock Labour Board for the port by notification in the Official Gazette. • The scheme provided to dock workers shall be administered by any board established for this purpose as prescribed by the Act. • The act ensures the safety and working condition of the dock workers at the workplace.
36.	THE CHILD AND ADOLESCENT LABOUR (PROHIBITION AND REGULATION) ACT, 1986	Prohibit the engagement of children in all occupations and to prohibit the engagement of adolescents in hazardous occupations and processes and the matters connected therewith or incidental thereto.	• The employment of any person who has not completed his fourteenth year of age is banned in certain occupations and processes. • The Act obliges the employer to furnish information to the inspector regarding the employment of children. There are restrictions on work timings. Making children work • overtime is prohibited.
37.	THE LABOUR LAWS (SIMPLIFICATION	Provide for the simplification of procedure for	• Requires any small establishment or very small establishment to which a Scheduled Act applies,

	OF PROCEDURE FOR FURNISHING RETURNS AND MAINTAINING REGISTERS BY CERTAIN ESTABLISHMENTS) ACT, 1988	furnishing returns and maintaining registers in relation to establishments employing a small number of persons under certain labour laws.	not to necessarily furnish the returns or to maintain the registers required to be furnished or maintained under that Scheduled Act, provided certain prescribed conditions should be met.
38.	THE BUILDING AND OTHER CONSTRUCTION WORKERS' (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1971	Regulate the employment and conditions of service of building and other construction workers and provide for their safety, health and welfare measures and for other matters connected therewith or incidental thereto.	- The act applies to all establishments where more than 10 workers are employed in any building or other construction work. - It ensures that good health and a good working environment are provided to the workers. The - Government of India has made it mandatory for every State government to establish their own Building and Other Construction Workers Welfare Boards.
39.	THE BUILDING AND OTHER CONSTRUCTION WORKERS' WELFARE CESS ACT, 1996	Provide for the levy and collection of a cess on the cost of construction incurred by employers with a view to augmenting the resources of the Building and Other Construction Workers' Welfare Boards constituted under the Building	Mentions that a specified percent of the construction bill or cost of construction incurred by the employer to build construction is equal to the amount of cess the same amount is deposited to the welfare board and the fund is utilized for the welfare of the workers or in the welfare schemes for the workers working in the building or a construction site.

		and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.	Obliges every employer to furnish such return to officer or authority, in a prescribed manner and time.
40.	THE UNORGANISED WORKERS' SOCIAL SECURITY ACT, 2008	Provide for the social security and welfare of unorganised workers and for other matters connected therewith or incidental thereto.	This Act aims to ensure a decent standard of living for the unorganised workers by listing many social security schemes. National Social Security Board and State Social Security Board are constituted to recommend the formulation of appropriate schemes. These schemes will be later monitored and reviewed.

Source: Ministry of Labour and Employment, Government of India; PRS

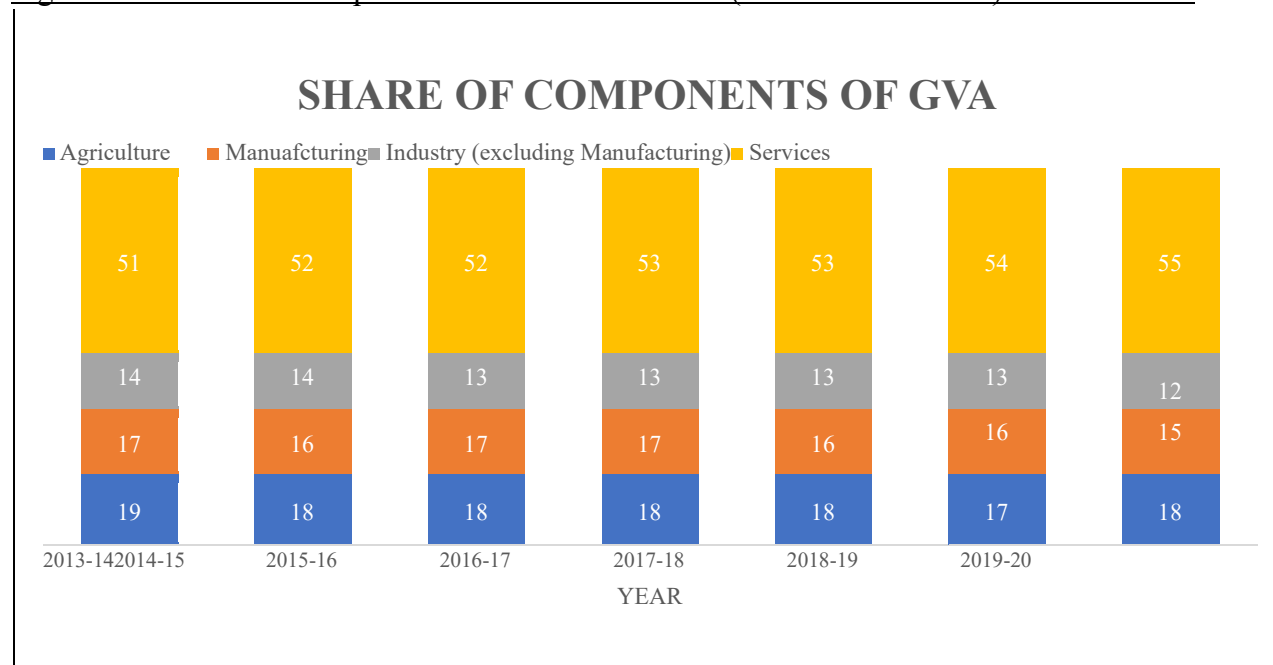
Thus, there are several acts concerning labour. It is quite often argued that the multitude of labour laws is the cause of labour market rigidity. Such laws are also blamed for the poor performance of the Indian manufacturing sector, especially the labour-intensive sector. To understand the impact of some of these laws, it is essential to understand the prevailing scenario in the manufacturing sector, which is done in the next sub-section.

2.1 Indian Manufacturing Sector

A well-developed manufacturing sector is significant for the growth of any economy. According to the Lewis model, the economic development of an economy takes place through structural transformation, i.e., a shift of resources from agriculture (traditional sector) to industry (modern sector). Several of today's developed economies had witnessed a similar pattern wherein the expansion of the manufacturing sector pulled out the surplus labour from agriculture. However, in India, the growth has been mainly service-led. Figure 3.1 shows the share of the different components in Gross Value Added (GVA) Basic Prices (Base Year: 2011-12) Current Prices.

In recent years, the shares have remained more or less constant. In contrast to services, the share of manufacturing is dismally low. This is a matter of concern since manufacturing generates several avenues for gainful employment. To absorb India's huge labour force, the industrial sector as a whole must expand.

Figure 2.1.1: Share of components in GVA Basic Prices (Base Year: 2011-12) Current Prices



2.1.1 Capital-intensive vs Labour-intensive

Bhagwati & Panagariya (2012) focus on the poor performance of labour-intensive manufacturing in the Indian economy. Based on a similar line of reasoning, we used the Annual Survey of Industries data for the recent years and calculated the labour-capital ratio as Total Persons Engaged/Fixed Capital. We considered the three least labour-intensive and the three most labour-intensive industrial groups and compared their respective shares in the Gross Value Added by all the industries¹. The following table highlights that the contribution of the labour-intensive sector has been quite low as compared to the capital-intensive sector.

Table 2.1.1.1: Share of GVA- Capital-intensive vs Labour-intensive

YEAR	CAPITAL-INTENSIVE			LABOUR-INTENSIVE		
	COKE AND REFINED PETROLEUM PRODUCTS	BASIC METALS	CHEMICALS AND CHEMICAL PRODUCTS	TOBACCO PRODUCTS	WEARING APPAREL	LEATHER AND RELATED PRODUCTS
2014-15	13	11	8	1	2	1
2015-16	13	7	11	2	2	1

¹ The third least labour-intensive industrial group came out to be 'Other Industries'. Therefore, for our analysis, we took the fourth least labour-intensive industrial group 'Basic Metals'.

2016-17	13	8	10	1	2	1
2017-18	11	10	10	1	2	1

The table clearly shows that while the share of the top 3 capital-intensive industrial groups in total GVA remained around 31%, the corresponding share of the top 3 labour-intensive industrial groups remained around just 4%. Even the composition of India's merchandise exports supports the fact that the share of capital-intensive goods is increasing in India's production base (Table 2.1.1.2).

Table 2.1.1.2: Share in Merchandise Exports

Goods	Category	Share		
		1990-91	2007-08	2019-20
Engineering Goods, Chemicals and Related Products, Gems and Jewellery and Petroleum Products.	Capital-intensive or Semi-skilled labour-intensive	41	65	70
Readymade garments	Unskilled labourintensive	12	6	5

Source: Bhagwati & Panagariya (2012) and Authors' estimation

2.2 Are Labour Laws to be blamed?

The rising share of the capital-intensive sector is often explained in terms of the high costs of hiring labour because of multiple labour acts. It is often argued that firms avoid the use of labour to escape from the burden and complexities of labour laws. For example, several acts oblige the employer to file multiple returns and maintain registers. This leads to considerable paperwork. Take the case of the Factories Act, 1948. Under this Act, each factory is supposed to main registers of attendance, records of hiring, dates of washing and paintings, and file half-yearly and annual returns (Bhagwati & Panagariya, 2012). Chapter V-B of the Industrial Disputes Act, 1947 makes it difficult to retrench workers in an industrial establishment with 100 or more workers. This is cited as one of the dominant causes of 'inflexible' labour markets in India. Moreover, several laws are contradictory in the sense that it is not possible to implement one without violating the other.

However, some others argue that it is wrong to completely blame labour laws for the growing importance of the capital-intensive sector. Chakraborty (2015) highlights the 'peculiar paradox' of a so-called rigid labour market that has a huge number of workers who can be hired and fired at will. This essentially means that the employment regimes have turned towards casualisation, i.e., by hiring contract workers, the establishments try to avoid the restrictions imposed by the labour laws. Some even argue that with a large proportion of workers

in the informal sector (91.9% in 2011-12 according to Economic Survey 2014-15), the labour laws apply to only a tiny section of the labour force.

Whatever be the reasons for the rising share of the capital-intensive sector, there are many implications of the relatively small share of the labour-intensive sector. Firstly, and most importantly, India has a huge labour force. The inability of the service sector to absorb the workers is evident in India's jobless growth. With an already low share of the manufacturing sector, the rising capital intensity can pose challenges for job creation and pulling workers out of the agricultural sector, especially if the technology is labour saving. Unemployment can become a huge obstacle in realising India's demographic dividend. Secondly, the declining share of labour-intensive goods like readymade garments in merchandise exports over the years (Table 2.1.1.2) reflects India's inability to exploit gains from trade based on labour-abundance driven comparative advantage.

There could be several other reasons for the poor performance of the manufacturing sector like inadequate access to credit, distorted land market, poor infrastructure, etc. Therefore, we now move to the broader concept of labour ecosystem which goes beyond the labour laws.

3. A State Level Comparison – The Labour Ecosystem Index

In India, labour is a concurrent subject so the state governments cannot only amend many of the central labour acts but also pass their own laws. The inter-state variations in labour regulations can be used to study any possible relation between the labour laws and other economic variables like the Gross State Domestic Product (GSDP).

3.1 Review of Literature

One of the most influential works to study the differences in the state laws and their impact was by Besley and Burgess (2004). They used all the 113 amendments to the Industrial Disputes Act, 1947 that had been passed between 1947 and 1992. Each amendment was classified as pro-worker (score of +1), pro-employer (score of -1) or neutral (score of 0). In case of more than one amendment being passed by the state in a year, it was given a score of -1, 0 or +1 for the particular year based on the overall direction of the change. It was found that a pro-worker amendment affected the manufacturing outcomes such as per capita and employment adversely for the registered manufacturing.

Bhattacharjea (2006, 2009) brought to notice the various methodological issues associated with the Besley and Burgess Index. There were issues concerning the inappropriate classification of certain amendments and misleading cumulation over time. Besides, the index focused just on one act, the Industrial Disputes Act, 1947. With over 40 central acts and 150 state laws, a complete picture of the inter-state variations requires a much wider study. In light of the above problems, several further studies have modified the index, starting with Ahsan and Pagés (2009) and Gupta et al (2009). Bhattacharjea (2020) explains the errors in each of these measures in terms of interpretation and construction.

This paper is based on The Labour Ecosystem Index developed by TeamLease Services, a human resource company. This index goes beyond labour laws and looks at the broader labour ecosystem.

3.2 About the index

The India Labour Report 2006 introduced the labour ecosystem index to rank the states. 19 States and Union Territories were included in 2006 as well as 2009 reports. The report cited the unavailability of data as the reason for not expanding the study to all the states and union territories. The original index is based on 28 normalised measures classified among three categories: Labour Demand/Employment Ecosystem Index, Labour Supply/Employability Ecosystem Index and Labour Law Environment/Ecosystem Index. The methodology is illustrated in the following figure:

Figure 3.2.1: Method to calculate the index values

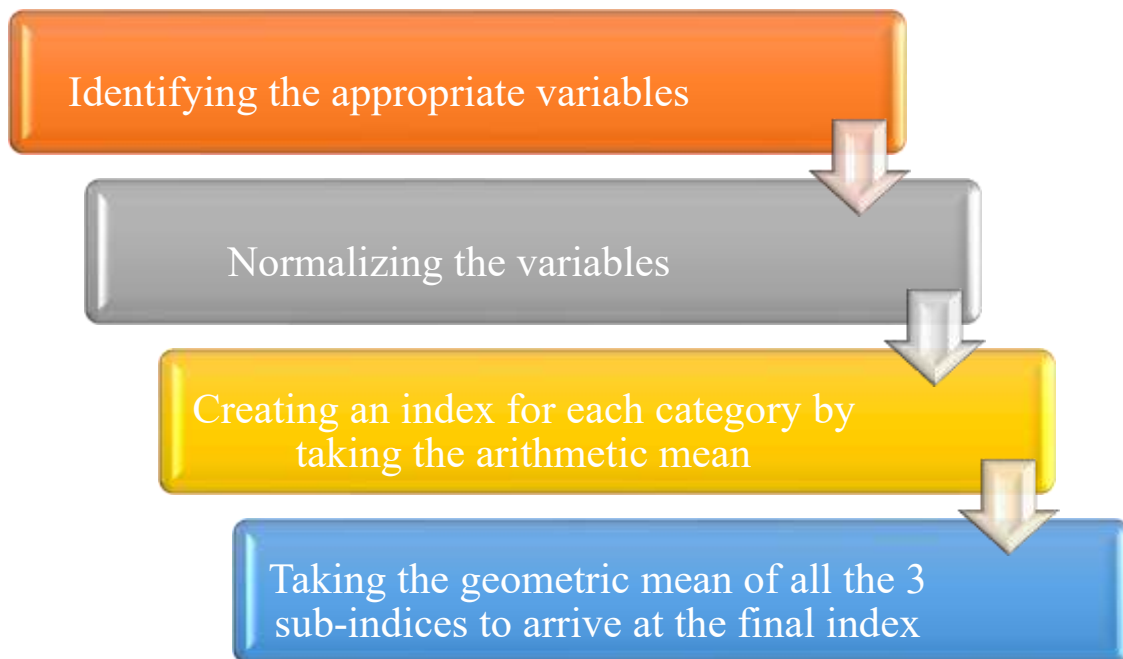


Table 3.2.1: The Labour Ecosystem Index – Components

<u>LABOUR ECOSYSTEM INDEX</u>		
Labour Demand Ecosystem	Labour Supply Ecosystem	Labour Law Ecosystem
Capital Formation as a share of Gross State Domestic Product	Work Participation Rate	Average wages of registered workers by Minimum wages for lowest daily paid workers.
Percentage of Industrial Entrepreneurs' Memorandums (IEMs) implemented	Population in 20-60 age group as a share of Total population	Inverse of Lockouts per Unit

Actual investment as share of proposed as per IEMs	Population in 20-60 age group as a share of Total Employees	Net Transaction Cost Reduction
Per Capita Availability of Roads	Total employment by Public sector employment	Cases disposed Off by the Courts under Shops & Establishment Act by Prosecutions launched
Power Surplus / Deficit as % of Required	Population graduated from secondary as a share of population	Inspections made under Shops & Establishment Act by Prosecutions launched
Tele Density	Literacy Rate	Inverse of Strikes per Unit
Gross State Domestic Product (at current prices) by Taxes on Commodities & Services	No. Of Seats available in M.B.A by No. Of Enrolment in Class (XI-XII)	Inverse of Employee instituted Labour cases divided by total Labour related cases
Inverse of Corruption cases pending investigation divided by cases registered under Prevention of Corruption & Related Acts	No. Of Seats available in Engineering by No. Of Enrolment in Class (XI-XII)	Inverse of Total Appellant Cases related to Labour laws divided by No. Of Organized sector Employees
Inverse of Violent Crimes divided by Cognizable Crime under IPC	No. Of Seats available in I.T.I.s by No. Of Enrolment in Class (XI-XII)	
	Percentage of Expenditure on Education to Total Budgets	
	Pupil Teacher Ratio	
Source: Indian Labour Report 2006 and 2009, TeamLease Services.		

The variables were normalized using the following formula:

$$I_{ij} = \frac{S_{ij} - \min (S1j, S2j, \dots, S19j)}{\max (S1j, S2j, \dots, S19j) - \min (S1j, S2j, \dots, S19j)}$$

where S_{ij} represents the value of ratio j for state i .

The index values were later multiplied by 1000 for reporting purposes.

3.3 Labour Ecosystem Index for the year 2016-17

Our work is based on a similar line of reasoning since we also calculate three sub-indices to arrive at the final index. The methodology is also being retained but we expand the study to include 32 States and Union Territories. However, the data related to some of the variables were not available for certain added states and union territories. Therefore, we present the results of 32 States and Union Territories as well as the original 19 States and Union Territories separately. Furthermore, we have made some changes to some of the variables. This was to either improve over the existing ones or make up for the unavailability of data. Wherever possible, the data for the year 2016-17 have been considered. The detailed results are explained below.

3.3.1 The Employment Ecosystem Index / Labour Demand Ecosystem Index

Table 3.3.1.1: Variables and the Data Sources

S. No.	Normalized Measure	Variables	Source
1.	Capital Formation as a share of Gross State Domestic Product (2016-17)	Capital Formation	Handbook of Statistics on Indian Economy, Reserve Bank of India
		GSDP (2011-12 constant prices)	
2.	Percentage of IEMs implemented	No. Of Cases Implemented (IEMs)	SIA Statistics, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India. (August 1991 – December 2016)
		Numbers Filed (IEMs)	
3.	Actual investment as share of proposed as per IEMs	Investment (Implementation of IEMs)	Basic Road Statistics of India 2016-17, Ministry of Road Transport and Highways, Government of India
		Value of Proposed IEMs	
4.	Per Capita Availability of Roads	Total Length of Roads in India	Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India
		Total Population (2016 Projection)	

5.	Power Surplus / Deficit as % of Required	Power Supply (Surplus (+) / Deficit (-))	Load Generation Balance Report 2017-18, Central Electricity Authority of India, Ministry of Power, Government of India
6,	Tele Density	Tele density (per 100 Inhabitants)	Handbook of Statistics on Indian Economy, Reserve Bank of India
7.	Gross State Domestic Product (at current prices) by Taxes on Commodities & Services	GSDP (current prices)	Handbook of Statistics on Indian Economy, Reserve Bank of India
		Taxes on Commodities and Services (at Current Prices)	State Finances: A Study of Budgets, Reserve Bank of India
8.	Inverse of Corruption cases pending investigation divided by cases registered under Prevention of Corruption & Related Acts	Corruption: Total Cases under Investigation	National Crime Records Bureau (NCRB) Crime in India 2016 Statistics, Ministry of Home Affairs, Government of India
		Corruption: Pending Investigation from Previous Year	
9.	Inverse of Violent Crimes divided by Cognizable Crime under IPC	Total (reported) cognizable crime under IPC	
		Total Violent Crimes	

Investment is one of the most important growth drivers and hence, contribute towards employment generation. Therefore, capital formation in the state and the intention of businesses to invest (IEM) are taken into account². However, not only the intentions filed are sufficient. What matters is how many of these are converted into reality so the number of IEMs implemented as well as the amount invested is also considered. To capture the quality of infrastructure in the state, the variables like tele density, power availability and per capita road length are included. For an overall congenial climate for economic activity, tax scenario and crime rates in the state are also considered in this sub-index. We have made no change in the normalized measures in

² Industrial undertakings exempted from the requirements of Industrial Licensing under I (D&R) Act, 1951 are required to file information relating to setting up of industries is known as IEM (Industrial Entrepreneur Memorandum).

this index except for extending it to more states and union territories and updating with 2016-17 data. The final values along with ranks for all the 32 States and Union Territories are shown in Table 3.3.1.2. Table 3.3.1.2:

The Employment Ecosystem Index / Labour Demand Ecosystem Index

State / Union Territory	Index Values	2016 Rank
Andaman and Nicobar Islands	83	32
Andhra Pradesh	387	6
Arunachal Pradesh	366	13
Assam	349	18
Bihar	213	30
Chandigarh	378	10
Chhattisgarh	290	26
Delhi	377	11
Goa	343	21
Gujarat	489	3
Haryana	383	8
Himachal Pradesh	348	19
Jammu and Kashmir	177	31
Jharkhand	293	25
Karnataka	280	27
Kerala	384	7
Madhya Pradesh	318	22
Maharashtra	350	17
Manipur	410	4
Meghalaya	372	12
Nagaland	357	14
Odisha	267	28

Puducherry	344	20
Punjab	304	23
Rajasthan	352	16
Sikkim	679	1
Tamil Nadu	379	9
Telangana	352	15
Tripura	387	5
Uttar Pradesh	266	29
Uttarakhand	541	2 24
West Bengal	295	

Sikkim ranks the first while the union territory of Andaman and Nicobar Islands ranks the last. The performance of Sikkim is driven mainly by the investment-related variables. Although the amount of investment under IEMs is low as compared to other states, the ratio of the amount invested to proposed is the highest in Sikkim. The opposite is true for Andaman and Nicobar Islands where the amount invested under IEMs is 0.

Table 3.3.1.2 shows the ranks of the original 19 States and Union Territories along with 2005 and 2009 ranks for comparison.

Table 3.3.1.3: Rank Comparison - Employment Ecosystem Index

State / Union Territory	2005	2009	2016
Andhra Pradesh	7	2	2
Assam	15	11	9
Bihar	19	17	18
Delhi	4	1	6
Goa	2	14	11
Gujarat	1	6	1
Haryana	11	12	4
Himachal Pradesh	3	4	10
Jammu and Kashmir	17	19	19
Karnataka	14	10	15
Kerala	6	5	3
Madhya Pradesh	16	16	12
Maharashtra	13	13	8

Odisha	10	15	16
Punjab	12	9	13
Rajasthan	5	3	7
Tamil Nadu	8	7	5
Uttar Pradesh	18	18	17
West Bengal	9	8	14

Source for 2005 and 2009 Ranks: India Labour Report 2009, TeamLease Services³.

Gujarat has regained the top position again after seeing a fall in 2009 while the state of Jammu and Kashmir remains at the last spot. Gujarat has performed well with respect to capital formation, IEMs and power availability. On the other hand, Jammu and Kashmir's poor performance is due to low capital formation and high crime-related measures. States like Kerala and Maharashtra have shown an improvement whereas some other states like Punjab and Karnataka saw a fall in their ranks.

3.3.2 The Employability Ecosystem Index / Labour Supply Ecosystem Index Table 3.3.2.1: Variables and the Data Sources

S. No.	Normalized Measure	Variables	Source
1.	Work Participation Rate	Work Participation Rate	Annual Report Periodic Labour Force Survey (PLFS) 2017-18, Ministry of Statistics and Programme Implementation, Government of India
2.	Population in 15-59 age group as a share of Total population	Population in 15-59 age group as a share of Total population	Sample Registration System Statistical Report 2016, Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India
3.	Literacy Rate	Literacy Rate	Same as 1
4.	Population in 15-59 age group as a share of Total Employees	Population in 15-59 age group	Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India

³ For 2005 and 2009, Andhra Pradesh includes Telangana as well.

		Total Employees	Annual Survey of Industries (ASI) 2016-17, Ministry of Statistics and Programme Implementation, Government of India
5.	Inverse of Pupil Teacher Ratio	Pupil Teacher Ratio	Unified District Information System for Education (UDISE), Department of School Education and Literacy, Ministry of Education, Government of India
6.	Approved total intake (AICTE) by No. of Enrolment in Class (IX-X)	Approved total intake (AICTE)	All India Council for Technical Education Approval Process Handbook (2017 – 2018) Same as 5
		No. of Enrolment in Class (IX-X)	
7.	No. of Seats available in I.T.I.s by No. of Enrolment in Class (IX-X)	No. of Seats available in I.T.I.s	Ministry of Skill Development and Entrepreneurship, Government of India Same as 5
		No. of Enrolment in Class (IX-X)	
8.	Population graduated from secondary & above as a share of population in the age group 15 years and above	Population graduated from secondary & above as a share of population in the age group 15 years and above	Same as 1
9.	Percentage of Expenditure on Education to Total Budgets	% of Education & Training Budget of Education & Other Department to Total GSDP	Analysis of Budgeted Expenditure on Education 2015-16 to 2017-18, Planning, Monitoring and Statistics Bureau, Ministry of Human Resource Development (Department of Higher Education) Government of India. (now Ministry of Education)

States with a higher proportion of the population in the working-age group (15-59 years) have a larger potential labour force to withdraw from. Hence, this variable has been included. The work participation rate has also been considered because a higher work participation rate indicates a large proportion of those, who are able and willing to work at the existing wage rate, are employed. Focusing not just on quantity but quality also, educational indicators like literacy rate and proportion of the population that has completed secondary education and above are calculated. To take into account the quality of education, pupil-teacher ratio and the percentage of education and training budget of Education and Other Department to total GSDP are considered. The seat intake of I.T.I.s and AICTE institutions is also studied to ensure that highly educated people are available for new and emerging sectors in the economy. The ratio of the number of seats to enrolment in Secondary (class IX-X) is calculated instead of enrolment in Senior Secondary (class XI-XII) in the original index because, in many states, senior secondary is a part of higher education so the data won't give a true picture. Also, instead of taking separate variables for M.B.A. seats and Engineering seats, a single variable for AICTE approved seat intake was taken. Due to our inability to find data on state-wise employment in the public sector, the measure 'Total employment by Public sector employment' was dropped. The final values along with ranks for all the 32 States and Union Territories for the year 2016-17 are shown in Table 3.3.2.2.

Table 3.3.2.2: The Employability Ecosystem Index / Labour Supply Ecosystem Index

State / Union Territory	Index Values	2016 Rank
Andaman and Nicobar Islands	532	4
Andhra Pradesh	564	3
Arunachal Pradesh	271	30
Assam	333	22
Bihar	227	31
Chandigarh	524	6
Chhattisgarh	318	24
Delhi	344	20
Goa	531	5
Gujarat	335	21
Haryana	418	14
Himachal Pradesh	575	2
Jammu and Kashmir	428	13
Jharkhand Karnataka	221	32
	414	15

Kerala	452	8
Madhya Pradesh	292	28
Maharashtra	385	18
Manipur	411	16
Meghalaya	432	12
Nagaland	397	17
Odisha	353	19
Puducherry	612	1
Punjab	448	10
Rajasthan	296	26
Sikkim	468	7
Tamil Nadu	451	9
Telangana	448	11
Tripura	305	25
Uttar Pradesh	276	29
Uttarakhand	321	23
West Bengal	295	27

Puducherry is at the first spot while Jharkhand is the worst performer. Puducherry's nice performance is mainly due to a higher literacy rate, better pupil-teacher ratio and a higher ratio of AICTE approved intake to enrolment in class IX-X. On the other hand, a high pupil-teacher ratio, a lower ratio of AICTE approved intake to enrolment in class IX-X and a lower proportion of the population (in the age group 15 years and above) graduated from secondary & above account for Jharkhand's poor performance.

Table 3.3.2.3: Rank Comparison - Employability Ecosystem Index

State / Union Territory	2005	2009	2016
Andhra Pradesh	5	3	2
Assam	19	18	14
Bihar	18	9	19
Delhi	4	2	12
Goa	1	5	3
Gujarat	6	4	13
Haryana	15	12	8
Himachal Pradesh	9	16	1

Jammu and Kashmir	17	19	7
Karnataka	2	1	9
Kerala	7	6	4
Madhya Pradesh	10	17	17
Maharashtra	8	7	10
Odisha	16	15	11
Punjab	14	11	6
Rajasthan	12	13	15
Tamil Nadu	3	8	5
Uttar Pradesh	13	14	18
West Bengal	11	10	16

Source for 2005 and 2009 Ranks: India Labour Report 2009, TeamLease Services⁴.

Table 3.3.2.3 shows the ranks of the original 19 States and Union Territories along with 2005 and 2009 ranks for comparison. Himachal Pradesh makes a big jump from 16 to 1 while Bihar falls back to the last position after seeing an improvement in 2009⁵. A high workforce participation rate, high literacy rate, favourable pupil-teacher ratio and availability of I.T.I. seats contribute to Himachal Pradesh's great performance. The reason for the fall in Bihar's rank lies in a low workforce participation rate and the worst pupil-teacher ratio.

3.3.3 Labour Law Environment / Ecosystem Index Table 3.3.3.1:

Variables and the Data Sources

S. No.	Normalized Measure	Variables	Source
1.	Average wages of registered workers by Minimum wages for lowest daily paid workers.	Minimum Daily Wages*300	Lok Sabha Unstarred Question No. 201 Answered On 25.04.2016, Ministry of Labour and Employment, Government of India Annual Survey of Industries (ASI) 2016-17, Ministry of Statistics and Programme Implementation, Government of India
		Average wages of registered workers	
2.	Inspections made under Shops &	Inspections made (Shops & Establishment Act)	Report on the working of the legislation governing conditions of

⁴ For 2005 and 2009, Andhra Pradesh includes Telangana as well.

⁵ It may not be accurate to compare the ranks since we have changed some of the variables and dropped one.

	Establishment Act by Prosecutions launched	Prosecutions Launched (Shops & Establishment Act)	employment in Shops, Commercial Establishments, Theatres, Hotels and Restaurants during the year 2016, Labour Bureau, Ministry of Labour and Employment, Government of India
3.	Cases disposed of by the Courts under Shops & Establishment Act by Prosecutions launched	Cases disposed of by the Courts (Shops & Establishment Act) Prosecutions Launched (Shops & Establishment Act)	
4.	Inverse of Industrial Disputes per Unit	Number of Industrial Disputes Number of Units	Labour & Employment – Statistical Year Book India 2018, Ministry of Statistics and Programme Implementation, Government of India Annual Survey of Industries (ASI) 2016-17, Ministry of Statistics and Programme Implementation, Government of India
5.	Flexibility	Classification based on labour regulations: +1 – Flexible 0 – Inflexible +0.5 - Others	Time-invariant classification (flexible/ inflexible/others) by K. V. Ramaswamy (2015) based on Besley and Burgess (2004) modified in light of Aditya Bhattacharjea (2006 and 2009), updated to 2008, with more states included.

The Minimum Wages Act, 1948 enables the state government to specify the minimum wage for different activities in the state. The measure ‘average wages of registered workers divided by minimum wages for lowest daily paid workers’ reflects how much are average wages higher than the bare minimum specified by the state government. The inverse of industrial disputes (lockouts + strikes) per unit is included since the industrial disputes reflect the failure of the legal regulatory mechanism in synchronizing the interests of the employers and employees. Instead of taking two different measures separately for lockouts and strikes, we have taken one variable for all industrial disputes since we were unable to find segregated data for the year 2016. With the increasing importance of the service sector, the adequate enforcement of the Shops & Establishment Act and

the timely disposal of related cases are also taken into account. Instead of taking the measure ‘net transaction cost reduction’, we have considered the classification of the states and union territories based on flexibility by Ramaswamy (2015). The time-invariant classification (flexible/ inflexible/others) is based on Besley and Burgess (2004) modified in light of Aditya Bhattacharjea (2006 and 2009), updated to 2008, with more states included. Also, the two measures related to court cases concerning labour were dropped since we couldn’t find the relevant data. We did find data related to the number of cases pending in Central Government Industrial Tribunal-cum-Labour Courts (CGIT-cum-LCs)⁶. However, it was not included as the jurisdiction of some of the labour courts extended to more than one state making it difficult to arrive at the state-wise data. The final values along with ranks for all the 32 States and Union Territories for the year 2016-17 are shown in Table 3.3.3.2.

Table 3.3.3.2: Labour Law Environment / Ecosystem Index

State / Union Territory	Index Values	2016 Rank
Andaman and Nicobar Islands	774	7
Andhra Pradesh	874	1
Arunachal Pradesh	103	30
Assam	599	19
Bihar	609	17
Chandigarh	424	24
Chhattisgarh	203	29
Delhi	520	23
Goa	653	14
Gujarat	821	4
Haryana	591	20
Himachal Pradesh	541	22
Jammu and Kashmir	343	25
Jharkhand	675	13
Karnataka	801	5

⁶ Lok Sabha Unstarred Question No. 1973 answered on 30.07.2018, Ministry of Labour and Employment, Government of India.

Kerala	586	21
Madhya Pradesh	40	32
Maharashtra	632	16
Manipur	299	27
Meghalaya	734	9
Nagaland	714	10
Odisha	637	15
Puducherry	750	8
Punjab	605	18
Rajasthan	846	3
Sikkim	231	28
Tamil Nadu	850	2
Telangana	786	6
Tripura	697	12
Uttar Pradesh	708	11
Uttarakhand	327	26
West Bengal	83	31

Andhra Pradesh tops the list while Madhya Pradesh performs the worst with respect to the labour law environment. The variables which mainly drive Andhra Pradesh's performance while bringing Madhya Pradesh' performance down are those related to the Shops and Establishment Act and average wages.

Table 3.3.3.3: Rank Comparison – Labour Law Ecosystem Index

State / Union Territory	2005	2009	2016
Andhra Pradesh	8	2	1
Assam	17	16	12
Bihar	10	17	10
Delhi	5	8	16
Goa	14	9	7
Gujarat	4	4	4
Haryana	6	7	13
Himachal Pradesh	13	13	15
Jammu and Kashmir	18	18	17
Karnataka	2	3	5

Kerala	15	10	14
Madhya Pradesh	9	5	19
Maharashtra	1	1	9
Odisha	11	14	8
Punjab	3	12	11
Rajasthan	12	11	3
Tamil Nadu	7	6	2
Uttar Pradesh	16	15	6 18
West Bengal	19	19	

Source for 2005 and 2009 Ranks: India Labour Report 2009, TeamLease Services⁷.

3.3.4 The Labour Ecosystem Index

The geometric mean of all the three sub-indices is taken to calculate the composite index. This is done to ensure that a state gets a high value on the overall labour ecosystem only if it performs well in each of three components – labour demand, labour supply and labour law. The final values along with ranks for all the 32 States and Union Territories are shown in Table 3.3.4.1. Table 3.3.4.2 shows the ranks of the original 19 States and Union Territories along with 2005 and 2009 ranks for comparison.

Table 3.3.4.1: The Labour Ecosystem Index

State / Union Territory	Index Values	2016 Rank
Andaman and Nicobar Islands	324	26
Andhra Pradesh	575	1
Arunachal Pradesh	217	30
Assam	411	19
Bihar	309	27
Chandigarh	438	15
Chhattisgarh	265	29
Delhi	407	20
Goa	492	6
Gujarat	512	4
Haryana	456	11
Himachal Pradesh	477	8
Jammu and Kashmir	296	28

⁷ For 2005 and 2009, Andhra Pradesh includes Telangana as well.

Jharkhand	352	25
Karnataka	453	12
Kerala	467	9
Madhya Pradesh	155	32
Maharashtra	440	14
Manipur	369	24
Meghalaya	491	7
Nagaland	466	10
Odisha	392	21
Puducherry	540	2
Punjab	435	16
Rajasthan	445	13
Sikkim	419	18
Tamil Nadu	525	3
Telangana	499	5
Tripura	435	17
Uttar Pradesh	373	23
Uttarakhand	384	22
West Bengal	194	31

Madhya Pradesh's poor performance on account of labour laws environment is the main reason behind its last rank while the opposite is true for Andhra Pradesh. Table 3.3.4.2: Rank Comparison – The Labour Ecosystem Index

State / Union Territory	2005	2009	2016
Andhra Pradesh	6	1	1
Assam	16	18	12
Bihar	18	17	16
Delhi	1	4	13
Goa	7	10	4
Gujarat	2	5	3
Haryana	12	8	7
Himachal Pradesh	10	12	5
Jammu and Kashmir	19	19	17
Karnataka	3	2	8

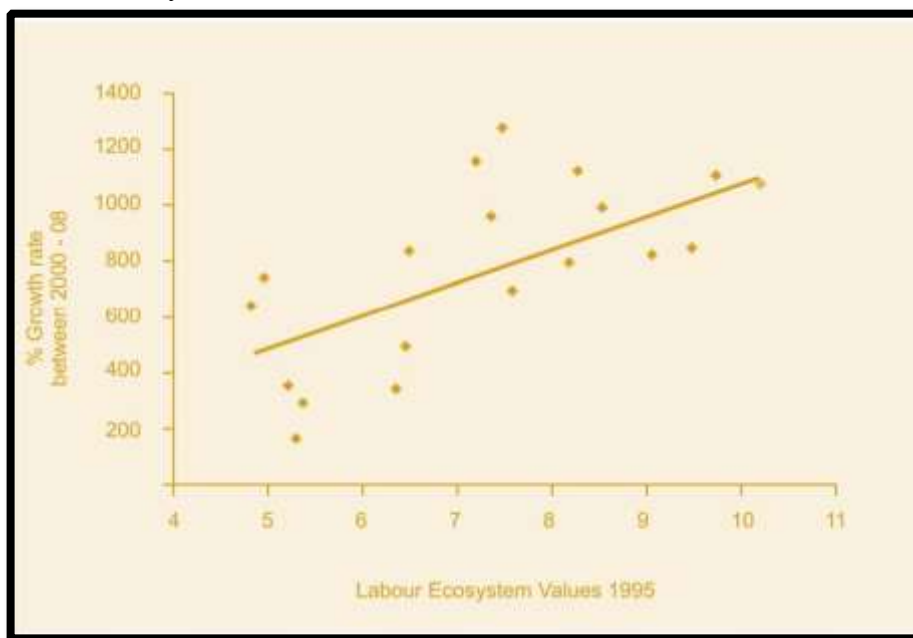
Kerala	11	6	6
Madhya Pradesh	13	13	19
Maharashtra	5	3	10
Odisha	14	14	14
Punjab	8	11	11
Rajasthan	9	9	9
Tamil Nadu	4	7	2
Uttar Pradesh	17	16	15
West Bengal	15	15	18

Source for 2005 and 2009 Ranks: India Labour Report 2009, TeamLease Services⁸.

3.4 The Labour Ecosystem Index and GSDP Growth

The Indian Labour Report 2009 found a strong positive correlation between a good labour ecosystem and future growth of Gross State Domestic Product (GSDP) by using 1995 index values and growth rate between 2000 and 2008 (Figure 3.4.1a).

Figure 3.4.1a: Labour Ecosystem Index and Future Growth in GSDP – 1995 values



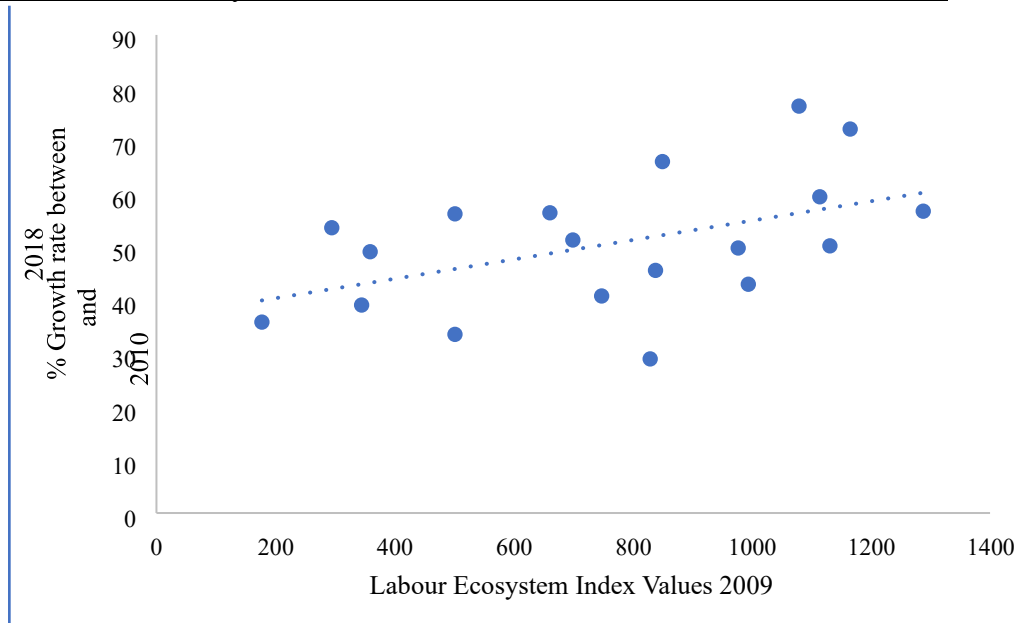
Source: India Labour Report 2009, TeamLease Services.

Applying the same idea to 2009 index values and growth rate between 2010 and 2018, our results of the Pearson correlation indicated that there was a positive association between the labour ecosystem index values and future growth rate for the original 19 states and union territories, ($r(17)$)

⁸ For 2005 and 2009, Andhra Pradesh includes Telangana as well.

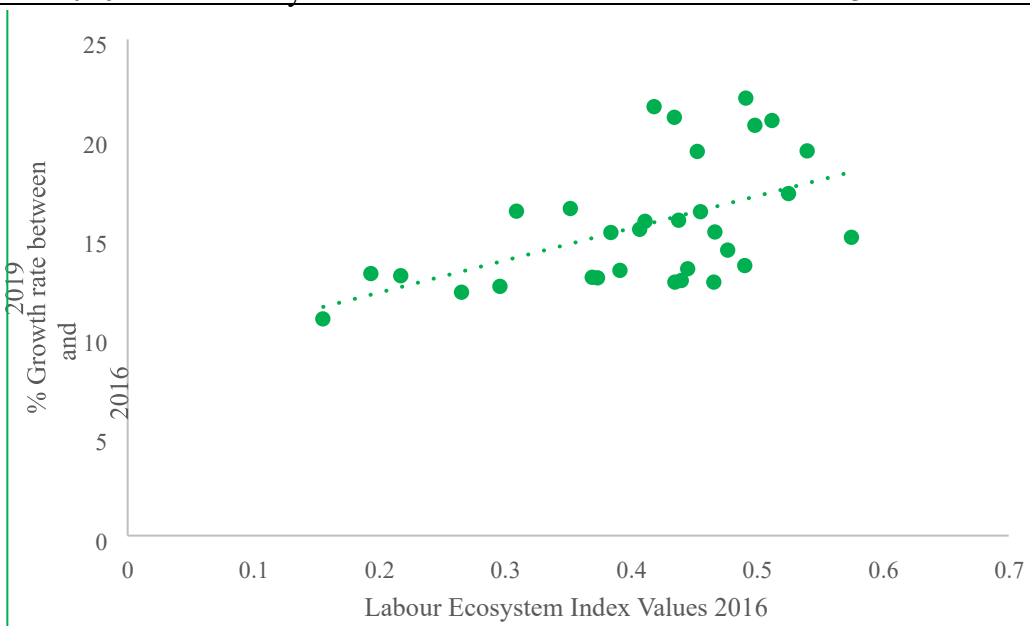
= .49, $p = .038$). Since the period of the index and the period over which the growth rate is captured do not overlap, the index has decent predictive powers.

Figure 3.4.1b: Labour Ecosystem Index and Future Growth in GSDP – 2009 values



To know whether our calculated index for the year 2016 has the same predictive powers, we checked for a correlation between the 2016 Labour Ecosystem Index and Growth Rate between 2016 and 2019. Excluding Andaman and Nicobar Islands for which 2018-19 GSDP was not available, results of the Pearson correlation indicated that there is a strong positive association between the labour ecosystem index values and future growth rate for the 31 states and union territories, ($r(29) = .52$, $p = .003$).

Figure 3.4.2: 2016 Labour Ecosystem Index and Future Growth in GSDP – 31 States and UTs



We repeated the same exercise for the original 19 states and union territories, i.e., we checked for a correlation between 2016 index values and the growth rates. Two cases were considered. First, growth rates between 2016 and 2018 were considered. Results of the Pearson correlation indicated that there is a strong

positive association between the labour ecosystem index values and future growth rate 2016-18 for the 19 states and union territories, ($r(17) = .63, p = .004$). For the second case, growth rates between 2016 and 2019 were considered. Again, results of the Pearson correlation indicated that there is a positive association between the labour ecosystem index values and future growth rate 2016-19 for the 19 states and union territories, ($r(17) = .55, p = .014$).

Figure 3.4.3a: 2016 Labour Ecosystem Index and Future Growth in GSDP – 19 States and UTs

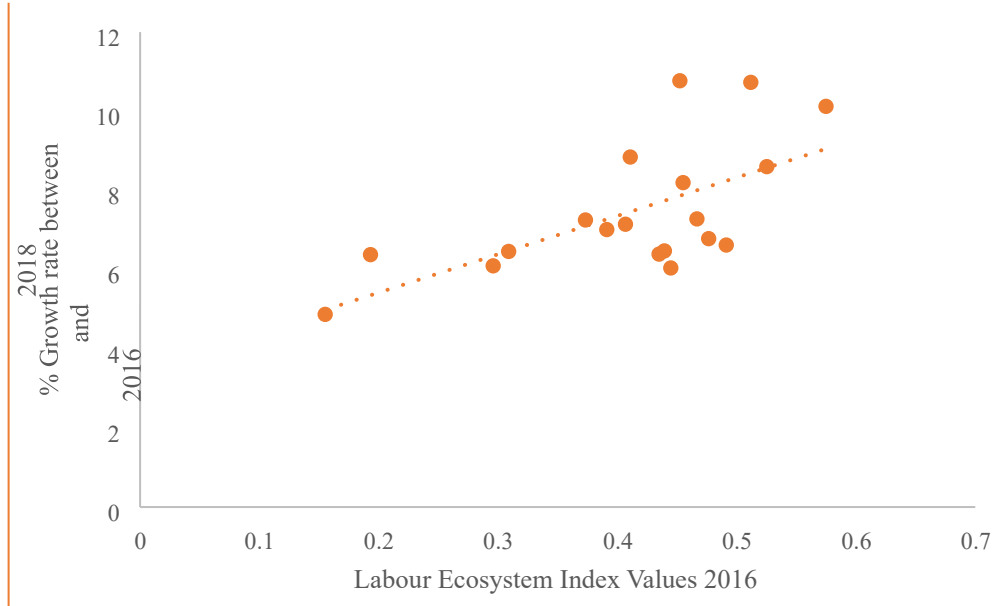


Figure 3.4.3b: 2016 Labour Ecosystem Index and Future Growth in GSDP – 19 States and UTs



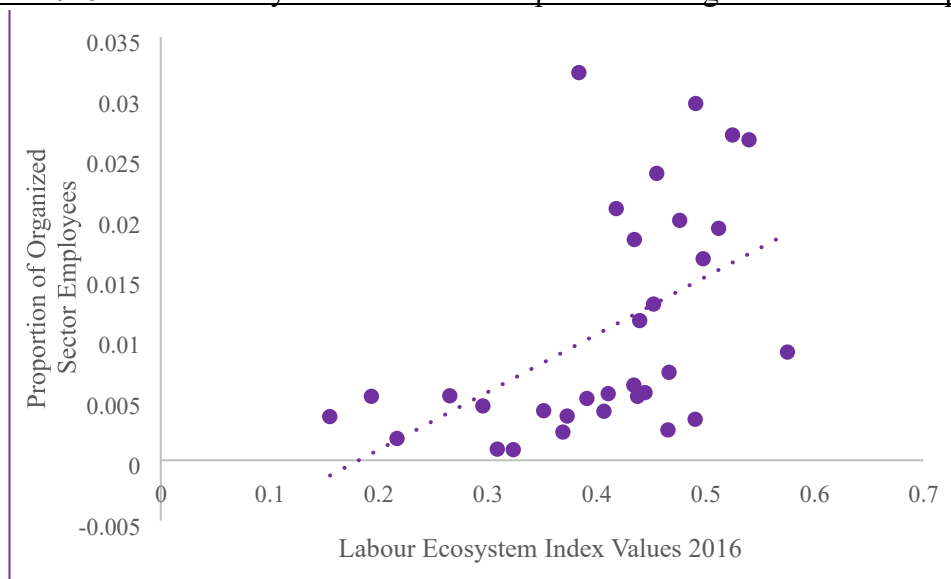
Thus, the index is correlated with future growth. It is based on an objective criterion and uses publicly available data. Although correlation does not imply causation, the index highlights the fact that not only labour laws but also factors concerning labour demand and labour supply are related to the trajectory of any state's GSDP. It, therefore, becomes essential to realise that a comprehensive set of labour reforms require not only mere changes to the labour acts but much broader changes extending to infrastructure, education, etc. A balance must be maintained between the interests of both the workers and the employers so that a harmonious

environment free of any strikes and lockouts prevails. Hence, a suitable labour ecosystem requires the factors affecting the demand and supply for labour to be combined with a favourable labour law environment.

3.5 Limitations of the Index

We did find a strong correlation between the labour ecosystem index values and the proportion of organized sector employees in the total population⁹. However, contrary to our expectations, we didn't find any statistically significant correlation between the index values and variables related to the manufacturing sector like Gross Value Added (GVA) by manufacturing and labour productivity measured by GVA added per worker¹⁰. This could mean that the manufacturing sector is affected by some factor other than those considered under the labour ecosystem index. It could also imply that labour regulations may not be the dominant cause for the not so good performance of the Indian manufacturing sector.

Figure 3.5.1a: 2016 Labour Ecosystem Index and Proportion of Organized Sector Employees - All



⁹ For all 32 states and union territories, ($r(30) = .51, p = .003$) while for the original 19 states and union territories, ($r(17) = .59, p = .007$). See Figure 3.5.1.

¹⁰ For correlation between index values and GVA added by manufacturing as a share of GSDP, the results were ($r(17) = .43, p = .066$) for the original 19 states and union territories.

Figure 3.5.1b: Labour Ecosystem Index and Proportion of Organized Sector Employees – Original



4. New Labour Codes

“... the right kind of labour reforms will simultaneously protect the legitimate interests of the workers, create more employment, and sharpen the competitive edge of Indian exports.”

-Atal Bihari Vajpayee

Parliament of India has passed four labour code bills to consolidate the multitude of labour laws in the country. Before the new labour codes were passed there were around 44 central labour laws and 150 state labour laws. The second National Commission on Labour (2002) recommended that the central laws should be integrated into groups like (i) industrial relations, (ii) wages, (iii) social security, (iv) safety, and (v) welfare and working conditions.

The need for labour reforms was felt because the old labour laws were very complex, inefficient, inconsistent and overlapping in nature. In some cases, the laws were believed to be counterproductive for development and employment generation. Also, many laws were too old with some of them being more than 70 years old. Moreover, as discussed in section two, Indian entrepreneurs prefer not to invest in labour-intensive sectors as evident in their declining share. Labour laws were also blamed for the missing large scale labour-intensive industries in India. 6th Economic Census (201314) reported that there were 5.9 crore establishments in India employing 13.1 crore people. Out of these, a total of 79% of workers were in establishments with less than ten workers. Thus, it was considered rational to reform the laws. The four new labour laws consolidate 29 labour laws (Table 4.1).

Table 4.1: Acts that are being subsumed by the four labour codes

Labour Codes	Acts being subsumed
Code on Wages, 2019	□ Payment of Wages Act, 1936; □ Minimum Wages Act, 1948; □ Payment of Bonus Act, 1965; and □ Equal Remuneration Act, 1976
Occupational Safety, Health and Working Conditions Code, 2020	□ Factories Act, 1948; □ Mines Act, 1952; □ Dock Workers (Safety, Health and Welfare) Act, 1986; □ Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996; □ Plantations Labour Act, 1951; □ Contract Labour (Regulation and Abolition) Act, 1970; □ Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979; □ Working Journalist and other Newspaper Employees (Conditions of Service and Miscellaneous Provision) Act, 1955; □ Working Journalist (Fixation of Rates of Wages) Act, 1958; □ Motor Transport Workers Act, 1961; □ Sales Promotion Employees (Condition of Service) Act, 1976; □ Beedi and Cigar Workers (Conditions of Employment) Act, 1966; and □ Cine-Workers and Cinema Theatre Workers (Regulation of Employment) Act, 1981
Industrial Relations Code, 2020	□ Trade Unions Act, 1926; □ Industrial Employment (Standing Orders) Act, 1946, and □ Industrial Disputes Act, 1947
Code on Social Security, 2020	□ Employees' Provident Funds and Miscellaneous Provisions Act, 1952; □ Employees' State Insurance Act, 1948; □ Employees' Compensation Act, 1923;

	□ Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959;
	□ Maternity Benefit Act, 1961; □ Payment of Gratuity Act, 1972; □ Cine-workers Welfare Fund Act, 1981; □ Building and Other Construction Workers' Welfare Cess Act, 1996; and □ Unorganised Workers Social Security Act, 2008

Source: PRS

4.1 THE CODE ON WAGES, 2019

This code applies to all workers. Under this law, the wages should include salary, allowances but would not include bonuses and travelling allowances. As per the provisions of the code, the central government would fix the minimum wage which could vary depending on geographical location. The minimum wage should be fixed by considering the difficulty level of work and the worker's skill. The minimum wage should be reviewed after every 5 years. The number of working hours will be fixed by the central government or state government and in case of overtime, double the normal wage should be paid. The code prohibits discrimination of wages based on gender, i.e., in the case of similar work, the same wage should be paid to men and women. This act also makes provision for setting up advisory boards by central and state governments. These boards will advise on fixing minimum wages. Chikermane & Agrawal (2020) consider the reduction in the number of annual returns and registers on the regulatory side as a step in the right direction. However, there are some concerns such as the omission of the principle of employers' liability to pay wages if the contractor is failed to do so. This is a big issue because there is a huge number of contract workers in India.

4.2 THE OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS CODE, 2020

The code expands the definition of a factory as an establishment where at least 20 workers work with power or 40 workers work without power. It removes the manpower limit on hazardous working condition and also fixes the daily work hours limit at 8 hours. The Code empowers women to be employed in all kinds of work and between 7 pm and 6 am subject to their consent and safety. It also provides employers with the flexibility to employ workers on a fixed-term basis according to their requirement in any sector. This act also takes into account inter-state migrant workers and provides them with portability benefits such as ration in the destination state. This is a nice step since we saw the tragic condition of migrant workers during the Covid-19 lockdown.

4.3 THE INDUSTRIAL RELATIONS CODE, 2020

The code makes it easier to hire and fire workers. Under the Industrial Employment (Standing Orders) Act of 1946, every establishment, employing more than 100 workers, was required to frame rules of conduct for workmen employed in the establishment but the new code increases this limit from 100 workers to 300 workers. The code also introduces new conditions for conducting legal strikes. The workers need to give 60-day prior notice before going on a strike. The new code also proposes the setting up of a re-skilling fund for training retrenched workers.

4.4 THE CODE ON SOCIAL SECURITY, 2020

Under this new code, the definition of employees has been widened to include migrant workers, construction workers, film industry workers and platform workers. The Code on Social Security universalizes social security to those working in the unorganised sectors. The Code reduces the time limit for receiving gratuity payments. The Code make provision that in the event of a national disaster or a pandemic situation the government can reduce or defer the employees' contribution towards PF (Provident fund) or ESI (employees' state insurance). It also proposes for setting up National Social Security Board to give suggestions to the central government concerning schemes for Unorganised Workers.

4.5 Review of the Four Labour Codes

The new labour codes are being hailed for bringing the much-awaited labour market reforms in India. Chikermane & Agrawal (2020) consider the new labour laws on the way towards perfection but cautions that it is the responsibility of the states to use this opportunity wisely.

New labour laws can help increase economic efficiency and give India a competitive edge in labour-intensive sectors. The new laws also focus on changing structures of work as they include gig workers, work from home, freelancers and fixed-term employment. Since the new codes replace the earlier complex and inefficient labour laws, they are expected to provide a big boost to industry and employment in the country. By providing better employment opportunities to its rising labour force India would be able to avail demographic dividend in the coming future.

According to some economists and industrialists, such reforms will boost investment and will improve the ease of doing business. The new codes provide a single licensing mechanism, easier and efficient dispute resolution process, and reduce the influence of trade unions. Thus, there are high expectations that these labour reforms would increase economic efficiency, thereby promoting economic development. However, in reforming the labour laws and getting economic benefits through them, the workers' rights cannot be neglected. According to critics, the new labour codes are anti-workers since they are more inclined towards employers and give them more power to hire and fire at will. By making it easier to hire and fire workers, their security is at stake. This could result in disharmony and lead to more industrial disputes which are detrimental as we saw under the labour law environment index that a congenial environment devoid of any strikes and lockouts is essential for an overall

better labour ecosystem. Moreover, increasing flexibility may not alone help expand the industrial base of the country but other reforms on the side of education and health are also necessary. Therefore, labour market reforms need to bring a balance between the powers of the employers and the rights of the workers and move beyond the narrow scope of increasing flexibility. Although the Labour Codes have been enacted and published in the official Gazette of India, their implementation remains in a state of flux. Progress of drafting rules varies across states. In a written reply to a question in the Rajya Sabha on July 24, 2025, Minister of State for Labour and Employment Sushri Shobha Karandlaje mentioned that to enable implementation, the Central Government has pre-published the draft rules for all four Labour Codes. As per the Ministry, 32 States and Union Territories have also pre-published their draft rules under at least one or more of the codes. However, the following gaps remain:

- West Bengal and Lakshadweep have not pre-published any draft rules under any of the Codes.
- Delhi has only pre-published draft rules under the Code on Wages, 2019.
- Tamil Nadu has not pre-published draft rules under the Code on Social Security, 2020.

5. Conclusion

The Indian labour market has been repeatedly alleged to be rigid due to the multitude of labour laws in the country. The laws were blamed for disincentivising entrepreneurs because of their burdensome and complex nature. To avoid the cost associated with hiring labour, the manufacturing firms resorted to capital-intensive techniques. The labour laws ended up hurting the very workers they were meant to protect. This is because the laws supposedly prevented the emergence of medium- and large-scale manufacturing establishments that otherwise could have absorbed a huge number of unskilled workers. Moreover, the employment regimes turned towards hiring contract workers. With more workers in the informal sector, the workers were deprived of any modicum of security.

Labour market reforms were deemed to be necessary to achieve flexibility and generate more formal employment. Besides, some of the laws were outdated and needed to be changed to take into account changing work structures. The new labour codes seem to be an attempt in this direction. By reducing regulatory returns, simplifying licensing mechanism and promising an efficient dispute resolution process, the new laws aim to ensure easy and smooth functioning of the labour market.

However, the protection of workers' rights and the provision of social security benefits cannot take a backseat in the name of providing more flexibility to employers. Also, apart from flexibility, comprehensive labour market reforms must address issues concerning skill development, proper training, good infrastructure, access to credit, etc., so that there is no demand and supply mismatch. As discussed under the state-level analysis, the future growth in GSDP is highly associated with the overall labour ecosystem and a suitable labour ecosystem

can be created if the factors affecting the demand and supply for labour are combined with a favourable labour law environment.

Against this backdrop, it would be interesting to see whether the new labour codes will be able to generate more formal employment and encourage economic activity, and thus, bring about the desired results of the much-needed reform. It is crucial that the labour laws are implemented nationwide without any further delay and ensure a balance between the rights of the workers and the powers of the employers.

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