

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Singh, Jaivir; Das, Deb Kusum; Choudhury, Homagni; Kukreja, Prateek

Working Paper

Law, skills and the creation of jobs as "contract" work in India: Exploring survey data to make inferences for labour law reform

Working Paper, No. 330

Provided in Cooperation with:

Indian Council for Research on International Economic Relations (ICRIER)

Suggested Citation: Singh, Jaivir; Das, Deb Kusum; Choudhury, Homagni; Kukreja, Prateek (2016): Law, skills and the creation of jobs as "contract" work in India: Exploring survey data to make inferences for labour law reform, Working Paper, No. 330, Indian Council for Research on International Economic Relations (ICRIER), New Delhi

This Version is available at: https://hdl.handle.net/10419/176357

${\bf Standard\text{-}Nutzungsbedingungen:}$

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Working Paper 330

Law, Skills and the Creation of Jobs as 'Contract' Work in India: Exploring Survey Data to make Inferences for Labour Law Reform

Jaivir Singh
Deb Kusum Das
Homagni Choudhury
Prateek Kukreja

September 2016



Table of Contents

Ab	strac	ti					
1.	. Introduction						
2.	Pron	Prominent Changes In Indian Labour Law					
	2.1	Labour Law and Contract Labour4					
	2.2	State Level Legislative Changes					
	2.3	The Apprentice Act 1961 and the 'Skilling India' Policy8					
3.	Surv	ey Results10					
4.	Inco	mplete Contracts and the Basis for Law Reform19					
Re	feren	ces22					
		List of Figures					
Fig	gure 1	: Overall distribution of Regular Workers and Contract Workers11					
Fig	gure 2	: Distribution of Contract Workers across Industries					
Fig	gure 3	: Profile of Export Firms and Use of Contract Labour14					
Fig	gure 4	: Firms using Contract Labour classified by Employment Size14					
Fig	gure 5	: Distribution of Firms employing Contract Labour and only Regular Labour across industries					
Fig	gure 6	Skill level of Contract Workers and Permanent Workers					
Fig	gure 7	No. of Firms with education attainment of CW / PW in situations where both are engaged in the same kind of work					
		List of Tables					
Ta	ble 1:	Distribution of Contract Workers across Industries12					
Ta	ble 2:	Proportion of Firms reporting Manufacture for Exports13					
Ta	ble 3:	Segregation between Contract Workers and Permanent Workers17					

Abstract

The paper begins with a discussion of Indian labour law and the increasing use of 'contract labour' in Indian formal manufacturing. We question the widespread perception that employment of contract labour provides flexibility to employers in terms of adjustment in response to demand and technology shocks, by bringing in the concept of 'incomplete contracts'. Apart from the ASI data, we use the responses from a specially commissioned survey in Haryana: a state having a well-established industrial base with a large pool of skilled labour force, in order to gain empirical insights on the links between law, skills and the extensive use of 'contract' labour. The paper then goes on to discuss some theoretical literature emphasising the importance of relationship specific investments for skills and proceeds to emphasize the role of the labour law in this context. It is strongly hoped that these findings will be used to comment on the costs and benefits of the 'contract' labour system and its variants across South Asia, particularly in view of moves to reform labour law in South Asia.

Key words: Skill creation, contract worker, labor regulations, manufacturing survey data

JEL classification: J08, J21, J50, J53.

Authors' Email: jaivirs@gmail.com, dkdas@icrier.res.in, hoc6@aber.ac.uk, prateekukreja89@gmail.com

Disclaimer: Opinions and recommendations in the report are exclusively of the author(s) and not of any other individual or institution including ICRIER. This report has been prepared in good faith on the basis of information available at the date of publication. All interactions and transactions with industry sponsors and their representatives have been transparent and conducted in an open, honest and independent manner as enshrined in ICRIER Memorandum of Association. ICRIER does not accept any corporate funding that comes with a mandated research area which is not in line with ICRIER's research agenda. The corporate funding of an ICRIER activity does not, in any way, imply ICRIER's endorsement of the views of the sponsoring organization or its products or policies. ICRIER does not conduct research that is focused on any specific product or service provided by the corporate sponsor.

Law, Skills and the Creation of Jobs as 'Contract' Work in India: Exploring Survey Data to make Inferences for Labour Law Reform

Jaivir Singh*, Deb Kusum Das*, Homagni Choudhury^ and Prateek Kukreja+

1. Introduction

There is a large literature (and policy suggestions drawing from this discussion) that states that Indian labour laws stifle employment and output. There is however, some cause to take a more nuanced view of the problems generated by the labour laws. It is of course true that while these stringent laws cover regular workers, sizeable sections of the workforce working in the formal manufacturing sector are not subject to the labour laws. Over the last decade or so there has been a change in law – in that the Supreme Court has interpreted legislation governing contract labour (labour not directly employed but through a labour contractor, referred to in other parts of the world as agency work) to say that employers have no obligation to offer regular terms of employment to contract labour. This has resulted in an expansion in the employment of this category of labour and a jump in the numbers of 'contract labour' can be dated from the judgment. Taking a broad perspective it can be said that this change in the law is a part of a larger trend, which has had a legislative component as well. For example most recently some states have initiated state-level changes to ensure that many more workers are not covered by labour legislation.

It is important to initiate a discussion as to whether this is indeed the correct manner to orient labour law reform in India. It is the case that traditional models used to look at labour markets, including many of those used to look at the Indian scenario assume perfect markets and no market failure. This pushes them to pose the central problem of labour law reform as one of fairness versus efficiency. It is typically suggested that an easing of the requirements of law may reduce fairness but will increase efficient allocation of resources – perhaps even create much larger overall fairness on account of expansion in employment. This orientation marginalizes models that emphasize institutional features (such as varieties of labour laws in our case) as responses to some market failure, acting to correct some externality. The presence of labour law in this respect may therefore be seen not just in terms of thwarting efficiency but can also be seen as a source of generating some efficiency.¹

^{*} Centre for Study of Law and Governance, JNU, New Delhi,

^{*} Department of Economics, Ramjas College, University of Delhi and External Consultant, ICRIER,

[^] School of Management and Business, Aberystwyth University (UK),

⁺ Research Associate, ICRIER

The paper is a part of the "Jobs for Development" research project 2015 at ICRIER supported by the World Bank. Financial support from World Bank is gratefully acknowledged. An earlier version of the paper was presented at the Jobs for Development conference at ICRIER on 3-4 December 2015 and we thank the participants for their comments. The authors thank K.R. Shyam Sundar and Pankaj Vashisht for their comments and suggestions on the earlier version. We also thank Kumar Abhishek for overall research assistance especially with the survey data and Manik Bhatia for compiling the recent changes in labor laws.. Views expressed in this paper are those of the authors and do not reflect their respective institutions. The usual disclaimers apply. Corresponding author: dkdas@icrier.res.in.

Thus, this paper takes on board the fact that the easing of labour law in India has expanded the employment of *contract labour* and asks if this is an appropriate direction for further labour law reform. To approach this issue, unlike standard commentaries on the Indian labour market, we assume that labour markets are better described using an *incomplete contracts framework* rather than assuming textbook prefect markets. We are motivated towards using this framework following scattered qualitative evidence suggesting that while employers are happy with the flexibility provided by the contract labour option, contract labour can be quite unsuitable for the job on hand because of the high labour turnover – contract workers are soon gone and an entire new lot has to be trained when hired. This in itself indicates that while there are the obvious benefits to the flexible contract labour system, there are costs as well. These costs are not easy and straightforward to conceptualise and measure because they are manifest in the intangible fact that firms face an inflexibility in the reverse form – they can now get rid of workers but they can't compel them to stay. This is a concern, which is not of much importance if the worker can easily be substituted one for another, but is of importance if the worker's skills/know-how is important for the job on hand. This pushes us into the world of work and skills as well as how this issue has a link with the relations between employers and employees, which (at least in part) depend on the regulation/management of employee-employer relationships. All this is best approached through an incomplete-contract framework because this framework states that when one cant write efficient contracts that condition relationspecific investment, which often leads to underinvestment and an inefficiency is generated thereof. The underinvestment we are thinking of in this case is the relation specific investment made by a worker in a job – if the worker does not feel reassured investing in the job because of potential opportunistic behaviour of employers then she will clearly underinvest. If such investment (typically in a place) is underprovided employers can well suffer from lower productive relations. It is however very difficult to empirically capture such underinvestment and we need to look at a set of indirect evidence to begin exploring such concerns. Broadly following these motivations we divide the paper into four parts. In the first part we review the changes in law that have enabled the large-scale use of contract labour, and the questions that this form of employment generates. We go on to describe some of the recent attempts by some Indian states to change labour laws in a manner that leads to lower legal coverage of the workforce. We also note the explicit attempts made by recent legislation to change section of the Apprentice Act to encourage the growth of skills among the labour force. In the second part we use information gathered from a survey of manufacturing firms from Haryana, alongside with some qualitative (case study) information to make inferences on the use of contract labour, skills and investment in the job by workers. In the third part of the paper, we outline the broad theoretical thinking behind the incomplete contract model particularly as it pertains to important questions raised in relation to labour market and follow it up with suggestions for meaningful labour law reform that enhance the productive relationship between employer and employee.

W.B Macleod (2011) 'Great Expectations: Law, Employment Contracts, and Labor Market Performance'. In Handbook of Labor Economics, edited by O. Ashenfelter and D. Card, 1591–696, vol. 4, part B. Amsterdam: Elsevier

2. Prominent Changes In Indian Labour Law

Roughly speaking there are at least three major changes that have occurred in Indian labour law over the recent past:

- (i) The changes in the regime governing the use of contract labour on account of the interpretation of the legislation by the Supreme Court of India.
- (ii) The gradual legislative changes initiated at the state level, which have moved more and more workers outside the coverage of labour laws.
- (iii) The changes that have been made to the Apprenticeship Act 1961 and the policy associated with 'Skilling India'.

2.1 Labour Law and Contract Labour

To start with it may be recapitulated that Indian labour laws are famously understood to be very restrictive from the viewpoint of the employer – making it very hard for employers to fire workers particularly larger firms who have to get permission from the government to retrench workers. Apart from that there are a whole lot of diverse laws and regulations that have to be followed regarding issues such as work conditions, minimum wages, provident fund and safety among many other such requirements. In this context it needs to be emphasised that for a worker to benefit from these measures she must be employed in an establishment that is covered by these laws as well as be covered by the legal definition of being worker or more precisely 'workman'. We don't discuss the details here², but note that the consequence of these legal definitions is that only about ten per cent of the Indian labour force is covered by standard labour legislation. Given the restrictions placed on typical employers hiring this ten per cent of Indian work force, it is the case that allowing the use of 'contract labour' – labour hired through a labour contractor, by the Indian Supreme Court has eased some of this pressure. As we have pointed out in an earlier work³, note needs to be taken of a judgment of the Supreme Court namely Steel Authority of India v. National Union Water-Front Workers⁴. This judgment was critical in allowing Indian firms to employ 'contract' workers widely; where one of the primary virtues (from the viewpoint of the employer) of employing such workers is that they can be fired far more easily than regular workers. Given that contract workers can be fired with ease it is important for us to look at the details of the legislation pertaining to this category of worker as well as the crucial judicial interpretation of the law.

The legislation relating to contract workers is the *Contract Labour (Regulation and Abolition) Act, 1970* (hereafter, CLA). The CLA was set out to both regulate as well as abolish contract labour. The Act is applicable to establishments employing a minimum of 20 contract workers. In order to regulate such labour, Section 7 of the Act requires the principal employer to obtain

For details see Singh, J. (2015), 'Who is a worker? Searching the Theory of the Firm for Answers' in Ramamaswamy (ed.) *Labour, Employment and Economic Growth in India* Cambridge University Press Delhi

Deb Kusum Das, Homagni Choudhury and Jaivir Singh 'Contract Labour (Regulation and Abolition) Act 1970 and Labour Market Flexibility: An Exploratory Assessment of Contract Labour use in India's Formal Manufacturing' ICRIER Working Paper 300, June 2015

⁴ AIR 2001 SC 3527

a certificate of registration from the authorities. To get the registration, the employer (under the rules of the Act) is required to declare the number of workers directly employed, the nature of the work in which contract workers are to be employed, and the actual number of contract workers to be employed. Further under Section 12 of the Act the contractors who supply contract labour need to obtain licenses. Under the rules to obtain such licenses there is a requirement for the disclosure of details such as nature of work for which the contract workers are to be employed, duration and the maximum number of such contract workers. The license may contain some specifications on hours of work, fixation of wages, and amenities. Under Section 8 of the Act, both the registration certificate and/or the license can be suspended or evoked if there has been misinformation or non-compliance with conditions under which the registration or license was recorded. The Act also governs aspects of wages paid to contract workers. In general, wages paid to contract workers must not be lower than the prescribed minimum wage; and, while the responsibility of payment of wages is placed on the contractor, if the contractor falls short, the liability is placed on the principal employer to make up for the payment due. The central (as well at least some state level rules) require parity with wages and conditions of work (hours, holidays etc.) that govern directly employed workers, if they are both doing the same work. The Act makes provisions for labour inspectors to examine relevant records as well as to speak with contract workers and initiate prosecution for contravention of the provisions of the Act.

However the CLA was legislated not to just 'regulate' contract labour but also to prevent its use and to abolish it when possible. Under Section 10 of the CLA, the labour department of the government is empowered to prohibit the use of contract labour taking into account factors such as whether the contract workers are being used for perennial jobs, regular workers are doing the same job and whether the work is incidental or necessary for the industry. Since the enactment of the law in the 1970s, both central governments and state governments have indeed issued notifications prohibiting the employment of contract workers. However upon such abolition, the issue of what happens to such 'rescued' workers was not very clear and a number of cases ended up in the courts to resolve matters. One such prominent case was Air India Statutory Corporation v. United Labour Union⁵, where the Indian Supreme Court said that in the event of abolition of contract labour the principal employer was obliged to employ the abolished contract labour as regular workers. This view was however overturned in the Steel Authority judgment⁶, which said that once the government has abolished contract labour, there is no obligation on the employer to employ former contract labour in regular jobs. One of the arguments offered by the Court for this interpretation was to say "the contract labour is not rendered unemployed as is generally assumed but continues in the employment of the contractor as the notification does not severe the relationship of master and servant between contractor and contract labour." This stance is out of tune with the fact that the 'notification' made under Section 10 (2) of the Contract Labour (Regulation and Abolition) Act is ostensibly notified because the appropriate government has information that the activity for which contract labour has been hired through a contractor is either necessary for the industry,

_

^{(1997) (9)} SCC 377

⁶ Steel Authority of India v. National Union Water Front Workers AIR 2001 SC 3527

perennial in nature, is/can be performed by regular workmen or work sufficient to employ full time workers. If this is actually the case then logically speaking there is a direct link with the employer, however the court strongly upheld the view that whether the relationship between the employer and the abolished contract labour is *real* or *sham* is to be distinguished from the act of abolishing contract labour and that this is an issue to be litigated independently as an industrial dispute under the Industrial Disputes Act.

Besides being out of tune with Section 10(2) of the CLA, the "non-absorption upon abolition" verdict carried in the SAIL judgement, does not even seem to make basic labour market sense. One must accept the fact that the principal employers have employed contract labour in violation of the principles enunciated in Section 10(1) of the CLA. Logically speaking, the principal employer must have employed such workers through such contractors who are suitable for such work as deemed perennial ex post. Ex-ante human capital endowments, therefore, of the contract workers shall be the same as the "regular legal workers", that would be employed ex-post abolition. Skill embodiment in the contract workers is assured in two ways: (a) Going by the argument provided by *Teamlease*, the contractors or the temping agencies, through which the principal employer hires contract workers do invest in the skills of their workforce; (b) Thanks to labour market dynamics, skilled workers themselves work as contract workers⁷ Therefore, it makes eminent labour market sense for the employer to automatically absorb the outgoing contract worker upon abolition.

More recently there has been further clarification from the Supreme Court on whether the contract labour agreement is "sham, nominal and a mere camouflage" by pointing out that if the contract is for the supply of labour then the labour will work under the 'directions, supervision and control of the principal employer" but since the salary is paid by the contractor the "ultimate supervision and control lies with a contractor".

As can be gleaned, these judgments have made it very easy for employers to use contract labour for a variety of jobs, with the government almost never taking any action against the use of such labour because even if they were to 'abolish' such labour, the employers are no longer obliged to absorb them as permanent employees. Furthermore as indicated it has become very difficult to show that contract labour has been employed under sham contracts.

The courts have also intervened in the terms associated with wages paid to contract workers. As mentioned earlier the CLA demands wage parity between regular and contract workers. However the Supreme Court in a judgment has explained that while looking at the issue of similar work done by regular and contract workers, the matters to be taken into consideration are:

"Nature of work, duties and responsibilities attached thereto are relevant in comparing and evaluating as to whether the workmen employed through contractor perform the same or

Based on inputs from interviews conducted by K.R. Shyam Sundar for his ILO study. See Sundar (2011) for details

International Airport Authority of India v. International Air Cargo Workers Union and another (2009) 13 SCC 374

similar kind of work as the workmen directly employed by the principal employer. Degree of skill and various dimensions of a given job have to be gone into to reach a conclusion that the nature of duties of the staff in two categories are on a par or otherwise. Often the difference may be of a degree. It is well settled that nature of work cannot be judged by mere volume of work; there may be qualitative difference as regards reliability and responsibility." ⁹

This view needs to be joined up with the contents of with another case¹⁰ which looked into the liability of the principal employer to make up for a shortfall in wages paid to contract workers when they were performing the same work as regular workers – in this case the Supreme Court again did not place any liability on the principal employer cementing the fact that wage parity has not been encouraged by judicial interpretation of the law.

It is quite evident that the judicial interpretation of the legislative provisions of the CLA over the 2000s has primarily been in favour of principal employers creating - to use the language popularised by the Bessely and Burgess paper - a pro-employer law. The regime engendered by these judicial interpretations has made the task of employing contract labour easier and cheaper - in terms of both, hiring as well as ease of firing. One can take a step further and suggest that it is not merely a matter of being able to hire labour more cheaply but that in the face of no overall change in the law, the use of contract labour by employers can be used as a device to circumvent some of the restrictions imposed by other restrictive labour legislations (such as the Industrial Disputes Act) and labour market institutions (like trade unions). It allows establishments to access to a set of workers who can be terminated at will and the effect of such a regime has been to increase labour market flexibility – an assertion for which we have a good amount of empirical support. 12

2.2 State Level Legislative Changes

The spirit of the changes that have come into effect with the contract labour system of moving more and more workers away from the law covering regular workers is manifest in the many changes that have been made by state governments recently with regard to labour law. We do not cover all the changes exhaustively here, mentioning only some of the changes to capture the tenor of recent changes in state level labour statutes.

Apart from encouraging self-certification in lieu of having a regime of factory inspectors, the major changes in states such as Rajasthan and Madhya Pradesh is to raise the size threshold of firms whereupon various labour laws or particular sections of labour laws take effect. For instance in Rajasthan the earlier coverage of the Contract Labour (Regulation and Abolition) Act (1970) extended to establishments employing 20 or more workers, which has now been changed to 50 or more workers. Similarly the threshold of the appplication of the Factories

Uttar Pradesh Rajya Vidyut Utpadan Board v. Uttar Pradesh Vidyut Mazdoor Sangh (2009) 17 SCC 318,320

Hindustan Steelworks Construction Ltd. v. Commissioner of Labour and Others, 1996 LLR, 865(SC)

T. Besley and R. Burgess. 2004. 'Can Regulation Hinder Economic Performance? Evidence from India', Quarterly Journal of Economics 119(1): 91–134.

Rahul Suresh Sapkal 'Labour Law, Enforcement and the Rise of Temporary Contract Workers: Empirical Evidence from India's Organised Manufacturing Sector.(Forthcoming in European Journal of Law and Economics, 2015)

Act, 1948 has been changed from establishments employing 10 or more workers (using power) and 20 or more workers (not using power) to establishments employing 20 or more workers (using power) and 40 or more (not using power). In a similar manner the coverage of the infamous Chapter V B which requires government permission before large firms can lay-off or retrench workers has been changed from 100 to 300 workers. The new Gujrat laws seek to exempt all workers employed in Special Economic Zones from the coverage of labour laws.

2.3 The Apprentice Act 1961 and the 'Skilling India' Policy

While the 'flexibility' of the formal labour market has been a ubiquitous presence with respect to the discourse around labour law in India for many years—till the recent past, there has been little talk about connecting labour and labour law with skills. A law was put in place about fifty years ago—the Apprentice Act 1961 and our first step is to list the salient features of this law as it was initially legislated.

Salient Features of the Apprentice Act 1961

The Apprentice Act, 1961 was set up to make it obligatory for certain employers to engage apprentices in designated trades. Broadly speaking, the Act regulates and controls the programme of training of apprentices, where the term 'apprentice' is defined by the Act as "a person who is undergoing apprenticeship training in pursuance of a contract of apprenticeship". To elaborate further, 'apprenticeship training' means "a course of training in any industry or establishment undergone in pursuance of a contract of apprenticeship and under prescribed terms and conditions which may be different for different categories of apprentices". Having defined apprentice and apprentice training in this manner, the Act makes it obligatory on part of the employers both in public and private sector establishments having requisite training infrastructure as laid down in the Act, to engage apprentices in 254 groups of industries covered under the Act. In this respect it is specified that the Act will not apply in an area or industry unless notified by the Central Government. The Act also specified the that the Directorate General of Employment & Training (DGE&T) in the Ministry of Labour was responsible for implementation of the Act in respect of Trade Apprentices in the Central Government Undertakings and Departments. In addition to this six Regional Directorates of Apprenticeship Training were prescribed, located at Kolkata, Mumbai, Chennai, Hyderabad, Kanpur and Faridabad. These State Apprenticeship Advisers were made responsible for implementation of the Act in respect of Trade Apprentices in State Government Undertakings/ Departments and Private Establishments. Besides this provision was made in the Act for the Department of Higher Education in the Ministry of Human Resource Development (MHRD) to be made responsible for implementation of the Act in respect of Graduate, Technician and Technician (Vocational) Apprentices. This is done through four Boards of Apprenticeship Training located at Kanpur, Kolkata, Mumbai and Chennai. Very importantly the Act set up Central Apprenticeship Council (CAC), which is an apex statutory tripartite body to advise the Government on putting down of policies and prescribing norms and standards in respect of Apprenticeship Training Scheme (ATS). It is specified in the Act that the Union Labour and Employment Minister is the Chairman and Minister of State for Education in the Union Ministry of HRD is the Vice Chairman of CAC.

Apart from providing the structure of training to apprentices the law also specified that a contract of apprenticeship be required to engage a person as an apprentice. Further the obligations of employers are listed, which included provision of training, proper training personnel and the carrying out of obligations under the contract of apprenticeship. The obligations of the apprentice include a conscientious attempt to train one, to attend classes regularly and carry out the lawful orders of the employer as well as carry out obligations listed in the contract of apprenticeship. The Act also governed payment of stipend to apprentices at a rate not less than a specified minimum and cannot be paid on a piece rate basis. There is a restriction on working hours and overtime is discouraged and apprentices are supposed to be able to enjoy the holidays listed in the establishment of apprenticeship.

Recent Changes in the Apprentices Act

Since its initial legislation, the Apprentice Act has been amended in 1973, 1986, 1997 2007 and most recently in 2014. The 1973 and 1986 amendments acted to include training of graduates and technicians and technician (vocational) apprentices respectively under its purview. The 1997 and 2008 amendments changed the definition of "establishment" and "worker" as well as made provisions for the reservation of candidates belonging to Other Backward Classes etc. However the most substantial changes that showed up in 2014 were largely a product of the recommendations of an Inter Ministerial Group (IMG). 13 The changes were aimed at ostensibly making apprenticeship more responsive to youth and industry. While we do not go over these changes in detail here, they are broadly aimed at providing greater flexibility to employers by making the terms more favorable for employers in the act of training and hiring apprentices. The red tape associated with the functioning of the law has been cut down and the new law allows the incorporation of new trades for the purpose of apprenticeship. Under the Apprentices Act, the number of apprentices is worked out in some ratio of the skilled workers employed. The changes in the Apprentices Act by the Apprentice (Amendment) Act, 2014 include a change in the definition of worker to include contract workers - thus the new definition of worker under Section 2(r) says ""worker" means any person working in the premises of the employer, who is employed for wages in any kind of work either directly or through any agency including a contractor and who gets his wages directly or indirectly from the employer but shall not include an apprentice referred in clause (aa)" This inclusion of contract workers as workers is an open acknowledgement that workers hired through contractors substitute for regular skilled workers. However it needs to be noted over the changes in the law, apart from some enhancement in the stipend and an 'opportunity to get skilled' do not really provide or rather provide weak dividends to workers who may apprentice themselves. Section 22 of the Apprentice Act says "It shall not be obligatory on the part of the employer to offer any employment to any apprentice who has completed the period of his apprenticeship training in his establishment, nor shall it be obligatory on the part of the

The Inter Ministerial Group (IMG) was constituted comprising representatives from Ministry of Railways, Ministry of Micro Small Medium Enterprises, Ministry of Power, Ministry of Defence, Planning Commission, National Skill Development Agency (NSDA), Working Group on The Directorate General of Employment and Training WG (DGE&T) for discussion on the suggestions received from PM's National Council on Skill Development (PMs NCSD), Central Apprenticeship Council (CAC), National Commission on Labour (NCL), Indian Labour Conference (ILC) and CII.

apprentice to accept an employment under the employer." In this context the Apprentice (Amendment Act) 2014 adds the clause "Every employer shall formulate its own policy for recruiting any apprentice training at his establishment" This is somewhat hopeful from the viewpoint of workers who may be able to invest in the jobs if the employment policy offers some form of tenure. However it may be noted that one needs a particular kind of wider legal regime that would support employer - employee contracts to be signed, particularly a robust union movement. The case law does not hold up any apprentice rights to a job 14.

After the passing of this legislation, in 2015 there has been a deceleration of a National Policy on Skill Development and Entrepreneurship¹⁵ under which an entire ministry called Ministry for Skill Development and Entrepreneurship has been set up to encourage the skilling of the workforce. While the document emphasizes various programs for increasing skills, there is very little mention on ensuring that workers are able to gain some sure returns to the investment that they would have put in to gain the skills. As long as the workers aren't convinced about the ex-post benefits or return to be accrued out of such programme, it is obviously very less likely that they would want to invest in skills. Moreover, in a country like India, which is largely characterised by institutional deficits, workers shall be less keen to invest in their skills which could affect skill building as a prime objective of these measures.

3. Survey Results

We use data from a specially commissioned survey of manufacturing firms undertaken by ICRIER, as part of a World Bank funded project 'Jobs for Development'. The survey covers around 500 firms in five states, namely Haryana, Tamil Nadu, Maharashtra, Gujarat and Karnataka and spread across five major industries; viz. Auto Components, Electronics and Electrical Equipments, Leather Products, Textile and Garments and Food Processing. Further, Textile and Garments industry was further sub-divided into: (i) Manufacture of Textiles and (ii) Manufacture of Wearing Apparel; whereas, Electronics and Electrical Equipments was further subdivided into: (i) Auto and Auto Components and (ii) Other Transport Equipment. The sampling technique used was a random sample of firms from the population of Annual survey of Industries (ASI) frame of registered manufacturing firms of various employment size classes.

In this paper, we explore the sample of firms from Haryana for the sectors mentioned above for the year 2015. The reasons for choosing Haryana were multifold-it has a large base of skilled labor force so very essential for firms involved in manufacturing process. Further, the state has provided large policy incentives for business under Haryana industrial policy of 2005 and finally large manufacturing firms in Haryana have access to good infrastructure (power, roads and railways).

For example see Management of T.I. Diamond Chain Ltd. v. P.O. Labour Court 2003 I CLR 57 (Mad.H.C.), Petroleum Employees Union v. Indian Oil Corporation Ltd. 2001 I CLR 785 (Bom.-D.B.)

National Policy on Skill Development and Entrepreneurship 2015 http://www.skilldevelopment.gov.in/assets/images/Skill%20India/policy%20booklet-%20Final.pdf

The total numbers of firms, across several manufacturing subgroups surveyed were close to 100 allowing us a rich database to explore and draw inferences on important issues like-Major issues faced by manufacturing sector in India hindering its growth and investment attractiveness, Influence of extant labour laws in India on manufacturing sector firms-especially the impact of issues related to employing contract labour and finally issues arising out of training and development of labour in the manufacturing sector in the context of lack of adequate skilled labor force availability.

Drawing from the overall sample - the sub-sample of 95 firms in the state of Haryana, we note that 41 per cent of the surveyed firms (in numbers 39) report the use of contract labour as can be seen in Fig 1 below.

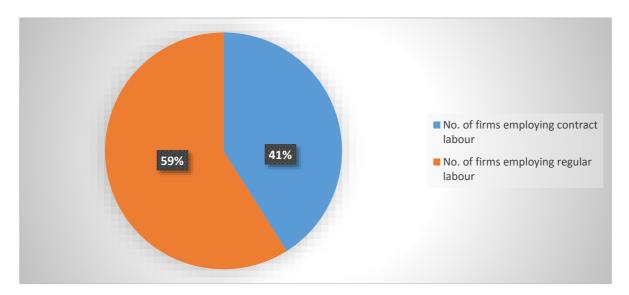


Figure 1: Overall distribution of Regular Workers and Contract Workers

Source: ICRIER Survey on labour issues in Indian Manufacturing sector 2015: Haryana

As a basic attempt to understand the data, we turn to identifying some of the characteristics of these firms, beginning the exercise by looking at the pattern of use of contract labour across the industries surveyed. As mentioned earlier, the sample was taken across a set of industries namely Auto Components, Computer Equipment and Operations, Electrical Equipment, Food Products, Leather Products, Manufacture of Textiles, Manufacture of Wearing Apparels and Other Transport Equipment. The spread of the use of contract labour across these industries is shown in Table 1, which is also reflected in the distribution shown in Figure 2. As can be seen, in three of the industry groups Auto Components, Electrical Equipment and the Manufacture of Textiles fifty per cent of the firms employ contract labour, followed by the fact that bulk of the firms manufacturing Apparel and Other Transport Equipment use contract labour, while the manufacture of Computer Equipment, Food Processing and Leather Products show a smaller proportion of firms employing contract labour. Using reported manufacture for exports as a heuristic measure of competition, we note the pattern of the proportion of firms that report manufacture for exports across the industries in our sample. This pattern can be seen in Table 2, as well as in Figure 3. Broadly speaking, it is evident that on the average about half of the

firms in each industry group report manufacture for exports (Auto Components, Computer Equipment, Electrical Equipment, and Food Processing) with a somewhat higher proportion of two thirds of the firms in the Leather Products and Other Transport Equipment saying that they manufacture for export. The clear outliers are the set of firms belonging to the category of Manufacture of Apparel and Manufacture of Textiles with the former industry group showing more than ninety per cent of the firms manufacturing for exports and the latter group only twelve per cent. Clearly the Manufacture of Wearing Apparel is the most oriented towards manufacture for exports with the closest similar set being Other Transport Equipment and Leather Products. In relation to this we see a good proportion of firms (two third) belonging to the categories of Manufacture of Wearing Apparel and Other Transport Equipment that both manufacture for export and employ contract labour. Other industry groups show only about quarter of the firms manufacturing for export and hiring in contract labour, with some groups (like Leather Products and Manufacturing of Textiles) exhibiting low and even no use of contract labour.

Manufacture of Wearing Apparel as well as Other Transport Equipment in India face uneven demand for exports from rest of the world. Now, in order to meet this fluctuation in demand, the firms may well have to adjust their labour input and scale of operation regularly. Employment of regular workers does not provide them with enough flexibility with regard to hiring and firing, due to strict labour regulations in place. Therefore, these firms prefer contract workers instead of permanent ones, in order to attain short-run efficiency and flexibility in labour use by hiring workers on fixed term contracts.

Table 1: Distribution of Contract Workers across Industries

Industry	Total No of Firms	Firms using Contract labour	Firms not using contract labour	Percent of firms using contract labour
Auto	14	7	7	50
Component				
Computer	9	3	6	33
equipment				
Electrical	14	7	7	50
Equipment				
Food Processing	13	3	10	23
Leather Products	18	2	16	11
Mfd of Textiles	8	4	4	50
Mfd of Wearing	14	9	5	64
Apparel				
Other Transport	5	4	1	80
Equipment				

20
18
16
14
12
10
8
6
4
2
0
Total No of Firms
Firms using Contract labour
Firms not using contract labour

Prims not using contract labour

Other transport and the product of the product

Figure 2: Distribution of Contract Workers across Industries

Source: ICRIER Survey on labour issues in Indian Manufacturing sector 2015: Haryana

We can loosely infer from this that while competitive pressures (as clearly evident in the case of Manufacture of Apparel and the Manufacture of Textiles) could be influencing the hiring of contract labour, other forces are also at play. This is clearly obvious in the case of Leather Products category where we note that while many firms manufacture for exports, there is very little use of contract labour by the firms belonging to this category.

Table 2: Proportion of Firms reporting Manufacture for Exports

Industry	No of firms	No of firms exporting	No of firms exporting and using contract labour	Percent of firms exporting	Percent of firms exporting and using casual labour
Auto Component	14	6	3	42	21
Computer equipment	9	4	2	44	22
Electrical Equipment	14	7	4	50	28
Food Processing	13	5	3	38	23
Leather Products	18	12	2	66	11
Mfd of Textiles	8	1	0	12.5	0
Mfd of Wearing Apparel	14	13	9	92	64
Other transport equipment	5	3	3	60	60

20 18 16 14 12 10 8 6 4 2 Computer Electrical Leather Mfd of Mfd of Apparel Component equipment Equipment Processing Products **Textiles** transport equipment ■ No of firms ■ No of firms exporting ■ No of firms exporting and using contract labour

Figure 3: Profile of Export Firms and Use of Contract Labour

Source: ICRIER Survey on labour issues in Indian Manufacturing sector 2015: Haryana

Looking out to other characteristics we next turn to the distribution of firms using contract labour classified on the basis of employment size. This can be seen in Fig 4 below. We note that a share of firms of all employment size classes employ contract labour though the proportion of firms employing contract labour increases with size -34 per cent, 60 per cent and 70 per cent respectively.

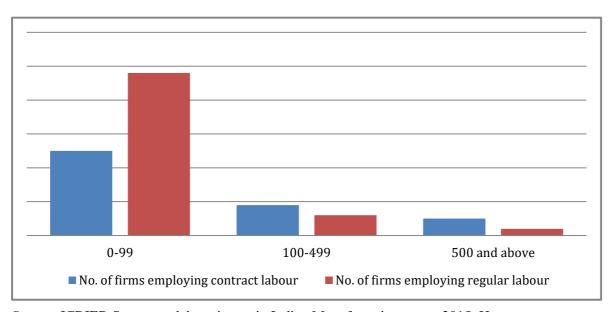


Figure 4: Firms using Contract Labour classified by Employment Size

In this context it is also important to note the variation of contract labour use with industry. The distribution of firms employing contract and only regular labour is shown across different industry groups surveyed in Fig 5(a) to 5(h).

Figure 5: Distribution of Firms employing Contract Labour and only Regular Labour across industries

Figure 5(a): Auto Components

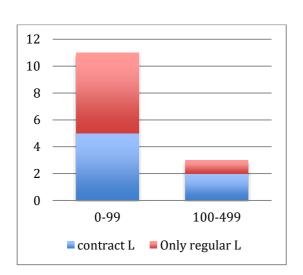


Figure 5(b): Computer Equipment and Operations

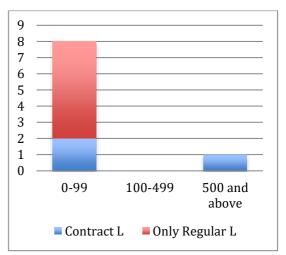


Figure 5(c): Electrical Equipment

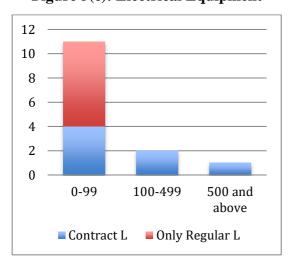


Figure 5(d): Food Processing

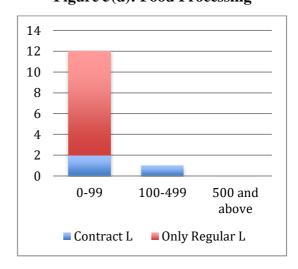


Figure 5(e): Leather Products

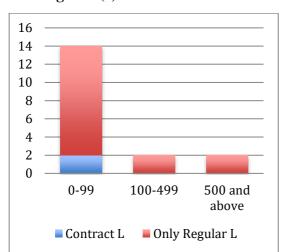


Figure 5(f): Manufacture of Textiles

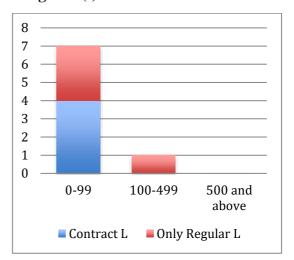


Figure 5(g): Manufacture of Wearing Apparel

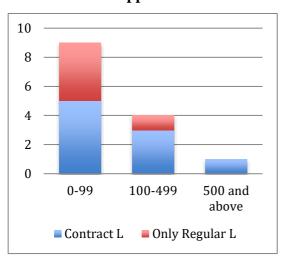
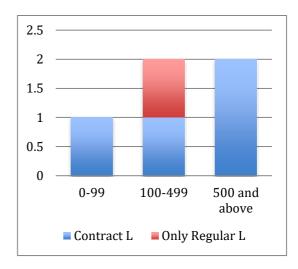


Figure 5(h): Other Transport Equipment



Source: ICRIER Survey on labour issues in Indian Manufacturing sector 2015: Haryana

It can be broadly seen from these distributions that some firms in all the industry sub groups surveyed report the use of contract labour. While larger firms almost invariably report the use of contract labour (except in the case of Leather Products) the class of smaller establishments (0-99 workers) have a proportion of firms (except for Other Transport Equipment, where all the firms use contract labour) reporting the use of contract labour. However the significant point to note is that, with varying degrees, that many smaller firms do employ contract labour – with a notably low proportion of firms hiring in contract labour being confined to the Leather Products and Food Processing industries.

This leads us to the next question as to what tasks are associated with contract workers – are these tasks distinct from those performed by regular workers, or do contract workers perform the same tasks? Over the survey, the firms employing contract labour were asked a series of questions on how they place contract workers in relation to permanent or regular workers. The

results are shown in Table 3 where we can see that only a small fraction of the firms report the segregation between contract workers and regular workers. On the other hand the bulk of firms report that both categories of workers work side by side and one third of the responses also report that the two categories perform tasks interchangeably. We can thus broadly make the inference that the survey supports the hypothesis that contract workers are not confined to peripheral activities but rather substitute for regular workers in the core tasks of firms. The interesting corollary that accompanies this is that while more than half of the firms employing contract labour say that regular workers are more skilled than contract workers, a much smaller fraction confines contract workers to less complex tasks than regular workers – suggesting that while firms hire in contract workers to substitute for regular workers, they probably bear the cost of having a portion of their labour force possessing lower skills – typically those that are learnt on the job. The sacrifice on the skills front is no doubt encouraged (apart from the non-application of the laws governing regular workers) by the fact that contract workers are paid lower wages – about two thirds of the firms explicitly state that they pay contract workers lower wages even though they do the same work as regular workers.

Table 3: Segregation between Contract Workers and Permanent Workers

	Segregation by floor	Segregation by sub-task	Can work side by side	Perform task interchangeably	Permanent workers always more skilled than contract workers	Contract workers always perform less complex task than permanent workers
Percentage of Firms Reporting	12	7	70	33	56	12

Source: ICRIER Survey on labour issues in Indian Manufacturing sector 2015: Haryana

In this regard some further descriptive statistics can be seen in Figure 6, which shows the distribution of responses to a question posed to firms who employed contract workers as regards the skill level of regular and contract workers – the firms were asked what was the skill level of a regular/contract workers employed, was it unskilled, semi-skilled (experienced on the job) or skilled (trained)? It can be seen that the bulk of responses state that both categories of workers are either semi-skilled or skilled (though with slightly

20 18 16 14 12 10 8 6 4 2 0 Unskilled Semi skilled Skilled ■ Contract Workers ■ Permanent Workers

Figure 6: Skill level of Contract Workers and Permanent Workers

Source: ICRIER Survey on labour issues in Indian Manufacturing sector 2015: Haryana

more firms saying that regular workers are the ones that are skilled), which gives us cause to push our point that while contract labour may be substituting for regular labour there might be a strain in achieving perfect substitution because of shortfall at the margin on account of lack of skills. This can also be inferred from the distribution of responses by the firms to a question on the educational attainment of both contract workers and regular workers. The distribution is shown in Figure 7, where we can see that the bulk of the firms report a higher educational attainment for regular workers than contract workers. About half the firms report the same level of educational attainment for contract workers as for most regular workers but the other half of firms report that contract workers have lower levels of educational attainment. This suggests that contract workers are drawn from a wider pool than regular workers but end up employing some workers that are of the same education level – the ones that substitute more easily for regular workers.



Figure 7: No. of Firms with education attainment of CW / PW in situations where both are engaged in the same kind of work

It is possibly the other workers that cannot be used easily to do regular tasks that generates a series of qualitative responses from the firms when asked about the downside of the contract labour system – the response is to highlight the fact that adequately skilled and productive worker cannot be easily hired and retained under the system. This kind of problem is corroborated by other qualitative studies, which associate the problem with the use of contract labour.

In particular one study notes the attempt of a heavy transport manufacturer located in Rudrapur where labour is drawn from the surrounding rural hinterland. The firm was able to raise the productivity only by signing an agreement with a trade union, which enabled contract workers to be treated at par with regular labour. Among other benefits that accrued to contract labour was that they were assured of tenure till the age of 58 years. The study reports that this was an isolated case in the region with most other manufacturing firms in the region suffering from the tensions of using contract labour – while contract labour is flexible and substitutes for regular work they sometimes do not stick and also do not adequately invest in doing the job. To understand this it is perhaps important to turn to an analytical structure that might help us think of the problem and also help us in thinking of the future of labour law reform in India. The incomplete contracts framework can quite usefully provide for this.

4. Incomplete Contracts and the Basis for Law Reform

For our purposes we invoke some of the rudimentary aspects of the incomplete contracts model and we do so by invoking some of the early literature to articulate how the model is useful for us to look at the labour market. In one of the seminal papers Klein, Crawford and Alchian¹⁷ tell us that *ex- ante* contracts involving relationship specific investment cannot cover risks that show up *ex-post*, primarily because of the physical impossibility of writing up such complex contracts. They point out that the more specific an investment is to a relationship, greater is the possibility of at least one of the parties appropriating quasi-rent from the gains of the relationship ex-post. The anticipation of this can forestall value generating ex-ante decisions to invest. They suggest that vertical integration can somewhat alleivate this problem, leading to more optimal levels of investment. Subsequently some of the literature has worked to refine the model suggesting that there are both costs and benefits to vertical integration but for our purposes we confine ourselves to their discussion on incomplete contracts as it pertains to the labour market¹⁸.

Pankaj Kumar in 'Who Benefits from the Law? Reminisces from Fieldwork on Contract (Agency) Workers in India' Paper presented at Labour Law Research Network Conference University of Amsterdam 25-27 June 2015

B. Klien, R. Crawford and A. Alchian. 1978. 'Vertical Integration, Appropriable Rents and the Competitive Contracting Process', Journal of Law and Economics 21(2): 297–326.

See for example S. Grossman and O. Hart. 1986. 'The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration', Journal of Political Economy 94(4): 691–719.

O. Hart, 1989. 'An Economist's Perspective on the Theory of the Firm', Columbia Law Review 89(7): 1757–74

O. Hart, O. and J. Moore. 1990. 'Property Rights and the Nature of the Firm', The Journal of Political Economy 98(6): 1119–58.

To approach the labour market context it is pointed out by Kline et al that often enough, vertical integration ends up being approximated by long-term contracts or even by extra-legal implicit contracts. The significance of such 'institutions' is manifest when we consider certain examples - for instance consider the case of worker hired to maintain an asset and if she does not do her job she can be fired, but were it the case she has a special ability to maintain the asset then she can hold up the owner of the asset and earn a quasi-rent. To resolve the problem it is not possible to vertically integrate as in other markets with the employer coming to 'own' the worker on account of anti-slavery law. So some form of vertical integration such as having a long-term relation — a franchise agreement perhaps which is more vertically integrated with an employer than a worker who can be fired at will is better in preventing a large hold-up.

Investment concerns become very important when we turn to human capital. While general human capital is another matter, specific human capital involves a series of ex ante investment decisions by both employers and employees, which are subject to an ex-post risk of quasi-rent appropriation. Consider the appropriation of quasi rent by workers when employers invest in specific human capital. Workers can quit; causing firms to push up wages to retain workers, but that is no guarantee of staying on and complex wage schedules are atypical, causing wage rigidity. This train of thinking has generated a large literature emphasising the wide variety of institutions that govern quantitative adjustments in labour markets.¹⁹ There are concerns of the appropriation of quasi-rent at the other end of the relationship as well – consider the case where workers have invested in specific human capital on the job and employers opportunistically fire workers nearing retirement disabusing them from enjoying the returns to investing in the job. While the role of trade unions is conventionally relegated to forming a cartel to engineer wage setting, they are probably particularly important as institutions that play an important role in monitoring and enforcing long term contracts to help preserve returns to employees with investments in specific human capital.

It is with these sorts of analytical framework that we can go back and visit some of the issues that we have raised in previous sections. For instance in the case study from Rudrapur mentioned at the end of the last section the agreement that allowed contract workers to get benefits similar to those of regular workers was the joint product of both the management as well as the trade unions playing a crucial role. However the author of the study also tells us that the agreement is under strain because the local government machinery considers it illegal – under the *Contract Labour (Regulation and Abolition) Act, 1970* the labour department should move to abolish contract labour if the job such labour has been hired for is a core activity and not peripheral. It is precisely this sort of conundrum that labour law reform in India needs to address. By confusing 'no law' as law reform, the system is encouraging a de facto employment at will regime which may be fine if one worker is substituted easily for another – as is the case with unskilled work. However to the extent that one worker cannot be substituted one for another, where investment in the job and the location where the job has been gained

-

For example see Hashimoto, Masanori, and Ben T. Yu. "Specific capital, employment contracts, and wage rigidity." *The Bell Journal of Economics* (1980): 536-549 and also see Hashimoto, Masanori. "Bonus payments, on-the-job training, and lifetime employment in Japan." *The Journal of Political Economy* (1979): 1086-1104

are important and specific human capital as skill is important, it becomes vital for labour law to offer variegated terms to workers. This is best done by having some basic rights for all labour in place and then proceeding to allow employers to design contracts that suit them best with worker interests being represented by unions. The creation of thresholds in statues invariably leads to perverse effects. As MacLeod and Nakavachara tell us that while legislation best pertains to the average case and that cases that come to be determined in courts on account of egregious behavior of employers are the crucial marginal cases²⁰. These are the ones that need to be corrected otherwise there will be a preemptive fall in productive relations. And, to do this requires us to step in the direction of the small beneficial change we saw in the Apprentice Act, which by and large ignores the complexities of skills and the market, but upon recent amendment does add the clause saying "Every employer shall formulate its own policy for recruiting any apprentice training at his establishment". India needs reform in this direction and less of reform that is merely 'pro-employer' such as among the many changes to the Factories Act in Rajasthan that states that complaints against the employer about violation of this law would not receive cognizance by a court without prior written permission from the state government. As we have tried to argue efficiency is contextual when there is value to be generated from ex-ante relationship specific investment and the correct law is vital for gaining this value.

W. B MacLeod and V. Nakavanchara "Can Wrongful Discharge Law Enhance Employment?" *Economic Journal*, Vol. 117, F218–F278

References

- **Besley, Timothy and Burgess,** Robin "Can Regulation Hinder Economic Performance? Evidence from India." Quarterly Journal of Economics (2004): 119(1): 91–134
- **Das, Deb Kusum, Choudhury, Homagini and Singh, Jaivir.** "Contract Labour (Regulation and Abolition) Act 1970 and Labour Market Flexibility: An Exploratory Assessment of Contract Labour use in India's Formal Manufacturing." ICRIER Working Paper No. 300, (2015)
- **Grossman, Sanford J., and Oliver D. Hart.** "The costs and benefits of ownership: A theory of vertical and lateral integration." *The Journal of Political Economy* (1986): 691-719.
- **Hart, Oliver, and John Moore.** "Property Rights and the Nature of the Firm." *Journal of political economy* (1990): 1119-1158.
- **Hart, Oliver.** "An Economist's Perspective on the Theory of the Firm." *Columbia law review* (1989): 1757-1774.
- **Hashimoto, Masanori, and Ben T. Yu.** "Specific capital, employment contracts, and wage rigidity." *The Bell Journal of Economics* (1980): 536-549.
- **Hashimoto, Masanori.** "Bonus payments, on-the-job training, and lifetime employment in Japan." *The Journal of Political Economy* (1979): 1086-1104.
- **Klein, Benjamin, Robert G. Crawford, and Armen A. Alchian.** "Vertical integration, appropriable rents, and the competitive contracting process." *Journal of law and economics* (1978): 297-326.
- **Kumar, Pankaj** in 'Who Benefits from the Law? Reminisces from Fieldwork on Contract (Agency) Workers in India' Paper presented at Labour Law Research Network Conference, University of Amsterdam 25-27 June 2015
- **MacLeod, W. Bentley, and Voraprapa Nakavachara.** "Can Wrongful Discharge Law Enhance Employment?*." *The Economic Journal* 117, no. 521 (2007): F218-F278.
- **Sapkal, Rahul Suresh.** "Labour Law, Enforcement and the Rise of Temporary Contract Workers: Empirical Evidence from India's Organised Manufacturing Sector." *European Journal of Law and Economics* (2015).
- **Shyam Sundar, K. R.** Non-regular workers in India: Social dialogue and organizational and bargaining strategies and practices. No. 466556. International Labour Organization, (2011)
- **Singh, J.** "Who is a worker? Searching the Theory of the Firm for Answers" in Ramaswamy (ed.) *Labour, Employment and Economic Growth in India* Cambridge University Press Delhi (2015)

LATEST ICRIER'S WORKING PAPERS

NO.	O. TITLE AUTHOR YEAR						
NO.		AUTHOR	IDAN				
329	HARVESTING SOLAR POWER	ASHOK GULATI	AUGUST				
	IN INDIA!	STUTI MANCHANDA	2016				
		RAKESH KACKER					
328	A MORE SUSTAINABLE	MONTEK AHLUWALIA	JULY 2016				
	ENERGY STRATEGY FOR	HIMANSHU GUPTA					
	INDIA	NICHOLAS STERN					
327	INDIA'S INFORMAL TRADE	NISHA TANEJA	JULY 2016				
	WITH PAKISTAN	SAMRIDHI BIMAL					
326	INDIA – PAKISTAN TRADE:	NISHA TANEJA	JUNE 2016				
	TEXTILES AND CLOTHING	SAON RAY					
		DEVYANI PANDE					
325	IMPROVING TAXATION	R. R. SINGH	JUNE 2016				
	ENVIRONMENT: ATTRACTING						
	FOREIGN DIRECT						
22.1	INVESTMENT	LAD (DU DYLA CWYA TY	HDE 2016				
324	FINANCIAL SECTOR	JAIMINI BHAGWATI	JUNE 2016				
	LEGISLATIVE REFORMS	M. SHUHEB KHAN					
	COMMISSION (FSLRC) & FINANCIAL SECTOR	RAMAKRISHNA REDDY BOGATHI					
	REGULATION IN INDIA	BOGATHI					
323	URBAN WATER SYSTEMS IN	MIHIR SHAH	MAY 2016				
323	INDIA: A WAY FORWARD	WIIIIK SITAIT	WIA 1 2010				
322	SURVEILLANCE OF CHRONIC	UDAYA S MISHRA	MAY 2016				
	DISEASES: CHALLENGES AND	S IRUDAYA RAJAN	11111 2010				
	STRATEGIES FOR INDIA	WILLIAM JOE					
		ALI MEHDI					
321	PREVENTION OF CHRONIC	ALI MEHDI	MAY 2016				
	DISEASES: REORIENTING	DIVYA CHAUDHRY					
	PRIMARY HEALTH SYSTEMS	PRIYANKA TOMAR					
	IN INDIA	PALLAVI JOSHI					
320	INNOVATION (AND	SAON RAY	MAY 2016				
	UPGRADING) IN THE	SMITA MIGLANI					
	AUTOMOBILE INDUSTRY: THE						
210	CASE OF INDIA	XXX XX XX A	15177.2015				
319	THE IMPACT OF GLOBAL	KUNTALA	MAY 2016				
	LABOUR STANDARDS ON	BANDYOPADHYAY					
210	EXPORT PERFORMANCE	NICHA TANEIA	MAY 2016				
318	FACILITATING INDIA- PAKISTAN TRADE THROUGH	NISHA TANEJA ISHA DAYAL	WIA 1 2016				
	THE LAND ROUTE	SAMRIDHI BIMAL					
317	ESTABLISHING INDIA'S	NISHA TANEJA	MARCH				
317	NATIONAL TRADE	SHRAVANI PRAKASH	2016				
	FACILITATION COMMITTEE- A	SAMRIDHI BIMAL	2010				
	PROPOSAL						
	THOI ONLL						

About ICRIER

Established in August 1981, ICRIER is an autonomous, policy-oriented, not-for-profit, economic policy think tank. ICRIER's main focus is to enhance the knowledge content of policy making by undertaking analytical research that is targeted at informing India's policy makers and also at improving the interface with the global economy. ICRIER's office is located in the institutional complex of India Habitat Centre, New Delhi.

ICRIER's Board of Governors includes leading academicians, policymakers, and representatives from the private sector. Dr. Isher Ahluwalia is ICRIER's chairperson. Dr. Rajat Kathuria is Director and Chief Executive.

ICRIER conducts thematic research in the following eight thrust areas:

- Macro Management Financial Liberalization and Regulation
- Global Competitiveness of the Indian Economy Agriculture, Manufacturing and Services
- Multilateral Trade Negotiations and FTAs
- Challenges and Opportunities of Urbanization
- Climate Change and Sustainable Development
- Physical and Social Infrastructure including Telecom, Transport, Energy and Health
- Asian Economic Integration with focus on South Asia
- Promoting Entrepreneurship and Skill Development

To effectively disseminate research findings, ICRIER organises workshops, seminars and conferences to bring together academicians, policymakers, representatives from industry and media to create a more informed understanding on issues of major policy interest. ICRIER routinely invites distinguished scholars and policymakers from around the world to deliver public lectures and give seminars on economic themes of interest to contemporary India.

