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ARTICLE



Enterprise Informality in India: The Blind Spots in Public Policy

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Abstract

An essential characteristic of firm size distribution patterns in developing countries including India, is a bimodal distribution with a "missing middle", which is widely accepted in development economics. We analyse data from the Annual Survey of Industries (ASI), National Sample Survey (NSS) and Economic Census to assess the firm size structure of the whole non-farm sector. The contribution of the paper is that for the first time a comprehensive database is constructed to enable analysis of the size structure of India's non-farm enterprises. The second contribution is that we find a deep distortion in India, with even a "small"-scale sector being very small, relatively. We examine briefly the policy-related causes that make India an outlier even among Asian economies in respect of size structure of enterprises. Finally, we argue that the historically policy-induced informality of enterprises is being entrenched by the current hiatus in state policy in even recognising the true nature of the problem of micro, small & medium enterprises (MSMEs), which holds back both their growth and employment.

Keywords Size distribution of firms · Firm performance: size · Diversification · Scope · Enterprise policy · Formal and informal sectors

1 Introduction

Most international development economics and industrial organisation literature emphasise the importance of small and medium enterprises (SMEs) as essential to output, but especially to employment generation (Krueger 2013; OECD 1997; Keskin et al. 2010; Wang 2016; Tybout 2000 and 2014; Hsieh & Olken 2014). Government of India (2017, 2018) states that the sector accounts for 45.0 per cent of

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India's manufacturing output and 40.0 per cent of total exports; also, that MSMEs accounted for 30.74 per cent of GDP in 2014–15 (Government of India 2021-22) Not surprisingly, MSMEs are considered a driving force of the economy. However, due to the predominance of tiny enterprises and informality in the industrial sector, it is challenging in developing countries to harness the economies of scale, adopt new technologies and regular upgradation (Mehrotra, 2019). Given that economies of scale go hand in hand with higher productivity, the predominance of micro-enterprises in any economy can be a barrier to growth and employment generation.

Dhar and Lydall (1961) were the first to observe the missing middle in Indian data and the thin share of employment size class 50 to 499 in Indian manufacturing employment. A very large share of workers in India's manufacturing sector is employed in enterprises with less than 50 workers (Hasan and Jandoc 2013), who show the distribution of employment by three size groups (micro and small < 50, medium 50–199, large > 200). Almost 85 per cent (or 37.5 million out of 44.6 million) were employed in such SMEs in 2005. *This share is considerably higher than that in many comparator countries in the Asia* and Pacific region, except South Asia. Thus, Mazumdar and Sarkar (2013), in their comparative study about manufacturing firms in 11 countries of Asia, show that the size group of 6–49 workers in India accounts for more than 55 per cent of total non-household manufacturing in 2005, much larger than in other Asian countries (outside Southern Asia).

Excluding agriculture, there is no country (with the exception of two, Cambodia and Nepal) in Eastern, Southeast Asian and South Asia which has a higher share of informal employers (79.1%) among all employers in India (ILO 2018). We emphasise "employers" as they constitute the informal units (unregistered), and their workers are normally informal (and without social insurance). This overwhelming predominance of informal employers is a classically Indian phenomenon: in East Asia the highest share is in China (52.5%); in South east Asia the share of employers who are informal is below 50 per cent; and in even Bangladesh, Pakistan and Sri Lanka, it is below 60 per cent (ILO 2018). This level of enterprise informality in India and elsewhere entrenches informality in the workforce as well and is a source of poverty (OECD 2008).

In order to delve deeper into the size structure of India's non-farm enterprises, in this paper, we merged the data of all organised and unorganised firms of India from different data sources to figure out the exact size of informality in enterprises. The focus is naturally on the MSME sector (i.e. number of firms by the size of employment). That will give us a clear idea about the size distribution (MSME and large) of India's non-farm enterprises.

The purpose of this paper is threefold. This is the first time that the entire nonfarm enterprises (manufacturing, services, construction) from across three different data sources are captured to understand the full scope of the unusual character of India size structure of enterprises, drawing upon data on the entire set of organised and unorganised, registered and unregistered enterprises. The paper's contribution, thus, is to provide a comprehensive view of the size structure of non-farm enterprises in India. Second, we briefly explain the type of government policies that have contributed to this extremely distorted size structure of India's enterprises. Third, we draw upon this preceding analysis to draw out the policy challenges of informality. Its contribution is also to highlight failure of MSME-related policy to recognise, let alone address the non-registration of units—which account for the vast majority of MSMEs. This blind spot of policy is a fatal flaw in the policy framework.

The paper is organised as follows. Section 2 spells out the definitions and data sources. Section 3 presents the size distribution of India's non-agricultural enterprise structure—formal and informal both. Section 4 then attempts to briefly explain this structure in terms of government policies, both historical and more recent. Section 5 discusses how the *current* government policies—despite decades of failure—are still failing to enable MSMEs to grow and generate employment, which undermines its efforts post-COVID to revive MSMEs, which have taken a beating since the demonetisation (of 2016). Section 6 concludes.

2 Data Sources and Definitions

We examine both formal and informal sector enterprises in this paper. To assess the size structure of the whole non-farm sector, it is necessary to analyse Annual Survey of Industries (ASI) data, Economic Census (EC) data and National Sample Survey (NSS) data. The ASI conducted by the Central Statistical Organisation (CSO) gathers information on "registered" or formal sector firms covered by (Sects. 2 m(i) and 2 m(ii) of) the 1948 Factories Act and firms registered in the 1966 Bidi and Cigar Workers Act—particularly those firms that use electricity and hire more than 10 workers, and those that do not use electricity but nevertheless employ 20 or more workers.

The NSSO Survey of Unorganised Manufacturing Enterprises, conducted every five years, includes unorganised or informal sector firms. Two rounds (2010–11 and 2015–16) were used for our analysis.¹ Unorganised enterprises are those employing less than 10 workers. NSS unorganised surveys are follow-ups to the different Economic Censuses (conducted once every six years or so). NSS used the EC 2013–14 as their sampling frame.

Non-agricultural enterprises include the construction sector. Construction enterprises are not covered by ASI annual surveys or NSS unincorporated non-agriculture enterprise round. Hence, to include the construction sector data in our analysis, we extracted information on construction (to add it to the above two data sources, NSS and ASI) from the EC for formal and informal construction enterprises.

The Ministry of MSMEs of Government of India enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, in 2006, which defines these enterprises.² The MSMEs in this Act were classified into two classes: a.

 $^{^2}$ As per IFC (2014) report, among the 267 definitions used by different institutions in 155 economies, the most widely used variable for defining an MSME is the number of employees (92% of the analysed definitions utilise this variable). Other variables commonly found in MSME definitions are turnover as well as value of assets (49% and 36%, respectively). Our analysis focuses on number of employees.



¹ No survey data for unorganised enterprises are available since 2016. A survey was carried out by NSO in 2019–20, but the data have not yet been made public. These surveys are going to be annually conducted. The 2020–21 survey data have also not been released.

Type of enterprises	Manufacturing sector Investment in plant & machinery	Service sector Investment in plant & equipment
Micro	Up to ₹2.5 million	Up to ₹1 million
Small	Over ₹2.5 million to ₹50 million	Over ₹1 million to ₹20 million
Medium	Over ₹50 million to ₹100 million	Over ₹20 million to ₹50 million

Table 1	Defining micro,	small and medium	enterprises:	Thresholds for	plant & machinery
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Source The MSMED Act, 2006, Ministry of MSMEs

Note: The Ministry of MSME in July 2020 revised MSME classification with a composite criteria for both manufacturing and services enterprises. But the data are not available in terms of the revised MSME definition

Table 2 Defining organised manufacturing firms by size of employment	Categories	Number of employees (Nos.)
	Micro	< 10
	Small	10 to < 20
	Medium	20 to < 100
	Large	> = 100

manufacturing and b. services enterprises, both of which were identified by investment in plant and machinery/equipment. The limit for investment in plant and machinery/equipment for manufacturing/service enterprises is as under (see Table 1):

Sometimes there is confusion about enterprises under formal/registered sector and informal/unorganised sector. We should clarify that the unorganised sector is not entirely overlapping with what is called the unregistered sector. In the NSS unorganised surveys, some enterprises can be registered under different acts/authorities. So, the unorganised sector consists of mostly unregistered enterprises and some registered enterprises under some act or authorities other than bigger factories/companies covered under ASI. Therefore, there is no overlapping or double counting between NSS and ASI datasets.

2.1 Annual Survey of Industries 2015–16 & 2010–11

The second source used is data of the CSO's ASI for 2010-11 and $2015-16^3$ (see Table 2).

³ However, the problem is that in the ASI, almost 40 per cent of firms have missing values in respect of investment in the plant and machinery variable over the years. Hence, we used the remaining 60 per cent of enterprises in the ASI database to categorise ASI firms in terms of the number of employees in each firm.

ASI (which only has data for the organised sector) does not classify firms by the categories-micro, small and medium-but NSSO's Unorganised Sector survey does. Therefore, we tried to discover what might be the number of employees in organised firms if we were to apply the Plant & Machinery thresholds used in NSSO surveys to the ASI firms (even though the ASI covers the organised sector, while the former do not). We found that the plant & machinery-based definition corresponds quite strongly with the category ranges for M-S-Ms for the number of workers shown above in Table 2. National Commission for Enterprises in the Unorganised Sector (NCEUS) discovered a high degree of overlap between micro-enterprises characterised by investment in plant and equipment and employment of fewer than ten individuals. The employment correlate of the capital investment threshold appears to be primarily, if not entirely, in the range of 10–19 workers for smallscale firms other than micro-units. Also, India's labour laws and regulations are quite complex in nature. If a firm adds one more employee after 99 and goes to 100 employees, the Industrial Disputes Act kicks in. The Industrial Disputes Act says that if it is a manufacturing firm with 100 employees or more, it cannot dismiss any of them under any circumstances unless get prior approval from Government. This is a major mark for the firms. Therefore, we have categorised those firms with 100 and above employees as large. After categorised small (10 & less than 20) and large (100 and above), the category left which is 20 to less than 100 employees has been categorised as medium. Since in this paper our attention is focussed on MSMEs, we needed and used a standard definition across the organised and unorganised categories in terms of the number of employees. Since 9 countries out of 10 in the world use number of employees as the basis of classification into micro, small, medium and large enterprises, we also adopted the same method, especially since our focus is on employment in the informal sector, as well as the potential for growth of these firms and generate employment.

To classify *construction* sector enterprises (from data drawn from the EC 2013) into M-S-M-E, the above schema used in Table 2 (for classifying organised sector industries from ASI) has been followed to determine the size of enterprises.

3 India's Non-Agricultural Enterprise Structure: Formal & Informal MSMEs

Table 3 presents the total universe of India's non-agricultural enterprises. Enterprises that employ less than 10 workers are considered as unorganised sector units. And those employing 10 or more workers are regarded as organised. What jumps out at the reader is the scale of informality among India's enterprise structure. India has 66.9 mn enterprises, informal (unorganised) and formal (organised) taken together in the non-agricultural economy. Around 30 per cent of enterprises are registered in both years (2015–16 and 2010–11) under some act or authority. There is a marginal increase in the share of registered enterprises in the informal sector over the years.

Another finding from Table 3 is that 96.1 per cent and 96.7 per cent of enterprises are in the unorganided sector in 2010–11 and 2015–16, respectively. Of these

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Sectors		Number of ente	srprises (Million)	Share (per cent)	
		2010-11	2015-16	2010-11	2015-16
Unorganised (Manufacturing, Services	Registered under any act/authority	16.8	19.6	28.86	30.30
(NSS) & Construction (EC))	Not registered under any act/ authority	40.8	43.8	70.05	67.73
	Construction (EC)	0.63	1.3	1.09	1.97
	Total	58.3	64.7	100	100
Organised	Manufacturing: Registered under Factories act, companies act or other (ASI)*/ Formal	0.17	0.17	7.3	7.41
	Services (EC)	2.17	2.06	92.7	92.18
	Construction (EC)	0.007	0.00	0.30	0.41
	Total	2.34	2.2	100	100
Total Unorganised				96.1	96.7
Total Organised				3.86	3.34
Total Unorganised & Organised		60.6	6.99	100	100
Source Authors' own calculation from A Enterprises (Excluding Construction) Sur	ASI unit-level data of 2015–16 & 2010–11, 67th (rvey unit-level data and 5th (2005) & 6th (2013) Eco	2010–11) & 73rd nomic Census	(2015-16) round NSS	SO Unincorporated N	Von-Agricultural

two-thirds are not registered anywhere—for the policymaker it is challenging to extend services to them if the state was desirous to do so.⁴

What is most notable is how small is the total number of organised/formal sector firms: only 3.86 per cent and 3.34 per cent in 2010–11 and 2015–16, respectively. Hence, one could legitimately argue that India's informal sector is the backbone of the economy (outside agriculture).

Table 4 shows the size of the formal and informal sectors according to MSME categories in 2015–16. The micro-enterprises' share and numbers are overwhelmingly large. What we do know is that 84 per cent of the micro-enterprises are ownaccount enterprises (OAEs), without hired labour, or household enterprises. An estimated 93 per cent of the micro-enterprises have less than 5 employees.

In fact, of the 66.9 mn MSMEs, barely 0.59 mn are Small and Medium. Naturally, their contribution would be very limited in India's growth story.

The size distribution of formal sector firms is nearly normally distributed. In contrast, informal sector size distribution is distinctly skewed to the left, with a concentration of micro-firms. In 2015–16, the share of registered organised sector firms from Table 3 was only 3.34 per cent and informal sector firms account for 96.7 per cent share of all firms. The registered formal sector firms have been analysed in several studies (Mehrotra and Parida 2019; Nagaraj 2018; Kapoor 2022), but informal firms have been overlooked (Mehrotra and Biggeri 2007). Informal firms' size distribution should be analysed more closely.

Even if we exclude OAEs from the total number to see the size structure of only MSMEs, we find that the huge pool of OAEs does not influence the whole picture of Indian MSME sector. Figure 1 clearly shows that even after excluding OAEs, small and medium enterprises constitute a very small share in India's MSME sector. Though there is a slight increase in the share of small firm category, but it's still very tiny (in relative and absolute terms) in number.

Figure 1 shows us that there is a marginal increase in the share of small category firms if we exclude the huge OAEs from the above table. But it does not change the picture in any sense. The distorted size structure is still evident.

From Table 3, we saw that the share of informal/unorganised sector firms that are *registered* under multiple acts/authorities is 30.3 per cent in 2015–16, which is a pretty good number for the informal sector. The acts or authorities under which informal sector firms are registered are in Table 5. There are some inclusions and exclusions of acts and authorities between these two points of time between NSS rounds (as we noted earlier).

Registration under multiple acts or authorities of informal sector firms is a mere formality, not particularly useful to either the state or firm. It is also not synonymous with formalisation. Formalisation under Factory Act registration (of the organised sector enterprises) tends to assure social security and other benefits in the firms. But

⁴ Kapoor (2022), examining manufacturing enterprises only, finds that over 2000–01 to 2015–16 there has been no change in this situation of sheer dominance of the microsector (<10 workers in her definition) in manufacturing.

Sectors		OAE	Micro (excluding OAEs)	Small	Medium	Large	Total
Unorganised (Manufacturing, Services (NSS) & Construc- tion (EC))	Registered under any act/author- ity	12,948.2 (24.3)	6387.6 (49.2)	279.8 (59.3)	5.1 (4.1)	3.1(8.4)	19,623.8(29.3)
	Not registered under any act/ authority	40,411.1 (75.7)	3369.4 (26.0)	51.1 (10.8)	0.2 (0.2)	0.0(0.0)	43,831.8(65.4)
	Construction (EC)		1266.9 (9.8)	6.6 (1.4)	4.4 (3.5)	0.9 (2.4)	1278.8 (1.9)
	Total	53,359.3 (100.0)	11,023.9 (84.9)	337.5 (71.5)	9.7 (7.8)	4.0 (10.8)	64,734.4 (96.7)
Organised	Manufacturing: Registered under Factories act, companies act or other (ASI)*/ Formal		36.3 (0.3)	42.7 (9.0)	59.8 (48.0)	26.5 (71.8)	165.3 (0.2)
	Services (EC)		1912.1 (14.7)	91.3 (19.3)	54.3 (43.6)	5.8 (15.7)	2063.5 (3.1)
	Construction (EC)		7.4 (0.1)	0.5 (0.1)	0.8 (0.6)	0.6(1.6)	9.3 (0.0)
	Total		1955.8 (15.1)	134.5 (28.5)	114.9 (92.2)	32.9 (89.2)	2238.1 (3.3)
Total Unorganised & Organised		53,359.3 (100.0)	12,979.7 (100.0)	472 (100.0)	124.6 (100.0)	36.9 (100.0)	66,972.5 (100.0)
Share (per cent)		79.7	19.4	0.7	0.2	0.1	100.0
Source Estimated from: ASI 201:	5-2016; NSO 73rd (2015-2016); an	id 6th (2013) Ecor	nomic Census				

Note: Figures in parentheses are in per cent. Columns add up to 100

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Acts or authorities	2010-11	2010–11		
	Number of enterprises ('000)	Share (per cent)	Number of enterprises ('000)	Share (per cent)
Shops and establishment act	3772.2	22.4	4270.1	21.8
Municipal corporation/panchayats/ local body	9904.1	58.9	12,678.5	64.7
Vat/sales tax act	1830.6	10.9	2383.2	12.2
Provident fund act	73.0	0.4	91.2	0.5
Employees state insurance corpora- tion act	64.7	0.4	61.4	0.3
Registered with SEBI/stock exchange?			13.0	0.1
Any other industry-specific act/ authority	1182.0	7.0	95.2	0.5
Total registered	16,826.6	100.0	19,592.6	100.0
Total registered	16,826.6	29.2	19,592.6	30.9
Total unregistered	40,846.6	70.8	43,799.4	69.1
Total	57,673.2	100.0	63,392.0	100.0

Table 5 Act/authorities under which unorganised units are registered

Source Authors' own calculation from NSO 67th (2010-11) & 73rd (2015-16) round unit-level data

registration under most of these other acts or authorities is only a simple registration, with firms operating as before such registration. Some small incentives for any State/Central Government exhibitions or fairs, early access of benefits from any government schemes and availing credit from banks can be gained by these types of registration of informal firms, but the process and implementation mostly discouraged

10-11 ,544

61.091

Table 6 Average productivity of organised and unorganised firms	Type of firms	Average pr	oductivity		
in 2010–11 and 2015–16 (in ₹		Formal (AS	SI)	Informal (N	ISS)
per worker)		2014–15	2010-11	2015-16	2010-11
	Micro	-	_	86,700	60,544
	Small	353,542	322,278	237,617	227,340
	Medium	516,849	390,445	302,148	204,050
	Large	672,931	610,926	308,089	275,503

456.489

Total

Source: Authors' own calculation from ASI unit-level data of 2015-16 & 2010-11, 67th (2010-11) & 73rd (2015-16) round NSSO Unincorporated Non-Agricultural Enterprises (Excluding Construction) Survey unit-level data

411.811

91.728

Note: Productivity calculated as GVA divided by the number of workers. GVA and productivity calculations have been done after deflating the figures with Wholesale Price Index values (2011-12 = 100 as the base)

them to avail those benefits we come back to this issue in Sect. 4, since it is critical to our argument about MSME ability to grow and generate employment.

3.1 Informal Firms Rarely Become Formal

Informal firms almost never become formal. La Porta and Shleifer (2014) report, based on the World Bank Enterprise Survey (large cross-country surveys) that on average 91 per cent of registered firms started out as registered. An average surveyed informal firm has been in business for nearly a decade without attempting to become formal. Also consistent with this observation, only 2 per cent of informal firms sell their output to large firms (versus 14% of total firms in the World Bank Enterprise Survey). Informal firms inhabit an economic space of their own, disconnected from the formal space. In India, too, barely 12 per cent of all MSMEs have a sub-contracting relationship with larger firms (Mehrotra & Giri 2020). This should be a matter of serious policy concern in India, given that in Japan's growth strategy, this subcontracting was a critical part of the expansion of SMEs (Kooij 1990; Uchikawa 2009).

The reason, however, that registration of informal firms is important is that, without registration, no information about them is available with the state, to be able to intervene even if it wanted to.

3.2 Productivity of Firms: Organised versus Unorganised

There are significant productivity differences between small and large establishments found in the literature (Leung et al. 2008; Syverson 2011; Mazumdar & Sarkar 2013). Technical change and returns to scale can be factors for productivity differentials between these two (Taymaz 2002). Productivity is one of the leading indicators of performance (Kanbur 2015). In India too, in Table 6 we can see that formal sector firms have higher productivity compared to informal ones. The larger the firm, the higher is the productivity. With a heavy predominance of micro-firms in the size structure of India's non-farm enterprises, the low productivity translates into low earnings, thus further entrenching poverty.

3.3 Own Account Enterprises

Own Account Enterprises comprise tiny units which are not even hiring one worker. In urban areas, OAEs are 76.8 per cent of all firms in 2010–11 and 76.6 per cent of firms in 2015–16, while OAEs are 91.4 per cent of all rural firms. While OAEs predominate in both rural and urban areas, their importance is overwhelming in rural areas. These are essentially units which ensure survival of the household dependent upon it. Internationally, there is a debate around the question of whether informality of enterprises is voluntary or involuntary (especially in Latin America) (OECD 2008). In India, there is little doubt that the vast majority of OAEs arose involuntarily as a means of survival. This predominance of OAEs in rural and urban is the underlying symptom of, and a reason for, the widespread poverty.

3.4 Wages and Earnings of Workers by Size of Enterprises

In Table 7, we can observe that first, the majority of units earn less than $₹5,000^5$ per month, which is below the national poverty line monthly per capita consumption (Tendulkar line), as of 2011–12, for a family of five members. Second, there are hardly any units in the > 10 workers category where workers earn more than ₹10,000 per month. Micro-units (1–5 workers), directory establishments (6–9 workers) and 10 & more workers are mostly receiving monthly average wage upto ₹5,000 in 2010–11. Third, by 2015–16 the scenario has changed significantly. The share of unorganized unit where earnings are as low as ₹5,000 or less falls sharply to 80 per cent from 96 per cent. Fourth, the percentage of those earning ₹10,000 pm rises from 4 to 18 per cent.

4 Why Is India's Size Structure of Non-Farm Enterprises So Informal?

Informality of enterprises cannot be separated from informality of workers; the vast majority of informal workers globally are in the informal sector (ILO 2018). Historically, there were many reasons for the growth and persistence of informality in India's enterprises (and hence its labour force), factors which affected both the demand and the supply of labour. We discuss each in turn very briefly (for a more detailed discussion see Mehrotra 2020; Mazumdar & Sarkar 2013; Kathuria et al. 2013; Raj, Schotte & Sen 2020; Nagaraj & Kapoor 2022).

⁵ Market exchange rate for Indian Rupee was 1US = ₹45.56 in 2010–11 and 1US = ₹65.47 in 2015–16.



Table 7 Unorganised sector: Montl	hly average v	'ages & allow:	inces per worl	cer, by the size	e distribution	of enterprises	, 2010–11 & 2	2015-16		
Monthly average wage, salaries &	OAE (own	earnings)	1-5 worker	8	6-9 worker	S	10 & more	workers	Total	
other allowances per worker (\vec{x})	2010-11	2015-16	2010-11	2015-16	2010-11	2015-16	2010-11	2015-16	2010-11	2015-16
Upto 5000			98.11	84.76	87.46	56.32	81.49	45.66	95.85	79.60
5000 to 10,000			1.80	14.08	11.28	36.56	16.27	43.11	3.80	18.06
10,000 to 15,000			0.06	0.89	0.92	5.76	1.45	7.79	0.25	1.79
15,000 to 40,000			0.02	0.24	0.33	1.30	0.66	3.20	0.10	0.52
More than 40,000			0.00	0.02	0.01	0.06	0.12	0.24	0.01	0.04
Wage category Total			100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Enterprise category total	84.63	84.17	12.63	13.28	1.79	1.68	0.95	0.87	100.00	100.00
Source Authors' own calculation fr	om NSO 67 ^{tl}	¹ (2010–11) &	73 rd (2015–1	6) round unit-	level data					

4.1 Explaining the Rise of Informality: Factors Determining the Total Demand for Labour

Three kinds of reasons stand out which have impacted the demand for labour in the organized/formal sector in India. The first was the pattern of India's growth, an outcome of the growth strategy. In the Second Five Year Plan (1955–56 to 1959–60) the Planning Commission adopted an import-substituting industrialisation (ISI) strategy, with a focus on heavy-industry first. While ISI was a standard early development strategy across the global South, it was the capital-goods bias of the ISI that stood out in countries such as the Soviet Union, China and India. This heavy-industry first ISI strategy was not ideal for rapid absorption of agriculture's surplus labour (unlike what was envisaged by Lewis (1954)). Small-scale industries were meant to check the concentration of economic power, and regional dispersal of industry, and generate non-farm employment. The result was that when surplus workers did migrate away from agriculture in search of non-agricultural work, they were inevitably absorbed in traditional services in both rural and urban areas. If not, they were absorbed in unorganised manufacturing in micro-enterprises employing less than 10 workers, where no social insurance was available.

A second factor impacting absorption of labour in organised manufacturing⁶ or services was the plethora of central and state government labour laws. On the one hand, hardly any labour laws were applicable to the small enterprises. On the other hand, the larger enterprises, whether medium or large, became gradually subject to a number of laws passed by state or central governments, which protected the workers in the organised sector. Most of the Indian labour regulations apply only to firms above a size threshold. It leads to firm size choice, misreporting on the part of firms and enumerators (corruption). It also increases firms' unit labour costs (Amirapu & Gechter 2019). While social insurance (in the form of employee provident fund and health insurance) was mandatory for enterprises with more than 20 workers, the growing number of laws covering organized workers meant that employers tended to adopt technologies that often limited the number of workers.

Organised sector jobs grew slowly, and most non-agricultural employment continued to grow in the always unorganised sector in micro-enterprises, with workers employed without any hope of social insurance. The merger of 35 central laws into four codes on labour is unlikely to promote formalisation, as the thresholds in respect of enterprise size (defined as employees) remain mostly applicable to the four labour codes passed by parliament, which barely cover the unorganised sector.



⁶ Kapoor (2022) reports that in apparel industry, 57 per cent of workers are in size class of 1–9 workers and 6 per cent are in the size class of 50–249 workers. In auto industry and electronics industry also the size structure does not follow the missing small argument. Thus, the size structure differs from industry to industry—missing middle does not apply to automobiles industry and electronics industry, which are predominantly in the organised sector. But here in this paper we tried to depict a complete picture of the MSME sector of India, organised and unorganised.

A third factor that impacted the demand for labour, also related to the policyinduced pattern of growth, was that the Industrial Policy resolutions of the government of India began a process of reservation of manufacture of consumer products of a non-durable nature for the small-scale sector. It began with a few products (in the Industrial Policy (IP) Resolution, 1948), intensified after the IP Resolution, 1956) and dramatically picked up momentum between 1970 and 1990. The reserved products list kept growing until in 1990 the number reached 836 products, the production of which was subsidised. The market for reserved products was not only protected from international but even domestic competition, adversely affecting the quality of their products. Medium-sized firms or large corporates were disallowed from entering this sector. This resulted in perverse incentives to remain small, with inevitable loss in terms of economies of scale (Subrahmanya 1995).

Most disconcerting is that post-1991, even after economic reforms began, through the 1990s the number of reserved items kept increasing. Even more lacking in economic logic was that after 1991, all firms small and large were first exposed to international competition, as tariffs were reduced from an average of 150 per cent in 1991 to about 10 per cent in 2002 (Singh 2017), while the reservation for MSMEs of products continued. So domestic competition was precluded for these reserved products, but international competition became permitted. It was only after 2000 that gradual phasing out of reservation started with de-reservation of a few items every year.

Morris et al. (2001) surveyed around 1200 SSI units and demonstrated that production of reserved items grew at a retarded rate to that of other producers in the SSIs. Mohan (2002) in a well-documented study of the NCAER subsequently argued for complete abolition of reservation for SSI sector. Debroy et al. (2006) showed that: (a) units that produced reserved items are barely a fifth of the total SSI sector; (b) they account for about a sixth of the total employment; (c) but only one eighth of the output of the sector; and (d) their exports are only a twentieth of the total SSI exports. Thus, the reservation policy had entrenched informality in India's enterprises.

Martin et al. (2017) exposed recently the contribution of product reservation policy to entrenching informality of enterprises in India, with its concomitant low productivity and low growth in firm size. They made a systematic analysis by exploiting variation in the timing of de-reservation across products and measured the long-run impact of national SSI policy changes using variation in pre-treatment exposure at the district level. Districts more exposed to de-reservation experienced higher employment and output growth. Entrants into the de-reserved product spaces and incumbents that were previously constrained by the size restrictions drove the increase in growth. The results suggest that dismantling India's SSI policies encouraged overall employment growth found that once a product was de-reserved, the number of establishments making that product increased by nearly 15 per cent. In addition, employment increased by 50 per cent, output by nearly 35 per cent, capital by 45 per cent and wages by 6 per cent. Note, however, that employment increased by more than output, implying a fall in labour productivity. In contrast, for incumbent firms they found that incumbents with plant and machinery just below the SSI threshold—with ₹9–10 million in historical value of plant and machinery—were constrained by the reservation policy, and unlike the average incumbent, increased their capital investment after the product was de-reserved. Contrary to the expectations for such policy, they find that eliminating the policy was in fact associated with increases in overall employment, and that these increases were driven by entrants into the de-reserved product space.

The damaging skewness in India's size structure of enterprises was inevitable: a mushrooming of tiny units (employing at best 2 to 9 workers) and in addition own-account workers. Together, they accounted for 99 per cent of all non-agri units in the country (Mehrotra & Giri 2019; Basole & Chandy 2019), and as we noted earlier, almost all of them were unregistered (and thus informal).

4.2 The Quality of Labour Supply as a Factor in the Emergence and Persistence of Informality

The final factor that resulted in the growth and persistence of informality in India was supply related: the education and skill levels of the workforce. NSS data allow an analysis of the education level of the workforce. Hardly any illiterates have regular salaried jobs. Barely 3 per cent of the workforce has technical education at tertiary level, and another 7.2 per cent has general academic education at tertiary level. As recently as 2017–18, only 2.4 per cent of the workforce has formally acquired any vocational education or training (Mehrotra 2020).

Most illiterate are either casual workers or in self-employment usually engaged in low productivity work. Over half of the self-employed are own-account workers, as opposed to being employed in micro-enterprises which might have 2–9 workers.

Just over half the workforce has education up to secondary level. Well over half of those who have education up to secondary level are self-employed. However, more worrying is that as many as 75 million (or nearly a third of all those with secondary education) of those with secondary education actually are in casual work.

Less than five per cent of the workforce has formally acquired vocational education. However, notable is that technical education below graduate level as well as at the graduate level and above significantly raises the probability of your getting a regular salary job than if you were a graduate with only general academic education (Mehrotra 2016). However, low attention to human capital investment in the planning process, in turn, resulted in low productivity, hence low incomes, and low margins for employers, who could not grow their enterprises (Mehrotra 2016).

Clearly, with a labour force that has relatively poor levels of education, most have been absorbed, if not in agriculture, in informal traditional services, or construction, or unorganised manufacturing. In none of these areas does employment come with social insurance; if the enterprises are informal, so are the workers.

5 The Culpability of Policy Post-Economic Reforms of 1991

In addition to our arguments above, there is sufficient literature that discusses how policies were responsible for the emergence of a skewed size structure. What is baffling is that regrettably, the policy regime has demonstrated continued rigidity, thus entrenching a skewed size structure.

5.1 A Way Forward?

In the last three decades the policy regime has encouraged the sub-optimal size of enterprises, instead of addressing skewed size structure. Government schemes and incentives were still holding back micro or small firms from expansion to some extent. Thus the Ministry of Finance (Economic Survey 2012–13) shows if firms grow larger than small, and think of becoming "medium" sized, they will lose all scheme benefits.

Table 8 shows the name of schemes for micro, small, medium and large and who can avail of incentives (as of 2022). Items 1–5 relate to MSMEs, while schemes 6–9 are those which are intended to benefit Own Account Enterprises (i.e. the nanounits, 40.4 million of which are unregistered anywhere). The same problem holds that enterprises may find they have no incentive to grow.

Meanwhile, typical of the support to OAEs is, since 1st April 2015, a new scheme: MUDRA. Under the PMMY, three categories of loans [*Shishu* (infant units, entitled to loans < 3000), *Kishor* (loan size 3000, -3000), *Tarun* (35 to 10 000 000)] were to be given. In 2018–19, the number of Shishu loans was 89 per cent (95% of these were on average for 329000); Kishor loans were 9.3 per cent and Tarun loans merely 1.6 per cent.

No additionality has been seen through this scheme. Though it has been claimed that it has created employment and start-ups, there is no sign of it. "It is a typical case of renaming and rebranding" (Mahajan 2019). The annual report of MUDRA shows that it contributed less than 3 per cent of the total lending by banks as part of their regular lending. Mudra loans account for between 8.5 per cent and 12.6 per cent of full bank credit availed by mainly large borrowers. Without adding to employment, it is adding even more micro-units, or OAEs.

Mudra loans are flawed as a financial product—these are structured as term loans with a tenor of three years, with periodic repayments of principal and interest, whereas 90 per cent or more of the amount is used for working capital, which is needed as long as the micro-enterprise runs. If the loan is repaid, the unit will not have working capital. These loans should have been offered as cash credit overdraft limits. That would also have reduced the interest burden on the borrowers.

Currently, the risk of default is tried to be obviated through credit guarantees from the Credit Guarantee Trust for MSMEs (CGT-MSME). But no guaranteed mechanism can sustainably deal with failure rates as high as 70–80 per cent among new enterprises, which are typical for nano-enterprises run by individual entrepreneurs (Mahajan 2019).

Name of the schemes	Descriptions	Micro	Small	Medium	Comment
1. MSME champions scheme	Assistance aimed at improving processes, designs and technology	Yes	Yes	Yes	Regressive, lesser degree of support as the size increases
2. International cooperation scheme	For participation in national and international exhibition	Yes	Yes	Yes	
3. Credit guarantee fund scheme for MSE	Credit guarantee for collateral free loan up to 2 crores	Yes	Yes		
 Government purchase and price preference policy for MSEs 	Till 2012–13, 358 products were reserved for exclusive purchase from MSEs. Twenty-five per cent of annual value of goods and services purchased to be procured from MSEs	Yes	Yes		
5. MSE-Cluster development programme	Training, tech, etc., grant of 75 per cent of project cost and tangible assets, infrastructure, grant of 80 per cent of project cost	Yes	Yes		
6. Scheme of fund for regeneration of traditional indus- tries (SFURTI)	Up to ₹2.5 crore for up to 500 artisans. and ₹5 crore for more than 500 artisans	Yes ^a			
7. MUDRA	MUDRA—a public sector FI for loans up to ₹10 lakh	Yes ^b			
8. Prime Minister's employment generation programme (PMEGP)	Back-end subsidy for up to 35 per cent of project cost of ₹50 lakh for manufacturing and ₹20 lakh for services	Yes			
PMEGP (2nd Loan)	Up-gradation of the existing PMEGP/MUDRA units: back-end subsidy for up to 20 per cent of project cost of ₹1 crore for manufacturing and ₹25 lakh for services	Yes			
9. National SC-ST Hub scheme	25 per cent subsidy on plant & machinery/equipment. marketing and mentoring	Yes			
Source Compiled from various Government report and w ^a Concluded based on loan size	vebsites				

 Table 8
 Schemes for MSMEs from the Ministry of MSME

^bConcluded such as meant for artisanal units

Size	Registration	Institutional	Loan	Non-instituti	onal Loan
		2010-11	2015-16	2010–11	2015-16
Micro	Registered	82.9	75.3	66.9	65.9
	Unregistered	14.2	15.7	32.6	31.8
	Total	97.1	91.0	99.5	97.7
Small	Registered	2.9	8.6	0.5	2.1
	Unregistered	0.0	0.3	0.0	0.2
	Total	2.9	8.9	0.5	2.3
Medium	Registered	0.0	0.1	0.0	0.0
	Unregistered	0.0	0.0	0.0	0.0
	Total	0.0	0.1	0.0	0.0
Total Registered		85.8	84.0	67.4	68.0
Total Unregistered		14.2	16.0	32.6	32.0
All Total		100.0	100.0	100.0	100.0

Table 9Size-wise and registration-wise share distribution of enterprises which had taken institutionaland non-institutional loans in 2010–11 and 2015–16

Source Authors' own calculation from NSO 67th (2010-11) & 73rd (2015-16) round unit-level data

Categories		Number of enterprises (Nos.)
Registered	OAEs	12,948,188
	MSMEs excluding OAEs	6,644,317
Unregistered/ no	ot in any book	43,799,417
Total		63,391,922
	Categories Registered Unregistered/ no Total	Categories Registered OAEs MSMEs excluding OAEs Unregistered/ not in any book Total

Source Authors' own calculation from NSO 73rd (2015–16) round unit-level data

Table 9 shows us the share distribution of enterprises (by size) which had taken institutional⁷ and non-institutional loans; it asks the question: is registration status in 2010–11 and 2015–16, suggesting a pattern in respect of the source of borrowing? Out of total unorganised enterprises, only 13 per cent took either institutional or non-institutional loans in 2015–16 (from NSS 73rd round data). In spite of some government credit supports (as discussed above), enterprises mainly relied on non-institutional loans, and if they were registered that was an important determinant of their source of borrowing, with the registered borrowing mainly from institutional sources (Table 10).

⁷ Institutional Loan consists of loans from central- and state-level term lending institutions, government (central, state, local bodies), banks, co-operative banks and societies, micro-finance institutions; non-institutional loan category consists of loans from money lenders, business partner(s), suppliers/contractors, friends and relatives, others.

5.2 Recognising the Major Problem in the MSME Sector: Lack of Registration

We have clearly established that the vast majority of non-farm enterprises are unregistered. Even though 12.9 million of OAEs are registered under some authority or act, there is no one database. In addition, 43.8 million units (or over two-thirds of all non-farm units, other than in construction sector) are not registered anywhere at all. Finally, even among MSMEs (excluding OAEs) that are, the Ministry of MSME Annual Report does not state how many or what proportion of MSMEs (even registered) are benefitted by its schemes. In other words, government schemes cannot pretend to reach MSMEs those are not even exist in any record (unregistered MSMEs).

Before the MSMED Act, 2006, there was a system of registration by smallscale industrial units with the District Industry Centres (DICs). The Ministry then replaced it by 'Udyam' registration on a portal developed by the Ministry based on the revised composite criteria of classification of MSMEs (notified 26.06.2020). More than 8.8 mn MSMEs had registered on the Udyam registration portal (by June 2022). Udyam registration is a prerequisite for availing the benefits of programmes of the Ministry of MSMEs. Compare this 8.8 million number to those in Table 10 to sense the gaping hole in government policy.

An RBI Committee (RBI, 2019) examined the issue of registration of enterprises and the lack of formalisation of MSMEs particularly in the micro-category. The registration requirement of Indian enterprises is primarily governed by the Industrial Development and Regulation (IDR) Act, 1951. It is mandatory only for a class of medium enterprises which are engaged in the manufacture of goods. The registration of MSEs and medium enterprises engaged in services activities is discretionary. However, having a registration certificate entitles an MSME for numerous benefits, especially after the MSMED Act, 2006. Registration gives them access to direct incentives provided by the Government.⁸ However, despite these benefits, registration has minimally increased, but so has the absolute number of non-farm enterprises. Clearly, none of the benefits seem to outweigh the transaction costs of dealing with government in the first place.

5.3 GST and Formalisation?

Some registration (and hence formalisation) is occurring after the introduction of the goods and services tax (GST) system in July 2017. There is a slight change in the share of informal firms (from 93% to 91%, see Mehrotra 2020). Existing unorganised sector units have registered if they have an annual turnover ₹4 million, because GST return has to be submitted. With that high a turnover, only the larger of

⁸ Collateral Free loans from banks; ease of getting Licenses, approvals and registrations; special consideration on international trade fairs; waiver of Stamp Duty and Registration Fees Exemption under Direct Tax Laws; Bar Code registration subsidy; Protection against delay in payment; Reduction in rate of Interest from banks; Preference in procuring from Government; Preference 1 per cent exemption on interest rate on OD 50 per cent subsidy for patent registration.

the small or medium enterprises would register with GST; the vast majority would still not. The missing non-registrants (nano-, small- and medium-sized firms) needs further research to determine their constraints size-wise, in detail.⁹

GSTN is a non-profit non-government company, providing shared IT infrastructure and service to governments, and tax payers. The frontend services of registration, returns and payments to all MSMEs are provided by GSTN. Implementation of GSTN has integrated the entire indirect tax ecosystem. However, under GST, MSMEs are not defined as per the definition of MSMED Act, 2006 as it is not possible to ascertain the investment in plant and machinery/equipment in GST return. Hence, there is no mapping of MSME definition in the GSTN data. As on date 12.1 million tax payers (the majority naturally being those units that were earlier registered under the state-wise VAT regime or central excise regime) have registered with GSTN, of which majority are estimated to be MSMEs, if the proposed turnover definition were to be applied. Permanent account number (PAN) for tax information collected in Udyog Aadhaar filing could be suitably used with PAN information registered with GSTN so that MSMEs and GSTN are integrated and monitored on real-time basis.

RBI (2019) recognises the fundamental problem we identified above about the government's blind spot. To ascertain the standing of the business entity (say registration, compliance with tax codes) is a time-consuming process due to the multiple silos of information storage and lack of a common identifier across the various databases. This lack of a common identifier may be a barrier towards implementation of single window registration processes for businesses. Absent proper identification MSMEs may suffer from significant inefficiencies in the delivery of the benefits under the MSMED Act, 2006.

Since UAM is not mandatory, large number of MSMEs have not registered. Therefore, the objective of Government to promote formalisation among MSMEs through registrations remains a non-starter. Further, UAM is completely self-declared and there is no verification of authenticity of that data. Also, unit operating in multiple states can have multiple GSTN. Hence, RBI (2019) felt the need for a unique identifier for MSME units, which can identify all the entities across the country. This will enable tax compliance, delivery of services in MSME schemes (including Priority Sector lending from banks) and provide seamless integration with financial institutions. Creation of a unique business identifier and amalgamation of various data silos of the government has been adopted by other nations.

5.4 Further Research Prospects

This paper has attempted to present a comprehensive picture of the size structure of India's non-farm enterprises and shows up its deep distortion, with even a "small"-scale sector being very small, relatively. It also discusses the role of policy in creating or perpetuating dwarfs or tiny enterprises in India. However, one question which

⁹ The Economic Census of 2019, which could enable such research has not been released in the public domain.

came up needs further research. The role of size-based regulations, such as the Factories Act, in shaping the size structure of manufacturing industries also requires a detailed discussion, including a comparison with the services sector. Additionally, the study also highlights the importance of examining the relationship between small-scale industry (SSI) reservation and enterprise informality. Assessing the extent of informality in product groups affected by reservation policies, and exploring alternative factors contributing to informality, would enrich the whole discourse.

6 Concluding Remarks

It is well known that informality abounds in India, both for workers and for firms. India's industrial size structure is contrasted with that of other Asian countries, such as Korea, Hong Kong, Taiwan, Malaysia, and Thailand. A few of the other Asian countries, such as Taiwan, Hong Kong, Japan and post-1990 Korea, have a strong presence of small enterprises, but the proportion of employment in this group is never as high as in the large enterprises, and the medium size range is well represented. Our study for India found that even the small category is too small to be visible along with medium. The size structure of the firms is steeply skewed to the left.

We have used ASI and NSS data sources both to demonstrate that not only is there a missing middle but a missing small-scale sector as well. In our study we examined the size structure after excluding the OAEs from micro-category. Even then the small category is relatively insignificant in the non-farm size structure of India's enterprises. Tiny micro-enterprises' ability to expand is minimal, partly because their access to credit is limited to non-institutional sources. Together with units that employ 1–5 workers, these nano-units have an almost 97 per cent share in India. Two-thirds of MSMEs are in services and the remaining in manufacturing. Barely 12 per cent of all MSMEs are in sub-contracting relationship with larger enterprises (and those too are concentrated in a few more industrialized state of India)—precluding the prospect of more broad-based contribution of such units in India's industrialisation.

The MSME units (other than the largest among them) have remained outside the policymakers' frame of reference. Policies adopted have barely made a dent on the problem of small scale. If anything, the policy framework has historically entrenched informality in the enterprise structure of India to a far greater extent that found in any Asian country, which is a source of informality of workers, low productivity in enterprises and entrenches poverty and inequality in the economy. Given how important the role of MSMEs in generating employment demonstrated by the East Asian experience, and also growth in the economy, there is a case for a new policy framework in India. This new policy framework needs to take registration of un-registered MSMEs as an overriding objective, if other policies are to become effective in attaining their goal.

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