

## 第 7 章

### Statistics on Bangladesh Manufacturing Industry

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**Abstract :**

This chapter discusses the available public data on manufacturing industry in Bangladesh. There are mainly two database; Survey of Manufacturing Industry and Business Registration. Each data gives us some insights on this industry but has some limitations.

**Keywords :** Survey of Manufacturing Industries, Business Registration,

## **1. Introduction**

In most of the developing countries, publicly available data lacks the reliability, frequency and coverage for whole of the country. Bangladesh can be the one exception in terms of coverage and regularity comparing with other less-developing countries. From the British colonial period, population census and agricultural census are periodically collected with quality in this part of the world which was then known as “Indian Sub-continent”. However, after the British Raj was over, countries got separated based on their own ideology and, political and religious reasoning but continued to have a functional Government-run statistical department capitalizing on the learning during the British era. In that fashion, manufacturing related statistics in Bangladesh are also collected on a regular basis with a reasonable time-gap along with other important national statistics.

In particular, we found that two databases exist on Manufacturing in Bangladesh by the Bureau of Statistics; one is Business Registration (BR) and the other is the Survey of Manufacturing Industries (SMI). As we can understand from their naming, SMI is a survey whereas BR is a census. While BR is the population of all the establishments, it only contains employment, location, and establishment year information. So the combination of SMI and BR may give us better understandings of the overall manufacturing sector scenario in Bangladesh.

Besides these official data from Bangladesh Bureau of Statistics (BBS), there are Enterprise Surveys (ES) conducted by the World Bank which is also focused on manufacturing sector. The ES covers a set of standard questions asked for other developing countries as well. Analysis employing ES may reveal the uniqueness of business environment and other related information of overall business scenario in Bangladesh; however has not been used in this analysis due to the specific aim and objective of this chapter and left for future research.

This chapter has been written by focusing on the latest BR (2009) and SMI (2005-2006) datasets to analyze overall manufacturing sector of Bangladesh. The reminder of this chapter is as follows. In section 2, using BR, we describe the distribution of manufacturing industries in Bangladesh. In section 3, we explain some finding and facts of manufacturing industries in Bangladesh using SMI whereas section 4 concludes.

## **2. Business Registration**

Business registration is a database collected at the business registration office. When an entrepreneur starts running a company, the person has to register at an office of Registrar of Joint Stock Companies and Firms (RJSC). RJSC is an official authority under the ministry of Commerce. After the partition from India, it was first set up in Chittagong, the main port and

2nd biggest city of Bangladesh with some files and records of Companies, Associations (Trade Organizations) and partnership firms received from Kolkata, India. The office was transferred to Dhaka, the capital of Bangladesh in 1962. Currently there are around 110,000 entities registered under RJSC.<sup>1</sup>

## 2.1. Distribution among industries

The BR data covers all the establishments in Bangladesh. We use the latest BR dataset which is purchased from BBS under the name of BR2009. Table 1 shows the number of establishment and employment by the size of employees available in BR 2009

In terms of employment, largest industry is manufacture of wearing apparel (Ready-made garments or RMG) and the share is 48.8%. The second is manufacture of textiles and the share is 24.8%. Third and fourth industries are manufacture of other non-metallic mineral products and manufacture of food products. Each employment share is 7.6% and 7.2%. The sum of these industries reaches to 88.4%. As the largest exporting industry of Bangladesh, textile and wearing apparel industries are also largest employer.

In terms of the number of establishment, the ranking changes among the top. Largest industry becomes manufacture of textile and the second becomes manufacture of other non-metallic mineral products. Third is manufacture of food products and fourth is manufacture of wearing apparel. These changes reflect the intensity of labour in wearing apparel industry (RMG).

## 2.2. Geographical distribution of each industry

In Figure 1 and 2, maps are drawn for twenty sectors. We aggregate the address information into district level (locally known as "zila"). It shows clear differences among the sectors. The maps for sectors which spread over the nation such as food products, tobacco products, textile and RMG, appears to be colorful and means that average employment levels are high. On the other hand, when there are only small amount of employment over the nation, such a sector only locates in Dhaka and some local cities like Chittagong and Khulna. These sectors are Beverages, Coal and refined petroleum products and computer, electronics, and optical. As is explained in the introduction and in the other chapters, since the export is limited to RMG, jute and leather industries, most of the manufacturing activities contribute to domestic supply. Thus it is natural for some sectors to have concentration of capital and rural cities.

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<sup>1</sup> <http://www.roc.gov.bd/>

	<i>Small</i>		<i>Medium</i>		<i>Large</i>		<i>Total</i>		<i>Share</i>	
	<i>Estab.</i>	<i>Empl.</i>	<i>Estab.</i>	<i>Empl.</i>	<i>Estab.</i>	<i>Empl.</i>	<i>Estab.</i>	<i>Empl.</i>	<i>Estab.</i>	<i>Empl.</i>
Manufacture of food products	6,670	118,279	284	17,888	275	110,396	7,229	246,563	20.1%	7.2%
Manufacture of beverages	32	677	2	116	16	7,363	50	8,156	0.1%	0.2%
Manufacture of tobacco products	112	2,552	21	1,440	78	59,245	211	63,237	0.6%	1.9%
Manufacture of textiles	10,882	215,193	1,092	74,730	1,030	556,300	13,004	846,223	36.1%	24.8%
Manufacture of wearing apparel (Ready made garments)	2,129	38,590	302	20,262	2,765	1,603,492	5,196	1,662,344	14.4%	48.8%
Manufacture of leather and related products	687	11,307	68	4,390	81	29,523	836	45,220	2.3%	1.3%
Manufacture of wood and products of wood and cork	346	4,582	13	949	5	1,939	364	7,470	1.0%	0.2%
Manufacture of paper and paper products	323	7,099	66	4,207	52	16,424	441	27,730	1.2%	0.8%
Printing and reproduction of recorded media	692	10,814	26	1,686	20	5,942	738	18,442	2.1%	0.5%
Manufacture of coke and refined petroleum products	14	312	4	300	2	993	20	1,605	0.1%	0.0%
Manufacture of chemicals and chemical products	248	5,459	53	3,577	57	24,561	358	33,597	1.0%	1.0%
Manufacture of pharmaceuticals, medicinal chemical and botanical products	160	3,863	44	3,061	51	14,141	255	21,065	0.7%	0.6%
Manufacture of rubber and plastics products	651	11,393	66	4,262	50	12,511	767	28,166	2.1%	0.8%
Manufacture of other non-metallic mineral products	1,397	37,553	805	56,482	903	166,185	3,105	260,220	8.6%	7.6%
Manufacture of basic metals	219	4,918	80	5,209	95	24,664	394	34,791	1.1%	1.0%
Manufacture of fabricated metal products, except machinery and equipment	808	13,256	63	4,007	36	9,199	907	26,462	2.5%	0.8%
Manufacture of computer, electronic and optical products	29	555	8	579	5	1,717	42	2,851	0.1%	0.1%
Manufacture of electrical equipment	217	4,367	34	2,308	30	8,035	281	14,710	0.8%	0.4%
Manufacture of machinery and equipment n.e.c.	141	2,298	13	887	14	2,854	168	6,039	0.5%	0.2%
Manufacture of motor vehicles, trailers and semi-trailers	36	589	4	230	4	559	44	1,378	0.1%	0.0%
Manufacture of other transport equipment	118	2,455	21	1,322	21	6,513	160	10,290	0.4%	0.3%
Manufacture of furniture	983	15,143	35	2,233	19	8,492	1,037	25,868	2.9%	0.8%
Other manufacturing	217	3,393	11	634	19	6,599	247	10,626	0.7%	0.3%
Repair and installation of machinery and equipment	115	1,792	3	208	1	267	119	2,267	0.3%	0.1%
Recycling	20	309					20	309	0.1%	0.0%
<b>Total</b>	<b>27,246</b>	<b>516,748</b>	<b>3,118</b>	<b>210,967</b>	<b>5,629</b>	<b>2,677,914</b>	<b>35,993</b>	<b>3,405,629</b>		

Table A1. Number of establishment and employment in each industry

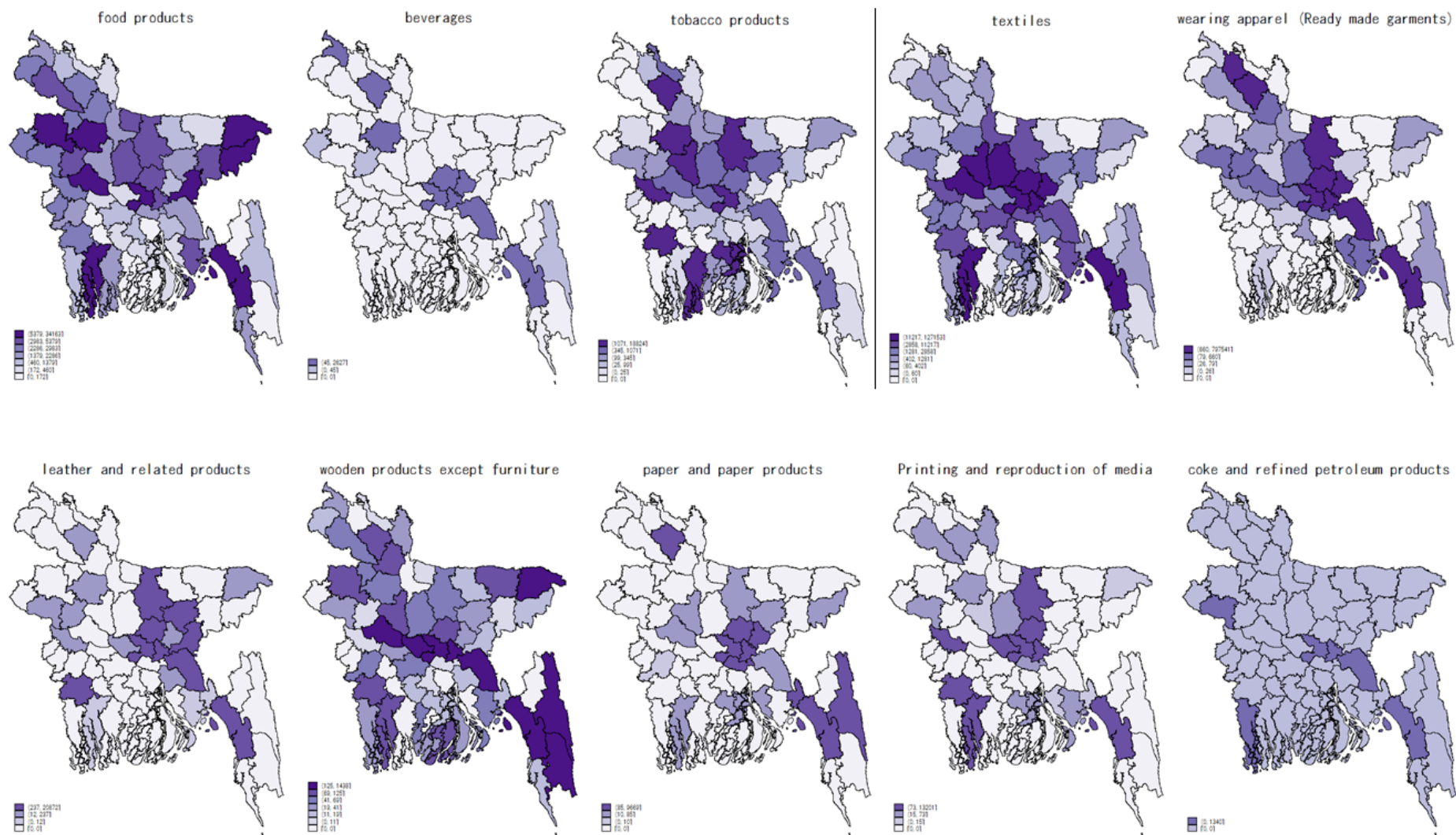


Figure. A1 Geographical distribution of employment in each industry



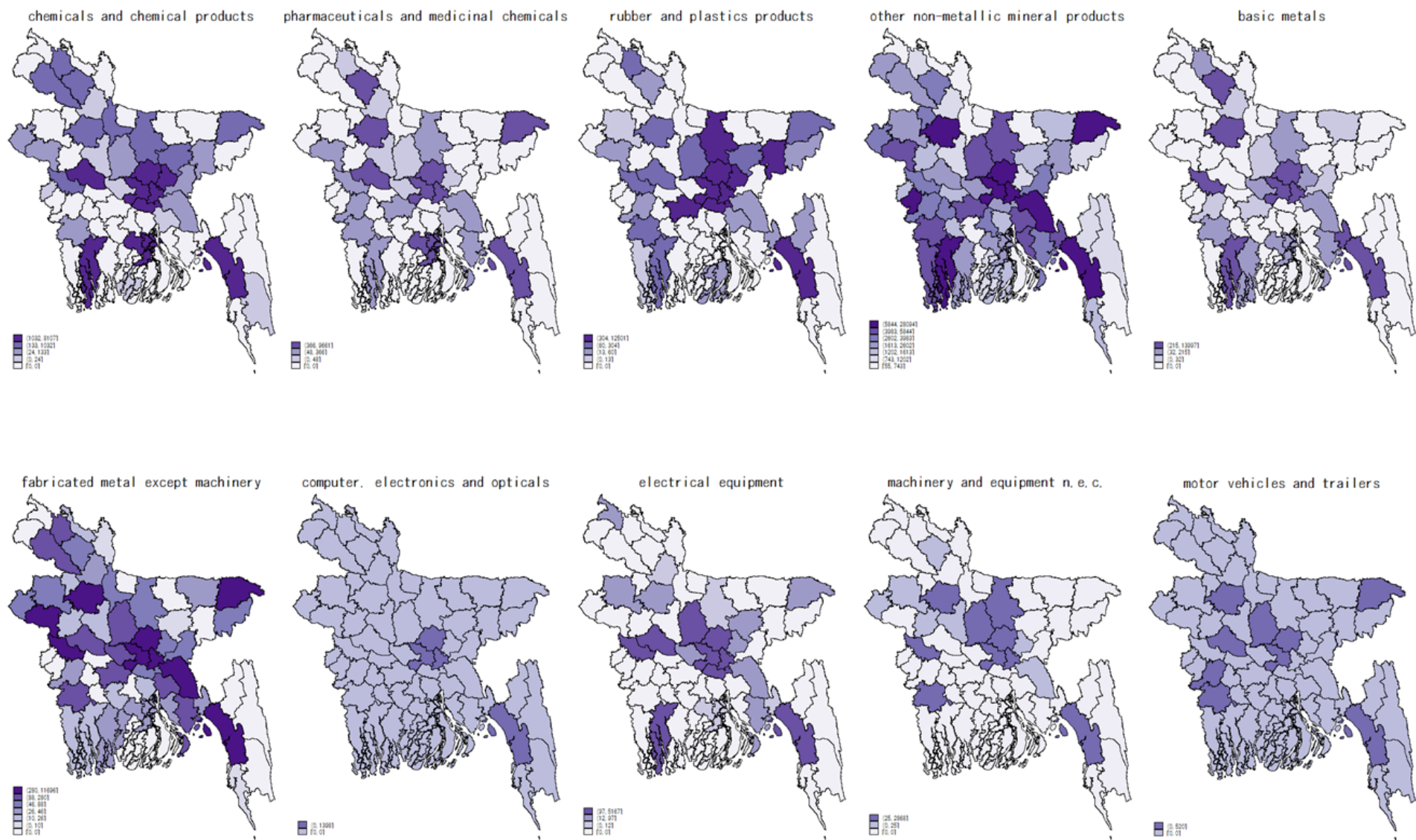


Figure. A2 Geographical distribution of employment in each industry (cont.)

### 2.3. Distribution in size

When we look at the size of establishment regardless of the industry, there is a unique feature in distribution of establishment and employment. In terms of establishment, 76% are small companies and 16% are large companies. On the other hand, in terms of employment, 79% workers are employed in large companies and 15% are small companies. Following the definition of the size of companies, this inverse relation would be natural to observe.

	Establishment	Employment
Small	76%	15%
Medium	9%	6%
Large	16%	79%

Table A2. Distribution of establishment and employment

For further analysis of the distribution of establishment and employment, we examine a popular relation between the ranking and the establishment size. Such analysis has popularity in city size, sales, and employment size distribution. For example, Soo (2005) examined rank size rule for 73 countries and found that OLS estimates of the Pareto exponent are roughly normally distributed. On the estimation procedures, Gabaix (2009) and Gabaix and Ibragimov (2011) propose a modification in the regression with small-sample bias. In the following analysis, since we have over 30,000 samples, we follow traditional methodology of finding rank size rule. Firstly, we take ranking by employment size and taking logarithm for ranking and the employment. We sometimes have a strong relation between these two variables; rank of employment and employment size. In some studies, the slope of this relation is said to be minus one.

Having examined the correlation of these variables, we find that there is a statistically significant relation between the two variables. A plotted figure of the log of ranking and log of employment is found in Figure 4. An OLS regression of the samples shows the result in Table 3. This result indicates that the coefficient is statistically different from minus one.

variables	Coefficient	Std. error
log of employment	-1.102219	0.0011158
constant	13.40507	0.005064
industry dummy	Yes	
observations	98548	

Table A3. Regression result for Zipf's law

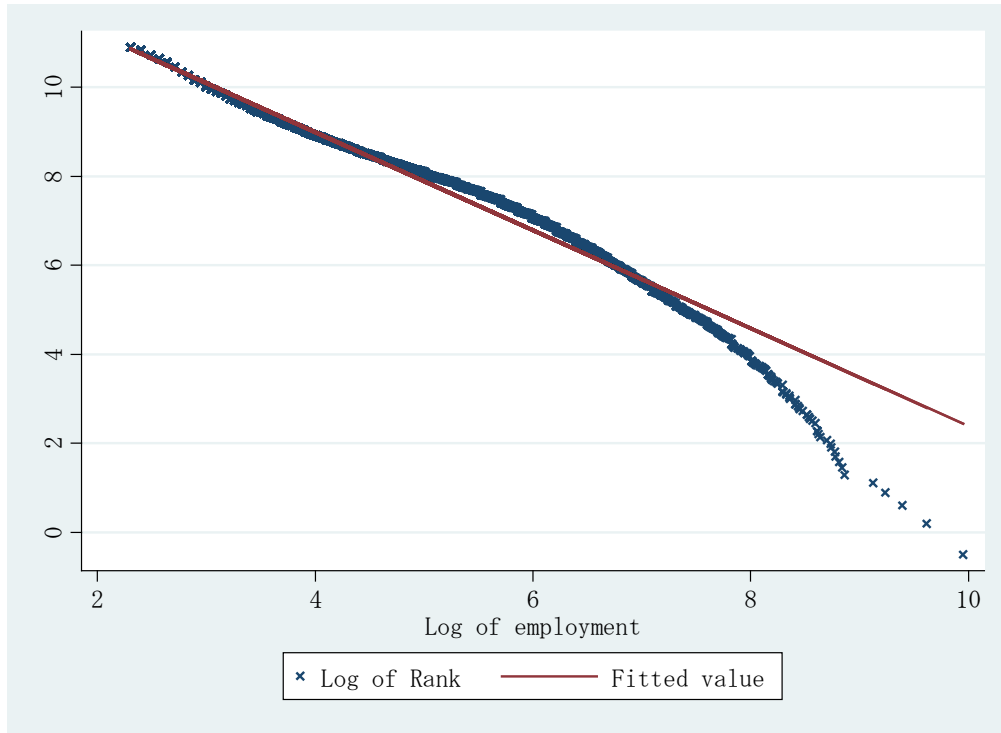


Figure A4. Distribution of establishment size and rank

For robustness check, we change the threshold of the lower bound. Increasing the lower bounds makes the coefficient of log of employment much closer to minus one. From no restrictions, when we restrict the sample larger than 20, the coefficient approaches to minus one. However the change is not monotonic and again apart from minus one when we further increase the lower bound of our samples. The coefficients continue to be apart from minus one after increasing the lower bound from 40 and above. These results may come from the distribution of largest samples of all. The samples which has larger employment ( $\ln(\text{emp}) > 8$ ) locate far below the fitted value. This implies that these largest companies are not large enough to have common Zipf's law.

variables	15<n		20<n		25<n		30<n		40<n	
log of employment	-1.048	***	-1.035	***	-1.037	***	-1.045	***	-1.070	***
constant	13.16	***	13.10	***	13.11	***	13.16	***	13.30	***
Adjusted R-squared	0.987		0.983		0.979		0.975		0.969	
observations	21045		16272		13418		11582		9361	

Table A5. Robustness Check for Zipf's law



### 3. Survey of Manufacturing Industries

The Government operated statistical agency of Bangladesh, BBS has been conducting the survey of Manufacturing Industries (SMI) under the Industrial Statistics Act 1942, on a regular basis since 1973-74. This survey covers all the manufacturing industries that employ 10 or more workers in their enterprise, however in the latest version of SMI 2005-06 emphases has been given to have more sample from small industries. According to the manual published from BBS (2009), on the basis of Economic Census of 2001 and 2003, manufacturing establishments has been classified into two broad categories, namely a) Large manufacturing industries if the number of employee registered under the entity is 100 or more and, b) Small manufacturing Industries. Large manufacturing industries further divided into two categories, based on the value addition which are i) handloom, textiles and brick, tiles and non-clay product and ii) rest of all. As we can see from following Figure A5, almost three quarter of the sample of the SMI are from small industries. Covering 35% of large establishments and 16% of the small establishments, overall SMI covers 18.5% of the manufacturing industries of Bangladesh.

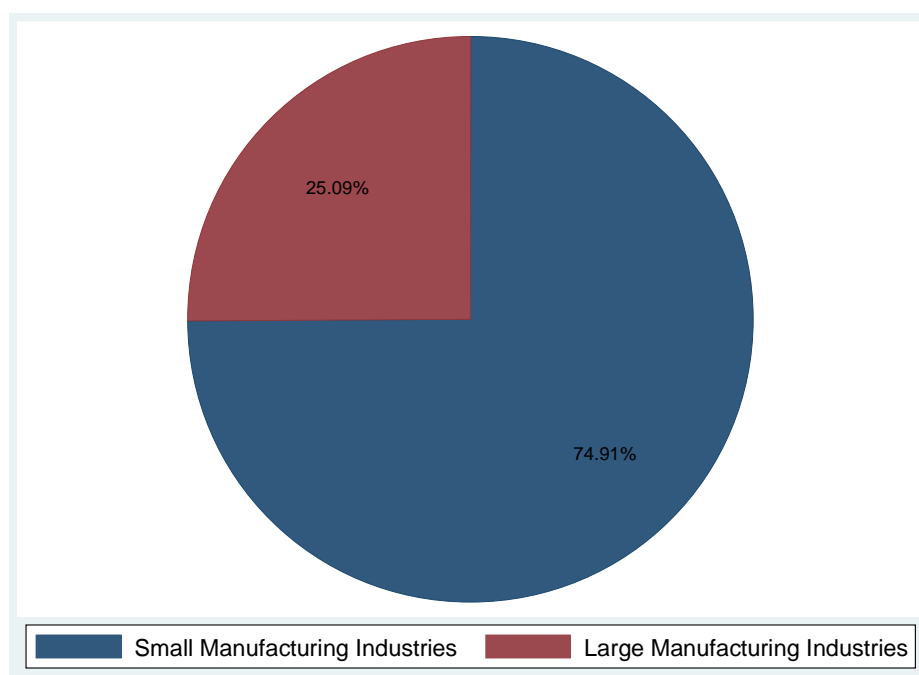


Figure A5. Distribution industries in the SMI 2005-06 sample

The data collection process of SMI (except for handloom) was done mainly by post mailing method. Hence, most of the data and analysis presented here are based on self-reporting and the BBS authority does not have the right or proper juristic power to verify the reported numbers and figures.

### 3.1 Ownership and Establishment Status:

Based on the SMI, the earliest establishment we can find in the record is build in the year 1667 which is a sugar refining and manufacturing industry. However, the period before independence, majority of the manufacturing industries were concentrated in handloom and textile industries (about half of the industries established before 1971 is of this kind). If we look at the decade based establishment record (see Figure A6), the rise of manufacturing industries in Bangladesh is mainly started during the 80's and it got boosted in the last decade as more than half of the registered establishments of SMI is recorded at that time. If we further classify this statistics based on small and large industry, it is interesting to notice that the large industries are mostly relatively newer industries compared with the trend in the small industries of the manufacturing sectors (see Figure A7). This rise of large entities in the manufacturing industries in recent time is perhaps due to the various investment incentives provided by the government (for example tax holidays) along with more investment friendly banking and credit access framework as well as a significant improvement in the transport and communication network in Bangladesh.

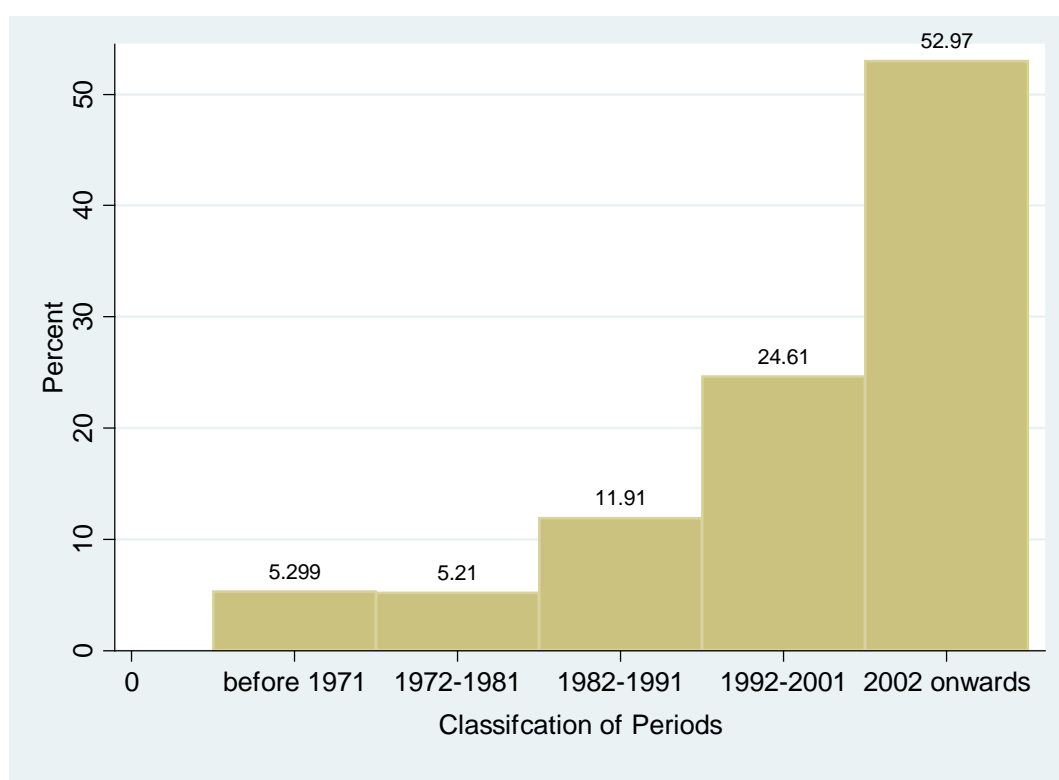


Figure A6. Distribution of industries based on periods of Establishment in the SMI 2005-06.

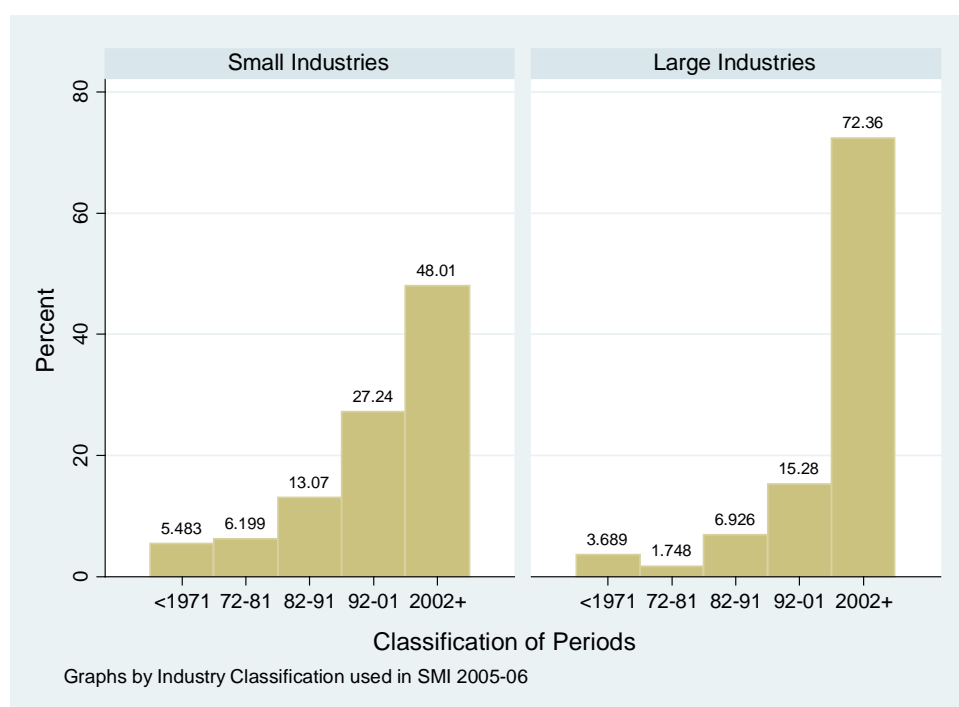


Figure A7. Classification of industries based on year of establishment

It appears that the majority of the establishment in the sample is under private ownership, comprises of 98.41 percentage of the total sample (see Table A6). Among those that are listed as private ownership, a significant proportion of such entities are owned by one person or family who is entitled for the profits or losses of the establishment. Second to individual or family ownership is the private limited company where the number of members is limited to at least two to a maximum of fifty with a legislation that members has no right to transfer the shares. For detail distribution of legal status of ownership type, please check the BBS document and Table A7. For entire distribution of industries sampled in SMI 2005-06, please check the annex at the end of this chapter.

Ownership Type	Freq.	Percent	Cum.
Government	44	0.72	0.72
Private	6,012	98.41	99.13
Joint Ownership	53	0.87	100
Total	6,109	100	

Source: Authors own calculation using SMI2006 dataset of BBS

Table A6. Distribution of ownership type

Type of Establishment	Freq.	Percent	Cum.
Individual Family	3,815	62.45	62.45
Partnership	398	6.51	68.96
Private Limited Company	1,739	28.47	97.43
Public Limited Company	107	1.75	99.18
Government Nationalized Enterprise	38	0.62	99.8
Cooperative and Others	12	0.2	100
Total	6,109	100	

*Source: Authors own calculation using SMI2006 dataset of BBS*

Table A7. Distribution of legal status of ownership

### 3.2 Fixed Assets and expenditure:

In the section of fixed asset, SMI survey asked individual industries to list type of fixed asset they possess as well as information on expenditure, repair, maintenance and depreciation cost on these fixed assets. One of the major components of fixed asset is land, however we have noticed about 38 percent of the sample industry does not have any land of their own and must be running their industry on rented properties. The average land price in the survey is 4.9 million BDT which is equivalent of 62,232.49 USD (taking the comparison of 1 USD = 78.73 BDT) with a median price of 2.5 million BDT (See Table A8).

				Quantiles				
Variable	N	Mean	S.D.	Min	.25	Median	.75	Max
Value of Land	377	490000	3200000	0.0	61000	250000	1,100,000	17,000,000.00
	8	0	0	0				0

Table A8. Net value of Land

The opening balance of fixed assets in local currency reveals that on an average the maximum opening balance of fixed asset belongs to Machines and equipment followed by land and factory and residents (see Figure A7). However, if one looks at the Figure A8 which is depicted based on the closing balance of the fixed asset (net of depreciation, damage and repair costs), the distribution of balance looks similar with the opening balance with one difference of land price. In terms of expenditure on repairing, alternation and extension of the fixed assets, a large portion of the expenditure is allocated for the machines and equipment in both local currency (in Figure A10) and in foreign currency (Figure A11). The next big expenditure in foreign currency

goes for transport cost (Figure A10) however, in local currency it is expenditure on Building and room for residents and factories (Figure A11).

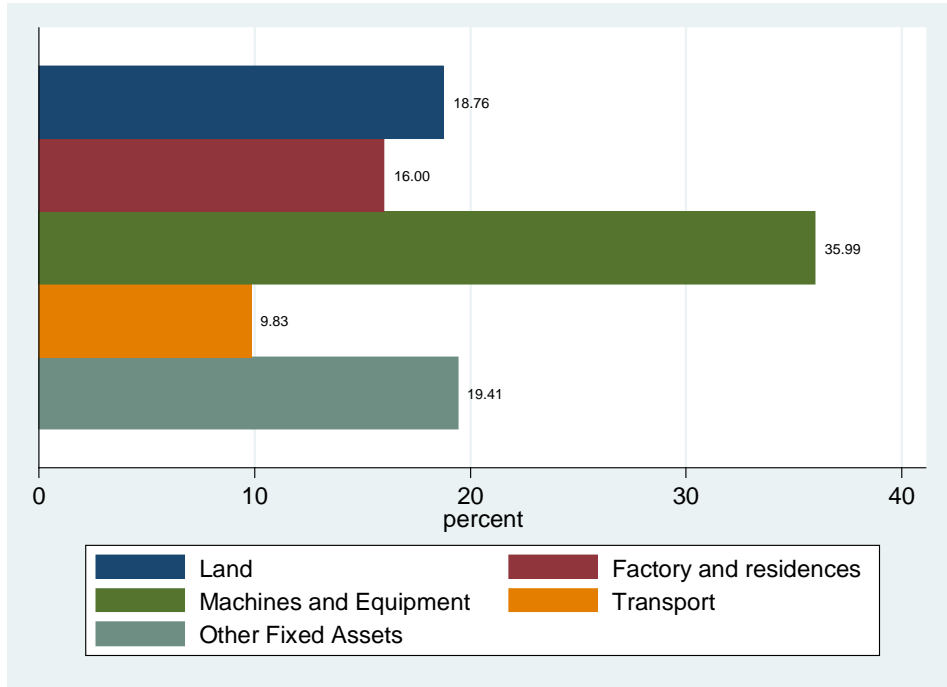


Figure A8. Distribution of open balance of fixed assets as a percentage of total balance, at the beginning of the year

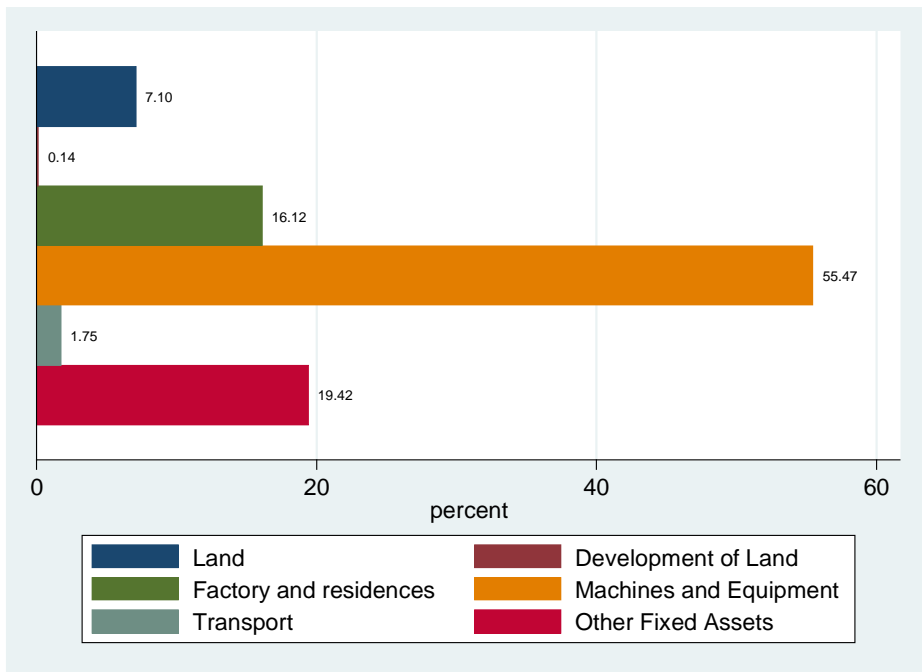


Figure A9. Distribution of net price of fixed assets (net of depreciation and damage except for land and development of land) at the end of the year

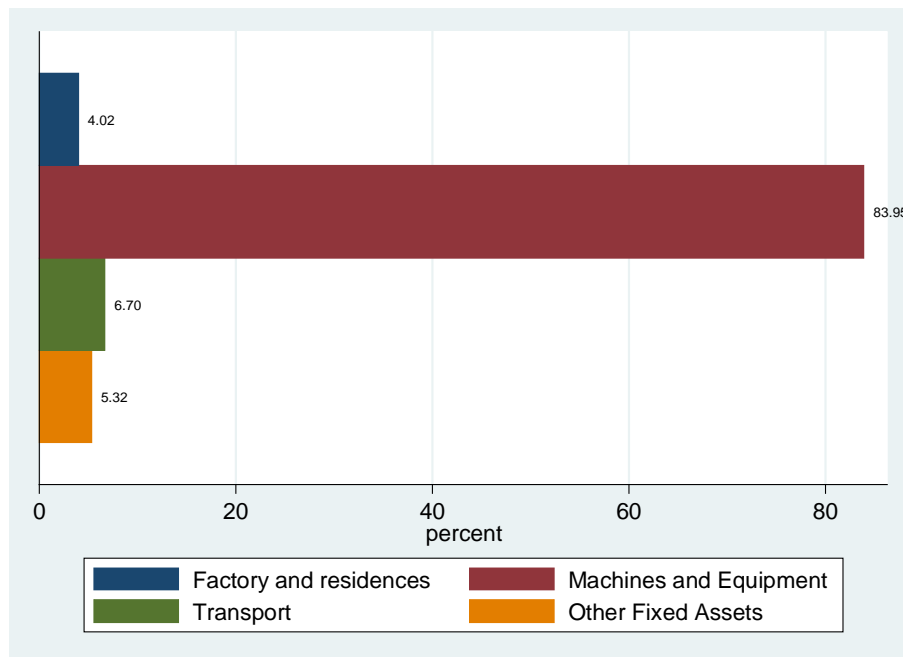


Figure A10. Distribution of expenditure for repairing, alternation and extension paid in foreign currency.

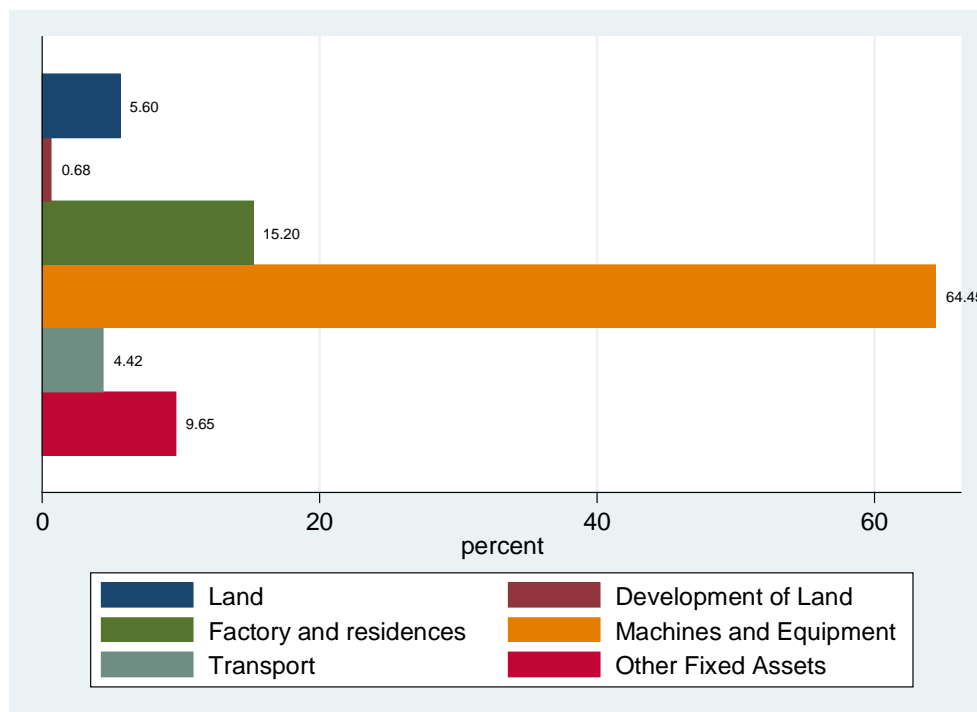


Figure A11. Distribution of expenditure for repairing, alternation and extension paid in local currency.



### 3.3 Wages and Salaries of Labor/staffs:

The average number of employees round the year is about 172 people with an average of 101.53 male and 96.81 female (see Table A9). The maximum amount of employment recorded in the SMI data is for a Knitwear industry. The data reveals that, on an average industries have 96 days of closed shifts with 252 working days with one shift (see Figure A12). Given the one weekend per week and average government holidays of 21 days, the rest of the closed shifts could be attributable to general strikes or to political protests. Even with these strikes, however, the average closed shifts are much less than any industrial country, for example, in Japan the sum of year round weekends and government holidays will be more than 115 days in any given year.

If we look at the classification of employment based on employment status in Figure A13, it is evident that the majority of the staffs belong to the production units, followed by administrative staffs and unpaid family works. A non-negligible amount (about 11 %) is temporary wage laborer who is not in the regular employment and could be termed as casual worker. If we go deeper into this analysis based on gender classification, we can easily observe a gender disparity in almost all the sector of employment, especially in the production units (see Figure A14). Despite a large increase in women participation at the garments and apparel industries, we still observe a striking gender disparity at the manufacturing sector which is worthwhile to notice for the policy makers.

Another noticeable finding would be the gender distribution of casual workers that is mostly male dominated and is consistence with the findings of other studies on casual employment (for example see Shonchoy 2011). Casual worker are usually the most deprived ones as they receive lower salary then the industry standards, as well as they are not eligible for any pension or non-cash benefits. Figure A15 shows that on an average industries spend a small amount (only 1.74%) on casual labor where as a large portion has been spend on employees classified as owner employee/directors/partner employees in the definition.

It is found from the data set that on average industries spend almost 93 percentage of their wage expenditure on salary and the rest is used for non-cash benefits and a miniscule amount (about 0.94%) on pension and social safety net.

Average Number of Employee over the Year				Quintile				
Variable	n	Mean	S.D.	Min	0.25	Mdn	0.75	Max
Male: Total	6069	101.53	345.08	0	12	22	82	13180
Female: Total	4574	96.81	874.8	0	0	4	20	54717

Table A9. Average Number of Employee

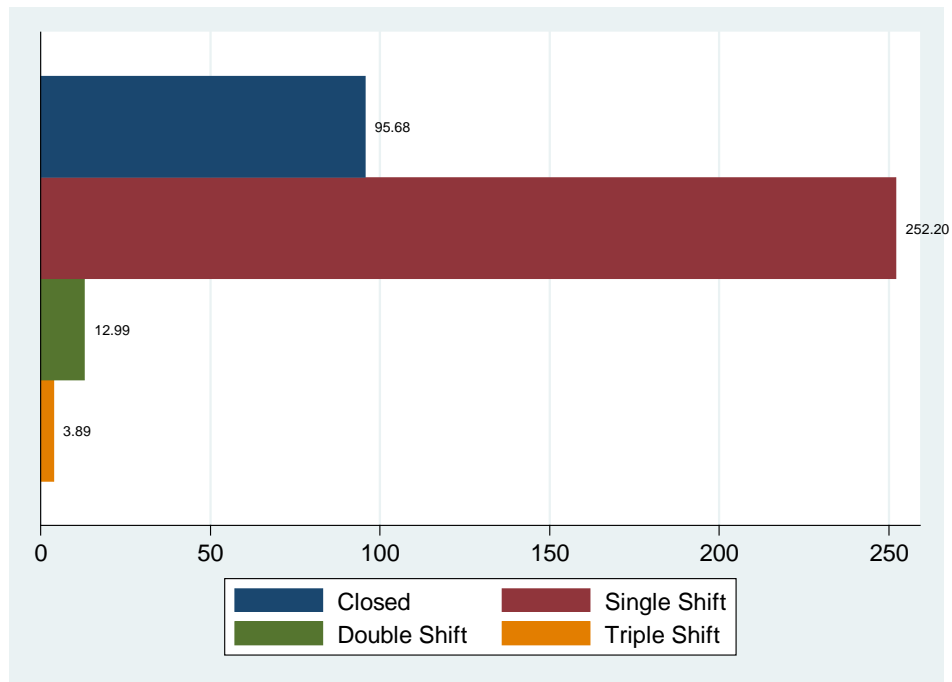


Figure A12.Average number of shifts over the year.

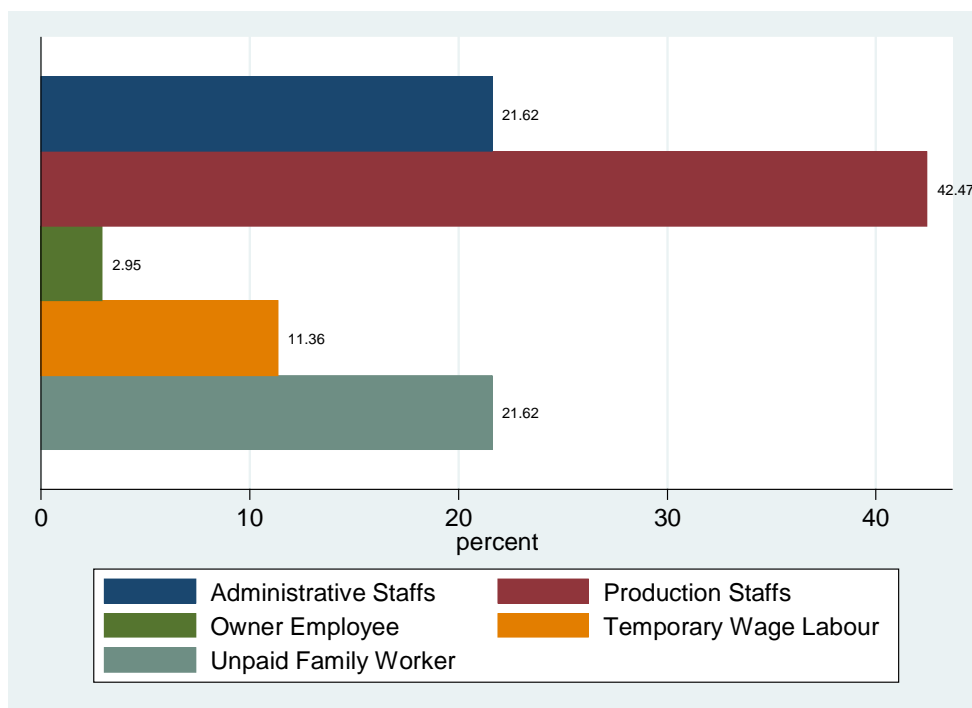


Figure A13.Classification of employment.

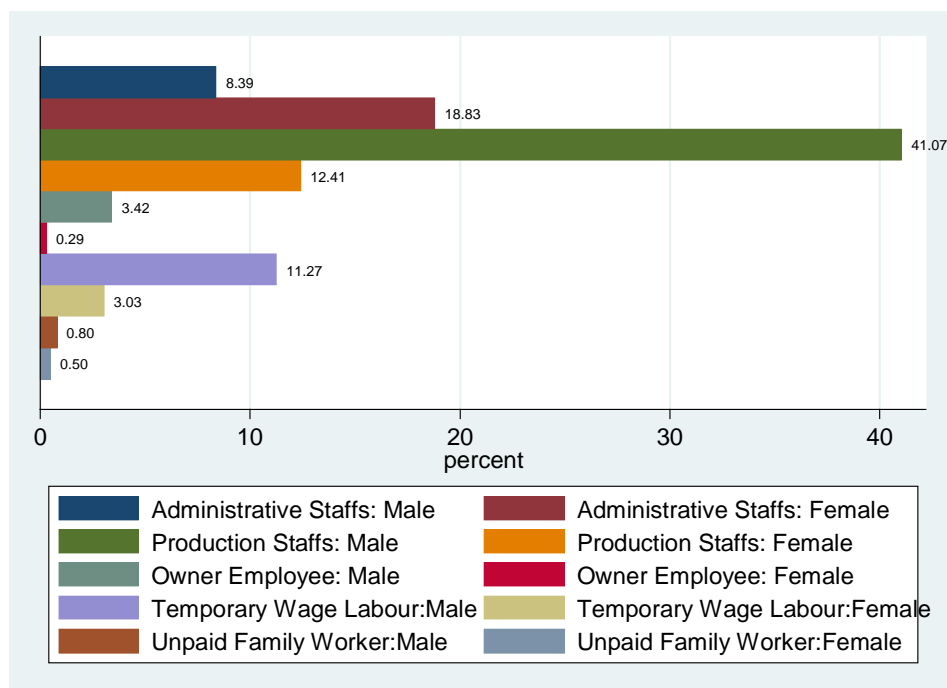


Figure A14. Gender specification distribution of employment.

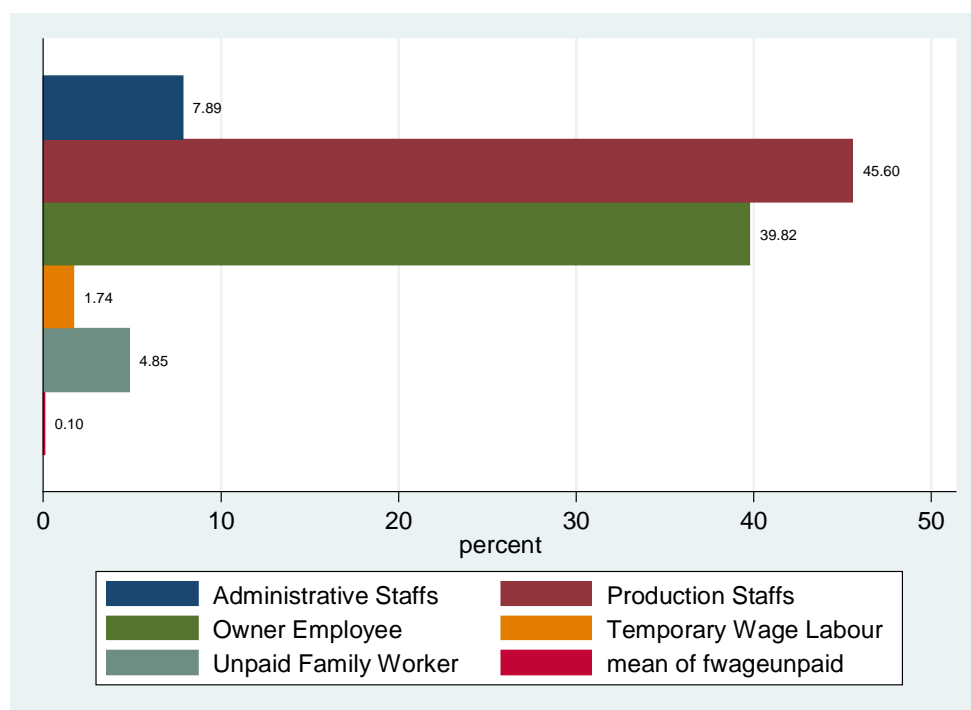


Figure A15. Salary distribution based on different classification of employment

### 3.4 Production expenditure and sale:

Other than the expenditure on raw materials, industries pay a significant amount for fuel and electricity use, excise and tax, and on repair and contracting out works for intermediate inputs (like some intermediate input supplies by other factories). In terms of contracting out and repair and maintenance, which is classified as “other expenditure for industrial production” in the SMI survey, a significant portion of expenditure of this category belongs to the repair and maintenance compared with contracting out works by the factories (see Figure A16). In case of excise, tax and other expenditure, a noticeable portion of expenditure of such category goes to paying the rent, followed by interest paid for banks and overhead expenditure (See Figure A17). The Figure A18 further reveals that the maximum expenditure on the energy use goes for the electricity (about 54%) with the second largest being the firewood. The cost on natural gas and coal is within a moderate range of 9.48% and 6.27%, respectively.

It appears that the main market of the production of goods by the manufacturing industries is mostly domestic in nature. If we look at the distribution of sales amount in Figure A19, it is evident that almost 85% of the sales come from the domestic market. However, if we look at the quantity of the goods sold in different market (Figure 20) than the share of the foreign sale increases but still a significant margin of sale is done in the domestic market.

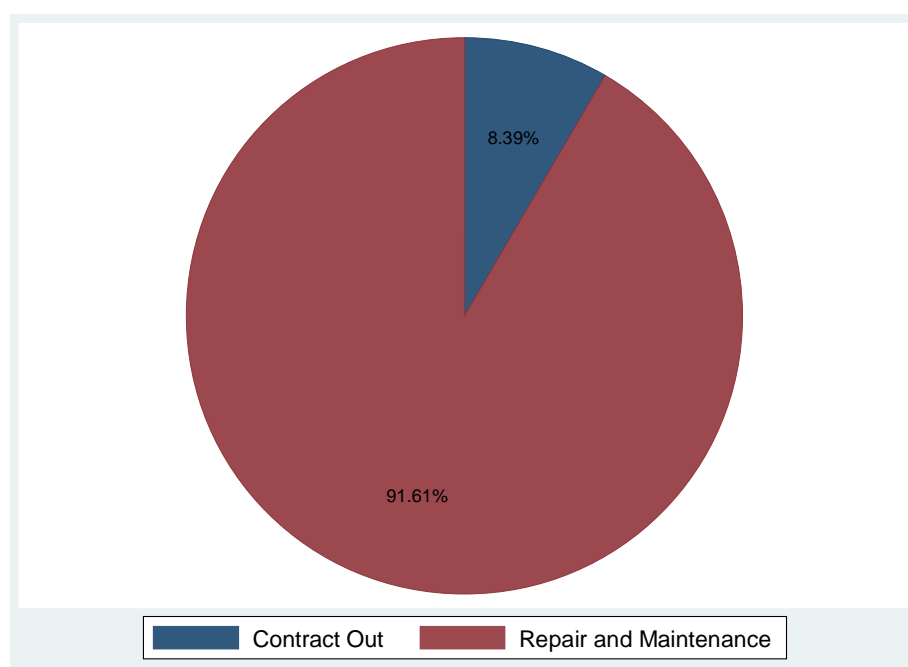


Figure A16. Distribution of other Expenditure for Industrial Production

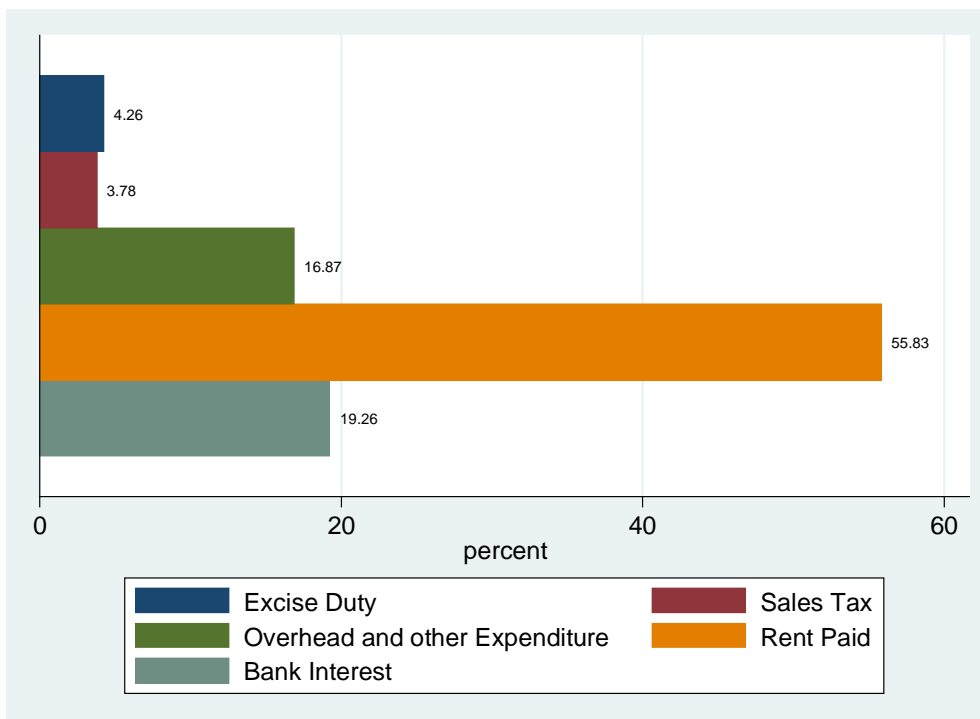


Figure A17. Distribution of Excise, Tax and other Expenditure

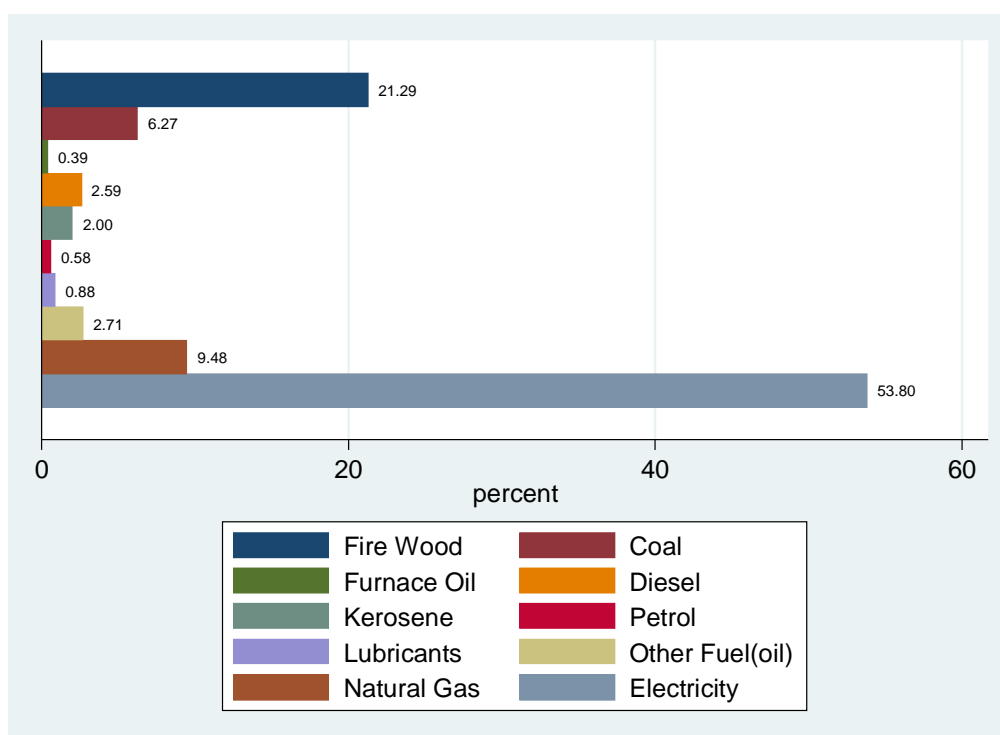


Figure A18. Distribution of Energy Use (in terms of value)

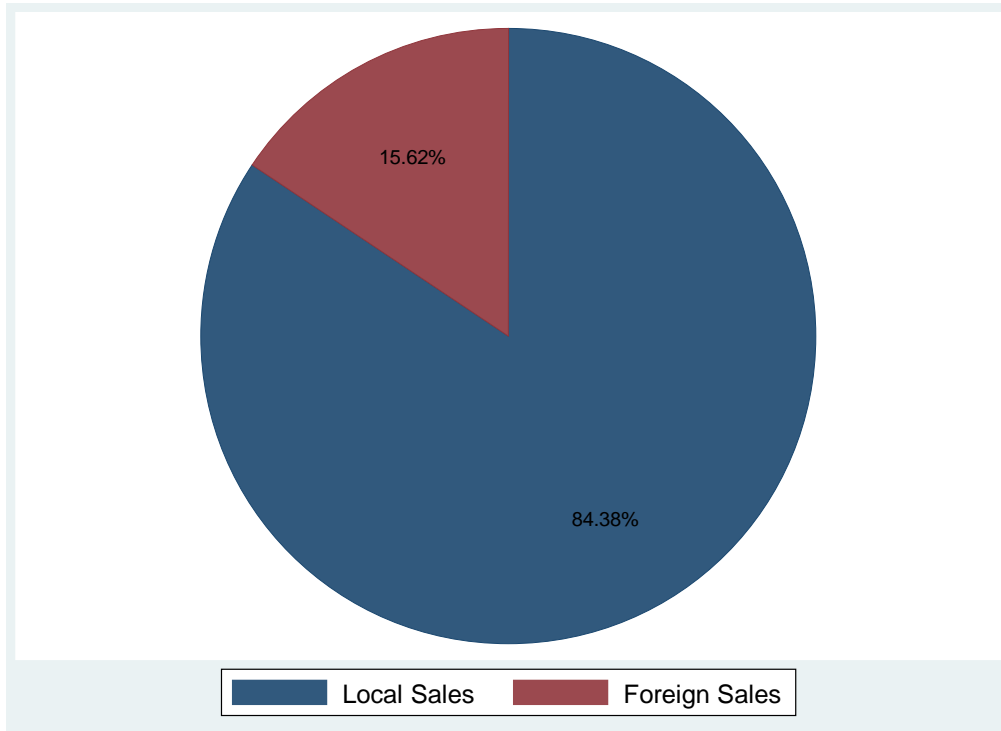


Figure A19. Distribution of Sales (as a percentage of total sales amounts in BDT)

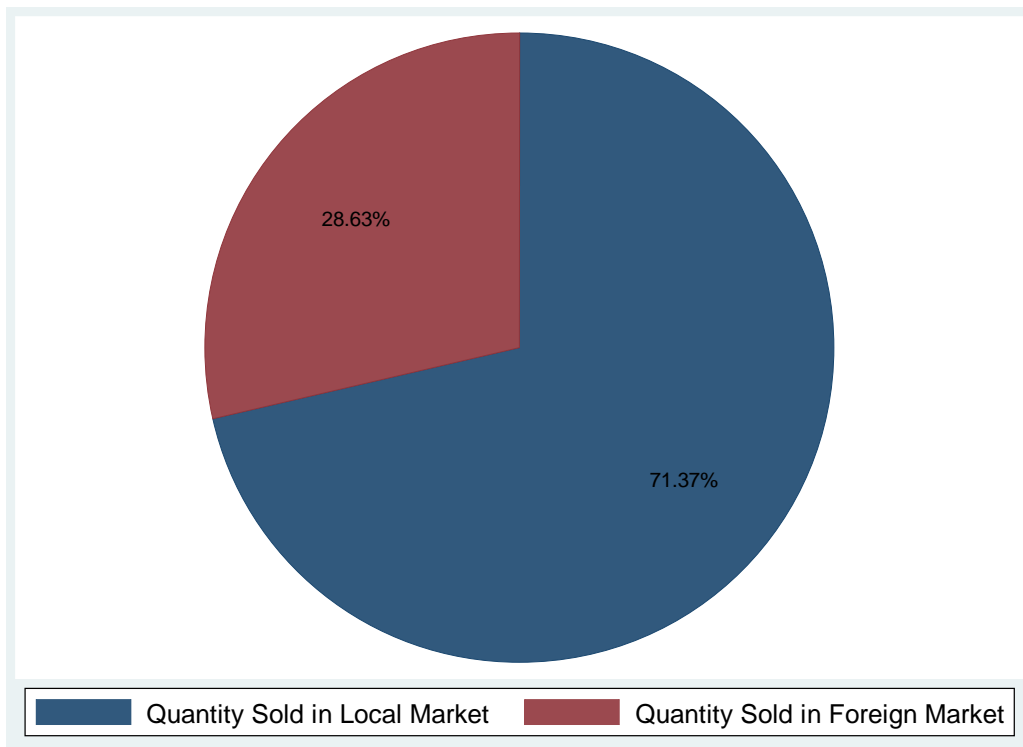


Figure A20. Distribution of quantity of sale (as a percentage of total sales quantity)



#### **4. Conclusion:**

In this chapter, we have examined some characteristics of manufacturing industries in Bangladesh. We extensively utilize available dataset such as Business Registration and Survey of Manufacturing Survey. From each dataset, we found some features such as the geographical and size distribution of companies and detailed information of sample companies. For example, we find that among sectors, there are different trends in geographical distribution and that the employment size distribution of manufacturing industries is far from the usual rank size distribution which is represented by the slope of minus one. The causes of these features shall be clarified in the subsequent studies in the following years. With the detailed information of SMI, we shall conduct econometric analysis and clarify the shortcomings in the methodology of its survey. Through such studies, we shall obtain policy implications regarding regulation policies, possible effective infrastructure development proposals and informative sampling survey.

=Reference=

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**Annex: Distribution of Industries in the SMI 2005-06**

Type of Industry	Freq.	Percent	Cum.
MFG. OF LIME STONE & CHALK	2	0.03	0.03
PROC. OF FISH AND SEA FOODS	52	0.85	0.88
PROC. OF FRUITS AND VEGETABLES	7	0.11	1
INEDIBLE VEG.OIL,ANIMAL OIL &	33	0.54	1.54
EDIBLE, VEG.OIL EXCEPT HYDRO.O	59	0.97	2.5
HYDROGENATED VEGITABLE OIL	4	0.07	2.57
MFG. OF DAIRY PRODUCTS	19	0.31	2.88
GRAIN MILLING EXCEPT RICE MILL	101	1.65	4.53
PREPARED ANIMAL FEEDS	7	0.11	4.65
RICE MILLING	570	9.33	13.98
GRAIN MILL PRODUCTS N.E.C	12	0.2	14.18
MFG. OF BAKERY PRODUCTS	302	4.94	19.12
MANUFACTURE OF SUGAR	7	0.11	19.23
COCOA, CHOCOLATE & CONFEC.	13	0.21	19.45
MFG. OF NOODLES,COUSCONS & SIN	14	0.23	19.68
MANUFACTURE OF GUR	13	0.21	19.89
TEA, COFFEE PROCESSING	99	1.62	21.51
TEA AND COFFEE BLENDING	7	0.11	21.62
REFINING OF EDIBLE SALT	81	1.33	22.95
MFG. OF OTHER FOOD PROD. NEC	34	0.56	23.51
SOFT DRINK & MINERAL WATER	22	0.36	23.87
CIGARETTES MANUFACTURING	7	0.11	23.98
BIDIES MANUFACTURING	82	1.34	25.32
TOBACCO STEMMING, REDRYING	7	0.11	25.44
ZARDA AND QUIVAM	16	0.26	25.7
TOBACCO MFG. N.E.C.	6	0.1	25.8
COTTON TEXTILES EXCEPT H. LOOM	200	3.27	29.07
DYEING, BLEACHING & FINISHING	151	2.47	31.54
JUTE TEXTILES EXCEPT H. LOOM	55	0.9	32.44
SILKS & SYNTHETIC TEXTILES	151	2.47	34.92

Type of Industry	Freq.	Percent	Cum.
NARROW FABRICS EXCP. H.LOOM	17	0.28	35.19
HANDLOOM TEXTILES	749	12.26	47.45
WOOLEN TEXTILES EXCEPT H. LOOM	7	0.11	47.57
MADEUP TEXTL GOODS EXPT. APPAR	24	0.39	47.96
MFG. OF CARPETS,RUGS AND MATS	9	0.15	48.11
MFG.OF CORD,ROPE,TWINE & NETIN	25	0.41	48.52
MFG.OF SPOOLING AND THREAD BAL	47	0.77	49.29
GINING PRESING & BALING OF COT	31	0.51	49.8
JUTE PRESSING AND BALING	7	0.11	49.91
OTH. TEXTILE MANUFACTURING NEC	3	0.05	49.96
MANUFACTURE OF KNITWEAR	205	3.36	53.31
WEARING APPAREL, GAR. EXPT.FUR	660	10.8	64.12
MFG.OF HATS AND CAPS	6	0.1	64.22
EMBROIDERY, TXTL. & WEAR GOODS	64	1.05	65.26
MFG.OF WEARING APPAREL N.E.C.	2	0.03	65.3
TANNING AND LEATHER FINISHING	63	1.03	66.33
LUGGEGE,HANDBAG SADDLERY ETC	3	0.05	66.38
LEATHER FOOTWEAR	43	0.7	67.08
RUBBER & PLASTIC FOOTWEAR	14	0.23	67.31
SAW MILLING AND PLANING MILLS	114	1.87	69.18
PLYWOOD AND PARTICLE BOARD	1	0.02	69.19
WOODEN STRUCTURAL PRODUCT	3	0.05	69.24
WOODEN CONTAINERS	2	0.03	69.27
STRUCTURAL PRODS OF BAMBOO	3	0.05	69.32
BAMBOO AND CANE PRODUCTS NEC	2	0.03	69.36
WOOD AND WOODCORK PRODUCTS	4	0.07	69.42
MFG. OF PAPER BOARD	14	0.23	69.65
ARTI. OF PULP, PAPER & BOARD,	48	0.79	70.44
OTH. ARTICLES OF PAPER PROD.NE	9	0.15	70.58
PRINTING OF BOOK MAP ETC.	28	0.46	71.04
PRINTING & PUBLG. OF NEWSPAPER	16	0.26	71.3
PUBLISHING OF RECORDED MEDIA	1	0.02	71.32
OTHER PUBLISHING	2	0.03	71.35

Type of Industry	Freq.	Percent	Cum.
PRINTING	126	2.06	73.42
BOOK BINDING & OTHER ACTIVIES	9	0.15	73.56
MANUFACTURE OF TAR, ALKATRA	5	0.08	73.65
MISC. PETROLEUM PRODUCTS	6	0.1	73.74
COAL PRODUCTS & BY PRODUCTS	2	0.03	73.78
PETROLEUM REFINING	1	0.02	73.79
MFG. OF BASIC CHEMICAL EXCT. F	1	0.02	73.81
FERTILIZER & NITROGEN COMPOUND	13	0.21	74.02
COMP, LIQUIFIED & SOLIDIFIED	1	0.02	74.04
DYES, COLOURS AND PIGMENTS	3	0.05	74.09
MFG. OF BASIC CHEMICALS	30	0.49	74.58
INDUSTRIAL CHEMICALS NEC.	1	0.02	74.59
PESTICIDE, INSECTD & FUNGICIDE	5	0.08	74.68
PAINTS AND VARNISHES	4	0.07	74.74
ALLOPATHIC DRUGS & MEDICINES	70	1.15	75.89
MFG. OF SOAP & ALL DETERGENTS	41	0.67	76.56
PERFUME, COSMETIC & TOILETRIES	6	0.1	76.66
UNANI MEDICINES	11	0.18	76.84
AYURO-VEDIC MEDICINES	13	0.21	77.05
HOMEOPATHIC & BIOCHEMIC MEDIC	5	0.08	77.13
CHEMICAL PRODUCTS N.E.C.	3	0.05	77.18
MANUFACTURE OF MATCHES	4	0.07	77.25
MANUFACTURE OF INK (ALL KINDS)	3	0.05	77.3
MANUFACTURE OF CANDLES	2	0.03	77.33
MEDICINAL & PHARMA. PREPN.	5	0.08	77.41
MFG.OF TYRES & TUBES	7	0.11	77.52
REBUILDING & RETREADING TYRE	1	0.02	77.54
MFG. OF RUBBER PRODS. N.E.C	32	0.52	78.07
MFG. OF PLASTIC FOOTWEAR	3	0.05	78.11
MFG. OF POLYTHENE PRODUCTS	28	0.46	78.57
MISC. PLASTIC PRODUCTS	67	1.1	79.67
MANUFACTURE OF GLASS	6	0.1	79.77
MFG. OF GLASS PRODUCTS	5	0.08	79.85

Type of Industry	Freq.	Percent	Cum.
MFG. OF EARTHENWARES	14	0.23	80.08
BRICKS,TILES & NON CLAY PROD	449	7.35	87.43
MFG. OF NON-CLAY REFRACTORIES	2	0.03	87.46
MFG. OF CEMENT PRODUCTS	26	0.43	87.89
ARTICLES OF CONCRETE, CEMENT	5	0.08	87.97
CUTTING, SHAPING & FINISHING	24	0.39	88.36
MFG. OF CEMENT PRODUCTS	14	0.23	88.59
NON-METALLIC MINERAL PROD. NEC	5	0.08	88.67
IRON AND STEEL MILLS	7	0.11	88.79
IRON AND STEEL FOUNDRIES	6	0.1	88.89
IRON & STEEL RE-ROLLING MILLS	72	1.18	90.06
IRON & STEEL BASIC INDUS.NEC	3	0.05	90.11
NON-FERRUS METAL BASIC INDS.	4	0.07	90.18
CASTING OF IRON & STEEL	1	0.02	90.19
CASTING OF NOM-FERROUS METALS	7	0.11	90.31
STRUCTURAL METAL PRODUCTS	38	0.62	90.93
MFG OF TANKS, RES, CONTAIN MET	4	0.07	91
STEAM GENERARORS EX. HOT WATER	1	0.02	91.01
METAL TRUNKS & SUITCASES	3	0.05	91.06
BOLTS, NUTS, REVETS & WASH.	19	0.31	91.37
PLUMBG EQUIPTS & METAL SANI.	7	0.11	91.49
METAL BARRELS AND DRUMS	3	0.05	91.54
MFG. OF WIRE & CABLE PRODS.	4	0.07	91.6
TIN CANS AND TINWARE	12	0.2	91.8
FORSING PRESS & ROLL-FORM MET	2	0.03	91.83
METAL STAMPING ETC.	5	0.08	91.91
MFG. OF CUTLERIES	4	0.07	91.98
HAND AND EDGE TOOLS	3	0.05	92.03
RAZORS AND BLADES	1	0.02	92.04
STEEL SAFES AND VAULTS	3	0.05	92.09
FABRICATED METAL PROD.n.e.c.	41	0.67	92.76
MFG. OF ENGINES & TURBINES	3	0.05	92.81
MFG. OF PUMP & COMPRESSORS	13	0.21	93.03



Type of Industry	Freq.	Percent	Cum.
HEATING & COOKING EQUIPMENT	6	0.1	93.12
MFG. OF OTHER GEN. PURPOSE MC.	4	0.07	93.19
AGRI. MACHINERY & EQUIPMET	11	0.18	93.37
OTHER GENL. PURPOSE MACHINERY	3	0.05	93.42
METAL & WOOD WORKING MACHINER	3	0.05	93.47
MFG. OF TEXTILE MACHINERY	7	0.11	93.58
INDUSTRIAL MACHINERY	2	0.03	93.62
MFG. OF OTHER SPECIAL MACHIN	1	0.02	93.63
MFG. OF DOMESTIC APPLIANCES	4	0.07	93.7
COMPUTING & ACCOUNTING MACHIN	1	0.02	93.71
ELEC. MOTOR GENERATOR & TRANS	1	0.02	93.73
ELECTRONIC COMPONENTS	2	0.03	93.76
INSULATED WIRES & CABLES	10	0.16	93.93
MFG. OF BATTERIES	3	0.05	93.98
MFG. OF ELECTRIC LAMP & LIGHT	4	0.07	94.04
MFG. OF OTHER ELECTRICAL EQUIP.	2	0.03	94.07
ELECTRIC BULBS AND TUBES	3	0.05	94.12
RADIO AND TELEVISION	3	0.05	94.17
MEDICAL & DENTAL INSTRUMENT	4	0.07	94.24
MFG. OF WEIGHTS SCALES	1	0.02	94.25
MFG. OF OPTICAL GOODS	6	0.1	94.35
MFG. OF WATCHES & CLOCKS	2	0.03	94.39
MFG. OF MOTOR VEHICLES	2	0.03	94.42
OTHERS	1	0.02	94.43
MFG. OF PARTS & ACCESS. FOR MT	9	0.15	94.58
SHIP BUILDING & REPAIRING	54	0.88	95.47
SHIP BREAKING & DISMANTLING	31	0.51	95.97
MFG. OF MOTOR CYCLES	5	0.08	96.06
BY-CYCLES AND INVALID CARR.	1	0.02	96.07
MFG.OF WOODEN FURNITURE	63	1.03	97.1
CANE AND BAMBOO FURNITURE	3	0.05	97.15
CHIKS	2	0.03	97.18
MFG. OF META FURNITURE & FIXT	33	0.54	97.72

Type of Industry	Freq.	Percent	Cum.
FURNITURE & FIXTU. OF METALS	5	0.08	97.81
FURNITURE AND FIXTURES N.E.C.	4	0.07	97.87
WOOD, CANE & BAMBOO HANDFT.	6	0.1	97.97
RUBBER & PLASTIC HANDRFT.	5	0.08	98.05
CHINA ,CERAMIC & GLASS HANDRFT	23	0.38	98.43
METAL DECORATIVE HANDICRAFTS	4	0.07	98.49
TEXTILE & SEWING HANDRFT.	2	0.03	98.53
BANGLES (ALL KINDS)	5	0.08	98.61
MFG. OF BROOMS & BRUSHES	3	0.05	98.66
DECORATIVE HANDICRAFTS N.E.C.	5	0.08	98.74
JEWELLERY- PRECIOUS METALS	21	0.34	99.08
MFG. OF MUSICAL INSTRUMENTS	2	0.03	99.12
SIGNS & ADVERTISING DISPLAYS	4	0.07	99.18
TOYS, NON-POWER DRIVEN	25	0.41	99.59
MFG. OF PENCILS & OTHERS	6	0.1	99.69
UMBRELLA & WALKING STICKS	11	0.18	99.87
BUTTON, STUDS & HOOKS	5	0.08	99.95
OTHER MFG. INDUSTRIES N.E.C.	1	0.02	99.97
RECYCLING OF METAL WASTE	1	0.02	99.98
RECYCLING OF NON-METAL WASTE	1	0.02	100