

Editor's Desk

The September, 2015 issue comes with the theme of informal employment. The first article on "What makes cross-country differences in the informal employment?" depicts the debates over boom of informal sector being a predicament on the way of achieving economic growth in developing countries. It is shown that Bangladesh ranks top among 57 countries in terms of share of informal employment in the total employment with an astonishing percentage of 88.31%. Four South Asian countries lead the top 10 list. Results from a cross-country regression, used in the article, suggest that per capita GDP, share of working age population in total population and trade openness are negatively associated with informal employment whereas self-employment appears to be positively associated with informal employment. The second article on "What determines the participation in the urban informal sector in Bangladesh?" reflects the different factors that affect the labor force's participation in urban informal sector. The share of urban informal employment in total urban employment decreased to 71% in 2010 compared to 82% in 2005 in Bangladesh. Using different econometric methods, the article shows that level of education significantly affects the probability of participation in the urban informal sector with individuals having lower level of education participating more in the urban informal sector. Also, mode of employment affects this participation. Moreover, female and elderly people are more likely to be associated with the urban informal employment. The interview session features three separate interviews of three individuals engaged in three different avenues of urban informal sector employment which in a way represent the livelihood choices of most migrant workers of our country coming to Dhaka in search of a better fortune.

Inside this issue

What makes cross-country differences in the informal employment?

What determines the participation in the urban informal sector in Bangladesh?

Interviews on urban informal sector

SANEM events

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What makes cross-country differences in the informal employment?

Selim Raihan

There are considerable debates about the role of the informal sector in an economy. The argument is that the expansion of the informal sector obstructs the economic growth in the developed as well as in the developing countries as the informal sector may create a barrier to increased productivity and economic growth. However, there are some contrasting views seeing informal sector as a solution to poverty reduction and economic growth by absorbing labor which could remain unemployed. Informal economy is mostly defined depending on the employment structure in an economy. Informal jobs mostly fall outside the domain of the government's labor market regulation. Moreover, informal workers do not function with the types of legal protections concerning the number of working hours, health and safety or with the types of mandated benefits that would normally be a feature of formal employment opportunities.

For many countries, the informal sector constitutes a significant share of their economies. ILO provides a database on the share of informal employment in total employment for 40 countries covering the time period mostly during the second half of 2000s (<http://laborsta.ilo.org>). We also added data of 17 more countries to the ILO database for the similar time period from the country specific documents. Out of these 57 countries 2 are OECD countries (Mexico and Turkey), 11 are Least Developed Countries (LDCs) and the rest 44 are developing countries. Among these 57 countries, the top country in terms of informal employment share in total employment appears to be Bangladesh with a staggering figure of 88.31%, followed by Nepal with 86.4%. In fact 4 South Asian countries are in the top 10 list. Among the bottom 10 countries, Serbia appears to have the lowest share of informal employment in total employment (6%). In order to understand the factors affecting differences among countries in terms of the share of informal employment in total

employment we have run a cross-country panel regression with the database for those aforementioned 57 countries. The first explanatory variable we have considered is the per capita GDP to see whether countries with higher per capita income tend to have a lower share of informal employment. The second explanatory variable is the share of working age population in the total population, to see whether countries with a higher proportion of working age population tend to have a lower share of informal employment. The third explanatory variable is the ratio of trade to GDP, to see how trade openness affect the share of informal employment. The fourth explanatory variable is the average years of schooling, to see how the level of education affect the share of

informal employment. Finally, the fifth explanatory variable is the share of self-employed people in total employment, to see whether self-employment is associated with informal employment.

The regression results suggest that all five explanatory variables are statistically significant. Per capita GDP has a strong negative association with the share of informal employment in total employment, as a 1% rise in the per capita GDP is associated with around 6 percentage points drop in the share of informal employment in total employment. The rise in the share of working age population in the total population by 1 percentage point is associated with 0.63 percentage points fall in the share of informal employment. Trade openness also has a negative association, as 1 percentage point rise in the ratio of trade to GDP is associated with 0.15 percentage

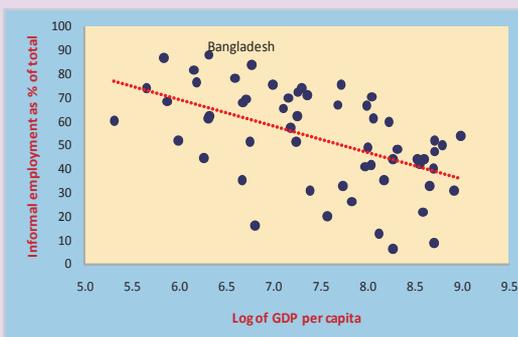
points fall in the share of informal employment. Rise in the level of education in negatively associated with the informal employment, as the rise in average years of schooling by 1 year is associated with the fall in the share of informal employment by 3.2 percentage

points. However, self-employment appears to be positively associated with informal employment, as 1 percentage point rise in the share of self-employment in total employment is associated with the rise in the share of informal employment in total employment by 0.73 percentage points.

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Top and bottom 10 countries in terms of share of informal employment in total employment					
Top 10 countries			Bottom 10 countries		
Rank	Country	%	Rank	Country	%
1	Bangladesh	88.31	1	Serbia	6.07
2	Nepal	86.40	2	Russian Federation	8.60
3	India	83.51	3	Macedonia, FYR	12.60
4	Mali	81.81	4	Moldova	15.98
5	Pakistan	78.40	5	Armenia	19.77
6	Tanzania	76.20	6	Romania	22.00
7	Bolivia	75.14	7	Azerbaijan	26.50
8	Guatemala	75.10	8	Turkey	30.60
9	Honduras	73.86	9	Syria	30.70
10	Madagascar	73.63	10	China	32.60

Data source: ILO and Country data



points. However, self-employment appears to be positively associated with informal employment, as 1 percentage point rise in the share of self-employment in total employment is associated with the rise in the share of informal employment in total employment by 0.73 percentage points.

What determines the participation in the urban informal sector in Bangladesh?

Selim Raihan, Nafiz Ifteakhar and Mir Tanzim Nur Angkur

The informal sector accounts for a large part of the economy in a developing country like Bangladesh in terms of both output and employment. Like many developing countries, the urban formal sector in Bangladesh is not able to provide enough job opportunities for its growing labor force, a majority part of which migrate from the rural areas. Thus, the growing labor force could easily find themselves in the urban informal sector for their livelihood. There are several factors which affect participation in the urban informal sector. This study makes a systemic attempt to understand those factors. Studies differ in defining informality based on certain characteristics ranging from ease of entry, low resource-base, family-based ownership, being small-scale and labor-intensive, unregulated but competitive, and informal processes of acquiring skills. In this study, we used data from the Labor Force Survey (LFS) of 2005 and 2010 for Bangladesh. The LFS provides a limited amount of information which can be used to define informality.

We have defined informality in this study by using three dimensions. The first dimension relates to the production unit or enterprise in which the workers work. More specifically, if the production units or enterprises are not registered with the concerned authority then we consider those units falling under the informal sector. The second dimension relates to the existence of contract between the workers and the employers. If there is no contract between workers and employers, either in written or verbal form, then we classify those workers as belonging to the informal sector. In addition to the above two criteria for the wage employed workers, if workers do not get any kind of pay slips or any kind of documents for their wages then they are considered to be involved in the informal sector. It appears that, according to the LFS 2005 and 2010, the share of urban informal employment in total urban employment fell in 2010 to 71% compared to 82% in 2005.

In order to conduct a systemic analysis of the factors affecting participation in the urban informal sector, we have constructed a pooled data base of urban employment from the Labor Force Survey data of 2005 and 2010. We model the participation decision of a person for which the dependent variable is a binary variable indicating '1' if the person is employed in the urban informal sector. Individual and family characteristics of the particular person may influence the decision of entering in the urban informal sector such as years of schooling, age and family dependency ratio, which have been included in the regression model. We have also taken the land holding (in decimal) as a proxy of the financial condition of the person (as the LFS data doesn't provide any overall income data). Employment characteristics or types may affect

the decision to enter in the urban informal sector. As per the LFS data, an employed person may be a wage employee, self-employed or an unpaid worker. It would be interesting to see whether there is any association between participation in the urban informal sector and the types of employment which is analyzed by introducing the wage employee dummy and the self-employed dummy in the regression model (where base category is considered to be the unpaid worker). To control for the industry fixed effect we have also added industry dummies.

We have estimated probit regression, since the dependent variable is a binary outcome variable. This implies that regression analysis would try to explain the effect of different factors captured by explanatory variables described earlier, on the estimated probability of any person's participation in urban informal sector. More specifically we have applied a pooled model within the framework of non-linear probability specification by introducing a time dummy for the year 2010 and the interaction terms of this time dummy with each of the explanatory variables as described earlier. This allows us to examine whether there are any changes in effects of those explanatory variables in 2010 compared to those of 2005.

Unobserved heterogeneity (i.e., individual's ability) can result in the inconsistency of the estimated parameters, therefore fixed effect estimator is preferred to control for the unobserved heterogeneity. However, LFS data, as such, doesn't permit applying fixed effect estimator as it requires a panel data. In order to counter this problem, in this study, we have developed a pseudo panel by constructing the cohorts using the "industry types" of the urban area. Cohorts are the sub groups of the sample, and in our case the employed persons from a particular industry type are taken as a cohort of that industry type. That means, for each industry type we will have a cohort. Though there are several industry types in the Labor Force Survey of 2010 and 2005, we have reclassified (i.e. merged comparable industry types and recoded where necessary) the industry types so that data of 2005 and 2010 can be comparable. In this case, for the fixed effect panel estimation, the dependent variable would be the percentage of informal sector employment in total employment for a particular industry code in the urban area. This can be termed as informal intensity of urban industry. For explanatory variables, we take averages for each cohort. Through this process, we are able to construct a pseudo panel where each of the observation represents a particular industry type.

From the 'probit' regression, using the pooled data, it is confirmed that the level of education significantly affects the probability of participating in the urban informal sector, with lower level of education being employed more in the urban informal sector. In 2005, a rise in 'years of schooling' by one year would mean lowering the probability of participating in the urban informal sector on an average by 0.017. The coefficient of

time dummy confirmed that compared to that of 2005, in 2010 the impact of education on the probability of participating in the urban informal sector declined. Fixed effect estimator, using the pseudo panel data, also suggests that education has negative significant impact on the informal intensity of a particular industry code, which implies higher average level of education would likely to reduce the urban informal sector participation. The coefficient implies that a rise in the average years of schooling of persons employed in a particular industry code by one year would decrease the informal intensity of that industry code on an average by 0.046 percentage points.

From the 'probit' regression, using the pooled data, it is found that individuals with higher family dependency ratio were less likely to be associated with the urban informal sector in 2005, though in 2010 this relationship reversed with statistical significance. The estimated coefficient of dependency ratio by fixed effect estimator, using the pseudo panel data, is positive and significant, implying an increase in the informal intensity of any industry is associated with the rise in average family dependency ratio of the workers employed in that industry.

From the probit regression it is clear that if landholding increases by 1 decimal, the probability of informal sector participation would reduce by 0.003, and between 2005 and 2010 no change has been observed in this respect. Fixed effect estimator, using the pseudo panel data, provides the similar result as far as the sign of the coefficient of family landholding is concerned.

From the probit regression, compared to the base category of 'unpaid labor', for both 'wage-employed' and 'self-employed', the probability of participating in the urban informal sector is much lower with statistical significance, and in 2010 these differences significantly enlarged. However, with the fixed effect estimator, using the pseudo panel data, only the coefficient of 'wage-employed' is significant and negative, and the magnitude of the coefficient can be interpreted as 1 percentage point rise in the proportion of 'wage labor' in a particular industry would decrease the informal intensity of that industry by 0.52 percentage point.

From the probit regression it is observed that, in 2005, female were more likely to participate in the urban informal sector as compared to their male counterparts; though in 2010 such differences declined. However, under the fixed effect estimator, using the pseudo panel data, 'female labor intensity' of any industry doesn't appear to have any statistically significant effect on the informal intensity of the industry. It has been also confirmed by both types of regression that elderly people are more likely to be associated with the urban informal sector.

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"I wish to be an entrepreneur..."

SANEM interviews Mr. Shahidul Hasan, aged 19, who works at a small manufacturing firm at Dholaikhal in Dhaka.

SANEM: How long have you been working in Dhaka? Why did you come to Dhaka instead of working at your village?

SH: It has been 5 years since I joined this mechanical firm in Dhaka. I came to Dhaka from Chandpur in search of fortune when I was 14. I came here because employment opportunities are scarce in our village and the main mode of income generation is performing agricultural activities. It was very difficult for my farmer father to bear the family expenses as income from agricultural activities is quite low. Thus, he sent me to Dhaka for work.

SANEM: How much do you earn here? Is it adequate?

SH: At times when our firm gets more contracts, we get bonuses along with the monthly wage of BDT 6,000. We have to work 12 hours a day over six days a week. Although it is not adequate, I cannot manage higher income at this stage of my life. It costs me BDT 4500 including accommodation and other expenses monthly. I save rest of the income in my bank account.

SANEM: What kind of activity do you do in your firm?

SH: At this firm, we produce any kind of motor/vehicle/machinery parts based on orders. My job is to cut the shapes of the metals accordingly. Once the metal is cut in shape,

others get engaged in producing the part.

SANEM: What types of challenges do you face here?

SH: Working in a mechanical firm is very risky. We do not get any safety tools. As we do not have any insurance coverage, if we get ill/injured during work - neither we get any financial support from the owner nor are we able to manage the expenses through any insurance policy. Although we get paid in case of sick leave, the scenario is not the same for everyone working in this sector. Another challenge our sector is facing now is that the profitability of this sector has shrunk over last few years. Now we have to compete with the Chinese manufacturers. Previously who used to order us in bulk has now switched to Chinese market. Although our products are better in quality, the Chinese products are low at cost and we cannot compete with them. Hence, the activities of these kinds of firms are now declining day by day and so are our wages and bonuses.

SANEM: What is your future plan?

SH: I do not think that I would get any other decent job with my qualification as I studied only up to class 7. However, I wish to set up my own mechanical firm in future. For that, I will have to acquire more skills in this sector. The owner of our firm in the beginning was an inexperienced worker like me; but now he himself is a firm-owner. I wish to be an entrepreneur like him.

SANEM: Thank you.

SH: You are welcome.

"There are opportunities of earning a handsome amount..."

SANEM interviews Mr. Rifat Hossain, aged 17, who works as an engine repairer at Dholaikhal in Dhaka.

SANEM: How did you come to know about this job? Where did you get your training from?

RH: I got to know about this job from my father as he used to work in a workshop at Munshiganj. Since childhood, I cherished the dream of becoming an engine repairer and thus I came to Dhaka at the age of 10. I got training from a workshop for 5 years where I learned a lot about engines. Now, I can repair car, microbus even truck engines very easily. For training, I started as an apprentice. I had to pay BDT 30,000 for getting the opportunity of apprenticeship that I took from my family. For five years I had to pay BDT 2,000 monthly which was deducted from my salary. Therefore, it cost me around BDT 150,000 in total. As an apprentice my salary was BDT 5,000.

SANEM: How much do you earn from this job? Is it adequate for your living?

RH: My monthly income ranges between BDT 20,000 - 60,000 depending upon the availability of contracts. As I don't have any bank account, I save some money on my own. I send home more than BDT 10,000 every month. Now my income is satisfactory and my family is well-off. Moreover, I bear the educational expenses of my younger brother who studies in class seven.

SANEM interviews three individuals in Dhaka involved in urban informal sectors. SANEM talks about the opportunities, benefits, challenges and other nitty-gritties of urban informal sector.

The interview aims to give the readers an insight into how urban informal sectors have been changing and affecting lives of numerous people of Bangladesh migrating to Dhaka in search of a better fortune.

SANEM: What challenges do you face in this informal sector?

RH: First of all, I am not provided with any safety tools although there are chances of getting injured. Even if we get sick leave, the leave is unpaid. I get paid only depending on how much I can work. If I am unable to work for few days due to illness, it means I would be unable to earn during those days. Besides, I have to bear my own medical expenses even if I get injured during my work. Furthermore, there are days when I don't have any leisure time and have to work more than 12 hours.

SANEM: What are your future plans? Do you intend to switch your job in future?

RH: No, I don't want to switch this job. There are opportunities of earning a handsome amount once one develops skills in this sector. I want to be more skilled so that I can earn more and save more. In future, I hope to be an owner of a workshop like the one I am currently working in.

SANEM: Thank you so much for your time.

RH: My pleasure.

"I will go back to my village..."

SANEM interviews Mr. Nurul Alam, aged 41, who pulls a rickshaw in Dhaka city.

SANEM: Why did you choose rickshaw pulling over other jobs?

NA: I studied up to class 4 only which makes me ineligible for formal jobs. I could not study further as I started working with my father in the fields. Moreover, I do not have any training on driving so I couldn't be a driver. I came to Dhaka in 2000 and I have been pulling rickshaw since then.

SANEM: What did you do before rickshaw pulling?

NA: Before rickshaw pulling I used to work in our own lands. In 1998 I went to Iraq in search of a good fortune which cost me BDT 400,000. I managed the money by selling 1 acre (3 Bigha) land in my village at Gaibandha. Also, I borrowed from others. However, the visa was valid for six months only. I was cheated by pimps engaged in manpower business due to my illiteracy. I had a hard time in Iraq as I didn't have work permit. After six months they sent me back to Bangladesh. Once I came back, everyone persuaded me to go to Malaysia to make a better living. I again contacted the local pimps who promised to send me to Malaysia by Sea. I went to Chittagong port where I saw the pimps injecting other passengers to put them asleep. I was traumatized and fortunately I managed to escape from there. I lost another BDT 150,000 in that pursuit. After being cheated twice to the frauds, I had no other way than coming to Dhaka.

SANEM: How much do you earn monthly? Is it adequate to manage your living expenses?

NA: Usually I earn about BDT 10,000-12,000 in 10-15 days in Dhaka. From the income, I have to repay my loans every month. Once I earn enough, I go back to my village where I have some lands (about 33 decimals). During my stay at village, I actively participate in agricultural activities there. From my lands I earn about BDT 15,000 during each harvest season. With the income from rickshaw pulling, I have managed to take additional 2 Bigha of lands (equivalent to 66 decimals) as lease for cultivation.

For me, the overall expense in Dhaka is around BDT 300 a day including rickshaw rent, two meals and accommodation at the rickshaw garage. After all expenses, I get BDT 500-700 at my disposal every day. Thus, I send BDT 1,500 - 2,000 per week to my village through mobile banking. However, during Eid my income gets doubled.

SANEM: What challenges do you face during work?

NA: Mainly, there are issues regarding bribing the police and security. We have to bribe the traffic police every day. Also, there is a high risk of rickshaw theft. However, the major problem of this job is the persisting uncertainty in it. During illness, I remain unpaid. If any accident occurs, I won't be able to pull rickshaw or do any other activity. So my income will be disrupted then.

SANEM: What are your future plans?

NA: In future, I wish to go back to my village and set up a shop there along with farm activities. I do not like rickshaw pulling as it is very strenuous. Once I repay my loans, I will go back to village and live there.

SANEM: Thank you.

NA: You are welcome.

Conference on “Empirical Research on Trade in Services” held at New Delhi, India

International Conference on “Empirical Research on Trade in Services” was held during 20-21 August, 2015 at Nalanda hall, IIFT, Qutab International Area, New Delhi, India. Dr. Pralok Gupta (Asst. Professor, Centre for WTO Studies, IIFT, New Delhi) provided his welcome remarks during the inaugural session. Keynote address was delivered by Mr. Sudhanshu Pandey (Joint Secretary, Department of Commerce, Govt. of India). On the second day of the conference, Dr. Selim Raihan (Professor, Dept. of Economics, University of Dhaka and Executive Director, SANEM) provided a special address on “Rethinking the ‘Industrial policy’ to incorporate services. How to enhance the ‘manufacturing content’ of services?”

A step forward for SANEM’s young researchers

Three young research associates of SANEM have traveled abroad for higher study in August, 2015. Fatima Tuz Zohora has been enrolled in M.A. in Environmental, Resources and Development Economics at University of Winnipeg, Manitoba, Canada. Ahmed Tanmay Tahsin Ratul will pursue his Ph.D on Applied Economics at University of Western Michigan, U.S.A. and Syer Tazim Haque has been enrolled in Masters in Food, Agricultural and Resources Economics (FARE) at University of Guelph, Canada. SANEM team wishes them all the best for their future endeavors.

The 3rd Asia KLEMS Conference held in Taiwan

The third Asia KLEMS Conference was held in Chung-Hua Institution for Economic Research (CIER) and Taipei International Convention Center, Taipei, Taiwan during August 12-13, 2015. The highlights of the conference were the structural changes in each Asian country and productivity growth in service industries. Welcoming remarks was provided by Mr. Chen-Chung Deng (Minister, Ministry of Economic Affairs, R.O.C.). Dr. Dale W. Jorgenson (Harvard University) delivered the keynote speech on the first day of the conference. Dr. Selim Raihan (Executive Director, SANEM) and Mir Tanzim Nur Angkur (Lecturer, Department of Economics, East West University and Research Associate, SANEM) presented a paper during the session on “Productivity Reviews in Bangladesh and South East Asia”.

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8th South Asian Training on CGE Modeling held at Cox’s Bazar, Bangladesh



Co-organized by SANEM, SAWTEE and Centre for WTO Studies, the 8th South Asian Training Program on CGE Modeling took place on 4-8 August, 2015 at the conference room of Hotel Sea Crown, Cox’s Bazar, Bangladesh. The inaugural session was held on 4th August, 2015 with welcome remarks by Dr. Selim Raihan (Executive Director, SANEM). Senior Program Officer from SAWTEE, Mr. Asish Subedi provided an inaugural speech. The contents of this vigorous 5 daylong training program included issues in policy analysis, introduction to CGE Modeling, Understanding SAM, SAM multiplier model, building CGE models using GAMS and some hands on exercises on CGE model using GAMS. A total number of 33 participants from Bangladesh, Bhutan, Fiji, India, Nepal, Pakistan and Sri Lanka received this training. The training program came to an end with certificate giving ceremony and closing remarks by the instructor, Dr. Selim Raihan.

SANEM-MCCI jointly organized discussion on “A New Investment Regime for Bangladesh”



South Asian Network on Economic Modeling (SANEM) and Metropolitan Chamber of Commerce and Industry (MCCI), Dhaka jointly organized a discussion session on “A New Investment Regime for Bangladesh” on 1st August, 2015 at the Chamber Conference Hall, Motijheel, Dhaka. A welcome address was provided by Mr. Syed Nasim Manzur (President, MCCI and Co-chair of the session). Dr. Bazlul Haque Khondker (Chairman, SANEM and Co-Chair of the session) provided his opening remarks. After the opening ceremony, Dr. Selim Raihan (Executive Director, SANEM) presented on “A New Investment Regime for Bangladesh”. In his presentation, Dr. Raihan discussed about issues regarding the fall in private investment over recent years and why Bangladesh needs a new investment regime to achieve the targeted GDP growth rate of 8% by 2020. According to Dr. Raihan, there are 3 major areas of improvement including policy reform, institutional reform and infrastructural reform to increase domestic private investment and FDI through economic diversification and export diversification. The presentation was followed by open discussion and remarks from the special guest, Dr. S.A. Samad (Executive Chairman, Board of Investment (BOI)). The event came to an end with concluding remarks by the co-chairs and a vote of thanks from the Vice President of MCCI.



SANEM is a non-profit research organization registered with the Registrar of Joint Stock Companies and Firms in Bangladesh. Launched in January 2007 in Dhaka, it is a network of economists and policy makers in South Asia with a special emphasis on economic modeling. The organization seeks to produce objective, high quality, country- and South Asian region-specific policy and thematic research. SANEM contributes in governments’ policy-making by providing research supports both at individual and organizational capacities. SANEM has maintained strong research collaboration with global, regional and local think-tanks, research and development organizations, universities and individual researchers.