





Research Article

Formalizing the informal sector: issues, challenges, and opportunities, 'A case study of Rawalpindi, Pakistan'

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ABSTRACT

The current research seeks the intention of the informal sector regarding transitioning towards formal sector. The main purpose of this study is to investigate the impact of tax avoidance, high tax rates, complicated registration process, tangible incentive on the 'willingness to switch' to formalization of informal sector. This research is conducted at three main commercial areas Raja Bazar, Saddar, and Tench Bhatta of Rawalpindi city, Pakistan. Simple Random Sampling is used with the sample size of 230. Primary data was collected through a structured questionnaire with both close and open ended questions. Linear probability model is used for the analysis. The results show that fifty six percent of the respondents are willing to register their enterprises, however they require some tangible benefits for registering their business. Furthermore, seventy eight percent are of the view that people do not register because they want to avoid taxes. Fifty six percent opine that one of the potential reasons is high tax rates. Seventy four percent considers complications in the registration process restricting people to register their business, and ninety percent firm owners report that getting registered will not prove to be handsome bid for them. Therefore, it is proposed that taxation authorities need to step up its dissemination efforts in reaching out to the informal sector about the potential benefits of registering with the tax authorities. It is also recommended that formalization of businesses should be branded and incentivized.

Keywords: *Informal Sector; Random Sampling; Taxation Authorities; Tax Avoidance; Rawalpindi City; Pakistan*

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1. INTRODUCTION

Informal sector is known by several terms such as informal economy, unofficial economy, invisible sector, unorganized sector, parallel economy, hidden sector, irregular sector, unstructured sector, underground economy, and an unobserved economy. The word informal sector was introduced by International Labor Organization (ILO, 1972) in its report "Employment, Incomes, and Inequality: A Strategy for Increasing Productive Employment in Kenya". Across the world the informal sector is neither taxed nor monitored at any government level. Unlike the formal sector, activities of the informal sector are not counted in the gross domestic product (GDP) as well as not in the gross national product of any country. Because of neither taxed, not monitored by any form of government. In many



developing nations, the informal sector, which includes enterprises, workers, and production activities handled by firms that are not registered and do not pay taxes, accounts for a significant and growing share of total economic activity (La Porta & Shleifer, 2010). Numerous researchers have explained the benefits of informal sector, the most important benefit the informal sector is providing the flexible employment for women who want to work close to their homes (Alatas and Newhouse, 2010) and to low wage workers who could not find job in formal sector (Loayza and Rigolini, 2011), also the informal sector providing employment to most of the middle class group of any country (Van Klinken, 2009). Working informally is costly for businesses, workers, and the community. For example, for unprotected workers working in informal sector has more negative aspects of work than positive aspects. As they are not registered, protected under labor or social protection legislation, not even recognized properly, they are also not able to enjoy or defend their fundamental rights as a worker. That is also a reason of their little or no collective representation to employers' associations or public authorities (ILO, 2014).

Unregulated and unregistered businesses mostly do not pay taxes, neither give benefits nor any entitlements to their employees, which does not only negate the protection of workers, but also implies that they compete unethically with other enterprises. Shortage in tax collection and contribution payments, which is sometimes very substantial, put an unfair weight on registered businesses (ILO, 2014). Informal sector plays a key role in developing countries like Pakistan. This sector can be categorized as self-employed workers and wage workers performing different jobs from traders to small producers. Like other developing countries, most of the Pakistan's labor force for their livelihood is still depending on informal sector. The informal sector undoubtedly is playing a significant role in Pakistan economy. It is absorbing a vast proportion of workers who may otherwise be unemployed. It is also providing services at a cheaper cost to the public and produces goods and services. Much of the profits accumulated within the informal sector, therefore, go into the hands of the few, who are free to exploit poorer employees with no fear of labor inspections, no need to provide legal contracts of employment or to guarantee minimum wage. Apart from agriculture, informal sector workers in urban and rural areas across the country work as mostly domestic servants. They produce glass bangles, garments, footwear, handicrafts, embroidery, sports goods, and surgical instruments, and they also work in leather tanneries, fisheries and mining. Currently, these informal workers are not only underpaid, but also working without health insurance and workplace safety. Moreover, they also do not have any access to social security benefits in Pakistan. The current study aims to seek intensions of the informal sector enterprises regarding registration of their enterprises. The study investigates willingness of informal sector to become formal sector, it highlights the issues, challenges and opportunities to the informal sector to become formal sector in the context of Rawalpindi city. This is very important for policy purposes as informal sector is not under the tax net and their activities are not counted in GDP of the country. Moreover, this will help for policy makers to design a policy for proper regulation for informal sector employees to provide benefits and incentives as applicable to formal sector employees. The study is being conducted for the first time in Pakistan. This kind of

study has not been done in Pakistan before, so it will be a great addition in the literature as well.

2. LITERATURE REVIEW

To comprehend the issue in question and to obtain research rigorous findings, theoretical and empirical literature review is unavoidable. The sector is characterized by small scale operations, labor intensive techniques, low-income families, private and local ownership of enterprises that are largely unprotected by government.

Lawanson (2011), mentioned that informal workers are poor followed by low level of income, they have low skills, and there is no comprehensive government plan to protect the workers and regulate employers in informal sector. That there is a need of informal sector to regulate or they themselves register so that the employees can get benefits like formal sector workers and also government can enhance their tax revenue.

Dell'Anno (2022), mainly categorized the informal economy into six potential drivers. He asserted that these potential elements inclusive of taxation system, regulatory system, labor force composition, enforcement system and tax morale and institutions leave substantial impact on registering the informal activities.

Gulzar et al. (2010), highlighted that in the context of globalization and free markets, the informal economy is greatly responsible for less value addition in the goods sold in the international market as well as equally responsible for restraining the potential of the country to produce high value added products by restraining the shift of technology even in formal sector through its backward and forward linkages with it. Consequently, the technological shift in manufacturing sector (i.e., formal sector) is relatively lower than that of Pakistan. It works in three ways; first; as it results in low savings and low capital formation, second; low resource constraint in formal sector, third; puts capacity constraint on labour force and restrain the labour force productivity through underemployment, disguised employment, providing low salary and early age employment.

Farrell (2004), elaborated that informal firms, bound to stay small in order to hide, impede economic growth and that their illegal cost advantage distorts competition. The substantial cost advantage that informal companies gain by avoiding taxes and regulations more than offsets their low productivity and small scale. Competition is therefore distorted because inefficient informal players stay in business and prevent more productive formal companies from gaining market share.

Schneider and Klinglmair (2004), unfolded that any short-term employment benefits of informality are greatly out weighted by its long-term negative impact on economic growth and job creation. Much of the debate over the costs and benefits of taxing the informal sector has focused on direct revenue and equity implications. On the surface, taxation of the informal economy appears to be a potentially important source of government revenue, as the informal sector comprises a large and, in many countries, growing share of GDP.

Elgin et al. (2021), emphasized upon the relationship between informality and business cycle. The different phases of business cycle actually determine the magnitude of being formal which further impact the revenues sides of the economy.

Taxing small firms can build a culture of tax compliance, there is no systematic evidence on the long-term impact of small business taxation on attitudes toward taxation among those firms.

Kenyon and Kapaz (2005), found that the implications of expanded taxation for the growth of small firms are as important as immediate revenue implications. The concern for many tax experts is that increased taxation of small firms may ultimately hinder growth, and that this cost may far outweigh the revenue benefit. The thinking is that small firms opt into informality precisely because they believe that informality will benefit them, given the burdens of formality.

Mughal and Schneider (2020), a huge informal sector in any economy is a burden because of tax evasion and it results greater tax burden on the formal sector, which is a negative impact arises in the form of low expenditure on public utilities, less productivity and lower economic growth.

The purpose of this article is to examine the informal sector's desire to transition into the formal sector. It is executed by highlighting the opportunities, concerns, and obstacles that the transition presents for Rawalpindi's informal sector.

3. THEORETICAL FRAMEWORK

Informal firms generally don't pay taxes and it further limits the government's capacity to give support for public goods and services. Moreover, remaining unregistered businesses, they find this channel convenient to avoid paying taxes. There is a positive analogy between the size of the informal and high tax rates, as well as labor market limitations and inefficient government organizations, and it is adversely related with the real per capita GDP. It is pertinent to mention here that costs of corruption and bureaucracy, instead of official taxes, are the major factors for the existence of the informal sector. Furthermore, the complications in the registration followed by costs, time, and many efforts restrict informal firms' owners to become formal and register their enterprise.

The relevant authorities i.e. firm registering bodies should do not offer tangible incentives to be formal and not only defend tax burden with general public services, which is one of the potential that against registering the firm and enterprise. In the absence of appropriate incentives to be formal, it is more likely that microenterprise or medium enterprise owners would prefer to remain completely informal. Under these particular circumstance, the informal sector is source of a personal cost-benefit analysis for the government in short term.

This attempt seeks the intensions of informal business for registering their business therefore, the main research problem which is "willingness to switch". Having reviewed the theoretical and empirical literature review and after mapping the theoretical framework,

the informal sector is substantially influenced by the major indicators as avoidance of taxes, high tax rates, complicated registration process and tangible incentives.

4. METHODOLOGY

In order to view the willingness of the informal sector to switch to formal sector the following methodology is followed.

4.1. RESEARCH DESIGN

The descriptive research design is used for the ongoing research and its details are mentioned below.

4.2. STUDY AREA

Rawalpindi City, usually recognized as '*Pindi*' is a city of Punjab province of Pakistan. Rawalpindi is neighboring to Islamabad, the capital city of Pakistan, and both the cities are jointly known as "twin cities" on account of healthy economic and social links between both cities. By population Rawalpindi is the fourth-largest city in Pakistan surpassing 3.2 million population. As Rawalpindi is one of the main hubs of economic and financial activities and is exposed to the huge informal sector.

4.3. SAMPLE SIZE AND DATA COLLECTION

Probability sampling design is applied, since all the unit of analysis have equal chances of being interviewed. Simple Random Sampling technique is used in this study. A huge amount of informal sector activities are performed in various areas of Rawalpindi city even from a small streets to larger commercial markets.

Therefore, a micro-enterprise level survey in Rawalpindi city's covering three main commercial areas i.e Raja Bazar, Saddar, and Tench Bhatta was conducted These three markets are the main commercial markets which also constitute a representative sample for the types of businesses in question. Due to the heterogeneous nature of business, this research is specific to the particular business. There are two reasons behind choosing heterogeneous business types: (i) to increases sample size and (ii) to increase diversification because different business owners may behave differently about switching to formal sector. The intention behind this sample frame is to prevent studying entrepreneurs only from a specific cohort which might have similar reasons for operating enterprises in the informal sector. The nature of collection data is one shot. Since the population is unknown, the conjectured population was around 10,000 (Raja Bazar = 4000 + Saddar = 3500 + Tench Bhatta = 2500). Therefore, according to this population frame, the calculated sample size is 260 with 95% confidence interval followed by the formula mentioned below;

$$N = (P) * (1 - P) \frac{Z^2}{C^2} \dots\dots (1)$$

In Equation 1, Z represents confidence level (By convention, it is assumed to be 95%, then value of Z is 1.96), C denotes confidence interval (acceptance for margin of error), usually is assumed 5% while P indicates the response distribution or variance of the indicator to be

measured. Further division of sample size of 260 according to areas is reflected in Table 1 given beneath:

Table 1. Sampling Framework

Area	Estimated Population	Sample Size
Raja Bazar	4000	104
Saddar	3500	91
Tench Bhatta	2500	65
Total	10,000	260

Primary data was collected through a structured questionnaires from informal firms of Rawalpindi city.

4.4. UNIT OF ANALYSIS

A small firms which are not registered with any government authority¹. A firm employed minimum of 3 workers and maximum of 9 workers are considered and also with the owner is associated with the informal sector's economic activity for the past 12 months.

4.5. ECONOMETRIC SPECIFICATION OF THE MODEL

In order to seek information from informal sector regarding their willingness to switch to formal sector, this research get the parameter estimated through the application of a Logit model because the dependent variable is binary in nature. The econometric equation of the model is as follows:

$$WTS = \beta_0 + \beta_1 AGE + \beta_2 EDU + \beta_3 MS + \beta_4 HHS + \beta_5 FS + \beta_6 BT + \beta_7 AB + \beta_8 AT + \beta_9 HTR + \beta_{10} CRP + \beta_{11} TI \quad (2)$$

4.6. DESCRIPTION OF VARIABLES

The central idea of the research is to assess the impact of the willingness of the informal sector to switch to formal sector. The specification of the variables are mentioned beneath:

AGE: The age of the firm owner.

EDU: Education level of firm owner.

MS: Marital status of firm owner.

HHS: Household size of firm owner.

FS: Firm size in terms of employed workers (full time and part time).

BT: Business type, i.e which sector the business is operating and which sector is more likely to register with the tax authorities.

AB: Age of business, how many years since the business is operating.

AT: Avoidance of taxes.

HTR: High tax rates.

CRP: Complicated registration process.

TI: Tangible incentives.

¹ According to SMEDA (SME Policy 2017), the number of employment size is up to 250. There is no minimum size of the firm explained in the SMEDA documents. We are now using FBR standard definition of microenterprises which is less than 10 employees.

The research problem of the study is willingness to switch (WTS) to formal sector by informal sector firms. It will be treated as a dummy variable, as this study has measured the willingness by giving value of 1 for positive response (Yes), and 0 otherwise.

5. RESULTS AND DISCUSSION

Before moving to the regression analysis, it is important to discuss the descriptive statistics of the variables of research which are going to be used in the regression model. The descriptive statistics are reported in Table 2 below:

Table 2. Descriptive Statistics

VARIABLES	N	Mean	SD	Min	Max
Marital Status	230	0.813	0.397	0	1
Household Size	230	6.200	1.823	2	14
No of Workers	230	3.348	0.634	3	9
Tax Avoidance	230	0.778	0.416	0	1
Willingness to Register	230	0.552	0.498	0	1
High Tax	230	0.570	0.496	0	1
Complicated Registration Process	230	0.743	0.438	0	1
Beneficial	230	0.896	0.306	0	1
Age of Business	230	7.787	4.107	1	23

Author's own calculations

The descriptive statistics in table 2, show just over 81 percent of the respondents are married and 19 percent of respondents were unmarried; we can conclude that most of the people engaged with informal sector in Pakistan are married. The average household size of firm owners of informal sector in our survey is 6.20. If we compare this household size with national level household size in Pakistan then according to Pakistan Census 2017, the average household size in Pakistan is 6.45. The maximum size of microenterprise in Pakistan is 9 or less, there is no proper data available in Pakistan regarding microenterprises' size of either formal or informal enterprises. However, in our survey the average size of informal firms is 3. The range of the firm size in our survey was 3 to 9. We have placed one condition that at least the firms who are operating in informal sector should be 1 year old. In our survey, the age of the businesses ranging from 1995 to 2017. By looking at the frequency table in the data, we can say that most of the businesses in informal sector started in 2010 (30 respondents). An evidence from literature ratifies that the informal sector enterprises do not register their businesses because they want to avoid taxes. This evidence also support our results that one of the reasons of not registering businesses because they don't want to pay any taxes. Our results show that 78 percent firm owners have the same perception; however, only 22 percent think that is not just the reason of not registering their businesses. Informal businesses also avoid becoming the formal enterprises because they think that tax rates are too high and with low profitability they cannot afford to pay high taxes. We asked on a scale 1 to 5 how high the tax rates are with 1 being less high and 5 being too high. We have merged option 1-3 as less high and gave it a value 0, and option 4-5 merged as too high tax rates with value 1.

The results indicate that 57 percent of the respondents are of the opinion that tax rates are too high whereas 43 percent respondents think that tax rate are high but not too much

high, they are reasonably high. In Pakistan, there are various studies which distinguish high tax rate to be a vital determinant influencing the magnitude of the Informal sector. Increase in the taxation rate is often highlighted as one of the most critical elements that adequately define the augmentation in the size of informal sector. Usually it is asserted by researchers that imposition of high tax rates lead to expansion in the size of informal sector (Kemal, 2003; Arby et al, 2010). Higher tax rates induce micro-enterprises firm owners to remain in the informal sector in an offer to avoid taxes and increase profits. Another reason of not registering their businesses by informal sector or firm owners is the complications in registration process in Pakistan. The results signify that 74 percent of the respondents believe that registration process is the most complicated while 26 percent of the respondents opine it's not. The results prove that the registration process is much complicated and SECP along with other relevant authorities need to make this process more convenient.

5.1. REGRESSION ESTIMATION TECHNIQUE

To get the empirical evidence of the willingness of informal business owners regarding switching to formal sector, main determinants are regressed through regression estimation technique. The findings explain that less beneficial and complicated registration process are highly significant whereas the other two variables are not found to be significant. The details are depicted in table 3 below:

Table 3. Findings of the Regression Estimation Technique

Variables	Model 1	Model 2	Model 3	Model 4
Complicated Registration Process	-0.285*** (0.070)	-0.268*** (0.069)	-0.268*** (0.070)	-0.273*** (0.070)
Less Beneficial		-0.371*** (0.080)	-0.369*** (0.080)	-0.360*** (0.082)
High Tax Rates			-0.010 (0.066)	-0.004 (0.067)
Tax Avoidance				-0.053 (0.076)
Constant	1.309*** (0.409)	1.547*** (0.378)	1.552*** (0.379)	1.583*** (0.372)
Observations	230	230	230	230
R-squared	0.141	0.185	0.185	0.187
Controls	YES	YES	YES	YES

*Note: Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$: The controls included age of firm owner, education level, marital status, household size, age of business, firm size, and business type.*

The respondents who consider the registration process to be more complicated are 27 percent less likely willing to register their firms compared to those who believe that the process is not complicated. The respondents who believe that it is less beneficial to become a formal sector, firms are 36 percent less likely to register compare to those who believe otherwise. The other two variables avoidance of taxes and high tax rates are not significant however, these two indicators do not pose issue for respondents as they are not already exposed to paying any kind of tax and they have to pay taxes after being a registered entity, these results are also aligned with the findings of Kemal (2003) and Arby et. al. (2010). This

is justifiable as one who did not face anything yet it can't be an issue for him at the moment. On the contrary, formal sector enterprises which are paying the taxes, they may properly explain that tax rates are very high, therefore, as the informal sector firms who have not registered yet and have not faced any problem in regard of taxes yet, rates of taxes are not matter of concern for them. On the other hand about avoidance of taxes, as understood that these are unregistered firms, they do not want to avoid taxes and in other question regarding paying taxes by business 87 percent of the respondents were of the view that businesses should pay taxes.

6. CONCLUSION

The starting point of this research was to seek intentions of informal sector microenterprises regarding transitioning from informal to formal sector. For doing so, a microenterprise level survey was conducted from 230 informal sector firm owners operating businesses at commercial areas of Raja Bazar, Saddar, and Tench Bhatta of Rawalpindi city. The findings signify that 56 percent of the respondents are willing to register their business and want to become a part of formal sector of Pakistan but conditioned to some additional benefits for instance health insurance, compensation on children education, transportation, concession on public services, and easy access to loan etc. Ninety percent of the respondents do not find it a handsome bid registering their business. Fifty Seven percent respondents believe that tax rates are too high, therefore reluctant to be formalized. Since the seventy four percent of the respondents believe that registration is much complicated process in Pakistan and consider it hard to get registered. This recommends followed by its findings that the formalization process should be in different phases, a process of context-specific, integrated procedures taken to decrease informal sector in a specified sector. Formalization of businesses should be branded and incentivized complemented with the rigorous strategy to outreach.

Another magnificent managerial level policy implication of this research is it assistances the policy makers to consider the major concerns of the informal sector while framing a prudent fiscal policy which may further enhance the confidence of the informal sector being formalized and the revenues of the government as well.

This research does not take into account the big cities of Pakistan keeping in view the human, financial and time constraints which comprises huge informal sector activities. The aspirant researchers may unfold the more divergence pertaining to the informal activities across the country.

Author Contributions:

Muhammad Adnan conceptualized the idea of this study and contributed in the introduction section. Malik Saqib Ali contributed in literature review. Azra Nasir contributed in the methodology and analysis section. Lastly, Syed Arshad Ali Shah contributed in the discussion and conclusion section. All authors have read and agreed to the published version of the manuscript.

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None.

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