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Lacuna in Trade Facilitation & Informalisation of Trade:

Lesson from India-Bangladesh Trade¹

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Abstract

The large and vibrant informal trade between India, and Bangladesh continues to thrive despite unilateral/regional/multilateral trade liberalisation in these two countries. This calls for an in-depth analysis of India's informal trade with Bangladesh. Recent studies have also shown that even in today's globalised world, informal trade barriers still do exist and inhibit trade flows, particularly so in the developing countries. This can arise due to a host of factors such as, complex customs procedures, capacity constraints and/or corruption at the border. These types of non-tariff barriers/structural impediments are less obvious but are also more difficult to directly measure. Particularly, with the decline in tariff rates of protection after the Uruguay round, the trade facilitation measures, the other name for reduction in transaction costs for trading goods has become an issues of significant importance in today's world. In this context, this paper attempts to analyse the interplay between shortcoming of trade facilitation measures in India-Bangladesh border and growth of informal trade. Using insights from the New Institutional Economics informal and formal institutions engaged in cross-border trade are contrasted to examine whether informal trading arrangements provide better institutional solutions. The study is based on primary data collated through surveys.

¹ These are my personal views. The author is a senior researcher at NCAER.

1. Introduction

In recent years, India and Bangladesh have adopted not only unilateral trade policy reforms but have also undertaken liberalisation under Uruguay Round and successive rounds of South Asian Preferential Trading Arrangements (SAPTA).² Despite these, recent works (Chaudhari, 1995; Taneja, 1999) indicate that India's informal trade with Bangladesh continues to thrive and shows no sign of decline. In this context, the present study attempts to understand the elements underlying the vitality of informal trading arrangements as well as to identify the bottlenecks of formal trading arrangement between India and Bangladesh. Specifically, the study focuses on the following three issues of interest in the context of India's informal trade: (a) what are the characteristics of informal trade, (b) why it takes place, and (c) how it differs from formal trade.

Understandably, traders have incentives to trade informally (provided the risks are low) if the economic returns are more. This may arise due to various factors such as:

- high tariffs and non-tariff barriers;
- domestic policy distortions such as subsidised public distribution system give rise economic incentives to trade these items in the neighbouring country if it fetches high prices;
- if the infrastructure supporting formal trade is weak and costs of trading increase substantially with higher volumes, some of it may spill over into informal trading;
- existence of an efficient institutional arrangement may attract traders to the informal channel;
- the rent-seeking activities of the public servants at each step of transactions may dissuade traders from using the official channel;
- low education level of traders may drive them from the formal channel.

The study has used extensive primary survey conducted in India and Bangladesh to analyse the institutional mechanism that enable informal trade to take place between India and Bangladesh. Using insights from the New Institutional Economics, the study contrasted informal and formal institutions engaged in crossborder trade in an effort to examine the transaction environments of formal and

²In 1991, South Asian countries of Bhutan, Bangladesh, India, Maldives, Sri Lanka, Pakistan, and Nepal established a preferential trading block in the region. Since then three rounds of SAPTA have been concluded. The member countries have also envisaged the formation of a free trading block by 2001.

informal traders, to understand whether informal trading arrangements provide efficient institutional solutions and how lacuna in trade facilitation has led to informalisation of trade between India and Bangladesh. It needs to be emphasised that since the sample frame for informal traders was drawn from an unknown population, the survey estimates may only be indicative and not firm estimates.

2. Trade Facilitation Bottleneck of India-Bangladesh Border³

According to the studies by Choudhury (1995), Taneja (1999), West Bengal is the principal transportation hub of informal trade between India/Bangladesh. In this context, it would be useful to examine the structural bottlenecks that formal exporters from West Bengal have to bear with. To a great extent, the transporter's/exporter's nightmare in the context of exports to Bangladesh has lead to "persistent open smuggling" in which all the stake-holders (police, government, BSF, traders, poticial parities, etc) have a role to play.

Three LCSs in West Bengal, namely Petrapole, Mahadipur and Hilli are the most important gateways for trade with Bangladesh in terms of trade volume and value. For our understanding, Table 1 provides a summary picture of the physical infrastructure at these LCSs. As this table shows, parking lots in all the LCSs lack the basic amenities like drinking water and toilet. The approach roads to the LCSs are congested. The frequent power cuts coupled with low voltage at the LCSs adversely affect the efficiency of customs officials. Surprisingly, there is no government-bonded warehouse in these LCSs. Thefts from parking lots are common and corruption is rampant. Since the problems prevailing in the three LCSs are similar in nature, we have chosen Petrapole border for our in-depth study as it handle the highest trade (66% in value terms during 2001-2002) between India and Bangladesh.

Petrapole is located about 95 kilometres from Kolkata. The commodities that are traded through Petrapole LCS originate from all over India. Kolkata is the final transhipment area for most of these commodities and they are carried to the Petrapole border by trucks through the National Highway 35, formerly known as Jessore Road as it originates from Jessore in Bangladesh. The delay in this route is a normal phenomenon due to the heavy traffic, three railway crossings and five congested towns (Barasat, Dutta Pukur, Ashoknagar, Habra and Bongaon) en route, poor physical condition and narrow width of the road, and encroachments. Another major hurdle in transportation is the narrow Naobhasa Bridge, which is located 3 kilometres

³ The finding of this section is drawn from Das and Pohit (2006)

prior to Petrapole. The bridge is so narrow that at a time only one truck can pass. Moreover, heavy trucks with carrying capacity of 15 to 18 tonnes or more cannot pass through this bridge due to its poor condition. This results in transhipment either in Kolkata or Bongaon incurring additional transportation cost and time.

	Table 1: Bottlenecks in Physical I	Infrastructure and Proced	ural Hazards
Facility	Hilli	Mahadipur	Petrapole
Approach	Single lane congested road	Poor physical	Passes through congested
Road to LCS		condition	towns & places infested by
			hawkers.
Parking lot	• No sanitation facility and	Lack of basic	• No sanitation facility and
	inadequate drinking facility.	amenities.	inadequate drinking water
	• Not secured - loss through	• Highly	facility.
	theft	discriminatory	• Not secured - loss through
	Prevalence of speed money	parking fees	theft
		• Not secured - loss	• Prevalence of speed money
		through theft	
		Prevalence of	
		speed money	
	No government bonded	No government	No government bonded
	warehousing	bonded	warehousing
Warehouse		warehousing	
Others	Poor quality of power	Poor quality of	• Irregular power supply
	• Local clubs with political	power affects	with low voltage
	affiliations extort exporters	efficiency of	• Single gate for export,
	for donations	customs officials	import and passengers
	• Hilli not notified in Duty	• Absence of bank	• Frequent strikes delay
	Entitlement Pass Book	collection centre	official work
	(DEPB) port registration -	• No office space for	Electronic Data
	traders of DEPB items not	clearing &	Interchange (EDI)
	getting the benefit.	forwarding agents	ineffective due to lack of
			efficient operator
			-

Merchandise has to face substantial loss of time at the border. The delay takes place at the parking lot, in customs clearance and at the entry/exit point. It is mandatory for the trucks coming from Kolkata during daytime to park at Bongaon Municipality Parking instead of moving directly towards the Central Warehousing Corporation (CWC) parking lot which is situated near the border gate and adjacent to the Indian Customs House. The existing custom clearance procedures at the border lead to significant costs and delays. The existing custom procedures and documentation are not transparent. As a result, all the exporters employ clearing agents on a commission basis to take up the responsibilities of all paper works at the border. Although, there is no official fees for paper work at customs office, exporters have to bear for overtime allowances of custom staffs if they want their consignment to be cleared on holidays or before/after the scheduled working hours. Recently, the government of India introduced the Electronic Data Information (EDI) system at custom office at Petrapole for streamlining the system. However, the system did not have smooth operation and so the manual clearing of papers is still the norm.

The entry point at the border has one single gate, which is used for exports, imports as well as for passenger movement. At a time, only one truck can pass through the gate. As a result, the entry point remains very congested. Big trees at the entry-exit point often become irritants to traffic flow. The Indian trucks after unloading at Benapole (in Bangladesh) are allowed to enter India only after 7 PM. or are allowed to return to India before the start of exports from India (i.e. 10 AM). This results in wastage of time together with payment of detention charges.

A trader/exporter incurs transaction costs in all the phases of the export process starting from obtaining information about market conditions in any given foreign market and ending with receipt of final payment. In a recent paper by Das and Pohit (2006), an attempt was made too quantify these costs on the basis of information collated through field survey of exporters/transporters engaged in India-Bangladesh trade.⁴ For clarity, the entire activities related to exports through the Petrapole-Benapole border have been divided into the following three distinct phases:

Phase 1 - loading at Kolkata, unloading at Benapole in Bangladesh and crossing of border while returning from Bangladesh

Phase 2 - transportation and

Phase 3 - exports including parking, customs clearance and crossing of border during exports.

The information on transaction costs needs further clarifications. In our analysis, the transaction costs that are quantified are only those incurred by Indian exporters up to the point at which they leave their cargoes in Bangladesh. Transaction costs beyond this point in Bangladesh are not quantified, so the total transaction costs

⁴ In all, the estimates were based on 88 exporters and 25 transporters.

of India-Bangladesh trade are not quantified. To be specific, the present paper solely deals with the total additional transaction costs incurred by the Indian exporters. Even in quantifying the additional transaction costs of the Indian exporters, certain transaction costs are not picked up in the survey.⁵

Table 2 indicates that the aggregate delay (loss of time) pertaining to all the three phases of exports turns out to be around 99 hours on an average (approximately 4 days) for a single shipment. The data suggests that the aggregate delay could be as high as 192 hours (8 days).

It is clear from the above discussion that there are structural bottlenecks that the exporters from West Bengal have to bear with. Understandably, some of the bottlenecks need more time to be solved and the policy-makers may work towards solving it. However, the issues that can be sorted out in short period of times should be addressed at first to give the right signal to the exporters/investors that the government means business. The natural question that arises why the state government of West Bengal is so lax in improving the infrastructure related to trade in West Bengal, while these days, the same is viewed among the investors as one of the most investment-friendly state of India. Though the state receives a share of the overall revenue collection from import/export activities as per directives of finance commission, given the uncertainties of the behaviours of the other states, it is quite rational in this kind of non-co-operative game for an individual state government to be less pro-active towards exports originating from the state. This is a real puzzle since we can see in other parts of world (Dubai, Singapore, Colombo), what a transportation hub can do for the economy. While it may be argued that Dubai's growth is partly due to the oil exports, the same is not true of Singapore, or Colombo.

The poor state of affairs in LCS of West Bengal is obviously an important factor of the growth and existence of informal trade between India and Bangladesh. However, as well will see below, other factors, also play a crucial role for the informalisation of trade.

Table 2: Loss of Time in Exports						
Stages Ideal time Loss of time Max. rep						
	(hrs)	(hrs)	Loss (hrs)			

⁵ For example, theft in the border parking lots which presumably leads to increased insurance costs and the costs involved in pre-shipment inspection are not covered in this paper.

Phase 1- Loading at Kolkata, unloading at Benapole in	5.9	17.8	91
Bangladesh and crossing of border while returning from			
Bangladesh			
Phase 2- Transportation	2.4	3.2	5
Phase 3- Exports including parking, customs clearance	21.3	78.1	96
and crossing of border during exports			
Cumulative	29.6	99.1	192

3. Informalisation of Trade

Our understanding of informalisation are primarily drawn from our earlier works (Pohit and Taneja, 2003, Das and Pohit, 2006) and recent field visits to the border districts of West Bengal. To understand the mechanism and functioning of informal trading markets, a survey was conducted during 1999 in border district of West Bengal and the corresponding regions in Bangladesh.⁶ Given the time and cost consideration, 200 traders consisting of 100 traders each in the formal and informal channel, split equally between the two countries, were covered.

Under formal trading arrangements, the recourse to law defines contracts between two contracting parties. This ensures that goods move across borders and payments are guaranteed. On the other hand contracting parties in informal trade cannot resort to the law for violation of terms of contract. Consequently, it is reasonable to assume that individuals trading through informal channel have developed parallel institutional mechanisms for contract enforcement and dispute settlement. It therefore becomes imperative to focus on issues of enforcement mechanisms including aspects of risk and information in informal trading. On the other hand it is important to understand the institutional structure that supports formal trade where exchange is affected by factors which are not related to the physical process of production, such as, administrative processes, government rules and regulations, infrastructure bottlenecks etc.

The current analysis is carried out using insights from the New Institutional Economics (NIE). The NIE differs from both neo-classical economics and from the 'old institutional approach'. While neo-classical economics focuses on perfect markets, such theory is devoid of institutions. The 'old institutional approach' on the other hand, recognises the importance of institutions but does not provide a theoretical foundation (Langlois, 1986). In contrast, the New Institutional Economics questions the two crucial assumptions of neo-classical economics namely cost-less transactions

⁶ Chaudhari (1995) reported that nearly 95% of illegal exports to Bangladesh goes from West Bengal

and perfect information and stresses on the role of institutions in facilitating market exchange by reducing transactions costs, providing a predictable framework for exchange and overcoming imperfect information (Assaad, 1993; Bardhan, 1989).

In the present context it is argued that while both institutional arrangements i.e. the formal and informal facilitate trade in goods across countries, they are carried out at a cost viz., transactions cost. These costs include those of organising, maintaining and enforcing the rules of an institutional arrangement. A rational behaviour would imply that a more efficient institution (in terms of lower costs) should be preferred over less efficient one (Coase, 1960).

Key determinants of transaction costs for formal trading in a particular country are the institutions, i.e. the rules and regulations that affect economic activities. Welldesigned institutions provide traders with a predictable framework and necessary business information at a cost that encourages them to comply with and pay for these institutions. Poorly designed institutions require traders to comply with burdensome rules and regulations and deal with inefficient, corrupt government agencies, and offer few benefits in return. Such institutions increase transaction costs, lower traders' incentives to comply, and hinder political and economic participation.

Below, we elaborate our key survey findings.

3.1 Survey Observations: General

At a general level the survey points to the evidence of a one way trade flow from India to Bangladesh. The survey data was also used to understand the sourcing network for procurement of goods for informal trade. The survey reveals that a large proportion of goods traded from India to Bangladesh are procured from other states in India. Also, the survey provides evidence of leakage of goods from the Indian Public Distribution System to Bangladesh.

3.2. Entry & Informal Channels in Informal Trading

Given the nature of informal trading, how difficult is entry into informal trading? What kind of costs do traders incur to make an entry into informal trading? Firms were asked how they entered informal trading. The survey revealed that in the absence of formal contracts between trading partners, the informal trading arrangements were characterised by non-anonymity of transaction. Thus, 74% of respondents in either Bangladesh or India entered through a friend or relative (see Table 3).

Entry in informal trading	Friend	Relative	Own initiative
Bangladesh	40	34	26
India	62	12	26

Table 3 Entry Characteristics of Informal Traders (% of Respondents)

The mechanism that supports information flows is also very important since what the transacting parties know and do not know will determine systematically the arrangements that will characterise exchange between them. Informal trade hinges on how traders can obtain information on commodities and quantities to be traded. Traders in both India and Bangladesh were asked how they obtained such information. It can be seen from Table 4 that making personal trips was the most important channel for information for Indian as well as Bangladeshi traders.

 Table 4 Information Channels (% of respondents)

Sources of Information	Bangladesh & India
Authorised channel	21
Personal trips	84
Distribution network	82
Official media	32
Enforcement agencies	37
Trade fairs	10

Note: Traders have the option of ticking more than one option

Given the institutional focus of the study, information on contractual arrangements between trading partners was also sought. Our survey findings indicate that prior dealing and advance payments are the two crucial factors governing the contractual arrangement.

3.3. Risk & Transaction costs

An aspect crucial in informal trading is the risk associated with informal trading. The vital aspects here are extent of risk, risk sharing arrangements and mechanisms of risk mitigation that are prevalent among trading partners trading informally.

Table 5 reported that the probability of getting caught is very low in both the countries. Informal traders have developed several mechanisms to assuage the extent of risk. As mentioned earlier, non-anonymous transacting is an important mechanism

for minimising risk. Further, they make payments to enforcement agencies to mitigate risk. As Table 5 shows, 60% of the Bangladeshi traders paid bribes between 3% to 6% of their turnover whereas 78% of the Indian traders paid between 1% to 3%. To diversify risk, one obvious way for informal traders is to have large number of transactions.

Table 5 Styliseu Facts	UI INISK IUI II	normai fraucis (f	citcint of Respondents)
Probability of goods being seized	<.05	0.05-0.1	0.1-0.2	>0.2
Bangladesh	20	58	18	0
India	72	26	2	0
Payments to enforcement agencies	1-3 %	3-6 %	6-10%	> 10 %
Bangladesh	28	60	12	0
India	78	18	4	0

Table 5 Stylised Fasts of Disk for Informal Traders (Dereent of Despendents)

Information was also sought from the traders regarding their combined transaction costs as percentage of turnover in terms of bribes to enforcement agencies, transportation costs, cost of credit and cost of currency conversion. Table 6 shows that 50% of the informal traders in Bangladesh had to make payments between 10% and 20% of their turnover in the form of transaction costs while in India 60% of them had to bear transaction costs of less than 10% of their turnover.

 Table 6
 Transaction Cost of Informal Traders (Percent of Respondents)

Transaction Cost in	<10%	10% - 20%	20% - 30%	>30%
Bangladesh	25	50	21	4
India	60	38	2	-

In the same spirit, information was also sought from the survey of formal traders regarding their combined transaction costs cost in the form of payments to officials as bribes at various stages, transportation cost including insurance cost, and cost of credit as share of their turnover. The relevant data are shown in Table 7. As this table shows, the combined transaction cost under these heads is by and large lower in India than in Bangladesh.

Table 7 Transaction cost of Formal Traders (Percent of Respondents)			
TC as % of their turnover	In India	In Bangladesh	
Less than 10%	24	22	
10% to 20%	40		
20% to 30%	36	20	
More than 30%		58	

3.4. Reasons for Informal Trade

The traditional argument is that informal trade takes place due to trade and domestic policy distortions. As and when such distortions are corrected informal trade would shift to the formal channel. However, our survey revealed that institutional factors were the most important factors encouraging informal trade between India and Bangladesh. The top four factors (viz, quick realization of payments, no paper work, no procedural delays and lower transportation costs) in Bangladesh or India are found to be factors giving rise to transaction costs (see Table 8). The inadequate transport systems that have been in existence between India and Bangladesh have led to high transportation costs. With respect to transit modalities, the survey has identified following bottlenecks: port congestion, excessive documentation, delays, slow movement of goods, transhipment and other indirect costs. While in India ethnic ties ranked fifth in importance, the presence of high duties in the official channel ranked fifth in Bangladesh.

Since perceptions on factors influencing informal trade were sought from Bangladeshi as well as Indian traders, a Spearman's rank correlation was computed for the ranking of factors given by both kinds of respondents. It shows a high value of 0.77 indicating converging of views regarding the factors influencing informal trade. Formal traders in Bangladesh and India were also asked to give their perceptions on the factors that they considered important for informal trade. A Spearman's rank correlation for perception of factors between formal and informal traders in Bangladesh yields a high value of 0.75. The same for the Indian traders yields a value of 0.76. Thus, there is high degree of agreement among the traders regarding the relative importance of various factors.

Table o Reasons for informal frade (fercent	of respondents)	
F Factors Influencing Informal trade	Bangladesh	India
Presence of high duties in official channel	50	18
Quantitative restrictions	34	22
Leakage of administered price goods	12	14
Absence/shortage of storage/warehousing facilities	24	6
Produced locally across border	40	22
Presence of haats/bazaar	22	20
Lower transportation cost	72	50
Lower time to reach destination for perishable commodities	36	42
Lower time to reach destination for non-perishable commodities	28	30
Absence of trading routes	0	10
No procedural delays	52	82
No paperwork	76	92
Quick realisation of payments	88	94

Table 8 Reasons for Informal Trade (Percent of respondents)

Lower bribes	26	38
Nexus between enforcement agencies and traders	46	30
Ethnic ties	24	42

Note: Respondents had the option of ticking more than one factor.

4. Discriminating Characteristics of Formal & Informal Traders

This section attempts to statistically analyse the characteristics of formal and informal traders engaged in Indo-Bangladesh trade as well as important aspects of modality and behaviour of such trade. While the discussion in the earlier sections has thrown light on the above aspects separately for two groups of agents/regime, it does not provide conclusive evidence of identifying the agents/regime based on some criteria. In this section, this missing link is established by analysing the significance of the differences between the two types of traders/trade in terms of univariate statistical criterion.

Our choice of univariate test is non-parametric Wilcoxon signed-rank test. The advantage of using a non-parametric test is that it is free of specific assumptions about the distribution of the population under analysis, which is appropriate in our case given little knowledge of characteristics of informal traders. As many of the variables considered here are qualitative in nature they can be classified or ranked but not measured accurately, hence non-parametric tests are more appropriate for our analysis. Among the various non-parametric tests, the Wilcoxon signed-rank test is one of the more powerful ones as it utilises information on both the direction and magnitude of the differences within pairs. It gives more weight to a pair that shows a large difference than to a pair that shows a smaller difference. The Wilcoxon signedrank is applied by matching pairs of observations from the sample of formal and informal traders for a set of variables selected for analysis. The Wilcoxon signed-rank test tells us that if there are two samples X_1 of formal traders and X_2 of informal traders with n observations each then the null hypothsis tests that the median of the distribution of a random variable $D = X_1 - X_2$ is zero.

 $H_{o:} \quad \mu = 0$

Where μ is the population median.

The test is performed by first ranking the absolute difference between matched pair of observations. From these ranks a z statistic is calculated by subtracting the sum

of the ranks for negative values from the sum of the ranks with positive values and then dividing this number by its variance, after adjusting for zeroes and ties. Thus:

$$Z = \frac{\sum_{i=1}^{n} a_{i}r_{i}}{\sqrt{Var\sum(a_{i}r_{i})}}$$

Where a_i is either positive one or negative one and ri are the observed signed-ranks.

For more than 25 observations, Z is approximately distributed normally. The results of the Wilcoxon's signed-rank test for 13 variables governing different aspects of formal and informal trade are depicted in Table 9. As this table indicates, the tests have been carried out separately for the Indian and Bangladeshi traders. The database comprises of fifty pairs of traders for India and fourty-six pairs of observations for Bangladesh. A one-tailed test has been conducted (at a 10% level of significance) since we have prior hypotheses regarding the direction of the difference in many cases. The results of the Wilcoxon signed-rank test are shown in Table 9.

The earlier sections have emphasised the role of transaction cost in informal and formal trading arrangements. One of the key hypotheses in the paper is to test whether informal trade flourishes because of lower transaction cost in informal trading than in formal trading. In this context the survey instrument was used to arrive at the transactions costs that traders incur in the two channels.⁷ The sign-rank test suggests that transaction cost in formal in India as well as in Bangladesh is significantly higher than the informal counterpart.

In some cases, traders use the informal channel not because they are unwilling to abide by laws and regulation, but rather they lack the necessary resources to do so (see Kuchta-Helbling, Catherine, 2000). This occurs if lack of education deters them from using the formal channel. Alternatively, the lack of resources may preclude them from updating their knowledge in respect of changes in trade policy. A sign rank test of education levels of two types of traders does indicate that informal traders have lower education levels than the formal ones. Moreover, when we statistically judge the level of awareness of trade policy changes of agents in the two channels through the attribute awareness of SAFTA, we do find a lower level of awareness of SAFTA among the informal traders.

⁷ Transaction costs for informal traders include payments made to enforcement agencies, transportation costs, cost of credit and cost of currency exchange. For formal traders transaction costs include bribes paid at various stages to officials, transportation costs including insurance and cost of credit.

It has also been argued in Taneja (1999), Chaudhari (1995) that ethnic ties/family linkages play a dominant role in aiding/abetting informal trade. The test using data on Indian traders indicate informal traders show significantly more ethnic linkages than the formal ones. However, our database on Bangladeshi traders fails to bring out any significant differences in ethnic linkage.

Engaging in business requires information such as how to find suppliers and buyers, and the market value of goods and services being exchanged. Without inexpensive access to this information economic activity becomes very risky and costly. How well the information channel for informal trading arrangement is developed is judged by the following two attributes: (a) time taken for first trade deal and (b) time taken for subsequent trade deal. The result shows that on both these counts, informal trading arrangement in India as well as Bangladesh function better than their formal counterpart.

The traders operating though the informal channel occasionally face the risk of goods being seized. On an average then, do the informal traders face higher risk? The inference from the test is that there is no significant difference in risk element between the two of types traders in either country. This is expected as a thriving informal trade indicate that government is failing to enforce its laws and regulations. Moreover, the survey suggests that informal traders make payments to officials to mitigate the risk of seizures.

Tuble 9 Results of Wheekon's Signed functurest					
Parameter	Bangladesh Territory		Indian Territory		
	Z statistics	Inference	Z statistics	Inference	
Transaction Cost (TC)	4.84	Fo>If*	3.27	Fo>If	
Education level (Edu)	5.84	Fo>If	5.91	Fo>If	
Awareness of SAFTA (SAFTA)	4.38	Fo>If	5.75	Fo>If	
Education & awareness of SAFTA (EduSaf)	5.81	Fo>If	6.03	Fo>If	
Ethnic ties (Ethnic)	-0.63	Fo=If	-3.67	Fo <if< td=""></if<>	
Time taken for first trade deal (TimFr)	1.68	Fo>If	2.14	Fo>If	
Time taken for subsequent trade deal (TimSq)	5.55	Fo>If	6.15	Fo>If	
Risk	-1.94	Fo <if< td=""><td>-5.07</td><td>Fo<if< td=""></if<></td></if<>	-5.07	Fo <if< td=""></if<>	
Number of transactions (Tran #)	-2.37	Fo <if< td=""><td>-2.56</td><td>Fo<if< td=""></if<></td></if<>	-2.56	Fo <if< td=""></if<>	
value of trade per Transaction (Avsturnovr)	5.43	Fo>If	5.24	Fo>If	
Rate of entry/exit (Ent/Ex)	1.57	Fo=If	0.16	Fo=If	
Trading Period (TrdPrd)	0.83	Fo=If	1.22	Fo=If	
Presence in domestic market (PreDom)	2.79	Fo>If	2.98	Fo>If	
Border price differential (BorPr)	-4.46	Fo>If	0.66	Fo=If	

Table 9 Results of Wilcoxon's Signed-ranked test

*Fo pertains to formal, If pertains to informal. The tests have been carried out at 5 % level of significance.

Is the informal trade characterised by large number of transactions, each having low volume of trade. We do find that value of trade per transaction (Avsturnover) is larger for formal traders than the informal ones both in India as well in Bangladesh territories.⁸

Is the informal trading characterised by higher rate of entry and exit than the formal counterpart? In other words, is the formal trader typically in business over a longer period than the formal one? The statistical test on both these counts fails to identify any differences.

The co-existence of trading in the domestic market with informal trading has been argued by Chaudhari (1995). Is it the typical behaviour of only informal traders? On the contrary, our result indicates that formal traders exhibit larger presence in domestic market.

Expectedly, the border price differential is the driving force for sustaining informal/formal trade activities. In this connection, one may question whether traders prefer one channel to another depending on the border price differential. Our result partially supports the hypothesis in the sense that only in Bangladesh border price differential was higher in the formal channel.

5. Concluding Remarks

What implications for policy does the study provide? It is evident that informal trade is quite large and can not be ignored in any policy dialogue. It is also true even that with a rapid pace of liberalisation, informal trade continues to thrive. As long as transaction cost in the formal channel is sufficiently higher than that of informal channel, there would always be incentive for traders to transact through the other channel if they can work out an efficient mechanism for risk minimisation. Of course, lower education levels and awareness of the policy environment of traders deters them from accessing the formal channel.

Understandably, the impediments to formal trade needs to be reduced. The plethora of administrative requirements need to be reduced drastically. For instance, EDI systems in Petropole, the main land route border of border trade between India-Bangladesh do not function efficiently. Also banking facilities are inadequate in the border areas. Similarly the impediments at other stages of formal trade transactions

⁸ This variable is generated by dividing annual turnover of a trader by the number of transaction in the year..

have to addressed and reduced considerably. The associated transaction costs, particularly bribes have a serious connotation. The fact that such costs have been highlighted in the context of cross-border trade is only the tip of the iceberg. Corruption is pervasive in all sectors and segments of the South Asian countries like India and Bangladesh which has serious consequences for the growth of these economies. By attempting a removal of rent seeking activities at the trade level, there is a possibility that such changes would percolate to other sectors of the economies as well.

While it can well be argued that if the transacting environment for informal trading is more efficient than for formal trading, why not let it continue - the danger is that the associated money laundering to finance such trade deals might prove to be a threat to the smooth functioning of formal capital markets. Even though the issue of informal capital transfers has not been dealt with in the study, the proceeds through informal trading are converted into each other's local currencies through the informal capital market thereby having a relevance to the study. A focus on law enforcement agencies to detect and obstruct informal transit of goods across borders is not a viable solution as increase in enforcement mechanisms could only lead to increase in rent collections. What would be more effective would be to reduce the impediments to trade in the formal channels. This would also have a much larger impact in the form of trade expansion between India and Bangladesh.

Information is another important aspect that has to be looked into. It is true that a major proportion of informal traders are locals who do not have high levels of education or are only conversant with local languages. It cannot be expected of them to understand and subsequently follow the jargon of formal trade arrangement between India and Bangladesh which are documented only in English and often difficult even for conversant persons to follow. Such gaps have to be filled by suitable dissemination of information and creation of awareness among traders of the various norms. Time delays due to unnecessarily long and complicated procedures need to be reduced by simplifying the procedures.

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