

Chapter 9: Trade financing, logistics and transaction costs

As part of the project, consultant studies were prepared on the financing of India-Bangladesh trade and on some aspects of its logistics. The original intention was to deal with Bangladesh exports to India as well as Indian exports to Bangladesh, but in both cases the surveys and studies only covered the latter, mainly because the volume of Bangladesh exports to India is so small that it was difficult to identify participants that could throw much light on these aspects. Ideally this work would have been a coordinated effort carried out in both countries, but for various reasons it was done only on the Indian side by Indian consultants. Despite these shortcomings, the studies have brought out some interesting aspects of these activities. The principal findings are briefly summarized below, first for trade financing, and secondly for trade logistics and transaction costs.

Trade financing

This study⁹¹ deals with the financing of Indian exports to Bangladesh—both exports by the legal route, and informal (smuggled “bootleg”) exports. It distinguishes the following principal sources of foreign exchange and mechanisms by which Bangladesh importers pay for imports from India:

- LCs issued by Bangladesh banks
- Lines of credit released by the Indian government for Bangladesh imports of Indian capital goods
- Informal hawala (also known as hundi) payment networks
- Remittances from Bangladeshis working outside South Asia (especially in the Middle East) through the hawala networks
- Remittances to Bangladesh from the large Bangladesh migrant communities living in India
- Smuggling of gold and currency (mainly Taka) into India from Bangladesh
- Illegal trafficking in narcotics, arms, stolen property and women and children from Bangladesh into and through India

The study makes a number of points about these financing mechanisms which are highly relevant for understanding the nature of the bilateral trade.

First, as regards LCs, it notes that Bangladesh government rules they are compulsory for all import consignments in excess of \$ 5000, but involve very high transaction costs. This is principally due to high charges (up to 3% of the transaction) for LC confirmation by a prime US or other developed country bank. In addition, until December 2003 Bangladesh importers were required by Bangladesh Bank to deposit compulsory margins which tied up working capital and involved a substantial extra cost as the margins generally exceeded the margins that would have been required by the banks issuing the LCs. According to the study, adding these costs to a variety of other transaction costs makes LC financing prohibitively expensive for most Bangladesh importers, so most LCs are not confirmed by prime foreign banks and therefore do not provide working capital to the Indian exporters since they cannot be discounted. In addition delivery of the goods in Bangladesh is typically taken by the importers without negotiating the LCs, so that in practice “the LC is a mere cover to move goods through the Customs”⁹². The study comments that LC costs would have declined since Bangladesh Bank’s compulsory margin requirements were dropped in December 2003, but implies that the costs are still too high for the LCs to in fact finance imports from India, and that payments and delivery of the goods are being directly negotiated between the Bangladesh buyers and the Indian suppliers without any substantive role for the compulsory LCs except as additional documentation during Customs clearance.

⁹¹ Goyal, Arun (2004, October). *Study on Financing of India-Bangladesh Trade*

⁹² Ibid p.13

This finding, that the LCs in this trade are not in practice being used for their normal function of reducing the risks and facilitating financing for both the importers and the exporters, implies that they would not be used in the trade if they were not compulsory. If this is correct, they involve non-negligible transaction costs without protecting the suppliers and importers against commercial risks such as defective shipments, non-payment, delayed payments etc.⁹³ *A priori*, this would appear to be relevant in any assessment of whether compulsory LCs are in fact an effective additional check on underinvoicing and other illegal practices at Customs in the India-Bangladesh trade.

Secondly, the study points out that the hawala networks perform much better than the formal banking system in terms of simplicity, speed, transaction costs, and reliability, and that for these reasons they are not only financing much of the informal bootleg smuggling trade from India to Bangladesh, but also substantial parts of the exports to Bangladesh that go through the legal routes. Remittances from the Bangladeshi workers in the Gulf countries and from Bangladeshi residents in India provide the foreign exchange, usually as US dollars or as Rupees in India, and Taka are provided by the Bangladesh importers. As regards imports into Bangladesh through formal Customs channels, some form of hawala payment would generally be needed to balance accounts if there is “technical” smuggling. For example, prices and quantities in a shipment as given in the shipping documents and an accompanying LC might match, but additional payments to the exporter will be needed if the quantities exceed the declared quantities or the products are different from the descriptions given in the documents.

Thirdly, the study notes that, in addition to hawala payments, informal exports from India to Bangladesh are also paid for by gold and Taka smuggled into India. According to the study, recorded Customs seizures in India of gold and currency are very small but are only “the tip of the iceberg” as the Indian Customs officials at the border avoid this kind of seizure owing to involved judicial procedures in gold and currency cases. The smuggled Taka are used to buy Rupees from informal foreign exchange traders who offer considerably more favourable Taka/Rupee rates than can be obtained from the banks, which are obliged to first convert the taka to US dollars and then to Rupees, as there is no official direct Taka/Rupee foreign exchange market. The report points out that the lack of such an official market means that remittances of the Bangladeshi immigrant community to Bangladesh (estimated at about \$260 million a year) go entirely by the informal hawala networks.

Trade logistics and transaction costs

It has long been recognized that there are serious logistical problems (congestion, delays, side-payments etc) at the land Customs stations on the India- Bangladesh border⁹⁴. In order to provide some quantitative indications of the scale of these problems, as part of this project NCAER organized surveys of exporters and transporters in the Kolkata-Petrapole region during July and August 2002. The results of these surveys are summarized and interpreted in a paper by Samantak Das and Sanjib Pohit⁹⁵. This paper first of all describes some of the infrastructure deficiencies and procedural hazards at these places, which include (at Petrapole, which is by far the best equipped) inadequate and congested roads, absence of government bonded warehouses, irregular power supplies, inadequate sanitary facilities and drinking water, prevalence of theft and other crimes, frequent strikes, prevalence of speed money, a single border gate which handles all truck and other traffic as well as individual travellers and which is wide enough for

⁹³ So called “back-to-back” LCs that finance imports of inputs needed by exporters are presumably not subject to these problems, since they have the backing of the original export LCs issued by banks in the US, Europe and other countries from which the exports have been ordered.

⁹⁴ These have been described and analysed as part of a comprehensive study of transport and logistics in the India-Nepal-Bhutan-Bangladesh sub region edited by Uma Subramanian (op cit)

⁹⁵ Das, Samantak, and Sanjib Pohit (2004). “Quantifying the Transport, Regulatory and Other Costs of Indian Overland Exports to Bangladesh”. Mimeo.

only one truck at a time to pass through. They point out that these and other deficiencies are if anything more severe at other land Customs stations, and they give the examples of Hilli and Mahadipur.

The Petrapole crossing was chosen for the survey because it handles by far the largest share of the recorded India-Bangladesh land border trade. Petrapole is on a major road 95 kilometres from Kolkata. The neighbouring town on the Bangladesh side of the border is Benapole, which in turn is linked by a highway to Jessore and Dhaka. The survey was carried out in Kolkata and Petrapole and responses were obtained from 15 transporters and 82 exporters, all engaged in the India-Bangladesh trade. The questions were framed so as to elicit the opinions of the transporters and exporters on the *excess* time and cost of transporting goods from Kolkata, clearing Indian Customs, unloading the goods on the Bangladesh side, and returning to the Indian side of the border. The excess cost and time involved was estimated by asking what each exporter or transporter considered should have been normal or reasonable, and comparing that with the actual time spent and actual expenses. In the case of congestion on the road from Kolkata to Petrapole, the “normal” time seems to have been defined as the time a truck would have taken to travel the same distance in normal conditions along an equivalent stretch of other national highways. What might have been considered “normal” or “reasonable” for activities such as the various stages of Customs clearance is more subjective, but the responses appear to have been reasonably consistent, probably because of queuing and waiting times that were about the same for everyone. The respondents were then asked to put a value on the estimated excess time they spent at the various points in the shipment and clearance process, in particular loading in Kolkata, transport from Kolkata to Petrapole, clearing Indian Customs at Petrapole, unloading in Bangladesh, and returning to the Indian side of the border. How this excess time was valued was left to them: the answers presumably mainly reflect the estimated opportunity cost of the time as they perceived it e.g. for a trucker, what could have been earned by using the truck during the “excess” time that it is tied up at Petrapole. In addition, all the respondents mentioned that as a matter of routine they pay “speed money” to police, Customs and other officials. They also experience delays in receiving export remittances, which they also attribute to slow bureaucratic processes. The perceived cost of these delays and the speed money payments⁹⁶ were then aggregated with the estimated excess time costs to give estimates of the total excess costs involved, and then these estimates were expressed as a percentage of the average value of a typical shipment. According to these calculations, the actual cost of an average shipment from Kolkata to the point of Customs clearance in Bangladesh was 12.31% of the value of the shipment, compared to an “ideal” cost of 1.93% of the value of the shipment. These costs were divided as follows:

Table 9.1: Estimated actual and excess costs of transport and Customs clearance in India at Petrapole

	<i>Cost as % of average shipment value</i>		
	Ideal or normal	Excess	Actual
Transport and Customs clearance time	1.71	5.73	7.44
Speed money	-	2.50	2.50
Time for receipt of export remittance	0.22	2.15	2.15
Total	1.93	10.38	12.31

These costs are based on averages of the relevant variables, and the variances are considerable with some very high maximum values e.g. excess transport and Customs clearance costs as high as 18%

⁹⁶ The survey obtained apparently reliable information on “speed money” at Petrapole, apparently because people had no or few reservations about discussing it since it is so prevalent and open. However no information was asked for or provided on underinvoicing, misclassification and similar practices, most of which probably takes place on the Bangladesh side in connection with Customs clearance and which involve much larger bribes and other side-payments than the amounts involved in speed money payments.

of the average shipment value. However, as the paper points out, the shipment values to which they are related are averages of all the commodities that the respondents were shipping, and the estimates thus do not pick up differences between different types of commodity, which are likely to be considerable. They also depend on respondent estimates of opportunity costs, the basis for which is not known.

In order to obtain a better idea how these costs vary across different types of commodity, for this synthesis the data on time delays, speed money, and export remittance delays was combined with data from the same NCAER survey on shipment values by commodity, and information on Indian trucking costs from another study⁹⁷. These calculations (Table 9.2) show that the impact of the Petrapole bottlenecks is serious for low value commodities but minimal for high value commodities⁹⁸. For example, the total logistics cost for a truck load of wheat valued at Rs 56,000 was 10.94% of the value of the wheat, but without the excess transport and Customs clearance time and delay in receiving export remittances, and without “speed money” payments, the total cost should have been 1.96% of the value of the wheat. Thus congestion and logistics inefficiencies added to the cost of getting the wheat from Kolkata through Petrapole to the Bangladesh Customs clearance point at Benapole, and increased its landed cost there by about 9%. By contrast, the total logistics cost for a truck load of truck and motor parts valued at Rs 2.7 million was only 0.75% of the cargo’s value, and would have only been 0.12% of the value under ideal conditions. The reasons for these large differences between low value and high value commodities is that wasted truck time and speed money are the same regardless of the value of the cargoes that the trucks are carrying, and therefore are more significant for low value cargoes. On the other hand, in these calculations the cost of the time delays for the cargoes has been estimated as the interest cost of working capital, which has been assumed at 1% per month. These costs i.e. the interest cost of the shipments while they are being transported and cleared by Indian Customs, and the interest cost of delays in payments for the export cargoes, are the same percentages of their values whether they are high or low. However this leaves out other costs of delay which for some products may greatly exceed the simple working capital interest cost e.g. deterioration of perishables such as fruits and some other foods, and buyer penalties for not meeting agreed delivery times. In addition, as already noted, the study is also confined to delays and other costs borne by Indian exporters: delays and other costs in clearing Customs in Bangladesh side of the border obviously increase the total logistics cost of the trade above the costs incurred in India.

The NCAER survey at Petrapole did not systematically investigate the logistics costs of Bangladesh exports to India, but according to the authors⁹⁹ Bangladesh exporters are treated in an unsympathetic and discriminatory way at Petrapole. For example:

- At the border Bangladesh trucks have to give way to Indian trucks going in the opposite direction with waits of 4-5 hours to cross.
- Once the trucks enter India, immediate transshipment to Indian trucks is required, since there is no bonded warehouse in which the goods can be stored. As no facilities are provided for the transshipment, damage to the goods results

⁹⁷ Subranamian, Uma et al op.cit Appendix 6

⁹⁸ It is likely that these commodity-specific estimates somewhat overstate the differences: in particular the very high estimates for cement and bauxite look implausible.. For products such as these it is possible that extra speed money might be paid to shorten the time the trucks spend clearing Customs, reducing the total per truck cost. Another possibility is that lower speed money rates and faster clearance times are established for obviously low value cargoes such as cement, perhaps reflecting the view that excessive payments and delays would reduce the traffic in these products. These possibilities could not be explored in the survey, which was only able to obtain information on speed money and delays for an average mix of all the products being transported, not according to the type of merchandise the trucks were carrying.

⁹⁹ Ibid pp 11-12

○ Bangladeshi exporters complain that they are badly treated when entering India at Petrapole, despite paying substantial bribes. Consequently they prefer to fly to Kolkata in order to explore business opportunities, even though the cost is much higher than the cost of land travel. Issues such as these are of considerable interest and concern in Bangladesh and would be worth exploring in follow-up studies. These would need to be done in Bangladesh and in a carefully focussed way in India, in view of the very low volume of the trade and the small number of commodities involved.

The paper makes a strong case for investing in larger and much improved infrastructure and facilities at Petrapole and at the other land border Customs stations. The desirability of doing so is apparent from the extra logistics costs illustrated in Table 9.2 e.g. for Bangladesh the present system involves substantial terms of trade losses, since the landed costs of imports from India of products such as wheat, rice, fruit, cattle feed, bauxite and other products appear to be much higher than they would be if the congestion were removed. Bangladesh exporters and potential exporters also have an obvious interest in faster and less expensive commodity movements across the border. Likewise, on the Indian side, even though it can be assumed that the congestion costs of exports to Bangladesh are recovered in the prices charged, at higher prices the volumes of the exports must be lower than they otherwise would be. If the required investments are not made, congestion will increase with the general growth of trade, and would largely cancel or offset economic benefits that would otherwise occur if tariffs or other trade barriers were to be reduced. This last point is especially relevant if India and Bangladesh were to ever implement an effective FTA, since without very substantial investments in infrastructure and administrative capabilities, increases in trade would be slowed down or blocked by increases in congestion and the associated increases in economic rents.

Table 9.2: Estimated total extra cost for Indian exporters of delays and "speed money" at Petrapole land border crossing. Cost per 10 ton truckload by various products

	Value of shipment per truck Rs '000	Interest cost Rs	Truck cost Rs	Speed money Rs	Total cost Rs	Total cost as % of shipment value
Cars	3077	4277	3553	1202	9032	0.29
Engineering equipment	2800	3892	3553	1202	8647	0.31
Truck and motor parts	2727	3791	3553	1202	8546	0.31
Electric pumps	2500	3475	3553	1202	8230	0.33
Fans	1502	2088	3553	1202	6843	0.46
Cosmetics	1449	2013	3553	1202	6768	0.47
TV/VCD parts	1424	1979	3553	1202	6734	0.47
Stabilizers	1369	1903	3553	1202	6658	0.49
Cotton yarn	904	1257	3553	1202	6012	0.66
Paper	884	1229	3553	1202	5984	0.68
Air conditioners	625	869	3553	1202	5624	0.90
Bleaching powder	600	834	3553	1202	5589	0.93
Cumin seed	524	728	3553	1202	5483	1.05
Red dry chilly	460	639	3553	1202	5394	1.17
Paints	450	626	3553	1202	5381	1.20
Milk powder	414	576	3553	1202	5331	1.29
Bicycle parts	375	521	3553	1202	5276	1.41
PVC pipes	355	493	3553	1202	5248	1.48
Mustard oil	350	487	3553	1202	5242	1.50
Marble slabs	290	403	3553	1202	5158	1.78
CI sheets	240	334	3553	1202	5089	2.12
Lentils	220	306	3553	1202	5061	2.30
MS rods	200	278	3553	1202	5033	2.52
Black stones	197	274	3553	1202	5029	2.55
Jute carpets	180	250	3553	1202	5005	2.78
Apples	120	167	3553	1202	4922	4.10
Pig iron	113	156	3553	1202	4911	4.37
Sugar	107	149	3553	1202	4904	4.57
Glass ware	90	125	3553	1202	4880	5.42
Mangoes	80	111	3553	1202	4866	6.08
Rice	79	110	3553	1202	4865	6.13
Wheat	56	78	3553	1202	4833	8.66
Cattle feed	49	68	3553	1202	4823	9.93
Cement	22	30	3553	1202	4785	22.26
Bauxite	21	30	3553	1202	4785	22.44

Notes: Estimates based on data collected in NCAER survey of exporters and transporters in Kolkata-Petrapole region during July and August 2002. Supplemented by estimates of Indian trucking costs in India in Annex 6 of Uma Subramanian et al. This estimates the annual total cost of a 10 ton truck at \$US 12,385. The fixed component of this after deducting tyre and fuel cost is \$6440 per annum, or \$17.60 per day. The average delay per shipment which the exporters and truckers interviewed by NCAER thought was unnecessary or excessive was about 100 hours or 4.17 days per truck. This was used to estimate the cost of the delay per truck and the working capital interest cost, assuming an interest rate of 1% per month. It was assumed that "speed money" is the same for each truck regardless of its cargo. Bribes related to Customs clearance are not included in these costs, and no costs incurred in Bangladesh after the goods have been unloaded there for Customs clearance, are included in these estimates