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Estimating Informal Trade across Tunisia's Land Borders

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Abstract

This paper uses mirror statistics and research in the field to estimate the magnitude of Tunisia's informal trade with Libya and Algeria. The aim is to assess the scale of this trade and to evaluate the amount lost in taxes and duties as a result as well as to assess the local impact in terms of income generation. The main findings show that within Tunisian trade as a whole, informal trade accounts for only a small share (5 percent of total imports). However, informal trade represents an important part of the Tunisia's bilateral trade with Libya and Algeria, accounting for more than half the official trade with Libya and more than total official trade with Algeria. The main reasons behind this large-scale informal trade are differences in the levels of subsidies on either side of the border as well as the varying tax regimes. Tackling informal trade is not simply a question of stepping up the number of controls and sanctions, because differences in prices lead to informal trade (and to an increase in corruption levels among border officials) even in cases where the sanctions are severe. As local populations depend on cross-border trade for income generation, they worry about local authorities taking action against cross-border trade. At the same time, customs officials are concerned about the risk of local protests if they strictly enforce the tariff regimes in place. This issue will become even more significant if fuel prices in Tunisia rise again as a result of a reduction in the levels of domestic subsidies.

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1. Introduction

Events recently reported in the Tunisian press have highlighted the scale of the problems linked to informal trade in Tunisia.[2] Although most of the headlines focused on the illegal imports of fuel, many other products (in particular manufactured goods, fruit and vegetables, and products from the Far East) are both imported and exported illegally.

Although informal trade is a relatively old phenomenon, which developed significantly in the last few years of the previous political regime (Meddeb 2012), it appears to have even grown strongly following the revolutions in Tunisia and Libya. Following the Tunisian uprising, the border post at Ras Ajdir, on the Libyan border[3] was attacked and vandalized**.** Following a number of other problems and the closing of the border on two separate occasions, customs authorities were unable to properly control cross-border trade flows.

As a result, informal trade levels are assumed to have risen. This report sets out to assess the scale of this trade between Tunisia and Libya and Tunisia and Algeria and to try to evaluate the amount lost in taxes and duties as a result as well as to assess the local impact in terms of income generation.[4] As studies of this type have already been conducted in Sub-Saharan Africa and in Central Asia (Ackello-Ogutu 1997; Kaminski and Mitra 2012),[5] this study used the methodologies already tried and tested in these regions.[6]

It is difficult to give a precise definition of informal trade because practices differ from one border to the other. For the purposes of this study, informal trade is defined as the flow of goods that are unreported or incorrectly reported by the country's customs authorities. This definition therefore covers a number of different aspects, including trade in goods passing through border posts with falsified customs declarations (in terms of the type or quantity of goods concerned) as well as smuggling (i.e., when goods cross the border without the knowledge of customs authorities) either through border posts or elsewhere along the border. However, this paper does not cover products that cannot be licitly traded in the country (such as weapons or drugs)[7].

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[2] For an example, see Leaders (2013).

[3] The routes followed by informal trade between Tunisia and Libya were clearly identified in an earlier study (Meddeb 2012). Although the Tunisia-Libya border is long (459 km), there is only one main crossing point, namely the border post at Ras Ajdir.

[4] This study focuses solely on informal trade and land borders and not on informal sector in general. Although some of the informal trade into Tunisia passes through the port of Tunis, this study does not take account of goods entering the country in this manner.

[5] In addition to the specialized literature on informal trade, a significant number of academic papers and reports discuss the impact of subsidies in Middle Eastern and North African countries.

[6] This study is based on fieldwork carried out in Ras Ajdir, on the Libyan border, and at Bouchebka, on the Algerian border. On May 1-9, 2013, questionnaires were handed out and completed by 192 individuals involved in informal trade at the crossing point at Ras Ajdir. Interviews were also conducted with customs officials at Ras Ajdir, Ben Gardane, and Médenine. The fieldwork on the Algerian border took place on May 25–29, 2013 in the Kasserine governorate in west-central Tunisia, more specifically in the town of Kasserine itself, at the border crossing point at Bouchebka, and at various locations on the border.

[7] This is the main topic of ICG (2013).

A number of conclusions can be drawn from this study. Although informal trade accounts for only a small proportion of Tunisia's total trade, it plays a significant role in bilateral trade with Libya and Algeria, and in certain sectors. While it accounts for more than half the country's trade with Libya, it is harder to estimate the level of informal trade with Algeria because it is more widespread and clandestine. However, it is possible to estimate that roughly 25% of the fuel[8] consumed in Tunisia is in the form of informal imports from Algeria. The main reasons behind this large-scale informal trade are differences in the levels of subsidies on either side of the border as well as the varying tax regimes.[9] For example, the price of fuel is around one-tenth in Algeria of that in Tunisia.

The growth in this type of trade has a significant impact on several areas of the Tunisian economy. Fuel is cheaper, but government revenues are reduced, not only because goods are not subject to customs duties at the Tunisian border, but also because traders avoid paying value-added tax (VAT) provided they remain within the informal network. This loss of revenues can be significant.

Moreover, this type of trade has an important economic and social impact in border regions. In many of these regions, informal trade is one of the most important economic activities—if not *the* most important—as is the case, for example, in Ben Gardane. Numerous individuals and organizations are involved in informal trade. While some are highly visible, such as transporters carrying the goods across the border, street vendors, and ad hoc traders (known informally as "ants"), others are less so, such as wholesalers, currency changers, and officials in the relevant administrations who are willing to turn a blind eye on the practice. This kind of trade also keeps many goods within budget for Tunisian consumers.

Both the existing literature and the interviews conducted for the purpose of this study underline the pivotal role played by wholesalers, who control the supply chain and distribution network and are best informed about possible commercial opportunities that may arise as a result of changes in customs duties or tax rates.

It is worth noting that the *modus operandi* differs according to whether trade takes place across the Libyan or Algerian border. According to customs authorities and those interviewed, the vast majority of informal trade across the Libyan border takes place through the official border post. However, this is not the case with trade across the Algerian border, where the role of border posts is marginal (with less than 2% of the volume of goods traded informally going through it). A major contributing factor is that prices differ greatly between Tunisia and Algeria (by a factor of five for a packet of cigarettes or a bottle of strong liquor or by a factor of ten for fuel).

Tackling informal trade is no longer simply a question of stepping up the number of controls and sanctions[10] because, as has been clearly shown in a number of countries, the sheer size of the

[8] This is based on data from STIR showing fuel imports of 2,790 million tons as against national fuel consumption of 3,746 million tons (source: www.stir.com.tn). We used an estimated weight of 0.792 tons per cubic meter of fuel (source: www.unitjuggler.com).
[9] This confirms findings of ICG (2013).
[10] Despite the fact that a new impetus has been given to crack down on informal trade (Leaders 2013).

difference in prices means that informal trade continues even in cases where sanctions are severe.[11]

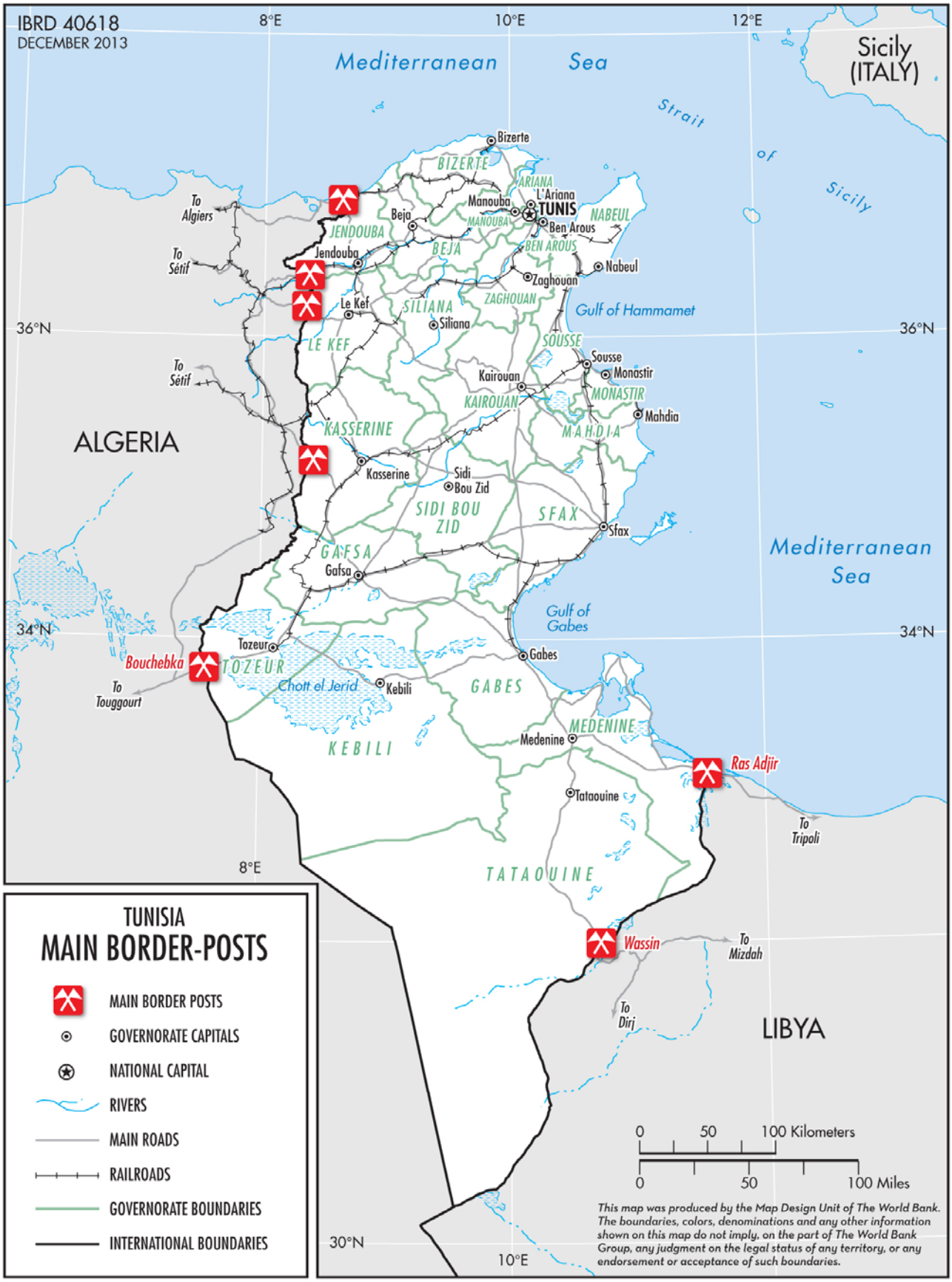
This situation clearly leads to strained relations between the authorities and the local population. As local populations depend on cross-border trade, they worry that the local authorities may take action against it, as is the case in western Tunisia. Meanwhile, customs officials are concerned about the risk of local protests if they strictly enforce the tariffs in place, as is the case at the Libyan border.

The current situation of increasing informal trade derives from a sense of being left out from Tunis (especially at the Algerian border) in the context of weakened a state without a political consensus. Therefore, informal trade surge would have more chance to be contained whenever a political agreement is reached.

Our estimate of the scale of informal trade between Tunisia and Algeria and Tunisia and Libya is set out in the following sections. It is based on official trade data, using the mirror statistics methodology (Section 2) as well as on interviews conducted on site with customs officials and various individuals involved in informal trade (Section 3). Section 4 presents an assessment of the positive and negative impacts of informal trade and Section 5 describes the loss of state revenues.

[11] In 2012, customs seized informal imports for 48 million USD (Leaders 2013.2).

Figure 1: Map of Tunisia and main border-posts



2. Preliminary Estimates Based on Official Trade Data

Based on a number of sources (press, reports, and interviews with customs officials), it is possible to pinpoint several categories of goods (including petroleum products, cigarettes, food products, textiles, alcoholic beverages and electronic goods) that are most likely to be traded informally in significant quantities. These products are known to benefit from major subsidies in Algeria or Libya (petroleum products and food products) or to be subject to substantial customs tariffs when imported into Libya (textiles, electronic goods). Annex 1 lists the categories of goods concerned according to their official category code under the Standard International Trade Classification (SITC), Revision 3.[12]

The following analysis is based on the work of Fisman and Wei (2009), Jean and Mitaritonna (2010), Berger and Nitsch (2012), Kaminski and Mitra (2012), and Raballand et al. (2013) on evaluating the level of informal trade by using official trade data.[13] These studies propose using the gap between the levels of trade in the same product reported by importing and exporting countries in order to make an initial evaluation of informal trade levels (this is known as an approach based on mirror statistics). In principle, there is a minimum gap between reported values on each side of a border because exports are calculated in terms of FOB (free on board), i.e., excluding transport and insurance costs, while imports are calculated in terms of CIF (cost, insurance, freight), i.e., including transport and insurance costs. This trade gap may grow as a result of classification errors or exchange rates.[14] Nonetheless, Bhagwati (1967) suggested that when the disparity was more than 30% of the value of the imported product, these traditional explanations are no longer sufficient because beyond that threshold, the most likely reason for this gap is an under- or over-evaluation of imports or exports.

The gap is calculated in the following manner for any given year and for any given pair of countries:

$$\%Gap_{ijt}^{k} = (Imports_{ijt}^{k} - Exports_{jit}^{k})/Imports_{ijt}^{k}$$

where *K* corresponds to any category of goods as defined at the group level by the STIC, Revision 3.

The initial analysis of trade date between Tunisia and Libya currently available at the international level reveals that very little published data recorded by the Libyan authorities are available.[15] Furthermore, trade flows are recorded for only a small number of products (45) compared to Tunisia (274 over the four years concerned). While the Tunisian authorities identified on average 80 different types of goods entering the market from Libya, the Libyan authorities recorded the exports of only a dozen different types of goods over the same period. While the average annual value of the trade flows recorded by the Tunisian authorities is US$508m, for the Libyan authorities, it is just US$204m. Most of the published data concern trade in hydrocarbons (petroleum and gas), which account for

[12] This classification is preferred over the harmonized system as no data are available for Libya in the United Nations Commodity Trade Statistics Database (UN Comtrade).
[13] This is a well-established approach that dates from the late 1960s following the work of Bhagwati (1967) and that is currently enjoying something of a revival as a result of new research into customs fraud.
[14] For a wider discussion of the various explanations, see Raballand et al. (2013).
[15] Data were provided for the period 2007 to 2010 only in COMTRADE.

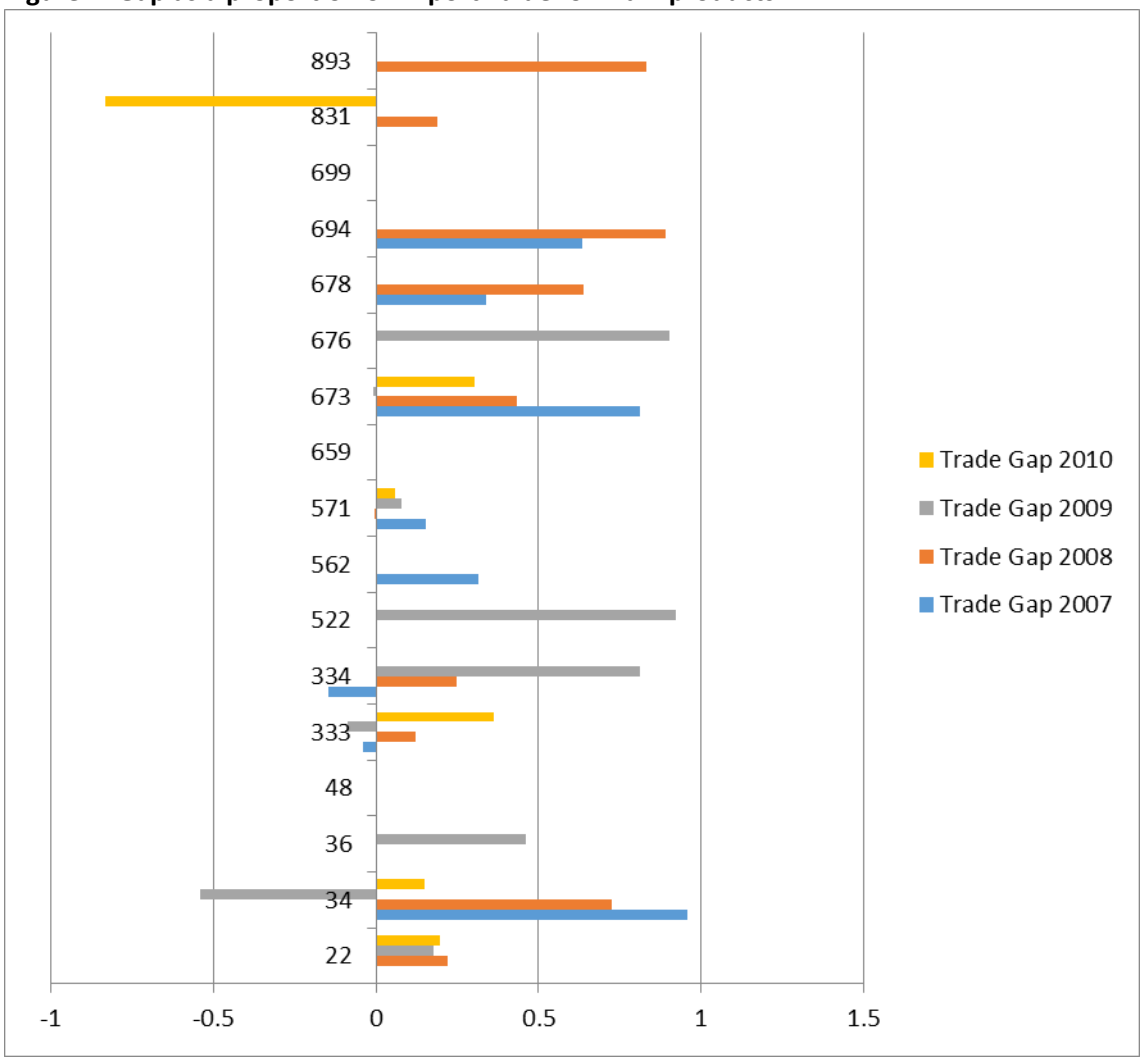
91% of the value of Libyan exports to Tunisia according to the Libyan authorities and 84% of Tunisian imports from Libya according to Tunisian authorities.

There are significant gaps in the trade flows reported by the Libyan and Tunisian authorities. These gaps are particularly large for iron and steel bars (SITC code 676) and inorganic chemical elements (SITC code 522). For example, in 2008, exports of metal bars registered by the Libyan authorities as exported from Libya to Tunisia were 20 times higher than the number registered as imported by the Tunisian authorities.

For 2007–2010, the average gap in percentage terms of the declared value is 269%. This figure is substantially distorted by the significant trade gaps identified for the products mentioned above.

However, even when the most extreme figures are eliminated (those where the gap is greater than 100% of the value declared by the importer, i.e., in 8 out of 41 declarations), the average gap remains at 41% of the declared import value.

Figure 2: Gap as a proportion of import value for main products



The situation differs wildly between Algeria and Tunisia. Between 2000 and 2011, a total of 1,141 trade flows between Algeria and Tunisia and Tunisia and Algeria were recorded in the Comtrade

database. Of these, 635 (55%) were registered on both sides of the border, 330 (29%) by the Algerian authorities only, and 176 (16%) by the Tunisian authorities only. The average annual value of these trade flows was estimated at US$272m by the Algerian authorities and US$295m by the Tunisian authorities.

The high value of these trade flows is due primarily to the dominance of trade in hydrocarbons (gas and petroleum), which accounted on average for 70% of Algeria's exports to Tunisia according to the Algerian authorities and 76% of Tunisian imports according to the Tunisian authorities. This trade accounts for most of the gap in the total value of trade recorded by the two countries (or US$28.4m higher according to the Tunisian authorities).[16]

The Tunisian authorities recorded data for imports of 68 different categories of products on average, while their Algerian counterparts recorded export data for 82 categories. Although there are gaps in the data (with 13 fewer categories on average per year), these are not as large as with Libya.

However, there are significant gaps in terms of both value and volume. Table 2 (see Annex 2) lists the 20 largest recorded gaps for a single product. In the most extreme case (fresh fruit and vegetables), the export value was 30,000 times higher when recorded as exports by the Algerian authorities than when recorded as imports by the Tunisian authorities. In general, trade flows from Algeria to Tunisia are under-reported by the Tunisian authorities, with CIF figures lower than FOB in 55% of the cases. For the most part, gaps are found in the trade in products used mainly in the construction industry, such as categories 723 (civil engineering and contractors' plant and equipment), 747 (taps, cocks, valves, and similar appliances), 812 (plumbing and heating fixtures and fittings), and 273 (stone, sand, and gravel).

In some sectors, the gap is significant across a number of years. For example, this is the case for agriculture, with categories 012 (other meat and edible meat offals), 034 (fish), 036 (crustaceans, mollusks, and aquatic invertebrates), and 054 (vegetables). This is also true of groups of products covering measuring equipment and metallic tools (group 699).

However, no trade gaps are recorded for some sectors where there is a strong likelihood of informal trade. This is the case, for example, for petroleum and telecommunications equipment.

Following the above example of Tunisia-Libya trade, if the most extreme trade gap figures are ignored (accounting for 32% of declarations made by the two countries), the average trade gap is 27% of the value declared by the importer. However, if the most extreme figures are included, the average gap is 272 times the import value.

[16] As noted in previous studies, (Berger and Nitsch 2012), it is very common to see disparities in the data concerning imports and exports of petroleum and petroleum products, principally because of fluctuations in their price on the international market.

3. Estimates Based on Fieldwork

As the data available are far from complete, it is not possible to estimate the scale of informal trade based on figures alone. For that reason, fieldwork was conducted at the Ras Ajdir crossing point on the Tunisia-Libya border and in the Kasserine governorate on the Tunisia-Algeria border. The aim of the interviews was to gather information on the current level of informal trade between Tunisia and its two neighbors.

The estimates were made using two different methods, which yielded roughly similar results (at least TND 1.8 bn including fuel from Algeria) (see Table 1). One estimate was based entirely on the information gathered during the fieldwork, while the second one was made using unit floor values based on data concerning modes of transport. The second method resulted in a higher estimate of the level of informal trade, most probably because of the under-reporting of value and/or volumes in the interviews.

Table 1: Comparison of estimates according to different methods

	Trade with Libya	**Trade with Algeria**	**Total (in billion TND)**
Fieldwork estimates	0.6	1.2	1.8
Unit values	1	1.4	2.4

Source: author computations.

Estimates of Informal Trade with Libya

The border town of Ben Gardane is home to the leading wholesale and semi-wholesale market for goods arriving from Libya for distribution in the north and center of the country. These goods are shipped from the ports of Zliten, Misrata, or Tripoli to Ben Gardane, where they are stored and distributed to the rest of the country.

The major wholesalers based in Ben Gardane play a key role in this process. They are few in number and tend to specialize in particular product lines.[17] Based on their understanding of the levels of demand in the Tunisian market, they place orders abroad (mainly in China and Turkey), arrange to receive the goods in Libyan ports, and organize convoys of transporters to bring the goods from the Libyan ports to Ben Gardane. Goods from China are subject to very different levels of customs duties in the two countries (6% in Libya compared to 33% on average in Tunisia). In addition to customs duties, goods entering the country are also subject to various consumption taxes that are normally collected by the customs authorities, and these two duties together make the disparities between Tunisia and Libya all the more marked. While the combined tax burden in the former is around 84% of the import value, for the latter, it is a little over 6% of the import value.

[17] Haddar (2013) estimates that there are around 60 such wholesalers: 15 in textiles, 10 in food, 10 in electrical and electronic goods, 5 in tobacco, 5 in carpets, 5 in clothing and footwear, 3 in tires, 3 in hardware, 3 in cosmetics, and 2 in furniture.

The transportation phase is complicated, and often involves unpacking and repacking merchandise on either side of the Ras Ajdir border post, usually in neighboring towns such as Zelten in Libya and Ben Gardane in Tunisia. The wholesalers also supply the various "Libya souks" that can now be found in most Tunisian towns and cities.

Ad hoc and itinerant vendors (known as *khawatta*) also come to the Ben Gardane market to buy their goods. Their journey, which is described in detail by Meddeb (2012), brings them from all over Tunisia to the Libya souk in Ben Gardane, where they purchase the goods they ordered, using either their own funds or advances from their families, local businesses, or partners.

For informal trade to work effectively, traders must be able to access significant sums of money in a short space of time. The major wholesale currency exchanges (or *sarrafa*) based in Ben Gardane have an effective monopoly in this area.[18] Ben Gardane has become a major trading floor controlled by the wholesalers, who supply the 200–300 currency changers located along a road known locally as "Wall Street." These currency changers easily meet the daily demands of informal traders, regardless of currency (Meddeb 2012), while the wholesalers themselves are usually involved in the larger transactions only.

Informal trade between Tunisia and Libya consists not only of a network of trade flows punctuated by the physical intervention of individuals located primarily in Tunisia (Ben Gardane), Libya (Tripoli and Zliten), and China, but also by a network of cash flows punctuated by interventions in these countries as well as in Dubai, which appears to be the market of choice for paying Chinese suppliers, according to interviews conducted with forwarders.

Box 1: Key stages in informal trade between Tunisia and Libya

1. Wholesalers in Ben Gardane order a certain quantity of goods from Chinese, Turkish, or Libyan suppliers based on real or predicted demand from their retail network.
2. At this point, *sarrafas* may become involved to help finance the deal if it is a particularly large one. If this is not the case, the currency brokers and bankers in Ben Gardane are able to organize the transfer of the payment in the appropriate currency.
3. The goods are received by Libyan agents or partners once they arrive at the Libyan ports. These agents or partners also arrange for the goods to be transported to the various depots that line the road toward the Libyan border.
4. Once the goods arrive at their Libyan depot, Tunisian transporters set off for the border, cross into Libya, load the goods, re-cross the border back into Tunisia, and offload the merchandise at one of the many depots that line the road from Ras Ajdir to Ben Gardane. This operation takes a day to complete and Tunisian drivers are not required to stay overnight in Libya. The drivers are paid between TND 300 and 1,000 for each trip across the border and back, depending on the type of merchandise they are carrying.
5. The goods are delivered to the wholesalers in Ben Gardane and other "Libya souks."
6. The *sarrafas* are reimbursed if needed (with a commission of 15 to 20% of goods values).

The major categories of goods passing through the Ras Ajdi border post are as follows: fuel, apples, bananas,[19] textiles, shoes, household electrical goods (LCD TVs, satellite receivers), white goods (refrigerators, air conditioners), and tires. These goods are either heavily subsidized in Libya but not

[18] According to Haddar (2013), there are five such traders.

[19] Import licences are granted by the Ministry of trade for bananas but not for apples (Leaders 2013).

in Tunisia (this is the case for fuel, for which subsidies in Libya cover 80% of the cost) or are much more heavily taxed in Tunisia than in Libya (all the other products listed above), leading to significant differences in price (see Table 2).

Table 2: Price of various goods in Tunisia and Libya

Product	Unit	Tunisian price (in TND)	Libyan price (in TND equivalent)
Cheese (gruyère)	kg	30	15
Corn oil	1 liter	3	1.2
Bananas	kg	3	1.5
Gasoline	1 liter	1.57	0.19
Fuel oil	1 liter	1.17	0.19
Air conditioners	12,000 BTU	900	560

Data source : surveys.

Tables 3 and 4 highlight the burden of taxes levied on imports from Libya to Tunisia for the above-mentioned products. The tariffs are the MFN (Most Favored Nation) rates levied by Tunisia on all its trading partners in line with its World Trade Organization (WTO) commitments. As Libya is not a member of the WTO, since 2005, it has been imposing a unilateral levy of 5.25% on almost all of its tariff lines. These rates are not the same as those applied under regional trading agreements such as the Euro-Mediterranean Free Trade Area (EuroMed) or the Greater Arab Free Trade Area (Gafta), which cover manufactured products. Rates applied under the terms of these agreements are more advantageous and are often virtually zero.

Table 3: Comparison of import customs duties in Tunisia and Libya

	Import tax burden in Tunisia[20]			Import tax burden in Libya				
Product	Custom Duty Tunisia	Custom Service Fee	Other (in TND)	Custom Duty Libya	Custom Service Fee	Other (in equivalent TND)	Total Tunisia	Total Libya
Bananas	36%	3%	0.500/kg	5.25%	0.75%	100	39% + 0.5 TND/kg	6% + TND 100
Apples	36%	3%	0.200/kg	5.25%	0.75%	100	39% + 0.2 TND/kg	6% + TND 100
Cheese	36%	3%	1.200/kg	5.25%	0.75%	100	39% + 1.2 TND/kg	6% + TND 100
Tea	36%	3%		5.25%	0.75%	100	39%	6% + TND 100
Roasted coffee	36%	3%		5.25%	0.75%	100	39%	6% + TND 100
Juice	36%	3%		5.25%	0.75%	100	39%	6% + TND 100
Chocolate	36%	3%	3.800/kg	5.25%	0.75%	100	39% + 3.8 TND/kg	6% + TND 100
Tires	27%	3%		5.25%	0.75%	100	30%	6% + TND 100
Carpets	30%	3%		5.25%	0.75%	100	33%	6% + TND 100
Clothing	30%	3%		5.25%	0.75%	100	33%	6% + TND 100
Shoes	30%	3%		5.25%	0.75%	100	33%	6% + TND 100
Refrigerators	30%	3%		5.25%	0.75%	100	33%	6% + TND 100
Air conditioners	30%	3%	10/1,000 BTU	5.25%	0.75%	100	33% + 10/1,000 BTU	6% + TND 100
TVs	30%	3%		5.25%	0.75%	100	33%	6% + TND 100

Sources: Authors' calculations, WTO, OTEXA

[20] Flat fee of 50 TND per cargo are not included in the table since this is due to a local agreement.

Table 4: Comparison of the total tax burden on imports in Tunisia and Libya

	Total consumption tax burden in Tunisia							
Product Designation	Value-added Tax	Consumption Tax	Advance over Income Tax	Other	**Total consumption tax burden in Tunisia**	**Total consumption tax burden in Libya**	**Total tax burden on imports into Tunisia**[21]	**Total tax burden on imports into Libya**
Bananas	22.5%	0.0%	10.0%	2.0%	34.5%	0.0%	> 87%	6% + 100TND[22]
Apples	18.0%	0.0%	10.0%	2.0%	30.0%	0.0%	> 81%	6% + 100TND
Cheese	22.5%	0.0%	10.0%	0.0%	32.5%	0.0%	> 84%	6% + 100TND
Tea	18.0%	25.0%	0.0%	0.0%	43.0%	0.0%	99%	6% + 100TND
Roasted coffee	18.0%	25.0%	0.0%	0.0%	43.0%	0.0%	99%	6% + 100TND
Juice	22.5%	0.0%	10.0%	1.0%	33.5%	0.0%	86%	6% + 100TND
Chocolate	22.5%	0.0%	10.0%	0.0%	32.5%	0.0%	> 84%	6% + 100TND
Tires	22.5%	30.0%	0.0%	1.0%	53.5%	0.0%	99.6%	6% + 100TND
Carpets*	22.5%	0.0%	10.0%	1.0%	33.5%	0.0%	77.6%	6% + 100TND
Clothing	22.5%	0.0%	10.0%	1.0%	33.5%	0.0%	77.6%	6% + 100TND
Shoes	22.5%	0.0%	10.0%	1.0%	33.5%	0.0%	77.6%	6% + 100TND
Refrigerator	22.5%	0.0%	10.0%	0.0%	32.5%	0.0%	76.2%	6% + 100TND
Air conditioning	22.5%	10.0%	0.0%	0.0%	32.5%	0.0%	> 76%	6% + 100TND
TVs	22.5%	0.0%	10.0%	1.0%	33.5%	0.0%	77.6%	6% + 100TND

Sources: Authors' calculations, WTO, OTEXA.

[21] These figures are approximate as several taxes are specific to individual products and are sometimes levied at a flat rate. The figures are provided to give an indication of the difference between the two countries.
[22] Data are equivalent in TND.

Customs authorities at Ras Ajdir are well aware that these goods are being transported across the border. However, they allow the goods to cross the border for the payment of a TND 50 tax for commercial vehicles smaller than or equal to 25m^3 once the vehicle has been inspected. On receipt of this payment, customs officials authorize the vehicle to cross the border. According to local authorities, between 200 and 300 of these commercial vehicles cross the border into Tunisia every day.[23] To this figure must be added the 500–600 or so cars that transport fuel and smaller goods (for the most part small electronic goods and clothing) across the border. Finally, around 150–200 Libyan 38-ton trucks also cross the border into Tunisia.

The information gathered at the Ras Ajdir crossing point enables us to estimate the number of vehicles, trucks, vans, and cars that cross the border each day as well as what they are transporting. The largest volumes concern fuel, clothing, and white goods. In value terms, the largest amounts concern electronic goods, with an average resale value of around TND 12,600 per load. Some products, including fruits such as apples and bananas, are almost entirely transported using small trucks and vans.

Based on the data collected, it is also possible to assess the levels of informal trade flows through the Ras Ajdir border crossing point, and this is presented in Tables 5 and 6. It is clear from these data that the level of informal trade is significant, with goods worth around TND 600m per year entering Tunisia informally from Libya via Ras Ajdir. This gives the traders involved in this cross-border business a profit of around TND 120m, although the size of profits varies greatly according to the type of good being transported. Trade in fuel is larger by far than that for all the other products, both in terms of sale values and profits.

Box 2: Methodology

The methodology used to calculate the figures set out in Tables 3 and 4 is as follows:

- We observed a number of vehicle types transporting each category of product. On the basis of the information we gathered, for each vehicle type and for each category of product, we calculated the average quantity being transported and an average value of the goods at the point of purchase and the point of sale.
- We calculated the proportion of each type of vehicle crossing the border each day (it was assumed that the sample observed was representative of daily vehicular traffic crossing the border). For example, in the responses to the questionnaires we distributed at the Ras Ajdir border crossing, there were 118 cars, of which 25 were carrying clothing. The local customs authorities register 500 cars passing through Ras Ajdir every day, or 1,000 over two days (the same time period as our fieldwork). Thus the 25 cars carrying clothing we observed would equate to (25x1,000)/118 = 212 vehicles carrying clothing over a two-day period, or 106 per day.
- Once the proportion of each type of vehicle carrying a particular category of product across the border each day has been calculated, it is possible to derive an idea of the scale of daily traffic by multiplying this amount by the average quantity and average value of each load being transported.
- To arrive at an annual figure, we multiplied the daily figure by 320 days, taking into account the large number of Tunisian public holidays and the month of Ramadan.

[23] It is worth noting that the border-post is opened 24 hours a day.

Table 5: Trade flows observed at the Ras Ajdir border crossing

	Number of vehicles observed	Number of vehicles per day	Average quantity*	Average cost of load at point of purchase**	Average cost of load at point of sale**
Food products					
Cars	5	21	185	1618	1758
Trucks and vans	4	14	7520	2333	3860
Household goods					
Cars	5	21	28	1090	1290
Trucks and vans	3	10	35	3600	4250
Other goods					
Cars	1	4	.	2000	2800
Trucks and vans	2	7	1000	10000	15000
Bananas					
Cars	1	4	393	600	920
Trucks and vans	17	59	3,117	4,618	5,408
Shoes					
Cars	0	0	0	0	0
Trucks and vans	2	7	1,500	11,250	13,000
White goods					
Cars	19	81	20	1,026	1,100
Trucks and vans	9	31	48	2,822	3,353
Electronic equipment					
Cars	7	30	13	884	1,041
Trucks and vans	3	10	75	12,667	13,600
Fuel					
Cars	58	246	72	25	72
Trucks and vans	3	10	50	12	27
38-ton trucks	0	200	954	330	954
Tires					
Cars	1	4	50	400	480
Trucks and vans	1	3	200	10,000	11,000
Apples					
Cars	1	4	0	300	350
Trucks and vans	6	21	2,400	4,317	4,626
Carpets					
Cars	5	21	25	1,090	1,220
Trucks and vans	2	7	30	1,800	1,900
Tea					
Cars	0	0	0	0	0
Trucks and vans	3	10	803	9,800	11,700
Clothing					
Cars	25	106	76	1,245	1,522
Trucks and vans	10	35	188	3,000	3,465

* per vehicle

** per vehicle, in TND

Source: Authors' calculations based on fieldwork

Table 6: Assessment of annual trade flows through Ras Ajdir per category of product

Category of product	Annual value of load at point of purchase*	Annual value of load at point of sale*	Annual profit for traders*	Revenue from the TND 50 tax *	Revenue from the current Tunisian tariff	Revenue from import consumer taxes	Total revenue
Food products	21.4	29.1	7.7	0.22	8.35	10.52	19.09
Household goods	19.39	22.95	3.56	0.17	6.4	9.03	15.6
Other goods	24.91	37.1	12.18	0.11	7.47	11.33	18.91
Bananas	88.01	103.25	15.23	0.94	67.38	53.61	121.93
Shoes	25	28.9	3.9	0.11	8.25	11.14	19.5
White goods	54.6	61.8	7.2	0.5	18.02	23.6	42.12
Gasoline	23.12	66.8	43.68	0	0	0	0
Tires	11.64	12.85	1.21	0.06	3.84	8.28	12.18
Apples	29.21	31.27	2.07	0.33	16.06	13.58	29.97
Carpets	11.39	12.49	1.1	0.11	3.76	5.07	8.94
Tea	32.7	39	6.3	0.17	12.75	19.54	32.46
Clothes	75.5	90.1	14.6	0.56	24.92	33.64	59.12
All goods	**467.47**	**590.79**	**123.32**	**3.44**	**193.89**	**221.9**	**419.23**

* In millions of TND over a 320-day year (360 days less the month of Ramadan and national and religious holidays celebrated in Tunisia)
Source: Authors' calculations based on fieldwork

Half the commercial vehicles crossing the border each day (or around 150) were found to be carrying goods such as milk, eggs, vegetables, and fertilizer from Tunisia into Libya,[24] even though it is illegal to export food products under Tunisian law. Fertilizer sales to farmers are subsidized in Tunisia, which is not the case in Libya.

Other goods, in particular tobacco, alcohol, and medicines, are not transported via the Ras Ajdir border crossing when entering (for tobacco and medicines) or leaving (alcohol and medicines) Tunisia. These goods are carried over the border in both directions via contraband routes through the Tunisian-Libyan Saharan route using convoys of all-terrain vehicles.

Estimates of Informal Trade with Algeria

There are numerous crossing points on the Tunisia-Algeria border. As a result, goods transported from Algeria do not appear to follow a well-defined route in the same way as cross border traffic between Tunisia and Libya. In addition, the particular demographic and geographic peculiarities of the Tunisia-Algeria border offer different opportunities from those on the Tunisia-Libya border. A large proportion of the border runs through a mountainous rather than a desert region, with the population strung out along the border and in some cases right on it (some villages are in fact divided by the border). As a result, there are many more opportunities for informal trade at the local level all along the border without needing to go through crossing points controlled by customs officials. According to the interviews we conducted, it is clear that there has been a steady increase in informal trade activities along substantial sections of the border in the last few years.

Data gathered during the fieldwork conducted for this study show that the way in which informal trade functions is fairly simple. Tunisian buyers cross the border into Algeria, choose the goods they want, place their orders, and hire a transporter to carry the goods across the border into Tunisia.[25] Payment for the goods and the transport is made when they arrive in Tunisia. Transport costs are around TND 200 for a van-load (around 1 ton) of ordinary goods, but can reach TND 1,000 for more sensitive products such as tobacco or alcohol.

In practice, neither the Tunisian nor the Algerian transporters ever set foot in the other country.

Box 3: Key stages in the transport of merchandise between Tunisia and Algeria

1. An Algerian transporter brings the merchandise from a point of sale in Algeria to an individual household on the Algerian side of the border.
2. The homeowner hides the merchandise in his house until the opportune moment to take it to a pre-arranged point on the border and hand it over to his Tunisian neighbor, who is often a family member.
3. The Tunisian homeowner then keeps the merchandise in his house on the border until it can be delivered.
4. A Tunisian transporter goes to the house on the border, quickly loads his van (in certain cases, loading takes place in a specially adapted garage owned by the homeowner) and delivers the load to

[24] Informal export trade most probably passes through the Ras Ajdir crossing point and takes place at night.
[25] ICG (2013) confirms that Tunisian informal traders rarely cross the Algerian border waiting for at the border for transshipment.

towns and villages near the border within a radius of roughly 50 km.

5. If the goods are destined to be delivered further afield, other transporters take over the load.

Although the border crossing point at Bouchebka is one of the most important on the Algerian border, there seems to be very little traffic there.[26]

According to the local authorities, informal trade takes place at points other than the official border crossings. Customs officials explained that the activity we observed at the crossing points was normal and that the number of border crossings was in line with the daily statistics for individuals and vehicles seen in 2012.[27]

This led us to look elsewhere for information, namely to traders and transporters of goods across the border living in Kasserine and in nearby border towns. Despite the difficult security situation and the climate of suspicion and distrust in the region, we were able to collect 107 responses to the questionnaires we distributed among these individuals. An initial assessment showed that there is a considerable difference in prices for certain products. These price differences appear to be the main reason for informal cross-border trade in the region (see Table 7).

Table 7: Prices of various goods in Tunisia and Algeria

Product	Unit	Tunisian price (in TND)	Algerian price (in TND equivalent)
Cheese (gruyère)	kg	30	10
Roasted coffee	kg	9	4
Tea	kg	5	3
Juice	1 liter	2	1
Sparkling drinks	1.5 liter	2	1
Gasoline	1 liter	2	0
Fuel oil	1 liter	1	0
Round steel reinforcement bars	per ton	1,600	900
32" LCD TVs	per unit	770	450
Air conditioners per 12,000 BTU		900	450
Foreign cigarettes	per packet	5	1

The most common form of transport used in this type of informal trade is the van, with 3,000 of these vehicles being used to transport goods illegally across the Algerian-Tunisian border, according to those we interviewed. On average, these vans make one crossing per day.

[26] In the space of three hours, we saw just six Tunisians on foot, three Algerian private cars, two Tunisian articulated trucks filled with full gas bottles, four empty Algerian articulated trucks cross into Tunisia, and just three Algerian articulated trucks carrying Tunisian white cement crossing into Algeria.

[27] A total of 65 private cars per day (10 Tunisian and 55 Algerians) and 15 trucks (3 Tunisian and 12 Algerian) are recorded as both entering and leaving Tunisia.

The responses to our questionnaires enabled us to draw up a table along the lines of Table 3, showing trade across the Tunisia-Libya border by type of product and vehicle.[28] Clearly, trade in fuel and fuel oil is the most important, involving 60% of the vehicles taking part in this activity. Traffic in cigarettes, which we did not see on the Tunisia-Libya border, accounts for the activity of around 7% of the vehicles.

Table 8 sets out our assessment of the annual level of cross-border trade, showing that this is lower than the levels seen at the Ras Ajdir crossing point. Fuel accounts for a significant part of this trade (around 30% in value terms). Round steel reinforcement bars made in and sourced from Algeria are not normally subject to taxation under trade agreements between Algeria and Tunisia. The high level of informal trade in these goods is due to the fact that they are of inferior quality relative to that required in the Tunisian construction industry, where it has to meet certain resistance standards. This is a case of informal trade being used to avoid a non-tariff barrier.

Table 8: Assessment of annual trade flows through the Kasserine governorate per category of product

Category of product	Annual value of load at point of purchase*	Annual value of load at point of sale*	Annual profit for traders*	Revenue from the current Tunisian tariff	Revenue from import consumer taxes	Total revenue
Bananas	9.91	12.6	2.69	8.12	6.22	14.34
Shoes	6.7	11.9	5.2	2.21	2.98	5.19
Air conditioners	41.3	52.3	11	24.69	21.45	46.13
Gasoline	86.6	99.2	12.6	0	0	0
Steel reinforcement bars	21.3	24.3	3	0	7.46	7.46
Fuel oil	9.88	11.3	1.42	0	0	0
Tires	34.7	50.5	15.8	10.41	24.13	34.54
Apples	9.06	11.1	2.04	5.23	4.29	9.52
Tobacco	23	27.5	4.5	4.14	41.8	45.94
Clothing	37.2	60.1	22.9	12.28	16.57	28.85
All goods	341.24	426.4	85.16	87.4	152.34	239.74

Transport of fuel in the country is carried out in two or three different stages. Ad hoc zones for transferring, exchanging, and bulk buying or selling fuel have been set up at points close to the border and further inland, the best known of which is in Meguila on Highway 3, some 230 km from Tunis and 40 km from Kasserine. Informal fuel distribution points, which used to be limited to the border region, can now be found along every road in the country and are increasingly to be found on urban streets, even in the capital, Tunis.

[28] We hypothesize that one in seven of these vehicles is used in the Kasserine governorate, one of seven governorates along the Algeria-Tunisia border.

We noted that although there was a strong National Guard presence on all the roads in the region, they were also remarkably relaxed about the levels of informal trade. There were virtually no customs officials to be found, and the checks conducted by the few that were seen are easily spotted and avoided by smugglers. Part of the reason for this is the relative weakness of the national government following the January 14, 2011 revolution as well as the local security situation, which swallows up a large share of government resources. There are also very few alternative solutions to encourage the development of these regions and thus reduce the high levels of unemployment that affect thousands of young people living there.

Extrapolation of Estimates of Informal Trade in Fuel from Algeria

Informal trade in fuel has become significant in recent times as a result of the last two increases in the price of gasoline at the pump, which widened the gap in prices between the two neighboring countries, both of which are major oil producers, with gasoline now ten times as expensive in Tunisia as in Algeria[29]. This goes hand in hand with a sharp decline in Tunisian household purchasing power over the last two years. Based on a variety of sources, the level of trade in fuel in the Kasserine governorate is similar to that in the other governorates along the Algerian border.[30] If we hypothesize that 60% of the 3,000 vans involved in informal trade are carrying fuel and that each one makes only a single trip each day with an average load of 1.6 m^3 over a 320-day year, we can estimate that the amount of fuel imported informally is 921,600m^3 per year (or 3,000x0.6x1.6x320)[31], with a sales value of around TND 882m (at $95 per barrel).

Estimates Based on Unit Values

Estimates based on interviews alone are not sufficiently accurate due to a number of factors. In the case of interviews with transporters, for example, the quantities being transported are often under-reported, and there is often a lack of knowledge of the real value of the goods concerned. In some cases, the sample is simply not large enough.

As a result, we tried to determine the volume and scope of informal cross-border trade using other data sources and through cross-checking to arrive at a figure closer to the reality.

We cross checked data on the number and type of means of transport used in this form of trade. This allows us to extrapolate the volume and value of goods concerned by informal trade.

Nearly 1,000 Tunisian vehicles use the Ras Ajdir border crossing each day, specializing in informal trade between Libya and Tunisia. These consist of:

- Between 200 and 300 25m^3 trucks;
- between 100 and 150 vans or small trucks;
- between 500 and 600 private cars.

[29] ICG (2013) states that fuel is the "king" product of informal trade to Tunisia.
[30] There was insufficient information on flows of other goods.
[31] According to media in Algeria, 1.5 million of m^3 of fuel would be sold in Morocco and Tunisia. Based on the population differential between Morocco and Tunisia, fuel smuggled to Tunisia would be at least 500,000 m^3 (Econostrum 2013).

To calculate the volume of goods transported by these vehicles, we assume that:

- 250 trucks can carry 3.5 tons each, or a total of 875 tons;
- 100 small trucks can carry 0.5 tons each, or a total of 50 tons;
- 500 cars can carry 0.2 tons each, or a total of 100 tons.

This puts the overall total at 1,025 tons per day, or 328,000 tons per year on the basis of a 320-day year, which excludes holidays.

For the Algerian border, we estimate that 500[32] small vans cross the border carrying imported contraband (excluding fuel). In other words, this is 500x1 ton=500 tons per day, or 160,000 tons per year. This makes an overall total for the two borders of 328,000+160,000=488,000 tons. If we take an average value of TND 3 per kg,[33] we find a total value of TND 1,464 million, or roughly 4% of the total value of all imports (excluding fuel).[34] Factoring in the figures for fuel imports, we compute a grand total of nearly TND 2,400 million (or more than 7% of the country's total imports).

4. The Economic and Social Impacts of Cross-Border Trade in Terms of Income and Job Creation among Border Populations

Informal trade has a positive benefit that goes beyond people living in border regions or those directly involved in this type of trade. However, it also has a cost to the Tunisian government in the form of lost tax revenues, which can lead, for example, to a decline in public investment. In this section, we assess both the positive and negative aspects of informal trade.

The two governorates covered by our research—Médenine and Kasserine—have very different levels of socioeconomic development. To assess the variation in the level of development between the different regions, the Tunisian Ministry of Regional Development and Planning decided to create a regional development index, based on the quality of the infrastructure, access to healthcare, education levels, and economic activity in each governorate (Ministère du Développement Régional et de la Planification 2012a). The level of development in the Médenine governorate (0.50) is close to that in other coastal and southern Tunisian governorates. By contrast, the Kasserine governorate is the least developed in all of Tunisia, behind other governorates in the center-west of the country.

Moreover, there are also disparities within each governorate. The position of the delegations that make up the Kasserine and Médenine governorates within the overall ranking of the 264 Tunisian delegations shows that the Ben Gardane delegation ranks just below the Tunisian median (Table 9), while the Foussana delegation is one of the least developed. Within the region, only the North Kasserine delegation has a relatively high level of development.

[32] Out of the 3,000 in use in border regions.
[33] Apart from apples and bananas, all the other products cost more than TND 3 per kg.
[34] Total imports were TND 33,695.4 million in 2011. Source: INS (National Statistical Institute).

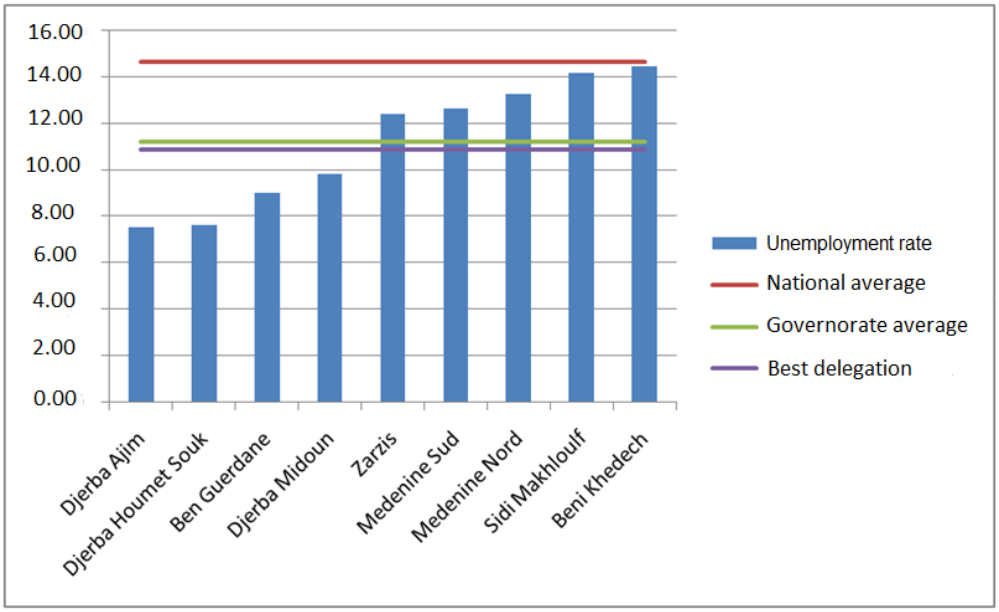
Table 9: Ranking of delegations in the Kasserine and Médenine governorates

	Indicator	Rank
Djerba Houmet Souk	0.437	58
Kasserine Nord	0.437	59
Djerba Midoun	0.390	85
Zarzis	0.365	102
Médenine Nord	0.322	128
Médenine Sud	0.298	142
Djerba Ajim	0.278	154
Ben Gardane	0.273	156
Sbeitla	0.213	179
Ezzouhour	0.185	201
Feriana	0.177	204
Sidi Makhloulf	0.152	226
Thala	0.144	230
Beni Khedech	0.139	237
Sbiba	0.115	244
Foussana	0.112	247
Djedeliane	0.108	250
Kasserine Sud	0.095	255
Hidra	0.078	259
Majel Bel Abbès	0.044	261
El Ayoun	0.005	263
Hassi Ferid	0.000	264

Source: ITCEQ (Tunisian Institute of Competitiveness and Quantitative Studies)

The Médenine governorate has a relatively broad range of economic activities, including tourism and farming focused on olive oil production and fisheries in the Djerba and Zarzis delegations. According to a study of regional development in Tunisia by the Ministry of Regional Development and Planning, the unemployment rate in the governorate (11%) is well below the national average (15%), although there is a significant difference between the various delegations that make up the region (see Figure 3) (Ministère du Développement Régional et de la Planification 2012b and 2012c).

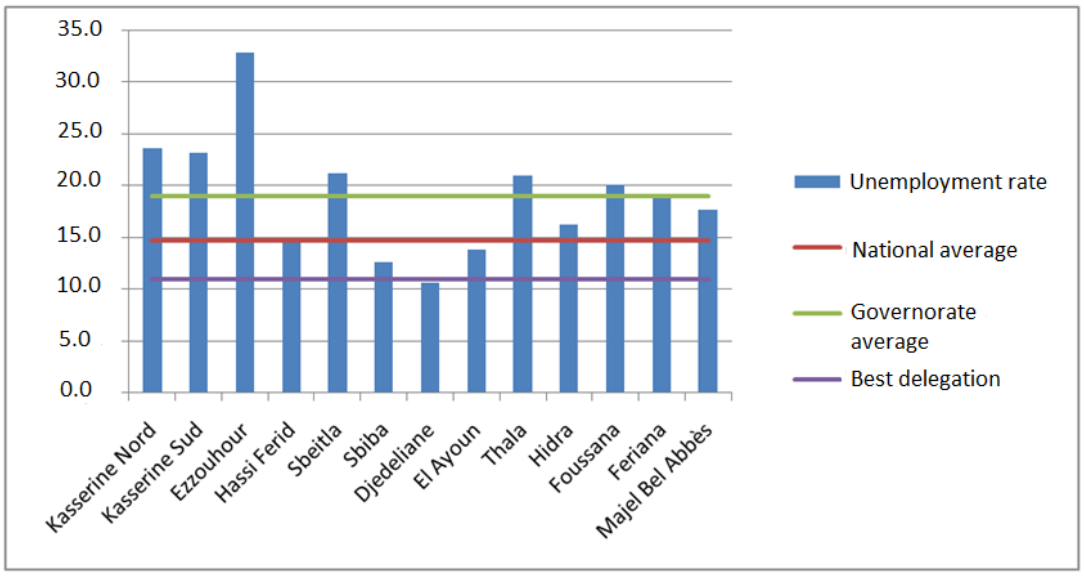
Figure 3: Médenine governorate: Unemployment rate, by delegation



Source: Ministère du Développement Régional et de la Planification

The unemployment rate in the Ben Gardane delegation (9%) is well below the average of the leading delegations. Farming and related industries are the main economic activities in the Kasserine governorate. As Figure 4 shows, the unemployment rate per delegation is well above the national average.

Figure 4: Kasserine governorate: Unemployment rate by delegation



Source: Ministère du Développement Régional et de la Planification

Unemployment in the Foussana delegation, where the Bouchebka border crossing is located, is 20%.

According to Haddar (2013), 3,800 people work in informal trade in Ben Gardane. This means that informal trade accounts for 20% of the region's active population of 19,158 people, as established by the Southern Development Office (Ministère du Développement Régional et de la Planification 2012d). The informal trade sector is one of the largest employers (if not *the* largest) in the region, ahead of agriculture and fisheries and construction, which employed 2,620 and 2,221 people respectively in 2011, and it undoubtedly accounts for a large part of the region's population working in the service sector (11,314 people).

Our study confirms that the majority of those involved in daily trade across the Tunisia-Libya border are residents (83% of respondents) or natives of Ben Gardane (68% of respondents). Most are young men (aged 30 on average) with primary or secondary education and with four dependents (wife, parents, children, or other extended family members). All reported that informal trade is their main source of income, although none entered trader as their occupation, preferring instead day worker (47%), farm worker (6%), driver (2%), even college student, high school student, or unemployed.[35]

Most (64%) of the respondents on the Libyan border stated that their annual income was between TND 1,000 and 3,000, while 19% stated that their income was between TND 3,000 and 5,000 a year. Using the ceiling value of the range [1,000; 3,000], this puts them into the TND 250 per month bracket, or TND 50 per person per month for a household of five (four dependents plus the respondent). This would put these households below the Tunisian national poverty threshold (TND 2.75 per day, or TND 82.5 per 30-day month).[36]

We asked those involved in informal trade what could be done to improve their day-to-day life. There were two main groups of responses to this question: the first, which accounted for 36% of respondents, suggested a number of measures that might improve their work as informal traders. A recurring theme was the poor treatment they receive at the hands of the Libyans as well as calls for improving relations with the Libyan authorities. There was also strong demand for improvements to customs procedures. Other suggestions included improving safety and tackling corruption within the informal trade network. The second, a larger group (55% of respondents), said that they wanted to stop informal trading and get a stable job somewhere in the region. Their preferred jobs were in the industrial, farming, and tourism sectors (in particular medical tourism), or business (subject to the creation of a free trade area).

The vast majority of those working in informal trade between Algeria and Tunisia in the Kasserine governorate are from that region (71% of respondents said they lived in Kasserine, while 51% were born there). Most are young men (average age 31), with either primary (31%) or secondary (51%) education. Here too, most respondents said that cross-border trade was their main source of income. On this border, 56% of respondents called themselves traders, while 31% said they were daily workers, although responses also included high school students (3%), college students (1%), and retirees (1%). The average number of dependents is slightly higher, at 4.5 people.

[35] A total of 38% of respondents did not answer this question.

[36] These figures should be interpreted with caution as it is often difficult to obtain a realistic picture of incomes when those questioned work in the informal trade sector.

As with the Libyan border, the majority (43%) of respondents on the Algerian border said that their annual income was between TND 1,000 and 3,000, while 29% said that their income was between TND 3,000 and 5,000. Using the ceiling value of the range [1,000; 3,000], this puts them in the TND 250 per month bracket, or TND 45 per person per month for a household of 5.5 people. (4.5 dependents plus the respondent). This would also put these households well below the Tunisian national poverty threshold (TNS 2.75 per day, or TND 82.5 per 30-day month).

Mirroring once again the pattern at the Tunisia-Libya border, there were two groups of responses to the question of how to improve the daily life of informal traders: one calling for improvements to working conditions, the other consisting of looking for a different job. However, in this case, the group of those calling for an improvement in conditions is in the majority, unlike on the Libyan border. Among the suggestions put forward for improving conditions were the creation of an Algeria-Tunisia single market or of a free-trade zone along the border. Only 20% of respondents suggested that they were interested in working in a sector other than trade, such as finding a job in the industrial sector.

The last question we asked respondents was about their relations with the authorities. Respondents on the Libya-Tunisia border said that they had good or very good relations with all the authorities, from the governorate to the police and the customs authorities. The situation is entirely different on the Algerian border, where the vast majority (91%) of the questionnaires was filled in outside of the official customs zones. Interestingly, the view of relations with the authorities on this border is markedly different. Relations with those authorities that are in direct contact with informal traders in their daily business (National Guard, customs, and border police) are reported to be either neutral or strained.[37]

Along the Algerian border, there is a sense that weapons imports are not necessarily problematic and informal trade is considered as a response of being left out from policies decided in Tunis. ICG (2013) in this regard quotes a local elite: "[Tunisian] State has never done anything for us and on top of that they want to prevent us to trade with Algeria? Weapons go through our regions and so what? We do not care since they are not against us but them. The only concern of the State is their border security. The more they despise us, the more we close our eyes on what comes in."

[37] This may be due to the fact that at the Algerian border, traders go through the border outside border-posts and not on the Libyan side.

5. Loss of State Revenues Linked to Informal Trade and Customs Responses

Loss of State Revenues Linked to Informal Trade

The loss of public revenues is significant. We estimate it to be at least around 1.2 billion TND[38] (of which around 500 TND for customs duties or more than one-sixth of total customs duties).[39]

Although the situation is improving for the local customs authorities on the Libyan border because of the introduction of the flat-rate TND 50 tax, the situation remains volatile, and the balance of power between the various actors has shifted. A number of concerns have been raised about the potential response—in particular the likely reaction of the people of Ben Gardane—to efforts to control trade flows more tightly.

The flat-rate of TND 50 TND seems particularly problematic insofar as it does not generate revenue but more worryingly allows goods and smugglers to enter virtually without controls on the Tunisian territory and could thus allow the entry of illegal goods such as weapons and drugs. This could also partially explain why informal traders have a positive assessment of customs in Ras Ajdir.

We estimate that the tax levied on each commercial vehicle crossing the border with Libya has raised around TND 3 million. However, this is a tiny fraction (or 2%) of the estimated profits earned by traders.

Customs Responses Against Informal Trade

Based on field surveys, the most worrying trend seems to be the current situation at the Libyan border with a certain *laissez-faire* from controlling agencies at the local level.

Despite this, an anti-smuggling plan was announced in July 2013 to address the problem. However, as often happens in such cases, the emphasis is on equipment while it seems that internal controls are weaker and weaker. Leaders (2013) interviewed the former Director of Customs, who had explained that the fight against smuggling will be strengthened with a growing number of vehicles, electronic surveillance, replacing the scanner at Ras Ajdir and rehabilitate buildings at border-posts.

Despite an increase of seizures in 2013, they seem to account for less than 5% of the total estimates. Indeed, in 2012, the customs official seized for 48 million TND (Leaders 2013.2).

6. Conclusion

In this study, we looked at informal trade between Tunisia and Libya and between Tunisia and Algeria. Our aim was to assess the scale of this trade and to try to evaluate the amount lost in taxes and duties as a result as well as to assess the local impact in terms of income generation.

[38] According to a leader of trade unions in the public company manufacturing cigarettes, 500 million TND of public revenues are lost because of informal imports of cigarettes (or 40% of revenues collected from cigarettes).

[39] The loss of revenue is calculated using the lowest rate of tax burden on imports for this category of goods, or 72% of its value and 30% for customs duties.

Because of a lack of detailed data on the registration and movement of goods across the borders, we employed a number of different calculation methods commonly used in this type of work in order to assess the extent of informal trade.

Three main conclusions can be drawn from these estimates:

- **Official trade statistics are currently sketchy at best and should therefore be treated cautiously as it is probable that the level of informal trade is in fact greater than that of official respective bilateral trade.** One positive aspect of this situation may be to highlight the fact that the level of regional integration is far higher than the official statistics would indicate, even if this integration has come as a result of differences in the tax burden between countries.

- **These differences in tax burden and in the resulting consumer sale prices are the main drivers of informal trade.** At a time when numerous discussions are taking place about whether to cut fuel subsidies and in a context where fuel prices can differ by a ratio of 1:10, with further increases possible, it is important to remember that without greater harmonization of prices at the regional level, there is every chance that the level of informal trade will continue to grow. Therefore, this study calls for increased regional coordination between Tunisia and its neighbors in terms of tariffs, tax levels and subsidies.

- **The economic and social importance of informal trade in the region means that any attempt to strengthen controls at the borders would probably cost more in terms of equipment and infrastructure and probably lead to higher levels of corruption among customs officials based on the border, further undermining government control.** However, it is also important to gather more information about trade flows and the behavior of officials in order to limit illegal flows as much as possible since there are links between informal trade and illegal imports, such as weapons. However, as usual, the emphasis is given to equipment whereas seizures remain probably extremely limited.[40]

- **Increased repression along the border based on more equipment and infrastructure is costly and may have a limited impact in the current context and could even undermine the internal governance of customs due to increased corruption.**

Therefore, in the present context, what can be done? Global experiences in this field have shown that the strengthening of controls (especially with more technology) cannot alone cope with smuggling. A comprehensive policy should be undertaken, which should limit the incentives for smuggling, such as change the tariff policy for certain products and strengthen internal controls within Customs to limit the emergence of local deviant practices. In addition, it is very important to monitor data on seizures, number of declarations, average value and so on.

[40] Interviewed by Leaders, the former head of customs explained: " a new impetus was given [to fight informal trade] with an increasing number of means of vehicles, strengthened electronic surveillance, building rehabilitation especially in border-posts and improved living conditions of [customs] personnel" and gave the example of resuming scanner in Ras Ajdir. Leaders (2013.2).

With this end in view, it is important to analyze product by product the main drivers for informal exchange (e.g., tariff peaks for bananas and cheese or import prohibition for carpets and apples flooding the parallel markets in any case). For many products, such as those mentioned above, a revision of the tariff policy or import procedures is necessary and requires political decision.

It is also important to strengthen cooperation with neighboring countries and consider informal cross-border trade and smuggling as a major concern during the various bilateral and multilateral meetings. In this regard, tax policies and subsidies harmonization should be a common goal to fight jointly smuggling and fraud.

Political leadership is finally to support a team for several years at the head of Customs with a mandate to strengthen internal controls of customs services. Whenever a DG changes every six months, any reform in this area is bound to fail. The DGD should strive to improve traceability of operations. For the time being, monitoring seizures is not of great interest since any increase usually goes in parallel with increased smuggling and does not capture the effectiveness of controls.

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Annexes
Annexes

Annex 1: Products showing the largest statistical difference with mirror statistics

- 04 – Cereals and cereal preparations
- 05 – Vegetables and fruit
- 12 – Tobacco and tobacco products
- 33 – Petroleum, petroleum products, and related materials
- 75 – Office machines and automatic data processing machines
- 76 – Telecommunications and sound recording and reproducing machinery and equipment
- 84 – Articles of apparel and clothing accessories.

Annex 2: Summary of observations based on fieldwork and international statistical data

Category of goods	SITC code	Goods observed at the Algerian border	Goods observed at the Libyan border	Gap between Tunisia and Libya (% of import value)	Year last gap between Tunisia and Libya noted	Gap between Tunisia and Algeria (% of import value)	Year last gap between Tunisia and Algeria noted
Vegetables	054	No	No	***	2011		2011
Fruit and nuts (excluding oil nuts)	057	Yes	Yes	***	2010	66%	2011
Tea	074	No	Yes	*	*	*	*
Tobacco (processed)	122	Yes	No	*	*	*	*
Petroleum products	334	No	Yes	81%	2009	4%	2011
Rubber tires	625	Yes	Yes	***	2010	15%	2011
Floor coverings	659	No	Yes	315%	2009	269%	2003
Iron and steel bars	676	Yes	No	815%	2010	***	***
Television receivers	761	Yes	Yes	***	2009	45%	2007
Electrical power machinery	771	Yes	Yes	***	2009	10%	2010
Men's or boys' coats, etc.	843	Yes	Yes	***	2011	***	2011
Footwear	851	Yes	Yes	***	2011	***	2011

* Not observed

*** Data not counter-balanced

Source: Authors