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Smuggling and Import Duties in Myanmar

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Abstract

This paper examines the effects of import duties on smuggling in Myanmar. Following Fisman and Wei (2004), the reporting discrepancies between Myanmar's imports records and corresponding exports recorded by trading partners are regarded as indicative of smuggling. The paper studies whether reporting discrepancies differ across trading partners as well as across time. Our main findings are first, that the hike in import duties in June 2004 helped to widen the reporting discrepancies, which suggests smuggling for tax evasion purposes and second, that reporting discrepancies differ considerably across trading partners: land borders appear to be particularly attractive venues for smugglers.

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i

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Smuggling and Import Duties in Myanmar[1]

1. Introduction

This paper examines the effects of import duties on smuggling in Myanmar. There are large discrepancies between Myanmar's reported imports and the corresponding exports reported by the country's trading partners. Myanmar's total imports for the fiscal year 2008/2009[2], as compiled by the Myanmar authorities, amounted to USD 4,563 million, whereas the corresponding figure in *Direction of Trade Statistics* (DOTS) of the International Monetary Fund (IMF) is USD 6,720 million. In other words, the records complied by the Myanmar authorities account for only 68 percent of the figures given in the DOTS records. This can be the result of either errors in data compilation, or a considerable volume of smuggling, or both.

Several studies have examined tax evasion by analyzing the relationship between tax rates and the reporting discrepancies in import data (Fisman and Wei, 2004; Javorcik and Narciso, 2008; Mishra *et al*., 2008). These studies mainly exploit the variation in tariff rates across product classifications, and they confirm that the higher the tax rate, the greater the reporting discrepancy for that particular product category. Although there is no global consensus that reporting discrepancies are indicative of smuggling, the aforementioned studies conclude that the discrepancies can indeed be regarded as

[2] The fiscal year runs from April 1st through to March 31st in the following year.

evidence that smuggling is going on.

Rather than the reporting discrepancies by products, the present paper focuses on the reporting discrepancies in the sum of imports for each trading partner, and attempts to examine how such reporting discrepancies have responded to changes in the tax rate. This approach also allows us to analyze variations in the degree of smuggling across trading partners. There appear to be considerable flows of goods across land borders that undergo customs clearance only in the source country and completely evade clearance by the Myanmar Customs. This has given rise to notable discrepancies in imports records for neighboring countries, and especially for imports coming into Myanmar from China and Thailand.

In June 2004, the government of Myanmar imposed a sharp rise in effective tax rates. Myanmar practices a multiple exchange rate system: for the valuation of imported goods, Myanmar Customs use an official rate which overvalues the domestic currency, the *kyat*, against the US dollar. A revaluation of the Customs valuation exchange rate results in a rise in effective import duties. The revaluation of June 2004, the first of its kind since 1996, more than doubled the effective rates of import duties. Taking the opportunity offered by this event, this paper examines the hypothesis that the sharp rise in import duties led to a worsening of the reporting discrepancies for each of Myanmar's trading partners.

The paper is structured as follows. Section 2 offers a definition of smuggling that we consider to be appropriate for the context of this paper. Section 3 reviews trade statistics, and illustrates that reporting discrepancies vary considerably across trading partners as well as over time. Section 4 describes the characteristics of Myanmar's trade in the border areas, and presents data to indicate that the increase in imports across land

borders has coincided with widening discrepancies of recorded imports from neighboring countries, notably those from Thailand. Section 5 explains developments in import duties, and discusses the June 2004 hike in effective tax rates. Section 6 presents some statistical evidence for the impact of the sharp rise in import duties on reporting discrepancies. Section 7 summarizes the analysis and offers some concluding remarks.

2. Definition of Smuggling

2.1 Definition of Smuggling

The term 'smuggling' has various meanings, and it is important at the outset to clarify our definition of the term. In the context of the present paper, smuggling refers to illicit and unauthorized trade in legal goods. Trade in illegal goods such as opium is not included in our analysis.

With reference to the customs clearance for Myanmar imports, three types of smuggling can be distinguished, and these are summarized in Table 1: (A) Goods that do not undergo customs clearance in either the exporting (source) country or Myanmar (the importing country), (B) Goods that pass through customs clearance in the exporting country, but not in Myanmar, (C) Under-invoiced goods that undergo customs clearance in both the exporting country and Myanmar, but the declared value of goods at the Myanmar Customs is lower than that declared at the customs of the exporting country. Smugglers may try to evade partially (for Type (C)) or fully (for Types (A) and (B)) the Myanmar import duties and circumvent import restrictions. On the other hand, as for taxation in the exporting country, inland commercial tax (value-added tax: VAT) is

3

exempted for exports: exports are subject to a refund of VAT of this kind. Thus, as for the cost price of imported goods in Myanmar, Type (A) smuggling includes the VAT, if any, of the exporting country, whereas it is exempted for Type (B) smuggling.

Table 1

In terms of trade statistics, among the three types of smuggling, Types (B) and (C) constitute discrepancies between the imports recorded by Myanmar authorities and the corresponding exports recorded by trading partners. This type of discrepancy can be described as 'observable smuggling'. In contrast, Type (A) smuggling is not captured in trade statistics and can be classified as 'non-observable smuggling'. The subsequent quantitative analysis of the present paper focuses solely on 'observable smuggling'.[3]

2.2 Causes for Reporting Discrepancies

For Myanmar's imports, on the assumption that export declarations are made in full at the Customs of trading partners, discrepancies may arise due to evasion of customs clearance as well as under- and over-invoicing at the Myanmar Customs. Evasion of customs clearance and under-invoicing can be related to tax evasion and the circumvention of import restrictions. On the other hand, over-invoicing of imports serves as a means of outbound remittances. As Myanmar has implemented strict controls on foreign exchange, there has been a demand for remittances through informal channels. Manipulating the amount of an invoice above the actual bill allows a

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[3] Several studies have analyzed 'non-observable smuggling'. Examples include Connolly et al (1995) on Paraguay, Menon (1999) on the Lao PDR, and Golub and Mbaye (2009) on The Gambia. Due to the very nature of the problem, these studies are descriptive analyses.

Myanmar importer to retain the balance as foreign assets kept abroad. However, this is rather a costly method of remittances as it incurs import duties.

Smuggling and over-invoicing affect discrepancies in the opposite direction: while smuggling lowers the ratio of Myanmar's recorded imports to the corresponding exports recorded by trading partners, over-invoicing raises this ratio. Nonetheless, a rise in import duties can be expected to encourage smuggling as well as to reduce over-invoicing, both of which always lower the ratio.

Measurement errors can be another cause of discrepancies. Discrepancies in the sum of imports for each trading partner can include misclassification of the country of origin of the goods concerned. For example, Myanmar often imports goods from a third country via Singapore. Importers of such goods may inaccurately report the country of origin as Singapore. This introduces a misclassification which can cause two discrepancies: while it raises the reporting ratio for the imports from Singapore, it lowers the ratio for the imports from the third country. Measurement errors can be expected to be neutral to changes in import duties.

3. Reporting Discrepancies of Trade Statistics

Table 2 summarizes Myanmar's imports from major trading partners for the years before and after the sharp rise in import duties in June 2004. The Table compares the imports recorded by the Myanmar authorities with the corresponding exports recorded by Myanmar's trading partners. Specifically, Column (A) refers to the imports in CIF

5

prices reported by Myanmar authorities [4]; Column (B) is compiled from the corresponding exports in FOB prices reported by trading partners; and Column (C) gives imports in CIF prices compiled in the IMF's *Direction of Trade Statistics* (DOTS). Myanmar's trade data are compiled on a fiscal year basis, and the data in Columns (B) and (C) are compiled accordingly using monthly data.

Table 2

Two observations pertinent to our analysis can be made on this table. First, the ratios of the recorded imports to the corresponding recorded exports, as expected, declined after 2004 for most of Myanmar's trading partners.

Second, the imports reported by the Myanmar authorities have often surpassed the totals given in the corresponding DOTS records, especially in the period from 2000/2001 through 2003/2004. Apart from measurement errors, this might be related to misclassification of the country of origin of the goods, and over-invoicing for remittances purposes. However, over-invoicing of imports from Malaysia, if any, does not necessarily mean that the remittances are held as foreign assets in Malaysia. While goods are imported from Malaysia, the settlement can be done in a third country such as Singapore.

Third, the reporting discrepancies differ considerably among Myanmar's trading partners. Throughout the periods concerned, for example, the ratios of the recorded imports to the corresponding recorded exports are especially low for China and Thailand. The ratio for Thailand in 2005/2006-2008/2009 is as low as 33 percent. This

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[4] Myanmar authorities publish import data by trading partners for these 13 countries only.

might be related to the rise of imports across the Myanmar-Thai border, a matter that will be considered in greater detail in the following section.

4. Trade across Border

4.1 Characteristics of the Border Areas

Myanmar shares borders with Bangladesh, China, India, the Lao PDR, and Thailand (See Figure 1). The Myanmar government did not authorize trade by land ports until the mid 1990s. The first border post with Thailand was opened in 1996, and with China in 1998. Before that there was only illicit border trade.

Figure 1

Myanmar's border areas are mostly inhabited by ethnic minorities, and the control of the central government over these areas has been relatively weak. Insurgencies by minority groups have been most severe in the region near the Myanmar-Northern Thai border: it was not until 2004 that a cease-fire agreement was concluded between the central government and ethnic minorities in this region.

Although it has opened border posts to legalize cross-border trade, the government has tolerated smuggling in the border areas. Ethnic minority groups themselves have not always engaged in smuggling. Rather, they have established their own border posts to impose pseudo taxes on smugglers as has been the case, for example, in the region close to the Thai border. For example, near Myawaddy town on the Myanmar-Thai border,

there are approximately 20 such border posts whereas there is only one Customs House in the region operated by the central government. The situation is similar in the Myanmar-China border areas.

Goods that pass through these informal border posts are recorded by Thai Customs as exports to Myanmar. Thailand imposes a seven percent value-added tax (VAT) on the sales of goods in the domestic market, and this VAT is exempted in the case of exports. Thus, smugglers of Thai goods into Myanmar have an incentive to undertake customs declarations of exports at the Thai Customs to obtain refunds of VAT. To facilitate such transactions, there are informal border posts in the Thai territory corresponding to the border posts of ethnic minorities in the Myanmar territory. These have been privately established by Thais, but are recognized by Thai Customs, and function as *de facto* customs houses. In the terminology employed in Table 1, trade in these goods constitutes Type (B) smuggling. This adds to the discrepancies between the imports recorded by the Myanmar authorities and the corresponding exports recorded by the Thai authorities.

It has not necessarily been the case that following the political stabilization of the border areas, all imports through formal channels immediately shifted to informal channels. Goods dispatched through informal channels often encounter extortion by local authorities during the transportation from the border areas to markets.

4.2 Rise of Trade across Border

According to the records compiled by the Myanmar authorities, the most active of the trading activities by way of land ports are those with China and Thailand. The recorded imports via land ports amounted to USD 583 million in 2007/2008, of which China and

Thailand accounted for 72.4 percent and 26.7 percent respectively. As for Thailand, a substantial portion of trade takes place with the Thai Northern Region. So far as China is concerned, the Chinese land ports are all located in Yunnan Province.

Table 3 shows contrasts in the flows of imports into Myanmar from China and Thailand. As regards imports from China, both imports via land ports and those via non-land ports have increased simultaneously. There is nothing particularly remarkable in the development in the reporting discrepancies between Myanmar imports data and Chinese exports data. By contrast, however, according to Thai data, the increase in imports from Thailand has been mostly by way of land ports. The recent cease-fire agreements and improved political stability may have contributed to an increase in the flow of goods through land ports. More important, the discrepancies between Myanmar import data and Thai export data has widened along with the rise in border trade. This implies that a large portion of border trade is recorded only at Thai Customs, and not at Myanmar Customs.

Table 3

As regards imports from Thailand, when evaluating the relationship between import duties and reporting discrepancies, this impact of the rise in border trade must be taken into consideration.

5. Developments in Effective Tax Rates on Imports

5.1 Structure of Taxes on Imports

This section reviews changes in taxes on imports. Taxes and their equivalents are composed of three elements: customs duties, commercial taxes, and pecuniary costs of trade restrictions. As will be shown, the sum of these elements is moderately high.

First, so far as the customs duty is concerned, in 2003 the simple average applied rate in nominal terms was 6.1 percent (Mizuno 2007), and the maximum tariff rate, applied to automobiles, is 40 percent. As a reference, in Thailand, in 2006 the simple average applied rate was 11 percent, and the maximum tariff rate was 80 percent, also applied to automobiles. It can be said that the nominal import tariff rates are relatively low in Myanmar in comparison with neighboring countries.

Furthermore, the effective tariff rate is much lower due to the use of an overvalued official exchange rate for valuing imported goods. Myanmar practices a multiple exchange rate system, and the Customs authorities apply an overvalued exchange rate to calculate the value of imports. Since 2004, the valuation rate has been fixed at 450 kyat per US dollar, while the prevalent parallel market rate was around 1,000 kyat per US dollar as of August 2010[5]. As import duties are payable in kyat, the effective tariff rate declines in line with the depreciation of the Myanmar kyat against the US dollar in the parallel market.

Second, commercial taxes are levied on imported goods as well as on domestically produced goods. Tax rates vary from commodity to commodity. Although there is not necessarily discrimination between imported goods and domestically produced goods, tax rates on most imported goods are 25 percent. Commercial taxes are collected at the time of customs clearance. As is the case with customs duties, however, the effective

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[5]   The valuation rate was revaluated to 1,000 kyats per US dollar in 2010 for some goods such as automobiles and their parts.

rates of commercial taxes are lower owing to the use of an overvalued official exchange rate for the valuation of goods.

Third, trade restrictions incur pecuniary costs on importers. Both imports and exports require licensing from the government. In addition to the explicit fees of licenses, opaque and unpredictable licensing processes incur costs on importers in terms of the time and effort involved.

On top of that, import licenses are issued on condition that importers have export-tax-deducted export earnings to cover import charges. This restriction is often called the 'Export First Policy', and it has been in effect since 1997. The government imposes a 10 percent tax on exports. After deduction of the 10 percent tax, export earnings can be held as foreign currency deposits (FCDs) at designated state-owned banks. Importers need to obtain such export earnings to obtain import licenses. In the parallel market, FCDs are traded between exporters and importers with an approximately 10 percent premium over informally circulated greenbacks. This suggests that the export tax is shifted onto the price of formally imported goods.

Another significant restriction on imports, although seemingly no longer in existence, was that the government directly controlled the private importers' contents of imports. The government classified imports into essentials (List A) such as capital goods, and non-essentials (List B) such as luxury consumer goods. Private importers were required to import at least 80 percent of the total from List A, and less than 20 percent from List B. This regulation, with some minor changes, was effective until early 2000s. Abolition of such administrative controls must have lowered the cost of imports of consumer goods.

Table 4 summarizes the nominal and effective tax rates and the cost price for the

import of consumer electric appliances as of August 2010. First, importers bear the costs of the exchange rate premium, which is here quoted as 10 percent. The import license fee is a non *ad-valorem* charge: for a consignment valued above one million kyat (approximately USD 1,000), the import license fee is 50,000 kyats (approximately USD 50) [6]. For illustrative purposes, the license fee is recalculated as an *ad-valorem* tax of 0.5 percent. The customs duty and the commercial tax are *ad-valorem* taxes, and the tax rates are 15 percent and 25 percent, respectively. The tax base of the commercial tax is the sum of the CIF and the customs duty. The effective rates of these two taxes change according to the exchange rate that is being used to value the imports. The table shows the duties amount to 54.3 percent in nominal terms if the parallel market rate is used to value the goods. However, the Customs authorities convert the value of imports into kyat at the official exchange rate. The valuation rate is at present 450 kyats per US dollar, while the parallel market rate is around 1,000 kyats per US dollar. As a result, the effective tax rate is reduced to approximately 30 percent. Nonetheless, this is still high compared with the sum of the tax rates on equivalent commodities in Thailand, which is 16.3 percent [7].

Table 4

5.2 The June 2004 Hike in Import Taxes

The use of an overvalued official exchange rate for calculating the value of imports reduces the effective tax rate. On the other hand, a revaluation of the official exchange rate brings about a rise in the effective tax. Under the present system, the government

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[6] Figures are from Mizuno (2007: 55).

[7] In Thailand, the customs tariff is 8.7 percent, and VAT is 7 percent.

reserves the right to raise the effective tax rate at its discretion by revaluing the overvalued official rate.

Figure 2 shows the trends in the prevalent parallel exchange rate and the effective tax rate on imports for the period from January 1997 through August 2010. In June 2004, the official valuation rate was revalued from 100 kyats per US dollar to 450 kyats. Although the depreciation of the kyat in the parallel foreign exchange market alleviated the impact of the change, the effective tax rate on imports instantly more than doubled.

Figure 2

6. Changes in Reporting Discrepancies and their Implications

This section presents a simple statistical analysis aimed at finding out whether or not the reporting discrepancies in Myanmar's imports deteriorated following the sharp rise in effective tax rates in June 2004, and attempts to draw some implications for Myanmar's economic policy.

6.1 Changes in Reporting Discrepancies

Using the two sources of monthly imports data compiled by the Myanmar authorities and IMF's *Direction of Trade Statistics* (DOTS), we set out to ascertain whether or not the reporting discrepancy in the sum of imports for each trading partner expanded following the sharp rise in effective import duties in June 2004. Specifically, we tested whether or not the differences in the twelve-month means of reporting discrepancies

13

before and after the rise in taxes are statistically significant. The test was carried out with respect to 13 of Myanmar's major trading partners as well as total imports.

For analyzing the relationship between reporting discrepancies and tax rates, we considered two main alternative methods. One was a simple statistical test on the differences in means. The other was a regression analysis. However, it needs to be noted that possibly because of time lags in reporting, the monthly data relating to reporting discrepancies are highly volatile. Thus, a regression analysis would require taking annual averages of reporting discrepancies, a task that in turn requires a longer sample period. On the other hand, the reporting discrepancies over a longer sample period may be influenced by structural factors such as changes in the implementation of trade regulations and changes in routes of trade (i.e. border trade). Thus, a regression analysis would be prone to omitted variable bias. This problem could be alleviated by a simple test of differences in means for the short sample period.

Table 5 summarizes the imports data and reporting discrepancies for the periods before and after the rise in the effective tax rate. As for data on imports, both Myanmar data and DOTS data show no remarkable changes over time. Myanmar records show slight declines in imports for most trading partners, whereas DOTS records present slight increases. As a result, for all trading partners except Korea, the ratio of Myanmar's reported imports to the corresponding DOTS records has declined.

Table 5

Next, the means of reporting discrepancies for two selected periods are significantly different between the two periods except for Germany, France and United States. For

14

these three countries, insignificance of the differences in means is attributable to the large standard deviations. Discrepancies in monthly data may arise due to time lags in reporting. For countries with small total volumes of imports, transactions may not be frequent, and the time lags of reporting for lumpy items may result in volatile reporting discrepancies. In contrast, for major trading partners such as China, Singapore and Thailand, the widening reporting discrepancies are statistically significant.

6.2 Implication on Tax Revenues

The above analysis implies that a higher effective tax on imports leads to an increase in smuggling. Accordingly, lowering the effective tax rates on imports is one of the measures whereby smuggling can be contained.

From the viewpoint of tax revenues for the government, lowering the tax rates would reduce tax revenues, but this would be partially offset by a decline in smuggling. Considering the weak administrative capacity of the Myanmar Customs, the tax elasticity of smuggling can be expected to be higher in Myanmar than in other developing countries[8]. With a higher elasticity, the loss of tax revenues due to a tax rate cut would be compensated to a greater extent in Myanmar with a decline in smuggling than it would be in other countries. In this regard, it remains a task for future research to quantify the tax elasticity of smuggling in the Myanmar context.

In the framework of the ASEAN Free Trade Area (AFTA), Myanmar is expected to lower its tariff rates. With the objective of achieving market integration with ASEAN member countries, Myanmar participates in AFTA and is committed to the Common Effective Preferential Tariff (CEPT) scheme. In this scheme, Myanmar is required to

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[8] Tax elasticity of smuggling differs among existing studies. For instance, the elasticity for China is over 2 in Fisman and Wei (2004), whereas it is below 1 for India in Mishra *et al*. (2008).

reduce tariffs below five percent and eliminate all trade restrictions for imports from ASEAN members by 2015[9].

However, the effective high import taxes have mostly resulted from inland commercial taxes and from trade restrictions. Given the small share of Myanmar's trade with ASEAN members within the total pattern of intra-ASEAN trade, other ASEAN members have little motivation for taking the trouble to persuade Myanmar to eliminate such obstacles Thus, reducing the obstacles to trade will largely depend on independent efforts by the Myanmar government itself.

Another challenge is to formalize the informal flow of goods across Myanmar's land borders. The reporting discrepancies in import records are especially high with Thailand and China, which account for a high share of the imports that are brought across Myanmar's land borders. Moreover, the deteriorating reporting discrepancies for imports from Malaysia suggest that goods are being transshipped in Thailand and smuggled across the Myanmar-Thai borders. Not only tightening the controls on trade across borders, but also lowering the tax rates would also add to diverting the smuggling into formal channels.

7. Conclusion

This paper has examined the impact of the hike in effective import duties in June 2004 on the discrepancies between Myanmar authorities' imports data and the corresponding exports recorded by the country's trading partners. The ratio of Myanmar's data to the

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[9] Details on CEPT scheme are reported in Tongzon and Khan (2005) among others.

records given in the IMF's *Direction of Trade Statistics* (DOTS) declined from 69.7 percent to 55 percent in the two years before and after the hike in import duties. This can be regarded as preliminary evidence for the significance of smuggling for tax evasion purposes.

Furthermore, reporting discrepancies vary substantially across trading partners. Myanmar records cover only 28.7 percent of the DOTS recorded imports from Thailand, and 45 percent for China in the year through June 2005. This paper has pointed out that there have been flows of goods across land borders into Myanmar which have undergone customs declaration in the source countries but not at Myanmar Customs. The border areas with China and Thailand appear to be areas in which smuggling is particularly rife.

Given that smuggling is responsive to tax rates, cutting down the effective tax rates is one of the ways to contain smuggling. While the import tariff rate *per se* is generally low in Myanmar, inland commercial taxes and restrictive trade controls result in moderately high effective tax rates. Cutting down the tax rates would reduce the tax revenues, but the reduction would be partially offset by a decline in smuggling.

Imposing controls on smuggling across Myanmar's land borders is another challenge. In this regard, instead of just intensifying the controls, lowering the tax rates could have the additional benefit of diverting the smuggling into formal channels.

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FIGURE 1

Map of Myanmar's Borders

FIGURE 2

Parallel Exchange Rates, Official Valuation Rates, and Effective Tax Rates:

January 1997 – August 2010
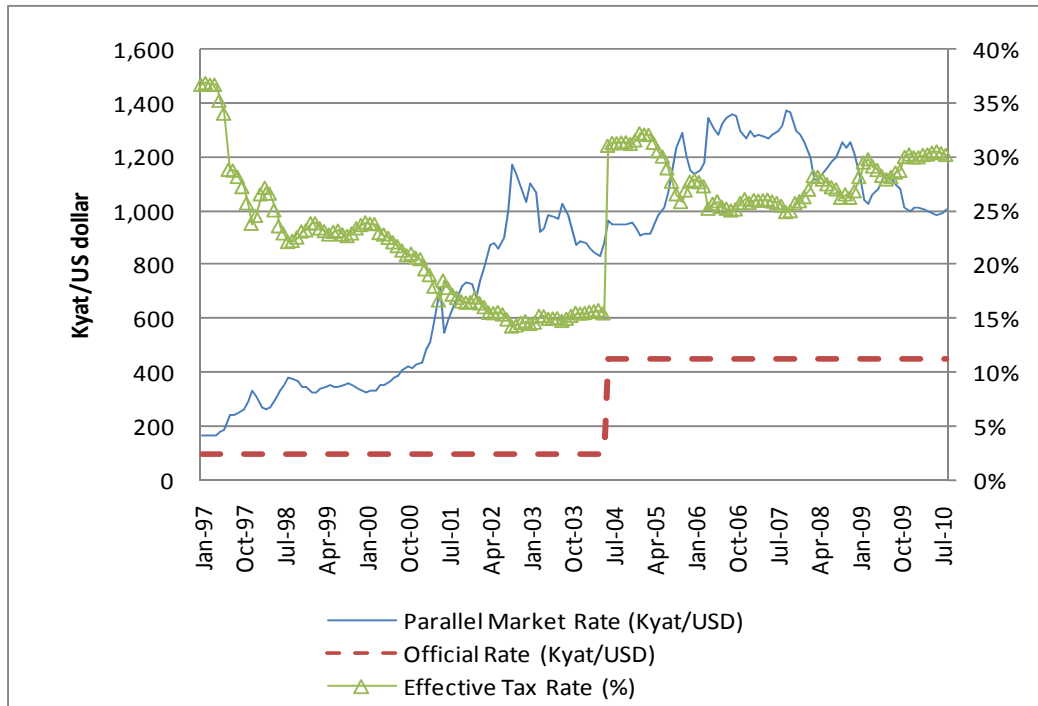
Sources: Parallel market exchange rate survey by authors

Note: Presumptions of calculation for effective tax rates are the same as in Table 4.

TABLE 1

Types of Smuggling

Customs of Exporting Country	Myanmar Customs		
	Unrecorded	Under-invoiced	Recorded
Unrecorded	(A) Smuggling VAT of Exporting Country	N.A.	N.A.
Recorded	(B)Smuggling	(C) Smuggling Myanmar customs duty Myanmar quasi-tariff Myanmar commercial tax	(D)Licit Imports Myanmar customs duty Myanmar quasi-tariff Myanmar commercial tax

Source: Authors.

Note:　N.A. means not applicable. VAT stands for value-added tax.

TABLE 2

Imports of Myanmar from Major Trading partners and Reporting Discrepancies:

Annual Data

	2000/2001–2003/2004 Average				2005/2006–2008/2009 Average			
	(A) Myanmar Reports	(B) Partner Reports	(C) DOTS	(A)/(C) %	(A) Myanmar Reports	(B) Partner Reports	(C) DOTS	(A)/(C) %
				Unit: US dollar. million				
Total	2,397	..	3,002	79.8	3,205	..	5,121	62.6
China	356	690	759	46.9	849	1,515	1,666	51.0
France	15	17	11	128.4	13	28	27	49.2
Germany	22	20	22	99.8	32	45	50	65.3
Hong Kong	76	62	68	111.5	24	43	47	51.9
India	95	69	75	126.3	140	165	177	79.0
Indonesia	73	56	64	114.2	142	188	207	68.7
Japan	232	146	161	143.7	168	144	159	105.6
Korea	218	205	226	96.8	117	206	220	53.0
Malaysia	231	..	217	106.6	182	192	262	69.4
Singapore	614	522	574	107.0	863	815	896	96.3
Thailand	248	408	453	54.9	330	991	1,069	30.8
United Kingdom	13	11	14	89.4	10	10	12	81.1
United States	26	11	14	185.7	58	8	9	606.5
Others	178	..	344	51.7	278	..	320	86.8

Sources: International Monetary Fund, *Direction of Trade Statistics* CD-ROM, Central Statistical Organization, *Selected Monthly Economic Indicators*. Global Trade Information Services, *World Trade Atlas* Database.

Notes: (..) means not available. Column (A) refers to the imports (CIF) recorded by the Myanmar authorities. The original data are in Myanmar kyat, the local currency. They have been converted into US dollars using the official exchange rate. Column (B) summarizes the corresponding exports (FOB) recorded by the authorities of Myanmar's trading partners. Column (C) shows the import values (CIF), compiled from *Direction of Trade Statistics* by International Monetary Fund (IMF).

TABLE 3

Share of Imports by Land in Total Imports from China and Thailand,

FY 1999/2000-FY 2009/2010

	Imports from China					
	Myanmar Imports Records		Chinese Exports Records		Ratio Border	Ratio Discrepancy
Fiscal Year (April-March)	(A) Border	(B) National Total	(C) Border	(D) National Total	(E) (C)/(D) %	(F) (B)/(D) %
	Unit: US dollar, million					
1999-2000	..	251	268	385	69.6	65.3
2000-2001	..	286	291	522	55.8	54.7
2001-2002	..	308	283	531	53.2	57.9
2002-2003	..	362	367	789	46.5	45.9
2003-2004	..	470	490	918	53.4	51.2
2004-2005	..	492	499	910	54.9	54.1
2005-2006	195	467	582	1,018	57.2	45.9
2006-2007	297	728	687	1,320	52.0	55.2
2007-2008	422	994	834	1,774	47.0	56.0
2008-2009	..	1,207	877	1,946	45.1	62.0
2009-2010	..	1,257	1,289	2,649	48.7	47.4

	Imports from Thailand					
	Myanmar Imports Records		Thai Exports Records		Ratio Border	Ratio Discrepancy
Fiscal Year (April-March)	(A) Border	(B) National Total	(C) Border	(D) National Total	(E) (C)/(D) %	(F) (B)/(D) %
	Unit: US dollar, million					
1999-2000	..	347	144	423	34.0	82.0
2000-2001	..	303	139	467	29.7	65.0
2001-2002	..	268	112	361	31.1	74.0
2002-2003	..	231	94	318	29.5	72.8
2003-2004	..	191	222	484	45.8	39.4
2004-2005	..	184	400	631	63.3	29.1
2005-2006	85	237	415	722	57.4	32.8
2006-2007	148	304	385	790	48.7	38.5
2007-2008	156	383	545	1,128	48.3	34.0
2008-2009	..	395	760	1,323	57.5	29.8
2009-2010	..	379	1,047	1,734	60.4	21.9

Sources: Website of the Department of Border Trade, Ministry of Commerce, Myanmar

http://www.commerce.gov.mm/eng/dobt/by_border_wide.html accessed on August 11, 2010.

Website of the Bank of Thailand (Foreign Trade through Customs Houses in Northern Region)

http://www2.bot.or.th/statistics/ReportPage.aspx?reportID=497&language=eng accessed on August 11, 2010.

Global Trade Information Services, *World Trade Atlas* Database.

Notes: (..) means not available. Border trade refers to exports of Thailand and China to Myanmar via land ports.

TABLE 4

Effective Tax Rate on Consumer Electric Appliances as of August 2010

		Nonimal Tax Rate	Taxation	
			Market exchange rate 1000kyat/USD	Official exchange rate 450kyat/USD
			in kyat	
A	CIF Yangon Port (@USD500)		500,000	225,000
B	Exchange Rate Premium	10%	50,000	50,000
C	Import License Fee	0.5%	2,500	2,500
D	Customs Duty	15%	75,000	33,750
E	Commercial Tax	25%		
	E=(1+D)x25%		143,750	64,688
	Total tax		271,250	150,938
	Effective Tax Rate		54.3%	30.2%

Source: Authors' compilation.

Notes: In this example, the import value of goods in CIF terms is USD500. The valuation of goods in kyat according to the market exchange rate (1000kyat/USD) is 500,000 kyats, but is 225,000 kyats at the official exchange rate (450kyat/USD). The exchange rate premium and the import license fee are assumed to be the same regardless of the valuation of the exchange rate. Customs duty and commercial tax are calculated by multiplying the nominal tax rate and the goods valuation with respective exchange rates. Effective tax rates are calculated by dividing the respective total taxes by the import value of goods at the market exchange rate (500,000 kyats).

TABLE 5

Imports of Myanmar by Major Trading partners and Reporting Discrepancies: Monthly Data, 2003-2005

	Import amount				Myanmar reports/DOTS reports						
	Jun 2003–May 2004		Jul 2004–Jun 2005		Jun 2003–May 2004		Jul 2004–Jun 2005		Differences between means		
Partner	Myanmar reports	DOTS reports	Myanmar reports	DOTS reports	Mean	Std. Dev.	Mean	Std. Dev.	Difference	Std. Dev.	t statistics
Total	2,246	3,325	1,938	3,554	69.7	23.57	55.0	11.43	14.7	7.56	7.703 ***
China	499	970	437	1,019	56.8	29.30	45.0	15.42	11.8	9.56	4.327 ***
France	13	16	11	34	184.1	270.91	97.5	102.02	86.6	83.57	0.983
Germany	19	17	26	34	139.7	122.18	113.9	122.80	25.8	50.01	0.337
Hong Kong	32	42	20	43	84.7	24.20	48.6	20.92	36.1	9.23	6.905 ***
India	118	105	84	120	110.9	80.32	71.1	23.36	39.8	24.15	3.623 ***
Indonesia	59	54	48	77	111.0	52.37	63.3	18.39	47.7	16.02	5.780 ***
Japan	261	131	147	122	258.8	187.64	128.2	61.31	130.6	56.99	3.466 ***
Korea	103	197	91	155	53.4	20.94	59.6	15.43	−6.2	7.51	5.063 ***
Malaysia	145	151	99	178	101.0	66.15	58.8	30.09	42.2	20.98	3.382 ***
Singapore	672	800	632	722	96.2	54.03	87.5	26.98	8.7	17.44	3.970 ***
Thailand	182	563	217	734	33.1	7.23	28.7	9.65	4.4	3.48	6.745 ***
United Kingdom	11	5	3	7	328.8	273.01	65.4	53.22	263.4	80.30	3.432 ***
United States	30	7	19	10	737.6	1,598.38	312.6	342.43	424.9	471.88	0.837

Source: Authors' compilation.
Notes: *** denotes statistical significance at the 1 percent level.