

**Guide to Data and Program for
Credit Rationing and Pass-Through in Supply Chains: Theory and Evidence from
Bangladesh**

M. Shahe Emran

shahe.emran@gmail.com; IPD, Columbia University

Dilip Mookherjee

dilipm@bu.edu; Boston University

Forhad Shilpi

fshilpi@worldbank.org; World Bank

M. Helal Uddin

umhelal@gmail.com; Dhaka University

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There are two main STATA datasets needed to replicate the tables and figures in the manuscript as well in online appendix. Four additional datasets (described below) are needed to produce summary statistics described in the text. All datafiles for replications of results in the paper and appendix are provided in the empirics/dataF/processed/ folder.

All variables are clearly labeled. Data sources are provided in the data section of the paper. All variable definitions are further described in Data and program files.

Stata Data file price_pt_2020n.dta is the main datafile to replicate all tables and figures in the main paper and online appendix except for figure 3 in the paper. All variables are labeled in the data file. The unit of observation is product-day (e.g price of product “x” at a date (January 1, 2010)). Product code is given in variable p_code which also have value labels (e.g. 1=palm etc.). This file contains all data needed for replicating results in the paper except Figure 3.

Stata Data file palm_import_2020.dta is the file with palm import data which is used to produce Figure 3 in the paper. Unit of observation is average monthly import quantity in expressed in 1000 metric ton. All variables are labeled.

The **Stata program** passthrou_edible_oil_April26_2020.do replicates all results in the paper and online appendix. All explanations of variable definitions, sample definitions and replications of all tables and figures are given in this do file. Wherever needed, notes are added to explain steps in estimation. Note that Figure 3 is produced at the very end of the file using monthly data.

To replicate the results in the paper and online appendix, one needs to run the dofile (passthrou_edible_oil_April26_2020.do). The data files needed for replication are price_pt_2020n.dta and palm_import_2020.dta. Please note all notes included in the Stata program regarding data file path which will have to be changed to user’s own directory.

The **Stata program** passthrou_edible_oil_April26_2020.do is in empirics/do_file/ folder

Statistics in Text

There are four additional data files that produce summary statistics mentioned in the paper. The stata dofile passthrou_edible_oil_April26_2020.do produces the summary statistics (at the end of the code). The datafiles needed for running that part of program are described below.

File name	Source	Unit of observation	Variable derived
Bangladesh_advance_rate.dta	Bangladesh Bank Website	Monthly	Interest rate pre- and post- reform
EOSurvey_refiner_price.dta	Edible Oil Surveys, 2013	Daily per transaction per trader	Refiner price of palm oil
EOSurvey_wholesale_price.dta	Edible Oil Surveys, 2013	Daily per transaction per trader	Wholesale price of palm oil
wholesale_trade_interest.dta	Edible Oil Surveys, 2013	Interest rate on credit line from banks	Interest rate paid by wholesale traders

These datasets are provided in empirics/dataF/processed/ folder.

Data preparation

The raw data came in different excel files which are read, cleaned and put together to produce the Stata datafiles price_pt_2020n.dta and palm_import_2020.dta. Data is put together in a Stata Dofile **prepare_data_edible_oil.do** which is in empirics/do_file/ folder,

Below is a table with raw data file names, source and unit of observation. All the dataset listed below are in empirics/dataF/raw/ folder.

File name	Source	Unit of observation	Variable derived
DAM Dataset_palm_wheat.xlsx	Department of Agricultural Marketing, Bangladesh	Daily price data	Average retail and wholesale prices of palm oil and wheat
palm_wprice.xlsx	Malaysian Palm Oil Board	Daily price and Ringgit to dollar exchange rate	World price of palm
exchange_rate.xlsx	Bangladesh Bank	Daily exchange rate	Dollar to taka exchange rate for buying and selling
wheat_wprice.xlsx	World Bank commodity price monitoring (downloaded from Chicago Board of Trading)	Daily price per bushel and kg	World price of wheat
dam_lentil_rice_onion.xlsx	Department of Agricultural Marketing, Bangladesh	Daily price data	Average wholesale and retail prices of lentil
NBR_lentil_Onion_import.xlsx	National Bureau of Revenue	Daily product code level import quantity and value	World Price of lentil

palm_import.xlsx	National Bureau of Revenue	Daily product code level import quantity and value	Monthly average import quantity of palm
Fuel Price.pdf	Bangladesh Bank	Date	Coded directly in the data preparation file

Data Access modality and Location

All raw data are located in empirics/dataF/raw/ folder. Below we describe access modality.

Dataset_palm_wheat.xlsx and **dam_lentil_rice_onion.xlsx**: Source of these data is the Department of Agricultural Marketing (DAM), Bangladesh. Most recent data are reported in the website:

http://dam.gov.bd/market_daily_price_report . Palm oil price is not reported in the summary table at the website and obtained from the official (Assistant Director, Research, DAM). Same is true for older data. Please contact Assistant Director, Research, DAM. Contact information is noted in the website.

palm_wprice.xlsx: Source is Malaysian Palm Oil Board. It is downloadable from the following website.

http://bepi.mpob.gov.my/admin2/price_local_daily_view_cpo_msia.php?jenis=1Y&more=Y&tahun=2020

Note that if the link does not work, go to <http://bepi.mpob.gov.my/> and go to right hand bottom corner to get to price data and click link there to get more historical data.

exchange_rate.xlsx and **Bangladesh_advance_rate.dta**: Source is Bangladesh Bank. Data can be obtained from the website:

<https://www.bb.org.bd/econdata/index.php>

wheat_wprice.xlsx: World Bank commodity price monitoring (downloaded from Chicago Board of Trading). Data was obtained from the commodity price team of the World Bank. Original data source is Chicago Board of Trading. Please see the details in the website:

<https://www.worldbank.org/en/research/commodity-markets#1>

NBR_lentil_Onion_import.xlsx and **palm_import.xlsx**: Source is National Bureau of Revenue. These data are not publicly accessible. Please contact Assistant Director, Research and Statistics for data. Website is below.

<http://nbr.gov.bd/publications/customs/eng>

EOSurvey_refiner_price.dta, **EOSurvey_wholesale_price.dta**, **wholesale_trade_interest.dta**: Source of these datafiles is the Edible Oil Surveys, 2013 conducted by the authors. These data are available from the authors directly. Please send an email to fshilpi@worldbank.org.

Raw Data Codebook

Dataset_palm_wheat.xlsx: Palm and wheat domestic wholesale and retail prices by dates. Definition of variables, units of measurements and variable labels are given in the first 4 rows.

dam_lentil_rice_onion.xlsx: Lentil wholesale and retail prices are taken from this datafile which also has data on rice and onion. Definition of variables, units of measurements and variable labels are given in the first 4 rows. Note that lentil is imported mainly from Turkey, so we take domestic prices of Turkish lentil.

palm_wprice.xlsx: Variables in this file are crude palm oil price in Malaysian Ringgit and Ringgit to dollar exchange rates by date. Crude oil price is per metric ton. Definition of variables, units of measurements and variable labels are given in the first 2 rows.

exchange_rate.xlsx: Exchange rate expressed as \$1=xx taka). Daily data. Definition of variables, units of measurements and variable labels are given in the first 2 rows.

wheat_wprice.xlsx: Wheat international price by dates. wheat_crude_b is wheat price (HRW) per bushel and wheat_crude_kg is per kilogram. Both prices are in dollar. Definition of variables, units of measurements and variable labels are given in the first 2 rows.

NBR_lentil_Onion_import.xlsx: Import quantity and value of lentil and onion by dates are in this file. The file provides import date, HSCODE, description of HSCODE, import quantity in kg and value in taka. Definition of variables, units of measurements and variable labels are given in the first 3 rows.

palm_import.xlsx: Import quantity and value of palm oil by dates are in this file. The file provides import date, HSCODE, description of HSCODE, import quantity in kg and value in taka. Definition of variables, units of measurements and variable labels are given in the first 3 rows.

Bangladesh_advance_rate.dta: monthly interest rate. Variable label provides the precise definition of interest rate.

EOSurvey_refiner_price.dta: Purchase price of palm oil from refiner by traders. Data are by date and trader ID. Variable is labeled.

EOSurvey_wholesale_price.dta: Sale price of palm oil by wholesale traders. Data are by date and trader ID. Variable is labeled.

wholesale_trade_interest.dta: Interest rate on credit line by wholesale traders. Data are by date and trader ID. Variable is labeled.