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政策研究大学院大学
NATIONAL GRADUATE INSTITUTE
FOR POLICY STUDIES

Tariff dismantling schedules

A global database of all EPAs in force [2014-2050]

GTAP Conference 2020

Dzmitry Kniahin

Market Analyst, Trade and Market Intelligence Section

International Trade Centre

18 June 2020



Tariff reduction schedules

A global database offering all EPAs in force [2014-2050]

By Ngavozafy Antonia, Kniahin Dzmitry, Mimouni Mondher and Pichot Xavier



GTAP Conference 2020

Structure of the presentation

I. Overview

II. Database

III. Future work

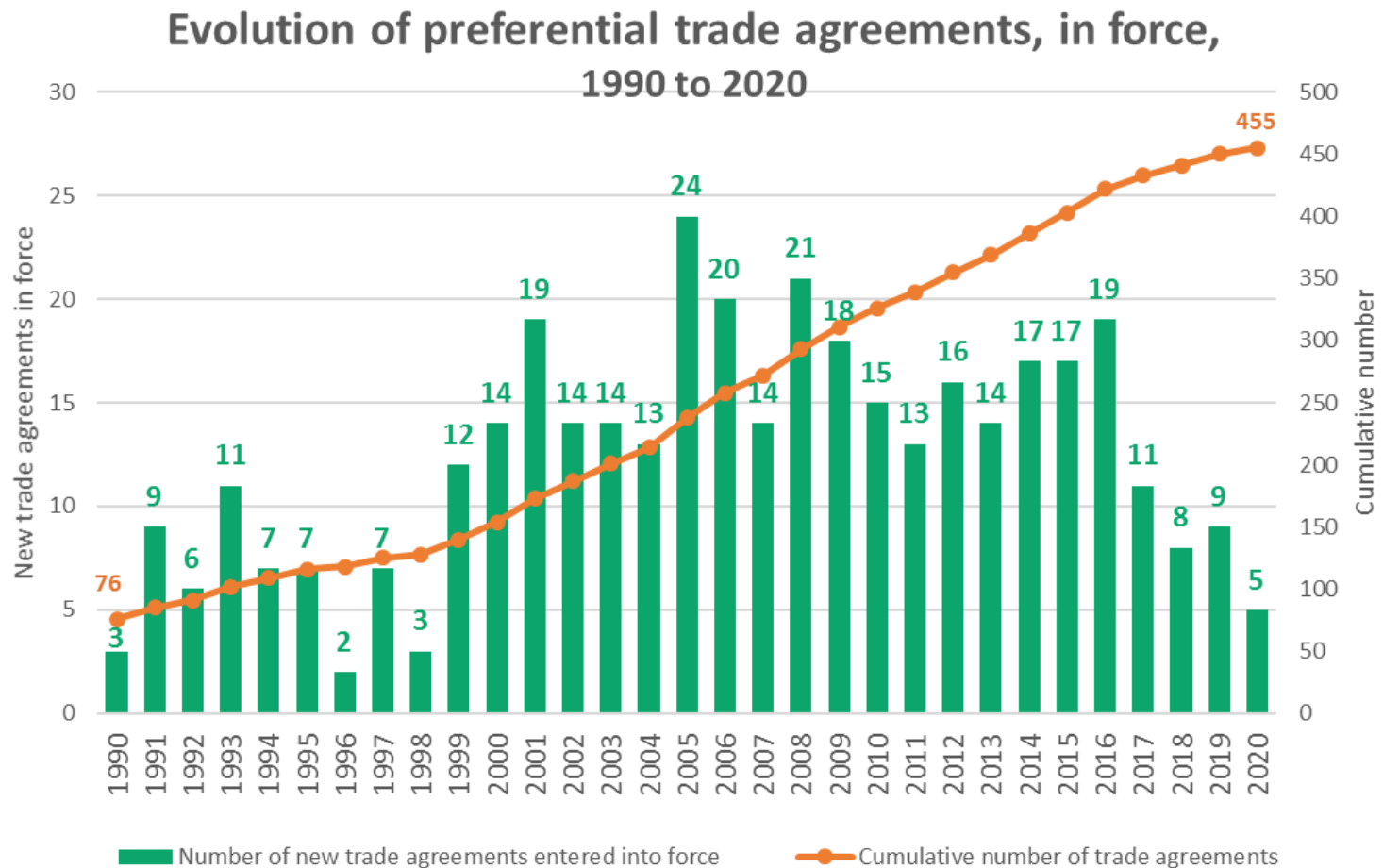
I. Overview

1. In 2014, ITC and GRIPS joined forces to construct a global database of preferential tariff dismantling schedules in existing EPAs covering 2014-2050
2. The project run in 2015-2020 and resulted in a single global tariff dismantling database covering almost 450 EPAs “in force” (until May 2019)
3. The database is freely available for download in HS6 and GTAP formats



<https://www.macmap.org/en/download>

Rapid rise of EPAs has changed the global tariff landscape



Note: trade agreements include both regional trade agreements and preferential trade arrangements

Source: ITC trade agreements database

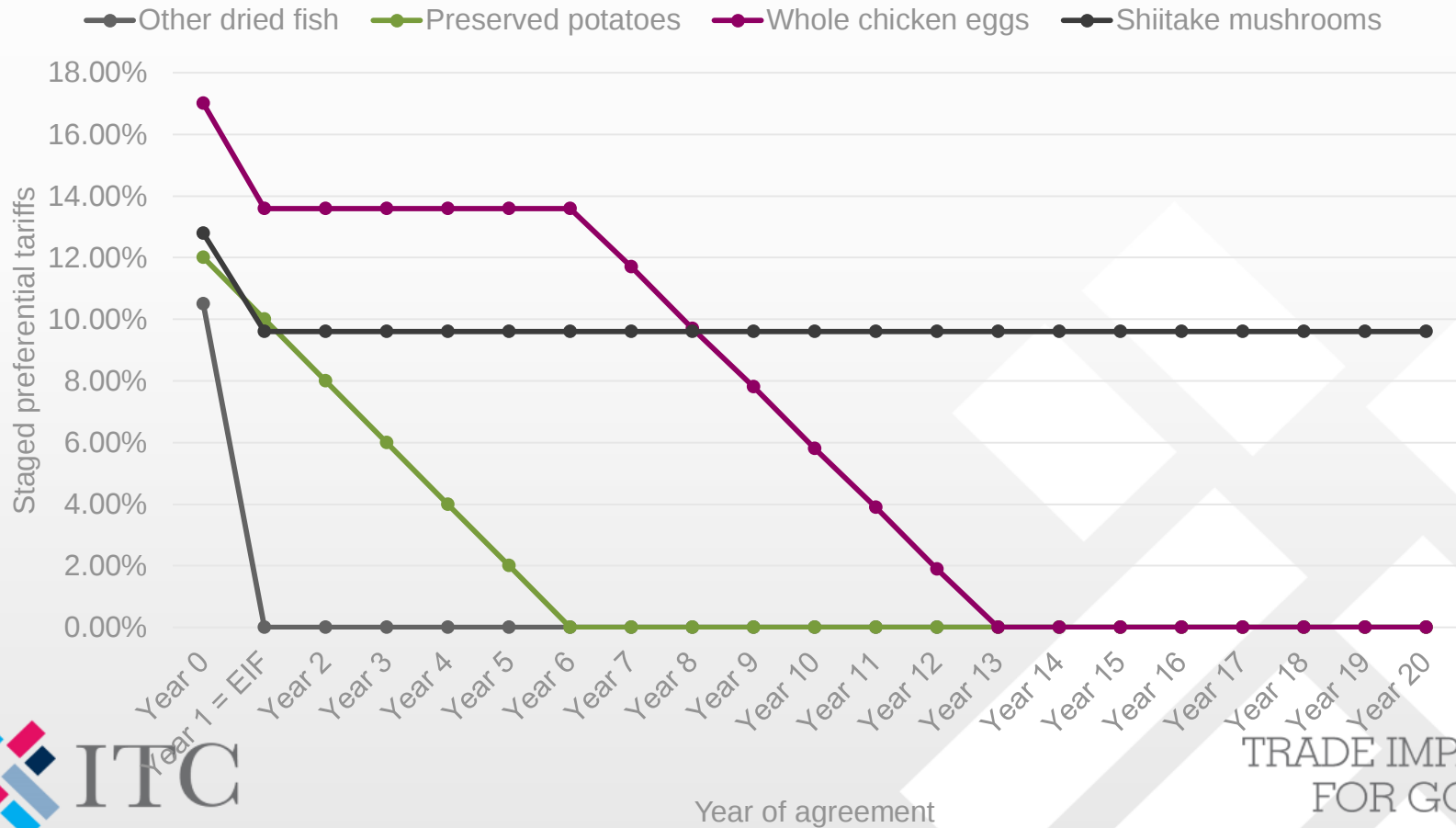
Last updated: June 2020



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In many EPAs, preferential tariff dismantling is scheduled over time

Example: Japan's tariff on selected products under EU-Japan EPA (2019)



Tariff dismantling schedules in EPAs

- Example: EU-Japan EPA (2019) – EU tariff dismantling on trucks

CN 2017	Description	Base rate	Category	Note	1st year	2nd year	3rd year	4th year	5th year	6th year	7th year	8th year	9th year	10th year	
8704 31 10	--- Specially designed for the transport of highly radioactive materials (<i>Euratom</i>)	3.5 %	B7		3.1 %	2.6 %	2.2 %	1.8 %	1.3 %	0.9 %	0.4 %	0.0 %	0.0 %	0.0 %	0
	--- Other														
	---- With engines of a cylinder capacity exceeding 2,800 cm ³														
8704 31 31	----- New	22.0 %	B7		19.3 %	16.5 %	13.8 %	11.0 %	8.3 %	5.5 %	2.8 %	0.0 %	0.0 %	0.0 %	0
8704 31 39	----- Used	22.0 %	B7		19.3 %	16.5 %	13.8 %	11.0 %	8.3 %	5.5 %	2.8 %	0.0 %	0.0 %	0.0 %	0
	---- With engines of a cylinder capacity not exceeding 2,800 cm ³														
8704 31 91	----- New	10.0 %	B7		8.8 %	7.5 %	6.3 %	5.0 %	3.8 %	2.5 %	1.3 %	0.0 %	0.0 %	0.0 %	0
8704 31 99	----- Used	10.0 %	B7		8.8 %	7.5 %	6.3 %	5.0 %	3.8 %	2.5 %	1.3 %	0.0 %	0.0 %	0.0 %	0
8704 32	-- Of a gross vehicle weight exceeding 5 tonnes														
8704 32 10	--- Specially designed for the transport of highly radioactive materials (<i>Euratom</i>)	3.5 %	B7		3.1 %	2.6 %	2.2 %	1.8 %	1.3 %	0.9 %	0.4 %	0.0 %	0.0 %	0.0 %	0

Tariff dismantling schedules in EPAs

- To smoothen the liberalization impact of EPA, a party may agree to dismantle its MFN tariff in a series of annual cuts
- The speed of tariff cuts depends on the initial level of MFN tariff, volume of trade and the political sensitivity of the protected product
- Tariff cuts are often negotiated at the national tariff line level of products

Impact on GTAP modeling exercises

- Not incorporating the agreed tariff dismantling schedules of existing EPAs into the GTAP baseline model strips it of the forward-looking property
- Quick fixes, like assumption-based, broad tariff cuts, lead to imprecise results, especially for sensitive sectors

II. Tariff Dismantling Database

1. Tariff dismantling schedules were extracted from legal texts of trade agreements and loaded into a database



2. Tariff dismantling database was aligned with Market Access Map tariff databases and methodologies at the national tariff line level



3. The database is available in GTAP 10 format for [2014-2050] time period



- *All GTAP regions (140+)*
- *All GTAP sectors as well as disaggregated HS6 level*
- *Baseline MFN tariff of 2014*
- *Average imports of (2013, 2014, 2015)*



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II. Tariff Dismantling Database

Tariff Dismantling Parameters

Element	Remarks	Example
Base rate	<i>In most cases, it is MFN rate at the start of EPA talks</i>	55%
Dismantling category	<i>Describes how tariff is dismantled</i>	“R9” *
• Start date	<i>Date when first cut takes place (often EIF)</i>	2021
• Number of annual cuts	<i>The tariff cuts can be implemented linearly or non-linearly (front-loading or back-loading)</i>	9
• End tariff	<i>For some products, tariff is dismantled partially</i>	10%
• Rounding method	<i>If a cut tariff is not a whole number, it should be rounded, rounded up or rounded down.</i>	Round down to the nearest 0.1%

II. Tariff Dismantling Database

Non-ad valorem duties in EPAs

- Non-ad valorem duties can be dismantled as well!

Example: EU-Japan EPA (2019) – Japan's tariff dismantling on live cattle (>300 kg)



Base rate	63,750 yen/each
------------------	-----------------

2019	2020	2021	2022	2023	2024	...	2034	2035
59,765.63 yen/each	55,781.25 yen/each	51,796.88 yen/each	47,812.50 yen/each	43,828.13 yen/each	39,843.75 yen/each		3,984.38 yen/each	Free

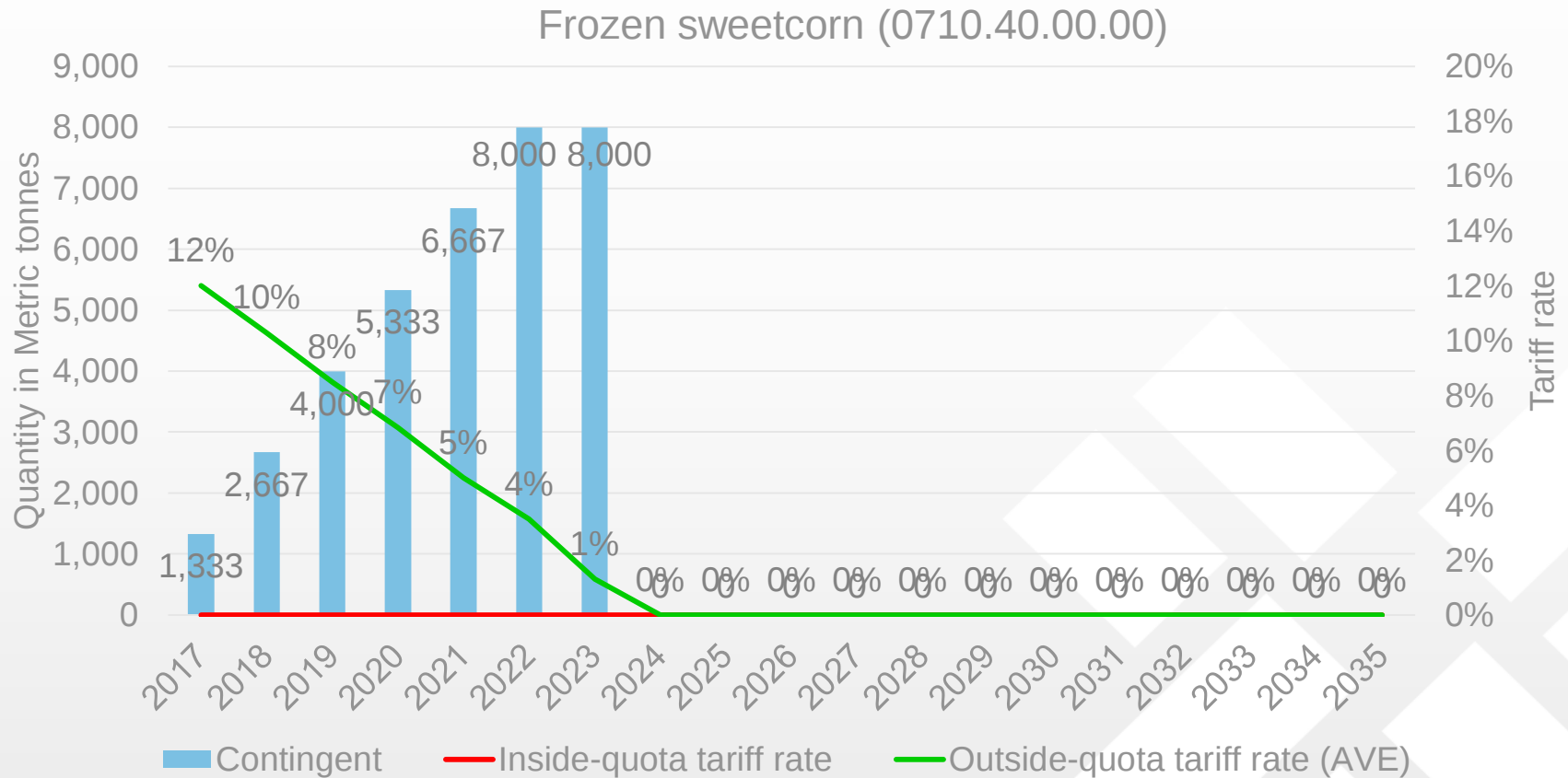
- We first apply a dismantling on non-ad valorem part, then convert into AVE

II. Tariff Dismantling Database

Tariff Rate Quotas in EPAs

- Tariff Rate Quotas can be dismantled along three dimensions
 - Quota contingent (Q)
 - Inside-quota tariff rate (IR)
 - Outside-quota tariff rate (OR)
- In some EPAs, TRQ contingent (Q) is scheduled to expand by X% every year indefinitely until infinity

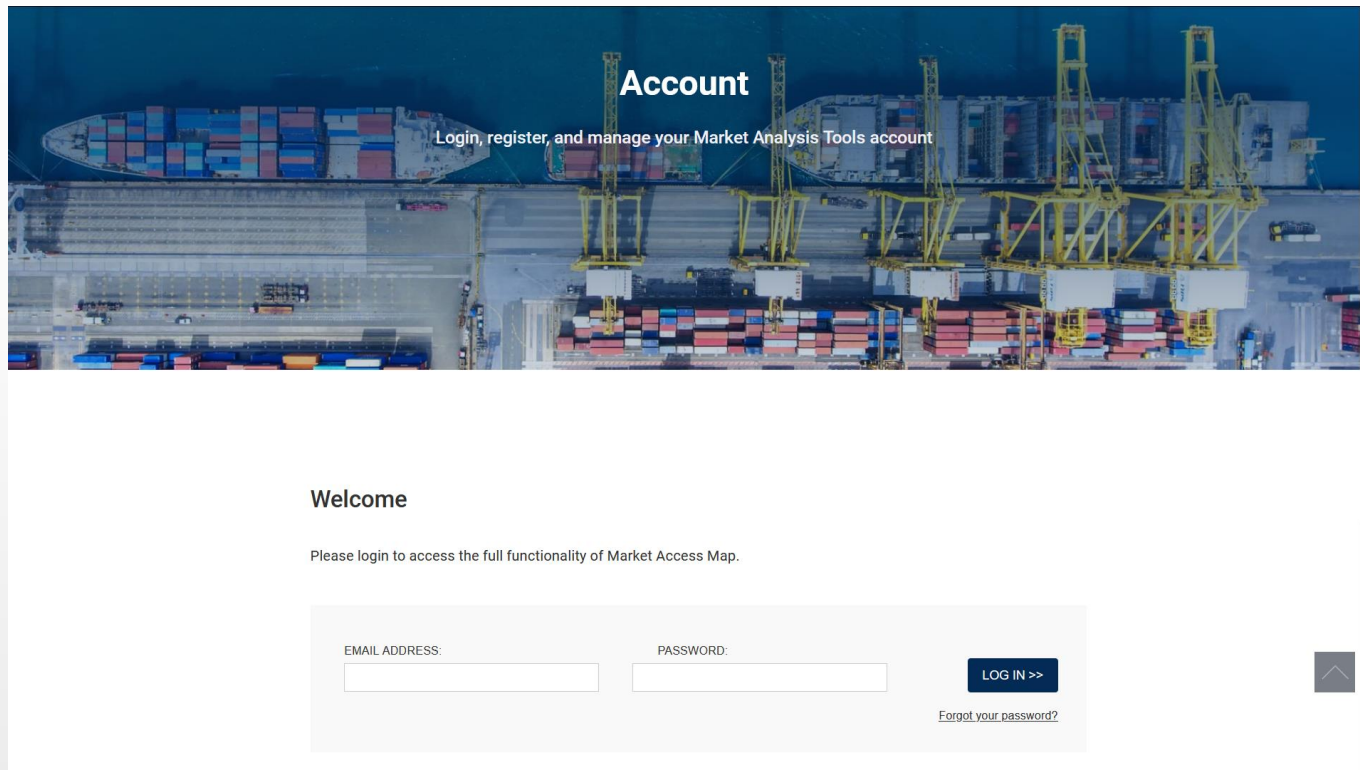
Example: EU TRQ dismantling in EU-Canada FTA (2017)



How to download tariff dismantling schedules?

Step 1. Create a free user account

→ macmap.org



Account
Login, register, and manage your Market Analysis Tools account

Welcome

Please login to access the full functionality of Market Access Map.

EMAIL ADDRESS:

PASSWORD:

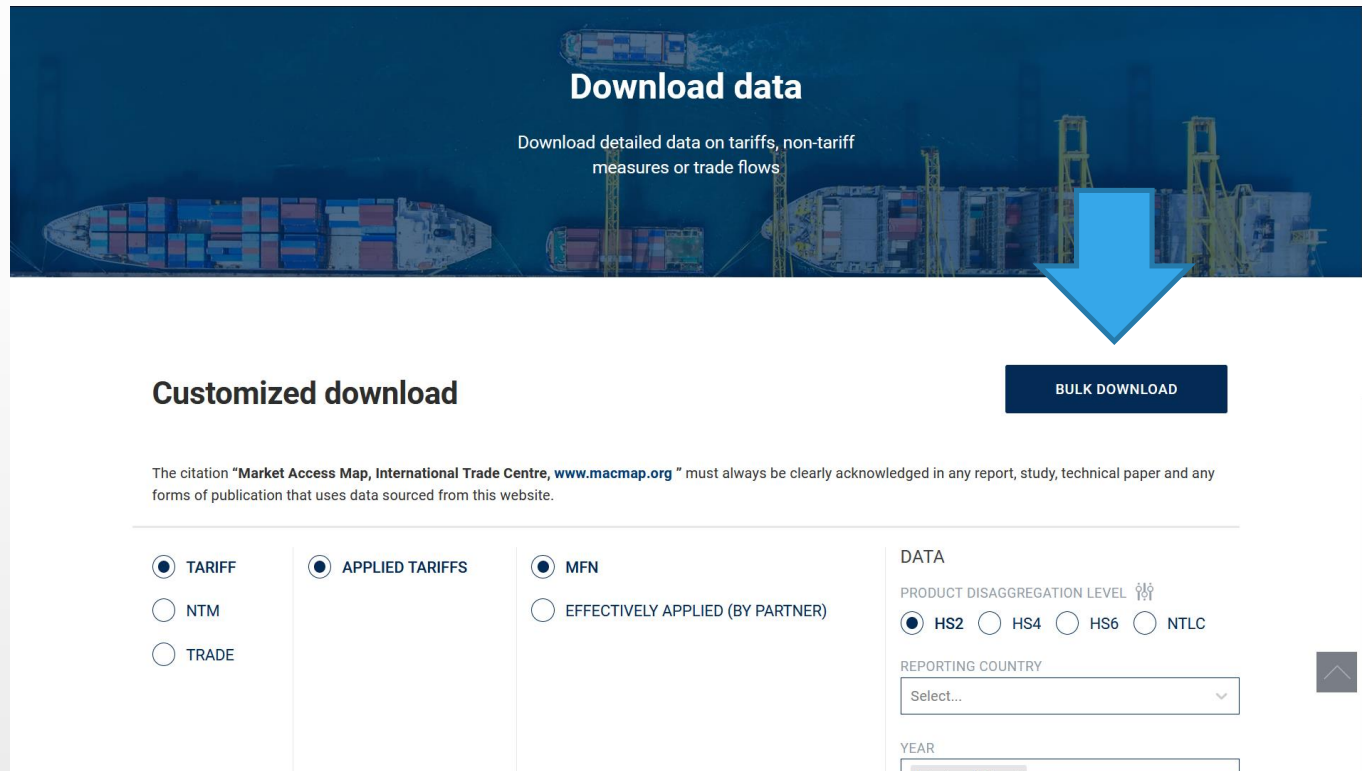
[LOG IN >>](#)

[Forgot your password?](#)

How to download tariff dismantling schedules?

Step 2. Go to Download module, then Bulk download

→ macmap.org/en/download



The screenshot shows the 'Download data' section of the Macmap.org website. At the top, there's a header with the text 'Download data' and a sub-header 'Download detailed data on tariffs, non-tariff measures or trade flows'. Below this, there's a large blue arrow pointing down to a 'BULK DOWNLOAD' button. Under the button, there's a section titled 'Customized download' with a disclaimer: 'The citation "Market Access Map, International Trade Centre, www.macmap.org" must always be clearly acknowledged in any report, study, technical paper and any forms of publication that uses data sourced from this website.'

The 'Customized download' section contains three columns of radio buttons for selection:

- ☒ TARIFF
- ☐ NTM
- ☐ TRADE

☒ APPLIED TARIFFS

☒ MFN

☐ EFFECTIVELY APPLIED (BY PARTNER)

DATA

PRODUCT DISAGGREGATION LEVEL 

☒ HS2 ☐ HS4 ☐ HS6 ☐ NTLC

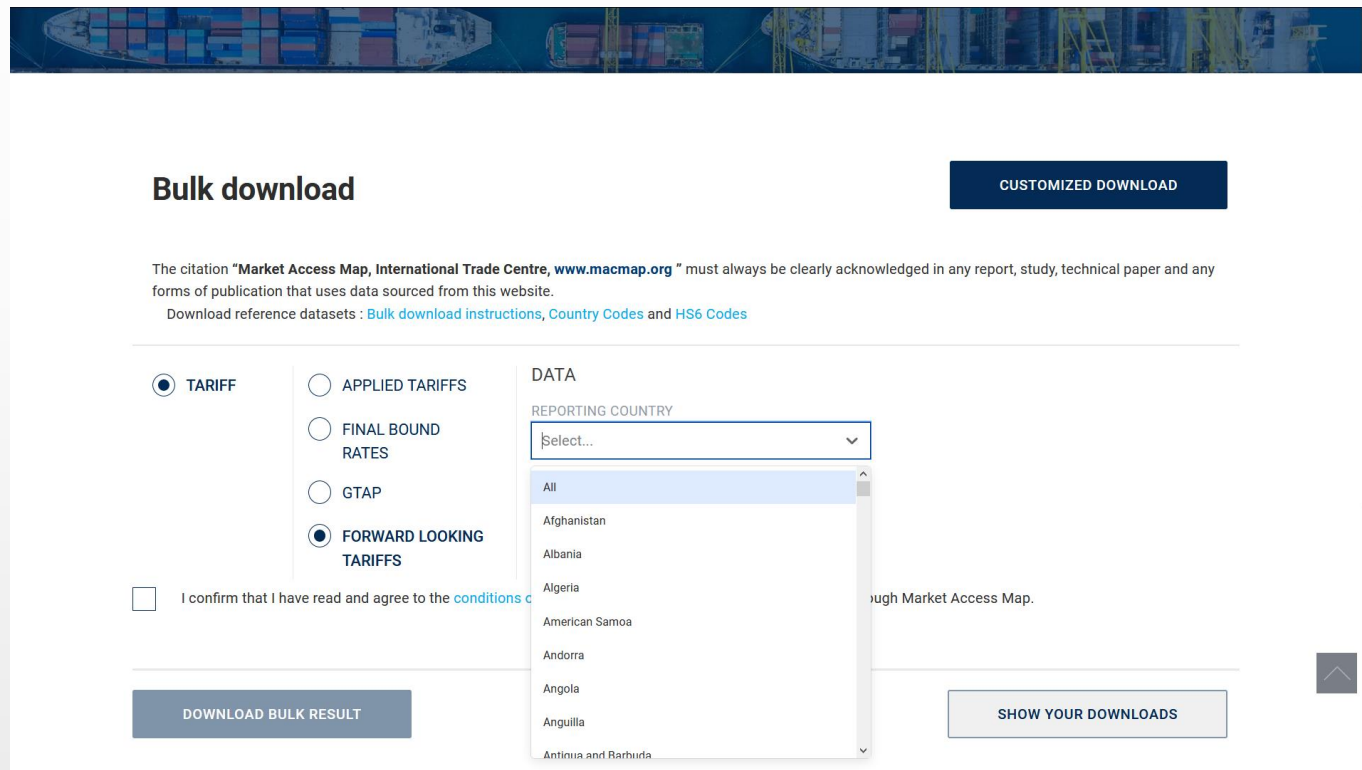
REPORTING COUNTRY

Select...

YEAR

How to download tariff dismantling schedules?

Step 3. Select “Forward looking tariffs”, then your reporting country (-ies)



The screenshot shows the 'Bulk download' section of the Market Access Map website. At the top, there is a header image of a cargo ship. Below it, the 'Bulk download' title is on the left, and a 'CUSTOMIZED DOWNLOAD' button is on the right. A paragraph of text states: 'The citation "Market Access Map, International Trade Centre, www.macmap.org" must always be clearly acknowledged in any report, study, technical paper and any forms of publication that uses data sourced from this website.' Below this, it says 'Download reference datasets : [Bulk download instructions](#), [Country Codes](#) and [HS6 Codes](#)'. The main form has two columns. The left column contains radio buttons for 'TARIFF' (selected), 'APPLIED TARIFFS', 'FINAL BOUND RATES', 'GTAP', and 'FORWARD LOOKING TARIFFS'. Below these is a checkbox for 'I confirm that I have read and agree to the [conditions of use](#)'. The right column is titled 'DATA' and contains a 'REPORTING COUNTRY' dropdown menu. The dropdown is open, showing a list of countries: 'All', 'Afghanistan', 'Albania', 'Algeria', 'American Samoa', 'Andorra', 'Angola', 'Anguilla', and 'Antigua and Barbuda'. At the bottom of the form, there is a 'DOWNLOAD BULK RESULT' button on the left and a 'SHOW YOUR DOWNLOADS' button on the right. A small 'up' arrow button is also visible on the right side of the form.

Bulk download **CUSTOMIZED DOWNLOAD**

The citation "Market Access Map, International Trade Centre, www.macmap.org" must always be clearly acknowledged in any report, study, technical paper and any forms of publication that uses data sourced from this website.

Download reference datasets : [Bulk download instructions](#), [Country Codes](#) and [HS6 Codes](#)

☒ TARIFF ☐ APPLIED TARIFFS ☐ FINAL BOUND RATES ☐ GTAP ☒ FORWARD LOOKING TARIFFS

☐ I confirm that I have read and agree to the [conditions of use](#)

DATA

REPORTING COUNTRY

Select...

All
Afghanistan
Albania
Algeria
American Samoa
Andorra
Angola
Anguilla
Antigua and Barbuda

DOWNLOAD BULK RESULT **SHOW YOUR DOWNLOADS**

How to download tariff dismantling schedules?

Step 4. Acknowledge citation obligations, then press “Download”

Bulk download

CUSTOMIZED DOWNLOAD

The citation “**Market Access Map, International Trade Centre, www.macmap.org**” must always be clearly acknowledged in any report, study, technical paper and any forms of publication that uses data sourced from this website.
Download reference datasets : [Bulk download instructions](#), [Country Codes](#) and [HS6 Codes](#)

☒ **TARIFF**

☐ APPLIED TARIFFS

☐ FINAL BOUND RATES

☐ GTAP

☒ **FORWARD LOOKING TARIFFS**

DATA
REPORTING COUNTRY

Albania x Japan x

☒ I confirm that I have read and agree to the [conditions of use](#) and publication by the data made available through Market Access Map.

DOWNLOAD BULK RESULT

SHOW YOUR DOWNLOADS

How to download tariff dismantling schedules?

Step 5. Download zipped data file and unzip it

Your downloads [PREPARE A NEW DOWNLOAD](#)

☐ Customized download
 ☒ Bulk download

TYPE	REPORTING COUNTRIES	PRODUCTS	YEAR	CREATED DATE	
Tariff	Albania, Japan			06/15/2020 13:49:10	DOWNLOAD
Tariff	Algeria, Angola, Antigua and Bar...			05/29/2020 22:06:33	DOWNLOAD
Tariff	Albania	A...		12/20/2019 09:29:40	DOWNLOAD
Tariff	All			12/11/2019 22:18:49	DOWNLOAD
Tariff	All			12/11/2019 22:16:21	DOWNLOAD
Tariff	Albania	A...		07/03/2019 17:13:42	DOWNLOAD
Tariff	Albania			06/13/2019 15:21:23	DOWNLOAD
Tariff			2014	06/13/2019 14:56:27	DOWNLOAD
Tariff	Albania, Algeria, Bahamas		Latest, 2018, 2017	06/13/2019 14:52:27	DOWNLOAD
Tariff	Afghanistan, Algeria, Andorra, An...		2018, 2017, 2016, 2015, 2014, 20...	06/13/2019 14:38:22	DOWNLOAD
Tariff	Afghanistan, Algeria, Andorra, An...		2018, 2017, 2016, 2015, 2014	06/13/2019 14:36:21	DOWNLOAD

Opening BulkDownloadResult_70503.zip

You have chosen to open:

BulkDownloadResult_70503.zip
 which is: Microsoft Edge HTML Document (30.1 MB)
 from: http://macmap-dev.itc-cci.net

What should Firefox do with this file?

☒ Open with Windows Explorer

☐ Save File

☐ Do this automatically for files like this from now on.

[OK](#)
[Cancel](#)

How to download tariff dismantling schedules?

Step 6. Open the data files

Example: File 1 “*MAcMap-JPN_fta_gtap.txt*” and File 2 “*MAcMap-JPN_fta_hs6.txt*”

File 1 (GTAP sectors)

File 2 (HS6)

MAcMap-JPN_fta_gtap.txt - Notepad											
File	Edit	Format	View	Help							
gtap_rep	reporter	gtap	Partner	gtap_par	year	ave	import	source			
JPN	392	OFD	372	IRL	2014	0.1118975353	65728	Market Access Map			
JPN	392	OFD	372	IRL	2015	0.1118975353	65728	Market Access Map			
JPN	392	OFD	372	IRL	2016	0.1118975353	65728	Market Access Map			
JPN	392	OFD	372	IRL	2017	0.1118975353	65728	Market Access Map			
JPN	392	OFD	372	IRL	2018	0.1118975353	65728	Market Access Map			
JPN	392	OFD	372	IRL	2019	0.0882145132	65728	Market Access Map			
JPN	392	OFD	372	IRL	2020	0.0829751382	65728	Market Access Map			
JPN	392	OFD	372	IRL	2021	0.0779449571	65728	Market Access Map			
JPN	392	OFD	372	IRL	2022	0.0729887286	65728	Market Access Map			
JPN	392	OFD	372	IRL	2023	0.0679578006	65728	Market Access Map			
JPN	392	OFD	372	IRL	2024	0.0650786393	65728	Market Access Map			
JPN	392	OFD	372	IRL	2025	0.0625280713	65728	Market Access Map			
JPN	392	OFD	372	IRL	2026	0.0600378262	65728	Market Access Map			
JPN	392	OFD	372	IRL	2027	0.0578165394	65728	Market Access Map			
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JPN	392	OFD	372	IRL	2029	0.0537081886	65728	Market Access Map			
JPN	392	OFD	372	IRL	2030	0.051826327	65728	Market Access Map			
JPN	392	OFD	372	IRL	2031	0.0500549053	65728	Market Access Map			
JPN	392	OFD	372	IRL	2032	0.0479514334	65728	Market Access Map			
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JPN	392	OFD	372	IRL	2034	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2035	0.0461800118	65728	Market Access Map			
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JPN	392	OFD	372	IRL	2037	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2038	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2039	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2040	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2041	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2042	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2043	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2044	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2045	0.0461800118	65728	Market Access Map			
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JPN	392	OFD	372	IRL	2049	0.0461800118	65728	Market Access Map			
JPN	392	OFD	372	IRL	2050	0.0461800118	65728	Market Access Map			

MAcMap-JPN_fta_hs6.txt - Notepad											
File	Edit	Format	View	Help							
rev	gtap_rep	reporter	hs6	gtap	Partner	gtap_par	year	ave	import	source	
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H4	JPN	392	030355	OFD	372	IRL	2016	0.1	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2017	0.1	14566	Market Access Map	
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H4	JPN	392	030355	OFD	372	IRL	2028	0.031	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2029	0.025	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2030	0.019	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2031	0.013	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2032	0.006	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2033	0	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2034	0	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2035	0	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2036	0	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2037	0	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2038	0	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2039	0	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2040	0	14566	Market Access Map	
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H4	JPN	392	030355	OFD	372	IRL	2048	0	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2049	0	14566	Market Access Map	
H4	JPN	392	030355	OFD	372	IRL	2050	0	14566	Market Access Map	

How to download tariff dismantling schedules?

List of variables

Variable	Description
gtap_rep	GTAP region (reporter)
reporter	ISO country code (reporter)
gtap	GTAP product sector
gtap_par	GTAP region (partner)
partner	ISO country code (partner)
year	Year
ave	Tariff rate (AVE)
import	Imports
source	Market Access Map
rev (<i>for HS6 file</i>)	HS revision (HS2012)
hs6 (<i>for HS6 file</i>)	6-digit HS code

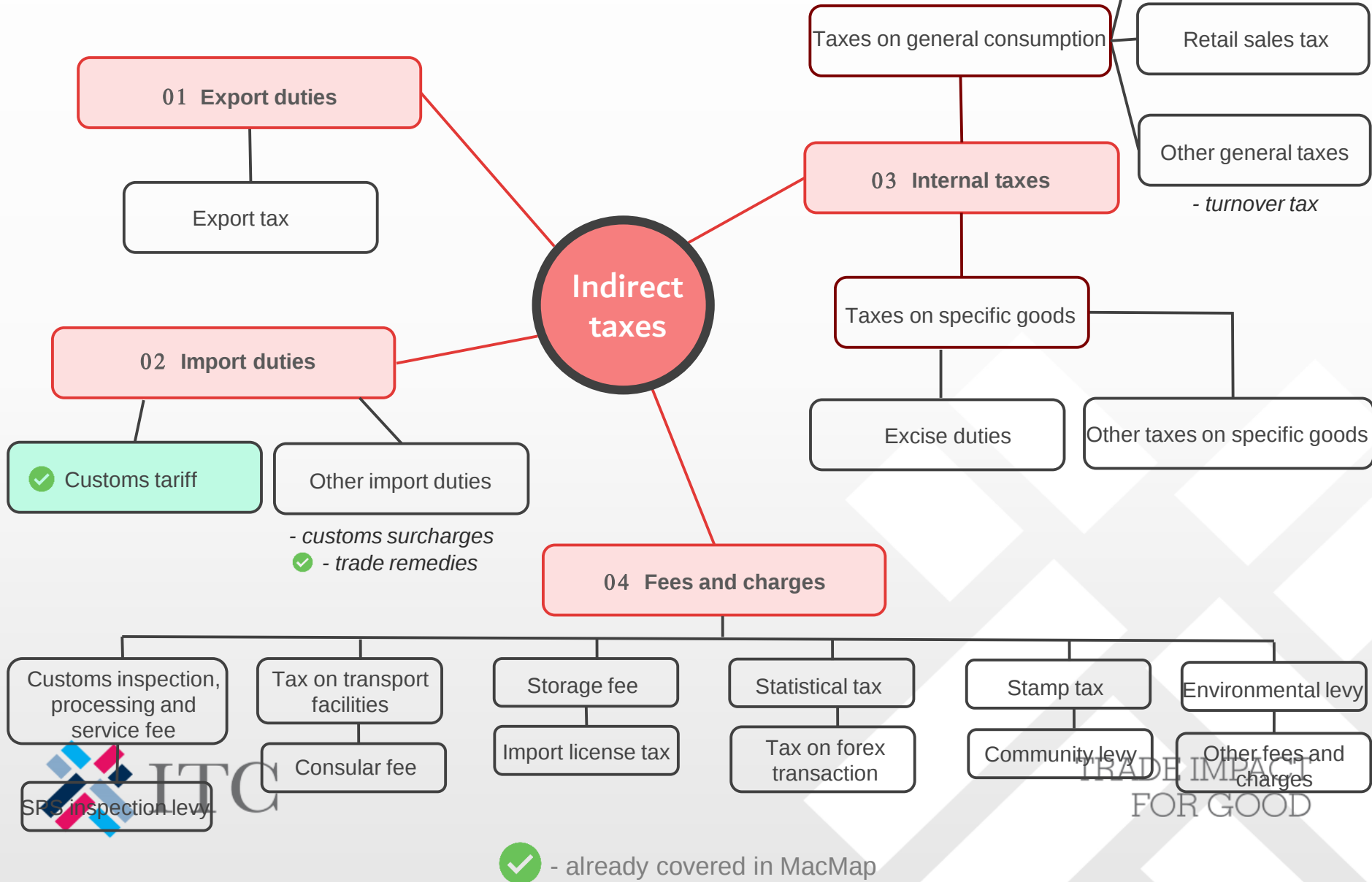
III. Future work (1/3)

- Maintenance and updates
 - New EPAs (2019/2020): US-Japan, EU-Singapore, EAEU-Iran, Korea-Central America, etc.
 - Forthcoming EPAs (2020/21): USMCA, RCEP, AfCFTA, EU-Vietnam, EU-MERCOSUR, EFTA-MERCOSUR, UK EPAs, etc.
 - GTAP 11 version (2017 baseline)
- Non-tariff dismantling schedules in EPAs
 - Staged rules of origin (e.g. autos in USMCA and EU-Japan)
 - Staged tax dismantling (e.g. Vietnam's export tax in CPTPP)
- ITC-GRIPS ongoing collaboration to collect and code all **product-specific rules of origin** in EPAs (United States, Japan, EU)

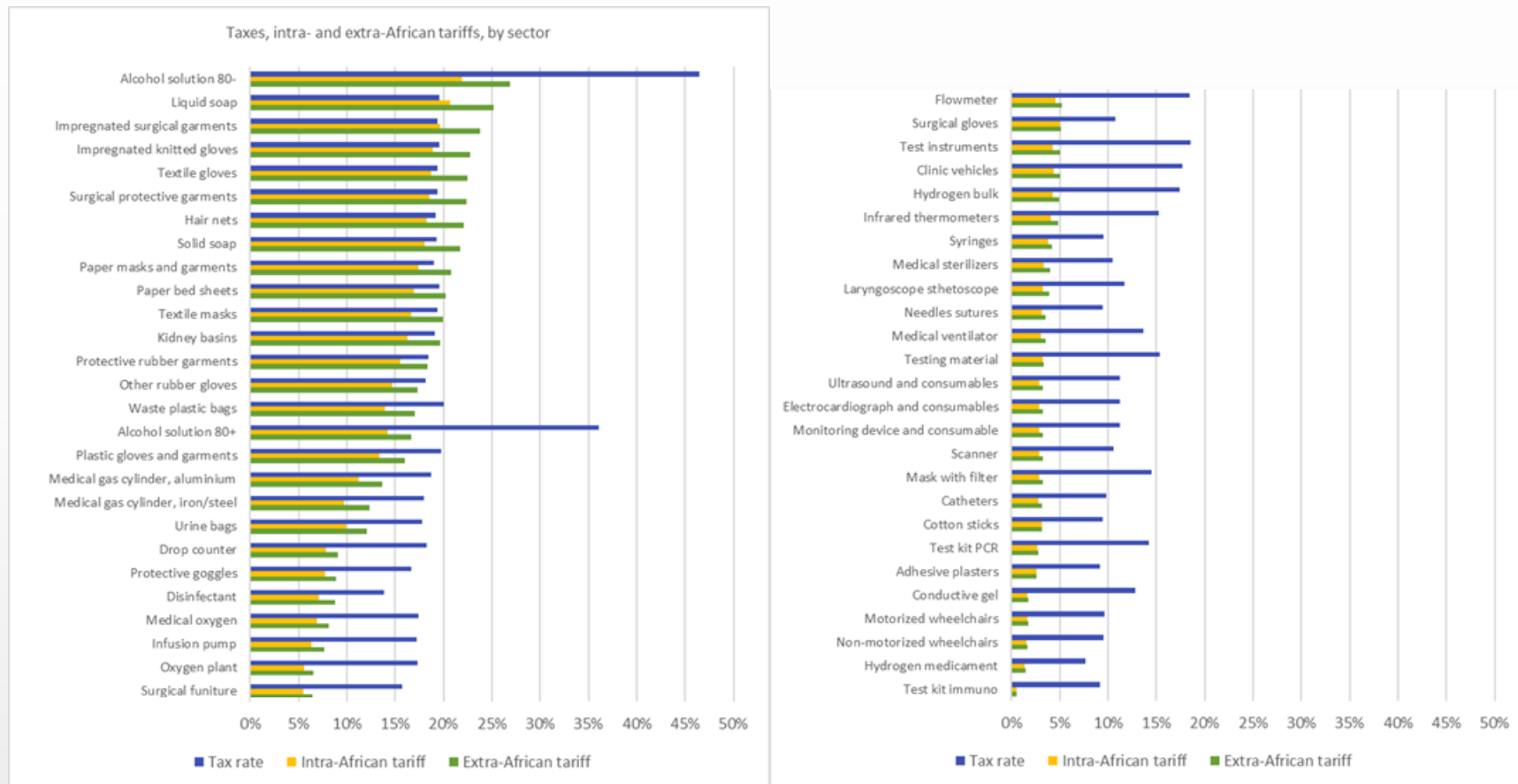
III. Future work (2/3)

- Market Access Map has started collecting **indirect taxes** at the product level (100+ countries at present)
- The new tax database complements customs tariff database and includes
 - Internal taxes, such as VAT, sales tax and excise tax
 - Other import duties, such as customs surcharges
 - Fees and charges, such as recycling levy and stamp tax
 - Export taxes
- The structure and methodologies of the new global tax database are being finalized
- The tax database will be accessible online in 2020 through Market Access Map

Indirect taxes: categories



COVID-19: average taxes vs. tariffs in Africa



Source: ITC study on medical industries in Africa related to COVID-19

Tax data complexity

- VAT tax with a list of product exemptions not specified in terms of HS codes (Example: [VAT of Vietnam](#))
- Taxes charged depending on product weight or another qualitative/quantitative characteristic (Example: [Malaysia's excise and sale taxes on vehicles](#))
- Complex formulas to assess tax (Example: [Swiss beer tax](#))
- Taxes at state and municipality levels (Example: [the US does not have a federal system of VAT](#))

III. Future work (3/3)

- Rules of Origin Facilitator incorporates **product-specific rules of origin** of 360+ trade agreements
- It will extend to cover additional 20 EU EPAs in collaboration with GRIPS
- Many companies ignore available EPA preferences and continue trading under MFN tariffs
- ITC has been comparing various rules of origin across EPAs and has been developing a restrictiveness index
- It should help estimate the share of trade that will pass under MFN despite available lower EPA tariff, and hence help estimating EPA impacts more realistically

Rules of Origin Database: Research

- ❑ Collaboration with other authors
 - ❑ Gourdon et al. (2020) – OECD-WTI ROO dataset
 - ❑ Jaime de Melo
- ❑ Application to specific problems
 - ❑ Harmonization of rules of origin on the African continent
- ❑ Quantify rules of origin
 - ❑ Restrictiveness indices

Thank You!



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Mr. Dzmitry Kniahin

Market Analyst

Trade and Market
Intelligence section (TMI)

International Trade Centre



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