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The Impacts of Japanese FTAs/EPAs

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1. Introduction

- FTAs/RTAs: 150 out of 192 with notification to the WTO are since the mid-1990s as of Mar.07
 - Increasing importance of pro-assessment and post evaluation
- Japanese EPAs (as of Jan 07)
 - In effect: Singapore (Nov.02), Mexico (Apr.05), and Malaysia (Sep.06)
 - In signing: Philippines
 - With substantive agreements: Thailand, Chile, Indonesia, and Brunei
 - Under negotiation/study: Korea, Vietnam, Australia, GCC, Switzerland, and India

1. Introduction (cont.)

- Most empirical work on Japanese EPAs or hypothetical RTAs incl. Japan: CGE model simulation analysis
 - Too new for stat. data or not concluded yet
 - E.g. Empirical literature for NAFTA with both pro&post assessment
- This paper assesses initial impacts of Japanese EPAs and discusses policy implication for EPAs/RTAs in the future
 - The Japan-Singapore EPA
 - The Japan-Mexico EPA

1. Introduction (cont.)

- Contents of the paper:
 - 1. Introduction
 - 2. Trade and FDI with EPA partners
 - 2.1 Overviews
 - 2.2 Sectoral issues on Japanese trade with Mexico
 - 2.3 Gravity model estimations on Japanese trade
 - 3. Effects of the Japan-Mexico EPA beyond trade liberalization
 - 4. Concluding remarks (with policy implication)

2.1 Trade, FDI and EPAs: Overview

Singapore (Tab.1)

- Trade ↑ but actual tariff removal by EPA is quite limited
 - Commodities committed to zero tariff under the WTO/EPA for SGP: 974/5,859 out of 5,859 in all
 - => actual tariff removal: 4,885(=5,859-974)? → 4
 - Already zero on a MFN basis, regardless of whether bounded or not under the WTO
 - Commodities committed to zero tariff under the WTO/EPA for JPN: 428/486 out of 2,277 in agri.
 - => actual tariff removal: 58 (=486-428)? \rightarrow 0
 - Already zero on a MFN basis
 - In non-agri., immediate tariff removal except 10 in petrochemicals with phasing out tariffs and 294 excluded from the list of tariff removal

2.1 Trade, FDI and EPAs: Overview (cont.) Mexico

- Features of trade
 - A large amount of trade bet. JPN and MEX via US
 - A significant portion of exports from JPN to MEX: "Maquiladora imports" or "other temporary imports"
 - In 2005, less than 40% goes to Mexican consumers
- Trade, particularly on the export side ↑ with EPA in effect (Tab.2)
 - From US\$ 8 bil. in 2001 to13 bil. in 2005 and 15 bil. in 2006
 - Major sectors: electric machinery (1.6 times of those in 2001), transport equipment (3.8 times), and precision machinery (4.2 times)

2.1 Trade, FDI and EPAs: Overview (cont.)

Mexico

- Investment
 - FDI on the BOP basis ↑ in 2005 and 2006, mainly in transport equipment (Tab.3)
 - FDI (after signing EPA) aims at (Tab.A.1)
 - i) Expanding production of built-up (BU) cars in MEX
 - ii)Establishing affiliates for sales in MEX by Japanese automobile manufacturers without local production sites ← introduction of zero-tariff import quota for BU cars under the EPA
 - iii) Expanding production of flat LCD TVs in MEX
 - ← increased demand in U.S. market

2.2 Impacts on Sec. Trade with MEX Exports

- Significant effects of tariff reduction by EPA are limited to exports of built-up (BU) cars (Tab.4)
- ←Zero-tariff import quota for BU cars under the EPA allocated to local&non-local producers (Tab.5)

	Zero tariff o	-	Zero tariff quota under EPA			
Automobile manufactures	2005	2006	2005F/Y	2006F/Y		
Sub-total: companies with local production	58,218	65,305	46,599	45,270		
Nissan	27,218	29,305	23,718	23,029		
Honda	5,000	9,000	8,900	8,652		
Toyota	16,000	17,000	6,664	6,487		
Mitsubishi*	10,000	10,000	7,317	7,102		
Sub-total: companies without local production	0	0	8,240	11,315		
Mazda	0	0	3,340	5,502		
Suzuki	0	0	3,000	4,092		
Isuzu	0	0	1,900	1,221		
Subaru	0	0	0	500		
Total	58,218	65,305	54,839	56,585		

^{*}Mitsubishi (non-local producer) partially uses the quota allocated to DaimlerChrysler in the same business alliance.

2.2 Impacts on Sec. Trade with MEX (cont.)

Exports

- Various parts of electric mach. and transport equip. ↑
 but most of them are already with zero tariff on a MFN basis or under PROSEC (Tab.4)
- => EPA may not be a major factor underling the rapid growth in their exports
- "Reverse phenomena" of tariffs (Tab.4&6)
 - EPA tariffs higher than MFN tariffs
 - Phasing out tariff removal by EPA and reduction of MFN tariffs
 - Base rates of phasing out tariffs: MFN tariffs in 2003
 - MFN tariff reduction: Dec.2004 (9,366) and Sep.2006 (6,089)
 - As of Jan. 2007, about a half of commodities in mining and manufacturing (about 10,000)
 - NAFTA: 0, EU: 3 in 2006 and 0 in 2007

Table 4 Major commodities of Japanese exports to Mexico and their tariffs in Mexico

	Sectora	al share	in total	Trade i (2004=		Tariffs for major commodities in each HS4-digit cat as of January, 2006				
HS Commodity	2004	2005	2006	2005	2006	MFN	PROSEC	EPA		
8529 Parts specific for some TV and radio	5.59	10.77	14.00	238	362	0%	0%	0%		
8703 Automobiles (passenger cars)	6.83	7.68	7.33	139	155	50%	Excl.	0%/20-30%		
8542 Electronic integrated circuits	7.59	6.13	5.18	100	99	0%	0%	0%		
8708 Parts for automobiles	4.03	4.64	7.57	142	271	10%, 15%	0%, 3%	0%, 11.7%, 14.4%, 16.29		
9013 Liquid crystal devices, lasers, etc	2.63	4.52	5.29	213	291	0%	0%	0%		
8532 Consender	3.46	3.80	2.53	136	105	0%, 10%, 15%	0%	11.7%, 16.2%		
8536 Apparatus for switching/protecting electrical circu	its 3.29	3.67	3.40	138	149	10%	0%	9%, 11.7%		
8473 Parts for office machines (computer)	3.11	3.03	2.67	120	124	0%	0%	0%		
8541 Semi-conductor devices	2.64	2.78	2.76	130	151	0%	0%	0%		
8507 Storage battery	2.11	2.32	1.70	136	117	0%	0%	0%		
8479 Machines with specific functions	3.80	1.83	1.88	60	72	0%, 10%	0%	0%		
7210 Flat-rolled products of iron and non-alloy steel	2.20	1.83	1.68	103	110	0%, 14%	0%, 3%	0%, 18%, 25%		
8471 Automatic data processing machines and the units	2.29	1.61	0.95	87	60	0%	0%	0%		
8525 Transmission apparatus	1.70	1.53	1.08	111	92	0%	0%	0%		
3926 Plastic products (other)	1.75	1.47	1.29	104	107	15%, 20%	0%	14.4%, 16.2%, 18.49		
8504 Electrical transformers	1.17	1.32	1.15	140	142	0%, 10%, 15%, 20%	6 0%	0%, 11.7%, 14.4%, 16.29		
8704 Trucks	1.11	1.24	1.13	137	147	50%, ST for use	l Excl.	0%/20-30%, excl. use		
8523 Recording media	1.22	1.15	0.98	116	116	0%	0%	0%		
8538 Parts specific for some electrical apparatus	0.99	1.07	0.91	134	133	10%	0%	0%, 11.7%		
8409 Parts for engines	1.05	1.08	0.82	127	112	10%	0%	0%, 10.4%, 11.7%		
8533 Electrical resistors	0.90	0.97	0.95	134	153	10%	0%	0%, 11.7%		
8502 Electric generator	0.01	0.85	0.04	7829	410	0%, 10%, 20%	0%	0%, 11.7%, 20.7%		
7225 Flat-rolled products of other alloy steel	0.75	0.83	1.26	136	241	0%, 9%	0%, 3%	0%, 13%, 18%		
9031 Measuring or checking instruments	0.71	0.83	0.75	144	152	0%	0%	0%		
Total	100.00	100.00	100.00	124	145					

Table 6 MFN tariffs and EPA tariffs imposed by Mexico on imports from Japan

EPA	EPA	MFN tariff as of Jan.					EPA tariff							
category	base rate	2007	2005F/Y	2006F/Y	2007F/Y	2008F/Y	2009F/Y	2010F/Y	2011F/Y	2012F/Y	2013F/Y	2014F/Y	2015F/Y	
B2	-	10	2.6	2.6	2.6	2.6	2.6	0	-					
B4	18	10	13.5	9	4.5	0			110					
B5	10	7	8	6	4	2	0							
	13	7	10.4	7.8	5.2	2.6	0							
	15	10	12	9	6	3	0							
	18	10	14.4	10.8	7.2	3.6	0							
	20	7	16	12	8	4	0							
4	23	15	18.4	13.8	9.2	4.6	0							
	30	20	24	18	12	6	0							
B6	18	10	15	12	9	6	3	0						
	18	15	15	12	9	6	3	0						
	23	20	19.2	15.3	11.5	7.7	3.8	0						
	30	20	25	20	15	10	5	0						
B7	13	50	11.1	9.3	7.4	5.6	3.7	1.9	0					
	20		17.1	14.3	11.4	8.6	5.7	2.9	0					
	23	50	19.7	16.4	13.1	9.9	6.6	3.3	0					
	30	50	25.7	21.4	17.1	12.9	8.6	4.3	0					
B8	13		11.4	9.8	8.1	6.5	4.9	3.3	1.6	0				
	18		15.8	13.5	11.3	9	6.8	4.5	2.3	0				
C	10		9	8	7	6	5	4	3	2	1	0		
	10	9	9	8	7	6	5	4	3	2	1	0		
	13		11.7	10.4	9.1	7.8	6.5	5.2	3.9	2.6	1.3	0		
	13		11.7	10.4	9.1	7.8	6.5	5.2	3.9	2.6	1.3	0		
	15	9	13.5	12	10.5	9	7.5	6	4.5	3	1.5	0		
	15		13.5	12	10.5	9	7.5	6	4.5	3	1.5	0		
,	18	10	16.2	14.4	12.6	10.8	9	7.2	5.4	3.6	1.8	0		
	23		20.7	18.4	16.1	13.8	11.5	9.2	6.9	4.6	2.3	0		
	30		27	24	21	18	15	12	9	6	3	0		
D	7		7	7	7	7	7	7	7	7	7	7	0	
	13	7	13	13	13	13	13	13	13	13	13	13	0	
	18	5	18	18	18	18	18	18	18	18	18	18	0	
	18	10	18	18	18	18	18	18	18	18	18	18	110	

Note: The table includes only tariff lines with MFN tariff reduction on December 31, 2004 (9336 tariff lines) and/or September 30, 2006 (6089 tariff lines). EPA tariffs lighlighted are those beyond MFN tariffs as of January 2007.

2.2 Impacts on Sec. Trade with MEX (cont.) Imports (Tab.7)

- Features of non-immediate tariff elimination in EPA:
 - I) Introduction of import quota with in-quota tariff at the level of half of MFN tariffs
 - II) Phasing out tariffs over 3-10 years
 - III) Tariff reduction from 3%/3.5% to 0%
 - **IV) Exclusion**
- Beef: the most outstanding growth in imports
 - Under EPA, introduction of zero import tariff quota of 10t
 - Import prohibition of U.S. beef due to BSE → One of the substituting import sources
- Pork: the largest share among agri. imports
 - Some of fresh, chilled, or frozen pork and prepared or preserved pork (excl. ham, bacon, and press ham etc.): did not increase in 2005 but increased in 2006
 - Under EPA, introduction of import tariff quota, combined with price-differential tariff, and excluded commodities

2.2 Impacts on Sec. Trade with MEX (cont.)

Imports

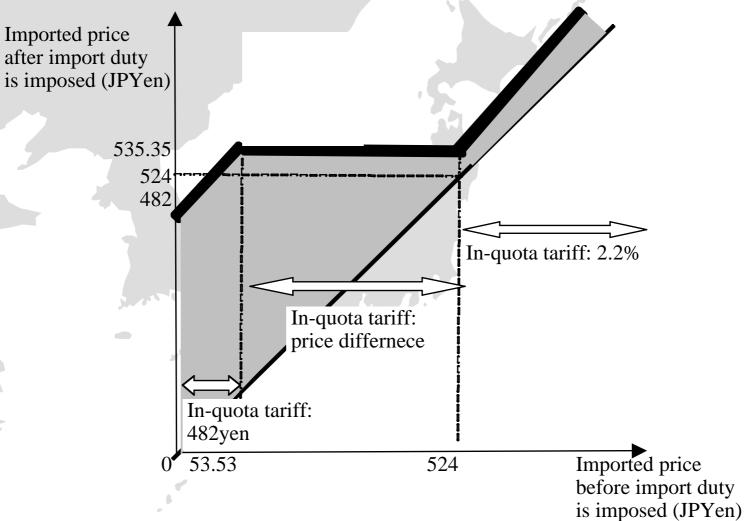
- Pork (cont.):
 - Some fresh, chilled, or frozen ↑: in-quota tariff of 2.2%
 - Prepared or preserved (excl. ham, bacon, press ham etc) ↑:
 excluded from the list of tariff removal
- Avocado, mango, frozen shrimps etc.:
 - Tariff elimination from 3%/1%
 - Can be easily absorbed in the fluctuation of exchange rates
 - Announcement effects of the EPA
- Orange juice
 - In-quota tariff: 12.75% (half of MFN tariff)
 - Preferential margin: 12.75%
- => Announcement effects and a very limited degree of the effects of tariff reduction on some imports by introducing import tariff quota with in-quota tariffs lower than MFN tariffs

	2004				2005			2006			Tariffs		
Commodity	Values (bil JPY)	% in agri.	(% in total)	Values (bil JPY)	% in agri.	(% in total)	Values (bil JPY)	% in agri.	(% in total)	WTO	Preferential	Temporary	EPA ^{viii)}
Total	234.8		(100.00)	279.9	C IIA	(100.00)	328.1		(100.00)				
Agriculture total (HS1-HS24)	55.5	100.00	(23.64)	60.4	100.00	(21.58)	64.6	100.00	(19.67)				
Pork	19.9	35.87	(8.48)	19.9	32.89	(7.10)	22.4	34.66	(6.83)				
Pork (fresh, chilled, or frozen)	0.6	1.12	(0.26)	0.4	0.62	(0.13)	1.6	2.48	(0.49)	(482yen/kg)		*	**
2	19.1	34.47	(8.15)	19.2	31.71	(6.84)	20.2	31.33	(6.17)	(4.3%)		4.3%	2.2%/4.3% ⁱ⁾
Internal organs	0.0	0.02	(0.01)	0.0	0.01	(0.00)	0.0	0.04	(0.01)	8.50%	4.3%/*Free		4.3%
Prepared or preserved pork (ham, bacon, press ham)	0.0	0.01	(0.00)	0.0	0.02	(0.00)	0.0	0.00	(0.00)	(8.5%)		8.5%	4.3%/8.5% ⁱⁱ⁾
Prepared or preserved pork (excl. ham, bacon, press ham)	0.1	0.20	(0.05)	0.1	0.25	(0.05)	0.4	0.57	(0.11)	20%			Excluded
Prepared or preserved pork (simply boiled in water)	0.0	0.04	(0.01)	0.2	0.28	(0.06)	0.2	0.25	(0.05)	Free			Free
Beef	1.7	3.03	(0.72)	6.4	10.59	(2.29)	5.2	8.12	(1.60)				;;;)
Beef (fresh, chilled, or frozen)	1.4	2.47	(0.58)	5.4	8.97	(1.94)	4.1	6.31	(1.24)	(50%)		38.5%	0%~/50% ⁱⁱⁱ⁾
Tongues and livers	0.3	0.57	(0.13)	1.0	1.62	(0.35)	1.2	1.81	(0.36)	12.8%			0%~/12.8% ⁱⁱⁱ⁾
Avocado	6.2	11.09	(2.62)	6.4	10.55	(2.28)	6.8	10.56	(2.08)	3%	*Free		Free
Tunas	6.1	10.99	(2.60)	6.4	10.53	(2.27)	6.1	9.44	(1.86)				
Bluefin tunas	6.1	10.99	(2.60)	6.3	10.42	(2.25)	5.4	8.39	(1.65)	3.5%			Excluded
Yellowfin tunas	0.0	0.02	(0.00)	0.1	0.11	(0.02)	0.2	0.24	(0.05)	3.5%			Free ^{iv)}
Melon	3.4	6.05	(1.43)	2.8	4.70	(1.02)	2.6	4.04	(0.79)	6%		From	6% x 6 times ^{v)}
Coffee	1.6	2.85	(0.67)	1.9	3.10	(0.67)	1.0	1.60	(0.32)				
Coffee, not roasted	1.6	2.81	(0.66)	1.8	3.05	(0.66)	1.0	1.49	(0.29)	Free			Free
Coffee, roasted	0.0	0.04	(0.01)	0.0	0.04	(0.01)	0.1	0.11	(0.02)	12%	10%/*Free	From	10% x 4 times ^{v)}
Pumpkins	1.8	3.29	(0.78)	1.8	2.94	(0.63)	2.6	4.05	(0.80)	3%	*Free		Free
Alcoholic beverages	1.6	2.97	(0.70)	1.7	2.79	(0.60)	2.0	3.17	(0.62)				
Beer	0.8	1.37	(0.32)	0.8	1.33	(0.29)	1.0	1.61	(0.32)	Free			Free
Distilling alcohol (excl. used for making alcoholic beverage)	0.8	1.47	(0.35)	0.8	1.34	(0.29)	1.0	1.50	(0.29)	16%	25.2yen/l/* Free		Excluded vi)
Liqueurs and cordials	0.1	0.13	(0.03)	0.1	0.12	(0.03)	0.0	0.06	(0.01)	126yen/l			Free
Asparagus	1.5	2.69	(0.64)	1.6	2.58	(0.56)	1.5	2.34	(0.46)	3%			Free
Mango	1.0	1.87	(0.44)	1.3	2,22	(0.48)	1.6	2.48	(0.49)	3%	Free		Free
Limes	0.9	1.66	(0.39)	0.9	1.54	(0.33)	1.0	1.61	(0.32)				Free
Sardines (of sardinops spp.)	0.4	0.74	(0.17)	0.8	1.25	(0.27)	0.4	0.56	(0.11)				***
Shrimps and prawns (frozen)	0.6	1.01	(0.24)	0.7	1.13	(0.24)	0.8	1.23	(0.24)	1%	*Free		Free
Grapefruit juice Not containing added sugar with more than 10% of sucrose by weight and a Brix value over 20)	0.0	0.00	(0.00)	0.3	0.58	(0.12)	0.2	0.34	(0.07)	25.5%		From 25	.5% x 8 times ^{v)}
Frozen orange juice (not containing added sugar with more than 10% of sucrose by weight)	0.2	0.37	(0.09)	0.3	0.51	(0.11)	0.4	0.55	(0.11)	25.5%		12	2.75%/25.5% ^{vii)}

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Figure 1 Imported prices of pork per kilogram before and after import duty is imposed



Notes: pork is fresh, chilled, or frozen. Import duty in shadows is in-quota tariff under EPA.

2.3 Impacts on Trade: Gravity Model Estimations

- Formally investigates impacts of EPA on trade, considering basic economic conditions/relationships
 - Distance, size of the economy, and income gaps
- 1. Conducts gravity model estimations and 2. examines the differentials between actual and fitted values of trade before and after the enforcement of EPA
 - Fitted values: theoretical levels of trade predicted by our gravity estimations

2.3 Impacts on Trade: Gravity model Estimations (cont.)

Equation of gravity model for Japanese EX/IM

$$In(Trade_i^t) = \beta_0 + \beta_1 \ln(Dist_i^t) + \beta_2 \ln(GDP_i^t) + \beta_3 \ln(GDPPCgap_i^t) + \varepsilon$$

Trade: real Japanese EX/IM (using U.S. wholesale price index), Dist: distance, GDP: real GDP, GDPPCgap: absolute value of the difference in real GDPPC, i: country, and t: year

- Sample set:
 - Countries with EX/IM of no less than 0.01% of Japanese total EX/IM in the corresponding year
 - Pooled data from 2001 to 2005

2.3 Impacts on Trade: Gravity model Estimations (cont.)

- Results of gravity estimations (Tab.8)
 - Japan has larger (smaller) amount of trade with countries located closer to (far from) Japan, countries with larger (smaller) economic size,& countries with smaller (larger) income gap
- Differentials bet. actual and fitted values of trade and differential ratios (Tab.9)
 - SGP: little direct impact on trade
 - MEX: positive impacts on trade, particularly on exports

Table 9 Differentials between fitted and actual trade values and differential ratios

		Singa	pore	G	Mexico						
	Exp	Exports Imports				Exp	orts	Imports			
	Millions	Ratio to	Millions	Ratio to		Millions	Ratio to	Millions	Ratio to		
	US\$	fitted	US\$	fitted		US\$	fitted	US\$	fitted		
	(real)	value	(real)	value		(real)	value	(real)	value		
2001	12,713	6.87	3,932	2.81		4,906	1.80	-473	-0.19		
2002	12,415	6.47	3,607	2.48		6,256	2.29	-660	-0.27		
2003	12,313	6.27	3,735	2.51		4,195	1.52	-788	-0.31		
2004	14,252	6.79	4,114	2.56	•	6,332	2.24	-600	-0.23		
2005	13,297	6.06	3,940	2.34		7,587	2.63	-496	-0.19		
2006	-	_	-	-		9,283	3.14	-336	-0.12		

3. Impacts Beyond Tariff Removal

- Some important outcomes of the JPN-MEX EPA beyond tariff removal
 - I) Improvement in business environment through bilateral consultations at a committee for business environment
 - II) Possible participation in international bidding of government procurement
 - III)Change in logistics of trade bet. JPN and MEX

3. Impacts Beyond Tariff Removal (cont.)

I. Business environment and EPA

- Establishes a committee for business environment, involving privates sectors
 - Nippon Keidanren, JETRO, JMA (about 70 member), and Camara Japonesa de Comercio e Industria de Mexico (over 180 member)
- Reviews follow issues raised at a committee in the previous year
- Issues from JPN: i) security, ii) immigration control, iii) intellectual property right, iv) infrastructure (transportation), v) debt collection, & vi) competitiveness-related
- Issues from MEX: quarantine of agri. imports in JPN

3. Impacts Beyond Tariff Removal (cont.) *Major improvement:*

- Security at International Airport in Mexico City
 - Before EPA, no cooperation bet. federal police (inside of the airport) and municipal police (outside)
- Immigration control, on the border near Otay (U.S.)
 - Complicated procedures and inappropriate attitude of officials of INM
 - Rationalized procedure for tourist visa, abolishment of invitation letter, and establishment of a new branch office of INM near Otay
 - => Request: immediate establishment of a second border of Otay to facilitate transportation of products produced in Tijuana (MEX)
- Direct flight services between Narita and Mexico City via Tijuana, where most JPN firms are located
 - Change in destination from Nagoya to Narita

3. Impacts Beyond Tariff Removal (cont.)

II. Government procurement and EPA

- Gov. procurement in MEX: domestic
 - Orders from CFE, PEMEX, and IMSS
- International bidding: allowed among FTA/EPA member countries
- ⇒ Japanese firms have finally obtained a right to participate in gov. procurement under the same conditions as firms of other FTA/EPA partners incl. U.S. and EU

E.g. The Mitsubishi Heavy Industries, LTD: a full-turnkey order from CFE

3. Impacts Beyond Tariff Removal (cont.)

III. Change in logistics for major agri. imports such as pork and avocado

- In most cases, Japanese trading companies in U.S. used to import from MEX and export to JPN
- Since EPA in effect, commercial transactions recorded as exports to JPN tend to increase even if they are physically exported from MEX to JPN via US
 - Destinations must be identified to obtain a certificate of the rules of origin required to utilize EPA tariffs in JPN
 - Mexican companies have been more actively involved in direct commercial transactions

4. Concluding Remarks

- Our gravity model estimations as well as detailed analysis on trade and actual tariff reduction by EPA
 - SGP: almost no direct impact on trade with quite limited actual reduction of tariffs by EPA
 - MEX: a certain degree of the positive impacts of EPA on trade (and investment), particularly on exports of BU cars
 - More significant effects of EPA on trade are expected in the future mostly after the problem of "reverse phenomena" of tariffs is solved
- Effects beyond tariff removal
 - Improvement in business environment, international bidding of gov. procurement, and change in logistics of trade

4. Concluding Remarks (cont.)

- In designing FTAs/EPAs in the future
 - Possible abuse of phasing out tariffs under FTAs/EPAs must be considered, particularly when countries have higher MFN tariffs
 - Creates confusing situation for exporters
 - Postpones the possible effects of EPAs
 - A simple structure of tariffs is desired, rather than a complicated structure of tariffs
 - Price-differential tariffs, specific tariffs, seasonal tariffs, import tariff quota, and exclusion from the list of tariff removal
 - If administrative procedure were costly and preferential margin were small, actual utilization of EPA tariffs would be low

4. Concluding Remarks (cont.)

- In designing FTAs/EPAs in the future (cont.)
 - Essential to create and effectively utilize a channel such as a committee for business environment under the JPN-MEX EPA, particularly for FTAs/EPAs with countries having a lot of Japanese investment
- A possibility that trade liberalization by FTAs/RTAs sometimes accelerates trade liberalization on a multilateral basis
 - The case of Mexico
 - Trade liberalization and FDI