

PSE Analysis and Implications for RTAs in Selected ASEAN countries:

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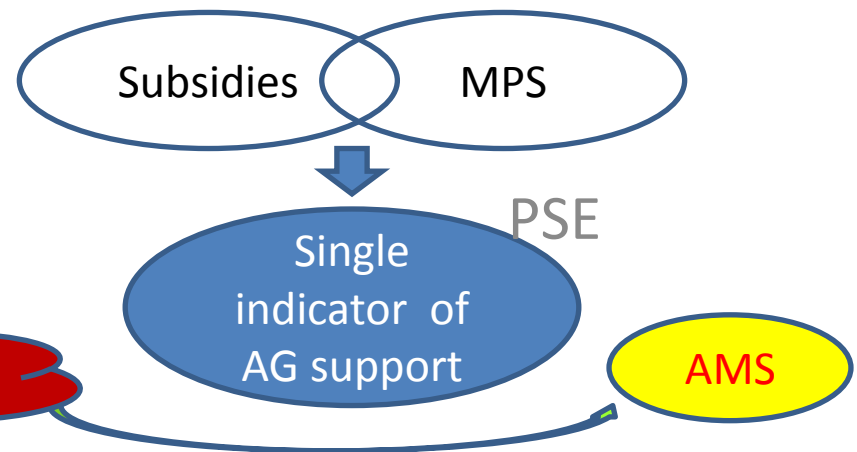
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A considerable number of this PPT slides have been taken or modified from the author's previous presentation made for the seminar organized by the PRIMAFF Japan in March 2003

PSE Analysis: Background

- Started in the early 1980s by the OECD based on T. Jostling's study
- to capture the rough magnitude of policy transfers arising from AG policies
- Among 3 actors (producers, consumers, & Govt.)
- that would cause over-production and/or under-consumption
- and thus distort intl. trade
- Basic concept comprises PSE, CSE, GSSE, and TSE
- Key is the inclusion of MPS (market price support) in AG support measurement
- Which has enabled the estimation of net total transfers among 3 actors



Root cause of AG trade war is domestic support!

PSE Analysis

Basic Concept & Methodology

PSE indicators try to measure the annual monetary value of **gross transfers** arising from policy measures that support agriculture, *regardless of their nature, objectives or impacts on production & income*:

PSE

Producer support estimate

- **from** consumers & taxpayers
- **to** AG producers individually

CSE

Consumer support estimate

- **from** AG producers & tax payers
- **to** consumers of AG commodities

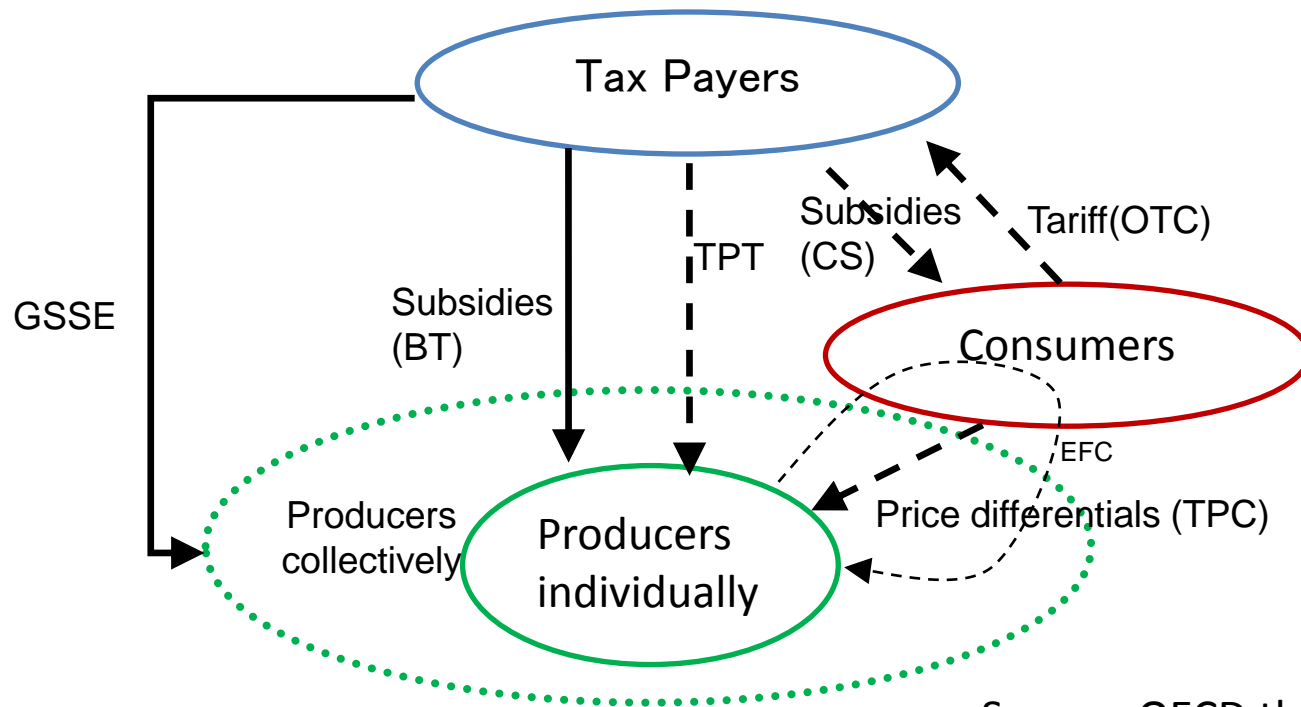
GSSE

General service support estimate

- **From** taxpayers
- **to** general services provided to AG producers collectively

TSE (Total Support Estimate) net of double counting)

Basic flows of Transfers arising from policies



Source: OECD the PES manual (partly modified)

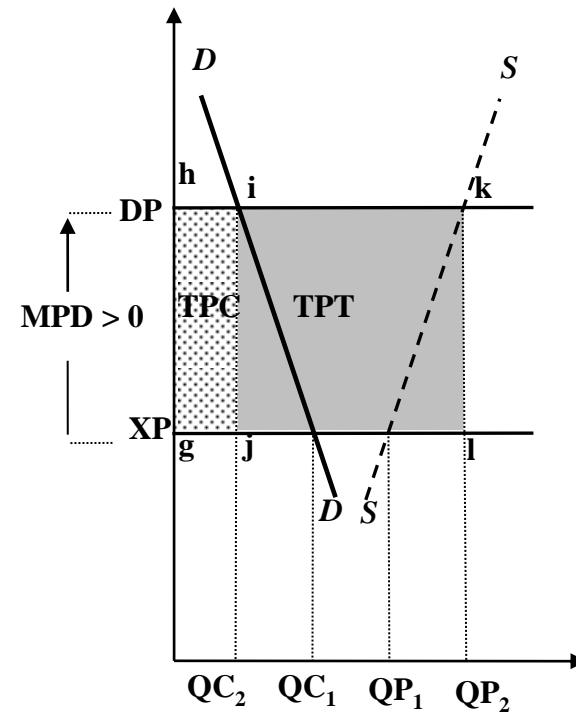
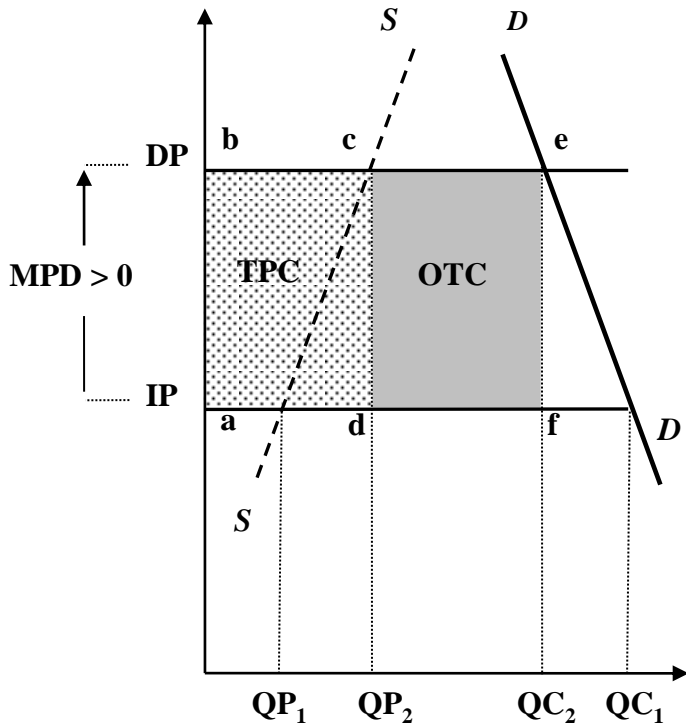
BT: budgetary transfers,
 TPT: Transfers to producers from tax payers
 CS: consumer subsidies
 TPC: Transfers to producers from consumers
 OTC: other transfers from consumers
 EFC: Excess feed costs

- Dotted line: implicit transfers from MPS (market price support)
- Direction of arrows is reversed if transfers are negative

Transfers through MPS

Imported commodity

Exported commodity

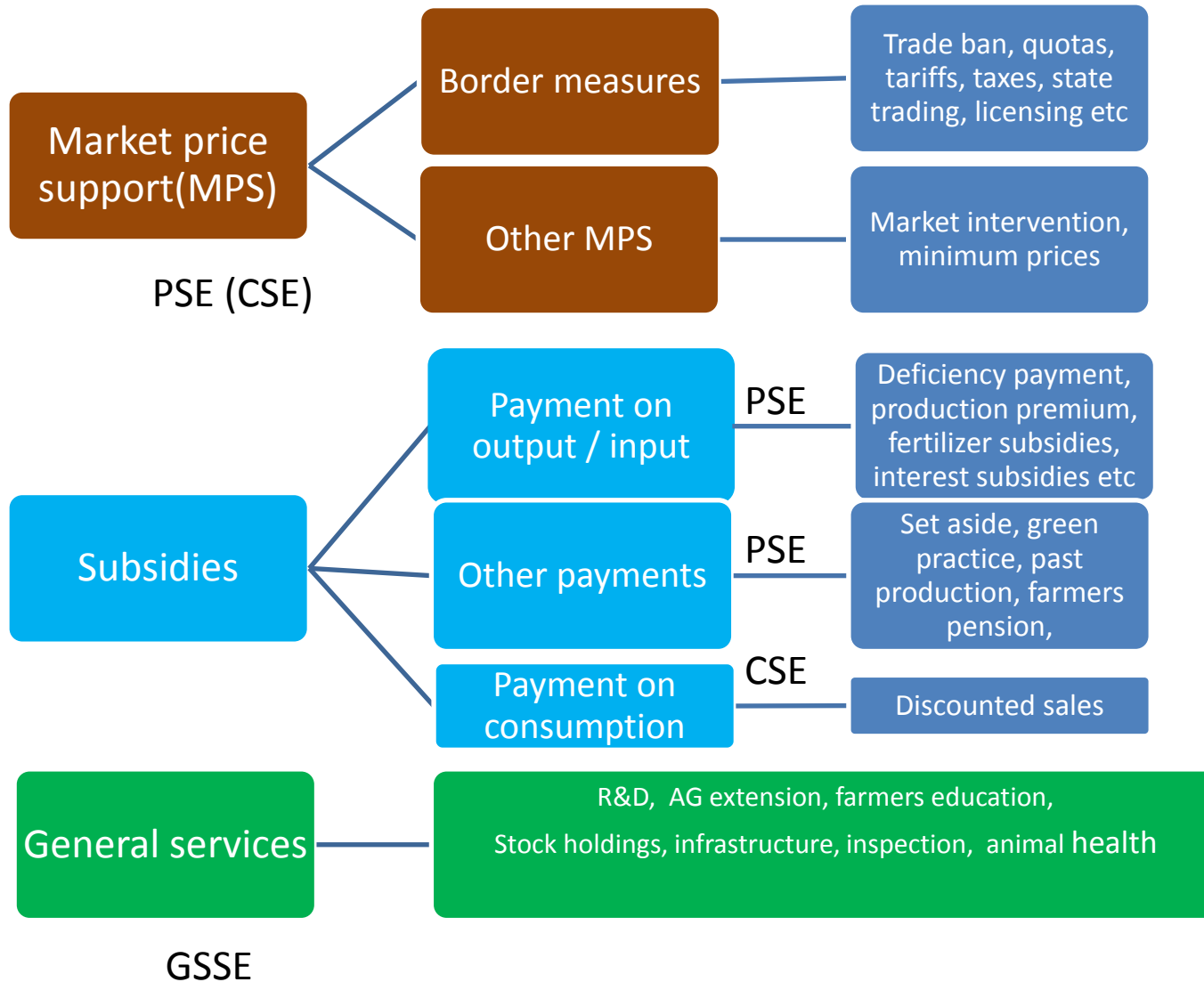


MPD: market price differential
 TPC: transfer to producers from consumers
 PTC: other transfers from consumers

TPT: transfer to producers from taxpayers
 IP: import price, XP: export price
 DP: domestic price

Source: OECD the PES manual
 (Partly modified)

Classification of policies



MPS measurement

- Price differentials (PD) are the base
 - $PSE(MPS) = PD \times Q_p$
 - $CSE(MPS) = -PD \times Q_c$
- Price differentials are measured:
 - Between import(or export) and domestic prices
 - At farm gate levels
 - By comparing ‘like with like’
 - By adjusting quality and weight differentials
 - By adjusting marketing/processing costs
 - For the commodities that price policies apply

PSE vs AMS

PSE/CSE (OECD)

- Try to capture all sort of support to agriculture
- Focus on transfers among three actors
- More theoretical
- Not negotiable
- Used for policy monitoring

AMS (WTO)

- Focus on domestic support which distorts production and trade
- More political
- Exclude support on :
 - ‘green’ and ‘blue’ policies
 - ‘development’ policies
 - ‘De minimis’ (5%)

PSE >> AMS (Aggregated measures of support)

Diverse ASEAN (1)

Country	Language	Political system	Major religion	Land	Pop.
				mill.ha	million
Brunei D	Malay, Eng.	Constitutional Monarchy (sultan)	Muslim	0.6	0.4
Cambodia	Kumer	Constitutional Monarchy	Buddhism	18.1	15.0
Indonesia	Bahasa Indonesia	Parliamentary democracy (president)	Muslim, Hindu	190.5	231.4
Lao DPR	Lao	Socialist republic	Buddhism	23.7	6.1
Malaysia	Malay, Eng. Chinese, Hindu	Federal constitutional monarchy	Muslim, Buddhism, Hindu	33.0	28.3
Myanmar	Myanmar	Transition from martial rule parlia. democracy	Buddism	67.7	59.5
Philippines	Tagalog, Eng	Parliamentary democracy (president)	Christian	30.0	92.2
Singapore	Eng., Malay, Chinese	Parliamentary democracy (PM)	Christian,	0.1	5.0
Thailand	Thai	Constitutional Monarchy	Buddism	51.3	66.9
Vietnam	Vietnam	Socialist republic	Buddism, Christian	32.9	86.0

Source: ASEAN secretariat, others

Diverse ASEAN (2)

Country	Land Area	Population	GDP	GDPpc		Total trade	Poverty	Internet use
	Km2	million	bill/\$	000\$	PPP '000\$	IM+EX bill\$	<1.25\$/day	no/1000
Brunei D	6	0.4	16	38.7	52.1	14.8-		560
Cambodia	181	15	13	0.9	2.3	12.8	28	31
Indonesia	1860	238	847	3.6	4.7	380.9	16	180
Lao DPR	234	6	8	1.3	2.8	4	31	90
Malaysia	330	29	288	9.9	16	415.7	2	610
Myanmar	677	60	52	0.9	1.4	14.9-		10
Philippines	300	96	224	2.3	4.3	111.8	23	290
Singapore	0.7	5	260	50.1	60.7	775.2-		750
Thailand	513	68	346	5.1	8.9	458.9	2	237
Vietnam	331	88	123	1.4	3.4	199.6	14	351

ASEAN AG: so diverse too!

2010 or latest year

Country	AG areas(mill.ha)		Agriculture % in		rice SSR, %	AG Trade mill.\$ 2007-11 5 year Av.		Major AG export
	Total	arable	GDP	Labor	Av. 2005-9	Export	Balance	
Brunei D	0.0	0.0	-	4	2	2	-326	
Cambodia	5.6	3.9	27.5	60	106	153	-513	
Indonesia	48.1	22.0	13.7	36	100	27824	15962	Rubber, marine P, coffee
Lao DPR	2.2	1.3	-	-	110	70	-204	
Malaysia	7.9	1.8	7.4	14	73	24547	11729	Palmoil, rubber, marine P
Myanmar	12.0	10.6	-	67	102	1150	265	Rice, pulses
Philippines	11.8	5.3	18.1	33	88	3306	-2347	Coconuts, banana
Singapore	0.0	0.0	0.1	0	0	6269	-2399	
Thailand	19.7	15.2	8.9	41	173	24967	17848	Rice, rubber, cassava, sugar
Vietnam	10.1	6.3	17.5	48	131	9033	1217	Coffee, rice, marine P

Source: FAO FAOSTAT, and WB World database

AG policy trend a road for ASEAN CAP?

2007 AEC blueprint

- Goal: Economic Integration
- Establish AEC by 2015
- Single market & production base
- Free flow of Goods, services, invest./capital, skilled labor
- Eliminate IM duties and NTB as CEPT-AFTA (with exceptions)
- Promote integration in standards, customs, etc



Conditions to become a real common market

- 1. Free intra-trade**
- 2. Common extra-trade policies**
- 3. Common price/income support policies**
- 4. Common macro economic policies**

AG production: Similarity and difference

Top 10 product groups in MCs (2000intl\$), 2011

Cambodia		Indonesia		Lao		Malaysia		Myanmar		Philippines		Thailand		Vietnam	
Products	%	Products	%	Products	%	Products	%	Products	%	Products	%	Products	%	Products	%
Rice	58.9	Rice	30.6	Rice	41.3	Palmoil& k	60.0	Rice	39.0	Rice	19.9	Rice	28.4	Rice	37.2
Cassava	11.9	Palmoil & k	17.0	Vege. nes	10.0	Poultry M	15.2	Poultry M	6.5	Bana&Pine	14.0	Rubber	11.1	Pigmeat	16.2
Cattle M	5.2	Rubber	5.3	Maize	5.9	Rubber	7.3	Beans	8.7	Pigmeat	11.9	Fruits nes	8.4	Vege. nes	5.3
Pigmeat	4.0	Fruits nes	4.2	Cattle M	5.2	Rice	4.7	Pigmeat	4.0	Fruit nes	9.9	Cassava	7.3	Fruit Nes	4.7
Maize	2.8	Cassava	4.2	Pigmeat	4.9	Eggs	3.4	Vege. nes	3.6	Coconuts	8.1	Sugar C	7.2	Coffee	4.1
Vege. nes	2.7	Poultry M	3.7	Coffee	2.8	Pigmeat	2.6	Sesame	2.8	Poultry M	5.1	Poultry M	5.9	Cashew	3.8
Fruits nes	2.0	Bana&Pine	3.4	Cassava	2.6	Bana&Pine	1.4	Groundnut	2.7	Vege. nes	4.4	Eggs	5.2	Cattle M	3.4
Rubber	1.2	Coconuts	3.4	Tobacco	2.2	Vege. nes	1.1	Cattle M	2.4	Cattle M	3.9	Pigmeat	4.6	Cassava	3.1
Bananas	1.1	Maize	3.1	Poultry M	1.5	Fruits nes	0.9	Milk	2.4	Sugar C	3.1	Bana&Pine	3.2	Rubber	3.0
Soybeans	1.1	Pigmeat	1.9	Sugar C	1.2	Coconut	0.4	Fruit Nes	2.3	Eggs	2.6	Cattle M	2.4	Poultry M	2.7

Source: FAOSTAT

- Rice has a predominant importance in all countries except Malaysia
- Some estate crops make up high share in Indonesia, Malaysia and Thailand
- In some countries, specific crops (e.g. cassava, coffee, beans, banana & pineapples) are produced for exports

AG trade liberalization

So far so good?

Progress in CEPT-AFTA for AG

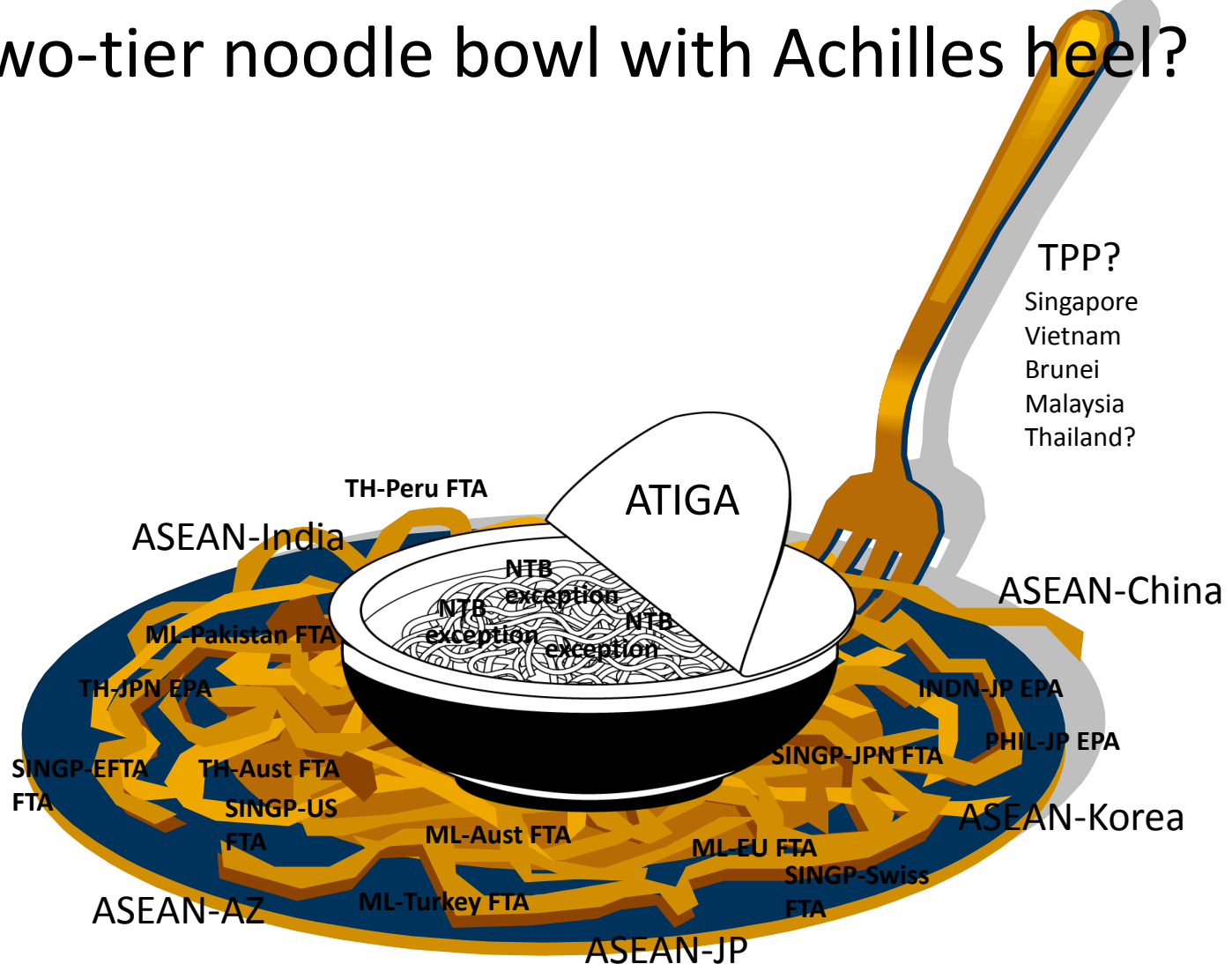
- Eliminate tariffs even sensitive products under ATIGA by 2010 for 6 nations & by 2015-18 for CLMV
- Eliminate NTB by 2010 in Thailand and by 2010-15 in Vietnam
- Except for Rice and Sugar in some countries

Achieved in most cases as scheduled because:

- MCs have been either competitive or marginal producers in these products;
- thus, real effective tariffs had been already low;
- various NTB (NTM) including TRQ, licensing, IM permits still in force for key products;
- temporary suspension may be allowed at emergency;
- rice and sugar have been excluded.

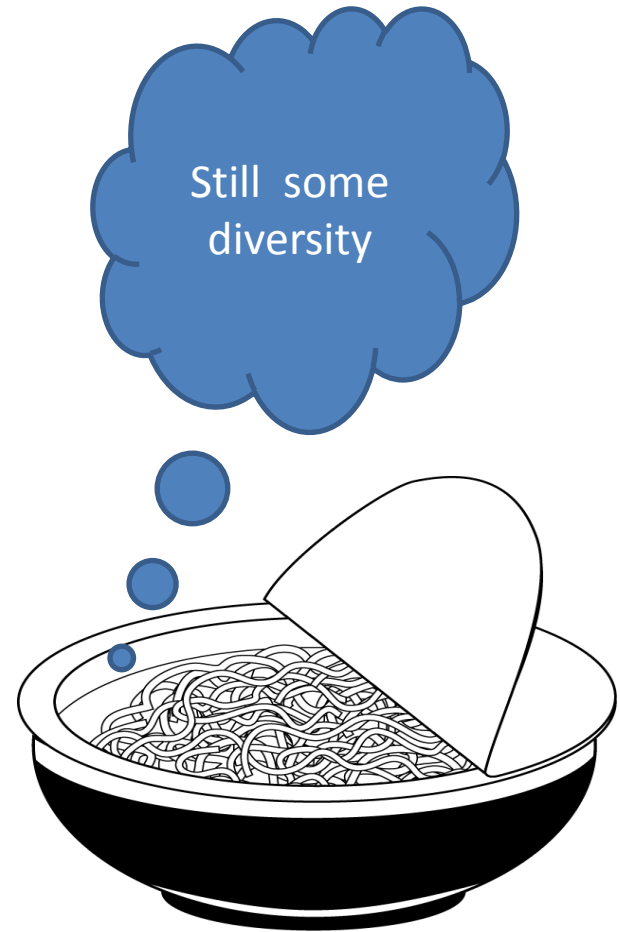
ASEAN AG trade liberalization

A two-tier noodle bowl with Achilles heel?



Inner bowl : AG in ATIGA

- CEPT:
 - achieved 0-5% tariffs in most AG items (ASEAN6)
 - Except rice and sugar
 - CLMV will follow
- NTB:
 - Still many NTB/NTM and less transparent
- Standards:
 - Still diverse in SPS, food safety control



CEPT but with discretion?

Rice and Sugar Tariffs (%) and NTM

	Rice			Sugar		
	2012	2015	NTM	2012	2015	NTM
Cambodia	5	0-5		5	0-5	
Indonesia	30	25	ST	30	10	IL
Lao	5	5	ST?	10	5	
Malaysia	20	?	ST	0	0	IL
Myanmar	?	5	ST	?	0.5	
Philippines	40	35	ST	28	5	TRQ
Singapore	0	0		0	0	
Thailand	0	0	TRQ IL	0	0	TRQ
Vietnam	10	5	TRQ	5	5	TRQ

Source: ASEAN secretariat, ATIGA tariff schedule for each country

Reported major AG NTM

Country	Major Items	Type of NTM
Indonesia	Chicken Root crops Rice & maize Soybeans & oilseeds	QR/prohibition Selected approval State Trading Licensing/permit
Malaysia	Meats, Fish, Milk Rice Palm nuts & kernels Sugar	Licensing (mostly SPS?) State Trading Licensing (discret.) QR, Licensing
Philippines	Beef, pork, chicken Potatoes Coffee Maize Soybeans & oilseeds Sugar	TRQ TRQ TRQ, permit TRQ Licensing (mostly SPS?) TRQ
Thailand	Rice Soybeans Coconut oil Sugar	TRQ, licensing TRQ, licensing TRQ TRQ
Vietnam	Eggs Vegetables, Fruits Sugar	TRQ Tech regulation (SPS?) TRQ

Source: ASEAN Secretariat, Database of non-tariff measures

Note:

Excludes general SPS measures

Excludes NTMs applicable to non-ASEAN countries

Outer bowl : tangled FTA/RTAs

- ASEAN FTA with Dialogue partners
 - China, Japan, Korea, Aust-NZ, India
 - But **simple wrapping of each nation's commitments.**
 - **No common schedules among ASEAN members nor dialogue partners**
- Bilateral FTA/EPA: **so diverse and tangled with full flexibility(exclusions)**
 - Thailand: JPN, AST, NZ
 - Malaysia :JPN, IND, Chile, PAK, NZ
 - Philippines, Indonesia, Vietnam: JPN(EPA)
 - Singapore: US, JPN, CHN, EFTA,IND, AST, etc
- TPP: Can they accept complete liberalization?
 - Brunei, Malaysia, Singapore, Vietnam, (Thailand)



ASEAN China FTA: Sensitive and highly sensitive list (2004)

	Sensitive products		Highly sensitive products		
	No.of items	Major items	No.of items	Major items	2012
Brunei	0		0		
Cambodia	8	porcessed food and tobacco	8	processed food	Mostly 0-10%
Indonesia	12	Minor processed food	13	rice, sugar, alcohol	Mostly retained
Lao	75	meats, milk, vegetables, fruits, rice	16	alcohol	Mostly retained
Malaysia	22	meats,milk,eggs,cabbage, tobacco	22	chicken, milk tobacco	Mostly retained
Myanmar	127	cofee, veg.oil, sugar, processed food	0		
Philippines	20	vegetables	41	meats, onion, carrots, rice,sugar	Mostly retained
Singapore	1	alcohol	3	beer	
Thailand	8	wheat flour, processed food	51	milk, onion, coffee, rice soybean, oil, sugar	Mostly 0-5%
Vietnam	Not available but chicken, coffee, rice, veg.oil and many others are included				Mostly retained

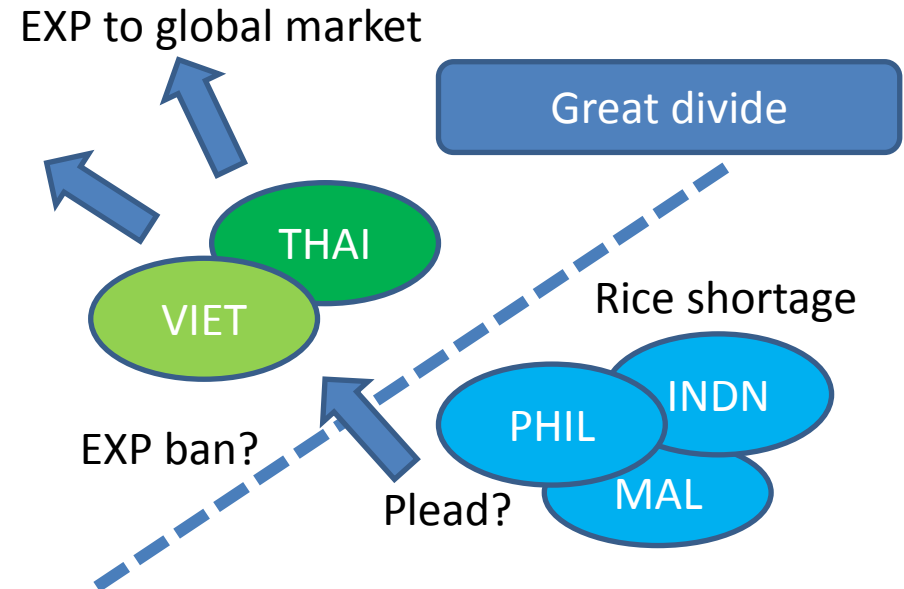
Source: ASEAN secretariat, ASEAN China FTA area, Agreement on Trade in Goods, Annex II and reduction schedule

Note: Tariff rates have been reduced since 2004 for sensitive products.

Reduction schedules differ by country and by ASEAN FTA

Food security: An apple of discord

- 2007/08 global food crisis disclosed a serious defect of CEPT-AFTA on food security
- It has no closes to assure the food security of food-importing MCs : Exporting MCs are free to ban exports or sell to non-MCs
- Dilemma of “open-regionalism” and solidarity
- Is the emergency rice reserve earmarked by ASEAN (87000ton only) enough?



Who is most vulnerable on Food?

Agricultural trade balance (2007-2011, 5year av. mill \$)

	AG Trade		AG trade Balance			Total Merchandize trade		
	Export	Import	AG total	Cereals	Food	Export	Import	Balance
Brunei	2	328	-326	-87	-241	9307	2505	6802
Cambodia	153	665	-513	-33	-262	5017	6774	-1757
Indonesia	27824	11861	15962	-2598	9654	147225	125190	22035
Lao PDR	70	274	-204	-20	-118	1406	1678	-272
Malaysia	24547	12817	11729	-1487	8192	191972	155961	36011
Myanmar	1150	885	265	15	546	7567	5145	2422
Philippines	3306	5652	-2347	-2076	-1608	47556	57291	-9735
Singapore	6269	8667	-2399	215	-2464	333737	301056	32681
Thailand	24967	7119	17848	5138	10857	179990	172921	7068
Viet Nam	9033	7815	1217	1786	752	67497	80987	-13490

Case Study: PSE Analysis

Can ASEAN move forward the EA-CAP

- Free trade alone cannot promise AEC-CAP
- It requires common AG policies including:
 - Common price/income support measures
 - Common Gov. services
- To capture overall policy support and trend, we need a good analytical tool : PSE/CSE/TSE

- Applied OECD methodology with some modification
- Period:1990-2008
- Commodity coverage
 - 60-70% of gross agricultural output
 - 10 standard commodities
 - other major commodities

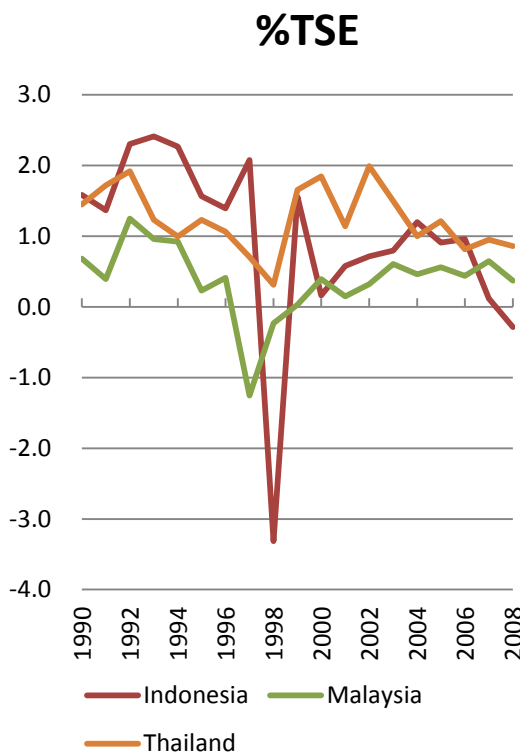
Indonesia, Malaysia, Thailand

Major AG support measures

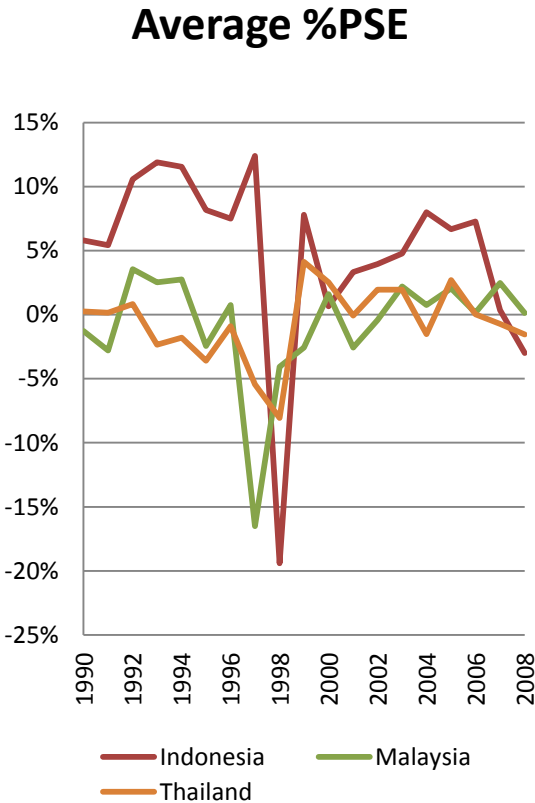
Country	Commodities	Measures
Indonesia	Rice	●Market intervention by BULOG
		●Minimum price, Specific duty
	Sugar	●Specific duty
	Soybeans	●Licensing, tariff
	Milk	●TQ
	Fertilizer	●Subsidies
Malaysia	Rice	●Minimum price
		●Market intervention by BERNAS
	Sugar	●Licensing
	Meats	●Licensing, TQ
	Rubber	●Export licensing
	Palm oil	●Export licensing
Thailand	Rice	●Pledging program
	Maize	●Pledging program, import surcharge
	Cassava	●Export licensing
	Meat,	●Licensing, tariff
	Milk	●Licensing, TQ
	Rubber	●Export tax

Source: WTO Trade policy review, various versions, and ASEAN secretariat

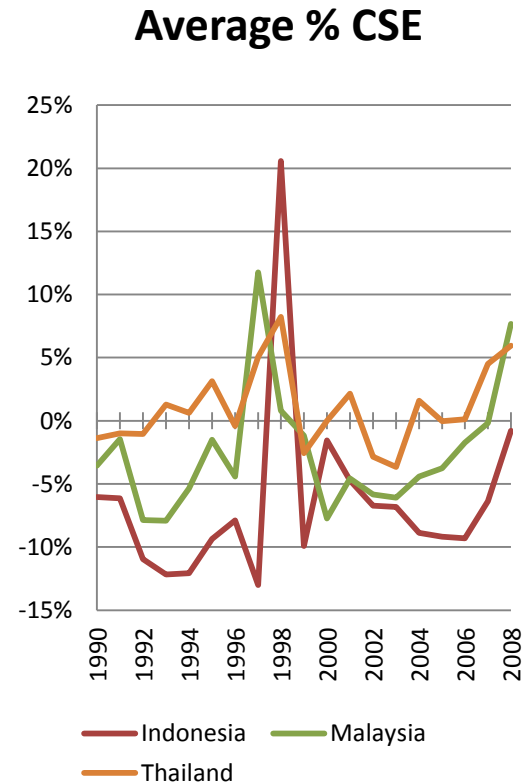
Trend of AG support: declining?



Vary by country
Declining trend?

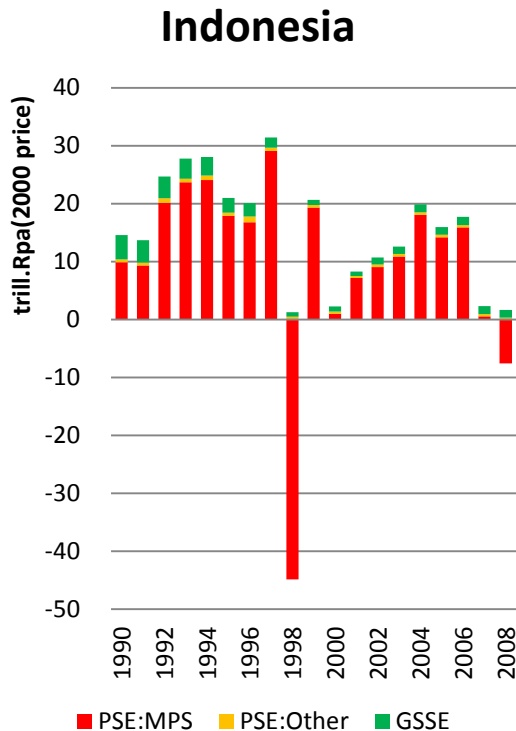


Mostly remain low,
+/-10% except 1997-8

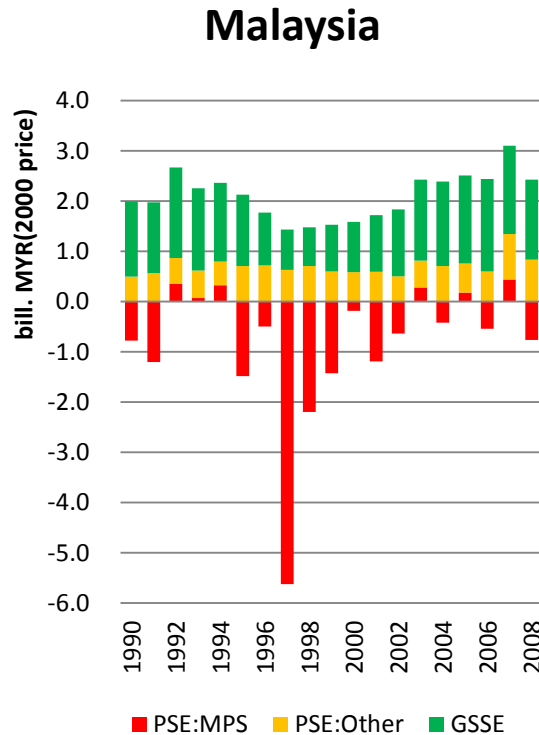


Mirror images with
an upward trend?

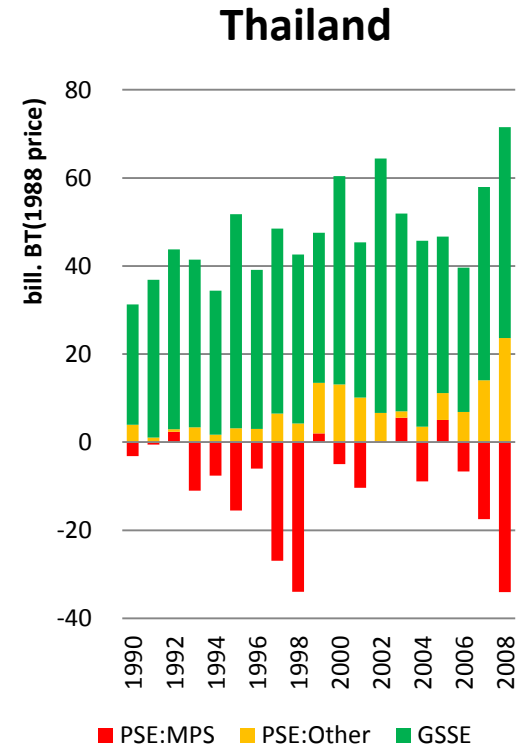
TSE composition : Policy support varies



- Mostly MPS with high fluctuation
- GSSE may be underestimated due to omission of provincial support

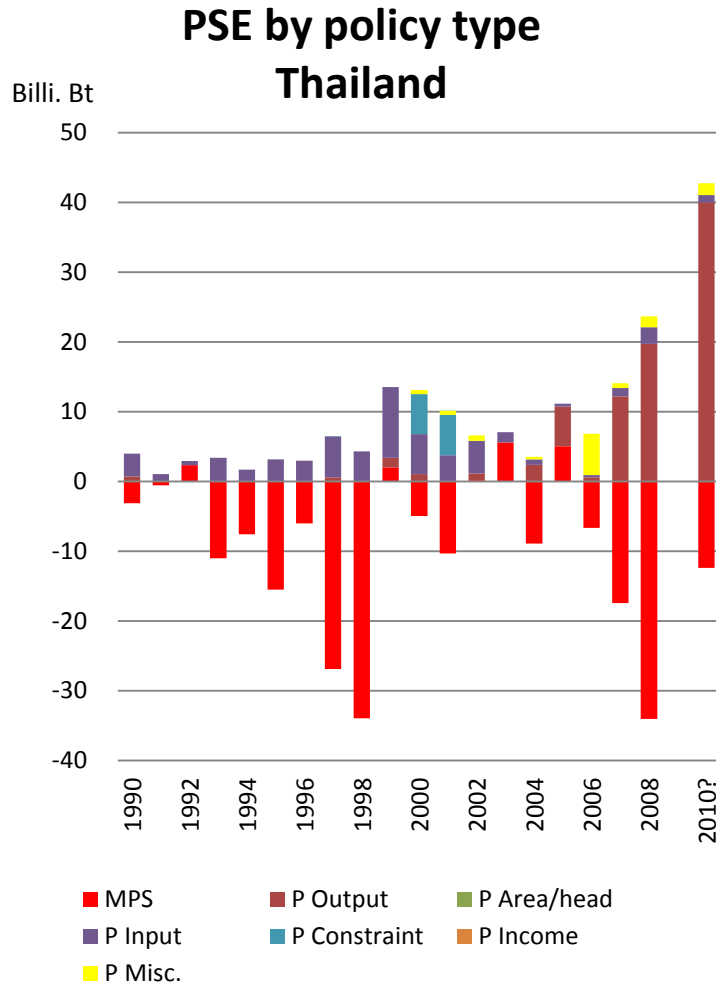


- High share of GSSE and others
- Producers are not protected so much



- High share of GSSE which counterbalance negative MPS

Changes in PSE in Thailand



- Because of the paddy pledging (insurance) program, PSE in Thailand is likely to increase substantially.

- In addition, Thai government may have to bear a huge cost of storing and disposing surplus rice stocks.

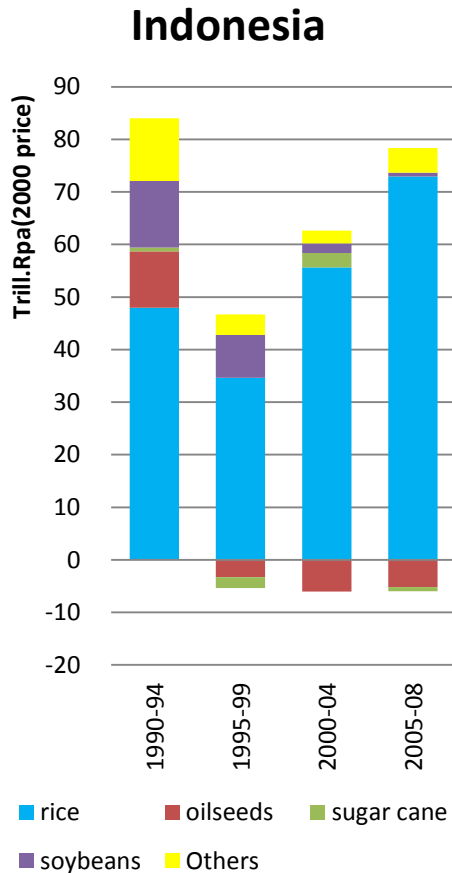
- The government loss would shoot up if international rice prices drop.

- Even world largest exporter may be recording positive support.

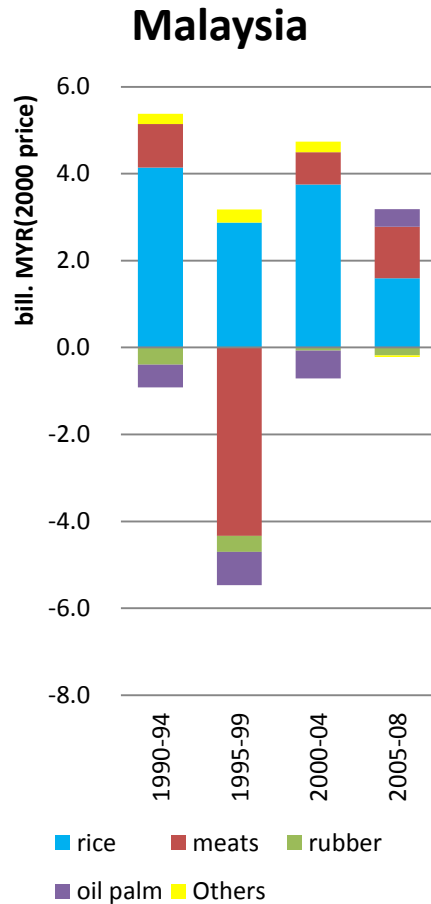
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PSE by commodity:

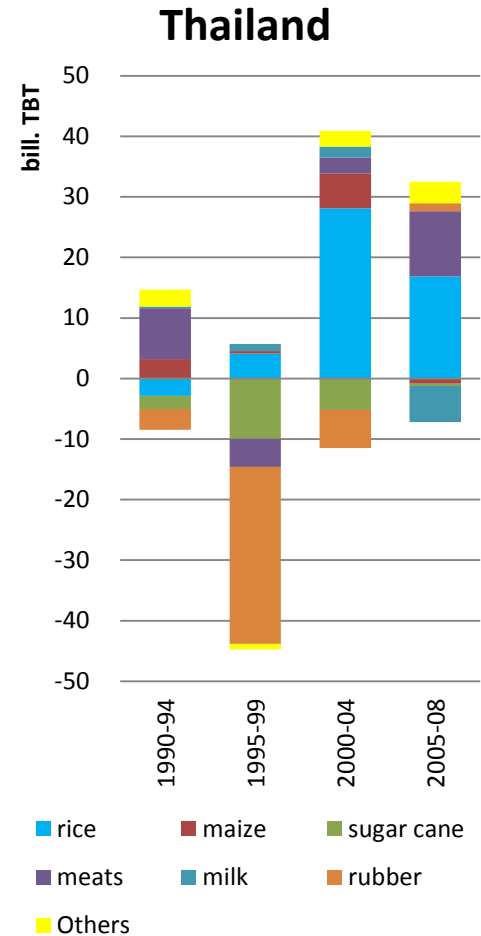
Rice farmers are protected most



Mostly rice (+)



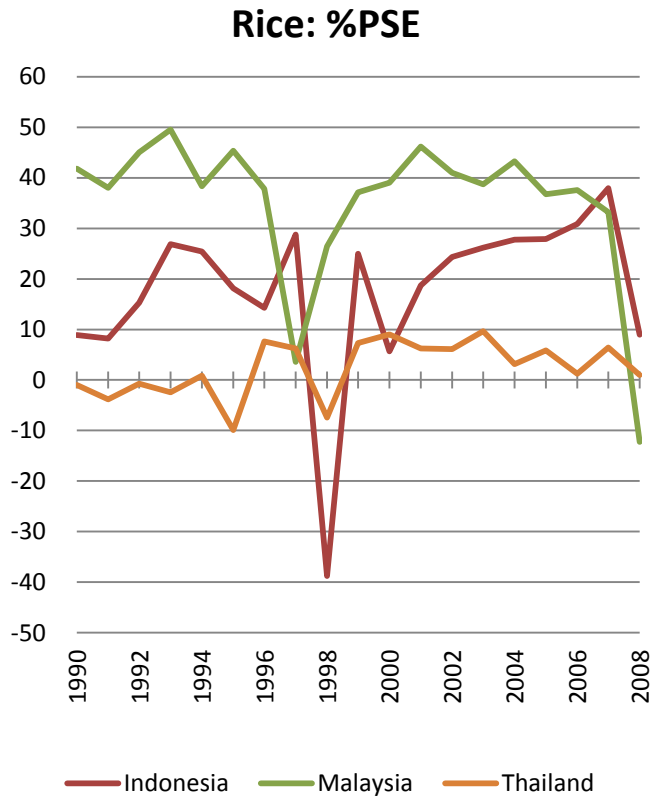
Mostly rice(+) & meats(+/-)



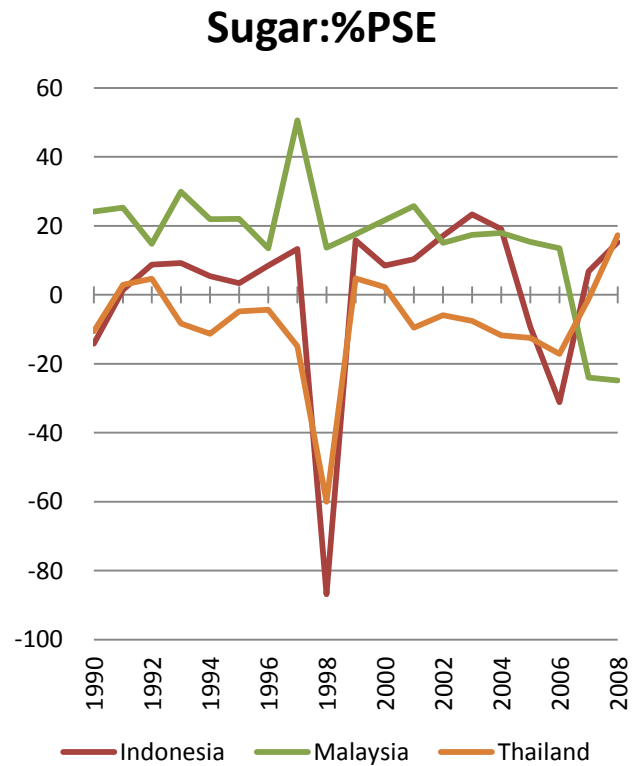
Diverse (+/-)

Rice and Sugar PSE:

divide between exporters/importers



- High %PSE & volatility in importers
- Nil for exporter (Thailand)



High volatility due to abrupt changes in exch. rate and intl. prices

Transfer Matrix and TSE (annual average, real term, 2000 and 1988 price for Thailand)

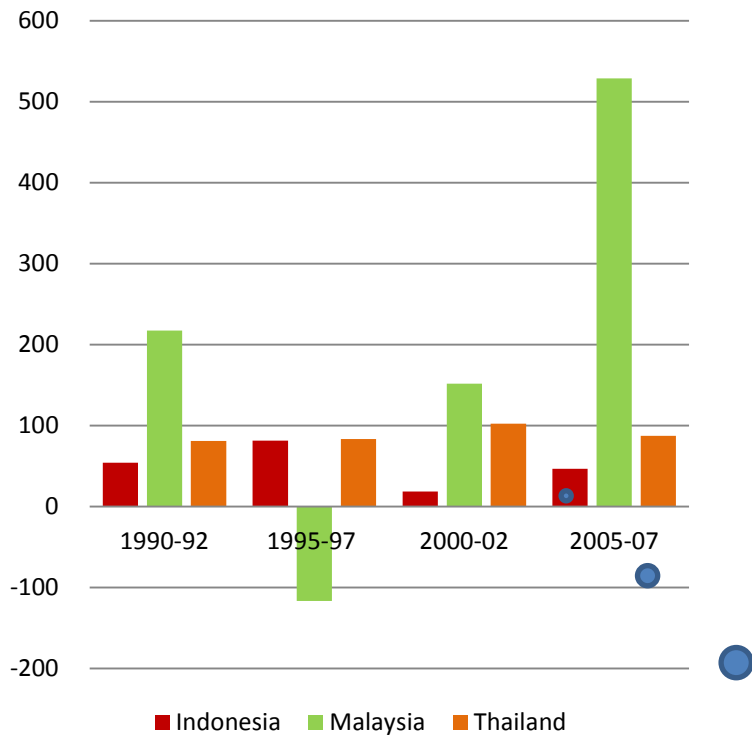
	1990-94				1995-99				2000-4				2005-08							
		PRD	CSM	TXP	Total		PRD	CSM	TXP	Total		PRD	CSM	TXP	Total		PRD	CSM	TXP	Total
Indonesia (Rpa trillion.)	PRD	0	-16.0	-2.0	-18.0	PRD	0	-7.6	-0.6	-8.3	PRD	0	-10.9	1.3	-9.6	PRD	0	-12.6	6.4	-6.1
	CSM	16.0	0	1.7	17.7	CSM	7.6	0	2.2	9.8	CSM	10.9	0	1.9	12.8	CSM	12.6	0	1.4	14.0
	TXP	2.0	-1.7	3.7	4.0	TXP	0.6	-2.2	1.7	0.1	TXP	-1.3	-1.9	1.1	-2.1	TXP	-6.4	-1.4	1.4	-6.5
	Total	18.0	-17.7		(21.7)	Total	8.3	-9.8		(9.9)	Total	9.6	-12.8		(10.7)	Total	6.1	-14.0		(7.5)
Malaysia (Rg. bill.)	PRD	0	-0.4	0.1	-0.3	PRD	0	1.1	0.4	1.6	PRD	0	-0.2	0.1	-0.2	PRD	0	-0.03	-0.53	-0.6
	CSM	0.4	0	0.5	0.9	CSM	-1.1	0	0.9	-0.3	CSM	0.2	0	0.9	1.2	CSM	0.03	0	-0.26	-0.2
	TXP	-0.1	-0.5	1.6	1.0	TXP	-0.4	-0.9	1.0	-0.3	TXP	-0.1	-0.9	1.3	0.4	TXP	0.53	0.26	1.74	2.5
	Total	0.3	-0.9		(1.9)	Total	-1.6	0.3		(-0.6)	Total	0.2	-1.2		(1.5)	Total	0.56	0.23		(2.5)
Thailand (Bt bill.)	PRD	0	-0.2	2.1	1.9	PRD	0	6.8	3.6	10.4	PRD	0	-1.1	-2.1	-3.2	PRD	0	5.6	-4.9	0.6
	CSM	0.2	0	0.6	0.8	CSM	-6.8	0	-0.1	-6.9	CSM	1.1	0	0.2	1.3	CSM	-5.6	0	-2.7	-8.3
	TXP	-2.1	-0.6	35.0	32.3	TXP	-3.6	0.1	39.8	36.3	TXP	2.1	-0.2	45.5	47.4	TXP	4.9	2.7	40.0	47.7
	Total	-1.9	-0.8		(33.1)	Total	-10.4	6.9		(29.4)	Total	3.2	-1.3		(48.7)	Total	-0.6	8.3		(39.4)

Note: 1 PRD: producers, CSM: consumers, TXP: taxpayers. Figures in bracket are TSE

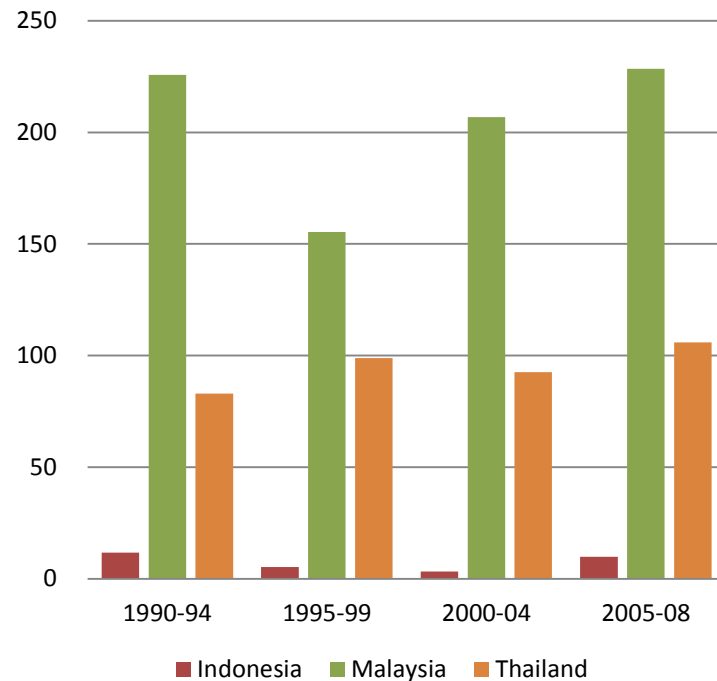
- Transfers were positive for producers and negative for consumers in Indonesia
- This was not so clear for Malaysia
- Producers were mostly taxed but govt. supports AG sector in Thailand
- No significant changes in real-term support to AG sector in the last 2 decades
- Transfer patterns differ by period reflecting relative prices to intl. market

Gaps in support per AG worker

TSE per AG worker
(current US\$)



GSSE per AG worker
(current US\$)



Are rich ASEAN members ready to pay?

A log way to AEC-CAP

AEC-CAP

- Huge diversity in political system
- Huge disparity in economic status and policies
- A two-tier noodle bowl
- No green rate nor common fund
- No harmonized macro-economic policies

EC-CAP

- Same political & economic system
- Less disparity in economic status and policies
- Similar AG structure and trade policies
- Same AG support mechanism since early 1962 (CAP)
- Green exchange rate, 1970?-1999
- European Agricultural Guidance and Guarantee Fund (EAGGF) 1962-2007
- Common fiscal and currency base

Challenges

Long way for AEC-CAP

- ASEAN MCs are so diverse. So are their AG, AG trade and policies.
- CEPT-AFTA appears advancing but hidden barriers look resilient in AG.
- Its tangled FTA/EPA/RTA network makes market integration more difficult especially in AG.
- Huge disparities and variations in AG support remain among MCs.
- They are attributable to nations' wealth and external economic factors. Integration in macro-economic policy matters.
- The disparities may be narrowed but need enormous time and funds, much more than the case of EU-CAP.
- 2007-8 food crisis disclosed a risk of discord among MCs on national food security. Many MCs reverted to traditional self-sufficiency policies, a set back in AEC-CAP.

Implications for TPP

- Participation of some ASEAN MCs in TPP will make the regional economic integration more complicated.
- Food importing MCs would not accept complete trade liberalization for key AG commodities such as rice.
- They favor the current loose, flexible and gradual way of trade liberalization and economic integration
- But this would not help Japan. They may be eligible for special treatments for developing countries.

Thank you!