

# **A Tariff-Line Approach to Capturing Trade Gains from an FTA: the Case of the Proposed KORUS FTA**

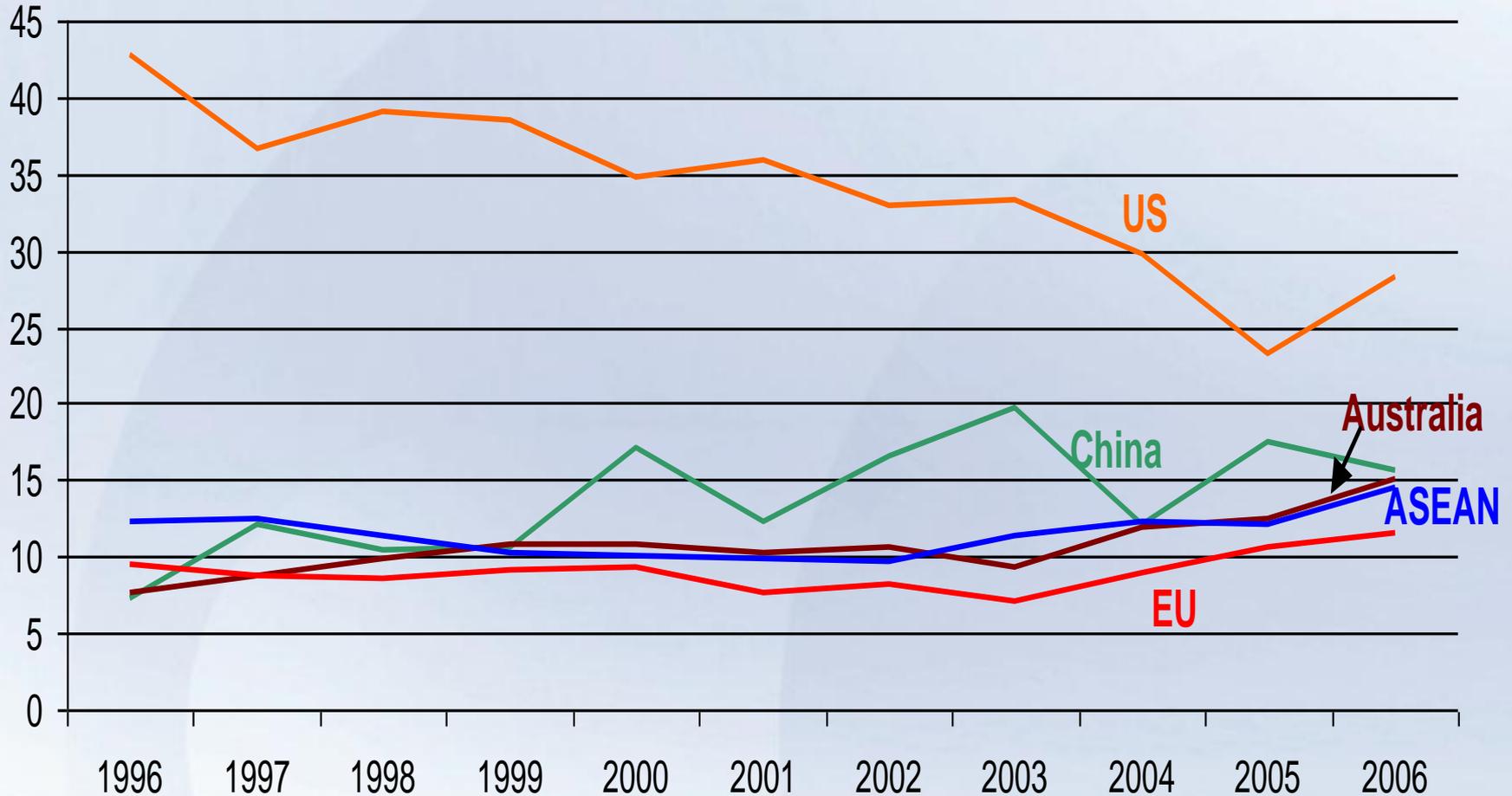
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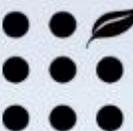


# Exporter Shares of Korea's Ag Imports

Percent

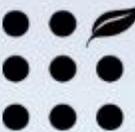
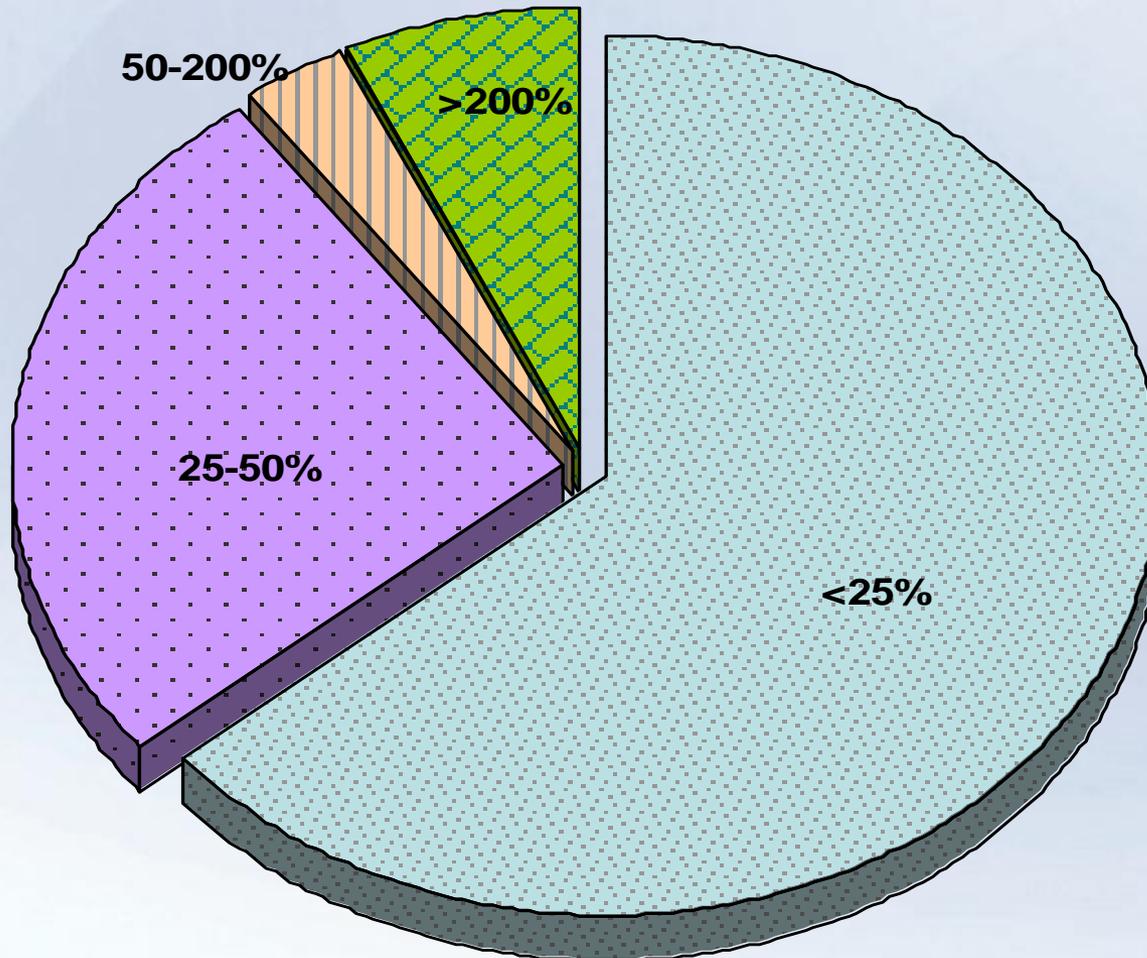


Source: ERS Korea briefing room



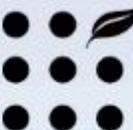
# Ten Percent of Ag Lines Have Tariffs > 50%

*But they account for 93% of lines with TRQs and 34% of US exports to Korea in 2004-2006*



# Proposed KORUS Agreement

- 23 staging categories (tariff reduction schedules) for ag imports to Korea
- 16 new US-specific TRQs established, with scheduled increases
- 30 products with special safeguards
- In most cases, tariffs reduced slowly over the implementation period, 2008-2027
- No tariff reductions for rice, or for over-quota rates on certain dairy products

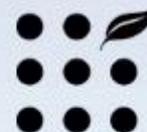


# Proposed TRQs for Korean imports of U.S. products

<b>Product</b>	<b>4-digit HS codes</b>	<b>Duration <i>years</i></b>	<b>Rate of growth/year <i>percent</i></b>	<b>Initial quantity <i>tons</i></b>
Dairy powders	0402	indefinite	3	5000
Food whey	0404	9	3	3000
Butter and dairy fats	0405	9	3	200
Cheeses, some varieties	0406	14	3	7000
Honey, natural	0409	indefinite	3	200
Potatoes, fresh/chilled, not for chipping	0701	indefinite	3	3000
Oranges	0805	indefinite	3	2500
Barley, except malting	1003	14	2	2500
Malt and malting barley	1107, 1003	14	2	9000
Corn starch	1108	14	3	10000
Food-use soybeans, identity-preserved	1201	indefinite	3	10000
Ginseng, raw white	1211	17	About .2 tons/year	5.7
Fodder, other	1214	14	0	200000
Dry milk preparations	1901	9	3	700
Animal feeds, supplementary	2309	11	3	5500
Dextrins	3505	11	3	14000

Note: Only certain 10-digit lines are included in the TRQs.

The 4-digit HS groups represented here also include non-TRQ 10-digit lines.

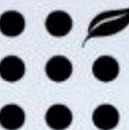


# A Tariff-Line Approach in Trade Analysis

- Avoids biases from aggregating tariff lines.
- Allows better representation of tariff details.
- Allows consideration of TRQs and other product-specific details.
- Allows handling multiple tariff lines per TRQ, and multiple TRQs per tariff line

BUT

- Uses a static, partial-equilibrium model, where the only factor influencing trade for an HS-10 line is the import price, assumed to be directly affected by a tariff reduction.
- No cross-product effects are incorporated.



# Analysis of Non-TRQ Lines

## Cline Model

$$\Delta MI_{i,j} \approx MI_{i,j} * ((1 + t_1) / (1 + t_0) - 1) * e$$

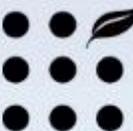
$MI_{i,j}$  = Import value from supplier  $i$  of commodity  $j$  (in dollars);

$t_0$  = Base MFN tariff rate;

$t_1$  = New MFN tariff rate; and

$e$  = Price elasticity of import demand.

The percentage increase in import value equals the percentage change in the import price caused by the tariff reduction, multiplied by the import demand elasticity.



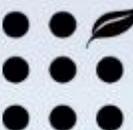
# TRQ Lines: Non-Residual-Trade Formulation

[in-quota import price] = [world price] + [in-quota tariff]

[over-quota import price] = [world price] + [over-quota tariff]

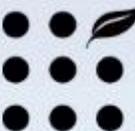
[total imports] = Min ( [TRQ], [in-quota imports] )  
+ Max ( 0, [over-quota imports] – [TRQ] )

Total imports equal the imports that would be taken at the in-quota tariff, with a ceiling of the TRQ quantity, plus any imports exceeding the TRQ, that would be taken at the over-quota tariff.



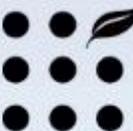
# Example 1: Chilled beef

- Pre-existing tariff treatment: simple ad-valorem tariff of 40%
- Competitors: Korea, Canada, Oceania
- KORUS phase-out: 15 years
- Final tariff for US product: 0
- Trade increase for US using Cline approach, at year 15: \$21 million



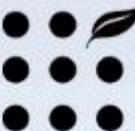
# Example 2: Corn for processing

- Pre-existing tariff treatment: WTO TRQ and annual adjustment TRQs; in-quota 2%, over-quota 328%
- Main use is corn sweeteners; competing supplies from South America, China, South Africa
- US would get 0 over-quota tariff after 7 years
- KORUS phase-out: 7 years
- Effectively permits expansion of corn processing industries: unlimited inputs from US
- Trade increase for US using TRQ formulation, at year 7: \$41 million



# Example 3: Oranges

- Pre-existing tariff treatment: TRQ with 50% in-quota tariff; 50% over-quota tariff
- Competitors: Korean tangerines
- US gets country-specific TRQ, rising 3% per year indefinitely, from a small base
- 0 tariff within US TRQ; 50% over-quota
- Trade increase for US assuming complete use of US TRQ, at year 15: \$24 million



# Bottom line

- KORUS FTA has not been ratified
- All analyses point to beef and pork as biggest potential US export gains
- Challenges to analysis:
  - Long, uneven phase-in of concessions  
How should economic growth be handled?
  - Need to capture meat/feed tradeoff
  - Cross-price effects
- Strength of this analysis:
  - Captures specific treatment for each tariff line

