NAFTA Rules of Origin: Adaptation in North America and Emulation Abroad

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FTAs are a major component of the global trading system

- NAFTA started the ball rolling (or at least gave it a strong kick)

- Rules of Origin (RoO) are necessary in all FTAs

- RoO can limit utilization of preferences and distort sourcing decisions and supply chains
Source: IDB Integration and Trade Sector based on INTrade.
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Outline – Part 1

• Purpose and function of RoO
• Historical context – why these RoO?
  – NAFTA RoO made sense at the time
  – How the rules became more flexible
    – Use of the Free Trade Commission to liberalize PSRO
• Lessons from NAFTA rule changes – a model for success
Outline – Part 2

- Post-NAFTA proliferation of FTAs
- How to compare PSRO
- NAFTA was taken as a template by all three countries and adapted for application in new FTAs.
- NAFTA PSRO were emulated even in FTAs beyond the three NAFTA partners
Part 1 – Evolution of the NAFTA RoO
Purpose of Rules of Origin

➢ Prevent Trade Deflection

➢ Promote use of regional materials in preferential trade (exporting protection).
### Examples

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Product Description</th>
<th>Official Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAFTA</td>
<td>Tomato ketchup and other tomato sauces</td>
<td>A change to subheading 2103.20 from any other chapter.</td>
</tr>
<tr>
<td></td>
<td>*Except Ketchup</td>
<td></td>
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<tr>
<td>NAFTA</td>
<td>Tomato ketchup and other tomato sauces</td>
<td>A change to tariff item 2103.20.aa from any other chapter, except from subheading 2002.90.</td>
</tr>
<tr>
<td></td>
<td>*Ketchup</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Product Description</th>
<th>Official Text</th>
</tr>
</thead>
</table>
| NAFTA    | Mens' overcoats of wool or fine animal hair                                           | A change to subheading 6101.10 through 6101.30 from any other chapter, except from heading 51.06 through 51.13, 52.04 through 52.12, 53.07 through 53.08 or 53.10 through 53.11, Chapter 54 or heading 55.08 through 55.16 or 60.01 through 60.06, provided that:
(a) the good is both cut (or knit to shape) and sewn or otherwise assembled in the territory of one or more of the Parties, and (b) the visible lining fabric listed in Note 1 to Chapter 61 satisfies the tariff change requirements provided therein. |
Political Economy of Product Specific RoO (PSRO)

- The restrictive effects of a rule of origin will vary across products as a function of endowments and hysteresis in production patterns, among other factors.

- Countries with a diverse export supply (i.e. large countries) will favor regimes with rules that vary across products - hence PSRO.
Why *these* RoO?

- It is also observed that FTAs with higher combined GDP have more restrictive PSRO, reflecting the greater availability of material inputs within the partner countries.

- NAFTA represented the first substantial preferential access granted to a developing country by the US or Canada.

- Uncertainty as to eventual FTA effects may have led to conservative default positions and therefore more restrictive PSRO than strictly necessary.

- The agreement includes mechanisms for modifying the RoO.

Source: Estevadeordal, Harris, and Suominen (2009)
NAFTA mechanisms for modifications of RoO

Article 414: Consultation and Modifications
1. The Parties shall consult regularly to ensure that this Chapter is administered effectively, uniformly and consistently with the spirit and objectives of this Agreement, and shall cooperate in the administration of this Chapter in accordance with Chapter Five.

2. Any Party that considers that this Chapter requires modification to take into account developments in production processes or other matters may submit a proposed modification along with supporting rationale and any studies to the other Parties for consideration and any appropriate action under Chapter Five.

Article 513: Working Group and Customs Subgroup
1. The Parties hereby establish a Working Group on Rules of Origin, comprising representatives of each Party, to ensure:
   a) the effective implementation and administration of Articles 303 (Restriction on Drawback and Duty Deferral Programs), 308 (Most-Favored-Nation Rates of Duty on Certain Goods) and 311, Chapter Four, this Chapter, the Marking Rules and the Uniform Regulations;

3. The Working Group shall:
   b) endeavor to agree, on the request of any Party, on any proposed modification of or addition to Article 303, 308 or 311, Chapter Four, this Chapter, the Marking Rules or the Uniform Regulations;

   d) propose to the Commission any modification of or addition to Article 303, 308 or 311, Chapter Four, this Chapter, the Marking Rules, the Uniform Regulations or any other provision of this Agreement as may be required to conform with any change to the Harmonized System;

Article 2001: The Free Trade Commission
1. The Parties hereby establish the Free Trade Commission, comprising cabinet-level representatives of the Parties or their designees.

2. The Commission shall:
   (d) supervise the work of all committees and working groups established under this Agreement, referred to in Annex 2001.2
Changes to the NAFTA PSRO

- Modifications to the NAFTA PSRO (Annex 401) have occurred in two ways:
  - Technical rectifications translate the existing rules into new versions of the Harmonized System. In principle these leave the effects of the rules unchanged.
  - Liberalizations of PSRO change the effects of the rules to allow greater use of non-originating materials.

- All modifications to the NAFTA PSRO have been technical rectifications of liberalizations. None of the changes have involved more restrictive rules.

- There have been five liberalizations:
  - Liberalization of the PSRO for the chemical sector accompanied the first technical rectification in 1996
  - Seven products liberalized in 2003
  - Track 1, 2, and 3 liberalizations in 2005, 2006, and 2009, respectively
  - Track 4 circulated in 2011 but not agreed or implemented
PSRO Liberalization Tracks 1-3

- **Track 1**: Tea, spices, seasoning (fermenting/packaging, crushing/grinding); Precious metals (unrefined precious metals and secondary precious metals); Speed drive controllers (printed circuit assemblies); Household appliances (elimination of RVC); Loudspeakers (reduced RVC); Parts of machinery (added RVC-only option); Thermostats (added RVC option); Toys (added RVC option).

- **Track 2**: Chocolate bars (allowed cocoa powder and bulk chocolate); Cranberry juice (added RVC); Leather, Articles of cork; Viscose rayon; untextured nylon; Glass and glassware (allowed use of scrap glass); Copper (refining confers origin); Base metals (processing bars into wire); Televisions (allows printed circuit assemblies); Automatic regulating or controlling instruments (reduced RVC)

- **Track 3**: Spices; Petroleum products; Leather; Nonwoven towels; Cotton Boxer Shorts; Aluminum; Lamp Ballasts; Batteries; Apparatus for telephony; Television and video cameras; radar apparatus; televisions; Alarms; Photocathode tubes; Electrical machines and apparatus; Rail locomotives and parts; Truck assemblies; Hydrometers; Apparatus for chemical analysis; Automatic regulating or controlling instruments; Time switches.
Coverage of PSRO Liberalization

Three cases were analyzed: 2003, Track 1, and Track 2

These liberalized 76, 112, and 120 subheadings, respectively

$43B, $29B, and $14B in regional trade, respectively

These cover 6%, 4%, and 2% of NAFTA trade

Shares of bilateral trade are even higher in some cases
What should we expect from PSRO liberalization?

- Proposals for liberalization of PSRO are sought from the private sector in all three countries, and published for comment prior to entry into force of the changes.

- Any given change is likely derived from a specific request in one country, and is unlikely to generate changes in all, or even multiple, bilateral trade flows.
# Evolution of Trade of Liberalized Items

## 2003 Liberalization of NAFTA PSRO

<table>
<thead>
<tr>
<th>HS Section</th>
<th>Subheadings</th>
<th>Liberalized</th>
<th>Canadian Exports to Mexico</th>
<th>Mexican Exports to USA</th>
<th>USA Exports to Canada</th>
<th>USA Exports to Mexico</th>
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<tbody>
<tr>
<td>4 Prepared Food and Beverages</td>
<td>194</td>
<td>18</td>
<td>223% 1256% 19% 1%</td>
<td>67% 29% 37% 15%</td>
<td>17% 38% 40% -4%</td>
<td></td>
</tr>
<tr>
<td>5 Mineral Products</td>
<td>150</td>
<td>22</td>
<td>328% -81% 66% 60%</td>
<td>114% 118% 69% 122%</td>
<td>65% 126% 1% 43%</td>
<td></td>
</tr>
<tr>
<td>6 Chemicals</td>
<td>808</td>
<td>19</td>
<td>44% 19% 36% 24%</td>
<td>60% 29600% 27% 51%</td>
<td>19% 39% 37% 98%</td>
<td></td>
</tr>
<tr>
<td>14 Precious Metals and Stones</td>
<td>53</td>
<td>15</td>
<td>150% 6% -4% 76925% 22%</td>
<td>46% 58% 54% 32%</td>
<td>54% 32% 33% 10%</td>
<td></td>
</tr>
<tr>
<td>16 Machinery and Apparatus</td>
<td>799</td>
<td>1</td>
<td>14% -40% 4% 30%</td>
<td>76% 27215% 16% 102%</td>
<td>12% -7% 7% 1%</td>
<td></td>
</tr>
<tr>
<td>17 Transport Equipment</td>
<td>133</td>
<td>1</td>
<td>98% -85% 12% 172%</td>
<td>-28% 9% -93%</td>
<td>17% -43% 13% -4%</td>
<td></td>
</tr>
</tbody>
</table>

## 2005 Liberalization of NAFTA PSRO

<table>
<thead>
<tr>
<th>HS Section</th>
<th>Subheadings</th>
<th>Liberalized</th>
<th>Canadian Exports to Mexico</th>
<th>Mexican Exports to USA</th>
<th>USA Exports to Canada</th>
<th>USA Exports to Mexico</th>
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<tbody>
<tr>
<td>2 Vegetables and Vegetable Products</td>
<td>274</td>
<td>19</td>
<td>30% 8670% 38% 46%</td>
<td>31% 81% 24% -8%</td>
<td>25% 31% 40% 31%</td>
<td></td>
</tr>
<tr>
<td>4 Prepared Food and Beverages</td>
<td>196</td>
<td>1</td>
<td>286% 8% 33% 343%</td>
<td>87% 32% 12% 31%</td>
<td>31% 24% 33% 10%</td>
<td></td>
</tr>
<tr>
<td>14 Precious Metals and Stones</td>
<td>53</td>
<td>18</td>
<td>15441% 1963% 35% 33%</td>
<td>742% 2794% 55% 249%</td>
<td>58% 86% 28% 28%</td>
<td></td>
</tr>
<tr>
<td>16 Machinery and Apparatus</td>
<td>863</td>
<td>42</td>
<td>33% 97% 12% 0%</td>
<td>150% -31% 26% 13%</td>
<td>14% -13% 13% 12%</td>
<td></td>
</tr>
<tr>
<td>18 Precision Instruments</td>
<td>242</td>
<td>10</td>
<td>99% 90% 18% 33%</td>
<td>133% -5% 26% 3%</td>
<td>12% 11% 5% -6%</td>
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<tr>
<td>20 Miscellaneous Manufactures</td>
<td>136</td>
<td>22</td>
<td>81% -83% -3% -19%</td>
<td>86% 67% 4% 207%</td>
<td>21% 23% 3% 394%</td>
<td></td>
</tr>
</tbody>
</table>

## 2006 Liberalization of NAFTA PSRO

<table>
<thead>
<tr>
<th>HS Section</th>
<th>Subheadings</th>
<th>Liberalized</th>
<th>Canadian Exports to Mexico</th>
<th>Mexican Exports to USA</th>
<th>USA Exports to Canada</th>
<th>USA Exports to Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Prepared Food and Beverages</td>
<td>206</td>
<td>5</td>
<td>87% 75% 12% -4%</td>
<td>152% 44% 13% 1%</td>
<td>41% 25% 29% -14%</td>
<td></td>
</tr>
<tr>
<td>5 Mineral Products</td>
<td>163</td>
<td>3</td>
<td>70% 40% 100% 15%</td>
<td>33% 1135% 33%</td>
<td>54% 113% 63% -68%</td>
<td></td>
</tr>
<tr>
<td>8 Leather and Furs</td>
<td>107</td>
<td>38</td>
<td>-6% -73% -10% -32%</td>
<td>-4% 62% 13% -30%</td>
<td>29% 2% -25% -28%</td>
<td></td>
</tr>
<tr>
<td>9 Wood and Wood Products</td>
<td>123</td>
<td>4</td>
<td>45% -100% -38% -42%</td>
<td>55% -11% -72%</td>
<td>4% -3% -3% -39%</td>
<td></td>
</tr>
<tr>
<td>12 Footwear</td>
<td>55</td>
<td>7</td>
<td>977% 286% -10% 3%</td>
<td>5% -60% -3% 11%</td>
<td>27% 26% 34% 41%</td>
<td></td>
</tr>
<tr>
<td>13 Rock and Ceramics</td>
<td>168</td>
<td>6</td>
<td>171% -97% -5% 117%</td>
<td>-4% -38% 1% 1%</td>
<td>12% -16% 18% 12%</td>
<td></td>
</tr>
<tr>
<td>15 Base Metals and Products</td>
<td>615</td>
<td>34</td>
<td>65% 3086% 19% 54%</td>
<td>34% 11554% 15% 34%</td>
<td>20% 20% 20% 40%</td>
<td></td>
</tr>
<tr>
<td>16 Machinery and Apparatus</td>
<td>876</td>
<td>18</td>
<td>47% -4% 7% 4%</td>
<td>126% -99% 42% -94%</td>
<td>6% -32% 8% -38%</td>
<td></td>
</tr>
<tr>
<td>18 Precision Instruments</td>
<td>250</td>
<td>5</td>
<td>83% 81% 15% 11%</td>
<td>277% 290% 14% -13%</td>
<td>15% -23% 11% -17%</td>
<td></td>
</tr>
</tbody>
</table>
Main Findings

- All bilateral trade flows have experienced greater growth in some liberalized products than in comparable products without RoO changes.
- Changes that result in greater access to US or Canadian markets were twice as common as changes that resulted in greater access to the Mexican market.
- In only two cases are there liberalizations without any measured effect.
- Growth rates of some liberalized products are high enough to argue that trade was not economical without the liberalization of PSRO.

The mechanism for liberalization of PSRO works, and should be used more frequently, in more FTAs.
Part 2 – Global Influence of the NAFTA RoO
Proliferation of FTAs

- **Mexico and Canada in the 1990s**
  - Mexico signed 7 FTAs with 11 countries between 1994 and 2000 (Not counting EU+EFTA).
  - Canada quickly completed negotiations with Chile and Israel in 1996, added Costa Rica in early 2001, and then went on FTA hiatus until 2008.

- **2000s – the US reemerges and Mexico goes global**
  - US returns with Chile, CAFTA, Colombia, Peru, Panama, Mideast, Korea, Singapore, Australia.
  - Mexico adds FTAs with Uruguay, Peru, Japan. Convergence with Central America and Pacific Alliance.
  - Canada signs with Colombia, Peru, Panama, and Honduras.

Nearly all of these FTAs feature PSRO that are heavily influenced by the NAFTA rules.
PSRO Templates are Useful

- PSRO are a chore to negotiate - 5000+ HS products
- Most countries export only a fraction of HS products
- Start with something proven to work (i.e. will prevent deflection/triangulation) and change what needs changing

NAFTA PSRO have served as a template for subsequent negotiations
How to Compare PSRO

What are the options for the structure of PSRO?
- GSP, ALADI, CUSFTA, EU, NAFTA
- Post-NAFTA?

Primary variable is level of specificity – NAFTA
PSRO are the most specific to date

Number of PSRO Criteria Permutations

Source: Estevadeordal, Harris, and Suominen (2009)
Dimensions for Comparison of PSRO

- Tariff shift requirements
  - Specified at chapter, heading, subheading, or item level
  - Can include exceptions and additions

- Value requirements
  - Vary by percentage required and method of calculation

- Process requirements
  - Must be compared manually

- Systems developed by IDB to support negotiations enabled codification of a large number of agreements’ PSRO.

- Comparisons will underestimate similarity in some cases due to differences in HS versions.
Data and Methodology

- PSRO codified for 85 FTAs at the HS 6-digit level → 433,409 specific rules

- Codification identifies:
  - Level of classification change (CC)
  - Specific products excepted from the CC (EX)
  - RVC level and calculation method
  - Uniquely identified processing requirements

- Comparisons based on one or more dimensions
Broad patterns of criteria usage have shifted

Percentage of Products subject to each Criteria Type
(Products may be subject to more than one criteria - Percentages sum to more than 100)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>USAISR</th>
<th>ALADI</th>
<th>NAFTA</th>
<th>CHLCAN</th>
<th>MEXBOL</th>
<th>CHLUSA</th>
<th>MEXJPN</th>
<th>USAKOR</th>
<th>CANCRI</th>
<th>CAFTA-RD</th>
<th>EU-MEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariff Classification Change</td>
<td>90.8</td>
<td>99.6</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>99.5</td>
<td>99.4</td>
<td>100.0</td>
<td>98.9</td>
<td>58.8</td>
<td></td>
</tr>
<tr>
<td>Exception to the Tariff Change</td>
<td>39.3</td>
<td>39.0</td>
<td>34.7</td>
<td>32.4</td>
<td>31.1</td>
<td>25.4</td>
<td>23.2</td>
<td>28.8</td>
<td>4.0</td>
<td>28.0</td>
<td></td>
</tr>
<tr>
<td>Value Requirement</td>
<td>100.0</td>
<td>0.0</td>
<td>4.4</td>
<td>4.1</td>
<td>7.9</td>
<td>2.8</td>
<td>4.0</td>
<td>2.2</td>
<td>3.5</td>
<td>2.2</td>
<td>28.0</td>
</tr>
<tr>
<td>Other Requirements</td>
<td>9.3</td>
<td>6.8</td>
<td>6.2</td>
<td>6.1</td>
<td>8.3</td>
<td>6.0</td>
<td>7.6</td>
<td>6.3</td>
<td>8.8</td>
<td>40.7</td>
<td></td>
</tr>
</tbody>
</table>

- Pre-NAFTA agreements and the EU follow a completely different model.
- Utilization of CC criteria changed with NAFTA, has remained near 100%.
- Use of Exceptions peaked with NAFTA and has declined.
- RVC use is higher in Mexico-Bolivia, but otherwise lower than in NAFTA.
Comparison of NAFTA PSRO vs. all FTAs

Percentage of Products with the Same PSRO Criteria as NAFTA (HS 6-Digits)

- When accounting only for CC, 36 FTAs apply the NAFTA criteria for at least 50% of products.
- When including EX and RVC, this number falls to 9 and 6, respectively.
NAFTA PSRO in Mexico’s Agreements

- The agreement with 3 Central American countries is almost 80% similar to NAFTA based on CC alone.
- Mexico’s agreement with Japan, signed 11 years after NAFTA, has over 55% similarity with NAFTA.
- EU PSRO follow a completely different template.
NAFTA PSRO in US Agreements

- US PSRO have been quite stable across agreements, but not uniform as exceptions and RVC have been adapted.
- Agreements with partners in the Middle East follow a different template.
Several agreements wholly outside the Western Hemisphere echo NAFTA PSRO

– 8 agreements match NAFTA CC more than half the time, 4 of which are wholly within Asia
Different levels of similarity across sectors

Share of Products with PSRO Similar to NAFTA
(Percent of HS 6 digit products with the same CC, by HS Section)

Similarities do not correlate with product sophistication:
– Plastics, footwear, and even autos have relatively high levels of similarity
– Leather, minerals, and vegetable products have low levels of similarity
Conclusions

NAFTA’s institutional mechanisms for adapting PSRO to evolving market structures has had a small but economically significant positive effect on regional trade. Such mechanisms exist in most FTAs, and should be used aggressively to enable regional trade.

NAFTA set the default “template” for PSRO of subsequent FTAs of NAFTA partners, and also heavily influenced agreements globally.

Although there are still many differences that raise compliance costs and depress preference utilization, this has provided a common global language for RoO.

Ongoing mega-regional negotiations (TPP, TTIP) will likely update this template for the next two decades. The systemic effects of these negotiations through this channel should be considered.

Multilateral discipline on RoO could be very helpful, but beware excessive harmonization.