



Rules of Origin Regimes and their impact on Business in the APEC Region

Rules of Origin: Facilitators or Frictions

University of Southern California
Marshall School of Business

Sydney, Australia
September 2007

Table of Contents

1	Executive Summary	i
2	Table of Contents	iii
3	University of Southern California Research Team	1
4	Introduction and Objectives	2
5	Research Approach	4
6	Scope, Caveats, and Limitations	6
7	Key Findings and Conclusions	17
8	Comparing Rules of Origin Regimes	11
	The Rules of Origin Regime Landscape in the APEC Region	
	Comparative Analysis of FTAs against the <i>Proposed</i> APEC Model Measures	
	Comparative Analysis of Rules of Origin within APEC FTAs with One Another	
	Industry Specific Rules of Origin Analysis	
9	Capturing the Voice of the Stakeholder	46
10	Case Study: Rules of Origin in the Food Industry	60
11	Case Study: Rules of Origin in the Automotive Industry	77
12	Conclusions	103

Table of Contents (Continued)

11	Appendices	108
	Appendix A: Survey Summary Statistics	109
	Appendix B: Food Industry: Detailed Analysis of Food Specific Rules of Origin for Free Trade Agreements	112
	Appendix C: Automotive Industry: Comparison of Origination Rules, Valuation Methods, and Content Percentages	117
	Appendix D: University of Southern California Marshall School of Business MBA Research Team Bios	127

University of Southern California Research Team

MBA Research Team

Sean Haran, *Team Leader*

Crystal (Chia-Ying) Ban

Yue Hu

Sahil Parmar

Justin Campbell

Su Lee

Aaron Seligman

Joe DiFilippo

May (Wei) Li

Andrew Schulman

Danielle Evans

Julie Mulkerin

Sylvia (Shengsheng) Zhang

Faculty Advisors

Dr. Carl Voigt

Associate Professor of Strategy, Clinical Management & Organization

Dr. Dennis Schorr

Associate Professor of Marketing, Clinical

Dr. Richard Drobnick

Director, Center for Global Business Excellence and Director, Center for International Business Education and Research (CIBEAR)

Dr. K. Ravi Kumar

Associate Dean for International Programs and Professor of Information and Operations Management

ACKNOWLEDGEMENTS

Our team would like to thank several individuals and organizations for their support of our research project. First and foremost we would to thank Roberto Romulo, Chair of the ABAC Liberalization working group, for his continued support of our USC Marshall research projects and for giving us guidance on this RoO project. Also thanks to Anthony Nightingale, chair of the ABAC Facilitation working group, for his support of our project. We are grateful to the ABAC Secretariat for all the help throughout this project. Special thanks go to Geoff Brennan, of ABAC Australia, for his guidance in the formulation of the project. His visit to our campus in the early stages of this project was more than just helpful. Walter Goode's painstakingly detailed work on the rules of origin in the automotive sector was extremely valuable in helping us understand the RoO complexity in this sector. Paul Irwin, of ABAC Canada, and Brian Lynch, of ABAC New Zealand, Satoshi Sadamori and Naoko Oka, of ABAC Japan, Fanny Ho, of ABAC Hong Kong, were gracious with their time and contacts with obtaining interviews. We thank them for their assistance in securing critical interviews. We acknowledge Brian Staples, of the Origin Institute in Canada, for sharing his expertise on rules of origin through a myriad of anecdotes and experiences. We would also like to thank Kati Suominen at the Inter-American Development Bank for giving us access to her research on RoO issues and providing guidance to the academic research portion of our project.

Analyzing APEC Rules of Origin Regimes

Introduction

This report offers a detailed analysis of Rules of Origin (RoO) regimes within the Free Trade Agreements in the APEC region. It builds on and complements research which comparing and contrasting APEC region FTAs prepared by the University of Southern California Marshall School of Business in 2006. Based on a line by line comparison of the legal text of rules of origin provisions, this report provides a detailed analysis of the similarities and differences across RoO regimes. It also presents the findings of field research into the “points of pain” experienced by businesses when employing rules of origin to take advantage of intended FTA trade preferences.

Though intended to promote local investment, facilitate free trade, and protect sensitive local industries from “unfair” competition, observers who have analyzed preferential RoO regimes in other regions report unintended consequences for business. The divergence of RoO provisions across FTAs, their restrictiveness, the complexity of the rules, and requirements for compliance have increased business transaction costs, and limited their use. With declining tariff rates, some businesses are even discouraged from even trying to access the benefits of the trade preferences because the costs of compliance outweigh the benefits received.

Our research of RoO regimes within APEC region is generally consistent with these conclusions. This report offers both specific examples and generalizations drawn from across our interviews in multiple economies, of businesses facing increased transaction costs from RoO usage, and business who intentionally forgo FTA advantages because RoO is too complex and costly.

Analyzing APEC Rules of Origin Regimes

Objectives

- The Marshall School of Business at the University of Southern California was asked to prepare a detailed comparative analysis of Rules of Origin regimes in all APEC FTAs.
- Three overarching objectives:

Objective I

Catalog Rules of Origin regimes across all APEC FTAs

Objective II

Capture the voice of business executives on obstacles to trade caused by Rules of Origin

Objective III

Examine the potential impact of Rules of Origin on trades in the APEC region

- A team of 13 MBA researchers with relevant academic backgrounds and industry experience collected and assessed the effects of Rules of Origin (RoO) in Free Trade Agreements (FTA) on trades, business operations, and investments
- This research builds on and complements the comparative analysis of APEC Free Trade Agreements undertaken by the University of Southern California Marshall School of Business for ABAC in 2006.

Research Approach

Comparative Catalog of APEC FTA Rules of Origin Regimes

- Provided a detailed comparative inventory of Rules of Origin (RoO) provisions in all the Free Trade Agreements (FTAs) and Regional Trade Agreements (RTAs) between economies within APEC
 - Focused our primary research on the general Rules of Origin provisions
 - Analyzed all RoO provisions at the line by line level of the legal text of the agreements
- Analyzed the similarities and differences of RoO across FTAs/RTAs; against the proposed APEC Rules of Origin Model Measures; and against each other
- Examined the current academic literature to inform the preparation of comparative catalog
- Prepared two detailed cases studies on Food and Automotive Sectors.
 - Analyzed the legal text of the industry specific Rules of Origin in these two industry sectors
 - These sectors are among the most frequent industries targeted for special treatment in Rules of Origin regimes.
 - We combined the “desk research” with our field research to prepare two detailed illustrative cases studies of the issues and points of pain businesses face within these industries.

Research Approach

Field Research: Capturing the Voice of the Business Executives on Rules of Origin “points of pain”

- Determine the impact of different Rules of Origin regimes in different economies, and in different types of industries, on business decisions
- Evaluate the direct and indirect cost burdens that RoO place on businesses, and determine which areas of RoO cause the most concern for business executives
- Assess the benefits and drawbacks of using RoO provisions in FTAs/RTAs between APEC economies
- Primary research data collected in 13 APEC economies from business executives, industry representatives, and trade officials
 - ***In-person interviews in 10 APEC economies:*** Chile, China, Hong Kong, Japan, Malaysia, Mexico, Singapore, South Korea, Thailand, U.S.A.
 - ***Telephone interviews:*** Australia, Canada and New Zealand
 - ***Questionnaire survey responses***
 - ***Industry sectors in which interviews were conducted:*** Agriculture, Automotive, Construction, Food & Beverage, Government, Manufacturing, Professional Services, Telecommunication, Pharmaceuticals
- Our specific intention was to interview executives, trade association officials, and trade specialists, with deep knowledge of Rules of Origin issues. This inherently biases our sample of opinions to large corporations involved with significant amounts of cross-border trades. Though not intentionally excluded, our sample has fewer opinions from SMEs.

Scope, Caveats, and Limitations

- **Focus of our interviews was with executives, industry specialists, consultants, and trade officials who are knowledgeable about Rules of Origin issues and challenges**
 - Intentionally our focus was on depth, rather than breadth of opinions
 - These interviews were intended to supplement our comparative analysis of RoO regimes
- **Gathered data in multiple economies, both developed and developing**
 - Despite our efforts to interview executives in all economies, our sample is biased toward larger companies in developed economies. Fewer executives in SMEs and in developing economies had deep knowledge of RoO issues, and were willing to speak with us
- **Gathered data in diverse industries and types of companies**
 - However, there was a focus on automotive and food companies given the objectives of our study
 - While we tried to obtain responses from SMEs as well as large companies, our focus on managers with RoO expertise led to larger sized enterprises in our sample.
- **With the small number of interviews conducted and the relative low number of respondents to our questionnaire, caution should be used in drawing generalizations**
 - Despite the limited number of respondents, a strong consensus of opinions emerged regardless
 - Where the interviews were unable to identify a strong consensus additional follow up interviews were sought
- **Limited FTAs/RTAs to those already negotiated and posted on the APEC website**
- **Analyzed all material readily available by public search**
 - While a good faith effort was made to find addenda, additional amendments, memoranda of understanding, etc., if they were not posted or obviously linked on government websites, they may not have been analyzed

Key Findings and Conclusions

1. Rules of origin are unnecessarily difficult to understand and interpret. Significant variances exist amongst rules of origin provisions across APEC region. These differences coupled with no standard interpretation of HS codes make Rules of Origin certification challenging and costly. In many instances companies will actually forfeit the benefits of FTA preferences because the origination process is too burdensome and costly.
2. Applying rules of origin can be a huge expense for businesses. Companies that apply Rules of Origin must invest in and develop significant capabilities to do so. Businesses must make significant investments in IT infrastructure and human capital just to prove origination. Additional expenses are incurred in ensuring compliance of not only their own organizations but also their suppliers, and in the associated record keeping and reporting.
3. Rules of Origin complexity (and costs) are compounded when companies operate across Free Trade Agreements or within overlapping agreements. No two rules of origin sections within the region are alike. These differences across free trade agreements make it impossible for businesses to realize synergies from IT systems, administrative procedures, and subject matter expertise.
4. Implications for the APEC Region:
 - Rules of Origin are being used as a barrier to entry in some industries, potentially stalling economic development in the region. Rules of Origin can effectively blocks new entrants from entering a market because of its complexity. As a result, some companies that have “figured out” rules of origin do not want a more transparent and harmonized system. They are benefiting from government enable competitive advantages.
 - Complex Rules of Origin can increase company costs to a point where they can not justify the expense... further potentially stalling economic development in some industries. Companies do not apply Rules of Origin because there is little to no benefit from doing so. In many cases, companies (both large and small) can not justify the cost associate with meeting Rules of Origin requirements. As a result, the benefits of Free Trade Agreements within the APEC region are not used. In these cases, companies either do not enter the market (i.e., invest) or simply pay the tariff.

Comparing Rules of Origin Regimes within APEC Region Free Trade Agreements

Comparing APEC Region Rules of Origin Regimes

This section presents the comparative analysis of RoO regimes across APEC FTAs. The data on which these comparative analyses are based is available on an accompany CD:

Catalog of Rules of Origin Regimes in Free Trade and Regional Trade Agreements Among APEC Economies 2006

The CD contains the legal text of the Rules of Origin separated by provisions for ease of comparison. It also provides a simplified provision by provision comparison.

Specific Research Objectives

- What does the Rules of Origin landscape look like?
- How are the Rules of Origin similar and/or different?
- Are Rules of Origin complex? If so, what makes them complex and how complex are they?

Section Outline

The comparative analysis of the Rules of Origin regimes is divided into five sections:

1. The Rules of Origin Landscape in the APEC region
2. Comparative Analysis of FTAs against the *proposed* APEC Rules of Origin Model Measures
3. Comparative Analysis of FTAs to One Another
 - Comparing each FTA by individual Rules of Origin provisions
 - Examining potential Rules of Origin complexity drivers
 - Analyzing process oriented provisions and origination criteria provisions
4. Comparative Analysis of Industry Specific Rules of Origin
5. Summary and Conclusions

The Rules of Origin Regime Landscape in the APEC Region

APEC Free Trade and Regional Trade Agreements

- 21 Economies in APEC
- 25 FTAs analyzed
- Signature dates from 1977 to 2007
- 4 multilateral and 21 bilateral agreements
- FTAs within member economies range from 0 to 12
- New FTAs are being negotiated currently

FTAs among APEC Economies

	Thailand	Indonesia	Malaysia	Philippines	Vietnam	Brunei	Singapore	New Zealand	Chile	Australia	PNG	Peru	US	Mexico	Canada	Japan	Korea	China	HK	Taipei	Russia	
Thailand	ASEAN																					
Indonesia	ASEAN	ASEAN																				
Malaysia	ASEAN	ASEAN	ASEAN																			
Philippines	ASEAN	ASEAN	ASEAN	ASEAN																		
Vietnam	ASEAN	ASEAN	ASEAN	ASEAN	ASEAN																	
Brunei	ASEAN	ASEAN	ASEAN	ASEAN	ASEAN	ASEAN																
Singapore	ASEAN	ASEAN	ASEAN	ASEAN	ASEAN	ASEAN	ASEAN															
New Zealand								Bilateral FTA														
Chile								P4 (TransPacific SEP)														
Australia									Bilateral FTA													
PNG										Bilateral FTA												
Peru											Bilateral FTA											
US												Bilateral FTA										
Mexico													Bilateral FTA	NAFTA								
Canada														NAFTA	Bilateral FTA							
Japan																Bilateral FTA						
Korea																	Bilateral FTA					
China																		Bilateral FTA				
HK																			Bilateral FTA			
Taipei																				Bilateral FTA		
Russia																					Bilateral FTA	
Total	8	6	6	6	6	8	12	5	8	5	1	2	7	4	3	2	2	1	1	0	0	

FTAs are increasingly being used as a tool to facilitate free trade in the APEC region

Rules of Origin provisions appear complex and inconsistent across FTAs in the region

- This chart contains the legal text for each RoO provision across all APEC FTAs
 - 25 FTAs
 - 48 individual RoO provisions
- Key Observations
 - Provisions lack consistency with one another
 - In general, provisions lack transparency
 - Provisions help to explain either the origination criteria or the process to claim origin

Comparison of RoO Legal Text in APEC Region FTAs

The chart is a large grid with 25 columns representing individual FTAs and 48 rows representing individual RoO provisions. The top row of the grid is highlighted in yellow, indicating individual FTAs. The grid cells are colored based on the presence of a specific RoO provision in a specific FTA. Most cells are red, indicating that the provision is not explicitly mentioned in that FTA. Some cells are blue, indicating that the provision is found in the APEC region. The grid is highly detailed, showing the specific legal text for each provision in each cell.

- RoO provision found in FTAs in the APEC region
- Individual FTA in the APEC region
- RoO provision not explicitly mentioned in the individual FTA

Across all FTAs, Rules of Origin provisions vary in definition, transparency, origination criteria, and compliance requirements

Comparative Analysis of FTAs Against the *Proposed* APEC Rules of Origin Model Measures

No global standard for benchmarking Rules of Origin

Issue

- No Rules of Origin sections are alike across all FTAs in the APEC region
- There is no global standard or best practice blueprint for Rules of Origin
 - WTO is negotiating non-preferential Rules of Origin provisions
 - WTO is shifting towards general, yet precise, Rules of Origin provisions
 - WTO states Rules of Origin provisions should:
 - ◆ Be transparent and administered impartially
 - ◆ Not have restricting, distorting or disruptive effects on international trades
 - ◆ Focus on what confers origin rather than what does not

Research Approach

- In January 2007, the USA proposed “*APEC Model Measures for RTAs/FTAs: Rules of Origin and Origin Procedures*”
- To compare similarities and differences across each FTA, we used these *proposed* Model Measures as a benchmark
- The objective of this comparison is to benchmark all FTAs against a single standard that is consistent with the WTO description of Rules of Origin provisions

Caveats

- The Model Measures are **not** an accepted and ratified Rules of Origin standard for benchmarking

Given the lack of a global rules of origin standard, we employed the “*APEC Model Measures for RTAs/FTAs: Rules of Origin and Origin Procedures*” as a benchmark

Rules of Origin Model Measures used as a benchmark for comparative analysis among FTAs

APEC Model Measures for RTAs/FTAs: Rules of Origin and Origin Procedures

1. Criteria for Originating Goods
2. Regional Value Content Requirement
3. Value of Materials
4. Accumulation/cumulation
5. De Minimis
6. Fungible/interchangeable Good and Materials
7. Accessories, Spare Parts, and Tools
8. Sets of Goods
9. Packaging Materials and Containers for Retail
10. Packaging Materials and Containers for Shipment
11. Indirect Materials Used in Production
12. Material that is Self-Produced
13. Transit and Transshipment
14. Consultation and Modification
15. Claims for Preferential Tariff Treatment
16. Exceptions to Certification Requirements
17. Verification
18. Obligations Relating to Importation



We used the 18 Rules of Origin Model Measures as a standard benchmark to compare FTAs

Comparing against the Model Measures: Is a RoO provision present or not?

Benchmarking FTAs Against RoO Model Measures

■ FTA addresses Model Measure
■ FTA does not address Model Measure

Method	Australia - PNG	ASEAN	NAFTA	Peru - Mexico	CCFTA	Mexico - Chile	Peru - Chile	New Zealand - Singapore	JSEPA	Korea - Chile	SAFTA	US - Singapore	US - Chile	China - Hong Kong CEP	Australia - US	Australia - Thailand	Japan - Mexico	ASEAN - China	New Zealand - Thailand	P4 (Trans Pacific SEP)	Korea - Singapore	China - Chile	US - Peru	ANZCERTA	US - Korea
Originating Goods	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Regional Value Content	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
De Minimis	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Accumulation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Packing Materials and Containers for Shipment	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Value of Materials	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Accessories, Spare Parts, and Tools	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Packaging Materials and Containers for Retail Sale	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Transshipment	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Indirect Materials	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fungible Goods and Materials	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Exceptions	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Claims for Preferential Tariff Treatment	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Origin Verifications	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Consultation and Modifications	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Set or Kits of Goods	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Obligations Regarding Importations	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Material that is Self-Produced	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Only one FTA across the APEC region addresses all 18 of the Model Measures

Comparing against the Model Measures: Is a RoO provision present, consistent, or different?

RoO Provision Consistency vs. RoO Model Measures

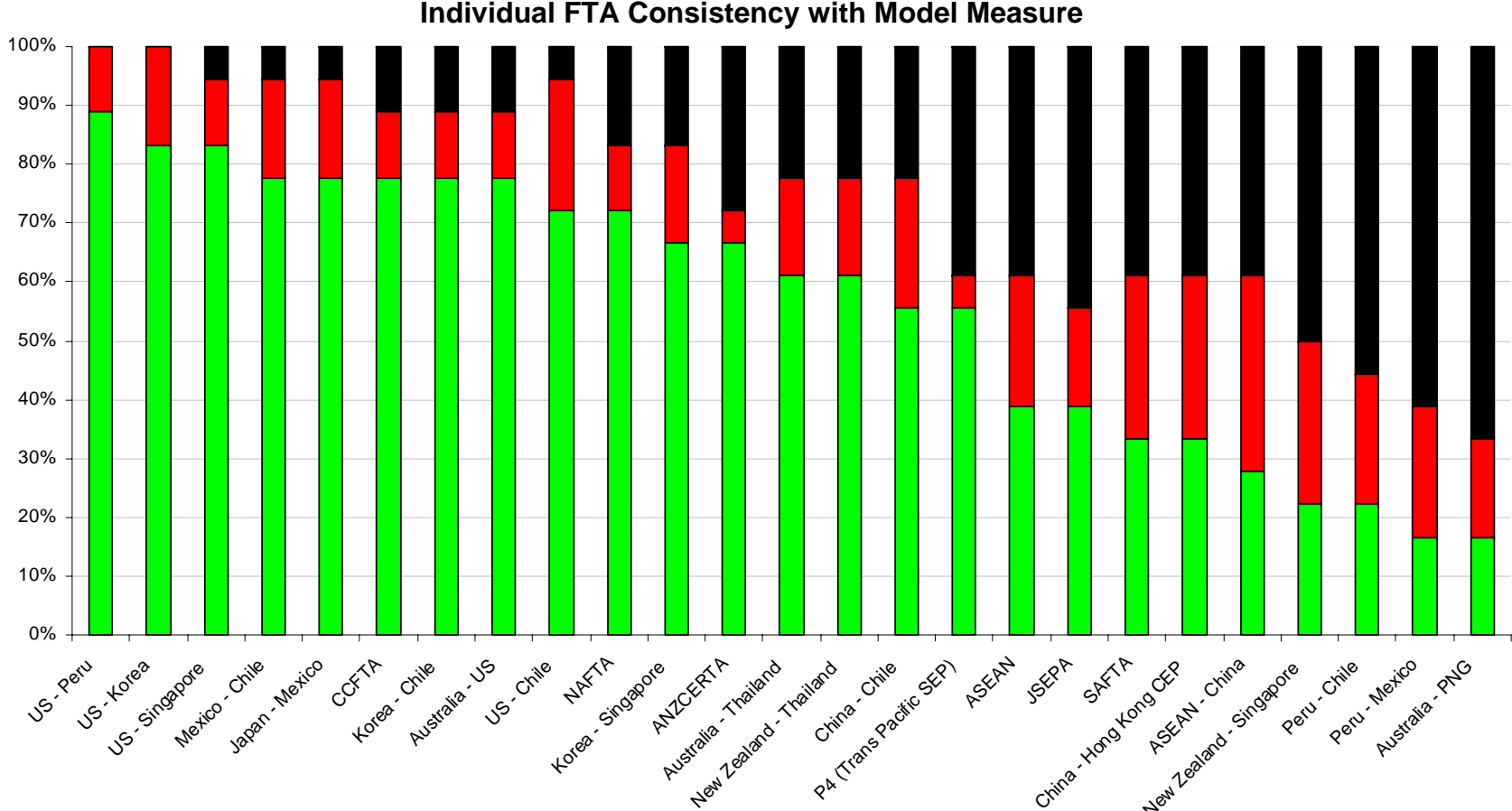
Method	Australia - PNG	ASEAN	NAFTA	Peru - Mexico	CCFTA	Mexico - Chile	Peru - Chile	New Zealand - Singapore	JSEPA	Korea - Chile	SAFTA	US - Singapore	US - Chile	China - Hong Kong CEP	Australia - US	Australia - Thailand	Japan - Mexico	ASEAN - China	New Zealand - Thailand	P4 (Trans Pacific SEP)	Korea - Singapore	China - Chile	US - Peru	ANZCERTA	US - Korea
Originating Goods	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Regional Value Content	Green	Green	Green	Red	Green	Green	Black	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
De Minimis	Black	Black	Green	Red	Red	Green	Black	Green	Green	Black	Green	Green	Green	Black	Green	Green	Green	Black	Green	Green	Green	Green	Green	Green	Green
Accumulation	Black	Green	Green	Red	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Packing Materials and Containers for Shipment	Black	Red	Green	Black	Green	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green
Value of Materials	Black	Black	Green	Black	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Accessories, Spare Parts, and Tools	Black	Black	Green	Black	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Packaging Materials and Containers for Retail Sale	Red	Red	Green	Black	Green	Green	Green	Red	Green	Green	Green	Green	Green	Red	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green
Transshipment	Black	Green	Green	Black	Green	Green	Red	Green	Red	Green	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Indirect Materials	Green	Green	Green	Black	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Red
Fungible Goods and Materials	Black	Black	Green	Black	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Exceptions	Red	Green	Green	Green	Green	Green	Red	Green	Green	Red	Red	Green	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green
Claims for Preferential Tariff Treatment	Red	Red	Green	Red	Green	Green	Red	Green	Green	Red	Red	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green
Origin Verifications	Red	Red	Red	Red	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Consultation and Modifications	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Set or Kits of Goods	Black	Black	Green	Black	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Obligations Regarding Importations	Black	Black	Red	Red	Red	Red	Green	Red	Red	Red	Green	Red	Red	Red	Red	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green
Material that is Self-Produced	Black	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red

15 of the FTAs have Rules of Origin provisions consistent with 9 or more of the Model Measures

Comparing against the Model Measures: Extent of consistency with Model Measures

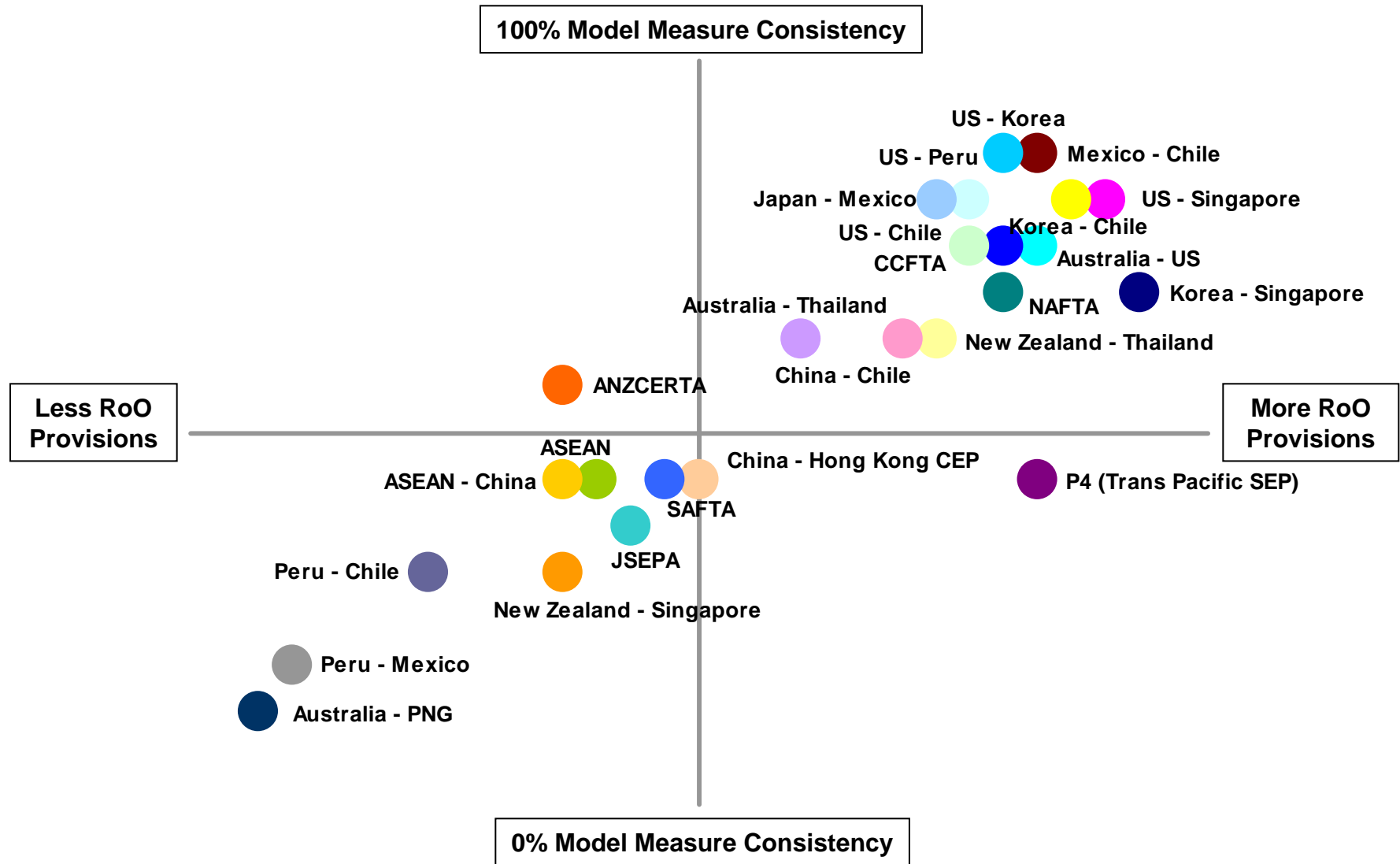
- Percentage of Model Measures consistency per FTA
- 100% = FTA consistent with all 18 Model Measures

■ FTA consistent with Model Measure
■ FTA does not address Model Measure
■ FTA differs from Model Measure



FTAs vary significantly with respect to being consistent with individual Rules of Origin Model Measures

FTAs with more total provisions are typically more consistent with Model Measures

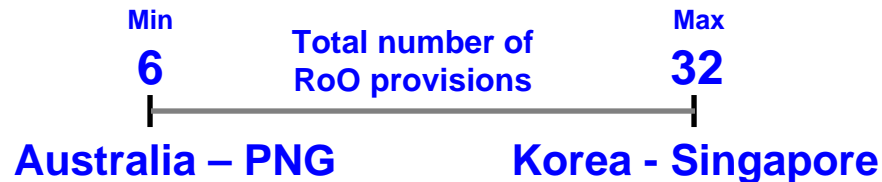


A closer look: More provisions, more consistency with Model Measures

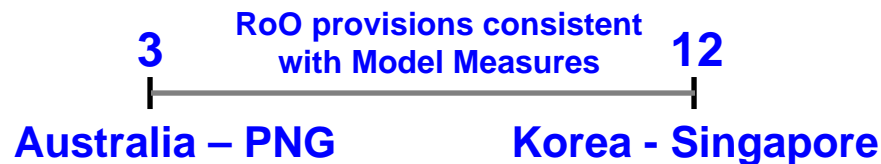
- FTAs can be sorted based on the number of provisions consistent with Model Measures



- Or by total number of Rules of Origin provisions addressed in the FTAs



- For example:



FTAs with more provisions are more consistent with the Model Measures

Summary: Comparing against the Model Measures

- There is no accepted and ratified global Rules of Origin standard
 - The presence of such a set of standards would assist in standardizing and harmonizing Rules of Origin provisions, and benefit business with less complexity and reduced transaction costs
- FTAs vary significantly in level of consistency with the 18 proposed Rules of Origin model measures
 - Businesses face greatly increased transactions when they must use multiple FTAs, and when FTAs are overlapping. When Rules of Origin requirements differ significantly, business cannot share learning or use the administrative procedures and systems.
- FTAs with more provisions are more consistent with the Model Measures
 - Those free trade agreements which negotiate a complete set of RoO provisions in detail tend to be more consistent with the proposed Model Measures and more transparent and less complex for businesses

Comparative Analysis of Rules of Origin within APEC FTAs to *One Another*

1. Comparing each FTA by individual Rules of Origin provisions
2. Examining potential Rules of Origin complexity drivers
3. Analyzing process oriented provisions and origination criteria provisions

Comparing Rules of Origin provisions to *one another*

Issue

- Comparing FTAs to one another helps to identify potential drivers of complexity and administrative costs

Analytical Approach

1. Divided the 48 provisions into three groups according to how many FTAs contain each provision
 - 1st group for most commonly used provisions (16 provisions)
 - 2nd group for moderately used provisions (14 provisions)
 - 3rd group for less commonly used provisions (18 provisions)
2. Examined complexity drivers cited most frequently by Rules of Origin researchers
 - Regional value content vs. tariff change
 - Accumulation
 - Certification
3. Compared each FTA's Rules of Origin to all other FTA Rules of Origin provisions
 - Each FTA is assigned an empirical score based on how many common provisions it shares with other FTAs' Rules of Origin

Caveat

- Comparing legal text to other legal text requires subjective judgment

Comparing Rules of Origin to one another shows potential drivers of complexity

Dividing the 48 Rules of Origin provisions into three groups according to how many FTAs contain each provision

Comparison of RoO Legal Text in APEC Region FTAs

Most Common

These provisions are addressed within at least 2/3 of all FTAs

Moderately Common

These provisions are addressed between 1/3 to 2/3 of all FTAs

Least Common

These provisions are addressed within less than 1/3 of all FTAs

- RoO provision found in FTAs in the APEC region
- Individual FTA in the APEC region
- RoO provision not explicitly mentioned in the individual FTA

Our analysis focuses primarily on the “Most Common” provisions; those found in at least 2/3 of all FTA Rules of Origin

Individual provisions grouped by frequency of occurrence in Rules of Origin

Most Common

- **Accessories, Spare Parts, & Tools**
- **Accumulation/cumulation**
- **Claims for Preferential Tariff Treatment**
- **Consultation & Modification**
- **De Minimis**
- **Exceptions to Certification Requirements**
- **Indirect Materials Used in Production**
- **Verifications**
- **Criteria for Originating Goods**
- **Packaging Materials & Containers for Retail Sale**
- **Packing Materials & Containers for Shipment**
- **Regional Value Content Requirement**
- **Transit & Transshipment**
- **Value of Materials**
- Cooperation
- Records

Moderately Common

- **Fungible/interchangeable Goods & Materials**
- **Obligations Relating to Importations**
- **Material that is Self-Produced**
- Interpretation & Application
- Non-Qualifying Operations
- Obligations Regarding Exportations
- Paperless Trading
- Penalties
- Review & Appeal
- Risk Management
- Advance Rulings
- Certificate of Origin or Declaration of Origin
- Confidentiality
- Express Consignments

Least Common

- **Set of Goods**
- Automotive Goods
- Certain Apparel Goods
- Cost Incurred
- Customs Valuation
- Decision on Origin
- Denial of Preferential Tariff Treatment
- Enquiry Points
- Intermediate Goods
- Invoicing by 3rd Country
- Outward Processing
- Recording of Costs
- Release of Goods
- Rules of Origin Subgroup or Joint Committee
- Security of Trade & Repression of Terrorist Activity
- Treatment of Goods for which Preference is Claimed
- Uniform Regulations
- Working Group & Customs Subgroup

***Bold, italicized provisions are proposed APEC Model Measures**

All but 4 Model Measures are within the most commonly used provisions

How much variation is there within similar Rules of Origin provisions across FTAs?

The following chart presents an analysis of the variation within the most common rules of origin provisions. Two key questions drive this analysis:

1. *How many FTAs use similar legal text for each Rules of Origin provision?*

- For each provision, the length of the color block represents the number of FTAs that use the same definition of that provision. For example:

- ◆ Transshipment, Accumulation, and Originating Goods have the most similarity among FTAs
- ◆ Value of Materials, De Minimis, and Verification have the most variance among FTAs

2. *How many different variations of each Rules of Origin provision are there?*

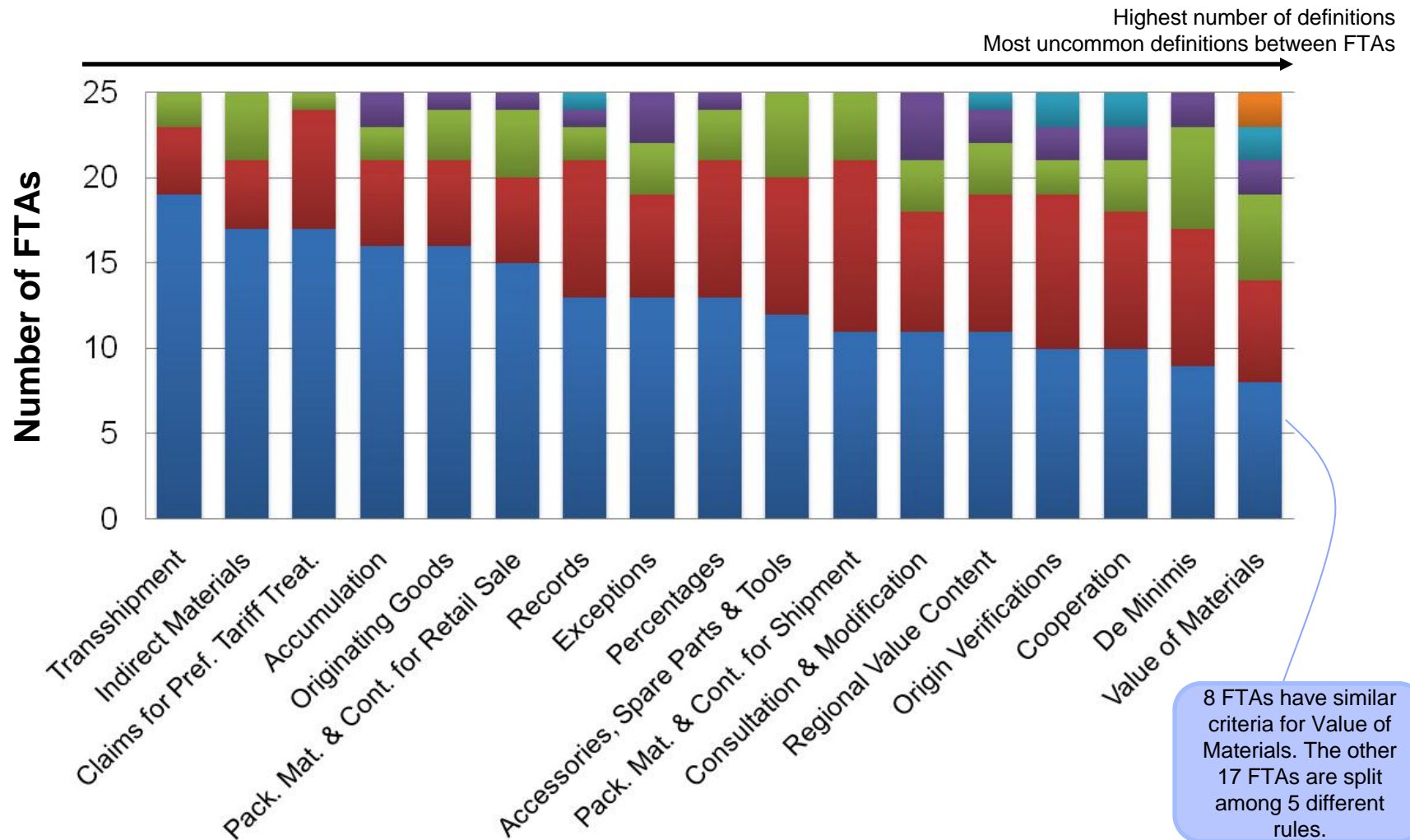
- For each provision, a colored block represents a group of FTAs that are similar on that provision. Fewer colors per bar indicates more similarity in the landscape on that provision. For example:

- ◆ Transshipment, Indirect Materials, and Claims for Preferential Tariff Treatment have the fewest types of provisions
- ◆ Value of Materials, Cooperation, and Verification have the most types of provisions

Complexity is driven by variations in each provision and differences between FTAs

There is more commonality within certain provisions

Each color block represents a group of FTAs that are similar on a particular provision



More divergence in a provision across FTAs can cause more administrative complexity for firms operating across multiple FTAs

Comparative Analysis of Rules of Origin within APEC FTAs to *One Another*

1. Comparing each FTA by individual Rules of Origin provisions
2. **Examining potential Rules of Origin complexity drivers**
3. Analyzing process oriented provisions and origination criteria provisions

APEC region FTAs are equally split between Regional Value Content and Tariff Change

Regional Value Content

ASEAN
ASEAN - China
Australia - PNG
CCFTA
China - Chile
Mexico - Chile
New Zealand - Singapore
Peru - Chile
Peru - Mexico
SAFTA
US - Korea

44%

Tariff Change

Australia - Thailand
Australia -US
ANZCERTA
Japan - Mexico
JSEPA
Korea - Chile
Korea - Singapore
New Zealand - Thailand
US - Chile
US - Peru
US - Singapore

44%

Mixed Method

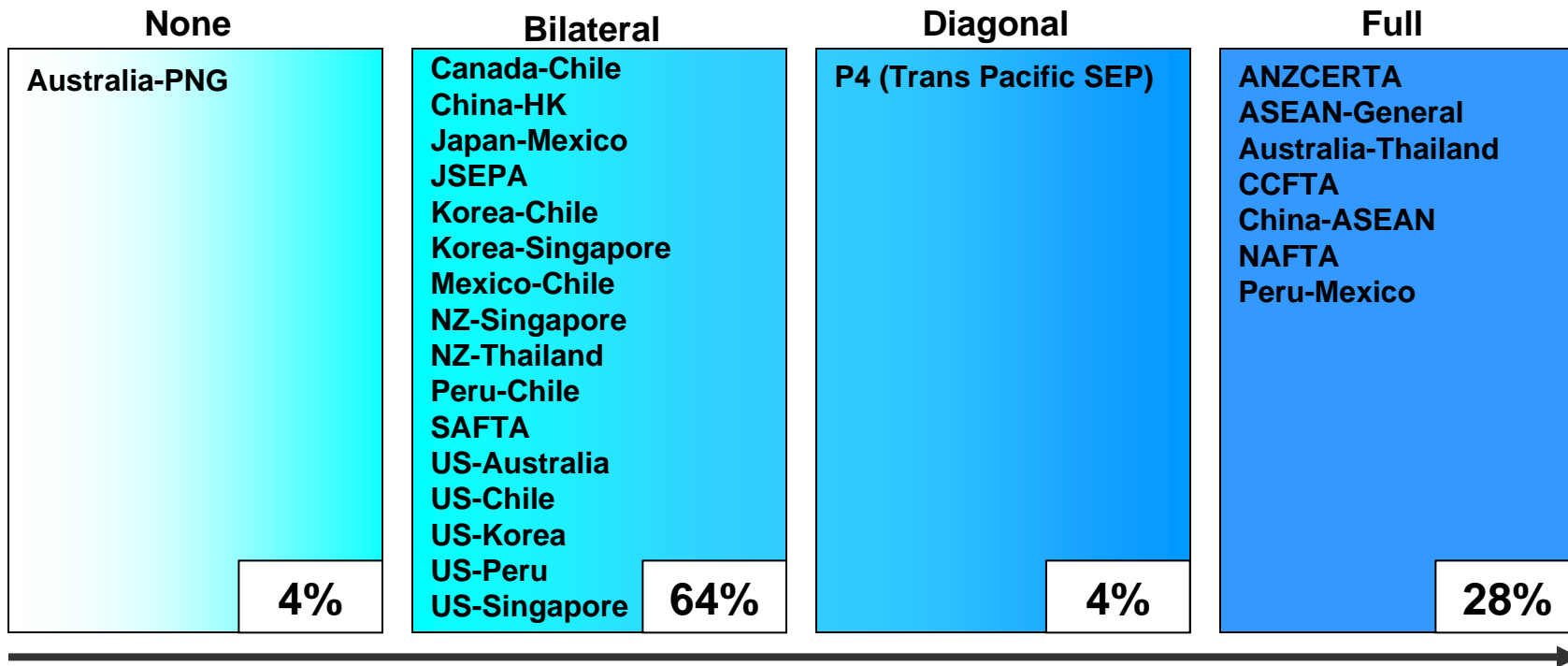
China - Hong Kong CEP
NAFTA
P4 (Trans Pacific SEP)

12%

Mixed Method FTAs allow users to prove origin using Tariff Change or RVC Method

24 of 25 FTAs in the APEC region allow for accumulation

Accumulation Methods

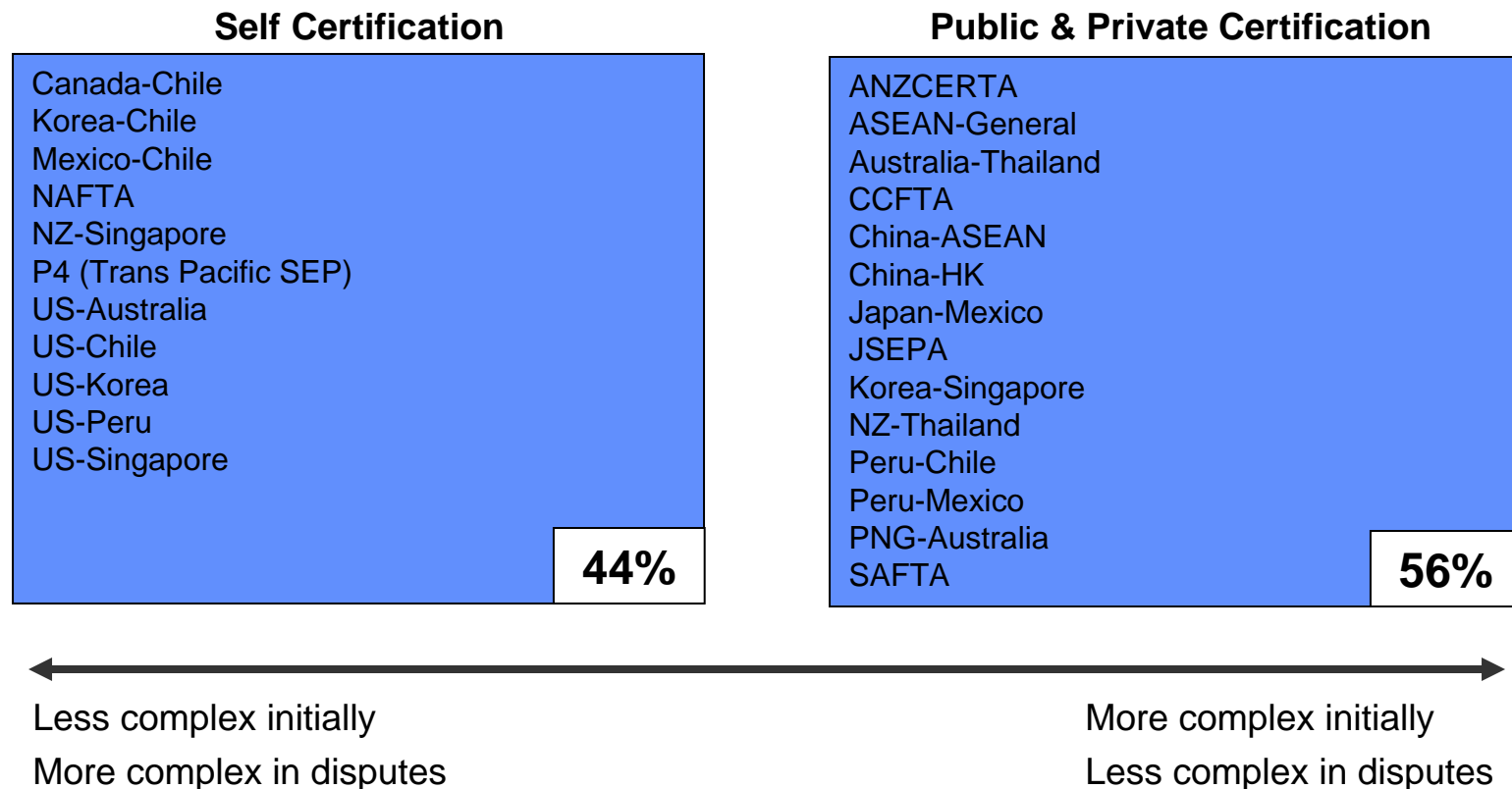


Ease of qualifying as an originating good when product is from the other party in a FTA

Most APEC FTAs allow for some form of accumulation, decreasing administrative complexity when determining origination criteria

Certification is a trade-off between potential dispute resolution costs and upfront administration costs

“The more numerous the bureaucratic hurdles and the higher the costs for an exporter to obtain an origin certificate, the lower the incentives to seek PTA-conferred preferential treatment.”¹



FTAs influenced by NAFTA typically allow for self certification

1. Estevadeordal, Antoni and Kati Suminen. The Origin of Goods: Rules of Origin in Regional Trade Agreements.

Comparative Analysis of Rules of Origin within APEC FTAs to *One Another*

1. Comparing each FTA by individual Rules of Origin provisions
2. Examining potential Rules of Origin complexity drivers
3. Analyzing process-oriented provisions and origination criteria-oriented provisions

Comparing Rules of Origin regimes by their relative emphasis on process-oriented versus proof-of-origination provisions

- The spatial positioning map on page 37 presents an alternative framework for comparing and contrasting RoO regimes
- Provisions within RoO can be loosely categorized as “*process*” or “*origination criteria*” oriented

Process Provisions

- Process RoO provisions describe processes for proving the origin of a good
- Examples include:
 - Records
 - Cooperation
 - Origin Verification
 - Consultation and Modification

VS.

Originating Criteria Provisions

- Originating criteria RoO provisions describe the method for determining origin
- Examples include:
 - De Minimis
 - Regional Value Content
 - Value of Materials
 - Accumulation

Process provisions describe how to prove origin while originating criteria provisions describe what a user must prove

Comparing FTAs based on process and origination criteria Rules of Origin provisions

- In the following Chart each FTA is scored on the similarity of its process provisions and origination criteria provisions
- **Process Provisions Score**
 - For each FTA in the group, an FTA receives 1 point for each other FTA to which it is similar
 - Example: If FTA #1 is similar to FTA #2 on *Origination Verification*, it gets 1 point; if not, FTA #1 gets 0 points
- **Origination Criteria Provisions Score**
 - For each FTA in the group, an FTA receives 1 point for each other FTA to which it is similar
 - Example: If FTA #3 is similar to FTA #4 on *Accumulation*, it gets 1 point; if not, FTA #3 gets 0 points
- **The total score is the sum of the scores for each process provision and each origination criteria provision**

Mapping FTAs on these two measures shows which FTAs are similar to the group on process oriented provisions and origination criteria provisions

Example of possible scoring outcome for this analytical comparison

- **High / High:** This indicates similarity to the group on both types of provisions
- **Low / Low:** This indicates difference from the group on both types of provisions
- **High / Low:** This indicates similarity to the group on one type of provision, but difference from the group on the other type of provision

Sample Scores

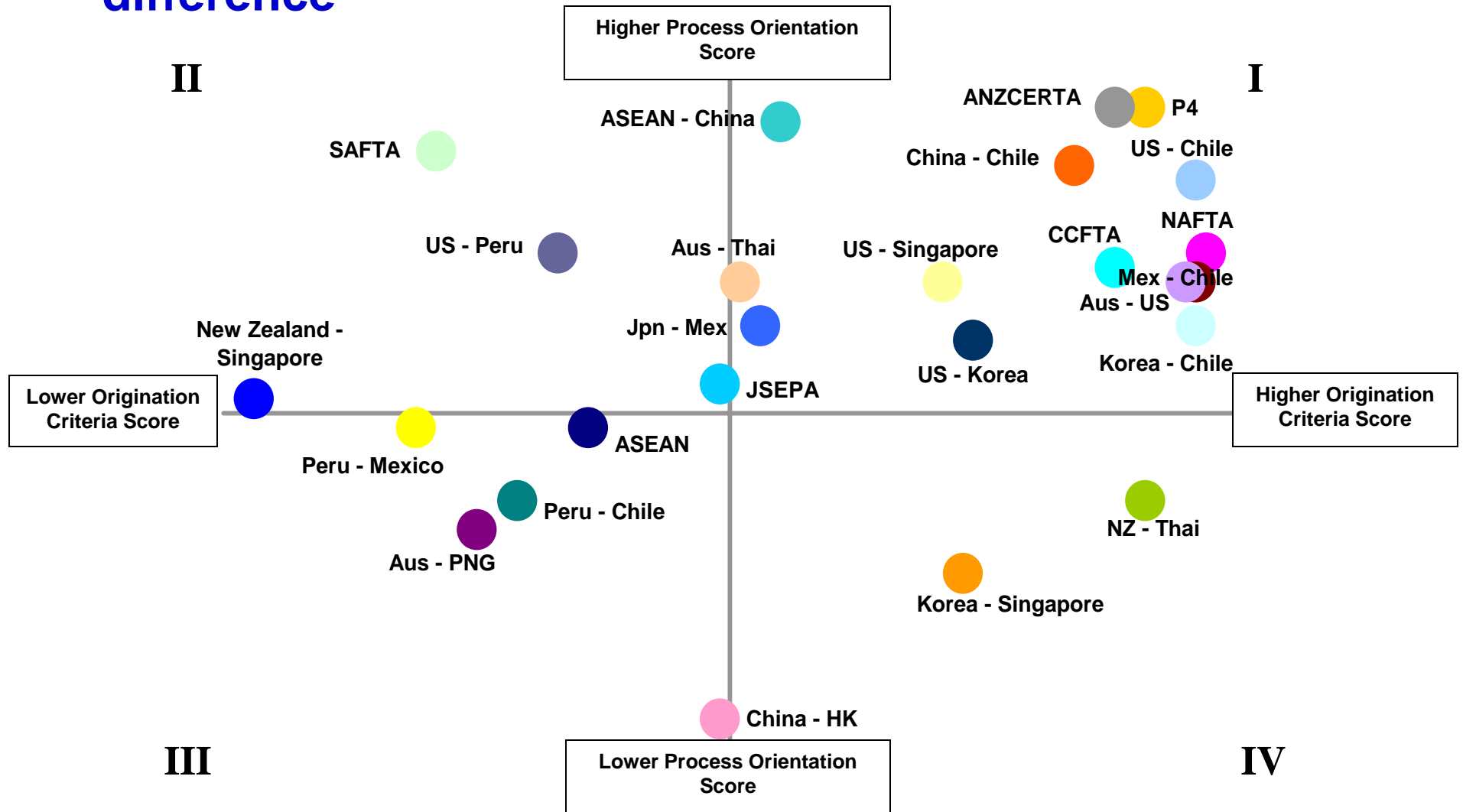
	ANZCERT	Australia - PNG	SAFTA	New Zealand - Thailand
Criteria	81	- 53	- 62	87
Process	100	- 38	86	- 29

Limitation

Two FTAs close to each other in score are not necessarily similar to each other. The scores indicate similarity to the group of FTAs only.

Higher scores for process provisions and origination criteria provisions indicate that an FTA's Rules of Origin are more similar to the group of FTAs

FTAs mapped based on the extent of Rules of Origin process and origination criteria similarity and difference



FTAs plotted on the upper right quadrant are the most similar to the group

Summary: Comparing Rules of Origin regimes against one another

- Broad differences in the rules of the most commonly used provisions of Rules of Origin creates a reality for business where there are essentially no common provisions
 - Business must treat each set of RoO as entirely new business requirements
- There most complexity arise within the accumulation, certification, and substantial transformation method provisions
- Complexity increases most for business when they must meet the requirements of multiple sets of RoO.
 - Where a company can use two or more similar FTAs it will experiences less difficulty and achieve lower costs
- Negotiating new Rules of Origin provisions that are similar to other RoO provisions will reduce company cost
 - Negotiating with this in mind, trade officials can eliminate unnecessary differences in these agreements
- Consistency to any standard reduces complexity in the landscape, promotes transparency, and lowers unnecessary administrative costs

Industry Specific Rules of Origin Analysis

Comparative analysis of *industry specific* Rules of Origin

Issues

- Special Rules of Origin provisions complicate firms' sourcing decisions¹
- Product specific Rules of Origin allow governments to include sensitive products rather than exclude them from the FTA
 - However, because each Rules of Origin can be tailored to a specific product, quantifiable comparison is difficult across sectors²

Research Approach

1. Examined industry specific Rules of Origin in the general Rules of Origin chapters and articles for all FTAs (excluding annexes)
2. Identified products that had special provisions and grouped by HS code
 - Examined individual Rules of Origin provisions containing these exceptions
3. Analyzed FTAs with the most exceptions

Caveats

- Many annexes contained all HS codes and therefore did not provide enough variation for a conclusive comparative analysis

89% of APEC FTAs have special rules for certain industries in the general Rules of Origin provisions

1. The Impact of RoO on Strategic Outsourcing: An IO Perspective

2. Selective Liberalization in Response to Globalization: RoO as Determinants of Market Access Provisions in PTAs

Rules of Origin provisions that include industry specific exceptions

Wholly Obtained or Produced	Substantial Transformation	De Minimis
<ul style="list-style-type: none">• Products easily qualify as originating but may have additional restrictions such as quotas, time windows, and other non-tariff trade barriers.	<ul style="list-style-type: none">• Additional change in tariff classification requirements• Specific regional value content requirements• Technical requirements	<ul style="list-style-type: none">• Different de minimis levels for specific products

Industry specific Rules of Origin include additional restrictions and requirements in general provisions

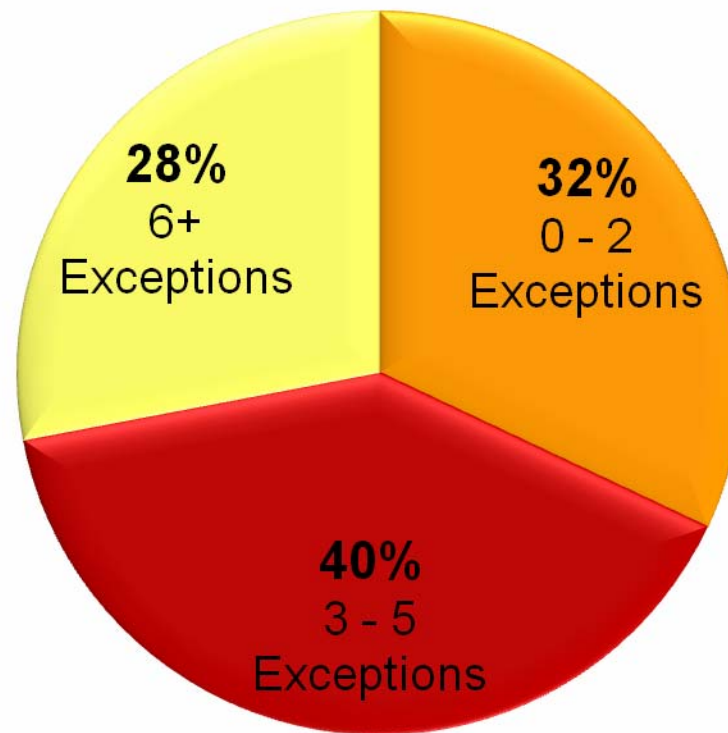
Industry specific Rules of Origin appear across nearly all FTAs in the regions

Industry specific RoO criteria by FTA

Industry	Australia-PNG	SAFTA	NAFTA	JSEPA	Korea-Singapore	Canada-Chile	Australia-US	Japan-Mexico	Mexico-Chile	US-Peru	Australia-Thailand	ANZCERTA	Chile-Peru	Korea-Chile	US-Chile	New Zealand-Thailand	US-Singapore	New Zealand-Singapore	ASEAN	P4	Peru-Mexico	US-Korea	China-Hong Kong	ASEAN-China	CCFTA	Total by HS Code
Animals	x		x		x	x	x	x	x	x	x		x	x	x	x	x				x					15
Vegetables	x		x	x	x	x	x	x	x	x	x			x	x	x					x					14
Food Stuff	x		x		x	x	x	x	x	x	x			x	x	x	x			x						14
Minerals	x		x		x			x					x													5
Chemicals	x				x		x					x	x													5
Plastic/Rubber	x	x		x	x																					4
Leather/Fur	x	x		x																						3
Wood Products	x																		x							2
Textiles	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x			x				19
Foot/Head Wear	x	x	x									x						x								5
Stone/Glass		x																								1
Metals		x	x	x		x																				4
Machinery/Electric		x	x	x		x																				4
Transportation		x	x			x	x		x	x		x									x		x			9
Misc		x		x																						2
Total by FTA	10	9	9	7	7	7	6	5	5	5	4	4	4	4	4	3	3	2	2	2	2	2	2	0	0	0

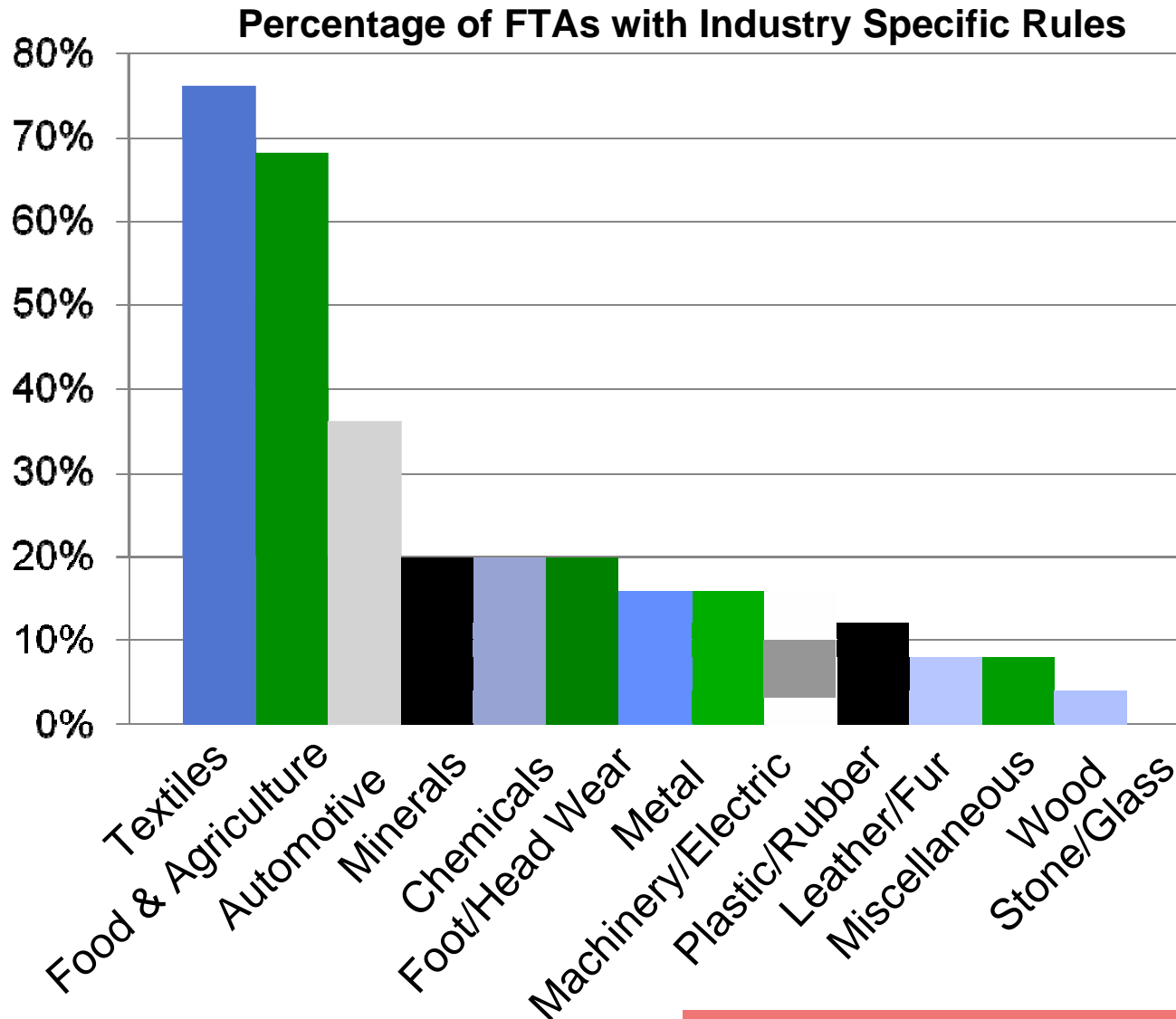
General provisions do not apply universally to all industries in the FTAs

- 32% of FTAs have 0-2 industry specific exceptions
- 40% have 3-5 specific exceptions
- 28% have 6 or more exceptions



The number of different industry specific criteria can be an indication of FTAs level of industry restrictiveness and protection

Textiles, Food & Agriculture, and Automotive industries have the most industry specific criteria



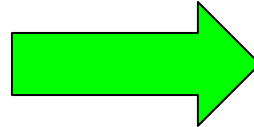
Summary: Industry specific Rules of Origin analysis

- 89% of APEC FTAs have special exceptions for specific products and industries
- Textiles, Food & Agriculture, and Automotive have the most exempted HS codes
- Industry specific Rules of Origin provisions add complexity to FTAs
 - Complicate firms' sourcing decisions
 - Force specialization of production to a certain market or markets when Rules of Origin are strict
 - Increase transaction costs when certification methods diverge for firms that operate under multiple FTAs
- Potential Impacts
 - Additional Rules of Origin complexity driven by industry specific exception reduces aggregate trade flows¹

1. Estevadeordal, Antoni and Kati Suominen. Rules of Origin in the World Trading System. Seminar on Regional Trade Agreements & the WTO. Nov 2003.

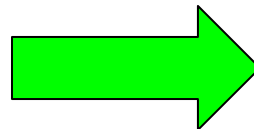
Conclusions

Complexity of the landscape causes transaction and administrative cost in dealing with the interaction of different FTAs in addition to the cost of administering each FTA individually



Precision and transparency reduce administrative guesswork and therefore cost

Complexity of a single FTA causes transaction and administrative cost for a company operating under that FTA



Simplification in the landscape reduces the cost of operating under two or more FTAs

- Simplification of general Rules of Origin may lead to simplification of product specific Rules of Origin
- Supporting a country's economic interests does not require complex Rules of Origin

Capturing the Voice of the Stakeholder: Business Executives, Trade Association Officials, and Trade Officials

Interviews and Survey Research: Identifying the major “points of pain” business executives encounter with Rules of Origin

Objective:

Beyond our analytical work on comparing RoO with FTAs, we attempted to learn directly from business executives with deep knowledge of Rules of Origin about their major concerns. We used a combination of both in-person interviews, telephone interviews and a survey instrument to gather both qualitative and quantitative information. Our objectives were to:

- Determine the impact of RoO on business decisions
- Evaluate the burdens that RoO place on businesses
- Assess the benefits and drawbacks of using RoO provisions in FTAs/RTAs between APEC economies

Field Research:

Primary research data collected in 13 APEC economies from business executives, industry representatives, and trade officials.

- Primary research was conducted in: *Australia, Canada, China, Chile, Hong Kong, Japan, Korea, Malaysia, Mexico, New Zealand, Singapore, Thailand, United States*
 - In-person interviews: **60**
 - Telephone interviews: **14**
 - Questionnaire responses: **41**
- Industries: *Agriculture, Automotive, Construction, Food & Beverage, Government, Telecommunications, Manufacturing, Professional Service, Pharmaceutical, Trade Association.*

Limitations:

- The objective was to seek information from knowledgeable executives, RoO specialists, and trade association officials in a variety of industries, and with government trade officials. As a consequence, there is more depth and less breadth in the research sample.
- There is a bias in our interviews toward executives in the Automotive and Food sectors. We sought explicit interviews with executives in these industries in order to develop the industry-specific case studies included in this report.

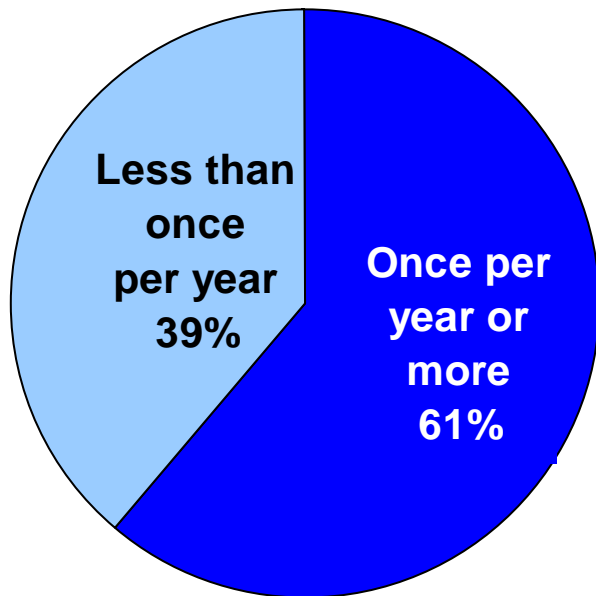
Rules of Origin: Cost Time and Money

** See Appendix A for survey questions and summary of responses

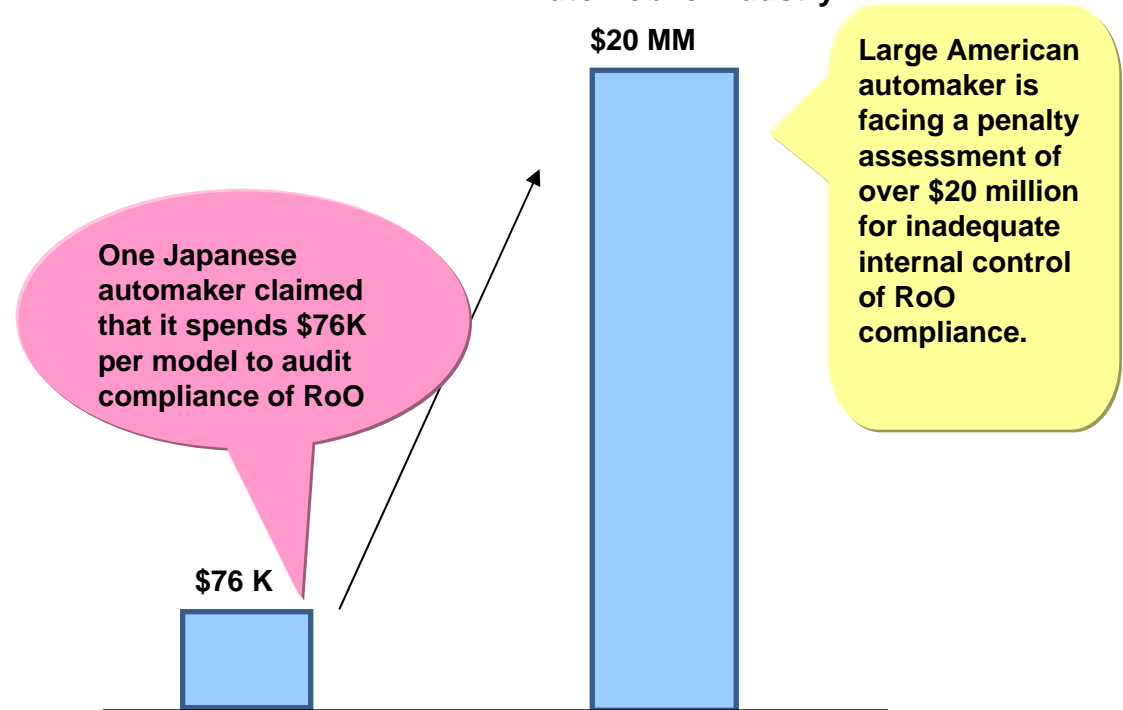
Rules of Origin factor into management decisions frequently...

...and the costs, while they vary widely, are real and unavoidable

Frequency of RoO impact on Management Decisions
Respondents Across All Industries



The range of incremental Costs
Associated with RoO-Related Issues
Automobile Industry

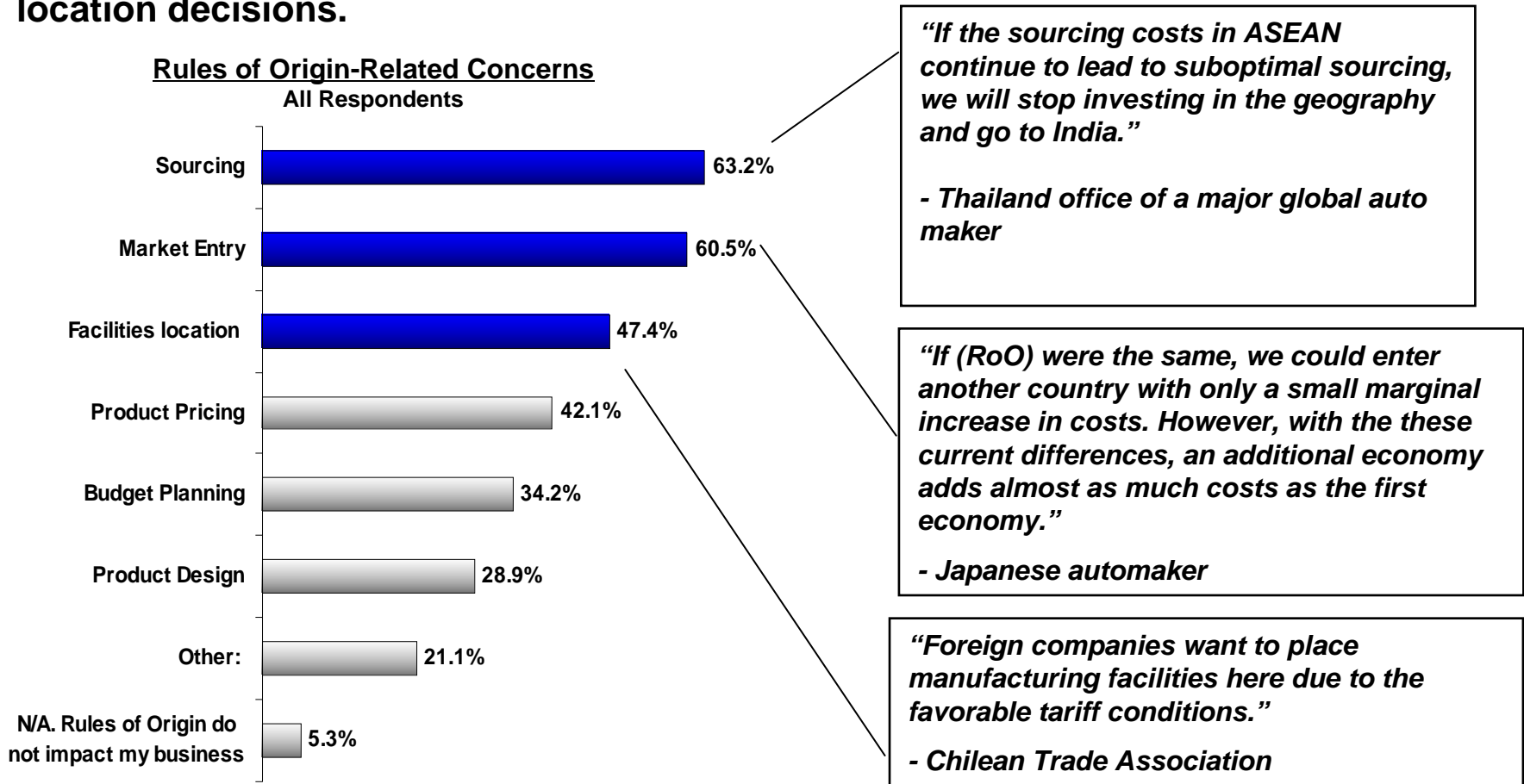


Rules of Origin issues impact decision-making at companies across industries and economies

Top Rules of Origin “Points of Pain”

** See Appendix A for survey questions and summary of responses

Rules of Origin have the largest impact on sourcing, market entry, and plant location decisions.



Rules of Origin have the largest impact on location-related strategic decisions

Businesses in every economy, and every industry, are facing Rules of Origin issues, however...

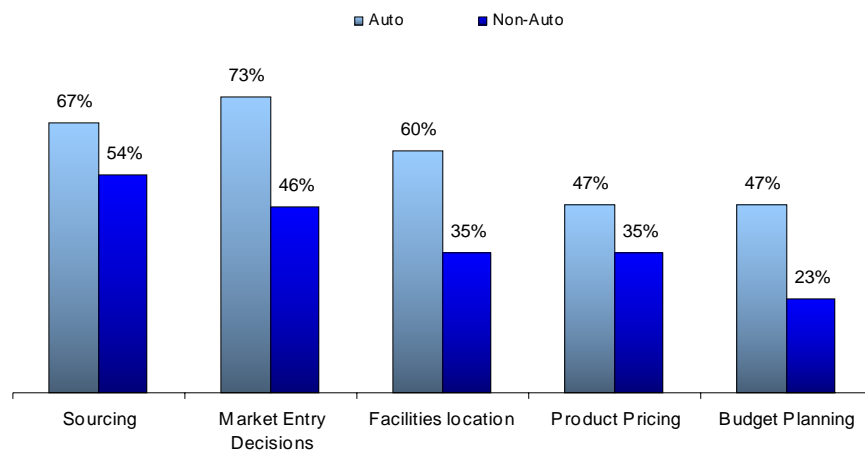
** See Appendix A for survey questions and summary of responses

Differences are seen on the industry level...

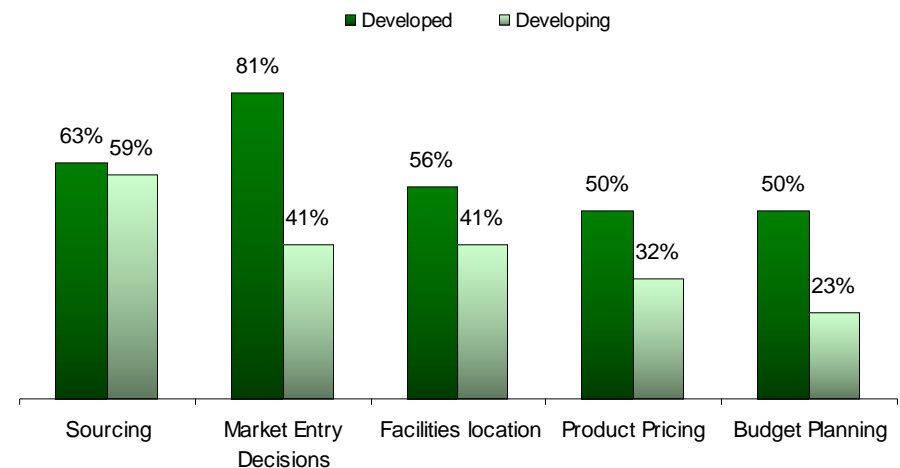
...and also on the economy level

Rules of Origin Points of Pain

Auto vs. Non-Auto Industries
% of Respondants Who Cited These as Issues



Developed vs. Developing Economies
% of Respondants Who Cited These as Issues

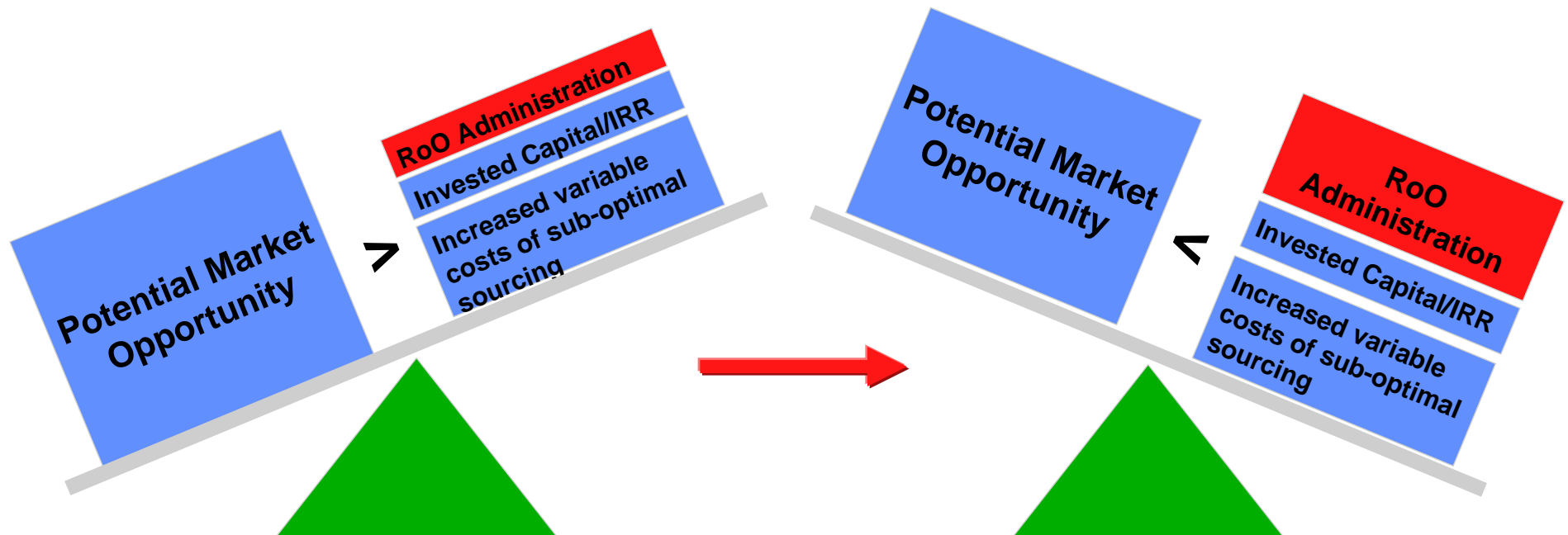


Across companies in both developed and developing economies, RoO concerns are essentially the same. One significant difference is in market entry decisions, which are more prevalent decisions for businesses in the auto industry and developed markets.

Rules of Origin may prevent market entry investments

Drawing upon comments from multiple interviews, we offer an illustrative example: Consider a global automaker seeking to enter a new market. The attractiveness of the market opportunity must be weighed against the capital investment, increased fixed costs, lost flexibility and the administrative costs of Rules of Origin.

Effect of Burdensome RoO Related Costs on Market Entry Decisions

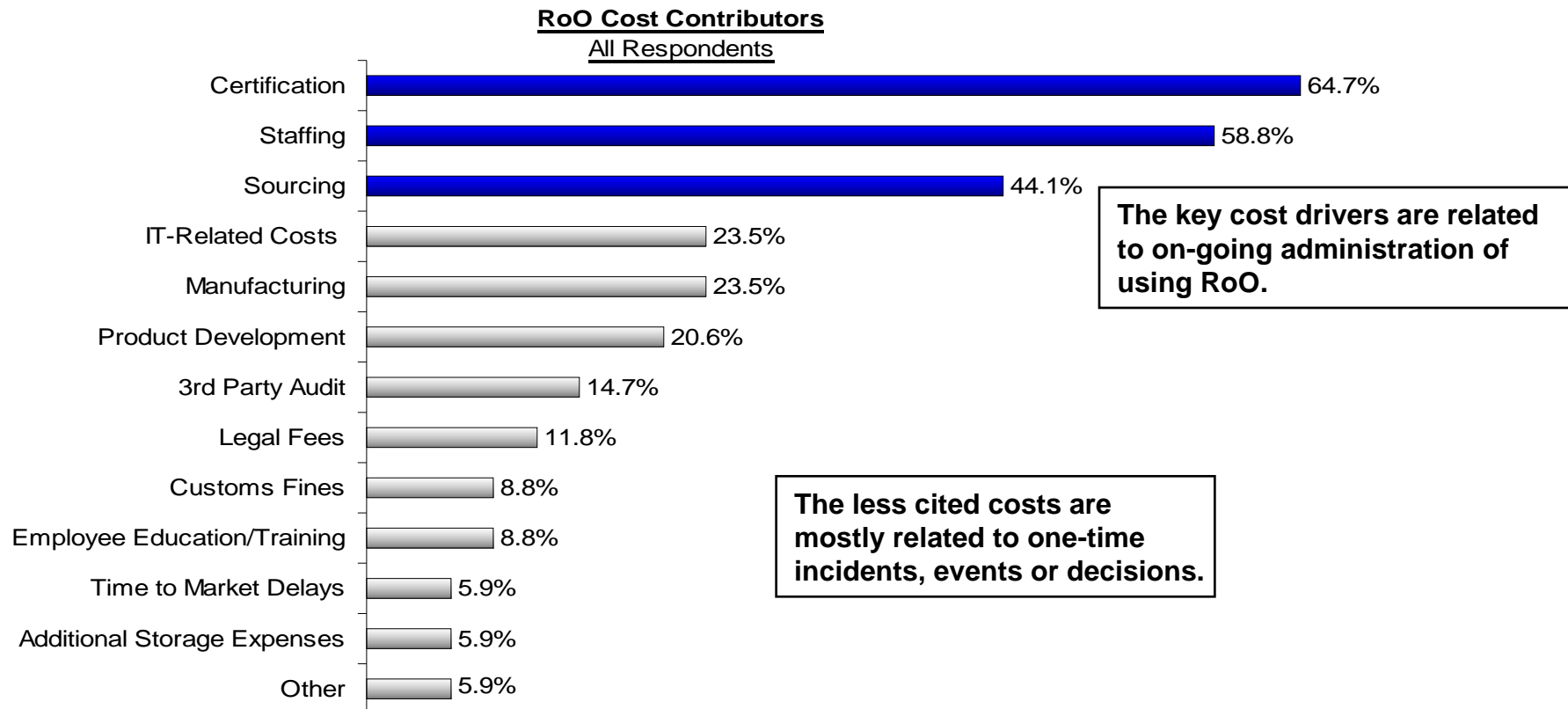


Including all RoO administrative and compliance costs (upfront and on-going) in market entry decisions can tilt the scales to the point where a market entry opportunity is no longer attractive. Hence investments do not get made.

Identifying the top Rules of Origin cost contributors

** See Appendix A for survey questions and summary of responses

The three most cited Rules of Origin-related costs: certification, staffing, and sourcing fees.

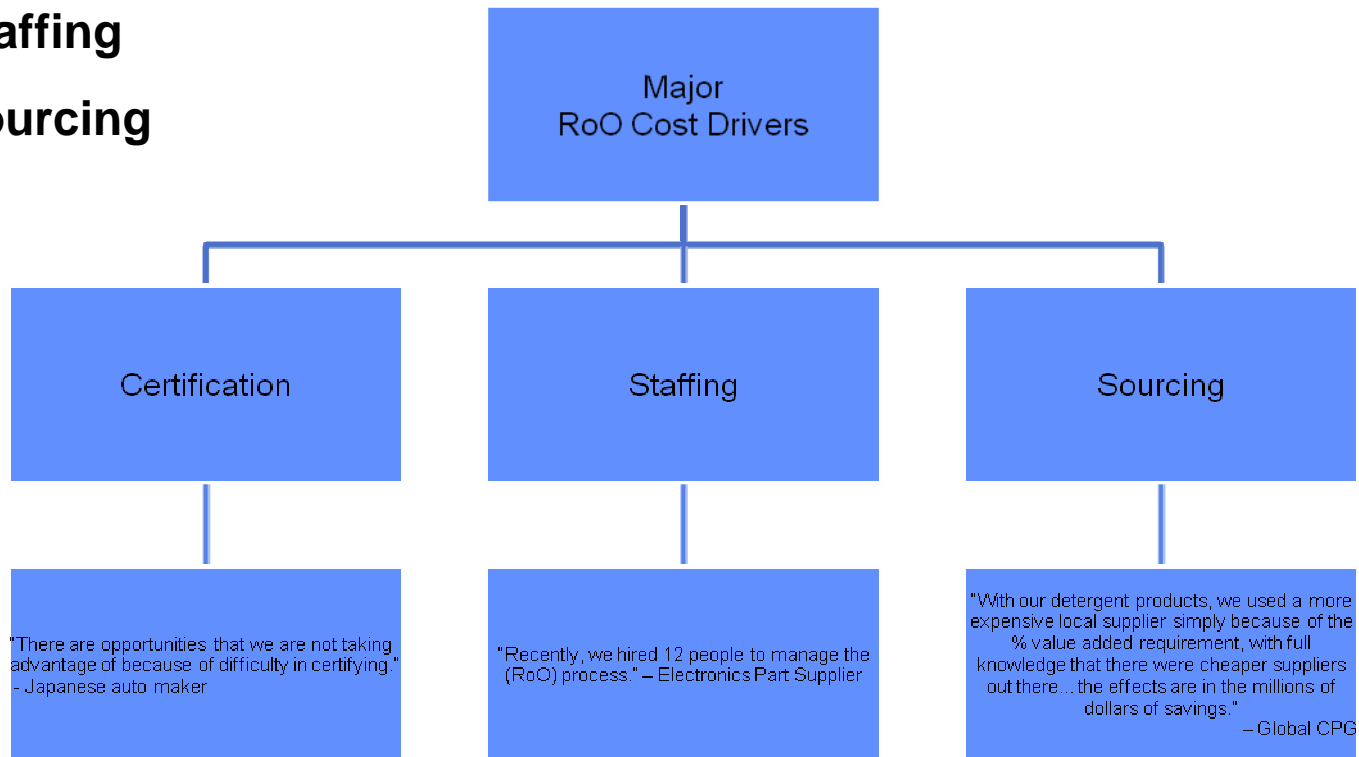


The largest RoO costs are in the areas of dispute resolution and RoO administration. Executives are also concerned with the costs of opportunities which may be missed because of the complexity of operating across FTAs with different Rules of Origin provisions

Identifying the sources of Rules of Origin-related costs

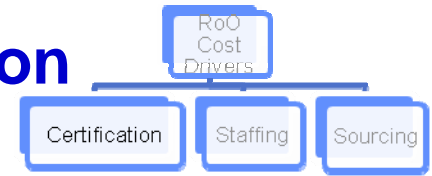
Across interviews, three explicit drivers of Rules of Origin-related costs emerged:

- 1. Certification
- 2. Staffing
- 3. Sourcing



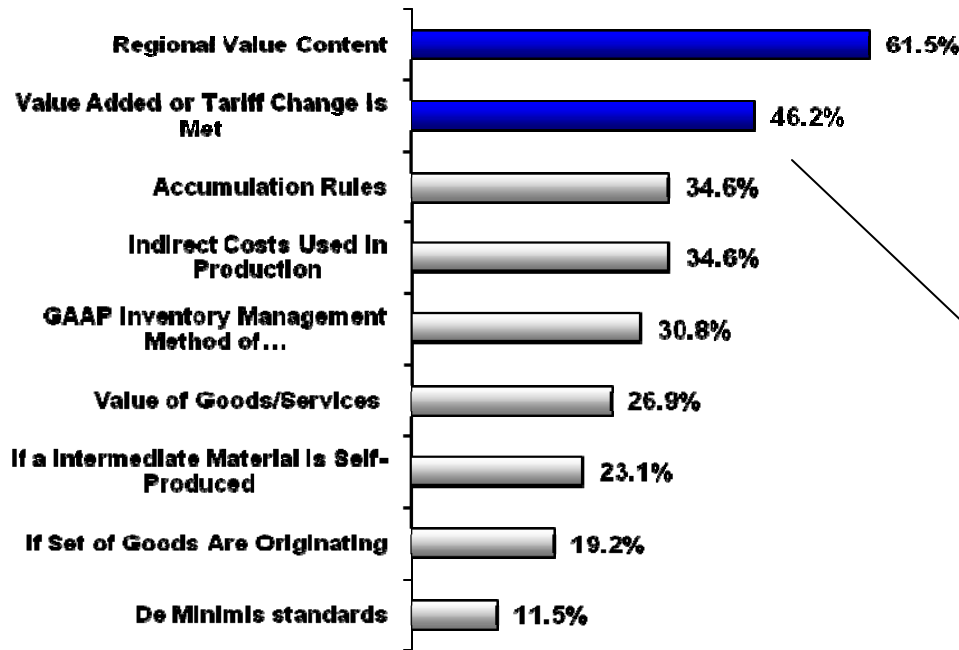
Certification costs driven by proving origination

** See Appendix A for survey questions and summary of responses



RVC and Value Added/Tariff Change procedures are the most complex categories to administer and appear to be high cost drivers for businesses.

Administrative Complexity Drivers
All Respondents

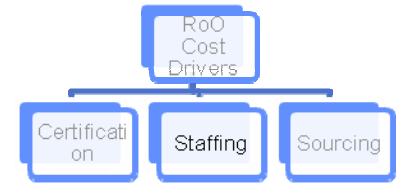


“It is hard to gather information from part suppliers to determine local content of parts. Suppliers have information that they want to keep secret.”
-- Japan automaker

“Value added is too much work, it costs a lot of time and money. To prove the tariff change rule we will have to show every HS code even for non originating material.”
-- Japan electronics manufacturer

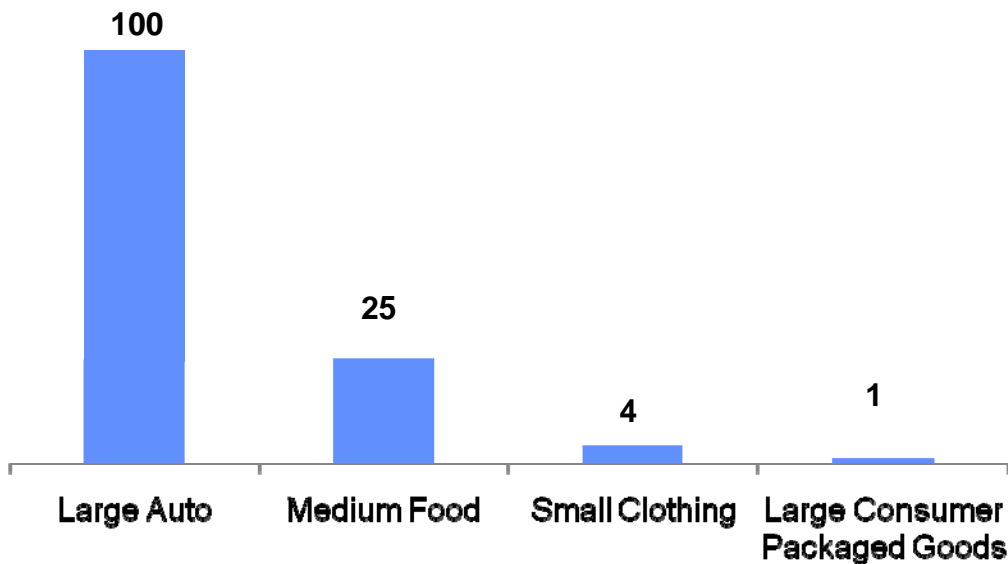
Calculating and proving origination are key cost drivers

Human capital costs: increasing internal headcount or hiring consultants?



Companies are investing in staffing to handle RoO issues – with mixed success.

Number of Internal Employees Dedicated to RoO Administration



Consulting: Pro and Con

Pro

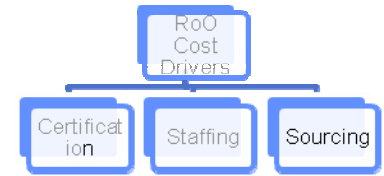
“We hire consultants to help us on topics in which we do not have expertise or when we don’t have time to analyze the RoO for a new product or region.” – Global Agricultural Firm

Con

“SMEs don’t have the internal capabilities to deal with customs and RoO complexity; as a result, they hire consultants who are not transparent in what they do and many are actually corrupt.” – ASEAN Chamber of Commerce

The added staffing costs are a significant cost of using Rules of Origin. Whether it is developing in-house capabilities or paying for consulting services, these costs add to the burden companies are facing.

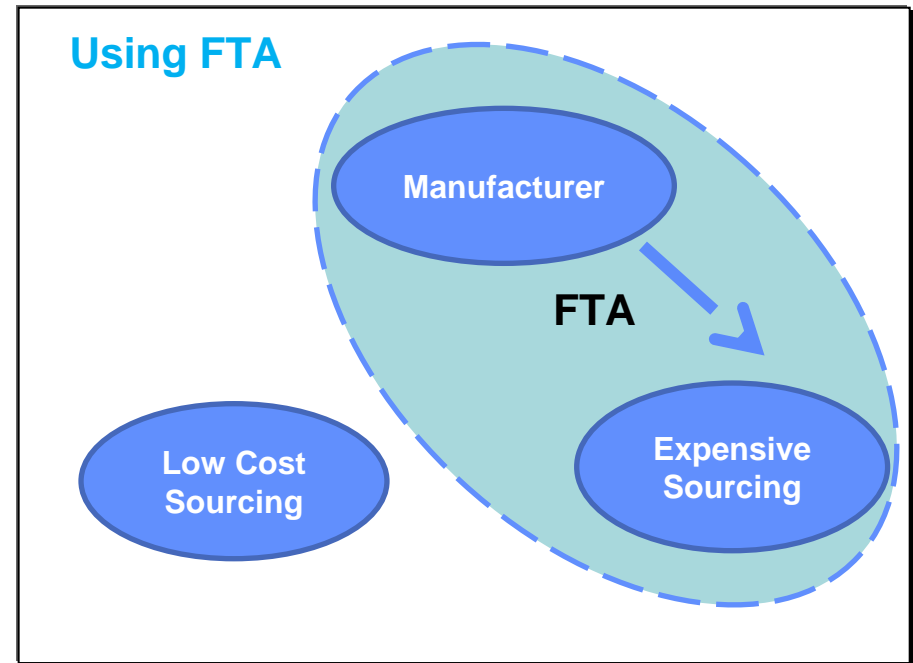
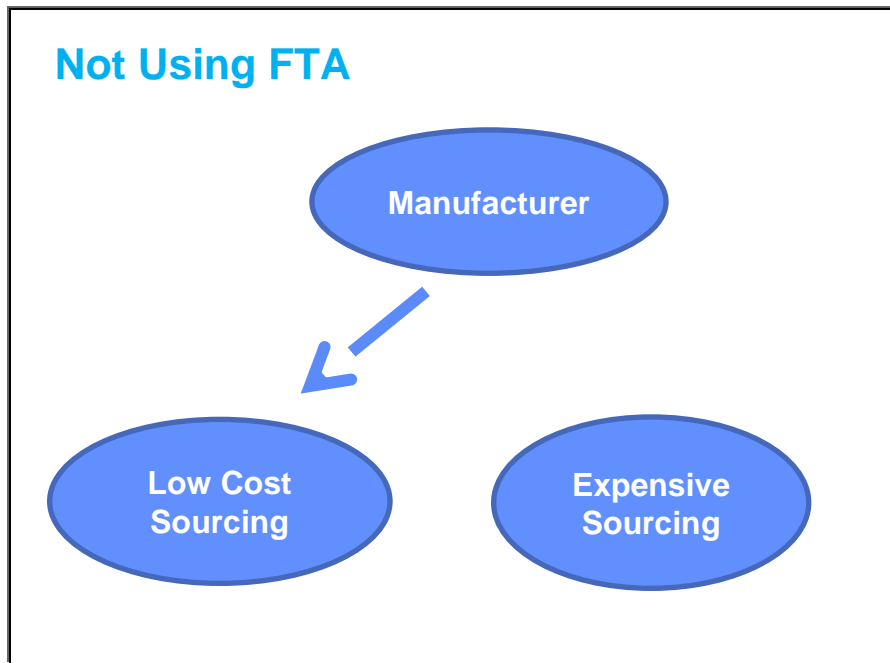
Sourcing costs are driven by origination



Ideally, a business would source parts from the low-cost provider...

...but when it must consider RoO, suppliers' locations are a key factor in the decision and can lead to higher costs.

The Effect of RoO on the Cost of Sourcing Decisions

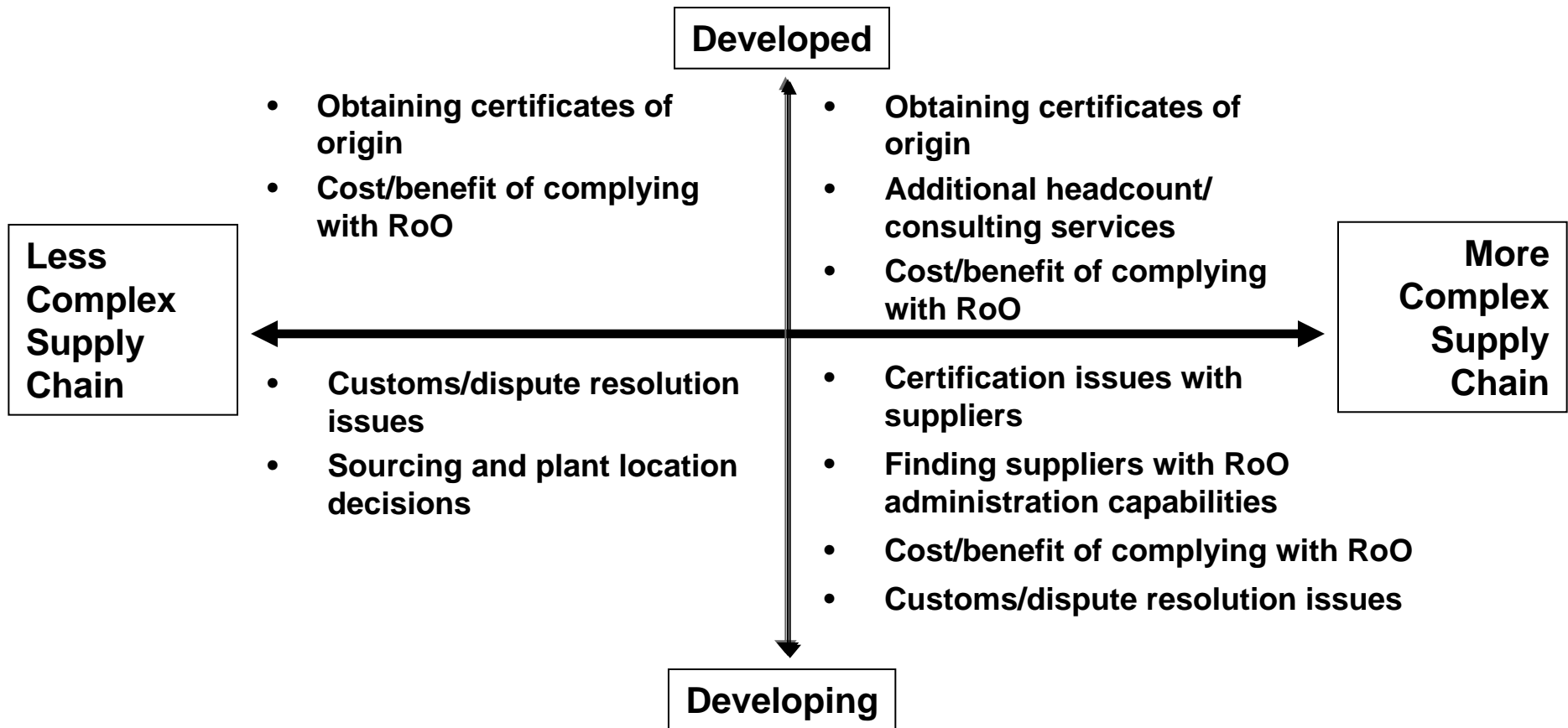


In some cases, in order to benefit from FTA preferences, companies may be forced to make sub-optimal decisions and must work with new/additional suppliers that add costs and can slow down the certification process

How different businesses are affected by Rules of Origin

Below are listed the most frequently raised Rules of Origin-related business concerns organized by supply chain complexity and development level of the economy.

Core Business Concerns by Supply Chain Complexity and Level of Economic Development



The heart of the matter: worth it or not?

Across our interviews, the crux of the issue for business is whether the efforts and associated costs imposed by using FTAs and their Rules of Origin are worthwhile.

	Use Rules of Origin	Pay Full Tariff
Benefits & Advantages	<p>Barrier to entry</p> <ul style="list-style-type: none"> “FTAs provide a competitive advantage for us.” – Global Food Company <p>Cost Savings</p> <ul style="list-style-type: none"> “last year we saved 50 million dollars on customs duties.” – Japanese Auto Maker 	<p>Tariffs are not cost prohibitive</p> <ul style="list-style-type: none"> “Countries want our goods, so the tariffs are low.” – Chilean Metal Producer <p>Tariffs are protecting our industry</p> <ul style="list-style-type: none"> “We wanted protection for our industry from a low cost economy.” – Mexican Trade Association
No Benefit/ Not Worth It/ Don't Know	<p>Cost of Doing Business</p> <ul style="list-style-type: none"> “RoO are one of the hidden costs of doing business.” – Canadian Trade Association <p>Poor Sourcing Decisions</p> <ul style="list-style-type: none"> “To comply with RoO we have to change sourcing of materials, but this increases costs.” – Japanese Electronic Manf. <p>Unclear on How to Calculate Benefit</p> <ul style="list-style-type: none"> “We tried to quantify the costs of RoO but “they are not reliable. It’s really difficult to quantify.” – Global Auto Maker 	<p>Lack capabilities</p> <ul style="list-style-type: none"> “Many SMEs don’t have the internal capabilities to deal with customs and RoO complexity.” – ASEAN Chamber of Commerce <p>Overly burdens suppliers</p> <ul style="list-style-type: none"> “We ask suppliers for RoO information... there’s not a great response.” – Global Auto Maker <p>Unable to make the business case for compliance</p> <ul style="list-style-type: none"> “It is often easier to pay the tariff because the time spent is simply not worth it.” -- Hong Kong Food Company

Conclusions

- Business executives cited dispute resolution and administration costs as the most prevalent Rules of Origin cost drivers.
 - These costs manifest themselves through certification, staffing, and sourcing.
- Rules of Origin significantly impact location-centric decisions.
 - Business executives stress that Rules of Origin has the greatest impact on strategic sourcing, manufacturing, and product sales decision-making.
- Rules of Origin–related issues are similar across all economies, industries and company sizes.
 - While we found some differences based on type of industry and size of company, most executives cited the say list of Rules of Origin concerns.
- Rules of Origin administrative and compliance costs can negatively effect market entry decisions.
 - Business executives cited that Rules of Origin costs, when significant, can lead them to change investment decisions. Some executives reported even considering making investments in other regions of the world.

Case Study **Rules of Origin** **in the Food Industry**

Key findings

- 1. Rules of origin issues are relatively less important to food companies when compared to other industries.** Only the largest food companies have the size and capabilities to take advantage of Rules of Origin.
- 2. Food companies operate in a highly restrictive and protected industry that dramatically affects their ability to use Rules of Origin.** Food-specific Rules of Origin are structured to enable economies to negotiate for special provisions that protect local food interests. As a result, food companies are restricted in their ability to truly take advantage of free trade preferences across the APEC region.

Food Industry Case Study

Food Industry

The food industry is one of the most protected industries worldwide. Beyond restrictive measures such as quotas, food stuff has some of the most product-specific Rules of Origin requirements.

Most food stuff qualifies as originating due to the nature of the industry. For example, raw materials are wholly produced. Processed goods comply with Rules of Origin via a substantial transformation.

Objective

- To examine one of the more restrictive industrial sectors within free trade agreements
- To determine how companies of different size and from different economies cope with Food specific Rules of Origin

Research Approach

- Analyzed industry specific Rules of Origin in the food stuff chapters (16-24) across FTAs
- Interviewed executives from the food industry within APEC region

Caveats

- Interviews conducted in 13 economies (Thailand, Australia, Hong Kong, China, Japan, Korea, Mexico, New Zealand, US, Chile, Canada, Malaysia, and Singapore) out of 21 APEC economies
- Interviews conducted trended toward larger multinational corporations

Insights

Our analysis of the food industry revealed two insights. This report focuses on the critical drivers behind the following findings:

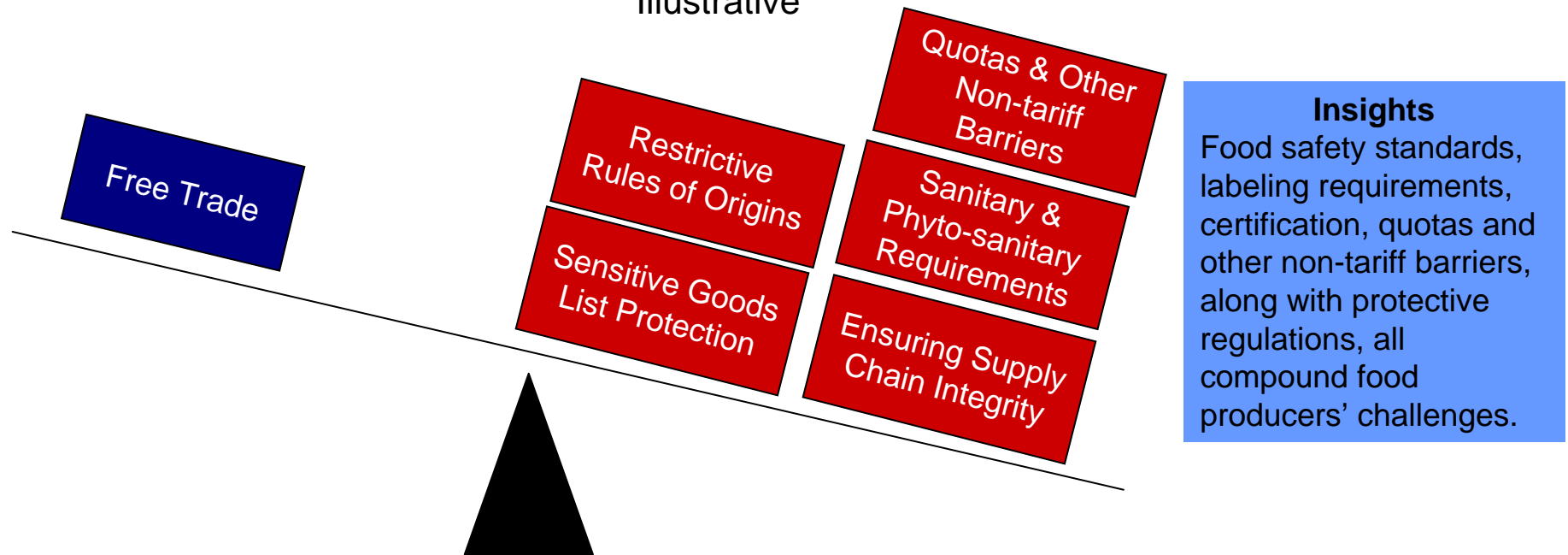
- 1. Understanding Rules of Origin is *relatively* simple for food companies; however, complying with the restrictiveness of the industry and other non-tariff barriers is more challenging**

2. The use of Rules of Origin is highly correlated with company size
 - Large companies have the resources to meet the additional administrative burden
 - Small & Medium Sized Enterprises (SMEs) may lack the resources and the scale to meet the administrative burden

The Food Industry has challenges beyond restrictive Rules of Origin

Rules of Origin requirements are only one of several important considerations food manufacturers must take into account when engaging in cross-border trade.

Protectionism Measures vs. Trade Liberalization in Food Industry Illustrative



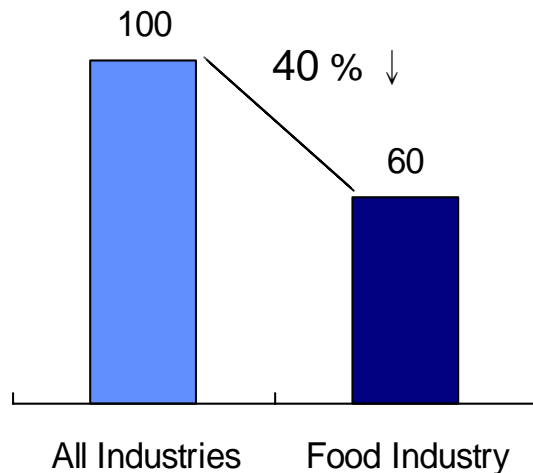
Rules of Origin are viewed as a minor roadblock by food executives when compared to other protectionist measures like quotas

Rules of Origin is not the major issue

Nearly 40% fewer food executives are affected by Rules of Origin related issues compared to those from other industries.

Frequency of RoO Related Management Issues

Instances Occurring at least once a year; Index = 100



“RoO affect our decisions, however, in the end we decided where to do business depending on overall costs including transportation costs, raw materials, and duties.”

– Large Food Manufacturer

“RoO do affect the way business is managed and the costs--but probably isn't the ultimate determinant of what countries companies do business in.”

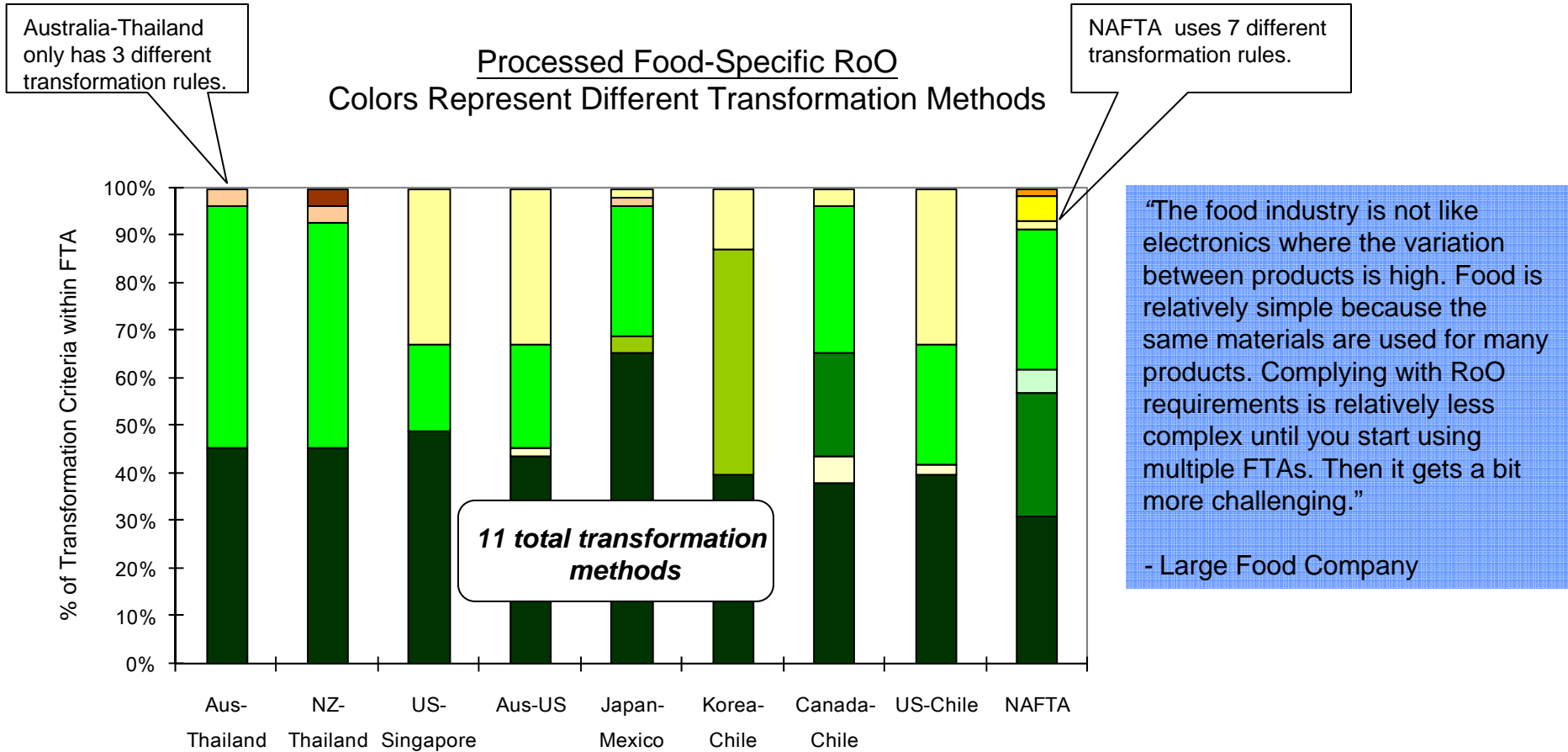
– Large Food Company

Both quantitative and qualitative research reveal that Rules of Origin is not a significant management issue for food company executives

Food specific Rules of Origin are more complex when looking across FTAs

** See Appendix B for a detailed analysis of food-specific Rules of Origin for selected FTAs

There are as many as 11 transformation methods for processed food products across FTAs



Food Rules of Origin are logical, relatively straightforward and not overly complicated; however, firms with operations and supply chains across multiple FTAs encounter complexity.

Food companies must apply different transformation methods to take advantage of Rules of Origin provisions across FTAs

Processed food manufacturers must manage multiple transformation methods and RVC requirements which increase the complexity of global businesses

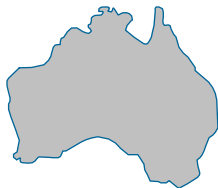
Case in Point: Applying RoO for Wine (HS: 2204) by Exporting Countries

Exporting Country:
Chile



Importing Country	Rule	Value Methodology	%
Canada	CTC	N/A	N/A
United States	CTC	N/A	N/A
China	RVC	Transaction Value	50%
Korea	CTC + RVC	Net Cost or Transaction Value	30%- build up; 45%-build-down
New Zealand	CTC	N/A	N/A

Australia



Importing Country	Rule	Value Methodology	%
Singapore	RVC	Net Cost	50%
United States	CTC	N/A	N/A
Thailand	CTC	N/A	N/A

Findings:

1. Most RoO use change in tariff heading and are sometimes accompanied by RVC requirements;
2. When RVC is required, a transaction value and/or net cost method are used to calculate RVC;
3. RVC ranges from 10%-100% for different provisions across FTAs.

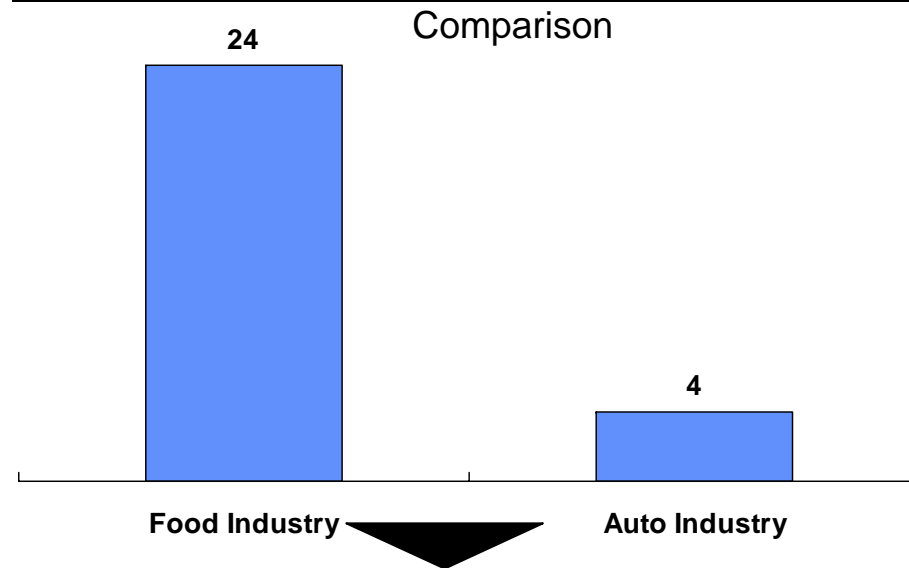
Simple transactions become increasingly complex when applying Rules of Origin across multiple FTAs. Small companies simply pay tariffs instead of applying Rules of Origin across FTAs

Rules of Origin help facilitate protectionism and restrictiveness of the Food Industry

More food chapters allow countries to negotiate for more protectionism...

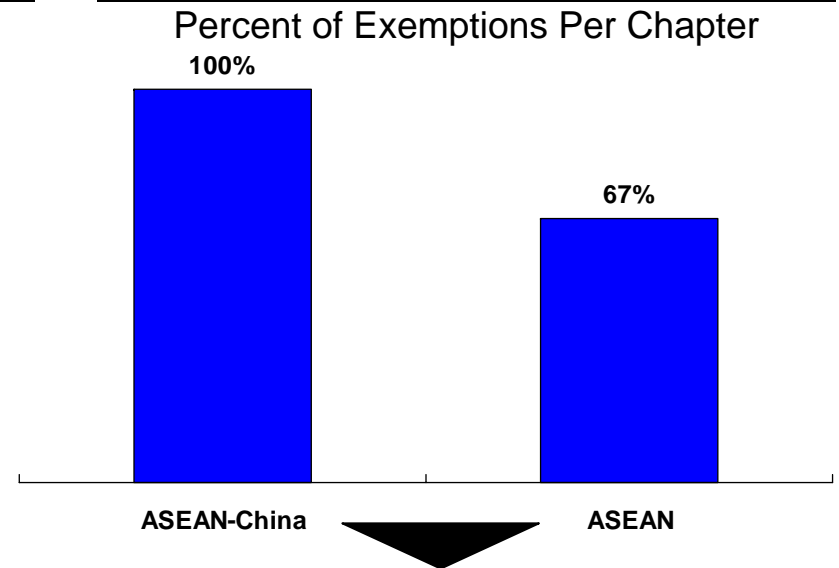
...that many be advantageous when at the negotiation table

Number of Industry Related Chapters in Harmonized System



A change in chapter heading is a more restrictive requirement for substantial transformation.

Chapters Exempted from General Provisions



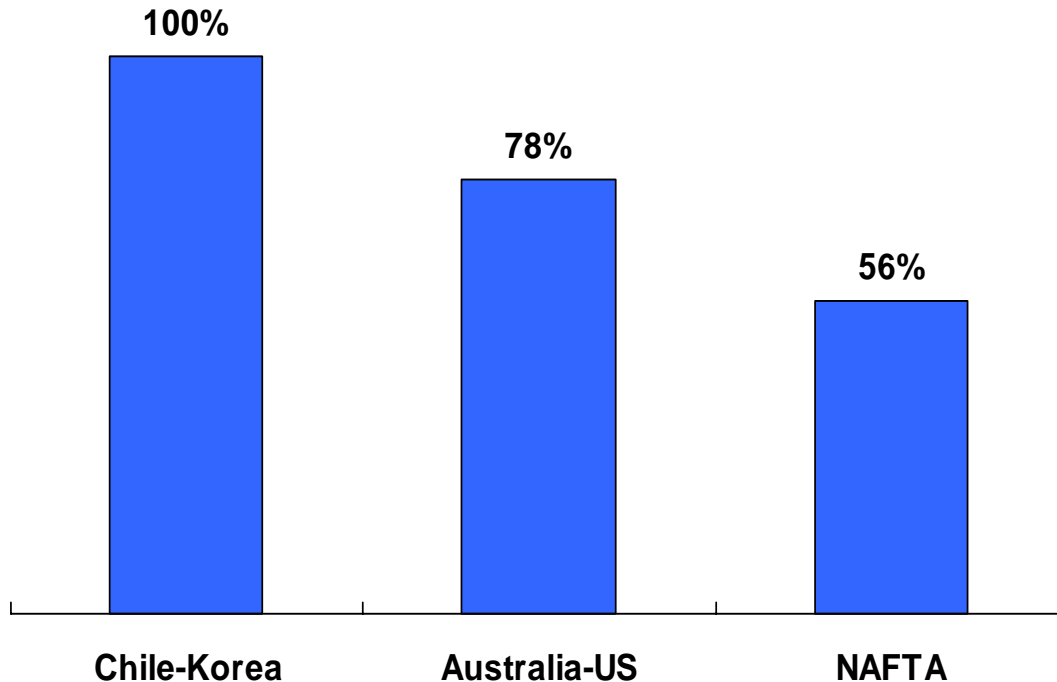
Food and agricultural items are often placed on exempted or sensitive goods list and excluded from FTAs.
 Example:
 • ASEAN-China FTA: Some items in every chapter are placed on the sensitive good list;
 • ASEAN FTA: 4 chapters are excluded.

Rules of Origin restrictiveness effectively limits food companies from taking advantage of global market opportunities

Stronger Rules of Origin for selective food items

Countries use additional special provisions to protect sensitive food products that can effectively eliminate trade.

Chapters Eliminated from De Minimis Provision



Elimination of De minimis provision makes Rules of Origin more restrictive.

Examples:

- NAFTA eliminates De minimis provision for 6 food items
- Chile-Korea eliminated De minimis provision for all food & agricultural goods
- Australia-US eliminates De minimis provision for selected food items

Rules of Origin are more restrictive when countries insist on adding provisions

Insights

Our analysis of the food stuff industry revealed two insights. This report focuses on the critical drivers behind the following findings:

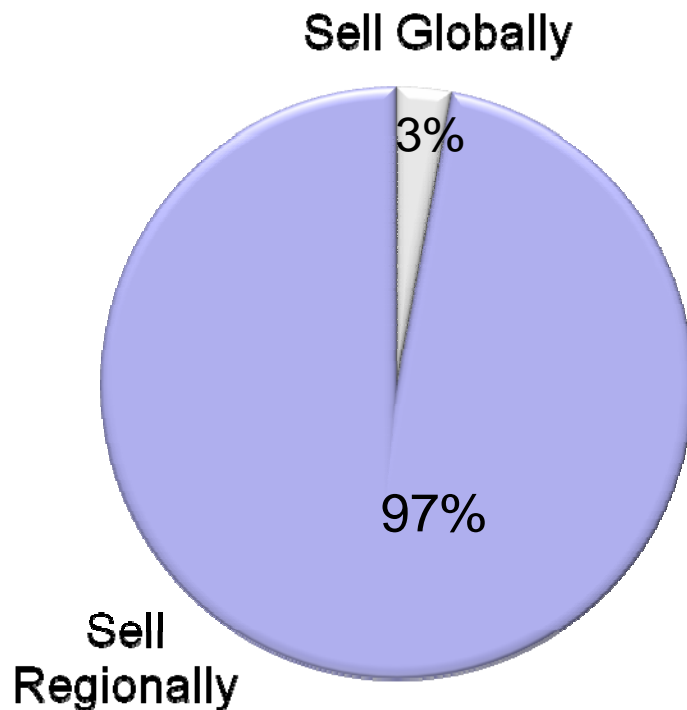
1. Understanding Rules of Origin is relatively simple for food companies; however, complying with the restrictiveness of the industry and other non-tariff barriers is more challenging
2. **The use of Rules of Origin is highly correlated with company size**
 - **Large Companies have the resources to meet the additional administrative burden**
 - **Small & Medium Sized Enterprises (SMEs) may lack the resources and the scale to meet the administrative burden**

Most companies source globally but sell regionally

Even large multinational companies sell regionally....

...which is driven by a number of industry specific factors

Case in Point: Location of Sale of Final Product
North American Food Company



Drivers of Regional Sales for Food

- Local tastes and preferences
- Logistics & distribution costs
- Differences in food safety standards, certification, and local labeling requirements

Many raw materials are exclusively grown and produced, which forces food companies to source globally

Large companies and SMEs engage FTAs and Rules of Origin differently

Food companies differ in how they view the benefits and costs of Rules of Origin

SME Perspective

“It is often easier to pay the tariff for smaller companies because the time spent is simply not worth it.”

– Small Condiments Company

VS.

Large Company Perspective

“RoO is complicated when it comes to new products. Once we identify each item, it is straight forward.”

– Large Confectionary Company

Size and resources determine the usage of Rules of Origin provisions

SMEs tend to use Rules of Origin less frequently than global companies

Global companies apply Rules of Origin proactively, while SMEs apply Rules of Origin passively.

“We always try to find ways to apply RoO. If we can’t, we pay the duty and pass the cost on to consumers.”
 – Large Multinational Food Company

Company Type	Apply RoO	Pay Duty
Large		
Small & Medium		

Frequency

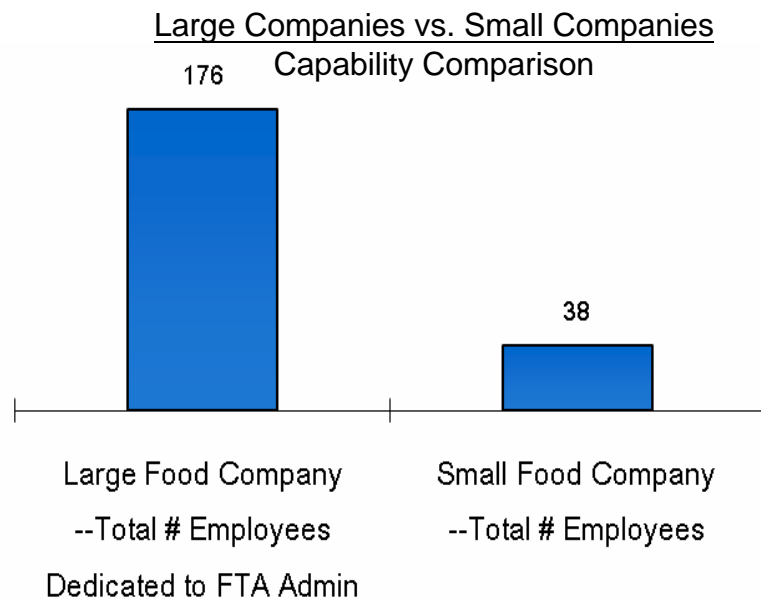


“We would like to apply RoO, but we lack the resources to do so effectively.”
 – Small Food Company

Many food companies simply pay tariffs instead of complying with Rules of Origin

Large companies dedicate more resources to FTA related issues

Large companies can dwarf smaller companies with their size and scale



Large companies have dedicated teams, and hire consultants to deal with RoO-related issues.

- “Consultants can cost USD\$200,000 for a single case.”
– Beverage Company Executive
- “We have dedicated staff to ensure we pay the lowest tariff.”
– Consumer Products Goods Executive

Large companies have dedicated staff to deal with Rules of Origin related issues and the resources to hire consultants

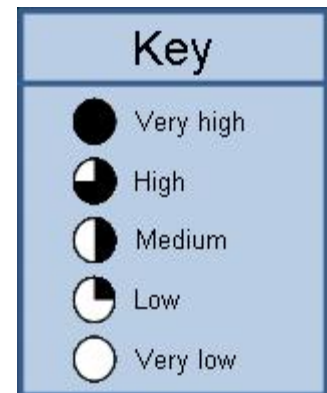
Unlike large global companies, SMEs lack the capabilities to manage Rules of Origin-related issues

Illustrative Comparison of Capabilities:

Global Multi-National Companies (MNCs) vs. Small & Medium Sized Enterprises (SMEs)

Resources	Global MNC	SME
IT Systems		
Subject Matter Experts		
Investment Capital		
Training		
Organizational Flexibility		

“Many SMEs simply do not have the resources to certify their products legally.”
- Food Executive



SMEs have limited resources of capital, human resources and IT systems. Therefore they source and sell mostly within region

Summary

Understanding Rules of Origin and its effects on the Food Industry

- Rules of Origin are viewed as a minor roadblock by food executives compared to other protectionist measures such as quotas
- Both quantitative and qualitative research reveal that Rules of Origin is not a significant management issue for food company executives
- Food Rules of Origin is logical, relatively straightforward and not overly complicated; however, firms with operations and supply chains across multiple FTAs encounter complexity
- Simple transactions become increasingly complex when applying Rules of Origin across multiple FTAs Small companies simply pay tariffs instead of applying Rules of Origin across FTAs
- Rules of Origin restrictiveness effectively limits food companies from taking advantage of global market opportunities
- Rules of Origin is more restrictive when countries insist on adding provisions

Evaluating how food companies use Rules of Origin

- Many raw materials are exclusively grown and produced (e.g., cocoa in South America) forcing food companies to source globally
- Size and resources determine the use of Rules of Origin provisions
- Many food companies simply pay the tariff instead of complying with Rules of Origin
- SMEs rarely have dedicated staff to deal with Rules of Origin related issues or the resources to hire consultants
- SMEs lack the capabilities to manage the complexity of Rules of Origin related administration issues

Case Study
Rules of Origin
in the Automotive Industry

Key Findings

- **Costs are driven by Rules of Origin administration**
 - Costs are compounded when working with multiple suppliers across multiple trade agreements
- **Administration of Rules of Origin complexity drives costs in the auto industry**
 - Costs are driven by number of FTAs and volume of products
- **Rules of origin administration requires automakers to make significant investments**
 - These investments include human capital, training, IT systems, and documentation efforts
- **Economies of scale on certification efforts are difficult to achieve**
 - Overhead, initial fixed costs, and shipping certificates prevent many companies from applying for preferential tariffs
- **Lack of standard interpretations of HS codes lead to classification disputes**
 - Classification is open to interpretation by automakers, suppliers, and customs officials
- **Suppliers are the bottleneck of certification efforts**
 - Suppliers lack the capabilities to deal with Rules of Origin complexity and have little incentive to comply with certification requests.

Automotive Industry Case Study

Objective

- Create a case study to understand Rules of Origin in the Automotive Industry
 - What are the pain points?
 - What are the drivers?
 - What does the industry say?
- The Automotive industry service as a harbinger for industries which continue to expand their supply networks across economies. With approximately 4,000 parts and suppliers across the globe, the problems the automotive industry faces with navigating Rules of Origin serve as valuable case study for other industries

Research Approach

1. Interviews and survey with executives and trade professionals
2. Survey companies in the automotive industry
3. Detailed analysis of the industry specific automotive sector RoO provisions

Caveats

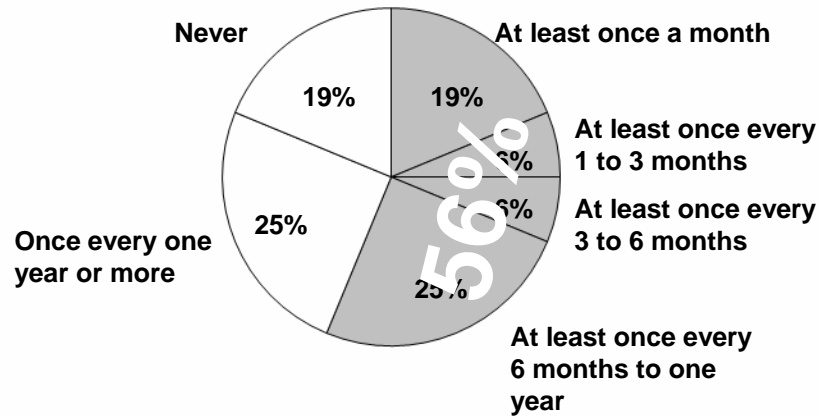
- Very difficult to get companies to share financial data

Rules of Origin impacts auto companies frequently

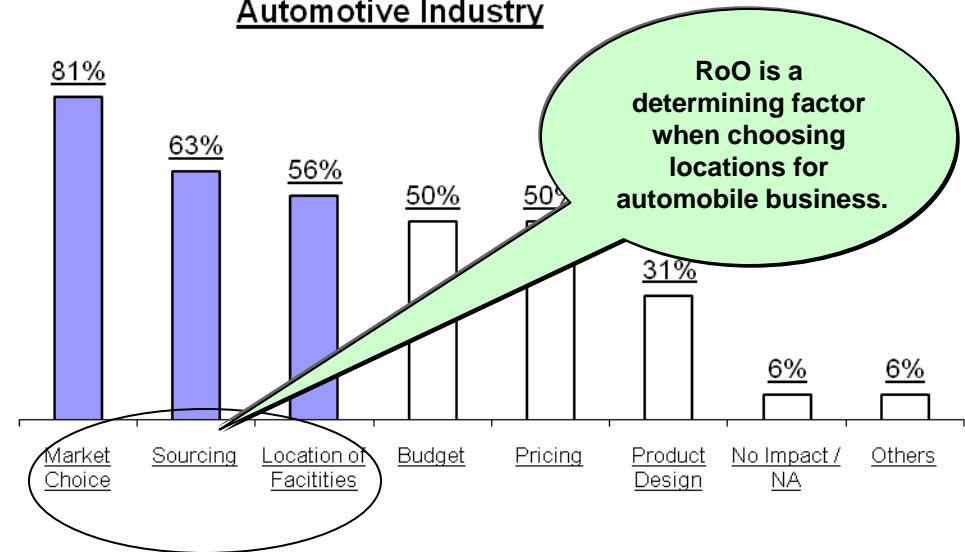
56% of the automakers face RoO-related issues on a regular basis...

... that impact critical business decisions

Frequency of RoO-Related Management Issues Automobile Companies



RoO Impact to Businesses Automotive Industry



“We use RoO in our day to day operations. It is important for sourcing. We are constantly looking for better cost and better logistics.”

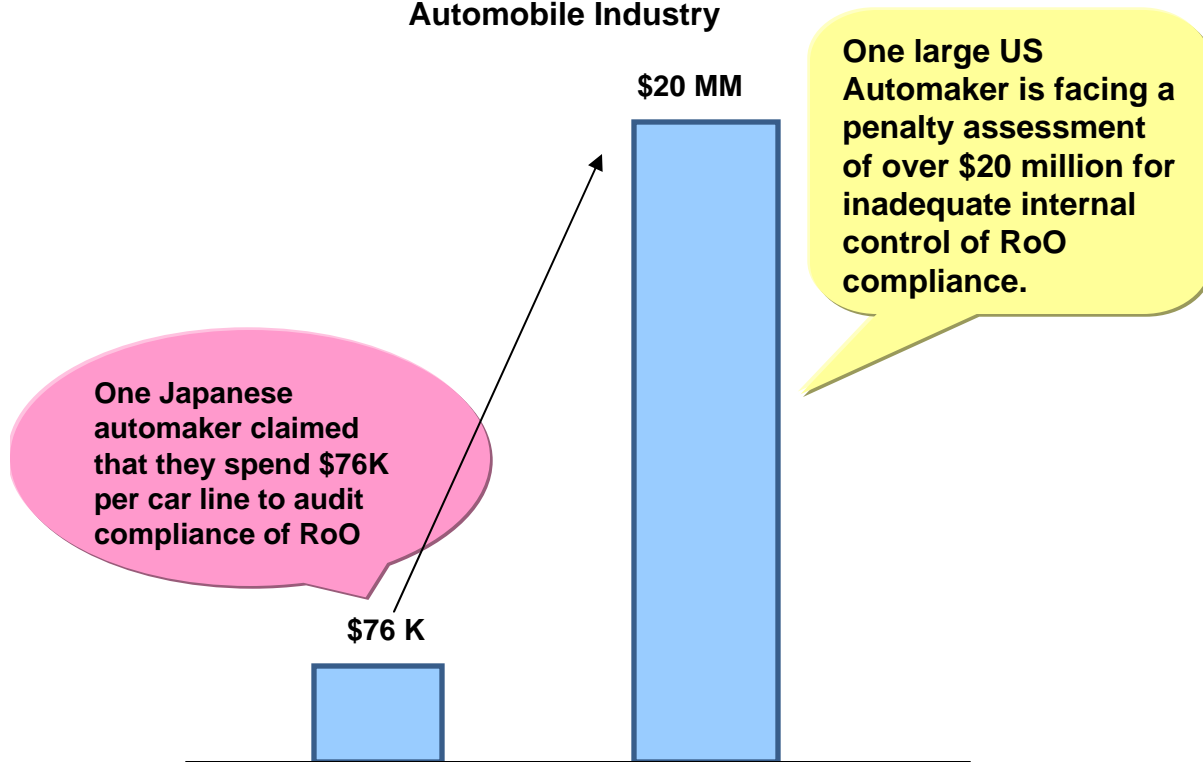
- Auto Part Manufacturer

Rules of Origin issues impact decision-making on a regular basis in automotive industry

Rules of Origin-related issues cause real costs to Automobile industry

Rules of Origin-related costs can impact the bottom-line from thousands dollars to tens of millions of dollars

Ranged Incremental Costs Associated with RoO-Related Issues Automobile Industry



Case-in-Point: On-Going Costs of RoO-Related Issues

DATE	Canadian Duty paid on North American sourced parts	Mexican duty paid on North American Sourced parts	Combined (Mex and CA) duty paid on parts that are potentially NAFTA eligible (USD)
Jul-05	12,157.07	\$6,587.61	\$18,744.67
Aug-05	11,962.67	\$10,874.54	\$22,837.21
Sep-05	18,842.59	\$4,933.20	\$23,775.79
Oct-05	13,947.21	\$7,600.77	\$21,547.98
Nov-05	9,472.89	\$5,676.96	\$15,149.85
Dec-05	14,823.80	\$6,867.86	\$21,691.66
Jan-06	13,322.32	8,566.12	\$21,888.44
Feb-06	10,318.77	5,102.13	\$15,420.90
Mar-06	15,874.29	8,402.13	\$24,276.42
Apr-06	8,365.17	6,482.38	\$14,847.55
May-06	9,731.54	11,473.67	\$21,205.21
Jun-06	8,591.66	8,454.99	\$17,046.65
	147,409.98	91,022.36	\$238,432.34

“On part shipments alone, we left \$238,432.34 on the table last year by not taking advantage of NAFTA because of the complexity of RoO.”
 -Auto Executive

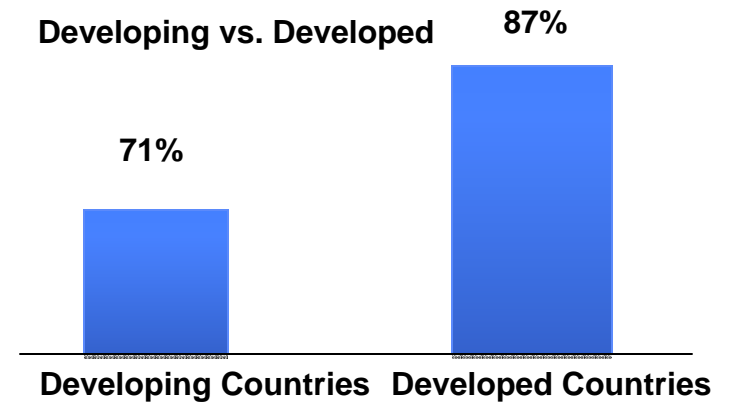
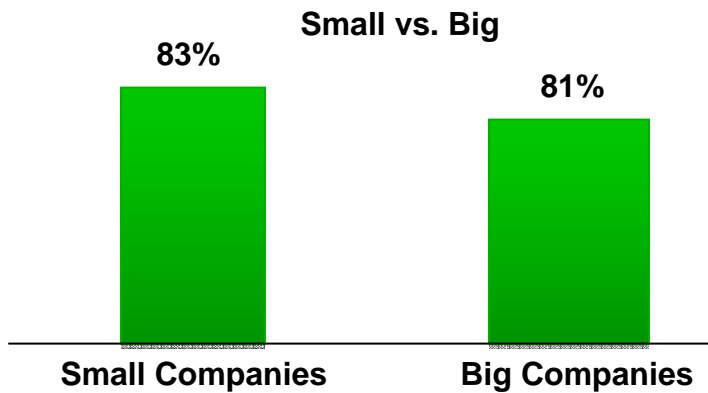
Rules of Origin-related costs can occur from on-going administration of process, disputes over certification and tariffs paid for originating goods due to Rules of Origin complexity

Rules of Origin impact businesses, economies, and regions equally

Companies of all sizes are impacted equally by Rules of Origin...

... as are countries...

Impact of RoO on Businesses



... which can negatively impact trade and economic development in the APEC region

“Complexity issues of RoO cause a lot of headaches in negotiating Free Trade Agreements. Industries have been complaining about increasing complexity. Although we are making every effort to harmonize the systems, we lost millions of foreign investments because businesses chose to invest in economies with more standardized rules.”

- Government Official in one APEC economy

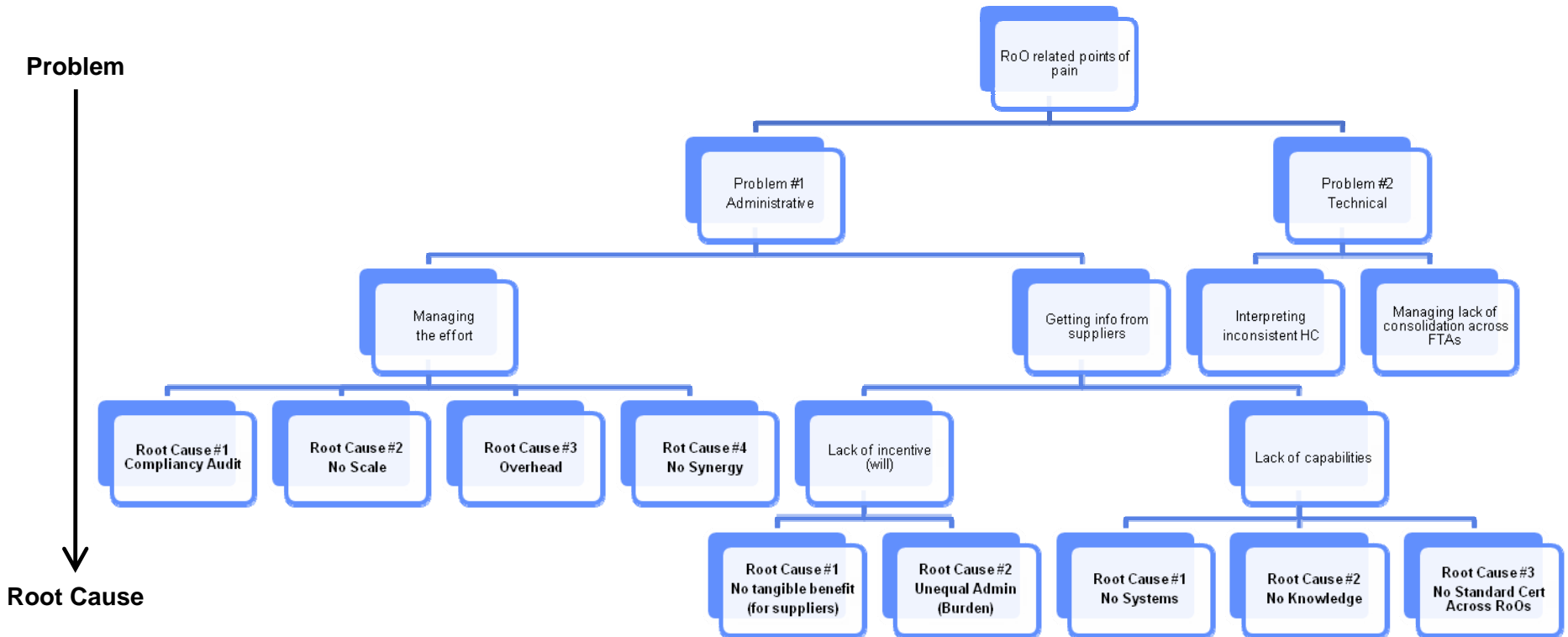
“If the sourcing costs in ASEAN leads to suboptimal sourcing, we will stop investing in the geography and go to India.”

- Auto Executive

The complexity of Rules of Origin create problems for all stakeholders in foreign trades

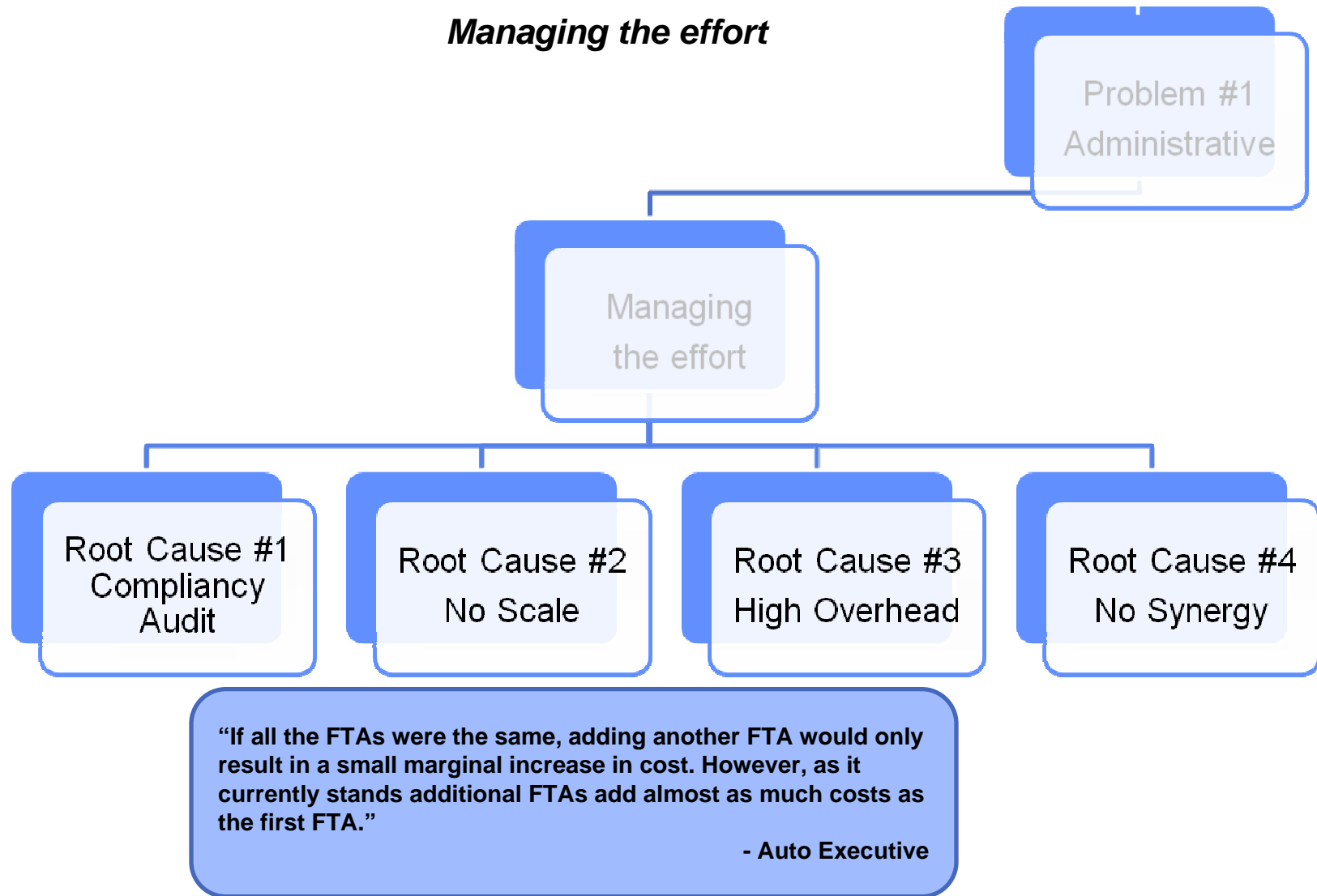
Points of pain for Automobile manufacturers

Rules of Origin-related issues are the result of overly burdensome administrative requirements and complex technical requirements.



There is an extensive list of pain points when dealing with Rules of Origin related issues

Administrative Rules of Origin–related challenges





Audit

Audits are necessary but burdensome requirements for Automobile makers

While the costs and effort of random audits seem extreme...

.. the risks of certification errors are enormous

Costs Associated with a Random Audit NAFTA example



Case-in-point: Risk of certificate failure



While many Asian automakers are pushing for self certification for potential savings, they need to be cognizant of the potential audit costs and penalties

Automobile makers have difficulty realizing scale efficiencies from their certification efforts






Automakers must certify anywhere from 40-70% of their parts in same way (i.e., process and effort) despite significant differences in part complexities and costs

Effort is the same regardless of product

“If part cost is small, it will be too expensive to apply FTA.”
- Auto Executive

“There should be an approved exporter system, if you prove yourself to be trustworthy. This would be a change similar to EU NAFTA (self declaration system).”
- Auto Executive

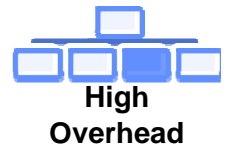
Illustrative analysis of the amount of product that companies must ship annually in order to break even on the certification costs (assuming a 10% tariff rate reduction)

Parts / Price	Cost to prove origin (40hrs @ \$80/hr)	Cost to certify shipment (Chamber of Commerce)	Annual Breakeven (When shipping parts on a daily basis)	Annual Breakeven (When shipping parts on a weekly basis)	Annual Breakeven (When shipping parts on a monthly basis)
Muffler \$100 	\$3,200	~\$20	1050	424	344
Wiper motor \$25 	\$3,200	~\$20	4200	1696	1376
Dome light \$1 	\$3,200	~\$20	210000	84800	68800
Tire \$250 	\$3,200	~\$20	420	170	138
Car line \$20,000 650/1000 parts 	\$2,080,000	~\$20	1044	1041	1040

Automakers must sell more lower priced products to make up for higher relative costs of certification

A Japanese manufacturer annual ships 16,000 cars via 50 shipments and 350,000 parts via 150 shipments annually under the Thailand FTA.

Due to upfront and per shipment costs, volume is key factor in the profitability of applying rules of origin



Rules of Origin administrative compliance requires significant internal capabilities

Ongoing Rules of Origin administration requires a great deal of expertise, coordination, and effort to comply with Rules of Origin requirements

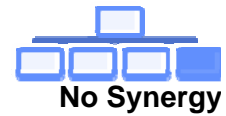
Essential capabilities for RoO administrative compliance

Capability	Requirements	Costs
Human Capital	<ul style="list-style-type: none"> Dealing with initial requests Dealing with follow-up compliancy requests Research with own suppliers 	<ul style="list-style-type: none"> Honda hired 3 employees to exclusively work on exports in Thailand GM's North and South American FTA group has 100+ people.
RoO Administration Training	<ul style="list-style-type: none"> Initial Training of Subject Matter Experts Continued training of recent changes 	Many manufactures hire consulting firms such as PricewaterhouseCoopers to provide training
IT Systems	<ul style="list-style-type: none"> Developing systems System maintenance 	<ul style="list-style-type: none"> Manufactures have received multi-million dollar quotes for enterprise (company wide) systems
Documentation	<ul style="list-style-type: none"> Have to certify shipment by shipment Record keeping Certification itself is relatively cheap 	<ul style="list-style-type: none"> GM's Thailand office estimates that it takes 40 hours on average to produce the initial certificate per part.

“Because of high we have to weigh investment with volume on whether or not to apply the FTA.”
- Auto Executive

“The biggest challenges in assembly operations are that a lot of suppliers don't have customs expertise.”
- Auto Executive

When all related overhead charges are included with other administrative costs the real financial burden of complying with Rules of Origin is material and significant



Complexities across Rules of Origin regimes make shared learning difficult

Automakers are rarely able to realize cost savings and administrative synergies across Rules of Origin because FTA-specific knowledge, skills, and systems are required

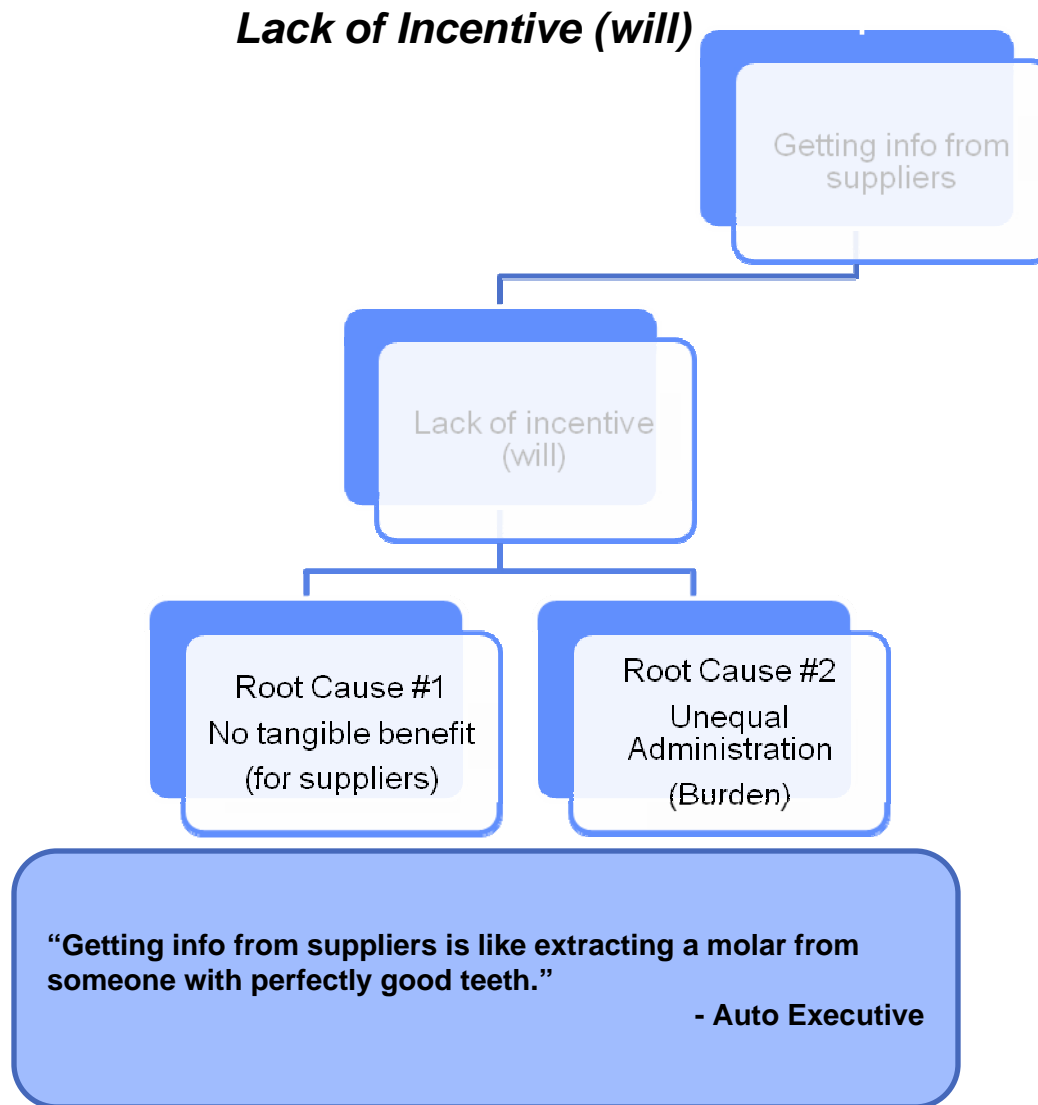
Areas for potential synergies among FTAs and between manufacturers and suppliers

Areas for Potential Synergies	Issues	Actual Synergies
Transferring RoO Expertise	<ul style="list-style-type: none"> Local content knowledge requirements don't transfer across FTAs 	Low / Med
Sharing Compliance Systems	<ul style="list-style-type: none"> IT systems are often not interoperable to differing compliance requirements 	Med
Consolidating Record Keeping	<ul style="list-style-type: none"> Record keeping requirements differ across FTAs and manufacturers 	Low

Best Practice
 "We have a 3 man team focused on duty optimization. There are 30,000 parts, a big number. Up until recently, we didn't have IT system to match part numbers with HS code. We brought over an American from our North America operations, who had experience with creating an IT system for NAFTA."
 - Japanese Auto Executive

Businesses will realize significant cost savings and operational efficiencies with increased harmonization of Rules of Origin

Administrative Rules of Origin–related challenges

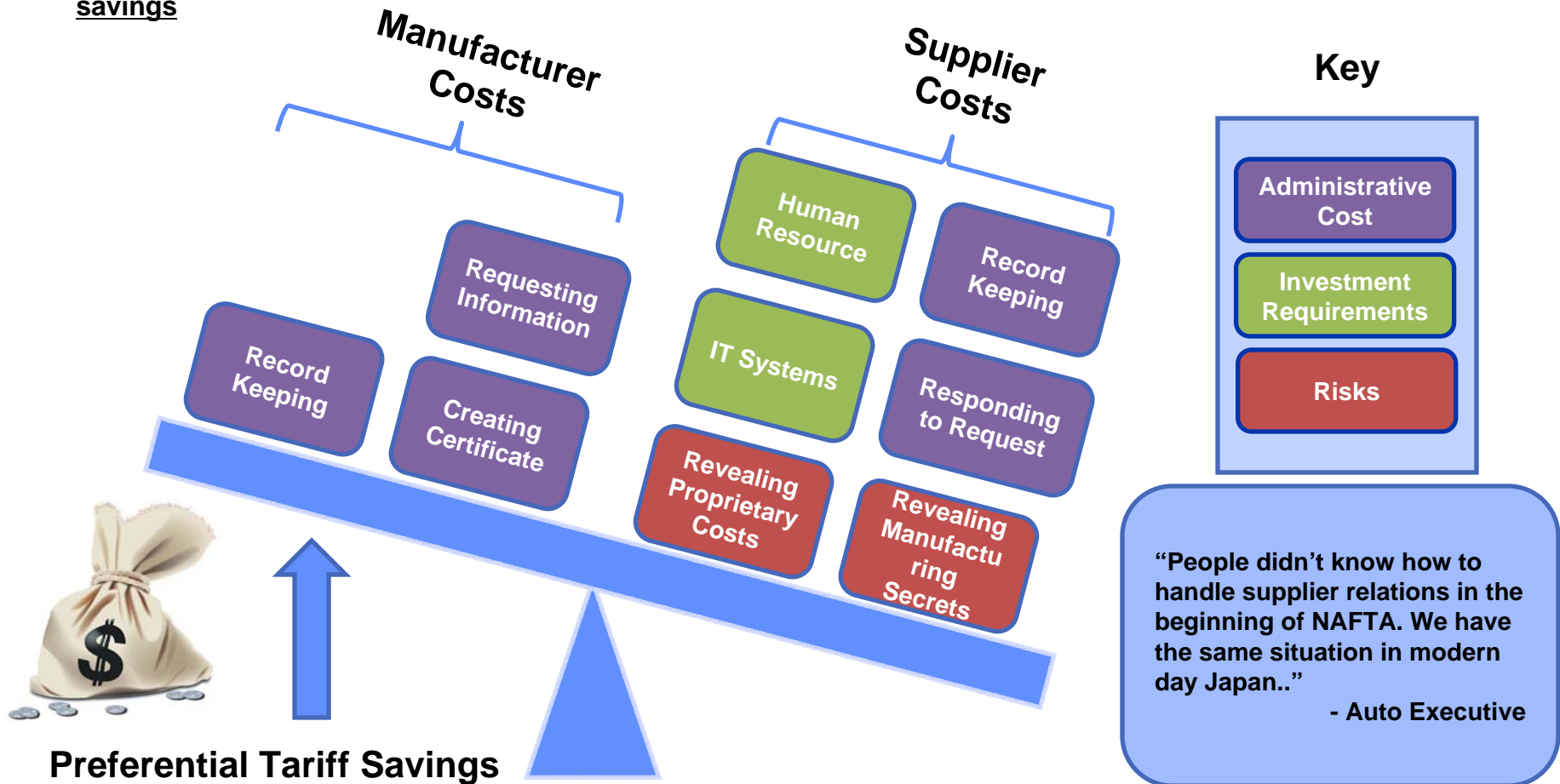




Auto makers provide little incentive for suppliers to comply with certification request

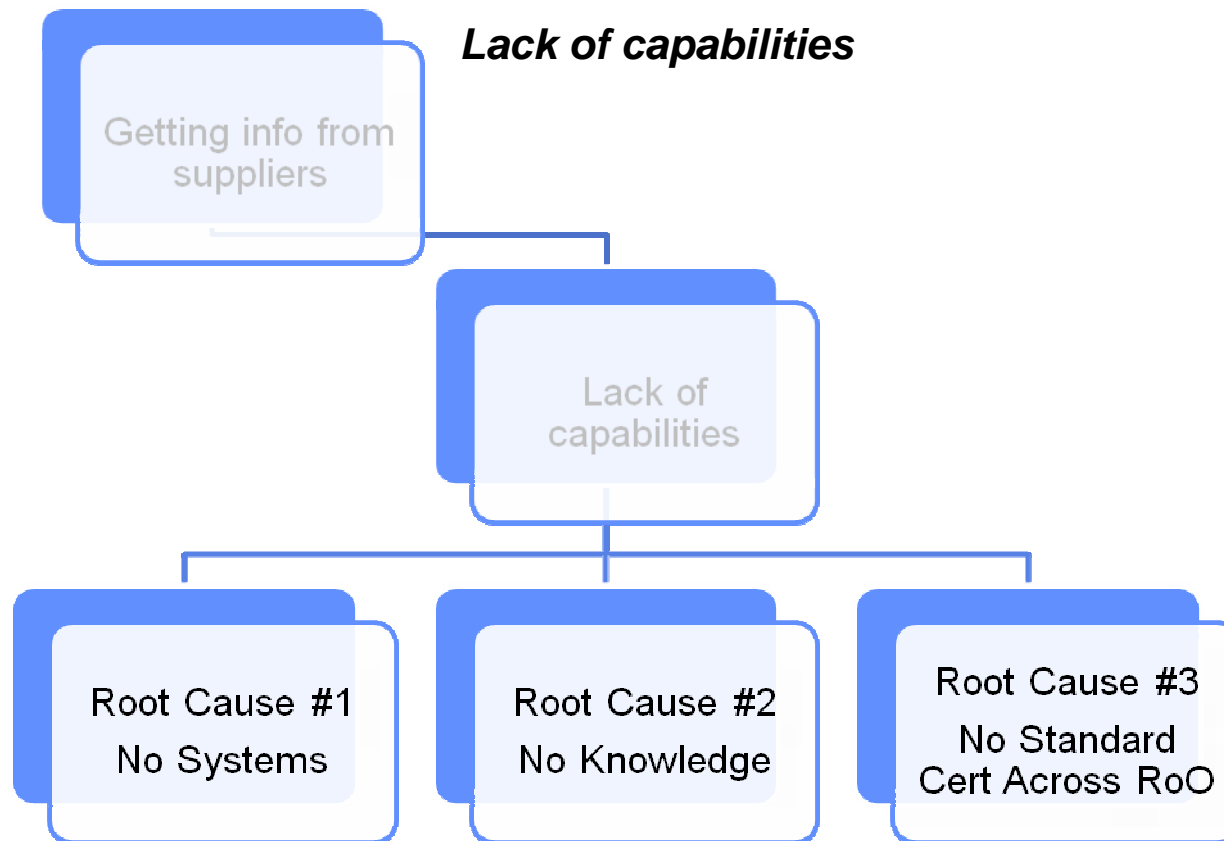
Automakers struggle with getting necessary information from suppliers for certification because there is little benefit and increased costs for suppliers

The uneven balance of manufacturer and supplier costs is made less equitable by the influence of tariff savings



Suppliers face more burdens than the manufacturer, yet they receive little benefit. Additionally, manufacturers have more leverage due to their size

Administrative Rules of Origin–related challenges



“We sent initial letters to all of our suppliers notifying them that we would like their cooperation, almost everyone acknowledged our requests. But, after we sent detailed requests, most responded that they lacked the capabilities to fulfill our request.”

- Auto Executive

“The biggest challenges in assembly operations are that a lot of suppliers don’t have customs expertise.”

- Auto Executive

Suppliers often lack the capabilities to comply with certification request from Automakers



Suppliers that are willing to provide certification information to automakers often lack the ability to do so in a timely manner

Capability comparison of manufactures and supplier

Resources	Manufacturers	Suppliers
IT Systems		
Subject Matter Experts		
Investment Capital		
Training		
Organizational Flexibility		

“Many of our suppliers simply do not have the resources to certify their products and legally we can not provide consultation to directly help them to certify their products.”
- Auto Executive

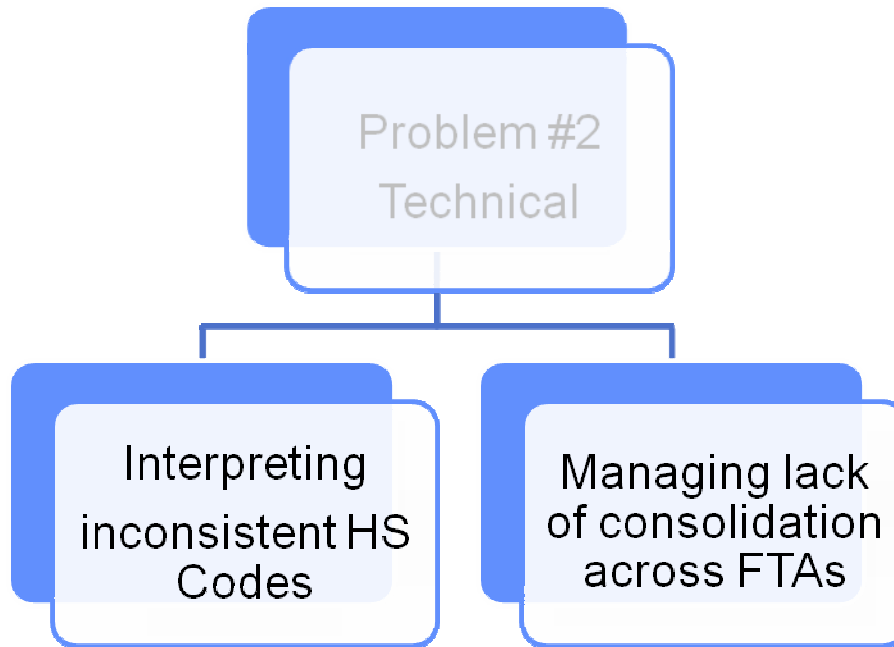
Key

- Very high
- High
- Medium
- Low
- Very low

Suppliers often receive conflicting advice on how to certify their products from different automakers

Technical Rules of Origin–related challenges

Technical



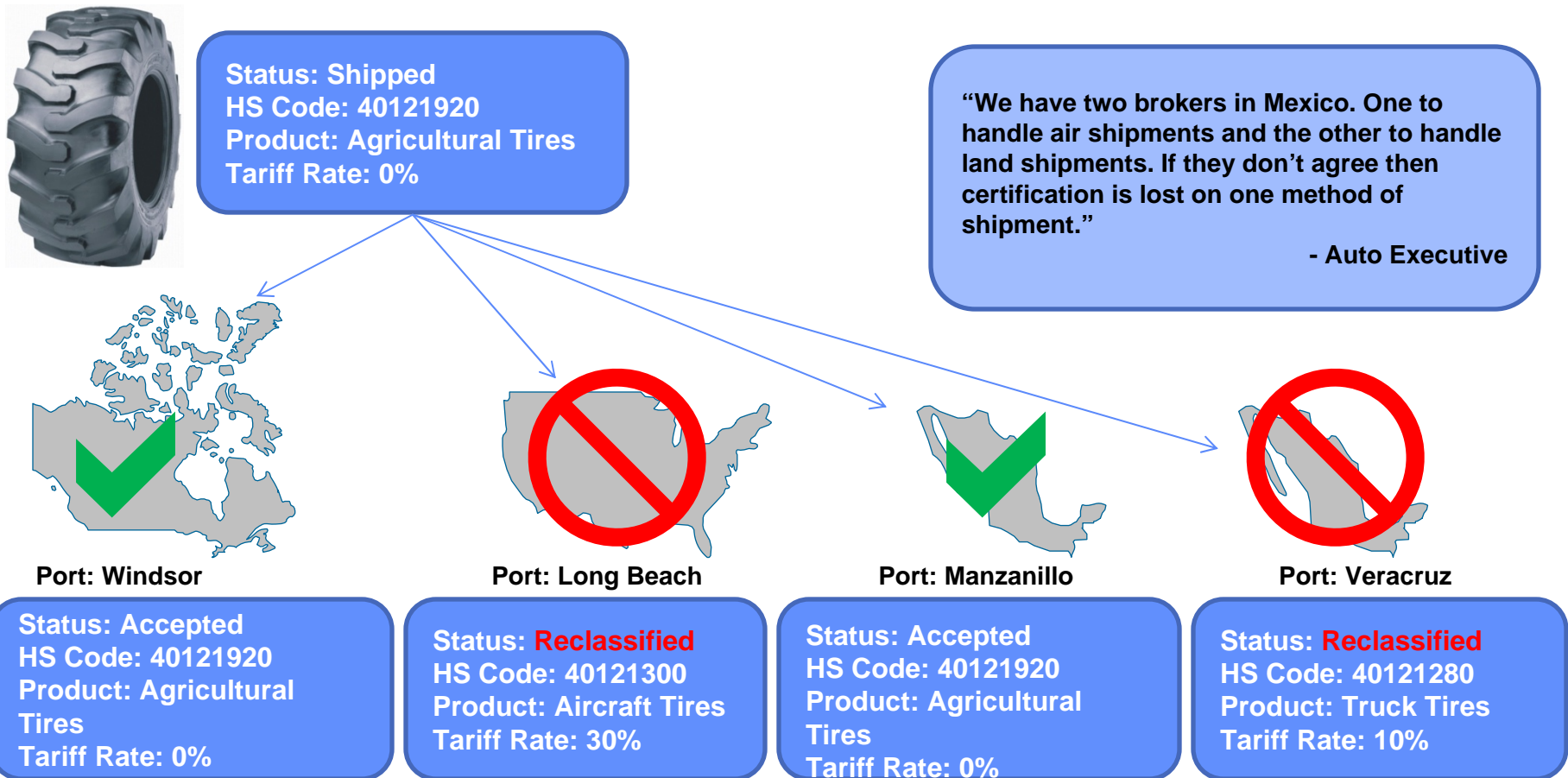
“Instead of standardizing RoO, they should start to teach people on how to standardize the interpretation.”
- Auto Executive

“RoO is different country by country. One country may accept a part while another may deny it. It’s difficult to follow all of the agreements. If every country had a FTA, there could be as many as 78 agreements each company would have to follow if they had operations in each economy.”

- Auto Executive

Product classification can be misinterpreted

Illustrative example: Different countries and even different ports interpret products differently



Lack of standardization coupled with limited subject matter expertise in some certification agencies can result in misinterpretations, additional costs, and potential compliance problems





Lack of consistency across FTAs may cause additional complexity

Shipping products from Chile to economic partners requires different origination rules, valuation methods, and content percentage

Comparison of origination rules, valuation methods, and content percentages of Chile's FTAs

Originating Country:
Chile



FTA Country*	Rule	Value Methodology	%
Canada 	CTC + RVC	Net Cost	20%-30%
United States 	CTC + RVC	Net Cost or Transaction Value	30%-50%
China 	RVC	Transaction Value	40%-50%
Korea 	CTC + RVC	Net Cost or Transaction Value	30%-45%

A Chilean firm must manage 2 different origination rules, 3 different valuation methods and 4 different content percentages to take full advantage of Rules of Origin

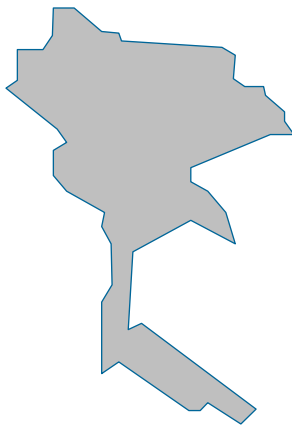
Lack of consistency across FTAs may cause additional complexity


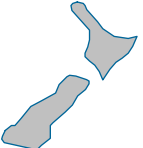

Shipping products from Thailand to economic partners requires different origination rules, valuation methods, and content percentage

** Appendix C provides similar analyses for all FTA

Comparison of origination rules, valuation methods, and content percentages

**Originating Country:
Thailand**



FTA Country*	Rule	Value Methodology	%
AFTA 	RVC	Transaction Value	40%
New Zealand 	CTC	N/A	N/A
Australia 	CTC + RVC	Transaction Value	40%

Thai automakers must follow a different origination rule per FTA to qualify for preferential treatment

Rules of Origin are complex on part basis across FTAs



Mr. Walter Goode evaluated number of automotive parts and compared Rules of Origin for those parts within 10 different FTAs

Heading or sub-heading	Description	AUS-USA	CAN-CHL	CHL-KOR	USA-SGP	AUS-THA	JPN-MEX	P4	CHL-USA	JPN-MAL	NZL-THA
7009.10	Rear-view mirrors for vehicles	█							█	█	
8512	Electrical lighting or signalling equipment (excluding articles of 8539), windscreen wipers, defrosters and demisters, of a kind used for cycles or motor vehicles										
8512.20	Other lighting or visual equipment		█	█	█	█	█	█	█	█	█
8512.30	Sound signalling equipment	█	█	█	█	█	█	█	█	█	█
8512.40	Windscreen wipers, defrosters and demisters	█	█	█	█	█	█	█	█	█	█
8702	Motor vehicles for the transport of ten or more persons, including the driver	█		█	█	█	█	█	█	█	█
8703	Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 8702), including station wagons and racing cars	█		█	█	█	█	█	█	█	█
870310	Vehicles specially designed for travelling on snow, golf carts and similar vehicles		█				█				

Key to entries

- █ Change from heading to heading, or meet a prescribed regional value content
- █ Change from heading to heading
- █ Change from heading to sub-heading, or change to sub-heading from prescribed sub-heading and meet a prescribed RVC
- █ Change from heading to sub-heading
- █ Change from sub-heading to subheading and meet a prescribed RVC
- █ Change from chapter to heading, and meet a prescribed RVC
- █ Meet a prescribed regional value content
- █ Change from heading to heading, and meet a prescribed regional value content
- █ Change from heading to sub-heading, and meet a regional value content
- █ Change from chapter to heading, or a change to heading from prescribed heading and meet a prescribed RVC
- █ Change from subheading to subheading or meet a prescribed RVC
- █ Change from sub-heading to sub-heading
- █ Change from heading to sub-heading, or meet prescribed RVC

“You can know the bible in and out, but you can never know the rules of origin in and out. I have known NAFTA for eleven years but I am still learning it. You can never be master of rules of origin.”

- Trade Expert

Even within a small sample of parts and FTAs, there is tremendous variability in the RoO methods

Preferential Rules of Origin for Automotive products summary

Analysis of Transformation Alternatives for Automotive Product HS Headings 8702-8708*

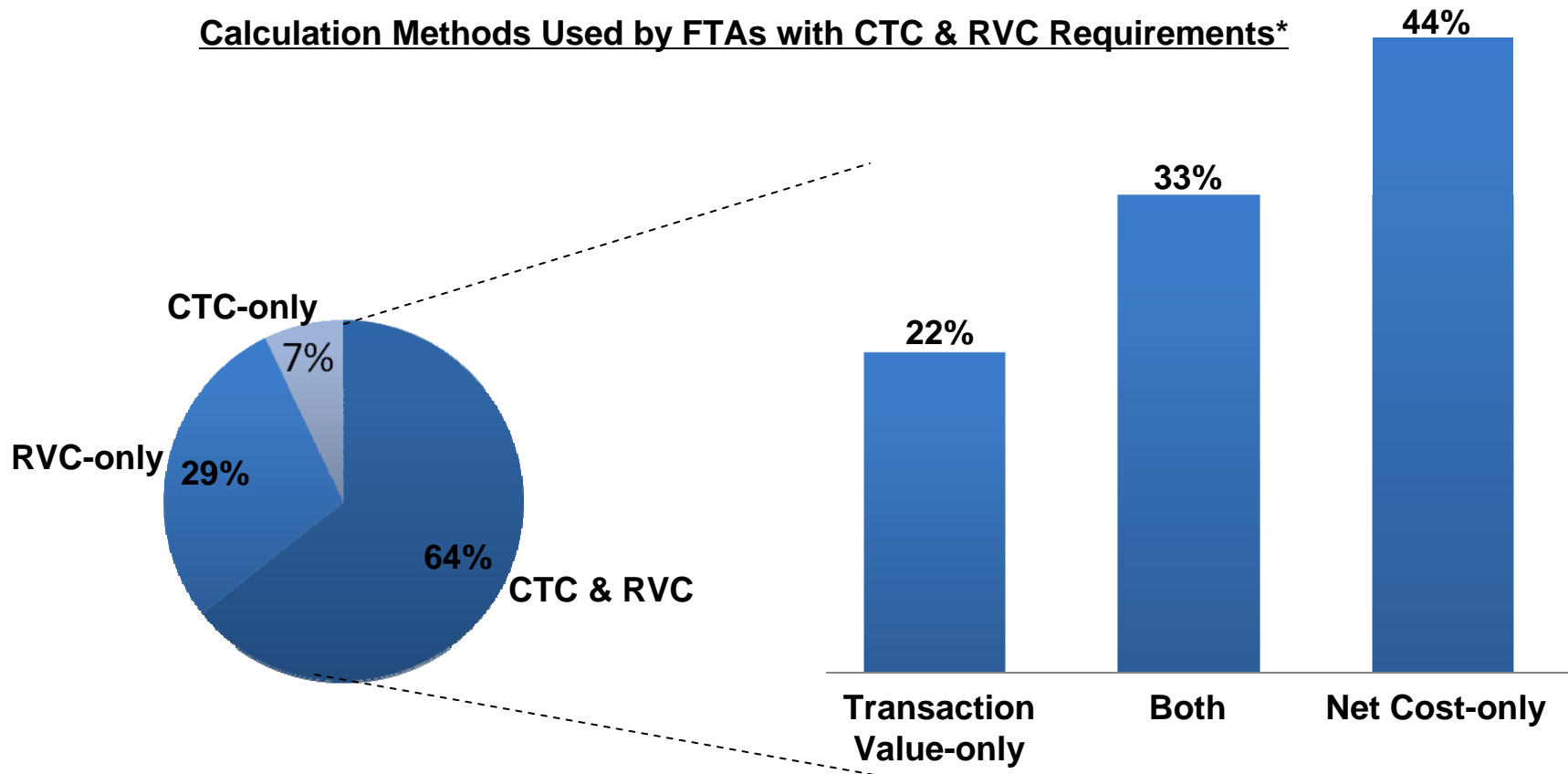
Agreement	RVC-only: Transaction Value	RVC-only: Net Costs	CTC-only	CTC or RVC: Transaction Value	CTC+RVC: Net Cost	CTC+RVC: Transaction Value	CTC+RVC: Net Cost or Transaction Value
AFTA	40%						
CHL-CHN	40%/50%						
CHL-KOR							30%/40%
USA-SGP					30%		
NZL-SGP		40%/50%					
JPN-MEX						65%	
CAN-CHL					20%/30%		25%/35%
AUS-NZL		50%			50%		
CHL-USA							30%/50%
AUS-USA					50%		
AUS-THA						40%	
NZL-THA			X			40%	
NAFTA					50%		

The analysis of transformation alternatives shows the complexity involved in Rules of Origin

Three types of Auto product valuation methods

Within FTAs that require CTC & RVC only 33% allow for both Transaction value and Net Cost

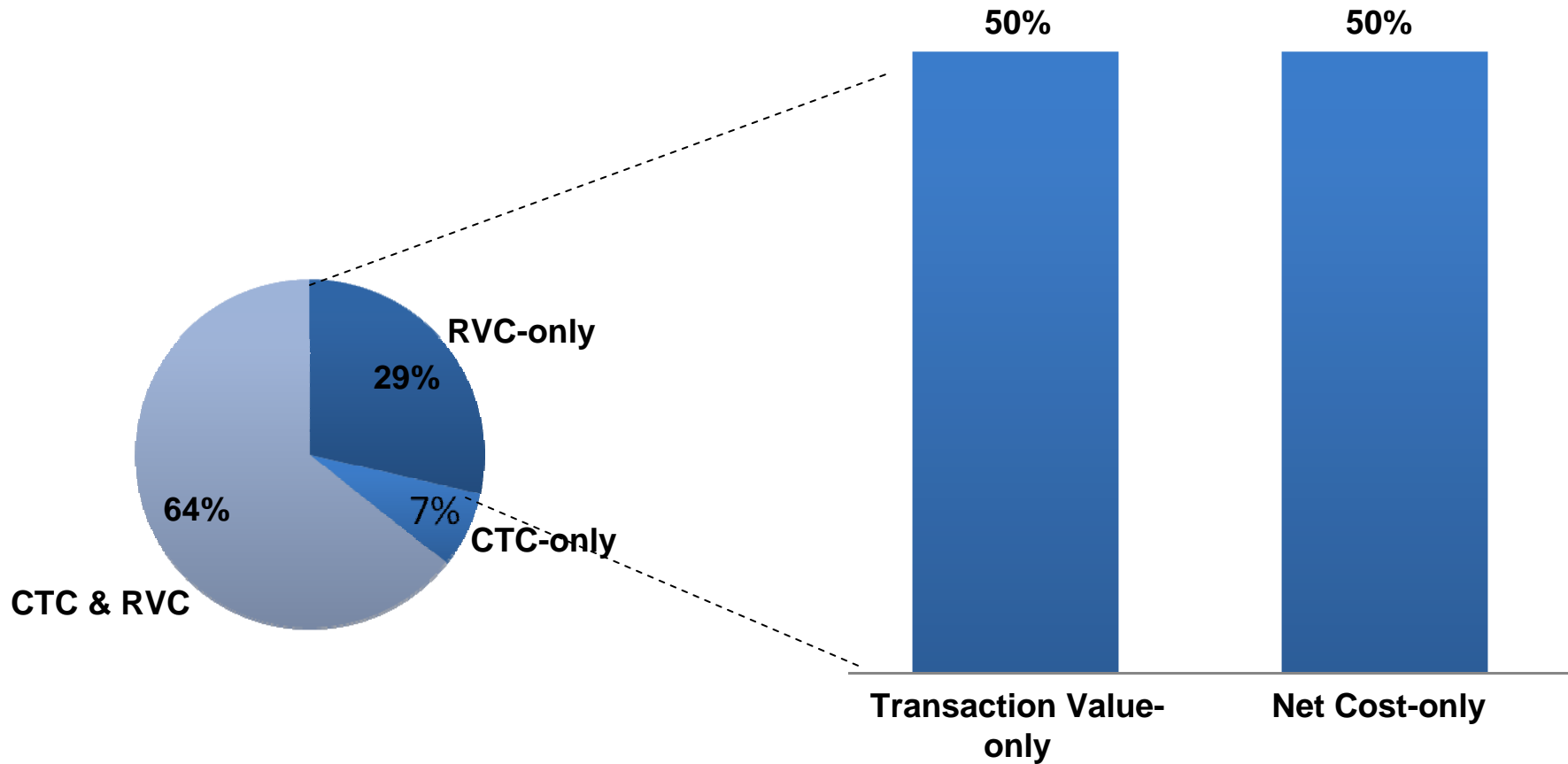
Calculation Methods Used by FTAs with CTC & RVC Requirements*



Auto product value is calculated most often on a net cost basis

Two types of Auto product valuation methods

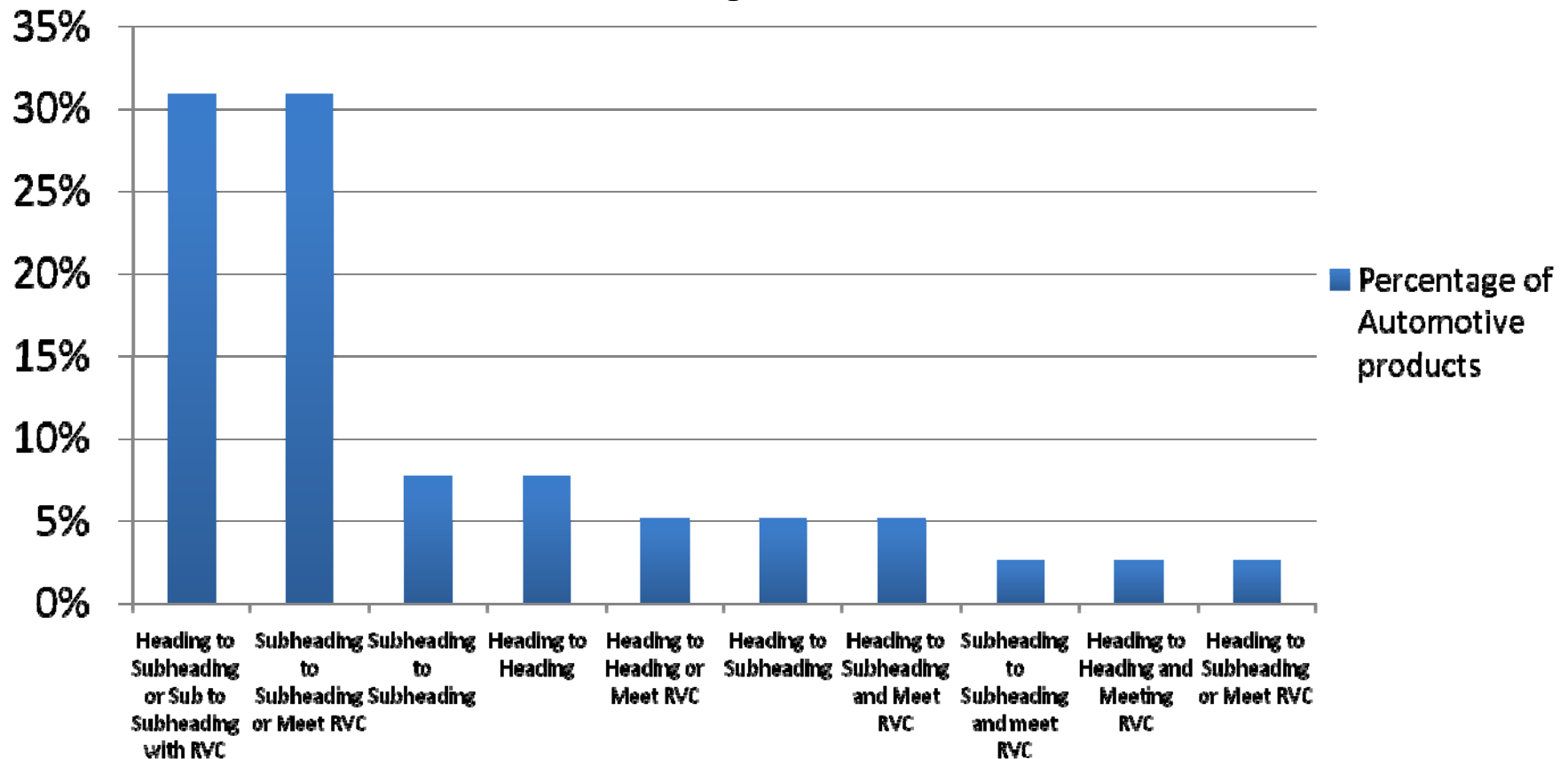
Calculation Methods Used by FTAs with RVC-only Requirements*



There is no consensus on which value calculation method is standard for FTAs using a RVC-only requirement

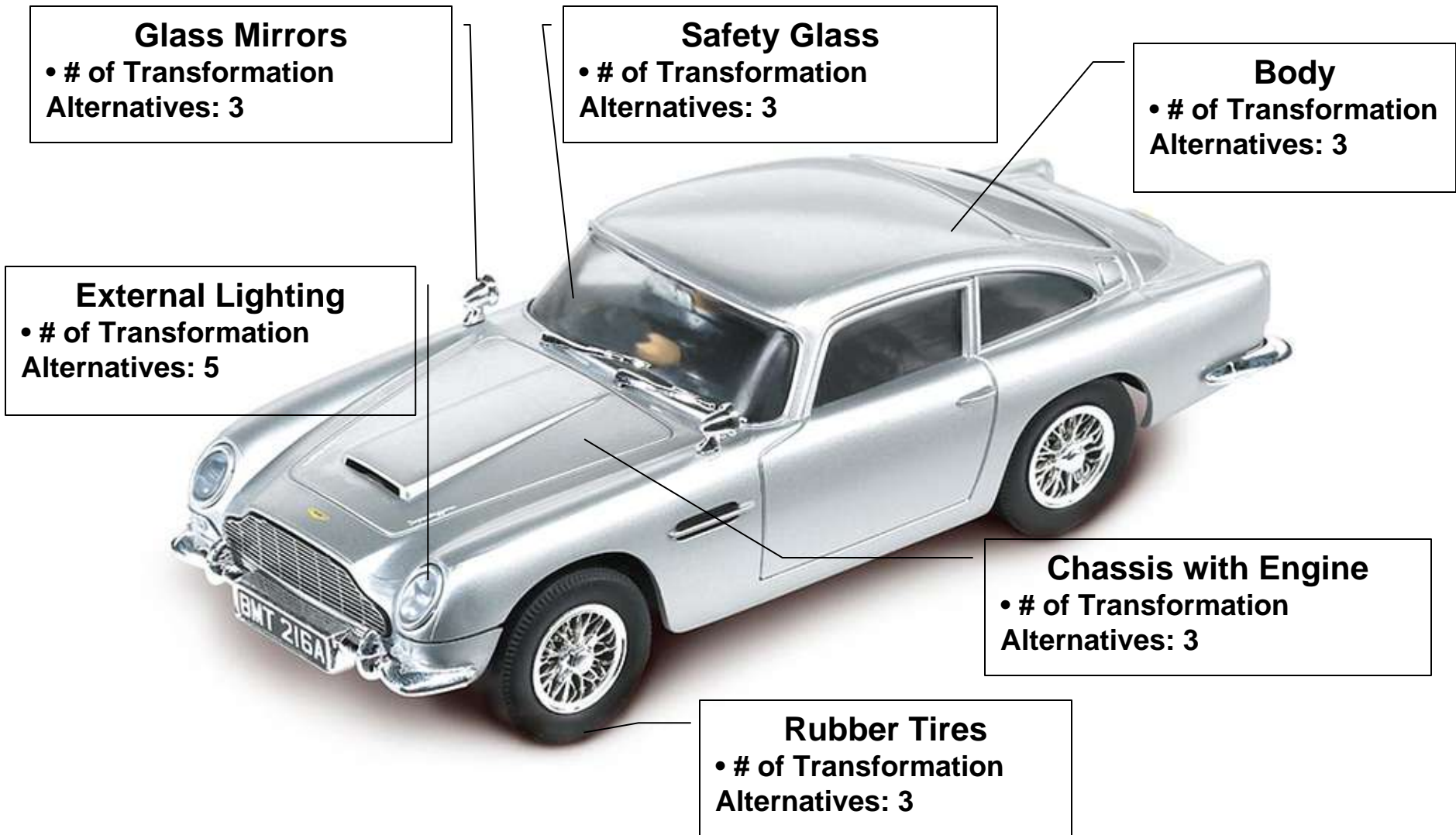
Two times more transformation alternatives than Automotive parts

**Analysis of Transformation Alternatives for Select Automotive Parts and FTAs*
HS Headings 4011 to 8708**



Automotive parts have many valuation alternatives but few with RVC requirements

Basic Automotive products have at least 3 different transformation alternatives to choose across FTAs



Some auto products have as many as 5 different transformation alternatives

Conclusions and Key Findings

Conclusions and Key Findings

- **Rules of Origin are unnecessarily difficult to understand and interpret.** Significant variances exist among Rules of Origin provisions across APEC region. These differences coupled with a no standard interpretation of HS codes make Rules of Origin certification challenging and costly for business. On more than a few occasions companies will actually forfeit the benefits of free trade preferences, and pay the tariff, because the origination process is too burdensome.
- **Applying Rules of Origin can be a huge expense for businesses.** Companies that apply Rules of Origin must invest in and develop significant capabilities to do so. Businesses must make significant investments in IT infrastructure and human capital just to prove origination. Additional expenses are incurred by companies that must assist their suppliers in the product certification effort (e.g., record keeping and reporting).
- **Rules of Origin complexity (and costs) are compounded when companies operate across multiple Free Trade Agreements or within overlapping agreements.** No two Rules of Origin regimes are alike within the region. These differences across free trade agreements make it all but impossible for businesses to realize synergies from IT systems, administrative procedures, and subject matter expertise.

For trade officials...

- **Expand the proposed model measures to include the remaining most commonly used measures.** The proposed standard needs to be more consistent with the current FTAs across APEC to truly be a “model” standard.
- **Provide additional training to customs officials and SMEs on HS code interpretation as needed.** Certification issues will persist across the region as long as product certification is open to interpretation. Small and medium-sized businesses and organizations either lack the knowledge, experience, and/or size to administer the process effectively.

Conclusions and Key Findings

For trade officials... (continued)

- **Include the commonly used measures and keep them consistent with the proposed model measures standard in free trade agreements.** This will ensure that all future free trade agreements will be consistent with all other agreements in the APEC region.
- **Communicate effectively all existing, changed, or new trade initiatives to all businesses, particularly to SMEs.** Ongoing trade initiatives or the benefits of using them are not common knowledge, especially for SMEs. Developing effective communication channels that can get information to all business through each economy is critical, if the intended benefits of free trade initiatives are to be realized.
- **Simpler is better, from a business viewpoint and should be regionally as well.** Businesses prefer simpler Rules of Origin provisions such as tariff change rather RVC to prove origination. Where provisions are complex, they reward those businesses with the resources to hire specialists or consultants to exploit the intended benefits, and disadvantage those without. This unintentional fact seems to reward the large and established, and punish the small and emerging. Overall, it limits the total number of companies using Rules of Origin. Which negatively impacts investment in the region.
- **Improve the role customs plays in the Rules of Origin part of the process.** Increased transparency, consistency, and clearance speed are sought by business.

Conclusions and Key Findings

For business executives...

- ***Provide your suppliers with free advice and expertise on product certification and documentation.*** Suppliers bear most of the costs and little of the benefit of the origination process. Educating suppliers on how to certify their products can help improve the efficiency of the certification process, reduce disputes, and lower additional costs in the long-run.
- ***Make Rules of Origin optimization someone's job.*** As companies grow, global sourcing and sales will become more and more important. Companies must start developing subject matter expertise now in order to stay competitive in the APEC region.

Conclusions and Key Findings

For the APEC Region...

- ***Rules of Origin are being used as a barrier to entry in some industries... potentially stalling economic development in the region.*** Rules of Origin can effectively blocks new entrants from entering a market because of its complexity. As a result, some companies that have “figured out” Rules of Origin do not want a more transparent and harmonized system. They are benefiting from the complexity of the system which enabling competitive advantages.
- ***Complex Rules of Origin can increase company costs to a point where they can not justify the expense... potentially further stalling economic development in some industries.*** Companies do not apply Rules of Origin because there is little to no benefit from doing so. In many cases, companies (both large and small) can not justify the costs associated with meeting Rules of Origin requirements. As a result, the benefits of Free Trade Agreements within the APEC region are not used. In these cases, companies either do not enter the market (i.e., invest) or simply pay the tariff.
- ***The proliferation of Free Trade Agreements, and the increasing global expansion of business supply chains, connect in a way that makes standardization and harmonization of Rules of Origin regimes a priority.*** Businesses will seek economic solutions which maximize their short and long-term profits regardless of the intended goals of FTAs. Where both overlap, economic growth results. Where they do not, numerous unintended consequences, for both business and economies, result.

APPENDICES

Appendix A: Survey Summary Statistics

Appendix B: Food Industry: Detailed Analysis of Food-Specific Rules of Origin Provisions for Selected FTAs

Appendix C: Automotive Industry: Comparison of Origination Rules, Valuation Methods, and Content Percentages

Appendix D: University of Southern California Marshall School of Business MBA Research Team Bios

APPENDIX A

Survey Summary Statistics

Survey responses

		# Respondents	Percentage	Developed	Developing	Auto-motive	Non auto
Origin impact your business.							
N/A. Rules of Origin do not impact my business	1a	2	5.3%	0	2	1	1
Other:	1h	8	21.1%	7	1	1	7
Product Design	1e	11	28.9%	7	4	5	6
Budget Planning	1d	13	34.2%	6	7	8	5
Product Pricing	1f	16	42.1%	9	7	8	7
Facilities location	1g	18	47.4%	9	9	9	9
Product Sales Countries	1c	23	60.5%	12	11	13	9
Sourcing	1b	24	63.2%	14	10	10	13
ANSWERED QUESTION, YES/NO		41		26	15	16	22
Overall, how often do Rules of Origin-related disputes (e.g., legal or customs issues) arise							
				Developed	Developing		
At least once a month	2a	6	15.0% <=1 year	47.8%	28.6%	5	1
At least once every 1 to 3 months	2b	3	7.5% > 1 year	52.2%	71.4%	3	0
At least once every 3 to 6 months	2c	2	5.0%			1	1
At least once every 6 months to 1 year	2d	5	12.5%			2	0
Less than once a year	2e	17	42.5%			9	6
Never	2f	7	17.5%			3	4
		40				23	14
Overall, how often do Rules of Origin-related management issues (e.g., sourcing problems) arise within your organization?							
At least once a month	3a	6	16.7% <=1 year	61.1%		5	1
At least once every 1 to 3 months	3b	1	2.8% > 1 year	38.9%		0	1
At least once every 3 to 6 months	3c	4	11.1%			2	1
At least once every 6 months to 1 year	3d	11	30.6%			7	3
Once every 1 year or more	3e	7	19.4%			5	2
Never	3f	7	19.4%			2	5
		36				21	13
Please <u>force</u> rank the following based on the additional costs associated with Rules of Origin compliance/administration.							
	#1	#2	#3	Developed Total	Developing Total	Auto Total	Non Auto Total
Other	4n	2	0	0	1	0	2
Employee Education/Training	4h	1	1	0	2	1	1
Additional Storage Expenses	4i	0	1	2	0	0	2
Time to Market Delays	4l	1	0	1	1	0	2
Customs Fines	4j	2	1	2	1	0	3
Legal Fees	4k	1	2	3	1	2	2
3rd Party Audit	4m	1	1	3	3	2	2
Manufacturing	4b	2	5	6	1	1	6
Product Development	4a	2	3	2	4	3	5
IT-Related Costs	4e	2	3	3	4	3	1
Additional Headcount	4f	3	1	3	5	2	3
Consultation	4g	2	7	4	8	5	6
Sourcing	4c	6	5	4	9	6	9
Certification	4d	11	4	7	12	8	11
		34					

Survey responses

Based upon your answers to the question above, please indicate the impact these additional costs have on your organization by allocating a total of 100 points.

	Average Percentage
Other:	5n 78.3%
Sourcing	5c 43.1%
IT-Related Costs (e.g., investment, upkeep)	5e 40.7%
Time to Market Delays	5l 40.0%
Customs Fines	5j 38.3%
Certification	5d 33.9%
Additional Headcount (both permanent and temporary)	5f 33.6%
Product Development	5a 33.4%
Legal Fees	5k 33.3%
Manufacturing	5b 27.3%
Additional Storage Expenses	5i 25.0%
Consultation (e.g., customs clearance agency, consulting)	5g 23.3%
Employee Education/Training	5h 9.3%
3rd Party Audit	5m 37.3%

Lastly, based upon your answers to question #3, please indicate how frequently these additional costs arise within your organization

	#1	#2	#3	Developed	T Total	Develo	Auto Total	Non Auto Total
Certification	6d	13	5	2	11	8	11	8
Sourcing	6c	5	4	7	7	7	5	9
Consultation (e.g., customs clearance agency, consulting)	6g	2	7	3	8	4	7	5
Manufacturing	6b	3	2	3	6	2	1	7
Product Development	6a	1	3	3	4	3	2	5
Additional Headcount	6f	3	2	2	4	3	5	2
IT-Related Costs	6e	1	3	2	2	4	6	0
Legal Fees	6k	1	1	4	5	1	3	3
Employee Education/Training	6h	1	1	3	1	2	3	0
Additional Storage Expenses	6i	0	2	1	2	1	1	2
Customs Fines	6j	1	0	2	1	2	0	3
Time to Market Delays	6l	1	0	1	1	1	0	2
3rd Party Audit	6m	1	0	1	1	1	2	0
Other	6n	1	2	0	1	1	0	2
		31						

Please assess the following Rules of Origin categories by administrative complexity (1=Most Complex; 9=Least Complex)

	#1	#2	#3	Developed	T Total	Develo	Auto total	Non Auto Total
De Minimis standards	7i	0	2	1	1	1	0	2
If Set of Goods Are Originating	7e	1	2	2	3	2	2	3
If a Intermediate Material is Self-Produced	7h	1	0	5	4	1	1	4
Value of Goods/Services	7d	1	4	2	3	4	5	2
Indirect Costs Used in Production	7f	1	4	4	5	3	3	5
GAAP Inventory Management Method of Fungible/Interchangeable Goods	7g	3	5	0	6	2	4	4
Accumulation Rules	7c	4	2	3	5	4	5	4
Value Added or Tariff Change is Met	7a	7	2	3	5	5	5	5
Regional Value Content	7b	9	4	3	8	7	7	8

APPENDIX B

Food Industry

Detailed Analysis of Food-Specific Rules of Origin Provisions for Selected FTAs

Comparison of Specific Rules of Origins for food industry (Chapter 16-19) for selected FTAs

Description	HS Code	NZ-Thailand	Aus-Thailand	US-Singapore	Aus-US	NAFTA	Japan-Mexico	Korea-Chile	Canada-Chile	US-Chile	ASEAN
Preparations of Meat, of Fish or of Crustaceans, Molluscs or Other Aquatic Invertebrates	1601-1605										RVC
Sugars and Sugar Confectionery	1701-1703										N/A
	1704										N/A
Cocoa and Cocoa Preparations	1801										N/A
	1802										N/A
	1803-1805										N/A
	1806.10aa										N/A
	1806.10										N/A
	1806.20										N/A
	1806.31-1806.90										N/A
Preparations of Cereals, Flour, Starch or Milk; Pastrycooks' Products	1901.10aa										N/A
	1901.10										N/A
	1901.20aa										N/A
	1901.20										N/A
	1901.90aa										N/A
	1901.90										N/A
	1902-1903										N/A
	1904.10-1904.90										N/A
	1905										N/A

Legend	
change to heading	
change to heading & meet % RVC	
change to heading & meet % volume of the goods	
change to tariff item	
change to tariff & meet % volume of the good	
change to subheading	
change to subheading & meet RVC	
change to subheading & meet % volume of the good	
change to subheading & meet RVC or % volume of the good	
No required change in tariff classification & meet % volume of the good	
Wholly obtained	
RVC	

Comparison of Specific Rules of Origins for food industry (Chapter 20-21) for selected FTAs

Description	HS Code	NZ-Thailand	Aus-Thailand	US-Singapore	Aus-US	NAFTA	Japan-Mexico	Korea-Chile	Canada-Chile	US-Chile	ASEAN
Preparations of Vegetables, Fruit, Nuts or Other Parts of Plants	2001-2007										RVC
	2008.11										RVC
	2008.11aa										RVC
	2008.19-2008.99										RVC
	2009.11-2009.39										RVC
	2009.41-2009.80										RVC
	2009.90										RVC
Miscellaneous Edible Preparations	2101.11aa										RVC
	2101										RVC
	2102										RVC
	2103.10										RVC
	2103.20aa										RVC
	2103.20-2103.30										RVC
	2103.90										RVC
	2104										RVC
	2105										RVC
	2106										RVC
	2106.90bb										RVC
	2106.90cc										RVC
	2106.90dd										RVC
	2106.90ee										RVC

Legend	
change to heading	
change to heading & meet % RVC	
change to heading & meet % volume of the goods	
change to tariff item	
change to tariff & meet % volume of the good	
change to subheading	
change to subheading & meet RVC	
change to subheading & meet % volume of the good	
change to subheading & meet RVC or % volume of the good	
No required change in tariff classification & meet % volume of the good	
Wholly obtained	
RVC	

Comparison of Specific Rules of Origins for food industry (Chapter 22-24) for selected FTAs

Description	HS Code	NZ-Thailand	Aus-Thailand	US-Singapore	Aus-US	NAFTA	Japan-Mexico	Korea-Chile	Canada-Chile	US-Chile	ASEAN
Beverages, Spirits and Vinegar	2201	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	N/A
	2202.10	Green	Green	Green	Green	Green	Green	Green	Green	Green	N/A
	2202.90	Green	Green	Green	Green	Green	Green	Green	Green	Green	N/A
	2202.90.aa	Green	Green	Green	Green	Green	Green	Green	Green	Green	N/A
	2202.90.bb	Green	Green	Green	Green	Green	Green	Green	Green	Green	N/A
	2202.90.cc	Green	Green	Green	Green	Green	Green	Green	Green	Green	N/A
	2203-2207	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	N/A
	2208.20	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	N/A
	2208.30-2208.70	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	N/A
	2208.90	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	N/A
	2209	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	N/A
Residues and Waste From the Food Industries; Prepared Animal Fodder	2301-2308	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	RVC
	2309.10	Green	Green	Green	Green	Green	Green	Green	Green	Green	RVC
	2309.90	Green	Green	Green	Green	Green	Green	Green	Green	Green	RVC
Tobacco and Manufactured Tobacco Substitutes	2401-2403	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	N/A

Legend	
change to heading	Yellow
change to heading & meet % RVC	Green
change to heading & meet % volume of the goods	Green
change to tariff item	Yellow
change to tariff & meet % volume of the good	Green
change to subheading	Green
change to subheading & meet RVC	Green
change to subheading & meet % volume of the good	Green
change to subheading & meet RVC or % volume of the good	Green
No required change in tariff classification & meet % volume of the good	Green
Wholly obtained	Red
RVC	Green

Sample of Rules of Origin for Food Products

Comparative Analysis of Selected Processed Food (Chapter 16-24) Specific Rules of Origin

Comparisons is made based upon the transformation criteria.

FTAs	RVC-only: Transaction Value	CTC-only	CTC or RVC: Transaction Value	CTC+RVC: Net Cost	CTC+RVC: Transaction Value	CTC+RVC: Net Cost or Transaction Value
AFTA			16.03-05, 20.02, 20.05,20.08, 20.09, 21.04, 23.02-04, 23.06: <u>40%</u>			
CHL-CHN	20-24: 50%	16-19				
CHL-KOR	2008.92-99, 2009.90: 80%	16, 17.01-17.03, 18.01-18.05, 21, 22.01, 23.01-08, 24			17.04, 18.06, 19,2001.10-91, 2009.11-80 , 22.02- 09, 23.09 :30%/45%	
USA-SGP		16,17, 18.01-06, 19.02-19.05, 20-24			18.0610: 35%; 19.01, 21.0320, 2106: 25%/100%	
CHL-USA		16-24				18.06.10, 19.01.10,20,90; 20.09.90: 35%/100%
AUS-USA		16-24		22.02.09: 40%/90%		
NZL-THA		16-24			18.01-02: 100%	
NAFTA		16-25				18.06.10: 65%, 20.09.90: 60% of TV or 50% of NC; 2202.90: 40% of volume

Findings:

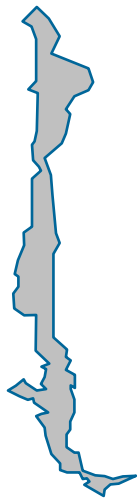
1. Comparing the General RoO rules for food chapters from 16-24 under selected FTAs, there are complex rules using RVC and CTC.
2. Countries use exceptions to protective food products.





APPENDIX C

Automotive Industry Comparison of Origination Rules, Valuation Methods, and Content Percentages

Lack of Consistency Across Free Trade Agreements Results in Additional Complexity

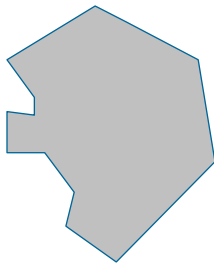
**Originating Country:
Chile**




FTA Country*	Rule	Value Methodology	%
Canada 	CTC + RVC	Net Cost	20%-30%
United States 	CTC + RVC	Net Cost or Transaction Value	30%-50%
China 	RVC	Transaction Value	40%-50%
Korea 	CTC + RVC	Net Cost or Transaction Value	30%-45%

Preferential RoO for Automotive Products by Originating Country

Originating Country:
Korea




FTA Country*	Rule	Value Methodology	%
Chile 	CTC + RVC	Net Cost or Transaction Value	30%-45%

Preferential RoO for Automotive Products by Originating Country

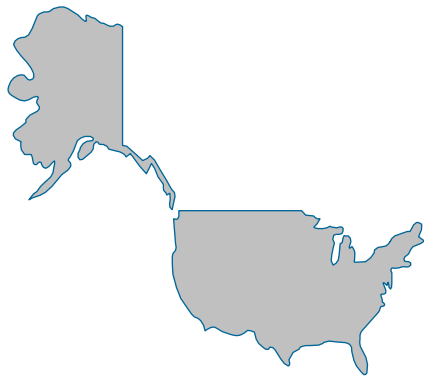
Originating Country:
China







FTA Country*	Rule	Value Methodology	%
Chile 	RVC	Transaction Value	40%-50%

Preferential RoO for Automotive Products by Originating Country

**Originating Country:
United States**





FTA Country*	Rule	Value Methodology	%
NAFTA 	CTC + RVC	Net Cost	50%
Chile 	CTC + RVC	Net Cost or Transaction Value	30%-50%
Australia 	CTC + RVC	Net Cost	50%
Singapore 	CTC + RVC	Net Cost	30%

Preferential RoO for Automotive Products by Originating Country

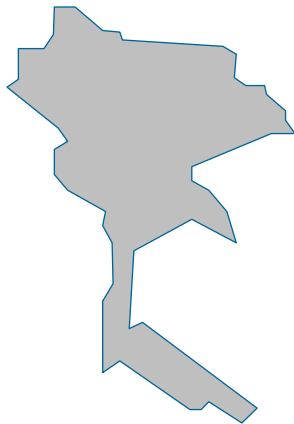
Originating Country:
Canada


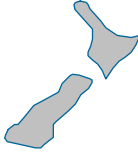



FTA Country*	Rule	Value Methodology	%
NAFTA 	CTC + RVC	Net Cost	50%
Chile 	CTC + RVC	Net Cost	20%-30%

Preferential RoO for Automotive Products by Originating Country

Originating Country:
Thailand

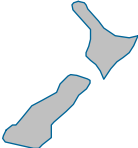




FTA Country*	Rule	Value Methodology	%
AFTA 	RVC	Transaction Value	40%
New Zealand 	CTC	N/A	N/A
Australia 	CTC + RVC	Transaction Value	40%

Preferential RoO for Automotive Products by Originating Country

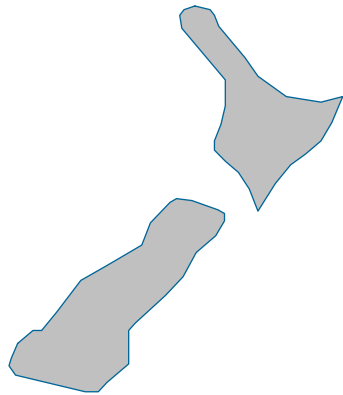
Originating Country:
Australia






FTA Country*	Rule	Value Methodology	%
New Zealand 	RVC	Net Cost	50%
United States 	CTC + RVC	Net Cost	50%
Thailand 	CTC + RVC	Transaction Value	40%

Preferential RoO for Automotive Products by Originating Country

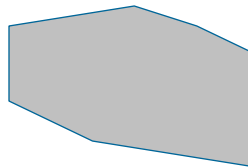
**Originating Country:
New Zealand**


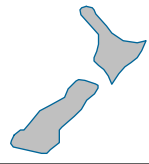
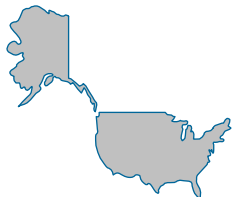


FTA Country*	Rule	Value Methodology	%
Australia 	RVC	Net Cost	50%
Singapore 	RVC	Net Cost	40%-50%
Thailand 	CTC	N/A	N/A

Preferential RoO for Automotive Products by Originating Country

**Originating Country:
Singapore**



FTA Country*	Rule	Value Methodology	%
AFTA 	RVC	Transaction Value	40%
New Zealand 	RVC	Net Cost	40%-50%
United States 	CTC + RVC	Net Cost	30%

APPENDIX D

University of Southern California
Marshall School of Business
MBA Research Team Bios

University of Southern California MBA Research Team

- **Sean Haran**, *team lead*, joins the ABAC research team with six years of work experience including two years of statistical research at the Federal Reserve and four years of management/strategy consulting experience. Most recently, he managed and wrote best-practice research studies for Chief Financial Officers of the largest corporations in the world while at the Corporate Executive Board in Washington, DC. Mr. Haran completed his Bachelor of Arts in Economics at James Madison University.
- **Crystal Ban** joins the ABAC research team with three years of work experience at largest advertising network, Ogilvy & Mather Advertising Agency where she managed both international and local accounts for the company. She also has research experience as a Product Planner at RealNetworks, Inc. working on next generation products for the mobile space in the U.S and Europe market. Ms. Ban earned her Bachelor of Arts in Business Administration from National Chengchi University. Originally from Taiwan, she is also fluent in Mandarin.
- **Justin Campbell** joins the ABAC research team with extensive experience in regulatory and administrative law with the United States government. While with the U.S. government, he developed policy related to wholesale electricity markets and worked to help industry companies operate within those laws. In addition, he advised Ford Motor Company on Vietnam's accession to the WTO and worked to open a high-quality international school in Gaborone, Botswana. Mr. Campbell completed his Bachelor of Science in Engineering Science and Economics at Vanderbilt University.
- **Joe DiFilippo** joins the ABAC research team after serving for six years as a Captain in Military Intelligence for the United States Army. During his time in service, he served on three different continents while conducting strategic and tactical predictive intelligence and analysis with other officers and civilians from over ten separate countries. Mr. DiFilippo earned a Bachelor of Science in Systems Engineering from the United States Military Academy at West Point, as well as a number of certifications from various U.S. Army intelligence and analysis programs.
- **Danielle Evans** joins the ABAC research team with three years of general management experience in the retail industry as a buyer for Macy's Department Stores, a \$14 billion global retailer. She managed the profit and loss of the \$25 million women's accessories business for the West Coast division. In that capacity, she also engaged in strategic financial planning and product development in numerous international markets within the APEC region. Ms. Evans completed a Bachelor of Arts in Communication from Stanford University and also speaks Spanish.

University of Southern California MBA Research Team

- **Yue Hu** joins the ABAC research team with eight years of academic research experience at a leading university in Shanghai where she specialized in the studies of international business environments and business communications in international trade. Moreover, she conducted many strategic planning projects for the Chinese government, for example, strategic planning for recycling industry in China. In addition, she led consulting projects for tourism development in China. Ms. Hu earned a Bachelor of Arts in Economics from University of International Business and Economics. Originally from China, she is also fluent in Mandarin.
- **Su Lee** joins the ABAC research team with five years of experience including two years of scientific research experience for the University of Michigan Department of Emergency Medicine and three years of strategic sales and marketing experience for Eli Lilly & Company. He has worked on international engagements for organizations in Vietnam, Thailand, and South Korea. Mr. Lee completed a Bachelor of Science in Microbiology from the University of Michigan. Originally from Korea, he is also fluent in Korean and Spanish.
- **May (Wei) Li** joins the ABAC research team with four years management experience in the financial service industry managing a retail branch of a bank with over \$20MM in deposits in the United States. She was also actively engaged in international business development of her family business between China and the U.S. Ms. Li earned a Bachelor of Science in Economics from the University of Washington. She is also fluent in both Mandarin and Cantonese.
- **Julie Mulkerin** joins the ABAC research team with five years work experience in various positions including logistics, origination and sales in a billion dollar agribusiness trading/shipping company in the United States and Latin America. In her roles, she worked collaborated on international trade issues with companies from Canada, the United States, and Latin America. Ms. Mulkerin completed her Bachelor of Arts in Spanish with minors in Economics, History, and Political Science from University of California - Davis. Having lived extensively in Costa Rica, she is also fluent in Spanish.
- **Sahil Parmar** joins the ABAC research team with five years of work experience in the IT and telecommunications industries in India and the United Kingdom. He started as a software programmer in the telecom industry and has worked on a variety of telecommunications implementation projects including the largest telecom project for British Telecom and leading a cross functional team of 35 members. He has also written and presented technical papers related to chemical engineering. Mr. Parmar earned a Bachelor of Science in Chemical Engineering from Gujarat University. Originally from India, he is also fluent in Hindi and Gujarati.

University of Southern California MBA Research Team

- **Aaron Seligman** joins the ABAC research team with seven years of experience in the field of IT for research institutions. He previously served as the Director of Computing Services at the California Center for Population Research. In this role, he supported several ground breaking longitudinal surveys and applied demographic research in countries such as China, Kenya, Mexico, and Indonesia. He has also worked at Niwakagaku, a Japanese manufacturing company in Japan, and at Toyota Motor Sales in California. Mr. Seligman completed his Bachelor of Arts Degree in East Asian Languages and Cultures from the University of California – Los Angeles. Having lived extensively in Japan, he also speaks Japanese.
- **Andrew Schulman** joins the ABAC team with seven years of international business experience. Living in New York City, he developed marketing and communications strategies for sports, healthcare and packaged goods clients on five continents. He has worked on projects for three of the past four Olympic Games and in 2005 he spent the fall in China, helping his firm prepare for the 2008 Games in Beijing. Mr. Schulman earned a Bachelor of Science in Communication Studies and Psychology from Northwestern University.
- **Shengsheng (Sylvia) Zhang** joins the ABAC research team with seven years of extensive experience in the marketing field for Fortune 500 companies in China. Working for China Hewlett-Packard Co. and Johnson & Johnson Medical China, she engaged in the area of market development and penetration. She has led many important product launch plans into the Chinese market and has a deep understanding of rules and regulations compliance in international trade. Ms. Zhang completed a Bachelor of Economics with an emphasis on international trade at the Beijing Second Foreign Language University. Originally from China, she is also fluent in Mandarin.