Non-Tariff Barriers to Trade in the APEC Region

When Non-Tariff Measures *Become* Non-Tariff Barriers: Insights from Agriculture and Accounting

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Research Project Objectives, Method, Scope, and Limitations

WHEN NON-TARIFF MEASURES BECOME NON-TARIFF BARRIERS: INSIGHTS FROM AGRICULTURE AND ACCOUNTING



Introduction

"Behind-the-border" non-tariff barriers (NTBs) to trade are real frictions to international business ranging from mere cost-adding nuisances to insurmountable obstacles. NTBs add real costs to businesses and do influence where, with whom, and how firms do business across borders. Economies have devoted substantial effort to improve cross-border trade. Tariffs are being reduced and free-trade agreements are being negotiated. With APEC, the numbers of RTAs/FTAs has proliferated. Since 2002, the number of ratified RTAs/FTAs has tripled. If those under negotiation now where to be implemented, APEC would have more than 50 agreements. Research by Kati Suominen has shown that as a result of this proliferation in RTAs/FTAs, by 2013, 90% of tariff lines will be freed.

However, and in spite of the concerted effort to facilitate trade across borders, levels of cross border trade have not reached expected levels. Behind-the-border NTBs remain important and costly impediments to trade.

Case Study Research Approach

This report focuses on NTBs in two in-depth areas: agriculture and accounting.

- Agriculture represents one of the most restrictive and protected economic sectors and is replete with all imaginable
 forms of NTBs. Deep national differences have worked against the emergence of global (or regional) standards
 which would enhance cross-border trade. The agricultural sector also lags all other economic sectors in terms of
 tariff reductions. Moving economies to adopt similar agricultural inspection, testing, and treatment standards, and
 basing them on science as opposed to local economic interests, would do much to facilitate trade, lower costs, and
 improve the quality and integrity of the world's food supply.
- Accounting represents a very different case study. Differences in domestic GAAP requirements raise the costs of
 companies doing business in multiple economies, and as a consequence, introduce a friction to the movement of
 capital across borders. Costs of continually restating quarterly financial statements are real and can be quite large.
 In contrast to the agricultural sector, the accounting profession has moved aggressively toward the adoption of a
 global standard, IFRS (International Financial Reporting Standards). If universally adopted IFRS would eliminate
 the need for costly restatement of financial reports, and would make financial reports across economies closely
 comparable. However, with APEC, the rate of adoption has been varied, and some economies are moving toward
 selective adoption of various provisions. The larger APEC economies tend to be more recalcitrant.

Our accounting case study is not only potentially interesting in its own right, but is also illustrative of the more general problems that APEC will encounter when attempting to develop, adopt, and implement region-wide standards in other economic sectors.



Key Findings

Primary Area of Concern:

An important distinction must be drawn between non-tariff measures (NTMs) and non-tariff barriers (NTBs). A non-tariff measure is a regulatory tool used to ensure health, safety, nutrition, environmental protection, security, quality assurance, animal welfare, and/or religious compliance. These are reliable and necessary, and they and serve an important purpose in preserving the safety and integrity of individual economies. A non-tariff barrier, however, is a non-tariff measure that causes an unfair impediment to trade.

While attention is typically focused on intentionally restrictive and protectionist NTBs, our research study found other important sets of NTBs that are possibly more costly to businesses engaged in cross-border commerce, and potentially less intractable to resolve than restrictive or protectionist NTBs. We found that NTMs can and do unintentionally and unnecessarily become NTBs because of differences and incompatibilities in standards across economies, and inefficiencies in how they are administered.

We argue that framing the problem of behind-the-border barriers as a largely a challenge of eliminating restrictive and protective NTBs is myopic, limiting, and potentially deflects energy and attention away from where real improvements can be made. Divergent and incompatible NTMs across economies, and inefficient, inconsistent, and bureaucratic implementation at borders increase transaction costs to the point where they become non-tariff barriers to trade.

A major conclusion of this study is that an APEC-wide coordinated and concerted effort at improving the design, implementation, and administration of NTMs would go a long way to lowering transaction costs and facilitating trade. This, we believe, could be a major agenda item for ABAC moving forward.

Other Areas of Concern:

- Another large concern for businesses are unnecessary and intentional NTBs. These are requirements that are not published, or inconsistently applied, or applied with prejudice. One executive called illegitimate NTBs, the "terrorists" of international business.
- Additionally, concerns about new emerging NTBs, particularly in the area of carbon footprint, were raised. Business executives
 want trade officials to "get ahead of the game' and develop equitable, transparent, consistent rules and requirements for all
 economies.
- With respect to legitimate NTMs, the major concerns reported were how to change, restructure, and improve import/export
 requirements so as to ensure the needed protection within importing economies without introducing unnecessary costs and time
 delays.



Research Method

OBJECTIVE: Provide an in-depth analysis of the nature and extent of key non-tariff barriers (NTBs) and their impact on the cross-border flow of goods and capital within the APEC Region.

Goal I

Collect comprehensive data (field and secondary research) on the topic of "behind the border" non-tariff barriers.

Goal II

Provide useful tools, analyses, and insights that can be used to formulate recommendations for improved cross-border commerce.

RESEARCH APPROACH:

- 1. Surveyed published sources for state-of-the-art thinking on non-tariff barriers to trade.
- 2. Constructed *comprehensive catalogs* of the agricultural trade and financial accounting policies across all APEC economies
- 3. Conducted a *comparative analysis* of each economy's policies against existing or proposed global standards (CODEX, OIE, and IPPC for Agriculture and IFRS for Financial Accounting).
- 4. Conducted *field research* (in-person and telephone interviews) with key executives and industry specialists to validate the above findings, to discover and catalog additional NTBs that result from practice rather than policy, and to determine the impact of the NTBs on business decisions and practices.
- 5. Prepared two detailed *cases studies* on Agriculture and Accounting Services:

Agriculture

- Flow of Goods
- Laggard in Global Standard Convergence

Accounting Services:

- Flow of Capital
- Leader in Global Standard Convergence



Research Scope

Because of the extensive scope and complexity of the NTB issue, we narrowed the scope of our analysis to two distinct areas: (1) the Agriculture Industry (representative of NTBs to flow of goods) and (2) Financial Accounting Methods (representative of NTBs to flow of capital).

Agriculture

Within Agriculture we focused on 12 categories:

- Coffee
- Cocoa & tea
- Fruits
- Vegetables
- Rice
- Wheat and grains
- Legumes
- Dairy
- Fish & seafood
- Beef
- Chicken
- Other meat
- Sugar

Accounting

Within Financial Accounting we limited to three broad areas of investigation:

- Issues associated with companies getting access to financial markets
- How different accounting methods across borders add costs and influence the decision to enter a market
- Convergence/progress toward adoption of IFRS requirements



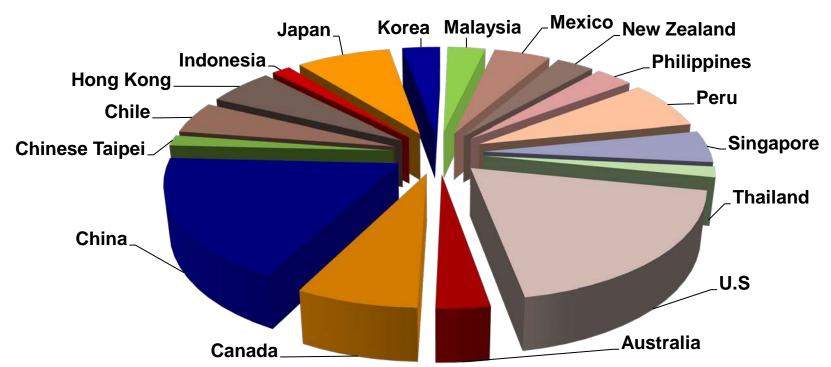
Field Research

Primary research data collected in 17 APEC economies from business executives, industry representatives, and trade officials through personal interviews conducted during May-August 2008 and follow-up telephone interviews.

Primary research was conducted in: Australia, Canada, China, Chinese Taipei, Chile, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Philippines, Singapore, Thailand, Peru, United States

Agriculture interviews: 80Accounting interviews: 46

Interviews conducted in 17 APEC Economies



Scope, Caveats, and Limitations

Focus of our agriculture interviews was with executives, industry specialists, consultants, and trade officials who are knowledgeable about agriculture NTB issues and challenges

- Intentionally our focus was on depth, rather than breadth of opinions.
- These interviews were intended to supplement our comparative analysis of NTMs.

Focus of our accounting interviews was with executives, accounting specialists, consultants, and trade officials who are knowledgeable about IFRS issues and challenges

- Intentionally our focus was on depth, rather than breadth of opinions.
- These interviews were intended to supplement our comparative analysis of accounting standards.

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 and large global accounting firms. Fewer executives in SMEs and in developing economies had deep knowledge of agriculture NTB and/or IFRS issues, and were willing to speak with us.

Gathered data in different agriculture sectors and types of companies

• While we tried to obtain responses from SMEs as well as large companies, our focus on managers with expertise in exporting led to larger-sized enterprises in our sample.

With the small number of interviews conducted, caution should be used in drawing generalizations

- Despite the limited number, a strong consensus of opinions emerged.
- Where the interviews were unable to identify a strong consensus, additional follow-up interviews were sought.

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 – Agriculture

- Agriculture is a global laggard in the reduction of NTBs. This has increased transaction costs for businesses thereby limiting the flow of goods across borders and increasing product costs for end consumers.
- Most of the debate and discussion on NTBs focuses on restrictiveness and protectionism. While
 exporting economies take the position that these should be eliminated, domestic economies argue that
 these cannot be removed because of economy-specific circumstances. However, there is more room
 for transparency with respect to the motivations for establishing NTMs not pertaining to safety and
 security.
- Beyond restrictiveness and protectionism, there are other factors that further lead to the proliferation of NTBs and hinder their removal:
 - Lack of Standards: Due to the absence of a single harmonized global agricultural standard, economies develop their own. Current global standards provide only minimal guidance, resulting in additional, different NTMs and NTBs.
 - Lack of Accessibility: Language and transparency of testing methods, inspection methods, and paperwork requirements of regulations is a major barrier to trade across borders.
 - Multiple Agencies: Inconsistencies in administration of policies across ports and difficulties in finding and interpreting import requirements combine to raise costs of cross-border business to discouraging levels.
- Across the APEC region, developed economies are already concerned with emerging issues such as genetically modified foods and food miles. Without coordination between governments and standardsmaking bodies, the NTMs erected to address these issues will evolve into NTBs.
- Recommendations to coordinate on standards and increase accessibility should have increased focus
 to have positive impacts for business executives.



Key Findings – Accounting

For APEC Region:

- Significant progress has been achieved in APEC economies towards IFRS adoption. 60% of APEC economies are on a path towards adoption of International Standards.
- Varying levels of adoption of International Standards leads to customization and selective adoption of standards. This negates the basic purpose and mandates remedial measures for reconciliation of information.

For Individual IFRS Principles:

- Easier rules that are less disruptive tend to be adopted more widely.
- Difficult rules that have the potential to significantly influence financial statements and the extent of disclosure are less widely adopted.

For Individual Economies:

- Smaller economies with less developed GAAP standards can realize significant benefits upon conversion to International Standards.
- Developed economies have fewer apparent benefits.

For Businesses:

- International Standards are highly beneficial to large multi-national entities and result in uniformity of reporting and reliable comparison and benchmarking.
- Small and Medium Enterprises that operate in an economy or within a limited number of economies do not receive significant benefits from the adoption of International Standards.



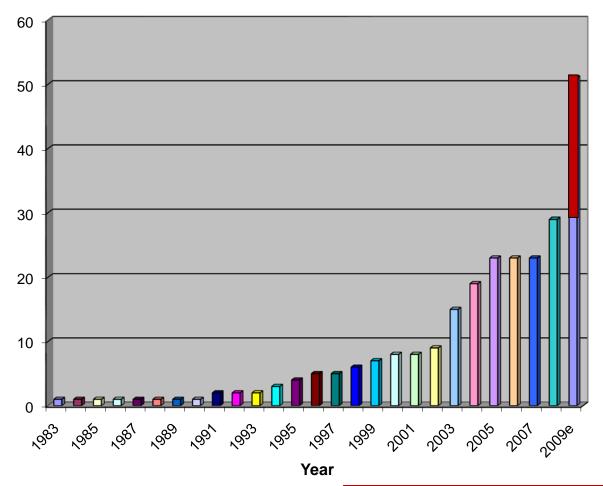
MAKING SENSE OF NTBS



In Pursuit of Trade Liberalization: Proliferation of RTAs/FTAs in APEC

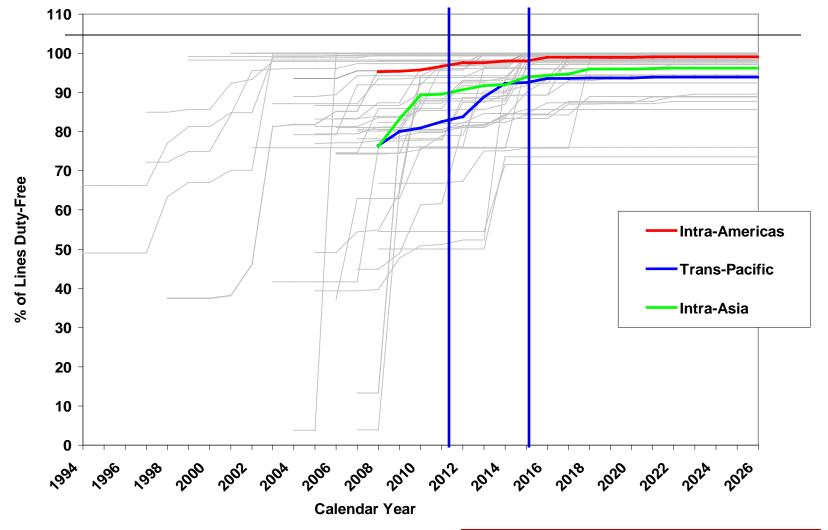
Since 2002, the number of FTAs/RTAs amongst APEC members has nearly tripled. If the approximately 25 FTAs currently pending were completed by the end of 2009, there will be 50+ RTAs/FTAs within APEC.

Signed APEC Member FTAs (1983-Present)



Collaborative Efforts Are Leading to a Decline in Tariffs

Research conducted by Kati Suominen at the Inter-American Development Bank has tracked tariff reducing agreements within RTAs/FTAs. The graph below shows that by 2013, more than 90% of lines will be freed – by 2017, more than 95%.

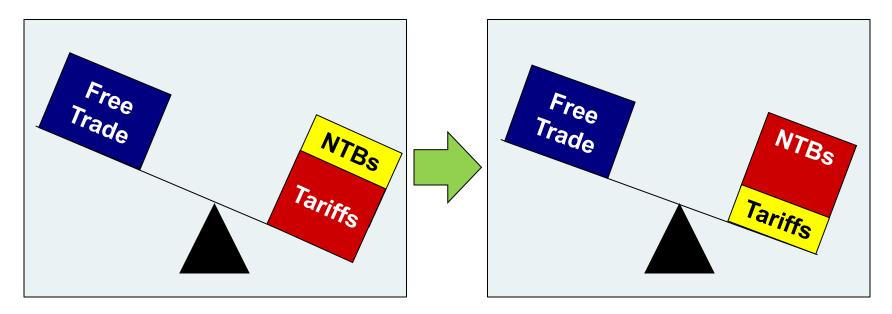




The Remaining Challenge: Behind-the-Border Barriers

The successful reduction and/or elimination of tariff barriers has raised the expectations for cross-border trade. However, and importantly, these expectations have yet to be realized.

As such, the spotlight has shifted from the reduction of *tariff* barriers to the elimination of *non-tariff* barriers, which are now recognized to be more substantial and complex than previously believed.



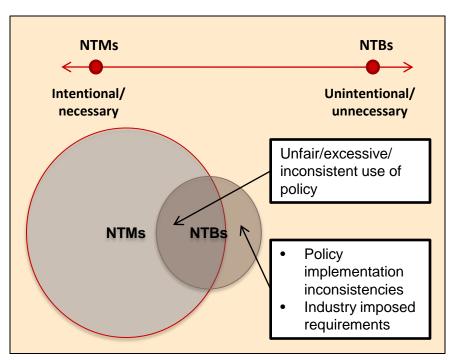
If non-tariff barriers to trade are not addressed, the expected benefits in increased trade will not be realized.



When NTMs Become NTBs

This report begins by drawing an important distinction between non-tariff measures (NTMs) and non-tariff barriers (NTBs). Simply put, NTMs are good; NTBs are bad. The 2007 WTO Public Forum Document How Can the WTO Help Harness Globalisation? distinguishes the two as follows:

"It is important to distinguish non-tariff barriers from non tariff measures. A nontariff measure can cover documentation requirements and fees at customs and regulatory measures such as adherence to standards. These are reliable and necessary. A non-tariff barrier however, is a non-tariff measure that causes an unfair impediment of trade." (Page 218)



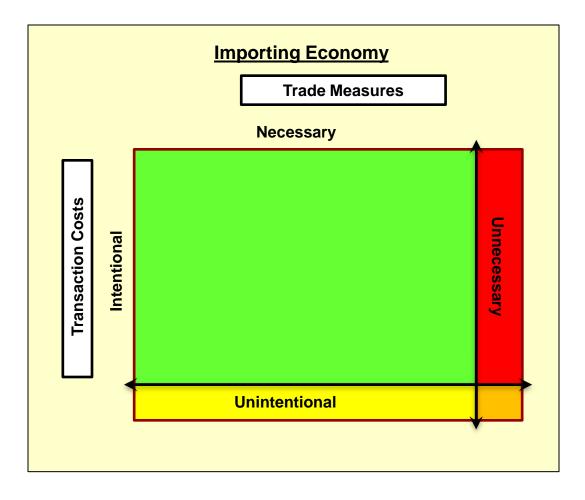
NTMs, when appropriately developed to ensure health, safety, nutrition, environmental protection, security, quality assurance, animal welfare, and/or religious compliance, are important.

However, when NTMs are not appropriate to the risk, seek to advantage domestic producers, and/or are based on non-standardized (even if scientifically defensible) principles, and/or are implemented differently across economies, they become NTBs.



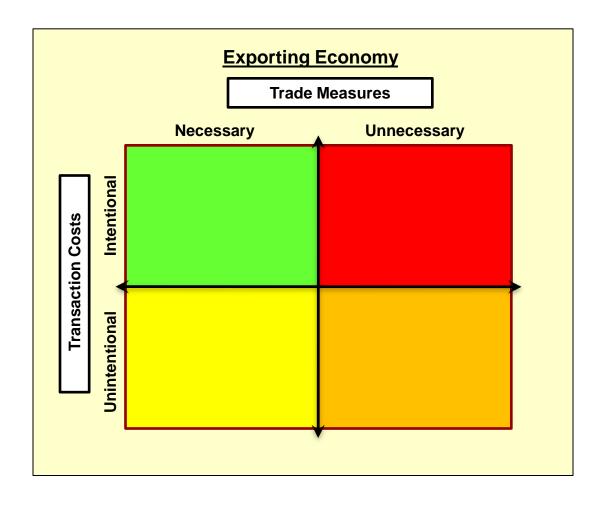
Perspective and Context Matter: Domestic Viewpoint

Taken from the perspective of a single domestic economy, most economy-specific NTMs are typically argued to be necessary, appropriate to risk, and effectively implemented. Economies do admit that some regulations have had unintended consequences and some NTMs remain after their effectiveness is no longer needed.



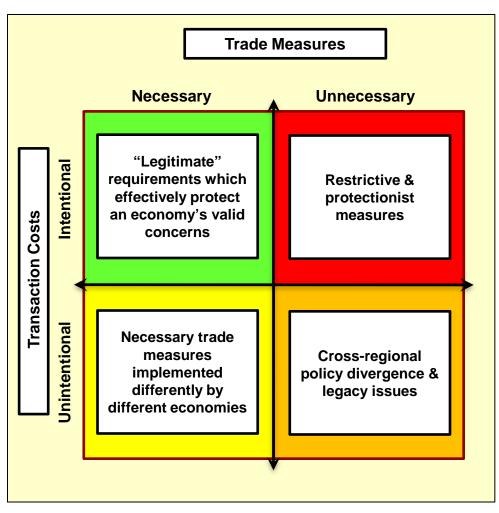
Perspective and Context Matter: Exporting Economy Viewpoint

Viewed from an external exporting economy perspective, many economy-specific NTMs are reinterpreted as NTBs.



When NTMs Become NTBs

Conceptually, the 2X2 matrix below highlights different types of NTBs, which are supported by our interview research.



Quadrant 1 – Necessary and Intentional NTMs

Captures the NTMS that all acknowledge are legitimate requirements to place on exporting businesses. Exporting economies recognize the need to put in place regulations that protect against known threats and risks.

Quadrant 2 – Necessary and Unintentional NTBs

Reflects the necessary trade regulations that become unintentional NTBs. These are measures that, though designed to address a real risk, are implemented differently from economy to economy, creating unnecessary transaction costs.

Quadrant 3 – Unintentional and Unnecessary NTBs

The majority of NTBs in this section derive from unnecessary cross-economy divergence in regulations – the risk is the same, the solutions vary. Also in this set are legacy NTMs that have become obsolete but are still imposed due to bureaucratic inertia.

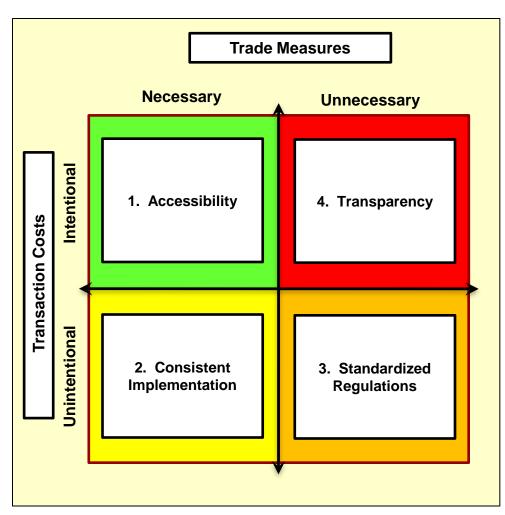
Quadrant 4 – Intentional but Unnecessary NTBs

Captures the NTBs generally referred to as restrictive and protectionist. Exporting economies debate the domestic economy's need for the NTM, and deem them to be "illegitimate".



Seeking Solutions

Stepping back from the challenges of eliminating specific types of NTBs, our report offers four very broad general recommendations:



Accessibility

Trade regulations need to be easy to access, understand, and update for businesses from all APEC economies/cultures.

Cost: added administration costs – especially costly to SMEs

Transparency

The justification/logic behind trade regulations must be made available to business leaders and other government trade regulators.

Cost: loss of trust leading to extra "slack" written into business operations plan

Standardized Regulations

Wherever possible, trade regulations across economies must be standardized.

Cost: added transaction costs for having to address the same concern multiple ways when doing business in multiple economies

Consistent Implementation

Implementation/enforcement of trade regulations must be reliably consistent, both inter-economy and intraeconomy.

Cost: inefficient flow of goods, services, and capital

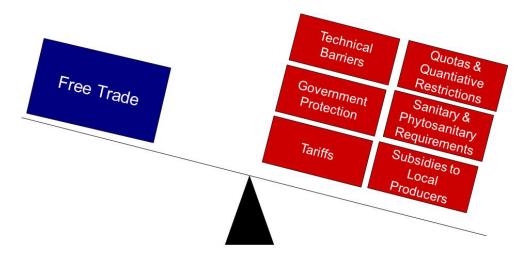


AGRICULTURE



NTBs in the Agricultural Industry

Cross economy agricultural trade is one of the most heavily protected industries. Given the sensitivity of the industry in terms of its impact on safety and security, economies regulate its trade with NTMs in order to protect human, animal and plant life. However, the myriad regulations covering registration, SPS requirements, technical barriers, quantitative restrictions, among others, are complex within and across economies. Such regulations are cited as real pain points for businesses that drive up costs and limit the flow of trade.



Free trade is restricted due to higher transaction costs.

Objective

The following section contains an extensive examination of NTBs in agricultural trade, and aims to address the following key objectives:

- Catalog non-tariff barriers in the agricultural industry across all APEC economies
- Capture the voice of business executives on obstacles to agricultural trade caused by NTBs
- Analyze how agricultural NTBs develop across the APEC region



Research Method

Comparative Catalog of APEC NTBs in the Agricultural Industry

- Provide a detailed inventory of regulations pertaining to agricultural trade for all 21 APEC economies for the following 12 food categories:
 - Beef/Red Meat, Chicken/Pork/White Meat, Coffee, Cocoa and Tea, Cross Commodities, Dairy, Fish/Seafood, Fruit, Legumes, Rice, Sugar, Vegetables, and Wheat and Grain.
- We considered the following NTM subclasses in the catalog:
 - Sanitary and Phytosanitary, Customs and Administration, Technical Barriers, Quantitative Restrictions, Government Participation/Trade Remedies, and Other.
- Analyzed similarities and differences of regulations against each other, and against international standards that exist.
- This has been discussed in detail in the Appendices.

Field Research: Capturing the Voice of the Business Executive on NTB "points of pain"

- Determine the impact of different agricultural NTBs in different economies and on business decisions.
- Evaluate direct and indirect cost burdens that agricultural NTBs place on businesses, and determine which types of NTBs cause the most concern for business executives.
- Primary research data was collected in 10 APEC economies from business executives, industry representatives, and trade officials. Research was conducted via in-person and telephone interviews.
- Our specific intention was to interview executives, trade association officials, and trade specialists, with deep knowledge of agricultural NTBs. This inherently biases our sample of opinions to large corporations involved with significant amounts of cross-border trade. Though not intentionally excluded, our sample has fewer opinions from SMEs.



Challenges, Scope, and Limitations

While simple in concept, the idea of producing a useable by economy comparative agricultural NTM catalog and analyzing trade restrictions proved exceptionally difficult to execute in practice.

Among the challenges we faced were:

- Accessibility: While some economies provide one-stop online resources, most do not. We had to refer
 to our interviews with business executives to get up-to-date regulations that were not published.
- Multiple Agencies: In many economies, responsibility for agricultural standards is shared across
 government agencies. The agencies typically publish and disseminate their standards in different ways.
 Where authority for standards overlaps, this creates a real problem.
- Level of NTM detail and specificity: Some economies provide very thorough detailed information, with help lines, for all important regulations. Others provide only general information.
- Language: Some economies listed their regulations only in their local language, with no translations
 available in any other language. This created difficulty in understanding and interpreting the regulations.
- Vagaries: Many economies word their regulations at a very high level leaving a lot open to interpretation. This adds uncertainty and ambiguity to the regulation itself and its implementation.

Because of these challenges, the comparative agricultural NTM catalog we produced has a number of very important limitations. Consequently, generalizations and conclusions drawn from it should be done with extreme care.



Challenges, Scope and Limitations

Comparative Catalog of APEC NTBs in the Agricultural Industry

- Number of NTMs per economy: Although we have attempted to make this catalog as comprehensive as
 possible, due to the aforementioned issues, there may be NTMs that are not listed in the catalog
- Absence of data: Due to unavailability of data for some economies, the number of regulations in some economies might not be comprehensive
- Direct comparability: When direct comparisons are drawn between economies, some regulations might not be directly comparable due to interpretation and implementation divergence across economies.

Field Research: Capturing the Voice of the Business Executive on NTB "points of pain"

Focus of our interviews was with executives, industry specialists, consultants, and trade officials who are knowledgeable about issues and challenges pertaining to non-tariff barriers in the agriculture industry.

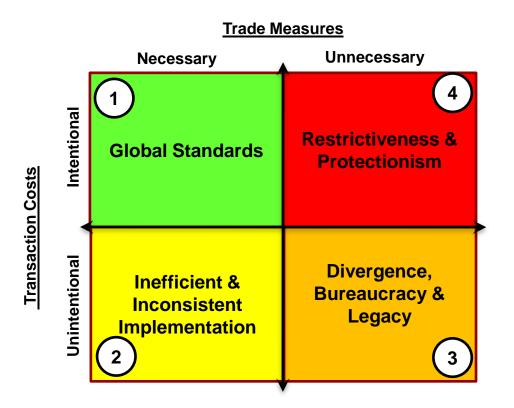
- Our interviews were predominantly with big companies.
- We only looked at 12 food categories, adapted from the WTO categorization to target the most pertinent food categories for the APEC economies
- Our interviews did not cover all 21 APEC economies.
- With the small number of interviews conducted, caution should be used in drawing generalizations.
- Despite the limited number of respondents, a strong consensus of opinions emerged regardless.
- These interviews were intended to supplement our catalog of agricultural NTBs.

While a good faith effort was made to find all NTMs in agriculture, if they were not posted or obviously linked on government websites, they may not have been analysed.



Agriculture Case Study Framework

When looking at non-tariff barriers within agriculture, our research and conversations led to the classification of all measures into these four quadrants, based on the necessity of the trade measure compared to whether the measure was intentionally imposed or not.

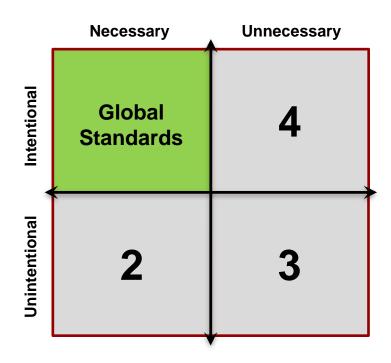


The four quadrants address:

- Quad 1: Global Standards and how the lack of harmonization among regulations leads to NTBs.
- Quad 2: How divergence and inefficiency in implementation is a major source of unintentional NTBs.
- Quad 3: Bureaucracy, Inertia and Legacy breed NTBs.
- Quad 4: How economies use NTBs to protect domestic industries and restrict imports.

NTBs must be thought of more broadly than restrictive and protectionist NTBs. Divergent, incompatible NTMs across economies and inefficient, inconsistent and bureaucratic implementation at borders increase the transaction cost to the point where they become NTBs.

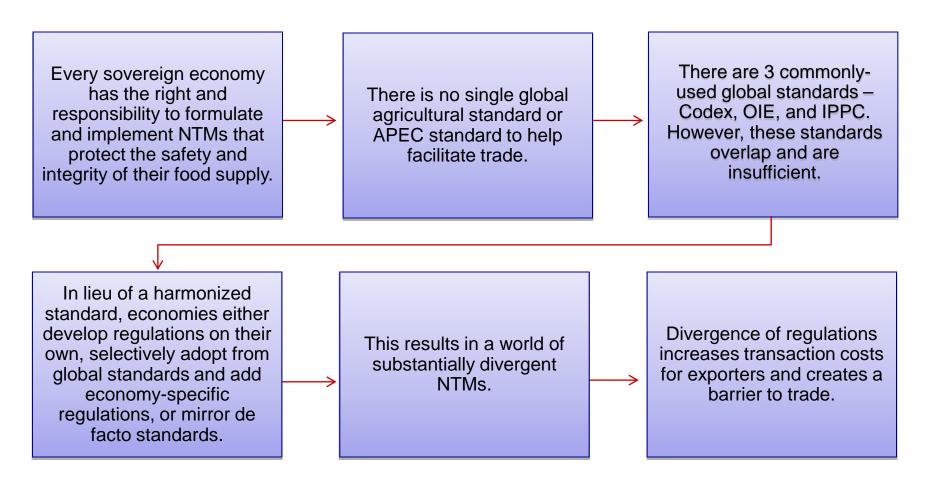




QUADRANT 1: FINDING GLOBAL STANDARDS



Lack of Harmonization Among Regulations Leads to NTBs



Due to the absence of a single harmonized global agricultural standard, economies develop their own regulations. Divergence of NTMs result in creating NTBs which increase transaction costs and decrease trade.



Every Economy Enacts NTMs to Protect Their Food Supply, But a Global Standard Must Harmonize Them

Economies enact NTMs and enforce NTMs at their borders to protect their food supply. Global standards must protect the global food supply but also help facilitate trade.

Ideals Sought in a Global Standard:

- Standards for high quality, safe animal and plant products
- Appropriate to risk
- Clear certification processes
- Freedom from diseases and pests
- Truthful labeling
- Transparent and consistent regulations across economies and through time



Codex, OIE and IPPC Are Existing Global Standards

Codex, OIE, and IPPC are widely accepted global standards. They aim to:

- Protect the environment and human consumption
- Promote transparency and harmonization in order to remove artificial trade barriers and other causes of trade disputes between economies
- Develop regulations on the basis of the best scientific knowledge at that time

These 3 global standards are based on agreed-upon scientific standards and contain regulations formed by committees. These are governed by a global body, but currently are not being actively enforced.

GLOBAL STANDARDS



Codex, OIE, and IPPC, as currently developed lack the basis to become strong global standards. There is significant overlap among the 3 standards in regards to food categories and NTM categories.

Overlapping NTM Categories Covered by Codex, OIE, IPPC

Codex covers the same food categories as OIE and IPPC except for Beef & Red Meat. The distinguishing factor is that Codex covers agricultural products only, while OIE and IPPC cover the products and handling of the live plants and animals.

Codex

- Sanitary Standards
- Technical Standards
- Including Hygienic Codes, Technological Standards, Maximum Residue Levels

OIE

- Sanitary Standards
- Managing animal health and diseases

IPPC

- Phytosanitary Standards
- Managing the spread and introduction of pests

Codex, OIE, and IPPC focus primarily on Sanitary and Phytosanitary NTMs but do not address Quantitative Restrictions, Trade Remedies or Customs and Administration NTMs. There is a high degree of divergence in the Valuation, Clearance, Documentation, Inspection, and Licensing regulations that fall under Customs and Administration NTMs.



Majority of APEC Economies Have Adopted Codex, OIE, and IPPC

Codex			
Adopted	Not Adopted		
Australia, Brunei Darussalam, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Thailand, United States, Vietnam	Chinese Taipei		

OIE				
Adopted	Not Adopted			
Australia, Brunei Darussalam, Canada, Chile, China, Chinese Taipei, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Peru, Philippines, Russia, Singapore, Thailand, United States, Vietnam	Hong Kong, Papua New Guinea			

IPPC			
Adopted	Not Adopted		
Australia, Brunei Darussalam, Canada, Chile, China, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Thailand, United States, Vietnam	Chinese Taipei, Hong Kong		



Insufficient Global Standards Result in Additional Economy-Specific Regulations & Powerful De Facto Standards

There is a legal obligation to base economies' SPS measures on standards developed by global standards setting bodies. Taken collectively, the 3 global standards address all NTB sub-classes and major food categories. Moreover, they have been adopted by almost all APEC economies. However, economies implement regulations in addition to the global standards when they:

- Determine that a higher level of protection is more appropriate to address a certain risk
- Encounter new threats to safety & security that none of the 3 standards have fully addressed

Developed economies, such as Japan, the United States and the European Union, actively form regulations in addition to global standards when their scientific references deem Codex, OIE and IPPC to be inadequate.

Developing economies, lacking the resources to completely develop a complete set of standards on their own, resort to referring to the standards of developed economies (Japan, EU and the US) and selectively adopting these de facto standards.





Economy-Specific NTMs Increase Divergence in Regulations

Every
sovereign
economy has
the right and
responsibility
to set
regulations to
protect their
people's safety
and health.





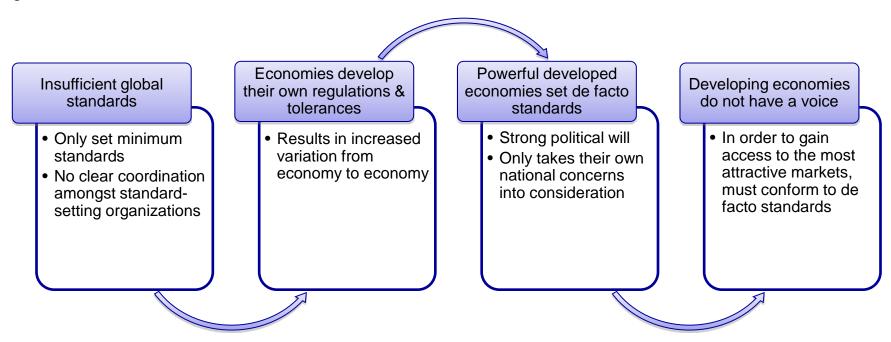
An increasingly complex set of divergent NTMs lead to increased transaction costs, which are a barrier to trade.

When each economy develops additional economy-specific regulations, these substantially divergent NTMs become significant barriers to trade.



Why Do De Facto Standards Exist?

No strong agreed upon set of agricultural standards exist. These global standards (Codex, OIE, IPPC) are established as minimal standards. Because of this, economies supplement these standards with additional requirements. Over time, three de facto standards have emerged: E.U., Japan, and the U.S. However, these de facto standards reflect the specific interests and agricultural guidelines of these economies.



E.U., Japan, and the U.S. de facto standards effectively become NTBs for exporter economies. They are not global standards.



De Facto Standards: Are They the Base for Global Standards?

Global standards should be developed to harmonize regulations which will increase trade.

De facto standards have emerged from the economic influence of the E.U., Japan and the U.S. on global trade. In effect, the specific requirements of these large economies are being imposed on all other economies wishing to trade with them.

Developed economy standards become new NTBs

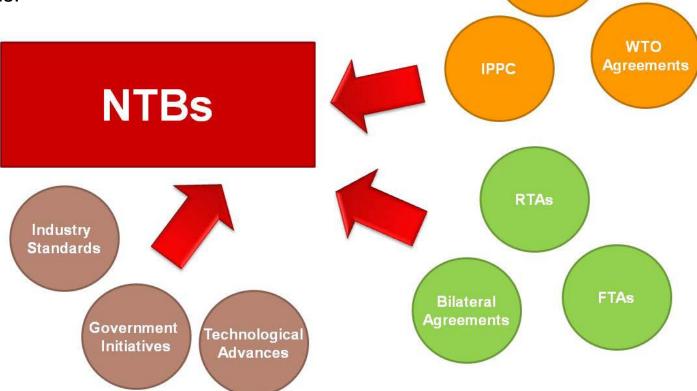
Developing economy needs are not addressed

Without significant revision and harmonization, the three de facto standards are not good candidates for developing a single agreed-upon set of global standards. In general, the de facto standards represent the most advanced and stringent regulations without any consideration of developing economies' needs and capabilities.



Divergence Creates NTBs

NTBs are created when exporters are forced to comply with a set of highly DIVERGENT regulations.



To understand the level of divergence in the agricultural NTMs that economies impose, we developed a comprehensive catalog of NTMs across all APEC economies.



OIE

Codex

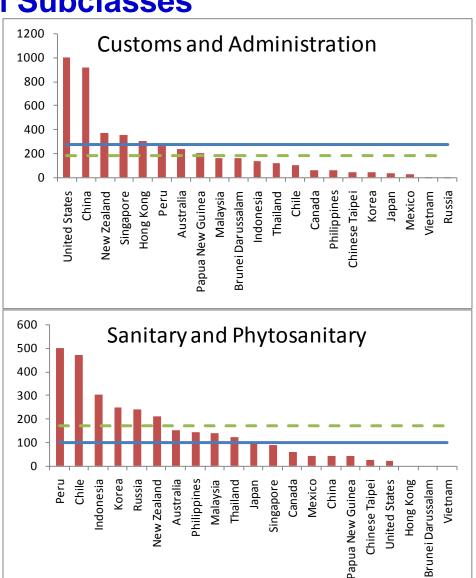
There is a Large Variation in the Number of NTMs in Economies for Different NTM Subclasses

Our comprehensive catalog of NTMs were summarized in these charts, which depict the number of NTMs by NTM categories across the APEC economies.

Takeaways:

- On average, customs and administration pose the most number of regulations.
- This adds a level of complexity since these regulations are imposed at the border and vary largely according to the individual economy's interpretation and implementation of different regulations.
- The US and China have more than double the number of NTMs for Customs and Administration than any other economy
- NTM categories, such as phytosanitary standards that safeguard against pests and diseases and provide for quality of food products, should ideally be similar across economies. However, they vary a lot across economies.

Detailed charts for every economy, NTB class, and food category are available in the Appendix.



— Average of developed economies — Average of other economies

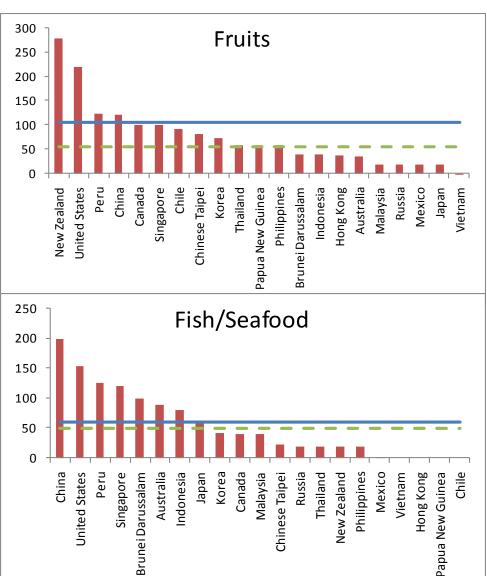


Developed Economies Dictate Standards

These charts depict the number of regulations for food categories across the APEC economies

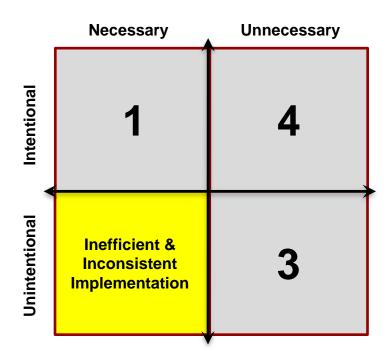
Takeaways:

- The average number of regulations in developed economies for food categories that are produced in under-developed economies is comparable to or lower than the number of regulations in the under-developed economies
 - This indicates that under-developed economies follow the regulations of developed economies as the de facto standards for food categories that are produced domestically.
 - This allows under-developed economies to protect the domestic production from economic pressures of imports
 - Example: Dairy, cross commodities, rice, legumes, sugar, and grain
- Developed economies typically pose higher number of regulations than under-developed economies on high-consumption perishable food categories
 - Example: Fish/seafood, fruits, and vegetables
- Detailed charts for every economy are available in the Appendix.



— Average of developed economies — Average of other economies





QUADRANT 2: INEFFICIENT & INCONSISTENT IMPLEMENTATION



Unintended Consequences Lead to NTBs

Without agreed upon global, or APEC-wide, agricultural standards for NTMs, all economies have moved to a "plus" and "different" status. Effectively, businesses within APEC must contend with economies that have tailored and built upon the requirements of CODEX, OIE, and IPPC, to protect themselves from real or perceived external threats. Alternatively, many economies have adopted the NTM requirements of the EU, US, or Japan, but in economy-specific ways. The unfortunate reality and consequence of an NTM "plus" and "different" world is significant divergence in NTM requirements across economies.

Unintentional NTBs. Quadrants 2 and 3 of our conceptual matrix reflect the impact of this "plus" and "different" world on business. Firms doing business in multiple economies argue that they encounter unintended burdensome transaction costs. Business executives reported to us that while the NTMs were recognized as necessary and needed, differences in implementation and bureaucracy across economies unintentionally raised costs of doing business, effectively introducing unintentional NTBs.

Cross-economy differences in minimum standards, inspection protocols, testing methods, and paperwork requirements, as well as dealing with multiple agencies simultaneously, inconsistencies in administration of policies across ports, and difficulties in finding and interpreting import requirements, all combine to raise costs of cross-border business to discouraging levels. What particularly raises the ire of business executives is that these costs, costs of implementing appropriate NTMS, are largely unintentional. But the costs are real and have become NTBs.

Businesses told us that they desire standardized NTMs for the same threats, consistently applied protocols, transparent regulations, educated agricultural inspectors and customs officials, and quick and meaningful feedback when problems are encountered.



Exporters Report Incurring Real NTB Costs

In our interview research business executives provided us with estimates of their added costs. Exporters complained loudest when they believed the added costs were the result of unintentional divergence, lack of consistency, and/or unnecessary requirements. Most believed that with increased across-economy harmonization of NTMs, improved transparency, and more within- and across-economy consistency, significant cost reductions could be realized. It is difficult to generalize from these data as the exporters were from different economies, exporting to different economies, with different agricultural products. However, they all wanted us to report that these unintentional and unnecessary costs should be the focus of a concerted effort to reduce and eliminate.

We do conjecture, however, based on our interview data that implementation costs, and costs of dealing with divergence and administration inconsistencies could be a magnitude larger than those involved with dealing with restrictive and protectionist NTBs

Examples:

- Philippine importer reported needing to hire a specialist at approximately \$10K per month to prepare import paperwork to meet Philippine government requirements.
- Peruvian citrus export cooperative estimates that 2 cents/kilo are allocated to NTB costs.
- New Zealand exporter reports \$500K per year is lost to spoilage, staff time, lost sales, and extra treatments.
- Pipfruit exporter reports NTB costs at \$1.50 per 18 kilo carton in Taiwan, \$1 in the US, and \$13 in Japan
- Peruvian agricultural conglomerate reports spending \$300-500K per year to comply with traceability requirements.
- New Zealand Dairy exporter reports incurring several hundred thousand dollars per year to hire 4-5 specialists.

Most common "wish-list" items reported were standardization, consistency, and provision of adequate and ongoing education for all agricultural inspectors and customs officials.



Least and Most Difficult APEC Economies

In response to the question, "Which economy is the least/most difficult to export to?" the answers received were vastly divergent depending on the specific economy-to-economy and/or company-to-economy dynamics. The results below are drawn from our limited sample of 86 interviews.

Easiest Economy to trade with	Comment	Hardest Economy to trade with	Comment
US	"The US makes it easy to get in and out due to a good infrastructure and a clear understanding of how to manage the system."	US	"If starting outside the US, the US has too much bureaucracy at the border; the FDA and USDA are very protectionist in spite of data that leads to the opposite conclusions."
Thailand	"The government does not pose any challenges to importing agricultural products."	Thailand	"There is a lack of clarity as to what is the scope of the products covered under certain policies."
Hong Kong	"For everything, Hong Kong has no barrier; all ports in Hong Kong are considered 'free ports.' Further, there is open trade between many of the neighboring countries."	Japan	"Pesticide level restrictions are some of the strictest in the world, serving as trade protectionism against foreign companies."
Singapore	"Efficient trade ports make testing very manageable."	China	"Competing government agencies issuing conflicting rules."

Economies can be viewed as the easiest or hardest economy with which to trade, depending on their relationship with the economy of the exporter questioned. Hong Kong and Singapore stand out as the least difficult. Japan and China were most commonly sited as most difficult.



Sources of Implementation NTBs

The absence of common generally agreed upon NTM standards has resulted in economies developing independent standards or adopting standards from other economies. This is a major source of NTM divergence, which unintentionally raises transaction costs for businesses engaged in cross-border commerce. Our research identifies this divergence introducing implementation-related costs at three levels:

Regulation

- Agricultural NTMs are promulgated with differing levels of safety and security in mind, as well as differing degrees of conservation.
- The degree of NTM specificity differs widely among economies. Some provide very specific language, while others offer only general guidelines.

Interpretation

- Agricultural inspection agencies can and do interpret NTMs differently. Different interpretation of regulations by different national agencies leads to widely differing policies.
- Some economies have created additional unpublished "administrative interpretations," which reinterpret NTM regulations much more restrictively.

Implementation

- How economies choose to implement agricultural NTMs is the biggest source of NTM divergence.
- Varies by testing method, inspection agency, training and education of inspectors, capabilities and resources available, etc.

NTMs become NTBs for businesses when divergence in standards across economies increases transaction costs.



Divergence and Inefficiency in Implementation as a Major Source of Unintentional but Necessary NTBs

Our research revealed the major source of concern for business was differences across economies in how agricultural NTMs are implemented. Though accepting of each economy's sovereign right to put in place regulations to ensure the safety and security of its interests, businesses rankle at the wide variety of approaches taken by different economies. Among the implementation issues raised were:

Methods of Inspection Testing & Treatment

 Even for the same agricultural threat, different economies use different testing procedures and treatment regimes.

Revenue Models

• Differences in how inspection agencies are funded create different incentives for the nature and extent of inspection procedures, testing methods, and treatment regimes.

Availability, Accessibility & Ease of Use

- Within APEC, there is a lack of consistency in where NTMs are published (i.e., in a single document or scattered across multiple locations).
- Their accessibility (i.e., in multiple languages, electronic or hardcopy form) and ease of use (i.e., web-enabled) also vary.

Capacity and Capabilities

- Economies differ in the availability of infrastructure and institutions to efficiently and effectively implement agricultural NTMs.
- Many emerging economies are challenged by trade growth exceeding their ability to add needed capacity or to provide training to develop the necessary capabilities.
- Worse yet, other economies refuse to increase representatives when faced with a backlog of import applications.



Divergence in Implementation as Other Sources of Unintentional but Necessary NTBs

Additional implementation issues raised were:

Transparency and Dispute Resolution

- Economies differ with respect to how transparent their NTM requirements are, particularly what tests will be used and how remedies will be applied.
- Additionally, access to dispute resolution procedures varies across economies, which is of particular concern when dealing with perishable agricultural products.

Disproportionate Implementation

- Economies differ with respect to how NTMs are applied to imports.
- Some economies impose blanket control measures, others impose nationwide as opposed to product-specific measures, while still others adopt selective measure implementation.

Within Economy Inconsistencies

- Inconsistencies in how agencies implement regulations raise transaction costs.
- Businesses report inconsistencies in how regulations are implemented at different port locations, over time, and across different agencies.

Education and Training

• Differences in the level of education and the extent of training of agricultural inspectors and customs agents was reported as a major hurdle by exporters.

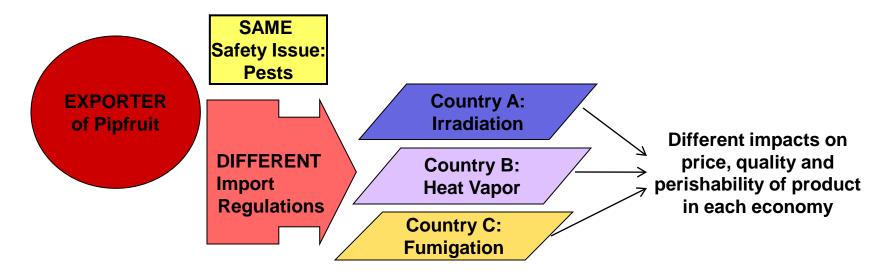
Different implementation tactics across economies makes NTMs become NTBs for exporters.



Different Treatment for the Same Agricultural Threat Increases Transaction Costs

Different economies use different testing procedures and treatment regimes for the same agricultural safety concern. This results in varied transaction costs for firms exporting to multiple economies.

Consider the following example: An exporter of pipfruit must address the same pest safety issue in each economy to which it exports. However, different target economy may impose different pest treatment protocols, such as irradiation, heat vapor, fumigation.



Complying with different testing procedures and treatment regimes across economies not only increases the price of exporting, but may negatively affect the quality of products, particularly if perishable.



Different Revenue Models Vary NTM Implementation

Businesses reported that differences in agricultural inspection agencies' funding regimes created different types of NTM implementation problems. Different revenue models created different incentives in the nature and extent of inspection, testing, and enforcement.

Direct Government Funding

Agencies are funded directly by government funds

While salaried employees have an incentive to clear workload quickly, this creates an incentive for employees to find the easiest solution

Example: Peruvian asparagus exporters to the U.S. complain that when pests are found, the entire shipment is automatically fumigated. No effort is made to determine the type of pest and if it arrived with the shipment or entered the shipment once in Peru.

Unionized Agencies

Unionized agencies follow strict work rules

Work rules can have a major impact on the speed of clearance of perishable agricultural products

Example: Peruvian exporters to Australia complained about unionized inspectors who work to the rule. Thus, shipments arriving after-hours or on the weekend must wait until the next business day for clearance.

Partial to Full Funding from Fees

Agencies fund themselves at least partially from inspection and treatment fees

Deriving funding from fees charged for services required creates incentives for the imposition of unnecessary tests

Example: Exporters to the Philippines must obtain a Bureau of Food and Drug certification prior to being allowed to sell their products to retail chains. While required testing is performed by authorized third parties, a processing fee is charged for analysis of results.

Finding NTMs Can Be a Painstaking Task

Businesses report difficulties in finding and interpreting NTMs. Economies publish regulations in different formats and with different depths of thoroughness. Some are fully interactive online, while many require significant research to find and interpret. Some economies have set very general requirements supplemented by extensive administrative guidelines, which may or may not be published or readily available.

Regulations differ in degree of detail and comprehensiveness

Changes are not reported consistently

Locations where information is published are different

Supplemental administrative rules may be more important

Economies should aim to provide fully interactive publication of NTMs and supporting administrative guidelines.

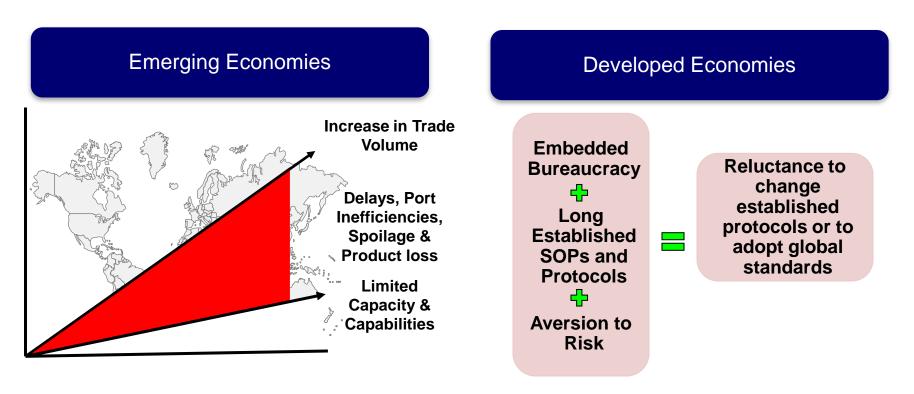


The availability of up-to-date, user-friendly and complete websites, such as the Canadian Food Inspection Agency's, reduces the difficulty in accessing regulations.



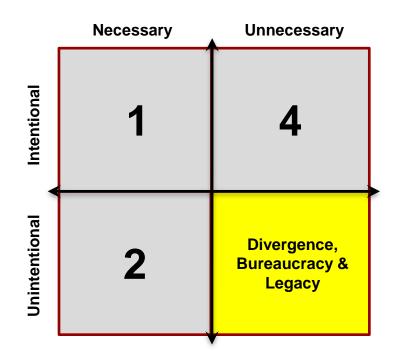
Capacity and Capabilities Constraints Create NTBs

Executives reported two different capacity- and capability-related challenges, which essentially broke along the emerging/developed economy divide. The challenge in emerging economies was reported as a lag between increased demand for import clearance services and the infrastructure and institutional capacity to handle the volume of trade. In developed economies, the challenge was reported to be one of bureaucracy, vested interests, and organizational inertia. In essence, the problem was one of a lack of willingness or ability to change.



Limited infrastructure and institutional capacity introduces costly inefficiencies in emerging economies. Developed economies resist change.





QUADRANT 3: DIVERGENCE, BUREAUCRACY & LEGACY



Unintentional & Unnecessary NTBs

Business executives bristle at what they consider are completely unnecessary barriers to trade, especially when they realize that their existence is neither intentional nor necessary for an agricultural threat. They point to two broad groups of problematic NTBs:

- Divergence-induced NTBs: NTBs that arise because of the lack of agreed-upon global or regional standards, which was discussed at length above.
- Bureaucracy & Legacy NTBs: NTBs that remain in existence long after their agreed-upon usefulness has gone because government agencies are incapable or unwilling to remove them.

All the executives we interviewed clearly acknowledged the importance and responsibility of economies to put in place NTM requirements to protect against the risks of unwanted agricultural pests and diseases. Not a single executive interviewed considered the costs they incurred to meet these requirements to be unfair or unreasonable. They acknowledged them to be as simply costs of doing business.

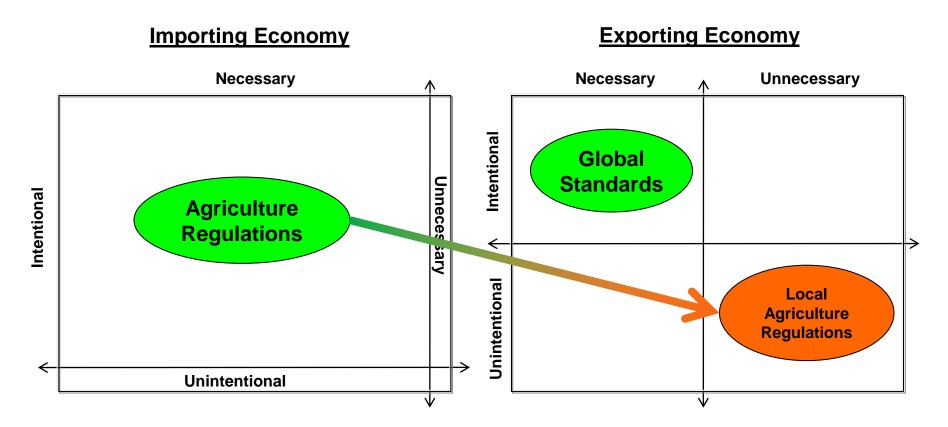
Where executives raised issue was with the unintentional and unnecessary costs that stem from the divergence in across-economy NTMs. The key NTB drivers reported were:

- CODEX "plus" and "different" regulations, which differ across economies;
- Use of different requirements, different inspection protocols, different testing methods, different treatment regimes, and different paperwork requirements for the same agricultural risks, pests, and diseases;
- Differences between agencies and inspection facilities within and across economies (for example, China and the US rank at the top of most lists);
- Inability of governments to remove unnecessary tests or upgrade to new protocols.



Divergence Breeds NTBs

Differences in approaches to how agricultural regulations are made, interpreted, and effectively and efficiently implemented turns well-intentioned NTMs into burdensome and costly NTBs for businesses.



Even if agreement could be reached on the use of general common standards, differences at the local economy level could turn NTMs into NTBs.



Bureaucracy, Inertia, and Legacy Breed NTBs

Business executives and government officials shared frustrations with the difficulties encountered when trying to remove unnecessary NTMs, changing inspection and treatment protocols, and with streamlining government oversight. Vested interests, familiarity with established protocols, and a bias to err on the side of being overly cautious in inspection, testing, and treatment, all were reported to contribute to unnecessary and unintentional consequences.

Government Bureaucracy

When multiple government agencies retain inspection control and/or oversight, businesses encounter NTBs.

Examples include:

- Meeting requirements for similar certificates from multiple departments
- Need to complete different paperwork
- Unnecessarily duplicative tests
- Different compliance hurdles imposed by different departments
- Nationalistic pride in some cases have led economies to "re-invent the wheel" rather than adopting protocols from other economies.

Organizational Inertia

Our interview research uncovered numerous examples across economies of government agencies' reluctance or inability to move forward in the areas of inspection, testing, and treatment.

Examples include:

- Self-interested government employees resisting new protocol approaches
- Agencies lack incentive to recommend their own elimination
- Continuation of paper processes despite effective and efficient paperless systems
- Inability to remove/eliminate NTBs.

Legacy

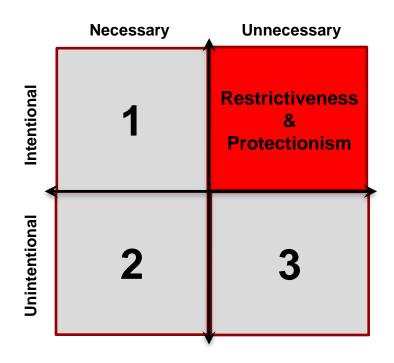
Perhaps the most significant complaint raised by exporters was that they encountered a strong bias in agricultural inspection agencies to continue with established inspection, testing and treatment protocols.

Examples include:

- Continued testing for pests and diseases that are no longer needed
- Use of older, less efficient and damaging treatment procedures.

Businesses report encountering annoying NTBs which are both unnecessary and unintentional.





QUADRANT 4: RESTRICTIVENESS & PROTECTIONISM



Restrictiveness & Protectionism

Most of the debate and discussion on NTBs focuses on the restrictiveness and protectionism embedded in economies' NTMs. While the domestic economy would argue that their NTMs are necessary because of economy-specific circumstances, exporting economies often question the restrictiveness of the NTM. Hence, they argue that the economy is intentionally erecting an NTB.

During our interviews with executives in multiple economies, we asked them to identify restrictive and protectionist NTBs. However, in analyzing this data, it is exceptionally difficult to separate or to assess what is legitimate or illegitimate.

In this section, we present anecdotes reported to us by exporters without value judgment. Clearly, perspective is a key driver in determining whether an agricultural measure is an NTM or an NTB.

We heard numerous examples of different types of restrictive and protectionist NTBs. We present only a handful of examples in this section.



Restrictiveness & Protectionism

Exporters acknowledge that sovereign economies have the obligation to ensure that the inflow of goods does not harm the health of its population and environment.

However, they also cite numerous examples of trade regulations they perceive to be protectionist measures. These are trade regulations that have no scientific basis insofar as protecting human, plant and animal life.

Measures such as Import Bans, Tariff Rate Quotas, and Government Subsidies are viewed as protectionist. These restrict trade without any safety or security justification.

Sovereign economies justify NTMs on the basis of domestic circumstances. Exporting economies deem NTMs unrelated to safety & security to be NTBs. Necessary Unnecessary

Protectionism is:

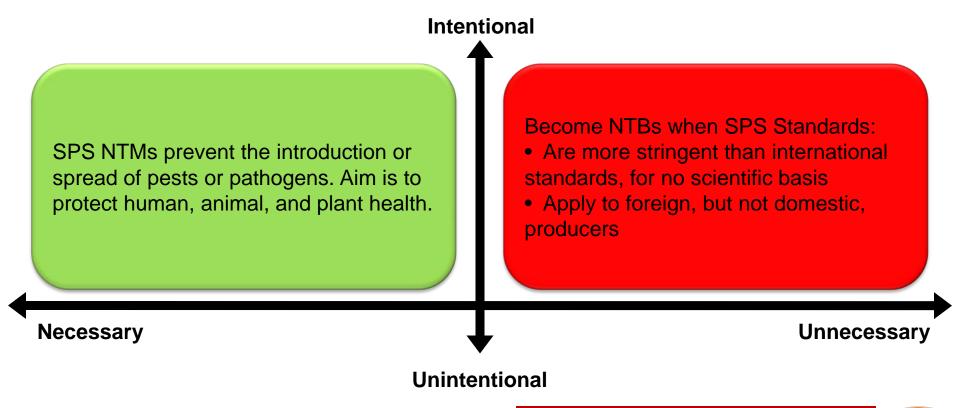
- Difficult to detect. Some occur in the same forms as necessary trade regulations, such as Technical Barriers and SPS Regulations. Perceptions on whether a regulation is protectionist depends on whether one takes the sovereign economy's view or the exporter's view.
- Difficult to dispute, due to differing scientific references and varying assessment of and tolerance to risk.

Businesses view such protectionist measures as unnecessary drivers of actual and opportunity cost.



Sanitary and Phytosanitary Measures

Sanitary and Phytosanitary (SPS) measures are government regulations that restrict or prohibit the importation and marketing of certain animal or plant products, so as to prevent the introduction or spread of pests or pathogens that these may be carrying. They protect human, animal and plant life. These include testing, inspection, certification and approval procedures; quarantine treatments including relevant requirements associated with the transport of animal or plant products; provisions on sampling procedures; and methods of risk assessment.



Restrictive SPS Measures

Examples:

"China imposes a zero tolerance rule for micro-organisms that are impossible to completely eliminate from poultry and red meat. These are more strict than OIE standards, which specifies certain safety levels. With chicken for instance, they require that there is zero salmonella. It's frustrating because the same standards do not apply to China's own farmers."

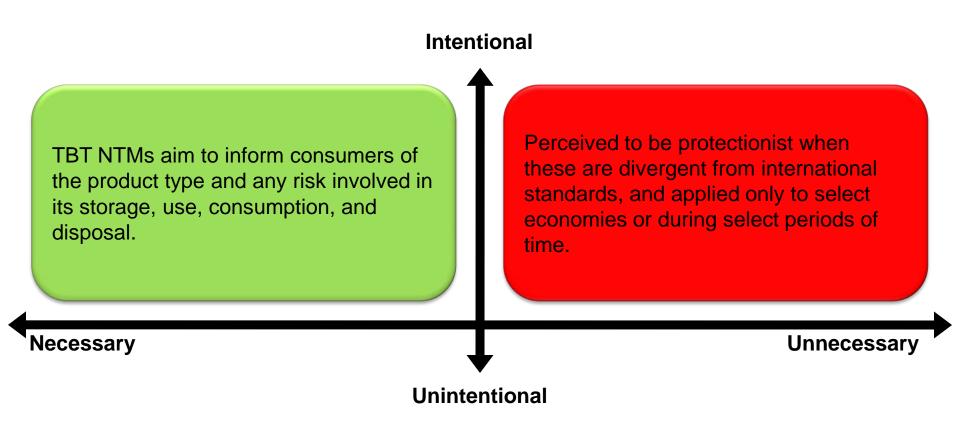
"Korea allows US, but not Canadian beef. This is unreasonable, because both the US and Canada are listed as having mitigate risk of BSE. The US and Canada beef supply is practically homogenous."

"The US fumigates asparagus for presence of a specific insect that is also present in the US. How can it be a threat if it is not an insect species that is foreign to its territory?"



Technical Barriers to Trade

Technical barriers to trade (TBT) refer to technical regulations and voluntary standards that set out specific characteristics of a product, such as its size, shape, design, functions and performance, or the way a product is labelled or packaged before it enters the marketplace.



Restrictive TBT Measures

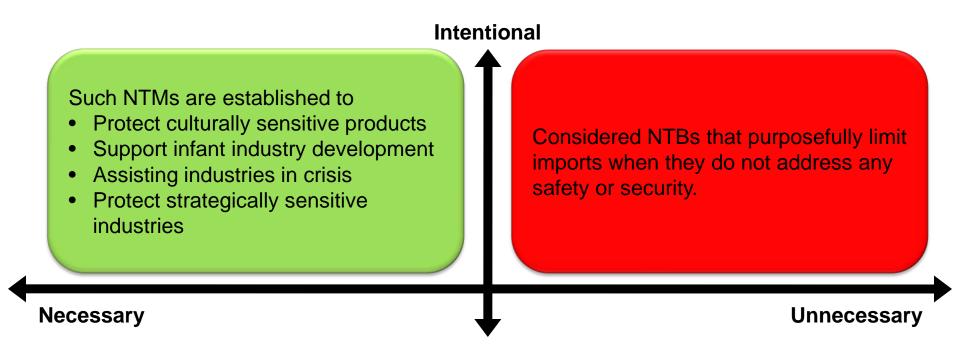
Examples:

"The US imposes a technical barrier on the size and color of citrus fruit from Peru only during the US citrus harvest season."

"Japan mandates that all ingredients and food additives be listed by name, along with content percentages, and include a description of the manufacturing process. This process is overly burdensome and risks that proprietary information may be obtained by competitors."

Other Protectionist & Restrictive NTMs

- Bans on products not associated with a threat to human, plant or animal health.
- Tariff rate quotas which impose costs that reduce or eliminate price competitiveness of importers vis-a-vis domestic producers beyond a predetermined import quantity.
- **Government subsidies** that benefit domestic producers in an effort to reduce competitiveness of imports within the sovereign economy.



Other Protectionist & Restrictive NTMs

Examples:

"Sugar is such a politically sensitive commodity, and we are shut out of exporting from all markets. We are allowed to export to the US, but the quantities are limited by tariff rate quotas. During times of shortage, they do allow import of increased quantities of raw sugar, but do not increase the quota of refined sugar, to protect domestic sugar refiners."

"Mexico bans all coffee plants and plant parts, including beans."

"Japan requires wheat be imported through MAFF's Food Department, which then resells wheat to Japanese flour millers at prices substantially above import prices, thereby discouraging wheat consumption by increasing the cost of wheat based foods in Japan."

"The Philippine Fisheries Code permits importation of fresh, chilled, or frozen fish and fish products only when certified as necessary by the Secretary of Agriculture and upon issuance of an import permit by the Department of Agriculture."



Restrictiveness & Protectionism

Solutions in this area can be found in working toward greater transparency, better understanding of motivations for the original established of the NTMs. Economies need to work towards win-win solutions that are mutually beneficial.

Based on our interviews with executives in multiple APEC economies we learned that while these restrictive and protectionist NTBs frustrate businesses, they have learned to accept, live with, and work around them. Business executives see the discussion of restrictive and protectionist NTMs to be largely political and a part of trade negotiations at the economy level. More concerning for business are the unintentional and unnecessary costs from issues from implementation and divergence in NTMs.



Lists of Restrictive and Protectionist NTBs

Restrictive and Protectionist NTBs remain a point of contention in bilateral and regional trade negotiations. Economies maintain lists of other economies' NTMs that they deem to be illegitimate, protectionist, and restrictive. In preparing this report we analyzed the lists from three economies: Mexico, New Zealand, and US.

The appendix presents a high level summary of the major trade complaints of these three against other economies. This compilation provides an overview of the nature and extent of restrictive and protectionist NTBs within the APEC Region.

It is illustrative to note that the US prepares an Annual National Trade Estimates report which highlights the US's list of restrictive and protectionist NTMs maintained by other economies. While the average number of pages per economy is 14, there are fully 65 pages for China and 26 for Japan.

Similarly, Mexico has prepared and published the APEC: Non Tariff Barriers to Mexican Exports report which lists 23 pages for Japan and 18 pages of NTBs for the United States. By comparison, the average across all other sovereign economies was only 8 NTBs.

Furthermore, conversations with New Zealand experts who are developing a report on SPS NTMs, reports 13 pages of overly restrictive SPS NTBs for the US, vs. only 3 for all other economies.



EMERGING NTBS IN AGRICULTURE



Emerging Issues - Opportunities for more divergence

- As there is increased clarity on the previous issues, there will continue to be other issues that arise from three distinct areas:
 - -Industry Induced
 - -Technology Advances
 - -Government Initiatives
- There is a need to facilitate conversations to thwart economy-by-economy approaches, measures, non-cooperating entities, and definitions.
- Without a collaborative approach, economies where these issues are becoming competitive issues will again impose de facto standards on the region.
- Effectively, this means that developed economies will impose measures that meet the needs of their specific circumstances which will more than likely have negative and unfair implications for emerging economies.



Where Emerging NTBs are found

Economies are facing pressures to develop NTMs to deal with new potential sources of risk in their products to protect their economies from new emerging issues within agriculture. These issues are appearing from three areas:

Industry Pressure

Private sector influences on agriculture standards and technical requirements

Technological Advances

Productivity advances with unforeseen effects on producers, consumers, and trade

Government Initiatives

Specific politically sensitive negotiations that often continue domestic protectionism

Without collective efforts and setting standards across economies these emerging issues will be more complicated, introduce more divergence, and increase transaction costs for business.



Industry Standards

Industry Pressures

Private sector influences on agriculture standards and technical requirements

- As players at different points on the food supply chain seek to improve their competitive advantages, they are motivated to meet the needs of consumers in new and different ways and to differentiate themselves from their rivals.
- Points of difference are being made in the following areas to improve competitive positions with retailer and consumer:
 - Organic Food Standards
 - Country of Origin Labeling
 - Eco-labeling
 - Carbon Foot-printing
 - Labor Rights and Fair Trade
 - Traceability via Bar Codes
- The consequences of the drive for competitive advantage in these areas is the creation of competitive barriers.
 While these can and should be argued as a natural artifact of market competition, they also became NTBs for exporting to these markets.



Competing Organic Food Standards

There has been a progressive move towards creating standards for organic foods. In practice, however, there is very little accreditation needed for a product to be labeled organic. Currently, the industry relies on voluntary disclosure and compliance to organic food standards. An assumption that organic farmers "play by the rules" is not a long-term viable solution. Three standards are competing for global dominance. Without a rapid convergence, differences in the way economies approach this issue will become entrenched.

National Organic Program (US)

EU Standards

Japanese Agricultural Standards

- New economy standards might be developed based on one of those three but often have divergences
- Private organic standards might meet multiple requirements but are still subtlety different
- Asian countries have few established standards and become targets for exporters because of ease of market entry

"These standards are non-equivalent and quite separate. The main problem is that they don't recognize each other." —Organic Publication Without common agreed upon standards, economies are selectively adopting standards for their own markets.



Country of Origin Labeling identifies and differentiates products with unforeseen consequences

Maintain an efficient and internationally competitive food industry

The USDA estimates U.S. companies will spend \$2.5B complying with the new rules during the first year and an annual \$499M thereafter for maintenance. USDA estimates the average implementation cost per firm is \$376 for producers, \$53,948 for suppliers and \$235,551 for retailers. – California Farm Bureaus

Address public health and safety concerns

"New Zealand tomato growers do not use dimethoate or omethoate and New Zealanders must be able to choose the origin of their products as part of their own health choices," – New Zealand Organic Representative

Provide consumers with information with which to make informed decisions

Does not apply to processed foods, restaurants, and can have multiple countries listed.

Facilitate trade and stops misleading labeling.

"This rule potentially will have an impact on all participants in the supply chain. The greatest impact (will be) on retailers and intermediaries -- handlers, processors, wholesalers, and importers -- while the impact on individual producers is likely to be relatively small. – USDA

Traceability via Bar Codes Increases Capital Required

Concerns over food integrity and safety are pushing retailers to demand traceability of food products from farm to consumer. The resources and capabilities required to implement full traceability require substantial investments which raise the cost for exporters. Both the drivers and the solutions take capital that are sometimes beyond the resources for the medium and small companies and economies.

Differentiation via authenticity

 Standards and links for data synchronization

Productivity gains because of product attribute information

- Training of supply chain managers and technologies
- New Technology for Testing

Risk management from the public, consumer, or producer

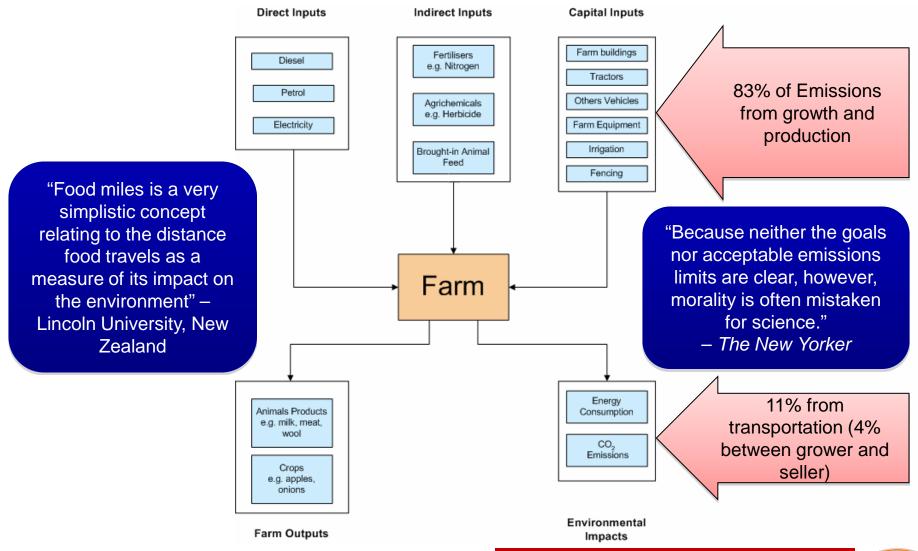
Coordination between governments

The meat industry has concerns that traceability will be used as an unjustified trade barrier because of the scientific and risk related requirements. It can potentially increase costs and **liability** and will raise the bar for marketing and branding.



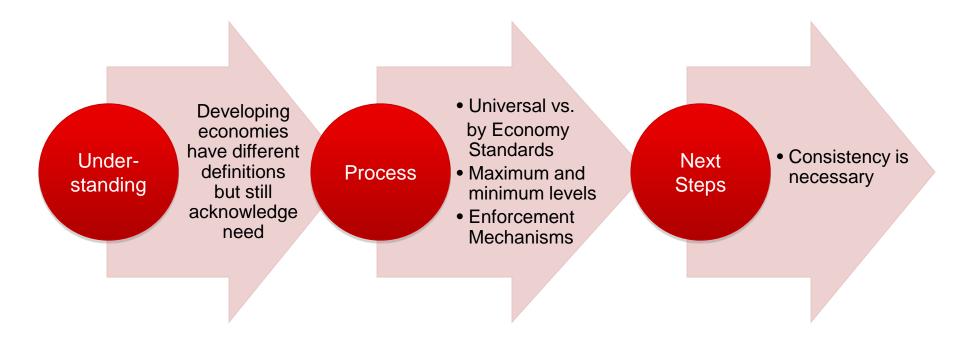
Differing Carbon Footprint Measurement Issues

Carbon footprint calculation is becoming an important social issue: there is critical pressure on food producers to develop appropriate protocols that fairly and accurately assess the true carbon footprint. However, done selectively, carbon foot-printing can act as an NTB to agriculture trade.



Labor Rights and Fair Trade

Corporate Social Responsibility is a growing differentiator for global businesses. As developed economies continue to impose their values and labor standards on developing economies, the cost of demonstrating compliance to these standards increases:



Labor Rights is a politically sensitive issue related to protectionism and potential infringement on national sovereignty. As economies develop standards and methods, they need to be developed in a manner than engages all economies instead of flowing from developed to developing economies.



Technological Advances

Technological Advances

Productivity advances with unknown effects on producers, consumers, and trade

The Situation

As economies and technologies advance, the optimization and differentiation of food production methods is coming to the forefront. Developed economies especially have moved forward in the following two methods:

- Genetically Modified Food
- Intellectual Property Protection in Agriculture

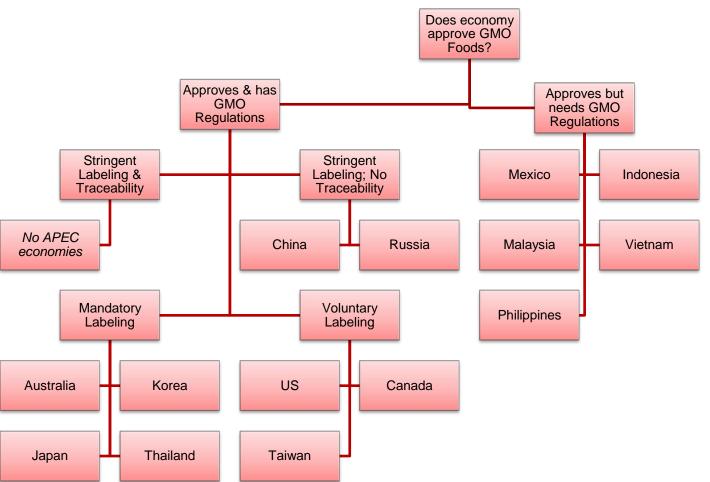
Implications

These policies have reduced costs and increased efficiency, but have further divided economy-by-economy production capabilities. This has increased divergences and created controversy across economies.



Genetically Modified Foods are approached differently

Typical GMO Foods are derived from plants that have been modified to become more resilient to external elements such as weather and pests. Though there are potential benefits, there is inconclusive evidence around their use and inclusion in food production creates significant controversy for trade. Each economy approaches the approval and labeling requirements differently:



"You could lose a market - billions of dollars -- overnight if you make the wrong decision. There is a need to find a reasonable balance between commodities and consumers where you can lie in bed at night and be sure that you will not glow in the dark." - Australian bureaucrat

Without a consistent approach, divergences will only increase causing more transaction costs.

Intellectual Property Protection in Agriculture

Designations of geographical indications and other intellectual property protection rules have had significant effect on market access and definitions for many area of agriculture. The WTO has attempted to harmonize differences between long-term benefits and short-term costs with mediocre results. Without coordinated discussion, the chasm between real needs and over-indulgent policy will only grow larger.

TRIPs (from the WTO) creates a globalized standard for IP Protection focused on national prosperity

Timeline for alignment determined by level of economic development

Wealth redistribution from developing countries to developed

Oligopoly of dominant US-based Firms

Since incorporating Geographical Indications (GIs) into China's national trademark system, more than 250 GIs have been registered with several hundred more applications pending. There have been over 300 infractions. – June 2007 Report

Patents Per Million People:

Japan: 2,884 Korea: 2,189 United States: 645

China: 51



Government Initiatives

Government Initiatives

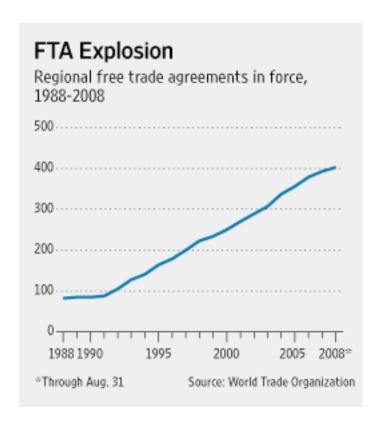
Specific politically sensitive negotiations that often continue domestic protectionism

- In an attempt to discuss different standards and movement of goods across borders, governments and their respective agencies often put specific focus on the following:
 - Agriculture as a bargaining chip for FTA negotiations
 - Food For Energy: Subsidies shift production focus
 - Bioterrorism and public health
- Larger negotiations often stall without discussion of these issues and frequently are driven by the developed economies with stronger government entities.



Agriculture as a Bargaining Chip for FTA Negotiations

As the number of FTAs and RTAs increases, economies are yielding to political pressures to focus on agriculture as a reference point for market access and definition of new standards. The majority of these pressures come from large, corporate agribusiness organizations who close the market for small and developing businesses.



"As tariffs and quotas are torn down under the mantra of trade liberalization, food safety is becoming a major offensive tool for industrial titans... to not only get market access for exports but to reduce competition from imports (in the absence of tariff and quotas)." - NGO representative

"While the WTO may have a much broader agricultural trade reform agenda and may be a source of *gaiatsu* (external pressure)... FTAs are a much more potent source of leverage to open agricultural markets because they generate strong *naiatsu* (domestic pressure)... from special business interests" - Australian Trade representative



Food For Energy: Subsidies Shift Production Focus

As worldwide oil prices increase, developed nations look to alternative fuels and subsidize production. There are potential domestic benefits and room for growth, but the amount of unknowns are just too great.



 Crop-based fuels could potentially shift the balance of power if economies reduce importing from limited suppliers and OPEC and turn to domestic production.

Food Supply Pressures from increased ethanol-based energy solutions will not only reduce corn levels for export, but will reduce acreage available for soybeans and other grain.

Global Warming

- Developing economies will have increased levels of deforestation
- Water demand will increase to levels

Control

 "We can't control the weather, we can't control the growth of demand in China, we can't control the oil price but we can control biofuels policy, because it's politically created in the first place." – NGO representative

Without a coordinated, strategic plan for energy and food production there will be adverse effects like misaligned priorities, food shortages, price instability, and environmental damage.

University of Southern California



Bioterrorism and Public Health

The threat of Bioterrorism has heightened of the past few years with significant more focus from the US after 2001. With this increased focus, more restrictive documentation and rules are necessary for cross-economy trade. This adds increased time and transaction cost.

Related to Health and Safety

 Against accidental or purposeful contamination of the food supply

US Driven

 After the Anthrax cases of 2001, the Bioterrorism Act established ground rules for registration and notice

The Global Health Security Initiative

- Informal, International Partnership
 - Launched in 2001 by Canada, EU, Japan, Mexico, US, UK and other European economies

Too much?

 "What does sell is a threat perception, fear is what sells, unfortunately that's what agro-terrorism feeds into," – Foreign-policy expert

There are real risks, but initiatives are not coordinated or fully defined.



Emerging Issues: Without Real Effort...It Just Gets Worse

Currently in an effort to assist industry, a number of global organizations have emerged as standards-making bodies. Unfortunately, there are now multiple, non-cooperating entities each working toward the same goals. Increasingly there are political and strategic government agendas that are shifting priorities from science-based to non-science focus. Conversations must be facilitated to reduce the impact of the divergence.

 Appropriate safety and accurate measures are needed

Real risk

Non-Science

 Without agreement, divergent solutions develop with individual economy motivations

- Selective implementation breeds a patchwork of measurements
- More difficult to change

Entrenched

Without collaborative effort, divergence will become the norm with the consequences of increased transaction costs and decreased trade.



A Case Study

AGRICULTURAL NTMS AND NTBS IN CHINA



Introduction

- The emergence of China's economy over the last four decades has substantially changed the center of gravity in trade within APEC.
- The size of its economy, the number of trading partners it has, and its rapid pace of growth, makes China's current and future choices of agricultural NTM very relevant.
- To the extent that China adopts existing NTM standard for inspection, testing, and treatment, protocols will go a long way to moving APEC towards more harmonized standards.

If China chooses to adopt economy-specific NTMs, it will further complicate, and increase the transaction cost, of agricultural trade in APEC



China is using established standards as a minimum, and adding additional regulations onto them

China's entry into WTO has sped up its adoption of global agricultural standards:

China subscribes to all major food international standards including CODEX, IPPC, OIE (China is the chair of the CODEX committee on pesticides)



China is "plus" where international standards are not sufficient:

China has pursued the development of unique national standards as the basis for technical requirements to address food safety concerns



Legacy challenges: Not all of China's existing standards have been updated

China is in the process of reviewing existing technical regulations to determine relevance and consistency of international standards.



Modeling agricultural NTMs after US, EU and ASEAN economies:

Joint technical seminars with U.S. Department of Health and Human Services (HHS) and U.S. Department of Agriculture(USDA)

China has made revisions in food inspection standards to match international guideline

Large revision to food inspection protocol by agreeing to bring 600 food safety inspection standards in line with international guidelines by 2010.



China NTB Issues

Standards & Policies

- China imposes very strict SPS standards (e.g. zero pathogens) making in consistent with international standards
- Strict unique national standards in Technical Barriers and Phytosanitary
- Lack of standardized rules/regulations has enacted confusion & uncertainty-(e.g. Food labeling standards)
- Restricted Quota and Registration (list of authorized plants) (e.g. poultry products)
- Regulations promulgated by multiple, divergent agencies at the central, provincial and local levels

Implementation

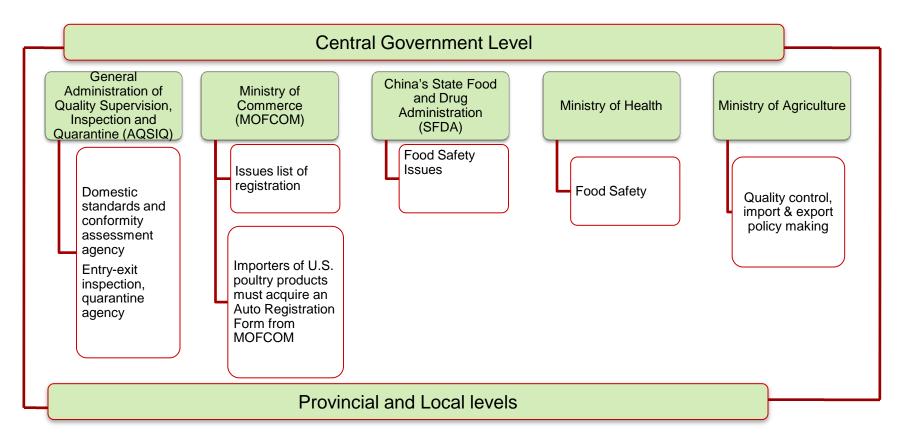
- Lack of scientific base and risk assessment in implementation
- Inconsistent interpretation and enforcement of rules across regions, provinces and ports
- Varies with economic needs of the time. Differentially strict interpretations of standards are imposed on imported produce but not on domestic produce.
- Lack of capacity and education among custom officials
- Bureaucracy -Efficiency/Time a big cost
- Selectively applying standards

Transparency

- Does not share the scientific basis for setting standard, which are different from other APEC economies
- Inconsistent notification, updates/progress on changes to regulations(SPS)
- Implementation of publish all rules/regulations related to trade as committed is far from complete
- While China has committed to publish all NTM rules & regulations, the process remain incomplete.



Multiple Government Agencies are Involved in Agricultural standards making



Standard & Policies:

 Regulations are promulgated by a host of different ministries and governments at the central, provincial and local levels, and it is not unusual for the resulting regulations to be at odds with one another.

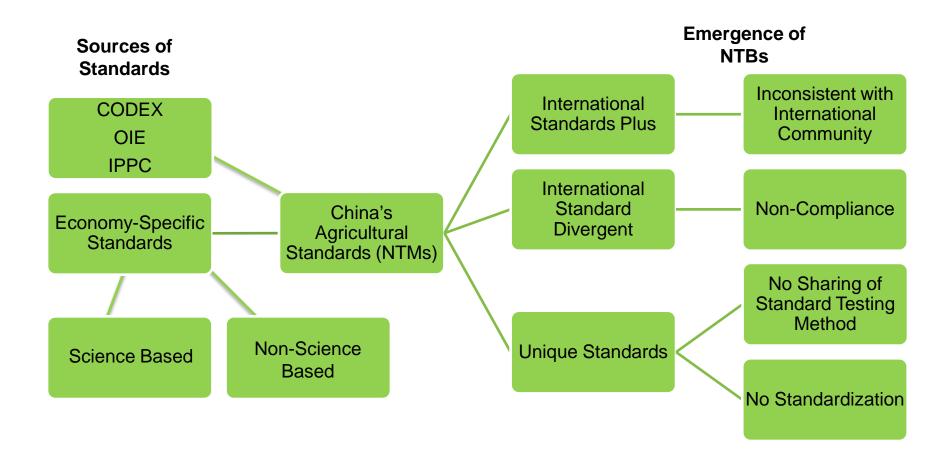
Implementation:

- Government bureaucracies have sometimes been accused of selectively applying regulations.
- Transparency:
- These various ministries and government agencies aggregate the issue of lack of transparency.



Sources of China's NTBs

China's NTBs emerge from a combination of international standards and economy-specific measures. Despite intentions to adopt global standards, China's Agricultural measures have become both global standard "plus" and different resulting in a large number of NTBs.



Example of Non-Compliance: BSE-Related Bans on Low Risk Beef and Bovine Products

In an effort to open beef trade with China, The U.S provided relevant technical information on its BSE-related surveillance and mitigation measures. It was deemed effective and appropriate by OIE, but China did not certify the products for importation.

December 2003

 Imposed a ban on US cattle, beef and processed beef products in response to a case of BSE found in a dairy cow

June 2006

 A limited market opening, restricted to the entry of U.S. deboned beef from animal 30 months of age or less.

July 2006

- Announcement of 22 entry conditions, many of which are unrelated to BSE
- Initial entry conditions remain unchanged

May 2007

- OIE determine that the US is a controlled risk country for BSE
- China opened market to deboned and bonein beef from animals 30 months or less
- Remaining entry conditions continue to remain unchanged

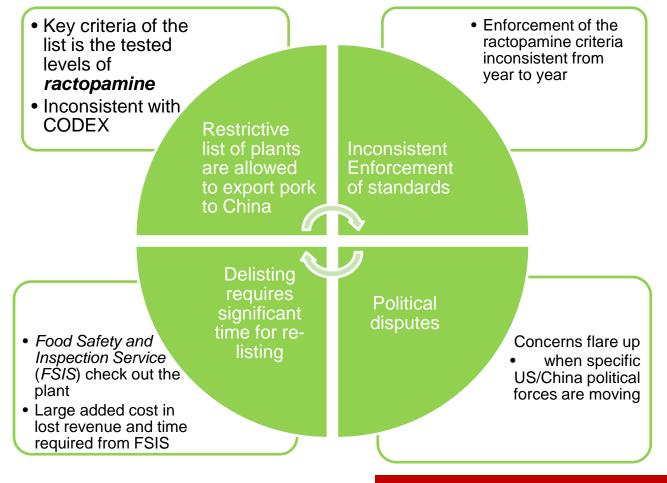
Present

- To engage in live stock trade, both economies must agree on export safety certification.
- No engagement has occurred.

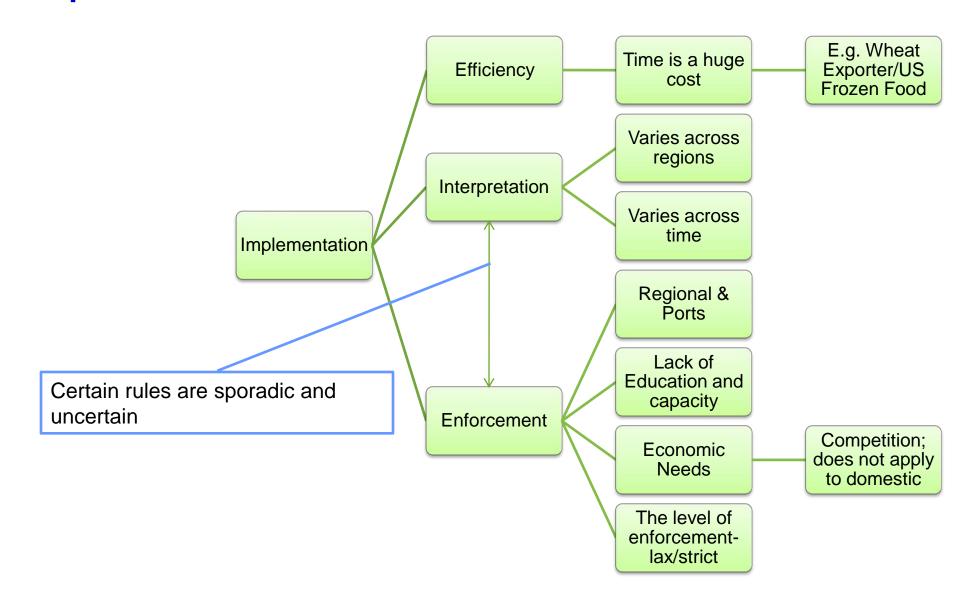


Example: Pork

Pork trade between the U.S. and China highlights a number of NTBs. China imposes a ractopamine standard which is more restrictive than CODEX resulting in selective US plants being able to export to China. Additionally, China has been inconsistent in enforcing these standards from year to year. Failure to meet China's restrictive standard can result in plant delisting. Relisting requires significant time and money. Future pork trade is often a negotiation chip in trade disputes between the U.S. and China. This affects about US\$1B of trade.



Implementation Issues-Overview



Implementation Inconsistency comes from a variety of sources

Enforcement varies across regions and ports leading to different importation procedures

- The interpretation and enforcement of the standards varies from port to port because:
 - Customs agencies are each run by separate municipal governments leading to different enforcement level
 - Depending on what is going on politically and economically, levels vary certain products.
- "There is no established rule about the levels or restrictions. Sometimes its looked at before, sometimes on the port, etc."- U.S. Corn exporter

Bureaucracy, Efficiency and Time increases costs and protectionism

- E.g. Canadian oil exporter:
- "One of the largest issues we face is approval for GMO. That's been the biggest challenge for us. The issue for us is that we'll get certain traits approved in Canada, US. Biggest issue we faced most recently is Chinese regulatory approval. Renewal that had to be completed last year or the year before. The amount of time it takes and the delays as well. We started working early on and what happened. That didn't take into account that business is done 6 weeks to 3 months in advance. So traders couldn't do business. "
- "There's delays in terms of access to market. Uncertainty exists when decisions will be made."
- Customs clearance: In Japan it takes 1 day. In China it varies on how many days.- Japanese grain exporter

Lack of Capacity and education of Custom officials

- In our view too with China it's not the regulatory structure is not developed I don't think so much as it is out of a lack of capacity- "US food industry association
- Relatively unsophisticated people at a port and you're trying to explain to them grain price futures. And if they
 do want to dig their heels in it will stop goods at the port for a certain period of time. Differing capacities at
 ports. –US Grain exporter



Limited Transparency yields Divergences in results

Failed to notify changes to international committee

Lack of information

Lack of reasonable period for comments on changes

Various versions of regulations only in Chinese

- In 2006, China failed to notify 22 measures to the SPS Committee, and did not notify them in 2007
- In 2005, China nullified 1,416 standards to determine continued relevance and consistency of standards.
- Official figures not accurate
- Designated *China Foreign Economic and Trade Gazette* as official journal for trade-related measures.
- In the WTO Protocol of Accession, China committed to establish tribunals for review of administrative actions relating to the implementation of things related to trade.
- Changes and progress on latest regulation changes occurs at different times
- Most information is not publicly available
- No update on progress to increase transparency



Agriculture

CONCLUSION & TAKEAWAYS



Key Findings – Agriculture

- Agriculture is a global laggard in the reduction of Non-Tariff Barriers. This has increased transaction
 costs for businesses thereby limiting the flow of goods across borders and increasing product costs for
 end consumers.
- Most of the debate and discussion on NTBs focuses on restrictiveness and protectionism. While
 exporting economies take the position that these should be eliminated, domestic economies argue
 that these cannot be removed because of economy-specific circumstances. However, there is more
 room for transparency with respect to the motivations for establishing NTMs not pertaining to safety
 and security.
- Beyond restrictiveness and protectionism, there are other factors that further lead to the proliferation of NTBs and hinder their removal.
 - Lack of Standard: Due to the absence of a single harmonized global agricultural standard, economies develop their own. Current global standards provide only minimal guidance, resulting in additional, different NTMs and NTBs
 - Lack of Accessibility: Language and transparency of testing methods, inspection methods, and paperwork requirements of regulations is a major barrier to trade across borders...
 - Multiple Agencies: Inconsistencies in administration of policies across ports, and difficulties in finding and interpreting import requirements, all combine to raise costs of cross-border business to discouraging levels.
- Across the APEC region, developed economies are already concerned with emerging issues such as genetically modified foods and food miles. Without coordination between governments and standardsmaking bodies, the NTMs erected to address these issues will evolve into NTBs.
- Recommendations to coordinate on standards and increase accessibility should have increased focus
 to have positive impacts for business executives.



Implications

From our research, there are certain areas that with increased focus and collaboration, real advances in the reduction of transaction costs can occur. These topics are as follows:

- Scientific standards Executives want harmonized scientific standards that continue to ensure health and safety but are agreed upon by the global scientific community. These standards must be implemented uniformly.
- Standardized protocols and shared best practices These will allow executives to implement processes for export that can be replicated across economies, providing cost and volume efficiencies. These can be achieved via APEC-wide conferences and symposiums to establish common import processes.
- Research on regional risk threats A collaborative assessment of regional risk threats will generate transparency in regional requirements and processes, allowing businesses to adapt to trade requirements.
- Accessibility to regulations A unified resource cataloging all the trade measures for all economies across APEC will generate cost efficiencies for businesses and encourage trade across economies.
- Collaboration across agricultural and customs agencies To ensure that trade measures are implemented as intended, it is essential that the agricultural and customs agencies communicate with each other and understand the requirements of these measures.



ACCOUNTING



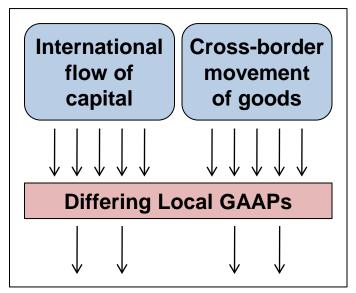
Non-Tariff Barriers to Accounting

The differences between the various domestic GAAPs employed throughout the APEC region raise the costs of doing business in multiple economies and introduce a friction to the international flow of capital.

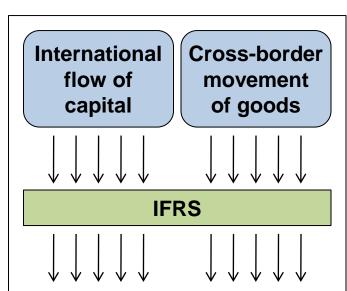
In contrast to the agricultural sector, significant progress has been made towards the promulgation of an international set of standards. The commonly accepted international standard is known as either the International Accounting Standards (IAS) or the International Financial Reporting Standards (IFRS).

Begun in 1973, IFRS has seen significant acceptance in the past decade, including the widespread adoption by economies in the European Union. The rapid growth in adoption is a testament to the perceived benefits of switching to an international standard, many of which have been supported by research.

However, despite the numerous perceived benefits of IFRS adoption many economies have not yet accepted it and some economies have actively resisted its adoption. Consequently, it appears that there are still some barriers to international adoption.



Impact of IFRS on the flow of capital across borders



Costs of Differing Accounting Standards

Differing accounting standards create two separate broad sets of added costs to crossborder activity; costs of conversion and increased costs of capital. Below are some examples of these costs borne by companies operating within the APEC region.

External costs of conversion

Who: A regional hotel chain with operations in several Asian economies.

Cost: The company spends approximately \$552,000 per year for external employees to convert each subsidiaries accounting books to one common standard.

General examples:

- External accountants
- Consulting services
- Added auditing

Internal costs of conversion

Who: A global insurance company that acquired a Japanese entity.

Cost: The company invested US \$15 million to overhaul an IT system to allow both Japanese GAAP for domestic reporting and US GAAP for corporate reporting.

General examples:

- Additional staff
- IT systems

Higher cost of capital

Who: A small-to-medium enterprise in an economy with local GAAP reporting.

Cost: Faced with growth opportunities, the company may be unable to list on capital markets without simultaneously reporting in an internationally accepted accounting standard.

General examples:

- Inability to list on markets
- Lack of private investors
- Inability to fund growth



Project Scope, Outcomes, and Limitations/Caveats

Financial Reporting & Accounting Standards (FRAS)

Scope:

To investigate the impact of differing local financial reporting & accounting standards on cross-border activity, including any associated costs and potential solutions.

Outcomes:

- A catalog of each APEC economy's convergence towards IFRS along 12 specific IFRS rules
- A catalog of administrative details of each economy's adoption progress
- An analysis of existing and potential barriers to IFRS adoption within APEC
- A discussion of potential solutions to barriers to IFRS adoption

Limitations/Caveats:

- Comparisons of local GAAPs to IFRS are based on audit firm publications, academic research, or specific review.
- While convergence is measured between local GAAP and IFRS, measuring convergence between economies is beyond the scope of this project.
- This report is not meant to pass judgment on the level of sophistication on completeness of local standards. It is simply a comparison of the language between local GAAP and IFRS.
- Accounting and auditing standards are only one of several supporting functions to international flow of capital. While this report suggests that movement towards IFRS will improve flow of capital, it must be taken within the context of other supporting functions.



Project Approach – Accounting

Step <u>Details</u> Resources

1

Identify a reliable international standard for comparison

Widespread adoption of IFRS has clearly established it as the de facto international accounting standard. This rapid growth has also created a broad base of stakeholders, providing a solid base for further improvements.

Organizational resources, academic experts

2

Confirm the perceived benefits of IFRS adoption

IFRS is a valid international solution only if it successfully addresses the costs of differing local accounting standards. Adoption by the E.U. allowed the assessment of these perceived benefits, and research generally supports them.

Academic research, functional experts, business leaders

3

Develop a method for comparison between IFRS and local GAAPs

To compare each economy's local GAAP we identified 10 accounting principles that vary widely between economies and have a significant impact on financial reporting. We then assessed each economy's compatibility with these principles.

Academic advisors, business leaders

4

Compile economy comparisons and other relevant information

Based on these 10 principles (which are covered by 12 specific IFRS rules) we completed the convergence catalog by comparing the economies. Additionally, we created second catalog to record other administrative aspects of adoption.

Organizational resources, academic experts

5

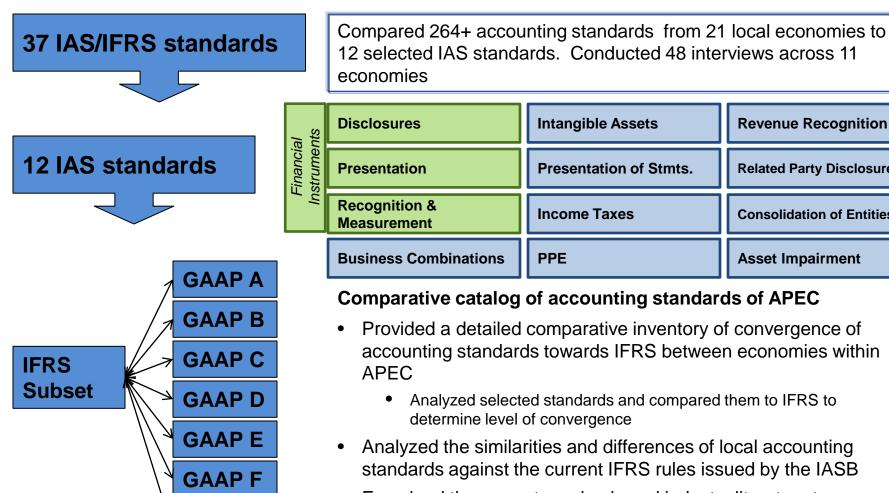
Discuss findings, trends, issues with adoption, and overall progress

Based on the catalogs, our interviews, and academic research we developed a summary of the key barriers to IFRS adoption. This assessment includes a discussion of the barriers, their root cause, and potential solutions.

Organizational resources, academic experts



Research Approach for IFRS Convergence Catalog



12 selected IAS standards. Conducted 48 interviews across 11

Related Party Disclosure

Consolidation of Entities

Asset Impairment

Comparative catalog of accounting standards of APEC

- Provided a detailed comparative inventory of convergence of accounting standards towards IFRS between economies within
 - Analyzed selected standards and compared them to IFRS to
- Analyzed the similarities and differences of local accounting standards against the current IFRS rules issued by the IASB
- Examined the current academic and industry literature to prepare of comparative catalog
- Conducted in-economy and over the phone interviews



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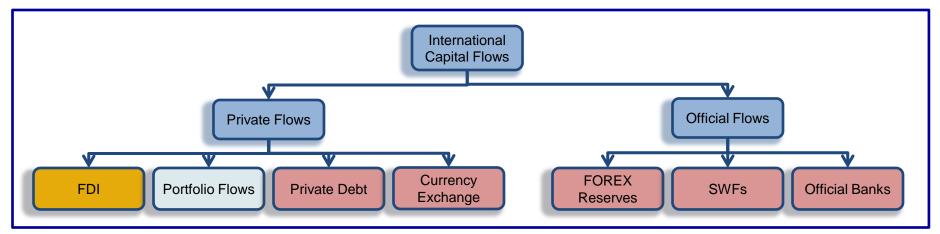
economies

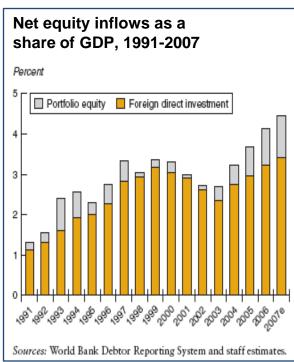
The Significance of Accounting and Financial Reporting in the Broader Context of Capital Flow

ACCOUNTING & CAPITAL FLOW



Overview of International Capital Flows





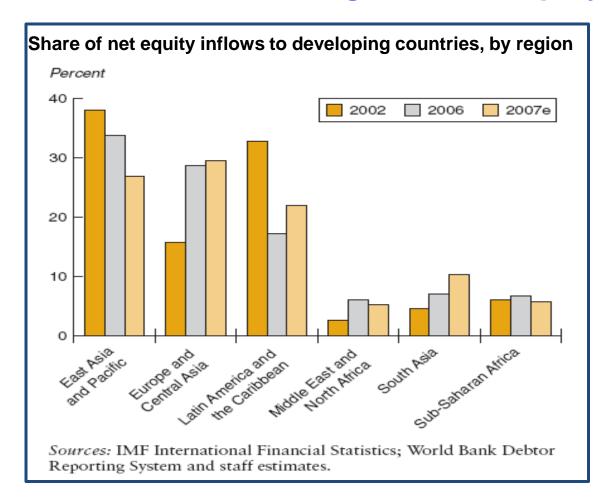
Private Flows: Foreign direct investment (FDI) and portfolio equity flows are the two principle types of international equity flows. In 2007 the total net equity inflows reached an estimated \$616 billion, while net private debt inflows reached an estimated \$413 billion.

While private flows have seen an increase for the past four years, the composition of those flows has partially shifted. FDI levels, particularly in Asia, only recently recovered to the levels experienced in 1999 & 2000. This is problematic for many economies, since FDI has the highest correlation with domestic investment and also brings other benefits, such as the transfer of knowledge and expertise.

Eliminating the costs associated with differing accounting standards should result in increased levels of private flows, particularly for FDI since this represents a lasting interest in a business entity.



Recent Trends in Regional Net Equity Inflows



Regional Shares of Equity Flows:

The APEC regions have seen a decline in their share of global net equity flows to developing countries between 2002 – 2007e (estimated).

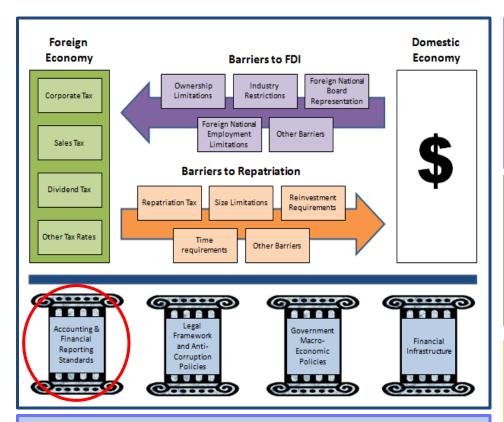
The decrease in the relative share of the APEC regions has largely been offset by increases in Europe and Central Asia, which grew from roughly 15% to nearly 30% of total inflows.

The shift in regional shares of net equity flows is the result of many political and socio-economic factors. However, it should be noted that mandatory adoption of IFRS in the E.U. occurred during this period and may have contributed to the increase.

IFRS adoption is one way for the APEC economies to regain their share of global net equity inflows. It is also one of the most actionable ways to improve investor confidence, and there are several examples of adoption both within and outside of APEC. However, to achieve the maximum potential benefits of adoption careful supervision and application is necessary.



Barriers to FDI



<u>Supporting Functions</u>: These activities support international capital flow. Our report focuses on accounting as one of these activities.

Barriers to FDI: These include any policies which affect incoming investment by foreign entities. Typical barriers to FDI include ownership limitations and board restrictions. These barriers can limit the control investors can exert over the target, and therefore increase the potential risk.

<u>Taxation Policy</u>: The taxation policy of the domestic (receiving) economy directly affects the return on investment for the foreign entity. Consequently, when making FDI decisions investors will consider the taxation policy of the target economy.

<u>Barriers to Repatriation</u>: Barriers to repatriation affect the ability of the foreign entity to bring the investment returns back to their domestic operation. Investors will typically consider these barriers when making FDI decisions since they can potentially increase risks or reduce returns.

Adoption of IFRS is one way to improve FDI and other private capital flows. However, commensurate improvements to other aspects of international capital flow are necessary to achieve the maximum potential benefits of IFRS adoption and financial reporting liberalization.



Introduction to IFRS

Standard Setting Organization

1973 – The International Accounting Standards Committee (IASC) is founded by several global accountancy bodies.

2001 – On April 1, 2001 the IASC becomes the International Accounting Standards Board (IASB), the current standard setting organization.

International Standard Issued

Standards issued under the IASC are part of the International Accounting Standards (IAS) and have the IAS prefix.

Standards issued under the IASB are called International Financial Reporting Standards (IFRS). All previously issued IAS standards are still referred to by their original name.



Since 2001, over 100 countries have required or permitted the use of IFRSs

The widespread global adoption of IFRS has solidified it as the most logical choice for a global accounting standard.

Additionally, global adoption increases the two powerful network effects of IFRS: increased international acceptance and a broad base of stakeholders providing guidance and advice.



Research on the Effects of IFRS Adoption

Research about the potential benefits of IFRS adoption has increased over the past several years. This is largely due to the increasing number of economies that have adopted IFRS. Much of this research supports the potential benefits of IFRS adoption, but also suggests certain situations under which the benefits are reduced.

Mandatory IFRS Reporting Around the World: Early Evidence on the Economic Consequences By Daske, Hail, Leuz, and Verdi (2007)

- Market liquidity and equity valuations increase with the mandatory introduction of IFRS
- Capital market benefits are only observed with the presence of strict enforcement and institutionalized strong reporting incentives

E.U. Implementation of IFRS and the Fair Value Directive

By the European Commission (2007)

- Broad agreement that IFRS adoption improves the quality of reporting, and increases comparability across competitors, and sectors
- Larger companies that rely more on equity financing perceive greater benefits of adoption

Market Reactions to Events Surrounding the Adoption of IFRS in Europe

By Armstrong, Barth, Jagolinzer, and Riedl (2006)

- Significant positive market reactions to events that increased the likelihood of IFRS adoption
- Benefits were lesser for companies already cross listed in the United States

Adoption by the E.U. and other economies across the globe has provided useful information on the results of IFRS adoption. Research of those who have either voluntarily adopted or mandated adoption finds that perceived benefits exist. However, there are several important lessons that can be applied to adoption by the APEC economies, one of which is the importance of enforcement and monitoring.



Findings from the Technical and Administrative Catalogs

CONVERGENCE TOWARDS IFRS



By Economy Comparison of Local GAAP to IFRS

The comparative catalogs consist of several charts that contain the detailed comparisons between local accounting standards and IFRS. Similarities and differences are outlined as appropriate. Congruence or incongruence of a specific local GAAP rule to that of IFRS is rated as 'True' or 'False' on the comparative catalog

Criteria to Determine Similarity/ Dissimilarity of Accounting Rules:

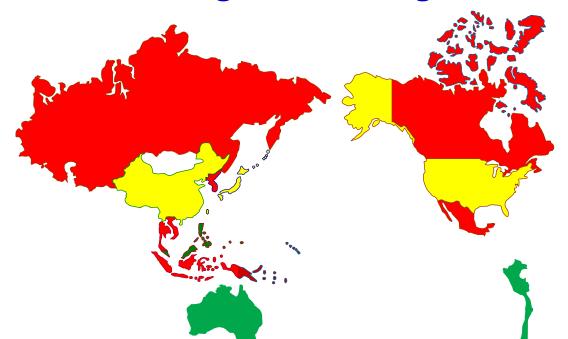
- Technical Congruence Equivalence of the method that is required to be followed to implement a rule in IFRS and local GAAP (e.g. Purchase Method vs. Pooling of Interest Method for business combinations)
- Universal Applicability Universal applicability of a rule or a method, without the presence of any exemptions for certain sectors / or situations (e.g., Exemptions in the consideration of state controlled entities as related parties)
- **Relevance** Differences in details that do not materially impact the meaning of an accounting rule were not considered when judging the congruence / incongruence between local GAAP rules and IFRS (e.g., application date exemptions for certain IFRS based rules)

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?
Business Combinations	IFRS 3			Differences: Significant differences exist as JGAAP requires Acquisitions to use the purchase method and Uniting of Interests to use the pooling of Interest method. IFRS requires purchase method only. Goodwill is amortized over 20 years in JGAAP, IFRS requires goodwill to be periodically tested	FALSE

Standards that are considered generally equivalent to IFRS may still have some level of divergence, making it very difficult to compare economies



IFRS Convergence Catalog Results



Number of accounting rules that are reasonably equivalent to IFRS: 9 - 12

High Level of Alignment

- Australia
 - Chile
- Hong Kong
- Malaysia
- New Zealand
- Peru
- Philippines
- Singapore

Number of accounting rules that are reasonably equivalent to IFRS: 5 - 8

Moderate Level of Alignment

- China, People's Republic of
- Japan
- Chinese Taipei
- United States

 Analysis was conducted based on most recent published reports on comparisons between local GAAP and IFRS issued by major international accounting and auditing firms

 Results are based on the technical comparison of accounting rules and do not consider the implementation and enforcement standards in a local economy Number of accounting rules that are reasonably equivalent to IFRS: 1 - 4

Limited Level of Alignment

- Brunei Darussalam
- Canada
- Indonesia
- Korea

- Mexico
- Russia
- Thailand
- Vietnam

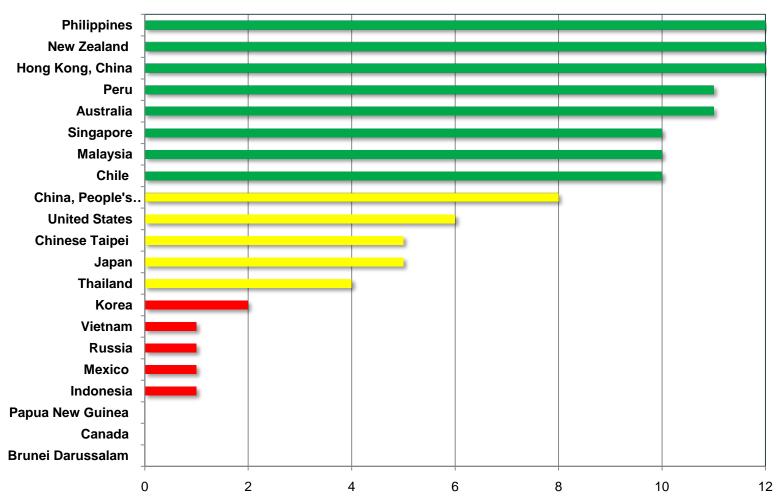
Considerable progress has been achieved by APEC economies in harmonizing local GAAP accounting rules with IFRS



Important Notes:

IFRS Adoption by APEC Economy

Technical Comparison of Selected Local GAAP Rules and IFRS for the 21 APEC Economies (scores per economy)

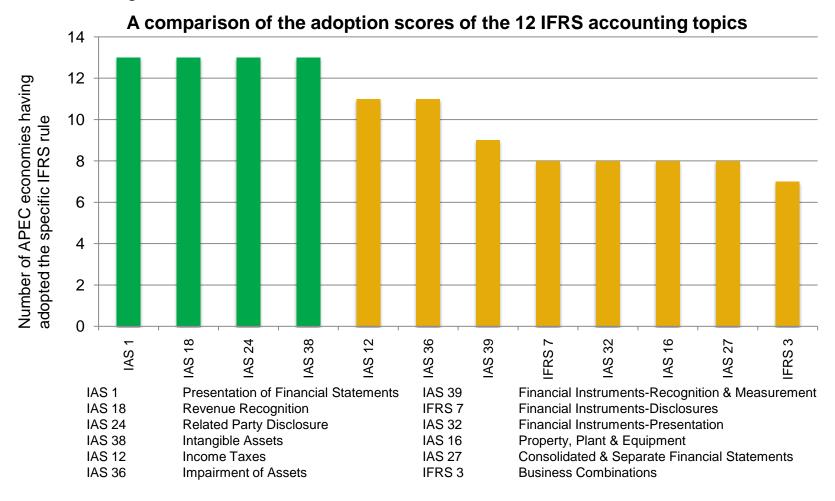






Adoption Rates for Each IFRS Rule in APEC Economies

An analysis of the total number of economies that have adopted/incorporated specific accounting rules



Difficult topics such as fair value accounting are less widely adopted.



Key Findings

APEC on a transition path towards IFRS - customization and selective adoption in some economies

Majority of APEC economies that are adopting IFRS are modifying local GAAP to incorporate IFRS or are in the process of overhauling their GAAP to conform to IFRS as issued by the IASB (Hong Kong –China, Australia, New Zealand, Singapore have adopted IFRS as issued by IASB, Several other economies are modifying their local GAAP standards to comply with IFRS)

Easier rules that are less disruptive tend to be adopted more widely

Rules such as IAS 1 – Presentation of Financial Statements, IAS 12 – Income Taxes, IAS 18 – Revenue Recognition, Impairment of Assets – IAS 36, Intangible Assets – IAS 38 etc. seem to be easier to adopt across the APEC Economies

Difficult rules that have the potential to significantly influence financial statements and the extent of disclosure are less widely adopted

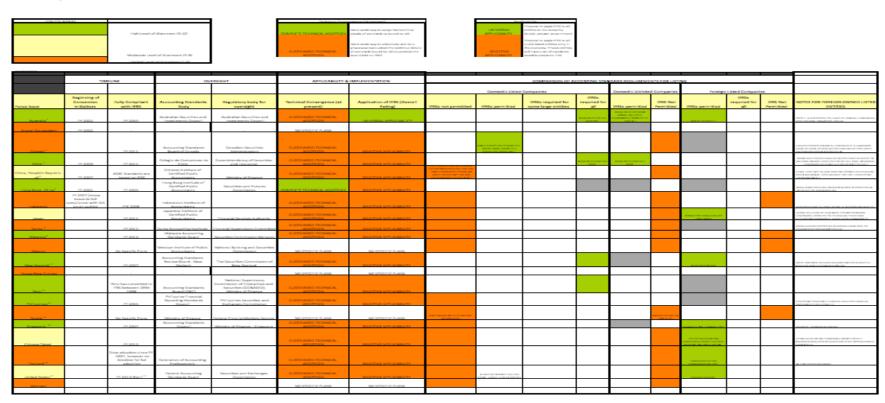
Rules such as IFRS 3 – Business Combinations, IFRS 7 – Financial Instrument Disclosure, IAS 32 –
Presentation of Financial Instruments, IAS 39 – Financial Instrument Recognition and Measurement,
IAS 27 – Consolidated & Separate Financial Statements seem to be the hardest to adopt across
APEC Economies

'Implementation' which influences the quality of information from accounting & reporting, and 'enforcement' that is dependent on auditing standards are regulatory frameworks are critical to realize the benefit of IFRS



IFRS Convergence – Administrative Process

The catalog below provides by economy information on 4 key metrics used to assess convergence towards IFRS. What timeline have economies agreed to for adoption of IFRS, who are the oversight bodies in charge of promulgating and enforcing standards, what level of applicability and implementation has been achieved, and a comparison of accounting standard requirements for listing for domestic and foreign companies.

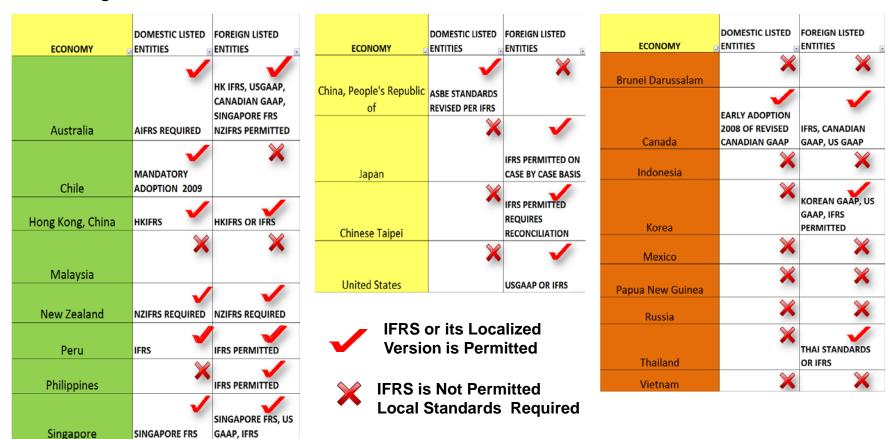


APEC economies need supporting administrative processes and organizations to manage the adoption projects, and enforcement bodies (securities regulators) to obtain the desired outcomes from the convergence towards IFRS



Accounting & Reporting Requirements

Varying reporting standards and requirements for listing will add to the transaction costs of multi-national entities seeking local capital. Presented below is an analysis of reporting standards required for listing domestic and foreign entities on stock exchanges in the APEC region.



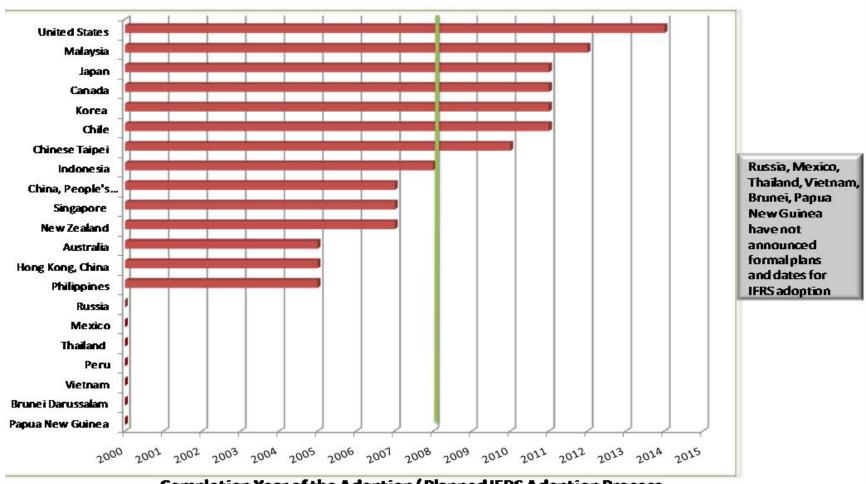
12 of 21 APEC Economies permit using IFRS for listing foreign entities on their local stock exchanges facilitating cross economy equity listing



Timeline of IFRS Adoption in the APEC Region

While some economies have completely adopted IFRS, some are on a path towards conversion of local GAAP/ adoption of IFRS





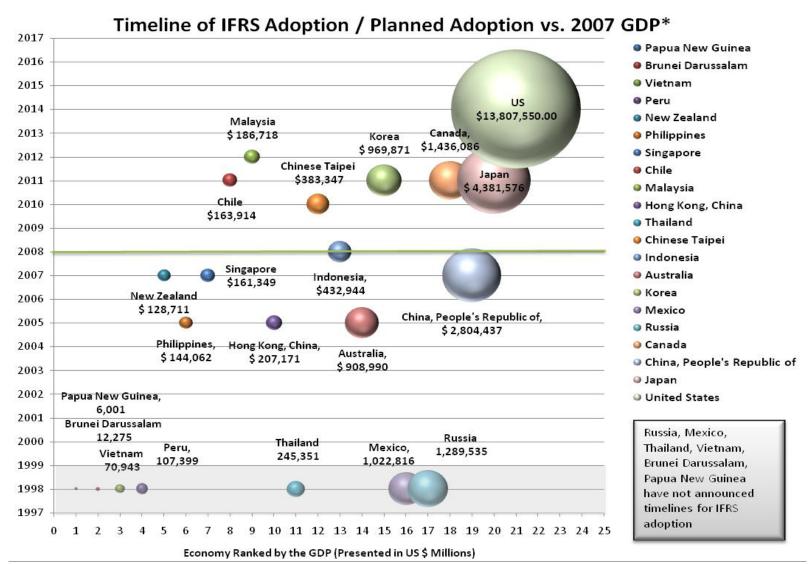
Completion Year of the Adoption/Planned IFRS Adoption Process

15 of the 21 APEC Economies have adopted or are on a path to selectively or completely adopt IFRS



University of Southern California

The Effects of Economic Size on IFRS Adoption



Large economies have longer timelines of adoption possibly due to the complexity of the conversion process

Key Findings

Larger economies are slower in adopting IFRS

Larger APEC economies (by GDP) seem to have longer IFRS adoption/ conversion plans. This could be due to (1) more developed markets and accounting systems that mandate a slower, non-disruptive approach to conversion and implementation (2) higher levels of inertia from corporate and government entities due to the possible adverse effects on the balance sheets and income statements of entities and higher transition costs (3) well developed capital markets in local economies that reduce the perceived benefits of IFRS (viz., a lower cost of capital, increased investor confidence, reporting consistency across operating subsidiaries) for local entities

Increased acceptance of IFRS facilitates access to capital across economies for foreign companies using IFRS

IFRS is accepted in 12 of the 21 APEC economies as an option to present the financial information of foreign issuers of capital. IFRS reduces conversion and reconciliation costs for foreign entities that intend to raise local capital. Acceptance of IFRS across the APEC Region has the potential to increase investments and the flow of capital in APEC Region.

Domestic entities in the APEC region are required to follow local GAAP standards or modified GAAP standards compliant with IFRS

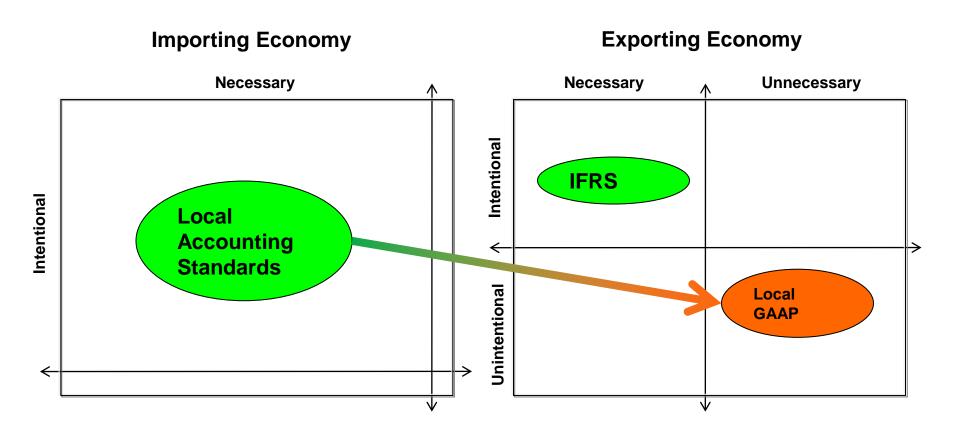
In several economies domestic listed entities are required to follow local GAAP rules or modified GAAP that is compliant with IFRS. Economies that have modified their local GAAP to be compliant with IFRS are adopting a phase-wise approach towards implementation by allowing large domestic entities as the first adopters. Local Small and Medium Entities (SMEs) do not seem to gain significant benefits from the IFRS based reporting standards.



SHIFTING FROM LOCAL TO GLOBAL PERSPECTIVE



Shifting Local Perspectives to Global Perspectives



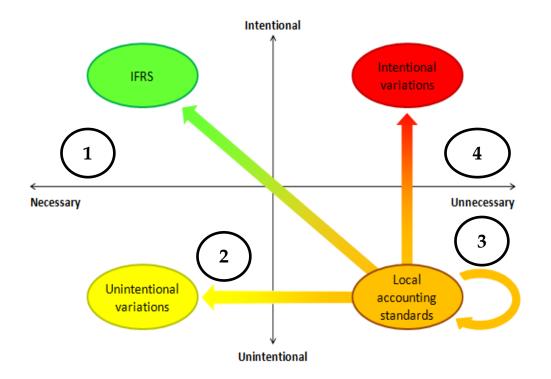
Sovereign accounting standards were developed to facilitate the comparability of financial information between companies <u>within</u> economies. However, with the rapid growth of global markets and global financial markets in particular, the issue of accurate comparability has reached across borders.



The Three Types of Barriers to IFRS Adoption

Economies across APEC are adopting IFRS by different paths. A complete and unmodified adoption of IRFS is the best option for providing easily interpreted financial reports that can be accepted by all economies. In most cases however, economies chose to adopt IFRS with some level of customizations.

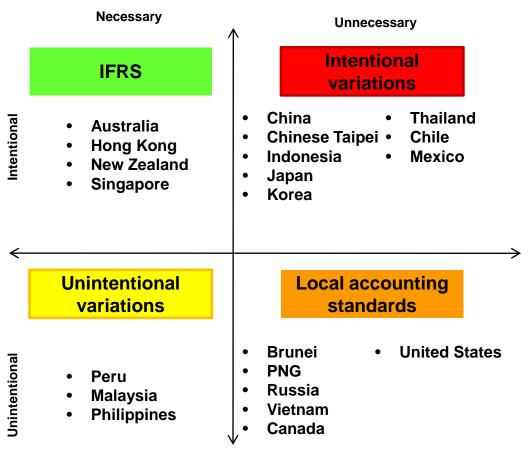
This is done primarily to address divergent local law or accommodate prevalent business practices that are difficult to account for through IFRS. In a few cases, economies are adopting IFRS as written, but it is taking longer to implement because of limitations in training and language barriers. Lastly, a number of economies are taking a wait and see approach to IFRS, and have not yet outlined a roadmap to adoption.



- 1. Convergent standard:
 Intentionally designed allow full transparency and consistent implementation across economies.
- 2. Unintentional variations:
 Unintentional differences resulting from insufficient resources, improper monitoring, or other environmental factors.
- 3. Non-adoption: A lack of incentives to adopt or difficulty progressing with adoption can both lead to non-adoption of IFRS.
- 4. Intentional variations:
 Intentionally designed to protect domestic entities.



As economies across APEC converge towards IFRS, they are choosing different paths. Of the 17 economies currently moving towards IFRS, 4 have adopted and are implementing IFRS fully, 3 more have adopted IFRS, but are on a slower implementation schedule, and 10 economies are intentionally choosing divergent versions of IFRS.



IFRS: Economies in this category have fully adopted and implemented IFRS.

Unintentional Variations: Economies in this category are either in process, or have already adopted IFRS, but following a slower implementation phase.

Local Accounting Standards: The economies in this section have not made any clear commitments towards IFRS, and continue to use their current local accounting standards.

Intentional Variations: The largest group fall in this category. Here are economies that are taking a longer time adopting IFRS, and are currently working decrease the differences between national accounting standards and IFRS. As they slowly converge however, these economies are also modifying the standards, or only adopting certain provisions of a particular standard.

The path economies chose to IFRS is a mater of incentives and institutional capabilities



Necessary Unnecessary

IFRS

Economies in this quadrant have either successfully adopted IFRS or are very near full convergence. Ideally, all APEC economies will eventually be in this quadrant, effectively eliminating differing accounting standards and all costs associated with them.

Intentional

In practice, not many economies have made the transition to this quadrant. There are very real barriers to full adoption, but technical and administrative.

Key Characteristics:

- All 4 economies in this quadrant are among the top 6 on the Index of Economic Freedom
- With the exception of Australia, they are among the bottom half of APEC economies in terms of total GDP
- All 4 economies are former British colonies or protectorates
- All 4 economies have significant amounts of trade and economic interests with regions that are already adopting IFRS

Unintentional

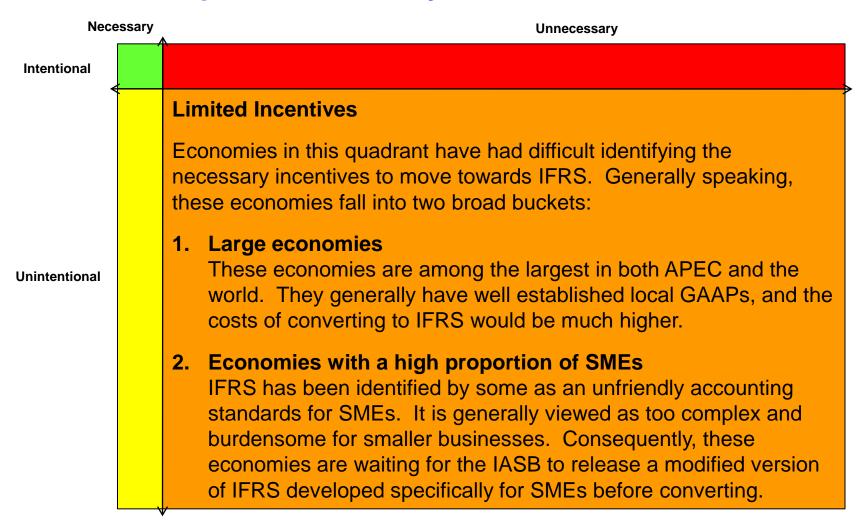
APEC economies who have made significant progress towards IFRS adoption generally had an easier path. The size of the economy was smaller, and the existing accounting standard prior to IFRS was not as developed as other APEC economies.



Unnecessary Necessary Intentional **Unintentional Variations** Economies in this quadrant have begun movement towards IFRS adoption, but have encountered or created unintentional barriers. Examples of unintentional barriers include: Lack of sufficiently trained accountants Insufficient oversight and monitoring Unintentional Delay in adoption due to language conversion or to provide appropriate guidance **Key Characteristics:** Small-to-medium GDP economies Philippines and Malaysia are 8th and 10th respectively in the top destinations for Portfolio investment as of 2007 (IMF & World Bank) Peru and Philippines are among the top 6 fastest growing in terms of GDP, according to the CIA World Factbook

The economies in this quadrant are experiencing strong GDP growth, and consequently are moving towards IFRS to encourage foreign investment. However, these economies face significant barriers and tend to lack the resources/infrastructure to fully support conversion.





The continued worldwide movement towards IFRS will increase the network incentives for economies in this quadrant. Additionally, there are potential methods for addressing both of these incentive issues which will be discussed later.



Necessary Unnecessary **Intentional Variations** These variations represent the most dangerous variation to IFRS. Should economies in this quadrant or other economies beginning IFRS adoption continue down this path, the potential benefits of IFRS will largely be lost. Intentional Unfortunately, these barriers are politically or economically motivated and are designed to protect certain sovereign interests. They represent a resistance to moving from the "isolated sovereign economy" perspective to the "economy operating within the global community" perspective. While growing incentives for complete IFRS adoption will pressure some of these economies to cease intentional variations, it is also important to encourage this movement through open discussion. Unintentional

Intentional variations are the most dangerous barrier to IFRS adoption, and significantly reduce the benefits of regional adoption. This quadrant represents politically or economically motivated protectionist agendas, and can only be eliminated through open dialogues.



Roadblocks and Recommendations

MOVING FORWARD



Significant Roadblocks

Local GAAP

Priority 1 Priority 2 **Priority IFRS**

Limited Incentives

- Clearly articulate benefits supported by research
- Initiate an investigative study of economic benefits of IFRS adoption for economies that have adopted, and potential benefits for economies that have not yet adopted
- Work closely with IASB to develop an SME version of IFRS
- Mandate mutual acceptance of IFRS equivalents

Unintentional Variations

- Support IFRS training in APEC economies
- Provide conversion planning and resource assistance for smaller economies
- Monitor application and confirm accurate IFRS results

Intentional Variations

- List IFRS customization by APEC economies
- Make special allowances to reduce conversion impacts



Implications

Adopting IFRS is imperative to accomplishing harmonized accounting standards in APEC. Although there is an imposed degree of harmonization due to the movement towards IFRS in APEC, Economies' national GAAPs continue to diverge

- 16 of the 21 APEC economies are moving towards IFRS in its entirety or modifying national GAAP standards according to IFRS.
- Selective adoption and customization of rules to suit local conditions is prevalent across APEC and these deviations are adversely impacting perceived benefits.
- Adoption of IFRS in the EU has resulted in improved quality of financial statements, increased investor confidence, and easier comparison across countries*.

A legislative body that sets 'Accounting Directives' on important accounting topics needs to be created in APEC

- Establish a legislative body wherein all member states are represented. This body releases Accounting Directives that assist companies preparing financial statements other than in accordance with IFRS.
- The Accounting Directives address the disparities between national GAAP and IFRS and provide recommendations for companies in APEC economies on how to disclose additional information such that their consolidated financial statements are equivalent to IFRS.
- There is also a need to update these Accounting Directives from time to time to reflect changes in IFRS.



Implications

The Accounting Directives should be accompanied by regulation supporting implementation and enforcement. The legislative body should also consist of securities supervisors from all APEC member states

- Securities regulators play a critical role in ensuring that listed companies comply with financial reporting requirements and accounting directives.
- A proper and rigorous enforcement regime is key to underpinning investors' confidence in financial markets.
- The APEC legislative body that sets accounting directives should also work with the securities regulators of member economies to ensure consistent implementation and enforcement of directives.
- Important guidance can be released via this body to assist listed companies reconcile their consolidated financial statements and reduce deviation from IFRS.
- The role of this body can be envisioned to be similar to that of CESR in the European Union

Education of accountants and auditors on IFRS and relevant accounting directives is critical for successful implementation and enforcement

- Implementation and enforcement of IFRS or IFRS compliant accounting standards is contingent upon key resources (accounting and auditing resources) and their educational capabilities.
- Professional accounting institutions in each APEC economy can collaborate to enhance their understanding of IFRS to ensure better implementation and a smoother transition for companies.



The Role of An Accounting Standards Legislative Body

A legislative body that constitutes securities regulators from all APEC economies will:

- Provide accounting directives on important topics
- Compare accounting standards of economies and provide reconciliation measures between National GAAP and IFRS for economies to improve cross-listing and cross-border capital flow
- Work with securities regulators in economies to ensure co-ordination of enforcement across economies

Overview of CESR

Created in 2001, the Committee of European Securities Regulators has several roles related to standardization of securities activities:

- Improve co-ordination among securities regulators
- Act as an advisory group to assist the E.U. commission in the application of IFRS in member states
- Work to ensure more consistent and timely implementation of community legislation in the Member States

CESR's IFRS Initiatives

- Create a "Transparency Directive" to confirm that external economies are using IFRS equivalent (not necessarily identical) accounting standards
- Coordinate the acceptance of capital market listings by companies from external economies with IFRS equivalent statements
- Provide guidance on new IASB releases, and assistance with understanding IFRS implications





Glossary

CESR Committee of European Securities Regulators

EU European Union

FDI Foreign Direct Investment

GAAP Generally Accepted Accounting Principles

IAS International Accounting Standard

IASB International Accounting Standards Board

IASC International Accounting Standards Committee

IFRS International Financial Reporting Standard

PP&E Property Plant & Equipment

SME Small and Medium Enterprise

KEY FINDINGS, CONCLUSIONS, AND IMPLICATIONS



Key Findings

While some non-tariff measures (NTMs) are "born" as intentional restrictive and protectionist NTBs, most are not. Viewing the NTB problem as solely one of eliminating restrictive and protectionist NTBs potentially deflects attention and energy away from finding ways to reduce and eliminate other less intractable and potentially more important NTBs. Divergent and incompatible NTMs across economies, and inefficient, inconsistent, and bureaucratic implementation at borders increase transaction costs to the point where they become NTBs to trade. Reducing or eliminating these NTBs would have major benefits to businesses.

The absence of commonly agreed upon standards for the development of NTMs has resulted in a world where "plus and different" is the norm. The consequence of every economy selectively adopting, or modifying global guidelines, and/or developing their own standards, has created a business environment with unintentional and unnecessary but substantially increased transaction costs for businesses wishing to engage in cross border commerce.

For developing economies the key NTB challenges were found to be related to the gap between a rapidly growing demand for efficient border clearance and the capacity and capabilities to do so. Business reported costly delays, inconsistencies, inefficiencies, and corruption, related to a lack of physical infrastructure and institutional capacity, and untrained officials as being a major concern in developing economies.

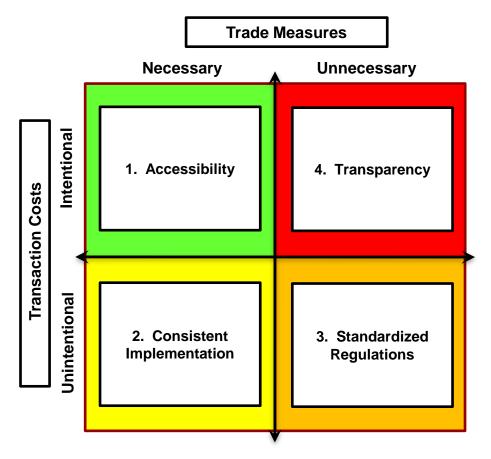
In developed economies the finger was pointed at bureaucratic and legacy problems as being the major source of NTBs. Developed economies are accused of lacking a sense of urgency to change, to adopt new protocols, and/or share and collaborate with other economies on developing region-wide standards. Special and vested interests have led to policies and procedures being retained long past their usefulness.

Important emerging issues, unless tackled early and in a collaborative way, will only serve to compound the existing NTB problem with new, and increasingly complex NTBs. Within agriculture, for example, issues around food-miles/carbon-foot print, intellectual property protection, genetically-modified foods, and food for energy subsidies, will likely lead to new NTBs. Business executives want trade officials to "get ahead of the game' and develop equitable, transparent, consistent rules and requirements for all economies.



Seeking Solutions

Stepping back from the challenges of eliminating specific types of NTBs, our report offers four very broad general recommendations.



Accessibility

Trade regulations need to be easy to access, understand, and update for businesses from all APEC economies/cultures.

Cost: added administration costs – especially costly to SMEs

Transparency

The justification/logic behind trade regulations must be made available to business leaders and other government trade regulators.

Cost: loss of trust leading to extra "slack" written into business operations plan

Standardized Regulations

Wherever possible, trade regulations across economies must be standardized.

Cost: added transaction costs for having to address the same concern multiple ways when doing business in multiple economies.

Consistent Implementation

Implementation/enforcement of trade regulations must be reliably consistent, both inter-economy and intra-economy.

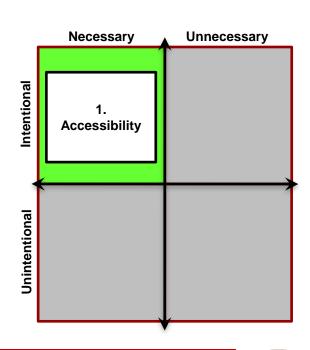
Cost: inefficient flow of goods, services, and capital



Seeking Solutions: Accessibility

NTMs are unnecessarily difficult to find and to interpret

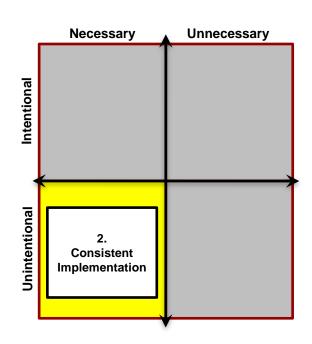
- Encourage all economies to adopt similar formats and locations for all NTMs
- 2. Perhaps, APEC website could be "shadow" location for each economy
- 3. Provide information in multiple languages
- 4. Include all information in plain language. That is, eliminate the practice of supplemental administrative guidelines that some economies use.
- 5. Keep updated
- 6. Lead economies might be encouraged to share IT and software platforms





Seeking Solutions: Efficient and Consistent Implementation

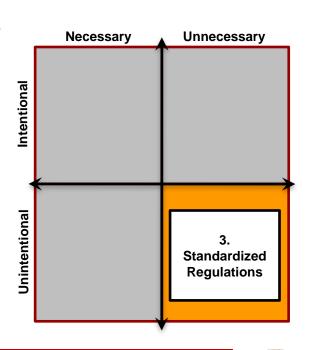
- 1. Ongoing education and training for all border officials, agricultural and customs inspectors, is critical.
- 2. Ensure consistency of implementation of all NTMs at all ports.
- Provide complete transparency for all inspection, testing and treatment protocols. This will help eliminate unnecessary testing and treatment, especially at ports where levied fees are a source of funding
- 4. Encourage the sharing of port administration protocols between economies, including best-practice procedures and systems. This is especially important for developing economies where demand for port services typically exceeds capacity and capabilities.





Seeking Solutions: Standardized Regulations

- Model measures should be created for all major NTM categories, providing more robust guidance on how SPS and technical standards should be written.
- 2. APEC-wide conferences should be scheduled to facilitate sharing across economies. Increased levels of collaboration on science, inspections, testing, and treatment protocols is critical.
- 3. Developed economies need to show good faith and a willingness to remove bureaucratic and legacy protocols. Developed economies must be prepared to restate and reformat established NTMs to bring them in-line with other economies.
- 4. Developing economies should be encouraged to adopt existing NTMs and protocols. This is particularly important with larger developing economies such as China.
- 5. At all costs, economies should be discouraged from selective adoption as the result is no different that having divergent standards.

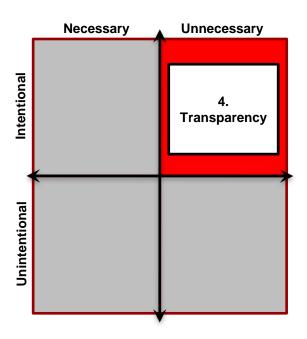




Seeking Solutions: Transparency

A Senior Minister from China provided us with the following advice on what will be critical for *trade officials* to successful work together to reduce protectionist measures:

- 1. Seek an accurate understanding of your partners
 Many problem arise from simple and dangerous
 misunderstandings. As such, it is essential that trade
 officials put in the effort necessary to learn about the
 pasts, presents, and futures of their trade partners with
 an eye for both similarities and differences. Likewise, it
 is important to work hard to be easily understandable.
- 2. Work for mutual benefit
 To make progress, it is critical that trade officials seek
 shared ground, common interests, and win-win
 arrangements. As our interviewee put it, "If you are only
 thinking of your desires, you will never get the deal."
- De-politicize relationships to increase rationality and professionalism
 Otherwise, already complex issues become too complicated to solve.





APPLYING LESSONS LEARNED TO THE BROADER CONTEXT

Key Learning From Accounting for Agriculture

Accounting's success story in harmonizing towards a global standard (IFRS) is due to:

- Clearly outlined benefits (lower cost of capital, increased investor confidence, lower transactional costs) for economies and companies in an increasingly globalizing business environment
- The presence of an independent standard-setting board (IASB) overseen by geographically and professionally diverse body of trustees
- Transparency in the rule setting and approval process
- Broad and principle based standards (IFRS) that are widely acceptable and applicable
- Co-ordination and support from securities regulators, international accountancy and auditing firms across economies adopting IFRS

Learning from Accounting applicable to Agriculture

- Creation of a standards body A centralized body that sets universally agreed upon standards applicable to the transfer of agricultural goods and commodities
- Transparency Higher level of transparency to disclose all possible regulations, non-tariff barriers and the potential costs involved for importers and exporters in APEC economies
- Clearly outlined benefits Commission research to elucidate the benefits resulting from eliminating non-tariff barriers to trade in the agricultural sector



Key Learning From Accounting for Agriculture

Common roadblocks on the path to adoption:

- Both large and small economies have a lack in incentive to move towards common standards.
 - Large economies have already heavily invested in sophisticated standards, and have a large amount of institutional inertia
 - Small economies find that the cost of change is greater than the perceived benefit
- As standards are adopted by many economies, they are being modified to protect certain business practices. The net effect is a lack of transparency that is no different than having divergent standards
- Implementation lags can be alleviated through better accessibility (simultaneous release in multiple languages) and improved supporting infrastructure
- While it is not always possible or practical to adopt all standards at once, starting
 with simpler standards has a positive effect. As more economies converge, it
 increases the incentive for lagging economies to converge because of increasing
 network effects.



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APPENDIX A:

NTMS BY FOOD CATEGORY ACROSS APEC



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Rice		
Sugar		
Vegetables		
Wheat and Grain		



Comparative agricultural catalog: method

We begin with a simple objective of building a 21x12 comparative agricultural catalog of all NTMs in the 21 APEC economies in 12 major agricultural categories

- 1. Beef/Red Meat
- 2. Chicken/Pork/White Meat
- 3. Coffee, Cocoa and Tea
- 4. Cross Commodities
- 5. Dairy
- 6. Fish/Seafood
- 7. Fruit
- 8. Legumes
- 9. Rice
- 10. Sugar
- 11. Vegetables
- 12. Wheat and grain



Comparative agricultural catalog: method

We then selected seven major categories of NTMs, that economies implement to safeguard against external environmental, disease, and bioterrorism risks, and to pursue national economic interest. We relied on a prior academic researching identifying the six broad NTM categories (including other):

- 1. Sanitary and Phytosanitary: Phytosanitary regulations are government regulations that restrict or prohibit the import and marketing of certain plant species, or products of these plants, so as to prevent the introduction or spread of plant pests or pathogens that these plants may be carrying. This NTM is further divided into:
 - a. Diseases/Quarantine
 - b. Certification
 - c. Additional Declarations
- 2. Technical Barriers: standards that set out specific characteristics of a product, such as its size, shape, design, functions and performance, or the way a product is labeled or packaged before it enters the marketplace. This NTM is further divided into:
 - a. Regulations
 - b. Labeling
 - c. Environmental Measures
- 3. Customs and Administration: Documentation and procedures that are encountered at the border. This NTM is further divided into:
 - a. Valuation
 - b. Clearance
 - c. Documentation
 - d. Registration procedures
 - e. Rules of origin
 - f. Licensing
 - g. Pre-shipment inspection



Comparative agricultural catalog: method

- 4. Quantitative Restrictions: Specific limits on the quantity or value of goods that can be imported (or exported) during a specific time period. This NTM includes:
 - a. Import quotas
 - b. Domestic content and mixing requirements
- 5. Government Participation/Trade Remedies: Subsidies and sanctions imposed by the government.
 - a. Anti-dumping duties
 - b. Border Tax Adjustments
 - c. Countervailing Duties
- 6. Other: NTM's not covered by the previous 5 categories fall within this category.
 - a. Legal Differences
 - b. Lack of Information
 - c. Corruption

Comparative agricultural catalog: limitations

Our goal was to record, in the comparative agriculture NTM catalog, every NTM established by one economy to exporters from the other 20 economies. We anticipated being able to identify whether the same NTM was applicable to other economies, or were they selectively applied to specific other economies.

While simple in concept, the idea of producing a useable by economy comparative agriculture NTM catalog proved exceptionally difficult to execute in practice.

Among the challenges we faced were:

- Accessibility: Perhaps the most formidable challenge we faced in finding import requirements. While some economies provide one-stop online resources, most do not. We had to refer to our interviews with business executives to get up to date regulations that weren't published.
- Multiple Agencies: A second important compounding problem was that in many economies, responsibility for agricultural standards is shared across government agencies. The agencies typically publish and disseminate their standards in different ways. Where authority for standards overlap, this creates a real problem.
- Level of NTM detail and specificity: Significant differences across economies exist in the extent of the specificity of information provided. Some economies provide very thorough detailed information, with help lines, for all important regulations. Others provide only general information. For example, exporters to Japan know that Japanese agencies maintain additional administrative guidance, which are not published. Unfortunately, in our research, we were not able to access this additional information.
- Language: Some economies listed their regulations only in their local language, with no translations available in any other language. This created difficulty in understanding and interpreting the regulations
- Vagaries: Many economies word their regulations at a very high level leaving a lot open to interpretation. This adds uncertainty and ambiguity to the regulation itself and its implementation.



Comparative agricultural catalog: limitations

Because of the challenges the comparative agricultural NTM catalog we produced has a number of very important limitations; and generalizations and conclusions drawn from it should be done so with extreme care.

- Number of NTMs per economy: Although we have attempted to make this catalog as comprehensive
 as possible, due to the aforementioned issues, there may be NTMs that are not listed in the catalog
- Absence of data: Due to unavailability of data for some economies, the number of regulations in some economies might not be comprehensive
- Direct comparability: When direct comparisons are drawn between economies, some regulations
 might not be directly comparable due to interpretation and implementation divergence across
 economies.



Number of NTMs for food categories across economies

The charts in the following section depict the number of regulations for all the food categories across the APEC economies

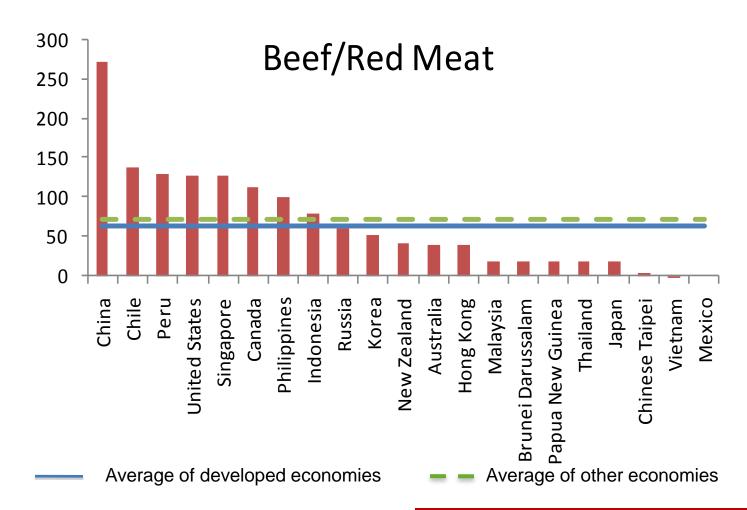
Takeaways:

- The average number of regulations in developed economies for food categories that are produced in under-developed economies is comparable to or lower than the number of regulations in the underdeveloped economies
- This indicates that under-developed economies follow the regulations of developed economies as
 the de facto standards for food categories that are produced domestically. This allows underdeveloped economies to protect the domestic production from economic pressures of imports
 Example: Dairy, cross commodities, rice, legumes, sugar, and grain
- Developed economies typically pose higher number of regulations than under-developed economies on high-consumption perishable food categories
 Example: Fish/seafood, fruits, and vegetables



NTMs on Beef/Red Meat by Economy

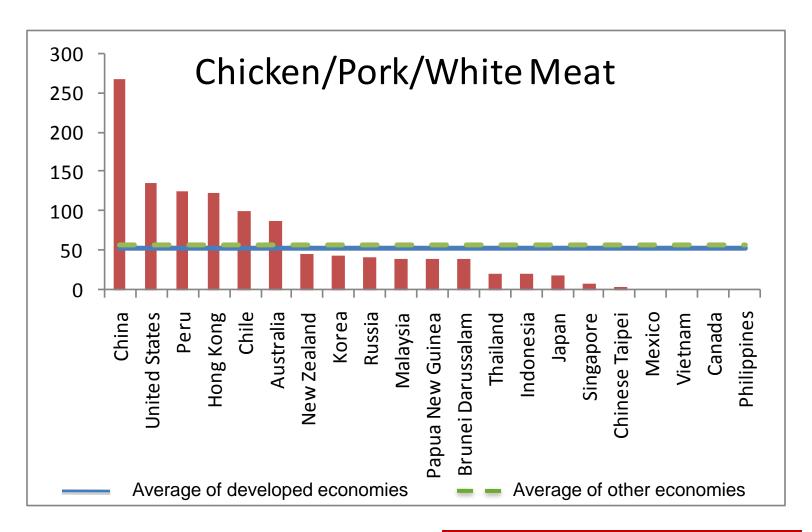
The chart below depicts the number of NTMs on Beef/Red Meat in every economy. These NTMs include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption.





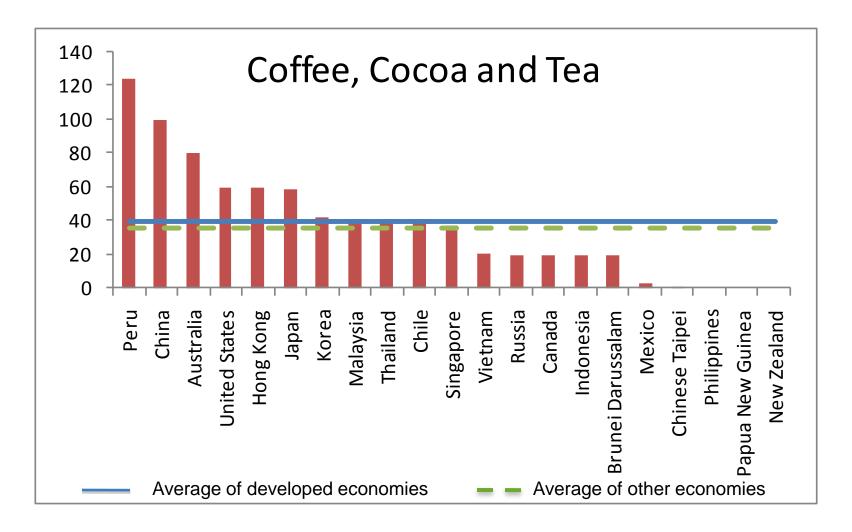
NTMs on Chicken/Pork/White Meat by Economy

The chart below depicts the number of NTMs on Chicken/Pork/White Meat in every economy.



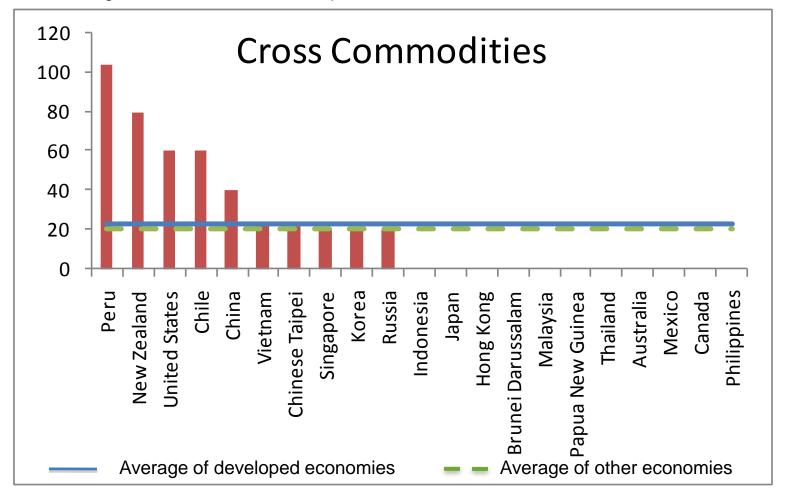
NTMs on Coffee, Cocoa and Tea by Economy

The chart below depicts the number of NTMs on Coffee, Cocoa and Tea in every economy.



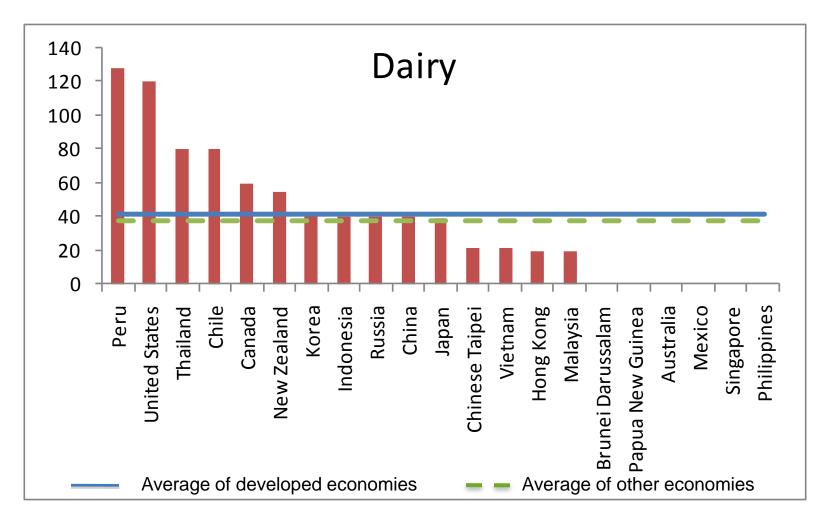
NTMs on Cross Commodities by Economy

The chart below depicts the number of regulations on Cross Commodities in every economy. These NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption.



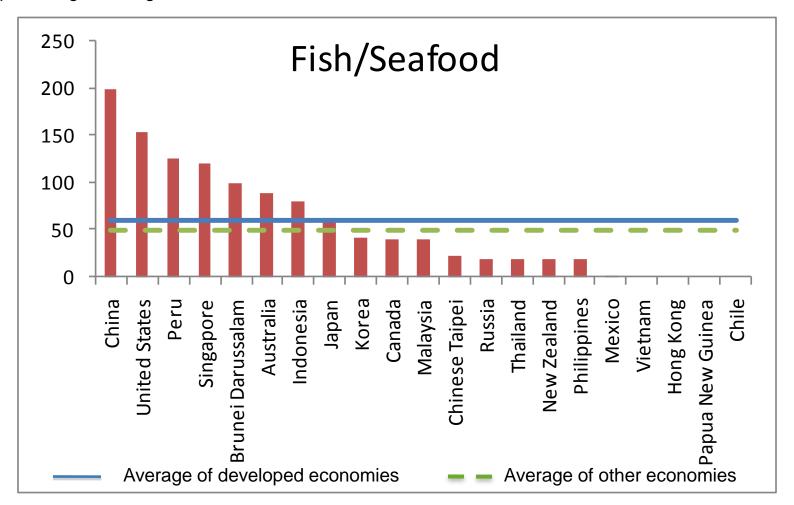
NTMs on Dairy by Economy

The chart below depicts the number of regulations on Dairy in every economy. These NTMs include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption.



NTMs on Fish/Seafood by economy

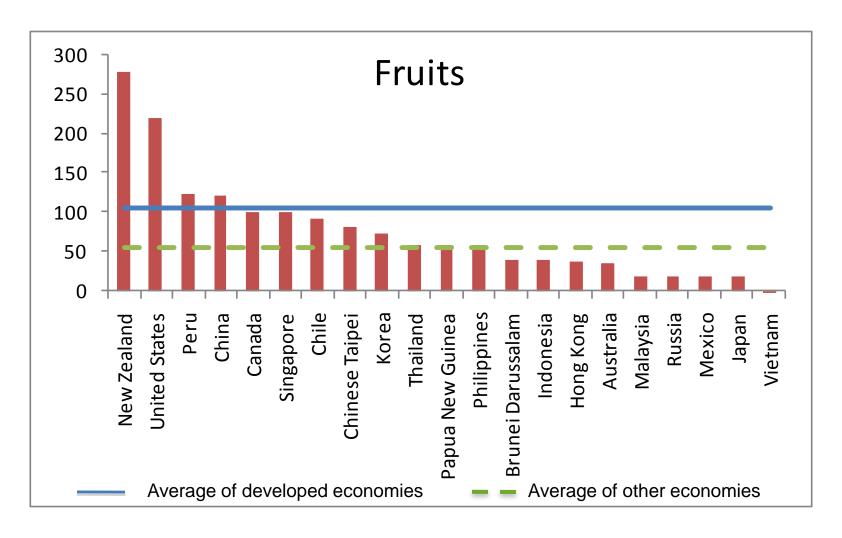
The chart below depicts the number of regulations on Fish/Seafood in every economy. These NTMs include regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others.





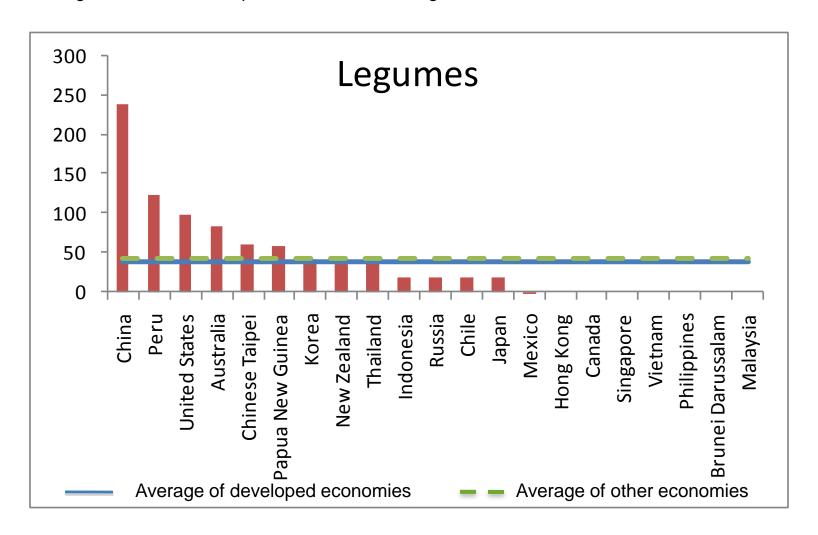
NTMs on Fruits by Economy

The chart below depicts the number of regulations on Fruits in every economy.



NTMs on Legumes by economy

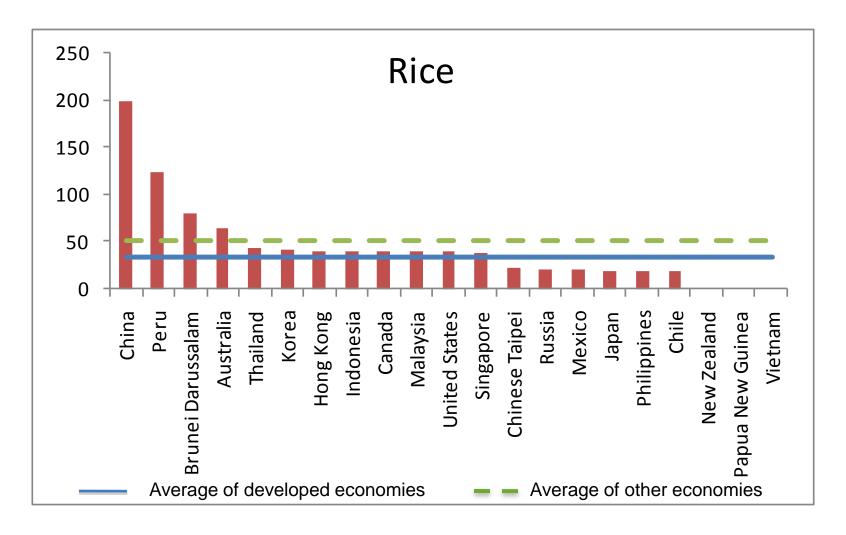
The chart below depicts the number of regulations on Legumes in every economy. These NTMs include regulations on beans, peas, and lentils among others.





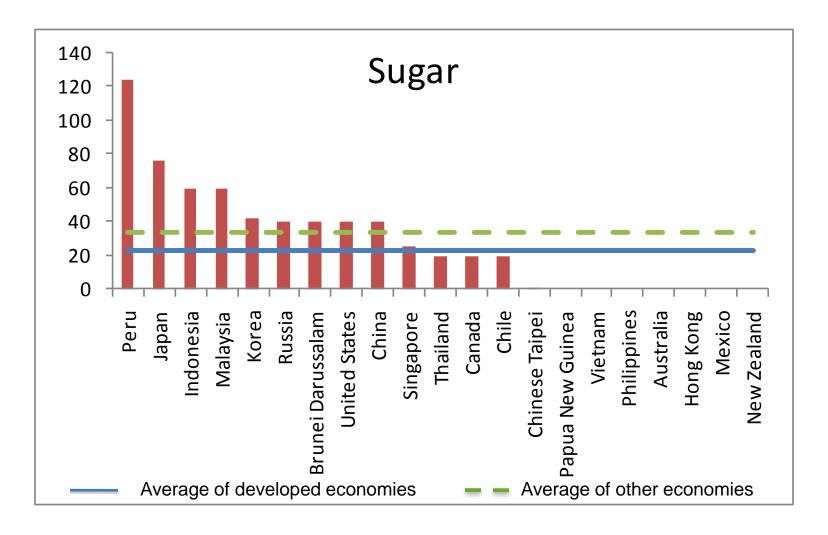
NTMs on Rice by Economy

The chart below depicts the number of regulations on Rice in every economy.



NTMs on Sugar by Economy

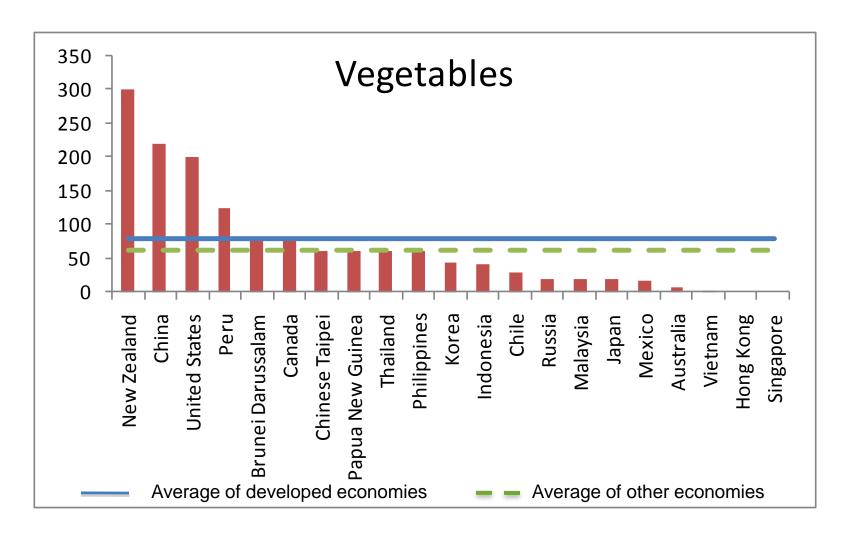
The chart below depicts the number of regulations on Sugar in every economy.





NTMs on Vegetables by Economy

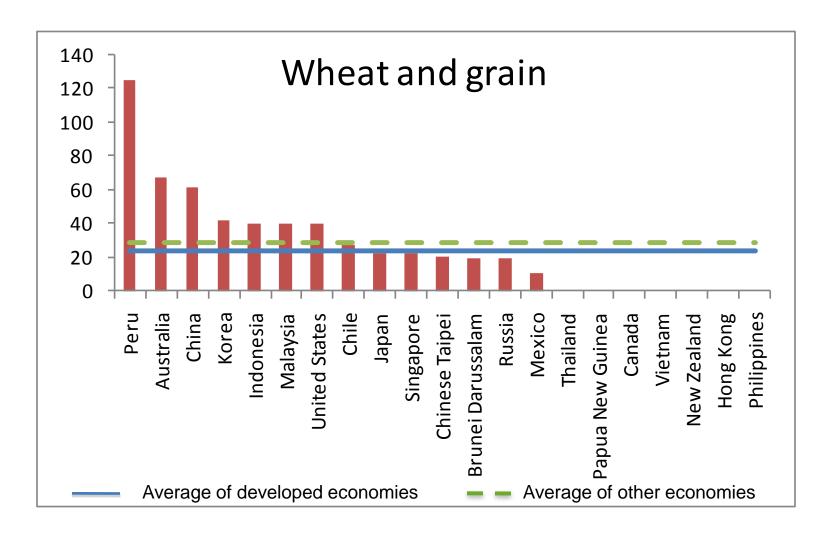
The chart below depicts the number of regulations on Vegetables in every economy.





NTMs on Wheat and Grain by Economy

The chart below depicts the number of regulations on Wheat and grain in every economy.



APPENDIX B:

NTMS BY CLASS CATEGORY



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Customs Administration	
Government Participation / Trade Remedies	
Quantitative Restrictions	
Sanitary and Phytosanitary	
Technical Barriers	

Number of NTMs by NTM Category Across Economies

 The charts in the following section depict the number of regulations by NTM categories across the APEC economies

Takeaways:

- On average, customs and administration pose the most number of regulations
 - This adds a level of complexity since these regulations are imposed at the border and vary largely according the individual economy's interpretation and implementation of different regulations
- NTM categories like technical barriers and phytosanitary standards that safeguard against pests and diseases and provide for quality of food products, should ideally be similar across economies. However, they vary a lot across economies.

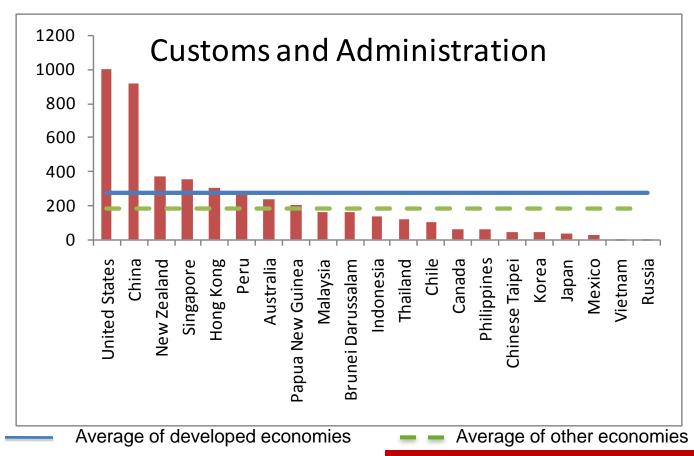
Caveats:

- The number of NTMs listed for each economy is based only on those we could find during our research, and may not be an exhaustive list
- For presentation purposes, each economy graph is scaled independently



Customs & Administration NTMs by Economy

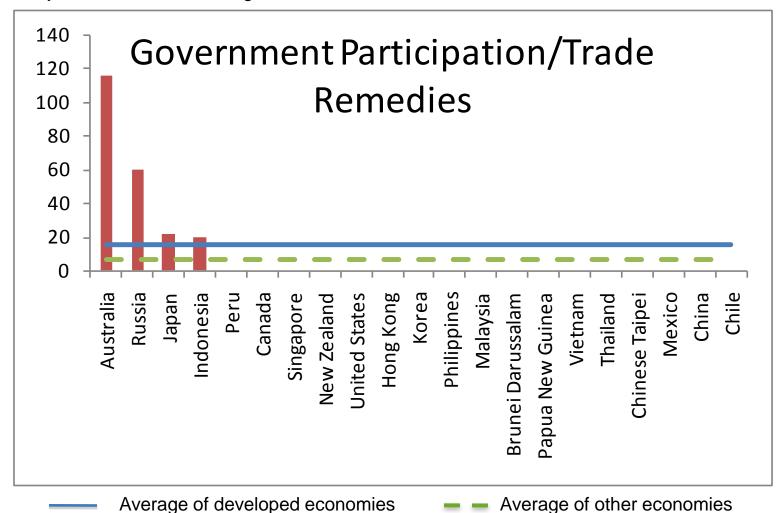
The chart below depicts the number of regulations on Customs & Administration in every economy. Customs and Administration includes documents and procedures encountered at the border: Valuation (whether transactions are recorded at market prices, face or nominal value vs. issue or discounted prices); Clearance; Documentation; Registration; Rules of Origin (economy where the product was obtained or produced, or the last transformable change occurred); Pre-shipment inspection; Licensing (granted by governments to entrants in specific industries or patents)





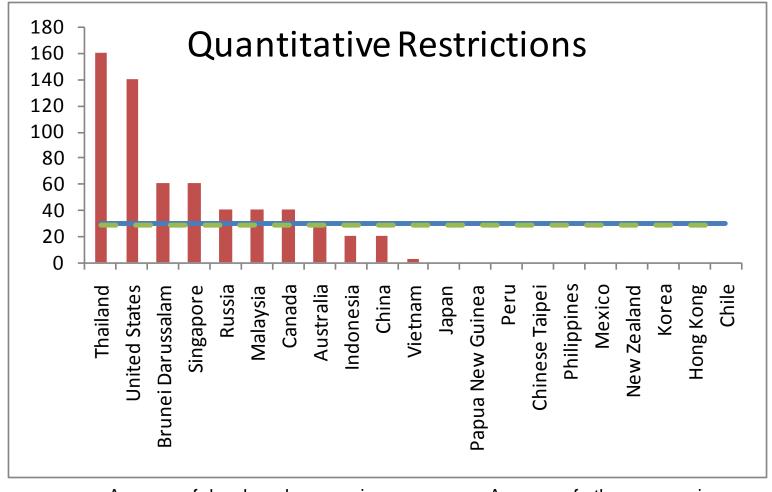
Government Participation & Trade Remedy NTMs by Economy

The chart below depicts the number of regulations on Government Participation/ & Trade Remedies in every economy. Government Participation/Trade remedies include sanctions, subsidies, anti-dumping duties, border tax adjustments, countervailing duties.

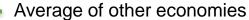


Quantitative Restrictions NTMs by Economy

The chart below depicts the number of regulations on Quantitative Restrictions in every economy. Quantitative restrictions are specific limits on the quantity or value of goods that can be imported (or exported) during a specific time period. This includes import quotas, domestic content and mixing requirements.



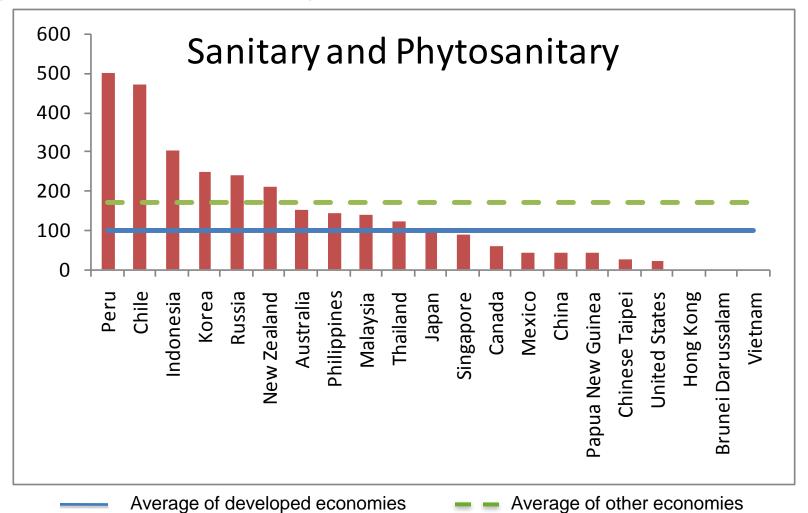




University of Southern California

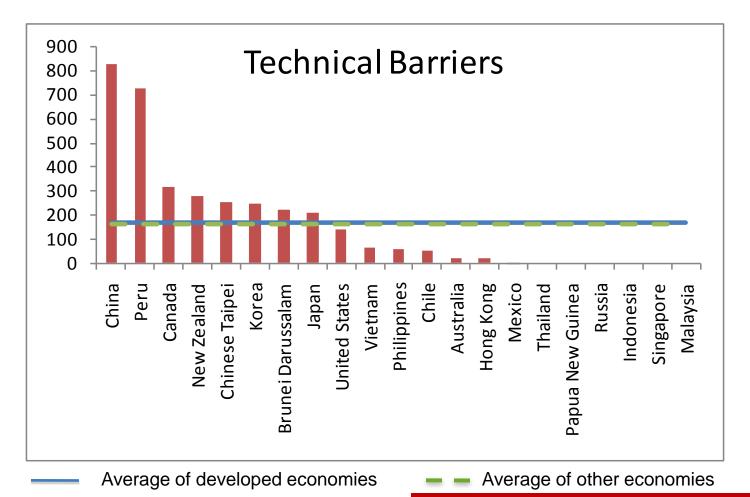
Sanitary & Phytosanitary NTMs by Economy

The chart below depicts the number of regulations on Sanitary and Phytosanitary in every economy. Phytosanitary regulations are government regulations that restrict or prohibit the importation and marketing of certain plant species, or products of these plants, so as to prevent the introduction or spread of plant pests or pathogens that these plants may be carrying.



Technical Barrier NTMs by Economy

The chart below depicts the number of regulations on Technical Barriers in every economy. Technical barriers are standards that set out specific characteristics of a product, such as its size, shape, design, functions and performance, or the way a product is labeled or packaged before it enters the marketplace. These include regulations (quality standards, safety, industrial), labeling (packaging, trademarks), certification, environmental measures (accountability is the responsibility for the deterioration of the natural environment, implying the allocation of environmental costs to the economic activities that cause such deterioration).



APPENDIX C:

FOOD CATEGORY NTMS BY ECONOMY



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Number of NTMs by different food categories across individual economies

 The charts in the following section depict the number of NTMs by different food categories across individual APEC economies

Takeaways:

- Not all economies have NTMs for all food categories, however, this could be attributed to the limitations of this catalog listed earlier
- Every economy attributes higher NTMs to different food categories
 - Typically, there are a larger number of NTMs for food categories that an economy produces locally. This could be attributed to an economy protecting its local producers from economic pressures of imports
 - The divergence in the number of NTMs for different food categories across economies is a source of NTBs for exporters, since they have to align with a variety of NTMs to export the same food product to different economies

Caveats:

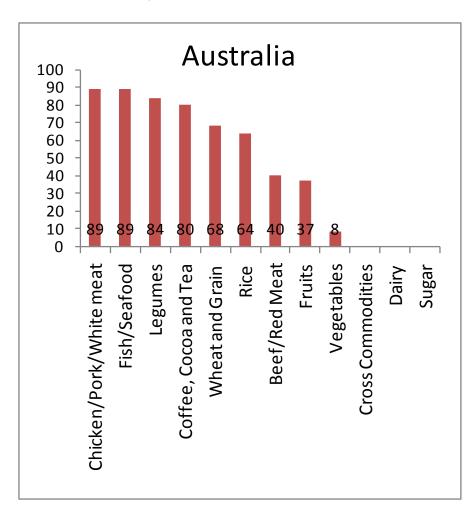
- The number of NTMs listed for each economy is based only on those we could find during our research, and may not be an exhaustive list
- For presentation purposes, each economy graph is scaled independently



NTMs per Food Category - Australia

The chart below depicts the number of NTMs by different food categories for Australia.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others

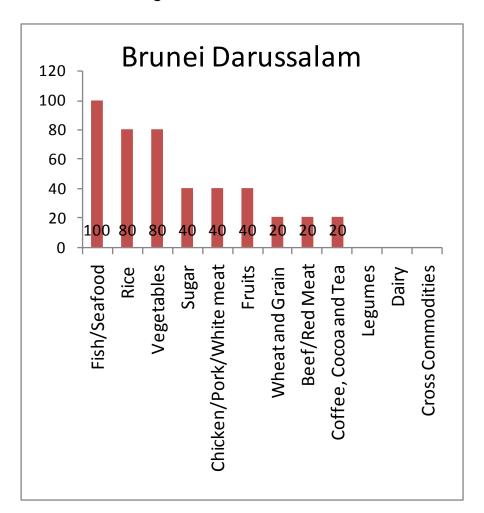




NTMs per Food Category – Brunei Darussalam

The chart below depicts the number of NTMs by different food categories for Brunei Darussalam.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others

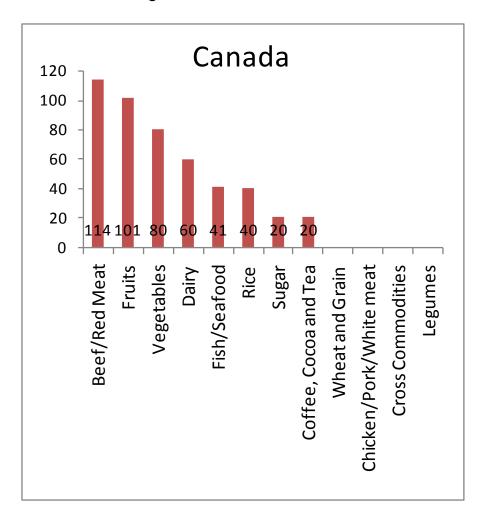




NTMs per Food Category – Canada

The chart below depicts the number of NTMs by different food categories for Canada.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others

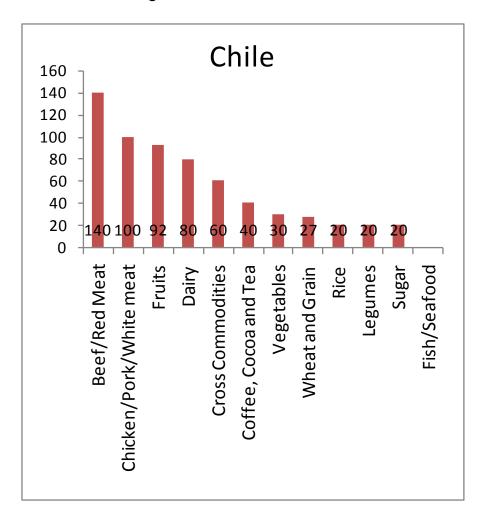




NTMs per Food Category – Chile

The chart below depicts the number of NTMs by different food categories for Chile.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
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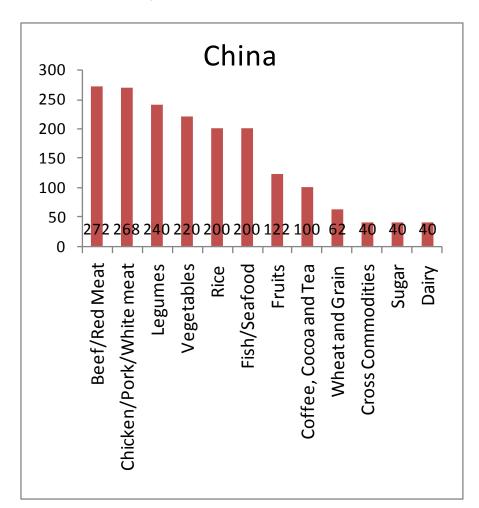




NTMs per Food Category – China

The chart below depicts the number of NTMs by different food categories for China.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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- •Legumes include regulations on beans, peas, and lentils among others

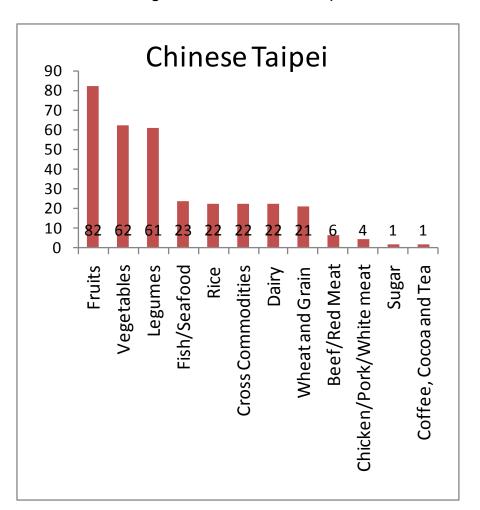




NTMs per Food Category – Chinese Taipei

The chart below depicts the number of NTMs by different food categories for Chinese Taipei.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others

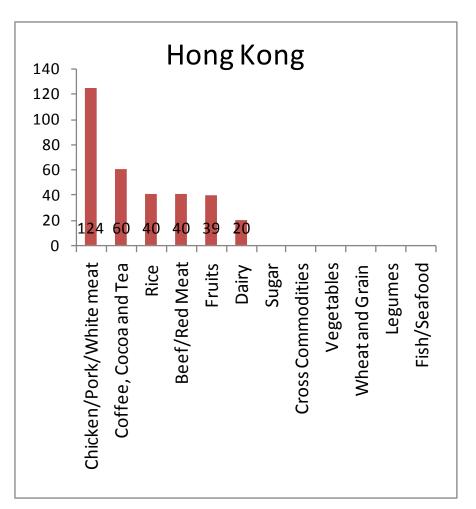




NTMs per Food Category – Hong Kong

The chart below depicts the number of NTMs by different food categories for Hong Kong.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
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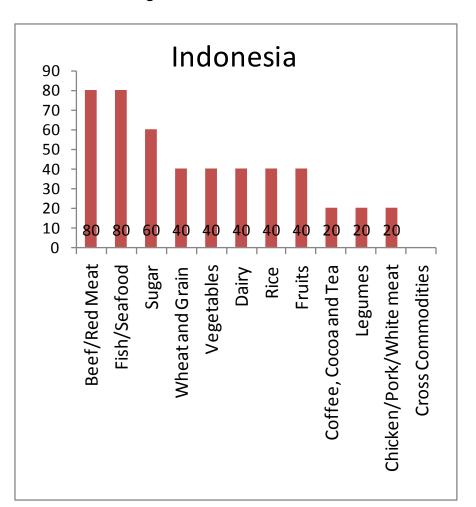




NTMs per Food Category – Indonesia

The chart below depicts the number of NTMs by different food categories for Indonesia.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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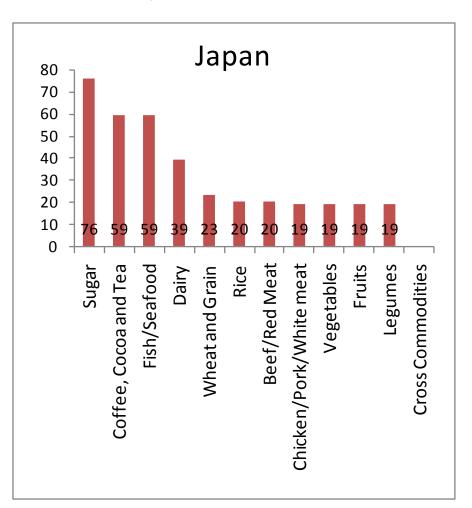




NTMs per Food Category – Japan

The chart below depicts the number of NTMs by different food categories for Japan

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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- •Legumes include regulations on beans, peas, and lentils among others

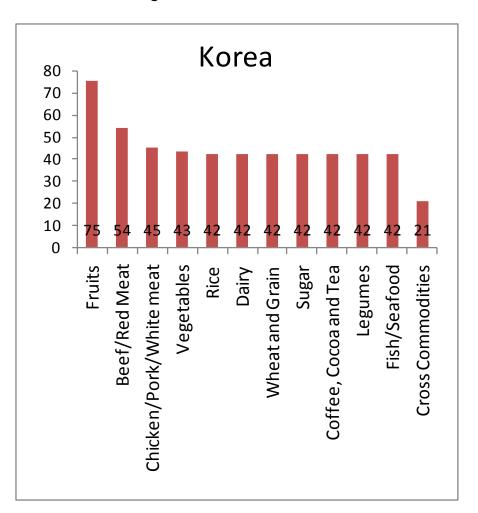




NTMs per Food Category – Korea

The chart below depicts the number of NTMs by different food categories for Korea.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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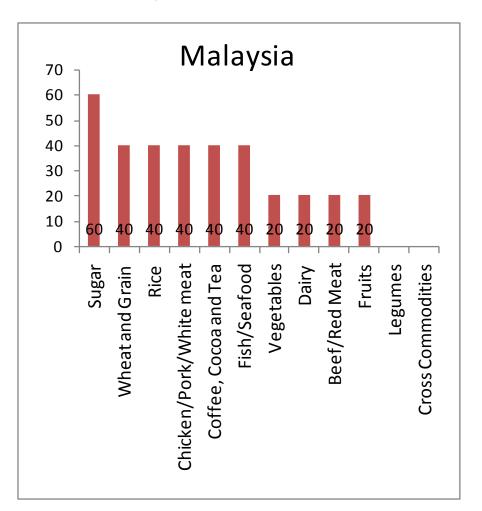




NTMs per Food Category – Malaysia

The chart below depicts the number of NTMs by different food categories for Malaysia.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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- •Legumes include regulations on beans, peas, and lentils among others

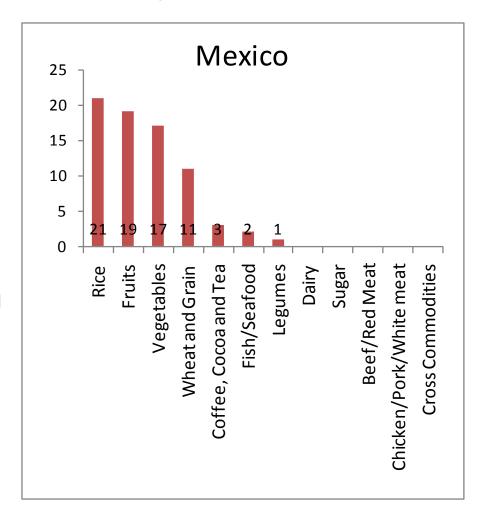




NTMs per Food Category – Mexico

The chart below depicts the number of NTMs by different food categories for Mexico.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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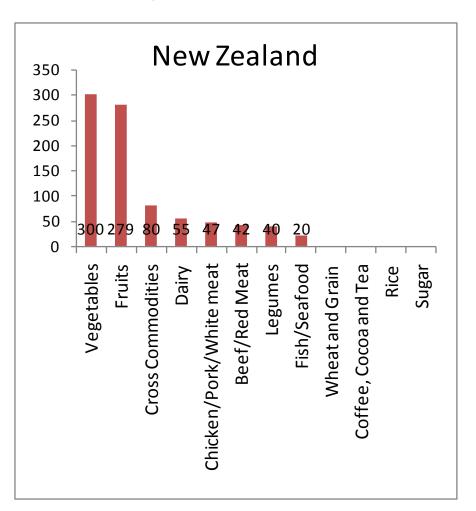




NTMs per Food Category – New Zealand

The chart below depicts the number of NTMs by different food categories for New Zealand.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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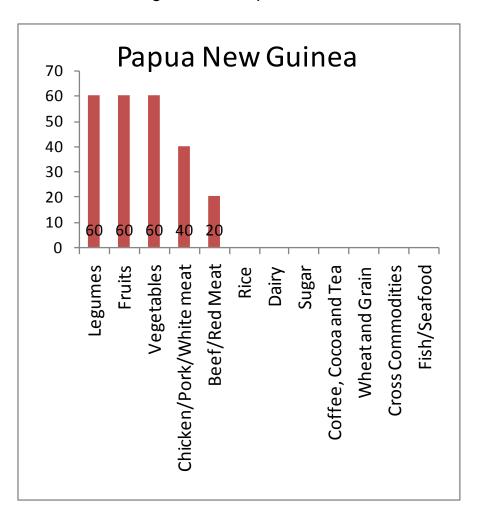




NTMs per Food Category – Papua New Guinea

The chart below depicts the number of NTMs by different food categories for Papua New Guinea.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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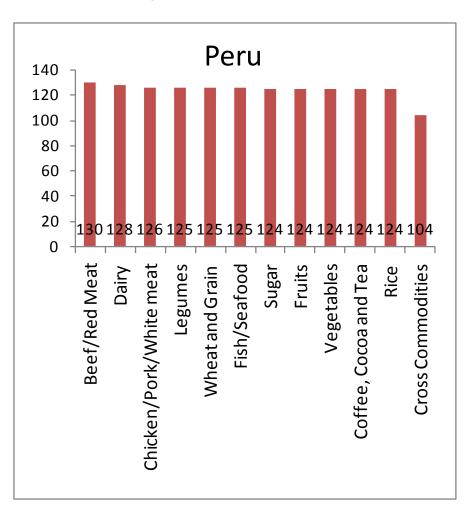




NTMs per Food Category – Peru

The chart below depicts the number of NTMs by different food categories for Peru.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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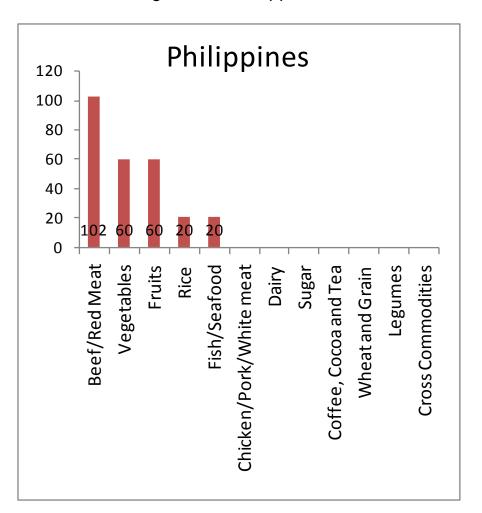




NTMs per Food Category – Philippines

The chart below depicts the number of NTMs by different food categories for Philippines.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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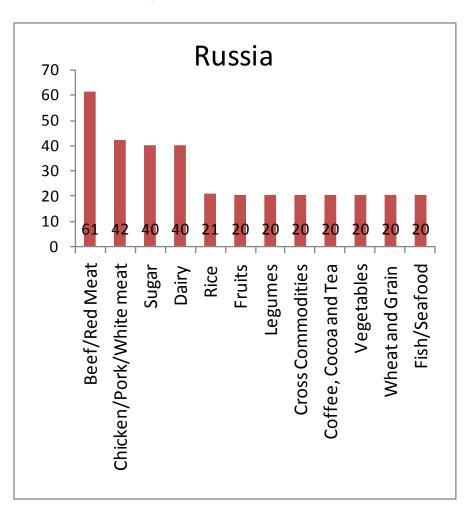




NTMs per Food Category – Russia

The chart below depicts the number of NTMs by different food categories for Russia.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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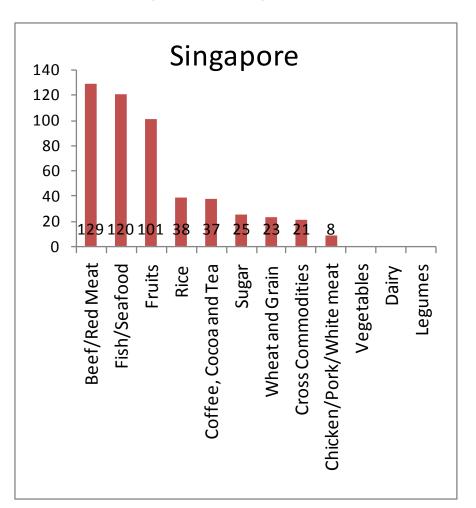




NTMs per Food Category – Singapore

The chart below depicts the number of NTMs by different food categories for Singapore.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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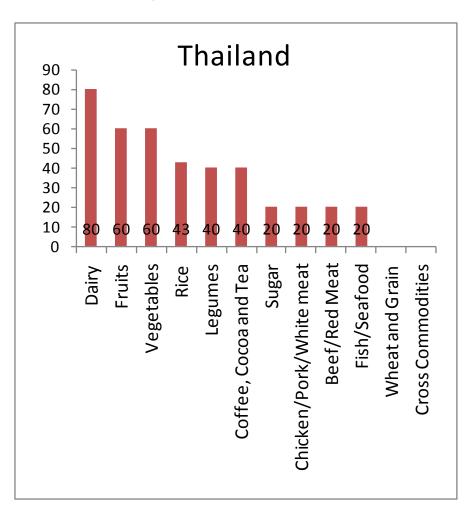




NTMs per Food Category – Thailand

The chart below depicts the number of NTMs by different food categories for Thailand.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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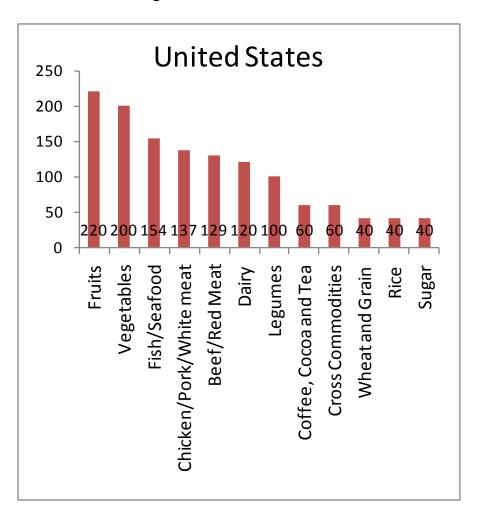




NTMs per Food Category – United States

The chart below depicts the number of NTMs by different food categories for The United States.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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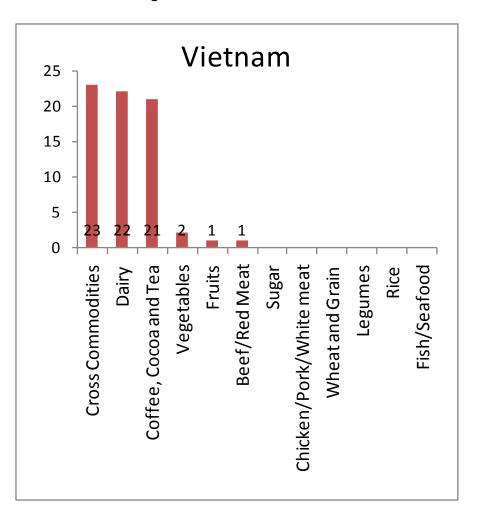




NTMs per Food Category – Vietnam

The chart below depicts the number of NTMs by different food categories for Vietnam.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
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APPENDIX D:

NTM CLASS BY ECONOMY



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Number of NTMs by different NTM Class across individual economies

 The charts in the following section depict the number of NTMs by different NTM class across individual APEC economies

Takeaways:

- Not all economies have NTMs for all NTM classes, however, this could be attributed to the limitations of this catalog listed earlier
- Every economy attributes higher NTMs to different NTM classes
 - The divergence in the number of NTMs for different NTM classes across economies is a source of NTBs for exporters, since they have to align with a variety of NTMs to export the same food product to different economies
- On average, customs and administration pose the most number of regulations
 - This adds a level of complexity since these regulations are imposed at the border and vary largely according the individual economy's interpretation and implementation of different regulations
- NTM categories like technical barriers and phytosanitary standards that safeguard against pests and diseases and provide for quality of food products, should ideally be similar across economies. However, they vary a lot across economies.

Caveats:

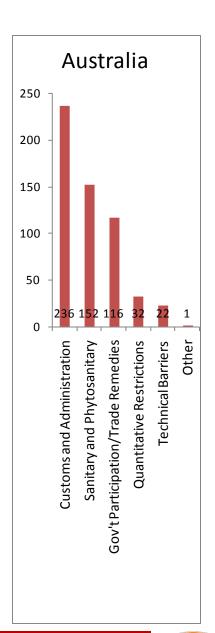
- The number of NTMs listed for each economy is based only on those we could find during our research, and may not be an exhaustive list
- For presentation purposes, each economy graph is scaled independently



NTMs per Class - Australia

The chart below depicts the number of NTMs by different NTM class for Australia.

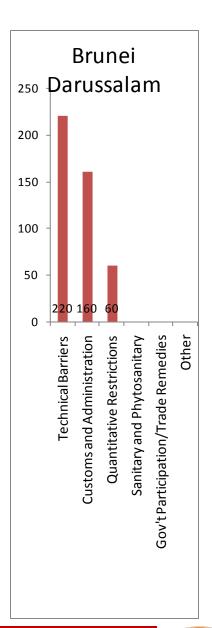
- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
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- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others



NTMs per Class – Brunei Darussalam

The chart below depicts the number of NTMs by different NTM class for Brunei Darussalam.

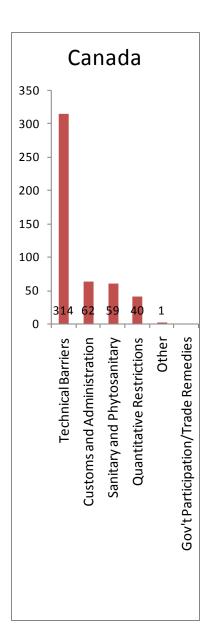
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- •Legumes include regulations on beans, peas, and lentils among others



NTMs per Class – Canada

The chart below depicts the number of NTMs by different NTM class for Canada.

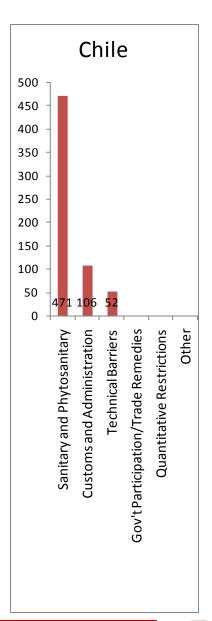
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NTMs per Class – Chile

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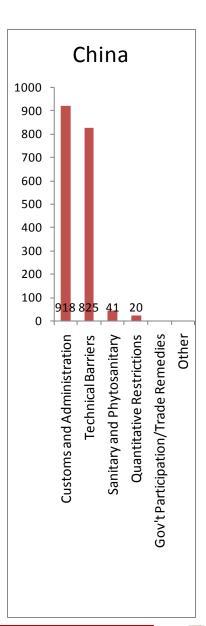
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NTMs per Class – China

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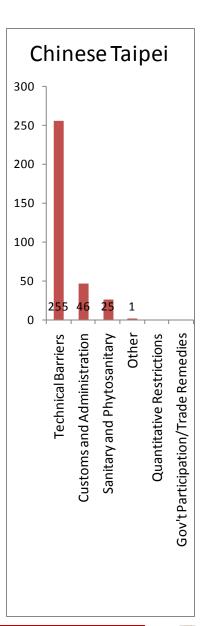
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NTMs per Class – Chinese Taipei

The chart below depicts the number of NTMs by different NTM class for Chinese Taipei.

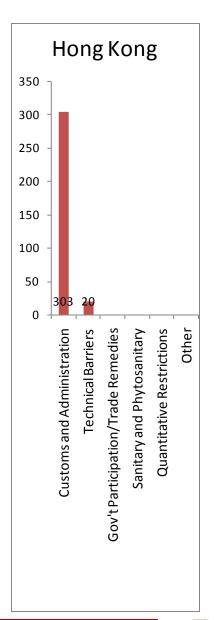
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NTMs per Class – Hong Kong

The chart below depicts the number of NTMs by different NTM class for Hong Kong.

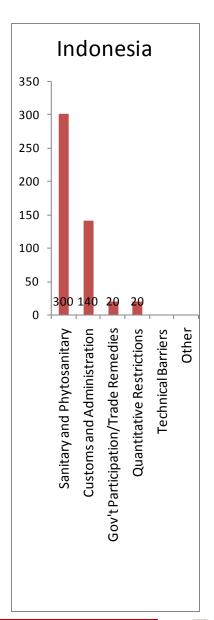
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NTMs per Class – Indonesia

The chart below depicts the number of NTMs by different NTM class for Indonesia.

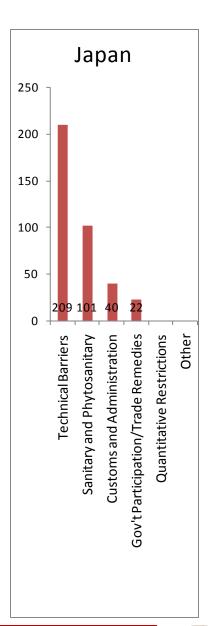
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NTMs per Class – Japan

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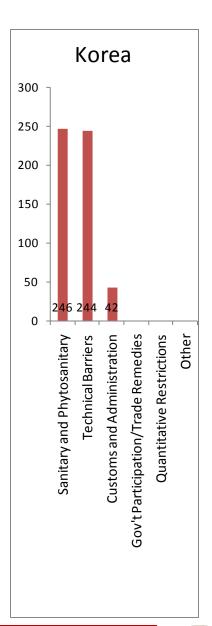
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NTMs per Class – Korea

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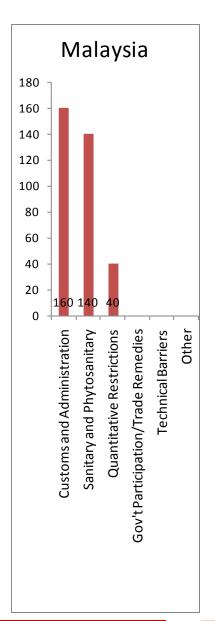
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NTMs per Class – Malaysia

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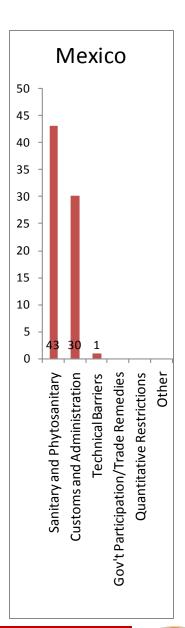




NTMs per Class – Mexico

The chart below depicts the number of NTMs by different NTM class for Mexico.

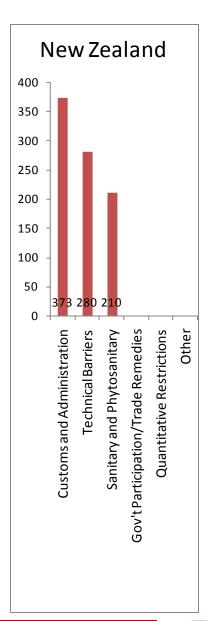
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NTMs per Class – New Zealand

The chart below depicts the number of NTMs by different NTM class for New Zealand.

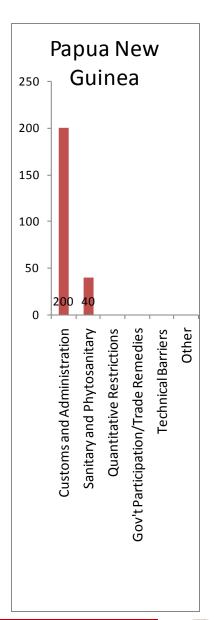
- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others



NTMs per Class – Papua New Guinea

The chart below depicts the number of NTMs by different NTM class for Papua New Guinea.

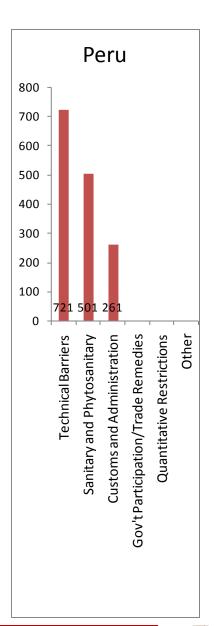
- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others



NTMs per Class – Peru

The chart below depicts the number of NTMs by different NTM class for Peru.

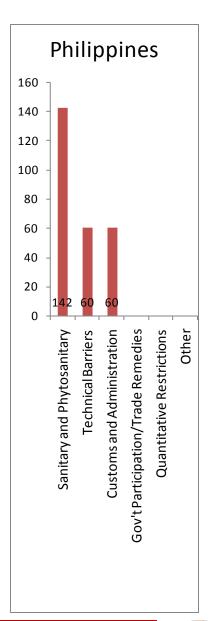
- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others



NTMs per Class – Philippines

The chart below depicts the number of NTMs by different NTM class for Philippines.

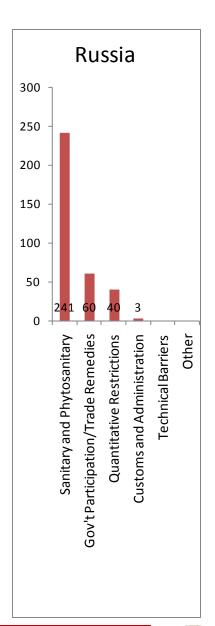
- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others



NTMs per Class – Russia

The chart below depicts the number of NTMs by different NTM class for Russia.

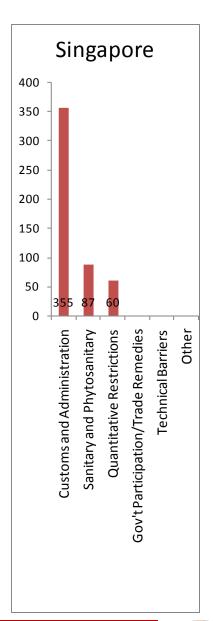
- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
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- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others



NTMs per Class – Singapore

The chart below depicts the number of NTMs by different NTM class for Singapore.

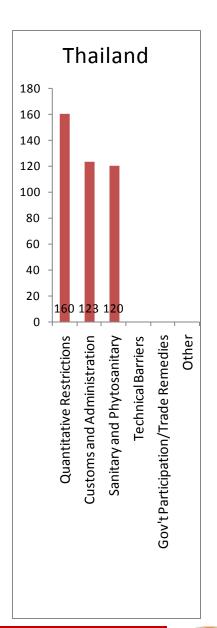
- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others



NTMs per Class – Thailand

The chart below depicts the number of NTMs by different NTM class for Thailand.

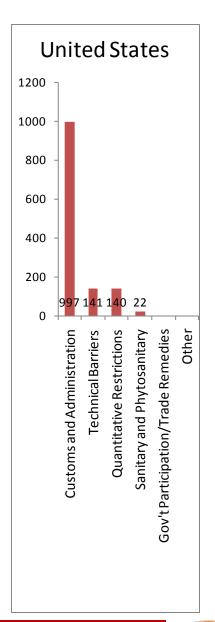
- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others



NTMs per Class – United States

The chart below depicts the number of NTMs by different NTM class for United States.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others

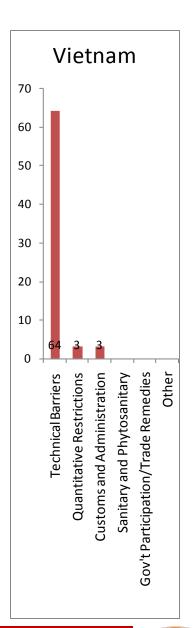




NTMs per Class – Vietnam

The chart below depicts the number of NTMs by different NTM class for Vietnam.

- •Beef/Red Meat include regulations on minced meat, halal meat, sausages and the like, and lamb among others for human consumption
- •NTMs include regulations on salt, sodium salt mixtures, salt substitutes, corn, oilseed meals, and edible oil among others for human consumption
- •Dairy include regulations on eggs, milk, condensed milk, and infant formula products among others for human consumption
- •Fish/Seafood includes regulations on farm-raised fish and shellfish, wild fish and shellfish, other food products of aquatic origin among others
- •Legumes include regulations on beans, peas, and lentils among others



APPENDIX E:

ECONOMY-SPECIFIC PAIN POINTS



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Australia

Intractable Market Access

- Narrow focus of quarantine law
- Lack of a risk management approach to decision making
- Long-running import risk assessment (IRA) procedures applied to all products from all possible source

"Cut and Paste"

- Food products are often mixes of various products
- Australian Quarantine Inspection Service (AQIS) devises a "cut and paste" list of conditions on the import permit for each new product

Import Deterrence

- Extra costs
- Administrative hurdles
- Highly-charged political interests and procedures in sorting out barriers

Complex exclusions and exemptions allow a range of quarantine measures to continue to restrict access. A protectionist motive may help explain the over-zealous level of official scrutiny sometimes experienced.

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Canada

Supply Management Systems

- Regulates dairy, chicken, turkey, and egg industries
- Severely limits exports to Canada above the tariff-rate quota levels

Package Size Limitations

- Standard package sizes imposed on imports of fresh or processed fruits and vegetables
- Ministerial exemption requires demonstrating an insufficient domestic supply

Bureaucratic Process

- New regulations must survive highly political process subject to autonomy of individual Provinces within their territories
- Paperless certification stalled by resource and legislative restrictions

A somewhat restrictive import inspection regime adds unnecessary cost to global exports and increases the chance of rejections.



Chile

Customs

- All imports valued at more than \$3,000 must be accompanied by a report approved and issued by Customs authorities
- Customs Agent required to link the importer and the National Customs Service

Price Band System

 Applied to wheat, wheat flour, and sugar (including mixtures containing more than 65% sugar content)

"Certificate of Use and Disposal"

- Importers of all food products must file this request
- Repeated reviews and sampling achieves public health protection at a higher cost than random testing

Many of Chile's trade restrictive requirements prevent the entry of a number of agricultural and food exports.



Indonesia

Halal

- Aimed to assure Muslim consumers of import safety
- Government maintains a ban on imports of chicken parts

Corruption

- Raises demands for unwarranted fees
- Influences ability to obtain required permits or licenses, expedite processes, and influence government concessions

Arbitrary

- Quantitative restrictions imposed on imports of animal based food products
- Arbitrary "check prices" higher food import duties
- Lack of a special importer identity card or registration number can detain imports at port

The de facto discretion afforded government agencies leads to arbitrary and corrupt impositions that determine the quantity and price of imports.



Japan

Rice

- Highly regulated and nontransparent rice importation and distribution system
- Strict MRL testing requirements disproportionately increases cost of bringing rice to Japanese markets

Disproportionate Imposition

- Unnecessarily trade restrictive use of nationwide, rather than regional, quarantine bans
- Unilateral blanket control measures applied without attention to actual level of risks posed by exporting countries
- Import violations of the MRLs may be treated more harshly than domestic violations, leading to sanctions that severely affect trade

Divergence

- Apparent lack of scientific justification for SPS pest protection, especially against pests also present in Japan
- Maintains BSE measures above international guidelines
- Mandating listing of all ingredients, food additives, and manufacturing process is overly burdensome and risks leaking proprietary information

A tradition of devising a measure, enshrining it in law, and then rigorously imposing it on exporting countries may stem from underlying mistrust of foreign sources of food and desire to protects its purportedly unique food culture.

University of Southern California

Korea

Entrenchment

- Officials need to be seen by the Korean public or politicians to be taking resolute action, often without quantitative or qualitative justification
- Once the decision to adopt a certain course of action has been taken, lobbying against it may serve only to further entrench the position

Traditional Peasant Culture

Strict Requirements

- The Animal Health Division owes its intractability from the view of its role as helping preserve the traditional peasant culture, though this is impossible in a global trading environment
- Incompatibility with need to align national standards with international obligations helps explain Korean officials' lack of flexibility in addressing issues
- Certain standards, technical regulations, and conformity assessment procedures appear disproportionately burdensome on imports
- Safety testing and certification must be conducted by designated certification bodies with qualified testing equipment and personnel
- The Korean Food and Drug Administration requires information about the content of the products to be set out on permanent labels

Pervasive concerns over national security and the inward-looking nature of Korean society, mean that officials do not readily open doors to imports.



Malaysia

Halal Hub

- All meat, processed meat products, poultry (except turkey), eggs and egg products must originate from plants inspected for Halal approval and receive Halal certification from an approved Islamic center
- Slaughterhouses, meat processors, and egg processors must also be inspected and approved by the Department of Islamic Development (JAKIM) for *Halal* beef, lamb, poultry, and egg exports

Heavy Government Involvement

- All meat imports require import licenses or are restricted by cut
- The Government has the right to re-inspect approved plants after 1 year
- The Food Safety and Quality Control Division Malaysia plays a part in the food safety regulation of all imported foods and can add requirements to those already in force

The current environment in Malaysia means that many decisions cannot be taken until Malaysian regulators and religious bodies have first considered the matter.



Mexico

Ports

- The port of Manzanillo is the major point of entry and features disproportionately among Mexican ports regarding specific trade issues
- The interpretation of certification requirements varies at different ports, especially at times when certification or import provisions are amended

Infrastructure

- Inadequate inspection facilities to comply with requirement that the inspection of imported live animals take place in Mexico
- New administrations change regulations and regulatory policy, which may discontinue regulatory relationships

Burdensome Regulations

- Burdensome guarantee system for goods subject to estimated prices
- Over 700 technical regulations called Normas Oficiales Mexicanas (NOMs) issued by a number of different agencies
- Agricultural importers must apply to the Secretariat of Finance and Public Credit and be listed on a special industry sector registry

Mexican inspection and clearance procedures for some agricultural goods are long, burdensome, nontransparent, and unreliable.



The Philippines

Clearance

- Veterinary Quarantine Clearance (VQC) meat and poultry import licensing scheme
- New regulations on the accreditation of foreign meat establishments (FMEs) from which meat and meat products are sourced for exports to the Philippines

Private Sector

- Reports of continued involvement in the valuation process
- Particularly in the activities of the Customs Bureau in reviewing all green lane entries for possible valuation-related offenses

Certification

- The Bureau of Plant Industry (BPI) regulates imports of fresh fruits and vegetables, requiring phytosanitary clearances from BPI for each shipment
- The Philippine Fisheries Code permits importation of fresh, chilled, or frozen fish and fish products only when certified by the Secretary of Agriculture and upon issuance of an import permit by the Department of Agriculture

Product import requirements are tedious and maintenance of this process involves much time and cost for exporters.



Russia

SPS

- Imposed a de facto ban on all rice from all origins, noting a variety of SPS concerns
- Authorities require SPS certificates for nearly all agricultural food products

Outdated Science

 Russian standards, particularly related to animal health and meat inspection, reflect the known science of the early 1990s

Opaque Regulatory Decision Making

- Russian officials are unfamiliar with international trade practices and are inherently suspicious and protectionist
- Officials are alleged to have been ready to accept bribes, thereby strengthening their influence over regional areas

Russian SPS measures have had a major negative effect on trade, often blocking the import of products deemed "sensitive," seemingly without a scientific basis for the measure.



United States of America

Border

- •There is little regulatory inter-departmental coordination resulting in fundamental differences in approach applied, particularly at the border
- •While the border inspection system punishes any incident of noncompliance, it does not provide for positive differential treatment of consignments from countries with arrangements with the FDA
- Food defense and border security issues have become a more focused US concern, and are likely to become increasingly trade restrictive

US Centric

- Much legislation and policy is not particularly consistent with the WTO/SPS
 Agreement. In promulgating new regulations US regulatory agencies tend to
 take a very US focused position in any assessment of risks
- •Animal identification and traceability have received impetus in response to the identification of BSE, but exporting countries must replicate its own requirements, regardless of better risk profiles

Enforcer

- Very active in WTO and international standard setting forums
- •Quick to remind other countries of their obligations

Exports to the US are subject to compliance with various levels of process prescriptive standards and testing mandated with limited options for equivalence.



Other Economies

Hong Kong

 The government is in various stages of implementing several labeling schemes that could harm consumer choice and significantly increase barriers to market entry of consumerready food exports

New Zealand

 Maintains a regimen of SPS controls for virtually all imported agricultural products

Singapore

- Prohibits meat imports from economies in which BSE has been detected or economies with which it does not have protocol agreements to preserve its rigorous food safety requirements
- Health authorities test every shipment of imported meat and poultry visually for wholesomeness and to ensure it is free from spoilage and disease



Other Economies

Chinese Taipei

- •Some plant and animal quarantine measures are not necessarily based on sound science and are more trade restrictive than necessary to ensure health and safety
- •Imported products containing residues and not specifically approved for use in Chinese Taipei are prohibited
- Provisional Maximum Residue Limits (MRLs) have been established for some fruits and vegetables, but Chinese Taipei has resisted recognizing Codex

Thailand

- •Import licenses and product registrations are required prior to importing foods for sale
- •Guidelines for the importation of live animals, meat and its by-products require establishments of origin to be accredited and included visits to establishments in the exporting country to observe or monitor zoosanitary measures



Appendix F

IFRS AND LOCAL GAAP TECHNICAL ANALYSIS



		Fii	nancial Instru	ments									
	Business Combinations	Disclosures		Recognition & Measurement		Income Taxes	Property Plant and Equipment	Revenue Recognition	Related Party Disclosures	Consolidated & Separate Financial Statements	Impairment of Assets	Intangible Assets	Total (Out of 12)
IFRS Rule	IFRS 3	IFRS 7	IAS 32	IAS 39	IAS 1	IAS 12	IAS 16	IAS 18	IAS 24	IAS 27	IAS 36	IAS 38	
Australia		Х	Х	Х	Х	Χ	Х	Х	Х	x	Х	Х	11
Brunei Darussalam													0
Canada (1)													0
Chile (2)		X		Х	x	Χ	Х	X	Х	×	х	Х	10
China, People's Republic of				X	х	х	x	X		X	X	х	8
Hong Kong, China	Х	Х	X	Х	x	Х	X	X	Х	х	х	Х	12
Indonesia								X					1
Japan			X			Χ			Х		х	Х	5
Korea								X	Х				2
Malaysia	Х	X		Х	х	Χ	X	X			х	Х	9
Mexico					х								1
New Zealand	Х	Х	Х	Х	Х	Χ	Х	Х	Х	x	Х	Х	12
Papua New Guinea	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Peru	Х	X	X	Х	x	Х		X	Х	×	х	Х	11
Philippines	Х	X	X	Х	x	Χ	Х	X	Х	×	х	Х	12
Russia								X					1
Singapore	Х	X	X	Х	Х	Х	Х		Х		X	Х	10
Chinese Taipei					Х	Х		X	Х			Х	5
Thailand	Х				Х					Х		Х	4
United States			X		Х			X	Х		X	Х	6
Vietnam									Х				1
Total (Out of 21)	7	, 8	8	9	13	11	8	13	12	8	11	13	

FOR COUNTRIES	Count
High Level of alignment	(9-12)
Moderate Level of	
alignment	(5-8)
Limited Level of	
alignment	(1-4)

FOR RULES	Out of 18**
Widely aligned	13 - 18
Generally aligned	7 - 12
Rarely aligned	1 - 6



Appendix G

CONVERGENCE TOWARDS IFRS



Australia to China

	TIRAT		OVED	CICUT.	ADDITION DUTTY O	INADI FRAFRITATION		COMPARISON OF ACCONTING STANDARD REQUIREMENTS FOR LISTING								
	TIME	LINE	OVER:	SIGHT	APPLICABILITY &	IMPLEMENTATION		COMPARISON C	F ACCONTING S	TANDARD	REQUIREMENTS FOR LISTING					
							Don	nestic Listed Comp	panies		Domestic l Compa		Foreign L	isted Com		
Focus Issue	Beginning of Conversion Initiatives	Fully Compliant	Accounting Standards Body	Regulatory body for oversight	Technical Convergence (at present)	Application of IFRS (Overall Rating)	IFRSs not permitted	IFRSs permitted	IFRSs required for some large entities	IFRSs required for all	IFRSs permitted	IFRS Not Permitte d	IFRSs permitted	IFRSs required		NOTES FOR FOREIGN OWNED LISTED ENTITIES
Australia ¹	FY 2002	FY 2005	Australian Securities and Investments Council	Australian Securities and Investments Council	CUSTOMIZED TECHNICAL ADOPTION	UNIVERSAL APPLICABILITY	inss not permitted	nos permite	entities		REQUIRED FOR SOME LARGE UNLISTED COMPANIES / PERMITTED FOR ALL		REFER TO NOTE 1	TOT All	remitted	NOTE 1: AUX PERMITS FRS, GAAP OF CANADA, HONG KONG, NEW ZEALAND, SINGAPORE, USA (A)
Brunei Darussalam	FY 2002	-	-	-	NO SPECIFIC PLANS											
Canada ²		FY 2011	Accounting Standards Board of Canada	Canadian Securities Administrators	CUSTOMIZED TECHNICAL ADOPTION	SELECTIVE APPLICABILITY		EARLY ADOPTION PERMITTED FROM 2008. COMPLETE ADOPTION FROM 2011								CANADA PERMITS FINANCIAL STATEMENTS IN CANADIAN GAAP, US GAAP, OR IFRS (B) FOR FOREIGN ENTITIES LISTED ON TORONTO STOCK EXCHANGE (B)
Chile ³	FY 2009	FY 2011	Colegio de Contadores de Chile	Superintendenc y of Securities and Insurance	CUSTOMIZED TECHNICAL ADOPTION	SELECTIVE APPLICABILITY				REQUIRE D STARTING 2009	REQUIRED STARTING 2009					BANKS AND OTHER FINANCIAL INSTITUTIONS TO ADOPT BY JAN 2009, MAJOR LISTED ENTITIES BY DEC 2009, INSURANCE COMPANIES 2010 AND ALL OTHER ENTITIES 2011
China, People's Republic of ⁴	FY 2007	ASBE Standards are based on IFRS	Chinese Institute of Certified Public Accountants	Ministry of Finance	CUSTOMIZED TECHNICAL ADOPTION	SELECTIVE APPLICABILITY	ALL PUBLICLY LISTED CHINESE ENTERPRISES SHOULD FOLLOW ASBE STANDARDS FROM JAN 2007, OTHER ENTITIES ARE ENCOURAGED TO USE ASBE.									CHINA DOES NOT ALLOW FOREIGN LISTINGS ON SHANGHAI STOCK EXCHANGE. NYSE BECAME THE FIRST STOCK TO BE LISTED ON SSE (C)



Hong Kong to Malaysia

			APPLICA													
	тімі	ELINE	OVE	RSIGHT	IMPLEMI	COMPARISON OF ACCONTING STANDARD REQUIREMENTS FOR LISTING									1	
										Domestic						
							_				Unlisted					1
	Beginning						Dom	estic Liste	d Companies	S	Compa	nies	Foreign Lis	ted Con	npanies	
	of								IFRSs			IFRS			IFRS	
	Conversio		Accounting	Regulatory	Technical	Application of			required for		IFRSs	Not		IFRSs	Not	NOTES FOR
	n		Standards	body for	Convergence (at	•	IFRSs not	IFRSs			permitte					FOREIGN OWNED
Focus Issue	Initiatives	with IFRS	Body	oversight	present)	Rating)	permitted	permitted	entities	d for all	d	ted	permitted	d for all	ed	LISTED ENTITIES HONG KONG
			Hong Kong													STOCK EXCHNAGE
			Institute of													REQUIRES
Hana Kana			Certified Public	Securities and	COMPLETE TECHNICAL	CELECTIVE										REOPORTING IN
Hong Kong, China ⁵	FY 2001	FY 2005	Accountants	Futures Commission	ADOPTION	SELECTIVE APPLICABILITY										HKFRS OR IFRS STANDARDS (D)
	FY 2007															, , , , , , , , , , , , , , , , , , , ,
	(move															
	towards full															
	complian															INDONESIA ONLY
	ce with		Indonesian		CUSTOMIZED											ALLOWS LISTING IN
	ISA on all		Institute of		TECHNICAL	SELECTIVE										INDONESIAN GAAP
Indonesia	audits)	FYE 2008	Accountants		ADOPTION	APPLICABILITY										(E) JAPAN, ON A CASE
																BY CASE BASIS
																PERMITS FOREIGN
																COMPANIES LISTED
			Japanese										PERMITTE			ON TSE TO FOLLOW THEIR
			Institute of										D ON A			OWN ACCOUNTING
			Certified	Financial	CUSTOMIZED								CASE BY			STANDARDS.
lanan		EV 2011	Public	Services	TECHNICAL	SELECTIVE							CASE			IGAAP IS THE
Japan		FY 2011	Accountants	Authority	ADOPTION	APPLICABILITY							BASIS			STANDARD (F) KOREA ALLOWS
																REPORTING IN
																KOREAN GAAP,
			Korea Accounting	Financial	CUSTOMIZED TECHNICAL	SELECTIVE										IFRS, OR USGAAP FOR FOREIGN
Korea ⁸		FY 2011	Institute	Supervisory Committee	ADOPTION	APPLICABILITY										ENTITIES (G)
110100			Malaysia	20												
			Accounting	Securities	CUSTOMIZED											
Malaysia		FY 2012	Standards	Commission	TECHNICAL	SELECTIVE APPLICABILITY										
Malaysia ⁹		L 1 2012	Board	Malaysia	ADOPTION	APPLICABILITY										



Mexico to Russia

					APPLICA	BILITY &										
	ТІМІ	ELINE	OVE	RSIGHT	IMPLEM	NTATION	COMPARISON OF ACCONTING STANDARD REQUIREMENTS FOR LISTING									
											stic					
											Unlisted					
							Don	Compa	nies	Foreign Lis	sted Con					
	Beginning															
	of								IFRSs			IFRS			IFRS	
	Conversio		Accounting	Regulatory	Technical	Application of			required for		IFRSs	Not		IFRSs	Not	NOTES FOR
			Standards		Convergence (at	IFRS (Overall	IFRSs not	IFRSs			permitte			require		
Focus Issue	Initiatives	with IFRS	Body	oversight	present)	Rating)	permitted	permitted	entities	d for all	d	ted	permitted	d for all	ed	LISTED ENTITIES
			Mexican	National												
			Institute of	Banking and												
		No Specific	1	Securities	NO SPECIFIC	NO SPECIFIC										
Mexico		Plans	Accountants	Commission	PLANS	PLANS										
																NOTE THAT NEW
			Accounting													ZEALAND REQUIRES
			Standards													NZIFRS WHICH IS A
			Review	The Securities	CUSTOMIZED											NEW ZEALAND
New				Commission of	TECHNICAL	SELECTIVE							REQUIRES			CUSTOMIZED IFRS
Zealand ¹¹		FY 2007	Zealand	New Zealand	ADOPTION	APPLICABILITY							NZIFRS			(H)
Papua New					NO SPECIFIC	NO SPECIFIC										
Guinea		-	-	- N-1-11	PLANS	PLANS										
				National												
				Supervisory Commission of												
		Peru has		Enterprises and												
		converted		Securities												
		to IFRS	Accounting	(CONASEV);	CUSTOMIZED											
		between	Standards	Ministry of	TECHNICAL	SELECTIVE										
Peru ¹²			Board (CNC)	Finance	ADOPTION	APPLICABILITY										
Teru		1554-1550	board (CNC)	Tillalice	ADDITION	ALLECABILITY										PHILIPPINES
			Philippine													REQUIRES 3 YEARS
			Financial	Philippines												OF AUDITED
			Reporting	Securities and	CUSTOMIZED											FINANCIAL
Philippines ¹			Standards	Exchanges	TECHNICAL	SELECTIVE										STATEMENTS FOR
3		FY 2005	Council	Commission	ADOPTION	APPLICABILITY										LISTING (I)
		2000	20 01.0.1	23			ONLY					BANKS				
				Federal			BANKS					REPOR				
				Finanial			NEED TO					TIN				
		No Specific	Ministry of	Markets	NO SPECIFIC	NO SPECIFIC	REPORT IN					IFRS				
Russia ¹⁴		Plans	Finance	Service	PLANS	PLANS	IFRS ALSO					ALSO				



Singapore - Vietnam

									_							
	TIM	ELINE	OVE	RSIGHT		ABILITY & ENTATION	COMPARISON OF ACCONTING STANDARD REQUIREMENTS FOR LISTING									
							Domestic Listed Companies			Dome Unlist Compa	ted	Foreign Lis	sted Con			
Focus Issue	Beginning of Conversio n Initiatives	Fully Compliant	Accounting Standards Body	Regulatory body for oversight	Technical Convergence (at present)	Application of IFRS (Overall Rating)	IFRSs not	IFRSs permitted	IFRSs required for some large	IFRSs	IFRSs permitte d	IFRS Not		IFRSs require	IFRS Not Permitt	NOTES FOR FOREIGN OWNED LISTED ENTITIES
Singapore ¹⁵	5	FY 2007	Accounting Standards Council	Ministry of Finance - Singapore	CUSTOMIZED TECHNICAL ADOPTION	SELECTIVE APPLICABILITY							Singapore FRS, USGAAP, IFRS			DELOITTE - STRATEGIES FOR IPO
Chinese Taipei		FY 2010		V .	CUSTOMIZED TECHNICAL ADOPTION	SELECTIVE APPLICABILITY							OTHER ACCOUNTI NG STANDAR DS PERMITTE D BUT REQUIRE RECONCILI ATION			OTHER ACCOUNTING STANDARDS PERMITTED BUT EXCHANGE REQUIRES EXPLANATION OF DIFFERENCES WITH GAAP ROC (J)
Thailand ¹⁶		for full	Federation of Accounting Professionals		CUSTOMIZED TECHNICAL ADOPTION	SELECTIVE APPLICABILITY							THAI ACCOUNTI NG STANDAR DS OR IFRS			(K) THAI STOCK EXCHANGE
United States ¹⁷		FY 2013 (Est.) ¹⁷	Federal Accounting Standards Board	Securities and Exchanges Commission	CUSTOMIZED TECHNICAL ADOPTION	SELECTIVE APPLICABILITY		PLANS TO PERMIT IFRS FOR SOME LARGE LISTED ENTITIES					USGAAP OR IFRS			
Vietnam		No Specific	Vietnam Accounting Standards Board		NO SPECIFIC PLANS	NO SPECIFIC PLANS										



Appendix H

BY ECONOMY LOCAL GAAP TO IFRS COMPARISON

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Australia

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent	Reference
Business Combinations	IFRS 3	AASB 3		Australian entities are required to identify an acquirer, and determine fair value of net assets and contingent liabilities. The Australian treatment may result in different outcomes where 'business combinations' occur before entities are floated, split up, demerged, etc	FALSE	A
FINANCIAL INSTRUMENTS						
Disclosures	IFRS 7	AASB 7		Entities that comply with AASB 7 as amended will simultaneously be in compliance with IFRS 7 as amended.	TRUE	В
Presentation	IAS 32	AASB 132		Entities that comply with AASB 132 as amended will simultaneously be in compliance with IAS 32 as amended.	TRUE	В
Recognition & Measurement	IAS 39	AASB 139		Entities that comply with AASB 139 as amended will simultaneously be in compliance with IAS 39 as amended.	TRUE	В
Presentation of Financial Statements	IAS 1	AASB 101	Not-for-profit entities using the added "Aus" paragraphs in the Standard that specifically apply to not-for-profit entities may not be simultaneously complying with IAS 1.		TRUE	В
Income Taxes	IAS 12	AASB 112		Entities that comply with AASB 112 as amended will simultaneously be in compliance with IAS 12 as amended.	TRUE	В
PPE	IAS 16	AASB 116	Not-for-profit entities using the added "Aus" paragraphs in the Standard that specifically apply to not-for-profit entities may not be simultaneously complying with IAS 16.	For-profit entities that comply with AASB 116 as amended will simultaneously be in compliance with IAS 16 as amended.	TRUE	В
Revenue	IAS 18	AASB 118		Entities that comply with AASB 118 as amended will simultaneously be in compliance with IAS 18 as amended.	TRUE	В



Australia

					Equivalent	
	IFRS Rule	Local Rule	Key Similarities	Key Differences	?	Reference
Related Party Disclosures	IAS 24	AASB 124	Key Management Personnel (KMP).	Paragraphs 1 to 22 of AASB 124 are equivalent to IAS 24 Related Party Disclosures as issued and amended by the IASB. Compliance with the additional KMP disclosures required by paragraphs Aus25.1 to Aus25.9.3 of AASB 124 is not needed for IFRS compliance.	TRUE	А, В
Consolidated & Separate Financial Statements	IAS 27	AASB 127	Additional paragraphs provide slightly different requriements, though these are considered above IFRS reporting or insignificant. IFRS provides some exemptions to consolidated statements, where as A-IFRS does not. Similarly, IFRS allows different reporting dates for parents and subsidiaries, where as A-IFRS does not.	Entities other than public sector entities that comply with AASB 127 will simultaneously be in compliance with IAS 27.		А, В
Impairment of Assets	IAS 36	AASB 136	Not-for-profit entities using the added	For-profit entities that comply with AASB 136 as amended will simultaneously be in compliance with IAS 36 as amended.		В
Intangible Assets	IAS 38	AASB 138	Not-for-profit entities using the added "Aus" paragraphs in the Standard that specifically apply to not-for-profit entities may not be simultaneously complying with IAS 38.	For-profit entities that comply with the requirements of AASB 138 as amended will simultaneously be in compliance with the requirements of IAS 38 as amended.	TRUE	В

Use	Reference	Source	Link	
Similarities,				
differences, and				
equivalent	Α	"A-IFRS vs IFRS" - September 2005, Deloitte	http://www.iasplus.com/au/0509differences.pd	<u>f</u>
Similarities,				
differences, and				
equivalent	В	Australian Accounting Standards Board	www.aasb.gov.au	



Canada

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Business Combinations	IFRS 3	1300, 1581, 1600, 3062		Multiple differences.	FALSE	A, B, C, D
FINANCIAL INSTRUMENTS						
Disclosures	IFRS 7	3861 or 3862		Multiple differences.	FALSE	A, B, C, D
Presentation	IAS 32	1300, 3861 or 3863		Multiple differences.	FALSE	A, B, C, D
Recognition & Measurement	IAS 39	1300, 1651, 3025, 3855, 3865		Multiple differences.	FALSE	A, B, C, D
Presentation of Financial Statements	IAS 1	1000, 1300, 1400, 1505, 1508, 1510, 1520, 1530, 1535, 3000, 3020, 3210, 3240, 3251, 3260, 3480		Multiple differences.	FALSE	A, B, C, D
Income Taxes	IAS 12	1300, 3465		Multiple differences.	FALSE	A, B, C, D
PPE	IAS 16	1400, 1506, 1520, 3061, 3280, 3831		Multiple differences.	FALSE	A, B, C, D
Revenue	IAS 18	3400		Multiple differences.	FALSE	A, B, C, D
Related Party Disclosures	IAS 24	3840		Multiple differences.	FALSE	A, B, C, D
Consolidated & Separate Financial Statements	IAS 27	1300, 1590, 1600, 3051		Multiple differences.	FALSE	A, B, C, D
Impairment of Assets	IAS 36	1581, 3025, 2051, 3061, 3062, 3063, 4211		Multiple differences.	FALSE	A, B, C, D
Intangible Assets	IAS 38	1581, 3061, 3062, 3450		Multiple differences.	FALSE	A, B, C, D

Use	Reference	Source		Link
Local rule, similarities,				
differences, and		ACSB Canada IFRS/Canadian GAAP Comparison, as of		
equivalent	A	March 31, 2007	http://www.acsbcanada.org/downle	oad.cfm?ci_id=41263&la_id=1&re_id=0
Similarities, differences,		IFRS compared to Canadian GAAP: an overview, Fall	http://www.kpmg.ca/en/ms/ifrs/dc	cuments/IFRS_CdnGAAPComparison_WE
and equivalent	В	2007	B.pdf	
Similarities, differences,				
and equivalent	С	Comparison of Canadian GAAP and IFRSs	http://www.iasplus.com/ca/0703ca	nadaifrs.pdf
Similarities, differences,				
and equivalent	D	The CICA's Guide to IFRS in Canada	http://www.cica.ca/download.cfm?	<u>ci_id=39765&la_id=1&re_id=0</u>

Chile

		Local				
	IFRS Rule	Rule	Key Similarities	Key Differences	Equivalent?	Reference
				Purchase method is generally used although pooling of interest method is used occassionally. Good will needs to be amorized over its useful life, but not to exceed 20 years Negative goodwill should be recorded as a deferred		
Business	IFRS 3	TB 42, TB 55, TB 59		credit and amortized over a period not to exceed 20 years. Per IASB negative goodwill should be recognised in the income statement immediately after management has reassessed the identification and measurement of identifiable items arising on acquisition and the cost of the business	FALSE	
Combinations				combination		
FINANCIAL						
INSTRUMENTS						
Disclosure	IFRS 7	TB 57	What ever the nature of the derivative contract, it should be dis closed in the notes to the financial state ments, as to the characteristics (type of con tract), the items or trans actions hedged, maturity date and financial ef fects in curred or expected, whether in assets, liabilities or results of opera tions. Also, the exis tence of related guarantees (margins) and premiums, if any, should be disclosed	Credit Risk disclosure is not specifically addressed	TRUE	
Presentation	IAS 32			According to IAS, financial instrument or its components should be classified as a liability or equity in accordance with the substance of the contractual arrangement. Classification of the insutrments as debt and equity is not specifically addressed in Chilean standards	FALSE	
Recognition & Measurement	IAS 39	TB 57	All derivatives are measured at fair value and recognized either as an asset or a liability in the balance sheet.		TRUE	
Presentation of Financial Statements	IAS 1		Similar to IAS 1		TRUE	
Income Taxes	IAS 12	TB 60	Similar to IAS 12 in accounting method of recording deferred taxes, accounting for benefits from loss carryforward, investment tax credits, general disclosure requirements. Slight differences exist in specific disclosure requirements.		TRUE	



Chile

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
PPE	IAS 16	TB 33, TB 12, TB 54	IAS requires PPE to be recorded at its cost and then restated to its fair value at the balance sheet date. According to Chile's standards, property, plant and equipment are recorded at monetarily corrected cost, net of depreciation. Technical appraisals are accepted in the forestry industry. In other industries, appraisals were accepted under specific circum stances until January 1, 1997, but further re valuations are prohibited.		TRUE	
Revenue Recognition	IAS 18		Similar to IAS 18		TRUE	
Related Party Disclosures	IAS 24	TB 16	Disclosure requirements according to TB 16 are similar to IAS 24		TRUE	
Consolidation: Consolidated & Separate Financial Statements	IAS 27	TB 42	Chile's standards are similar to IAS in the areas of criteria for consolidation, equity accounting issues, parent company only financial statements, disclosure requirements.	Consolidation and Equity Accounting for joint ventures as addressed by IAS 31 is not specifically addressed by the Chilean standards		
Impairment of Assets	IAS 36	TB 33, TB 42	Similar to IAS 36 in terms of the treatment of long lived assets for use, and long lived assets to be disposed off, wherein the net carrying value should be written down to the net recoverable value of an asset.		TRUE	
Intangible Assets	IAS 38	TB 55	Acquired intangible assets should be recorded at monetarily corrected costs (this takes into account corrections for currency). IAS 38 mandates recording intangible assets at cost. Also intangible assets per TB 55 are permitted to be amortized over a period of 20 years and not exceeding 40 years. IAS 38 does not have a set period requirement but does not permit infinite intangible asset life.		TRUE	

Referenc			
е	Source		Link
	Significant Differences in GAAP in Can	ada, Chile, Mexico and the United	The Canadian Institute of Chartered Accountants,
	States: an analysis of accounting pro	nouncements as of January 2001	Toronto, Ontario



China

					Equivalent	
	IFRS Rule	Local Rule	Key Similarities	Key Differences	?	Reference
Business Combinations	IFRS 3	ASBE 20	Definition of Goodwill, Treatment of Goodwill (goodwill cannot be amortized), Treatment of contingent liabilities, Gain/ Loss on Acquisitions, Disclosure requirements	Requires the pooling of interest method for entities that have common control Reverse acquisitions are not covered under ASBE 20	FALSE	China's new accounting standards - A comparison with current PRC GAAP and IFRS - August, 2006, Deloitte
FINANCIAL						
INSTRUMENTS						
Disclosure	IFRS 7	ASBE 22				
Presentation	IAS 32	ASBE 22				
Recognition & Measurement	IAS 39	ASBE 22	Comprehensive standards that cover the recognition of measurements of financial services. New categories of financial instruments, financial assets (loans and receivables, held to maturity instruments, held for sale) financial liabilities. Requires all financial instruments to be measured at fair value All derevatives shall be measured at fair value		TRUE	China's new accounting standards - A comparison with current PRC GAAP and IFRS - August, 2006, Deloitte
Presentation of Financial Statements	IAS 1	ASBE 30	Requirement to classify assets and liabilities as current and non current Assets and liabilities presented in the order of liquidity Comparitive information disclosure requirements Profit attribution to minority interests Statements of changes in equity	Analysis of Expenses - Under ASBE 30 Expenses are analyzed by function but IAS 1 allows this to be presented based on the nature of expenses or their function	TRUE	China's new accounting standards - A comparison with current PRC GAAP and IFRS - August, 2006, Deloitte
Income Taxes	IAS 12	ASBE 18	Does not allow the tax payable method Adopts the balance sheet liability method to determine deferred tax of temporary differences.		TRUE	China's new accounting standards - A comparison with current PRC GAAP and IFRS - August, 2006, Deloitte



China

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
			Single general recognition principle for	Revaluation - IAS 16 allows both the cost model		China's new accounting
			both initial costs and subsequent	and the revaluation model. If an item of PPE is		standards - A comparison
	IAS 16	ASBE 4	expenditure, residual value of assets,	revalued, the entire class of assets to which that	TRUE	with current PRC GAAP
			measurement of residual value,	asset belongs shall be revalued. ASBE 4 only		and IFRS - August, 2006,
PPE			dismantling or removal expenses.	allows the cost model		Deloitte
			Clarifies that revenue does not include			China's new accounting
			inflow of economic benefits from			standards - A comparison
	IAS 18	ASBE 14	owners equity contributions		TRUE	with current PRC GAAP
			Revenue is measured at fair value after			and IFRS - August, 2006,
Revenue Recognition			discounting any deferred payments			Deloitte
				State Controlled Entities - State Controlled		
			Related parties are determined via joint	Entities are not regarded as related parties due		
			control or significant influence	to the reason that they are state controlled. IAS		
	IAS 24	ASBE 36	Separate financial statements and	24 does not exempt state controlled entities.	FALSE	China's new accounting
	IA3 24	ASBL 30	disclosure requirements addressing	Two parties subject to joint control or	FALSE	standards - A comparison
				siginificant influence from the same party are		with current PRC GAAP
Related Party			related party transactions, relationship	considered related by ASBE 36, but IAS 24 does		and IFRS - August, 2006,
Disclosures				not address this.		Deloitte
			Parent prepares consolidated			
			statements			
			Scope of consolidation is determined			
			based on "control"			
			All subsidiaries under parent's control	ASBE 33 requires the reporting periods of the		
			will be consolidated and statements in	parents and subsidiaries to be the same. IAS 27		
	IAS 27	ASBE 33	changes of equity shall be presented	recommends preparing additional statements if	TRUE	
	IA3 27	ASDE SS	Losses applicable to minority	the reporting periods are different. IAS 27 also	TRUE	
			shareholders in a subsidiary	recommends the differences in reporting dates		
			Ability of an enterprise to control the	be the same from period to period.		China's new accounting
			other is based on 'voting rights'			standards - A comparison
Consolidation:			Equity method is to be used to account			with current PRC GAAP
Consolidated & Separate			for equity interests in jointly controlled			and IFRS - August, 2006,
Financial Statements			entities.			Deloitte



China

					Equivalent	
	IFRS Rule	Local Rule	Key Similarities	Key Differences	?	Reference
Impairment of Assets	IAS 36	ASBE 8	Recoverable amount shall be estimated for individual assets. If it is not possible to determine an individual asset, recoverable amount shall be determined from the asset group. Asset groups cannot be changed arbitrarily. Stricter requirements for impairment testing of assets Prohibits the reversal of all impairment related losses	ASBE 8 prohibits the reversal of all impairment losses but IAS 36 only prohibits the reversal of impairment losses for goodwill.	TRUE	China's new accounting standards - A comparison with current PRC GAAP and IFRS - August, 2006, Deloitte
Intangible Assets	IAS 38	ASBE 6	Amortization pattern shall reflect the assets future economic benefits Depreciable amount is the cost less residual value of asset Indefinite intangibles are not mortized but tested for impairment Development costs shall be capitalized if specific criteria are met If Intangible asset has a finite life, the useful life and amortization methods need to be reviewed at every reporting period	IAS 38 allows a cost model and a revaluation model (where fair value can be determined by reference to a price quoted in an active market). ASBE 6 only allows the cost method.		China's new accounting standards - A comparison with current PRC GAAP and IFRS - August, 2006, Deloitte

	Reference	Link
Γ	China's new accounting standards - A comparison with current PRC GAAP and IFRS - August,	http://www.iasplus.com/dttpubs/0607prcifrse
L	2006, Deloitte	nglish.pdf



Chinese Taipei

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Business Combinations	IFRS 3		Both methods use the fair value method to value assets	All identifiable assets and liabilities are measured using fair value at the acquisition date. IFRS 3 requires that only realiably measurable liabilites be recognized	FALSE	G
FINANCIAL INSTRUMENTS Disclosures	IFRS 7	SFAS 28, SFAS 36		Bank disclosures are more stringent than IFRS, with more oversight and detailed guideline for disclosure.	FALSE	H, L
Presentation	IAS 32	\FA\ \A\	Similar definitions for classification of assets, liabilites, and equity	Multiple differences	FALSE	L
Recognition & Measurement	IAS 39	SFAS 13, SFAS 33, SFAS 34		Multiple differences	FALSE	E, I, J
Presentation of Financial Statements	IAS 1	SFAS 1, SFAS 15	Similar		TRUE	В
Income Taxes	IAS 12	SFAS 22	Similarities in the way taxes are recognized and defered		TRUE	F
PPE	IAS 16	SFAS 1		Only addressed in SFAS 1 as an illustrationof a physical asset, but there are no guidelines on how to treat PPE	FALSE	В
Revenue	IAS 18	NEAN 37	similar guidelines on when revenue can be recognised		TRUE	N
Related Party Disclosures	IAS 24	SFAS 6	Similar		TRUE	С
Consolidated & Separate Financial Statements	IAS 27	SFAS 7		A number of additional disclosures exisit beyond what is required through IAS. These include the reporting of foreign currency risk, significant restrictions on transfer of funds from sub to parent	FALSE	D
Impairment of Assets	IAS 36	SFAS 35	The carying amount of individual assets are reduced in the same maner.	Difference on how goodwill is allocated between cash generating unites.	FALSE	K
Intangible Assets	IAS 38	SFAS 37	Mostly similar		TRUE	М



Chinese Taipei

Use	Reference	Source		Link
IAS / SFAS equivalence &	Reference	Convergence with International Financial		LITIK
roadmap	Δ	Reporting Standards: The Experience of Taiwan	http://www.ardf.org.tw/english/abuutus	/970711 ndf
loadinap		Conceptual Framework for Financial Accounting and		7570711.pai
CEAC 1	В	,	http://www.ardf.org.tw/english/Full%20	Toyt9/2020 2009/01 ndf
SFAS 1	В	Preparation of Financial Statements		
SFAS 6	С	Related Party Disclosures	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/06.pdf
SFAS 7	D	Consolidated Financial Statements	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/07.pdf
		Accounting by Debtors and Creditors for Troubled		
SFAS 13	E	Debt Restructuring	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/13.pdf
SFAS 22	F	Income Taxes	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/22.pdf
SFAS 25	G	Business Combinations	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/25.pdf
SFAS 28	Н	Disclosures in the Financial Statements of Banks	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/28.pdf
		Accounting for Transfers of Financial Assets and		
SFAS 33	I	Extinguishments of Liabilities	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/33.pdf
		Financial Instruments: Recognition and		
SFAS 34	J	Measurement	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/34.pdf
SFAS 35	K	Accounting for Asset Impairment	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/35.pdf
SFAS 36	L	Financial Instruments: Disclosure and Presentation	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/36.pdf
SFAS 37	М	Accounting for Intangible Assets	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/37.pdf
SFAS 32	N	Accounting for Revenue Recognition	http://www.ardf.org.tw/english/Full%20	Text%20ac-2008/32.pdf



Hong Kong

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Business Combinations	IFRS 3	HKFRS 3	Same except for application date exemptions.	Limited retrospective application for combinations agreed to prior to January 1, 2005	TRUE	A
FINANCIAL INSTRUMENTS						
Disclosures	IFRS 7	HKFRS 7	Same.		TRUE	A
Presentation	IAS 32	HKAS 32	Same except for additional transitional provision.	HKAS 32 has an additional transitional provision (para 97) allowing an entity not to present comparative information if such information is not available.	TRUE	A
Recognition & Measurement	IAS 39	HKAS 39	Same except for retrospective application requirements.	HKAS 39 does not permit retrospective application, whereas IAS 39 generally requires retrospective application.	TRUE	A
Presentation of Financial Statements	IAS 1	HKAS 1	Same except for minor textual differences.	Minor textual differences – explanation of legal requirements which do not give rise to differences.	TRUE	А
Income Taxes	IAS 12	HKAS 12	Same.		TRUE	A
PPE	IAS 16	HKAS 16	Same except for some minor exemptions.	Transitional exemptions for entities that carried their PPE at revalued amounts before September 30, 1995 and have not revalued since that date and for not-for-profit entities previously exempt under SSAP 17.	TRUE	A
Revenue	IAS 18	HKAS 18	Same		TRUE	A
Related Party Disclosures	IAS 24	HKAS 24	Same		TRUE	A
Consolidated & Separate Financial Statements	IAS 27	HKAS 27	Same except for minor textual differences.	Minor textual differences – explanation of legal requirements which do not give rise to differences.	TRUE	A
Impairment of Assets	IAS 36	HKAS 36	Same except for transitional differences.	Exemption for goodwill and other intangible assets acquired before January 1, 2005. Prospective accounting for other assets from January 1, 2005 forward.	TRUE	A
Intangible Assets	IAS 38	HKAS 38	Same except for transitional differences.	Exemption for intangible assets acquired before January 1, 2005. Prospective accounting for other intangible assets from January 1, 2005 forward.	TRUE	A

Use	Reference		
		Comparison between HK Financial Reporting Standards	
		and International Financial Reporting Standards as at 1	
Local rule, similarities,		January 2008, January 2008, Hong Kong Institute of	
differences, equivalent	A	CPAs	http://www.iasplus.com/hk/0801hkfrsifrs.pdf



Indonesia

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Business Combinations	IFRS 3	PSAK 22		Multiple differences.	FALSE	A,B
FINANCIAL INSTRUMENTS						<i>γ</i> -
Disclosures	IFRS 7	No equivalent		No equivalent	FALSE	A,B
Presentation	IAS 32	Multiple		Multiple differences.	FALSE	A,B
Recognition & Measurement	IAS 39	Multiple		Multiple differences.	FALSE	A,B
Presentation of Financial Statements	IAS 1	PSAK 1		Multiple differences.	FALSE	A,B
Income Taxes	IAS 12	PSAK 46		Multiple differences.	FALSE	A,B
PPE	IAS 16	PSAK 16		Multiple differences.	FALSE	A,B
Revenue	IAS 18	PSAK 23	In general, revenue recognition is similar to IFRS	Some industry specific guidance may result in measurement differences.	TRUE	A,B
Related Party Disclosures	IAS 24	PSAK 7	Many similarities in respect to disclosures in multiple areas.	Indonesian required disclosures are more limited than IFRS. Disclosure of category of compensation for key management personnel is not required by Indonesian GAAP. Some entities considered to be related by IFRS are not under Indonesian GAAP. Other differences.	FALSE	А,В
Consolidated & Separate Financial Statements	IAS 27	PSAK 4	Similarities exist in areas such as definition of a subsidiary or special entity, similar accounting policy requirements, similar reporting dates, and others.	Indonesian GAAP has no guidance for the presentation of assets held for sale, has no requirements for currently exercisable voting rights, provides different exlcusions from reporting requriements, and different requirements for accounting for investments in a subsidiary.	FALSE	A,B
Impairment of Assets	IAS 36	PSAK 48	Similar requirements for measurement and reversal of impairment losses.	Different guidelines for recoverable amount, no specific requirements for determining value in use, no specific requirements for foreign currency future cash flows, reversal of goodwill is unclear.	FALSE	A,B
Intangible Assets	IAS 38	PSAK 19	Similar definition and initial recognition. Some similarities in recognition criteria.	Multiple differences.	FALSE	A,B

Use	Reference	Source	Link
Local rule, similarities,			
differences, and equivalent	А	IFRS and Indonesian GAAP, A comparison, January 2007, Deloitte	http://www.iasplus.com/asia/0704ifrsindonesiangaap.pdf
Similarities, differences, and		Similarities and Differences; A comparison of IFRS, Indonesian GAAP and	
equivalent	В	<u>US GAAP</u> , January 2005, Price Waterhouse Coopers	Available for order online through PWC



Japan

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Business Combinations	IFRS 3			Differences: Significant differences exist as JGAAP requires Acquisitions to use the purchase method and Uniting of Interests to use the pooling of interest method. IFRS requires purchase method only. Goodwill is amortized over 20 years in JGAAP, IFRS requires goodwill to be periodically tested	FALSE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
FINANCIAL INSTRUMENTS						
Disclosure	IFRS 7			Differences: Segment Information reporting (by line of business and geography for JGAAP, by differences in risks and returns for IFRS usign org. structure)	FALSE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
Presentation	IAS 32				TRUE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
Recognition & Measurement	IAS 39			Differences: Significant differences exist in the treatment and reporting of financial instruments (IFRS requires fair value whereas JGAAP requires market value of assets averaged over the last 1 month period prior to the balance sheet period). Impairment	FALSE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
Presentation of Financial Statements	IAS 1		Mostly Similar	Differences: Disclosure of Discontinued Operations is required per IFRS. JGAAP has no special provisions in this regard Treatment of changes in accounting, material errors to reporting Differences: Segment Information reporting (by line of business and geographic segments)	FΔISF	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
Income Taxes	IAS 12		Similarities: mostly similar in treatment and concept	Differences: Offsetting of deferred tax assets and liabilities, presentation of deferred taxes as assets and liabilities	TRUE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry



Japan

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
PPE	IAS 16				FALSE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
Revenue Recognition	IAS 18			Differences: Income recognition for sale of goods and services, income recognition for construction contracts		Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
Related Party Disclosures	IAS 24				TRUE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
Consolidation: Consolidated & Separate Financial Statements	IAS 27		Similarities: Scope of consolidation, consolidation procedures, application of equity method, treatent of jointly controlled corporations	Differences: Treatment of special purpose corporations, standardization of accounting policies, presentation of minority interests	FALSE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
Impairment of Assets	IAS 36		Similarities: Impairment testing procedure, allocation of losses, criteria for recognition of impairment	Differences: Impairment testing of assets is performed on a group of assets per JGAAP, IFRS specifically defines CGUs for impairment testing.	TRUE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry
Intangible Assets	IAS 38		Similarities: Recognition of intangible assets	Differences: Amortization of Intangible Assets (IFRS requires that useful assets with undertain lives are not depreciated. JGAAP has no specific provisions for this)	TRUE	Report on Internationalization of Business Accounting in Japan - June 2004, Ministry of Economy Trade and Industry

	Reference	Link
П	Report on Internationalization of Business Accounting in Japan - June 2004,	www.iasplus.com/resource/0406ifrsjapangaap.pd
Ш	Ministry of Economy Trade and Industry	<u>f</u>



Korea

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?
Business Combinations	IFRS 3	No Equivalent		No Equivalent	FALSE
FINANCIAL INSTRUMENTS					
Disclosures	IFRS 7	No Equivalent		No Equivalent	FALSE
Presentation	IAS 32	No Equivalent		No Equivalent	FALSE
Recognition & Measurement	IAS 39	No Equivalent		No Equivalent	FALSE
Presentation of Financial Statements	IAS 1	SKAS 21 & SKAS 24		Multiple standards	FALSE
Income Taxes	IAS 12	SKAS 16		No English text available	FALSE
PPE	IAS 16	SKAS 5		Differences in depreciatoin and revaluation definitions and models	FALSE
Revenue	IAS 18	SKAS 4	Almost identical word for word	Provides detail beyond what is available in the IAS summary	TRUE
Related Party Disclosures	IAS 24	SKAS 20	Identical definitiions for related parties.	While the standard is identical for public companies, entities not listed may choose to omit information on management compensaton	TRUE
Consolidated & Separate Financial Statements	IAS 27	SKAS 25		Could not determine similarities for Non-Controling Interests and changes in Ownership	FALSE
Impairment of Assets	IAS 36			Does not treat Impairment of Assets as a unique category	FALSE
Intangible Assets	IAS 38	SKAS 3	Similar treatment of R&D	No definitions on Measurment after recognition. There is a hard cap of 20 years for usefull life	FALSE

Note: All listed companies will be required to prepare their annual financial statements under K-IFRSs beginning in 2011. Listed companies other than financial institutions will be permitted to do so beginning in 2009. Unlisted companies will be allowed to use K-IFRSs. The translation of IFRSs into Korean is a word-for-word translation of the IASB's standards, including all mandatory guidance, and interpretations. Translation of the non-mandatory guidance that accompanies several of the IFRSs is now under way and will be completed by the end of 2008.

	Reference	Link
Ī		http://www.samil.co.kr/about/ifrs/Korean%20Sims%20
L	Similarities and Differences - A comparison of IFRS and Korean GAAP, 2006 PricewaterhouseCoopers	<u>&%20Diffs%20extract.pdf</u>



Malaysia

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent ?	Reference
Business Combinations	IFRS 3	FRS2, FRS 3	Similar in most aspects.	Inconsistency in the effective date of transitional provision where entity applies FRS 3 for accounting business combinations, goodwill arising from business combination after Jan 2006, or any excess of the acquirer's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities. Also no equivalent standards issued by MASB for the revised IFRS 3.	TRUE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008
FINANCIAL INSTRUMENTS						
Disclosure	IFRS 7	FRS 132		FRS 132 is consistent with IAS 32 that is revised in 2004. Amendments on disclosures of financial instruments in IFRS 7 have not been ncorporated into FRS 132	TRUE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008
Presentation	IAS 32			No equivalent amendments issued by MASB for puttable financial instruments and oblications arising on liquidation	FALSE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008
Recognition & Measurement	IAS 39				TRUE	
Presentation of Financial Statements	IAS 1	FRS 101	Similar and consistent in all aspects for IAS 1 standards issued in 2003. No equivalent FRS standards issued for IAS 1 issued in 2007 or the amendments issued in 2008		TRUE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008
Income Taxes	IAS 12	FRS 112	FRS 112 is consistent with IAS 12		TRUE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008



Malaysia

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
PPE	IAS 16	FRS 116	Consistent with IAS 16 except for the entity that has recorded its PPE at revalued amounts upon implementation in 1998 of MASB Approved Accounting Standard IAS 16 for the first time, but had not adopted a policy of revaluation. Such an entity can carry its assets based on their previous revaluations.		TRUE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008
Revenue Recognition	IAS 18	FRS 118	Consistent with IAS 18 except that FRS 118 does not deal with sale of development units in property development activites		TRUE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008
Related Party Disclosures	IAS 24	FRS 124	FRS 124 is consistent with IAS 24 overall	Major Difference - No disclosure of transactions is required In financial statements of state-controlled entities of transactions with other state controlled entities	FALSE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008
Consolidation: Consolidated & Separate Financial Statements	IAS 27	FRS 127	FRS 127 is mostly consistent with IAS 27	One difference is that for a parent company to be exempted from presenting consoidated financial statements, it requires, among others, that the ultimate or any intermediate parent to be incorporatd in Malaysia.	FALSE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008
Impairment of Assets	IAS 36	FRS 136	FRS 136 is consistent with IAS 36		TRUE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008
Intangible Assets	IAS 38	FRS 138	FRS 138 is consistent with IAS 38		TRUE	Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFRS - Pricewaterhousecoopers, January 2008

Reference	Link
	http://www.pwc.com/extweb/p
Financial Reporting Standards (FRS) in Malaysia - How do they compare with IFF	RS - wcpublications.nsf/docid/2520BC
Pricewaterhousecoopers, January 2008	EB0771B23BCA257391002E268F



Mexico

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Business Combinations	IFRS 3			No specific method is used, but the Purchase method is generaly used. Negative Goodwill is recorded as a differed credit and is amortized over 5 years	FALSE	Page 24
FINANCIAL INSTRUMENTS						
Disclosure	IFRS 7			Multiple differences	FALSE	Multiple
Presentation	IAS 32		Similar terms and conditions for disclosures and interest rate risk.	Entities are not required to disclose information about credit risk.	FALSE	Page 45
Recognition & Measurement	IAS 39			Multiple differences	FALSE	multiple
Presentation of	IAS 1				TRUE	No Information, but typicaly
Financial Statements	1/1/2 1				TROL	similar across economies
Lacons Tours	IAS 12		Similar Requirements: Income Tax Expense recognition, deferred taxes	The previously recognized balances should be subtracted and the resulting difference should be applied to a line in stockholders' equity. The effects are permitted to be distributed in the stock holders' equity accounts that resulted in the differences	FALSE	Dana 27
Income Taxes PPE	IAS 16		For Cost basis, PPE is recorded at acquisiton cost.	For Cost basis, Depreciation is not mentioned for Mexico. Rather, the value of PPE is restated to current value using the National Consumer Price Index.	FALSE	Page 27 Page 121
Revenue Recognition	IAS 18			Multiple differences	FALSE	Mulitple
Related Party Disclosures	IAS 24		In both cases, the nature of the relationship must be disclosed	IAS asks for the type of transaction as well as elements of the transaction required to understand the financial statement	FALSE	Page 74
Consolidation: Consolidated & Separate Financial	IAS 27		An entity should consolidate all of its subsidiaries in which it has	Differences over the ownership required to have "significant" influence on an aquired company. IAS allows investments in a subsidiary to be carried at cost or revalued	FALSE	-
Statements			control.	in the parents separate finacial statements		Page 38
Impairment of Assets	IAS 36			Only addresses reduction in value of assets.	FALSE	Page 69
	IAS 38			Intangible assets should be recoreded initially at cost, and then restated at the balance sheet date, using the National	FALSE	
Intangible Assets				CPI.		Page 115

Use	Reference	Source	Link
		Significant Differences in GAAP in Canada, Chile, Mexico and the United States: an analysis of accounting	The Canadian Institute of Chartered
		pronouncements as of January 2001	Accountants, Toronto, Ontario



New Zealand

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?
Business Combinations	IFRS 3	NZ IFRS 3		No significant Differences	TRUE
FINANCIAL					
INSTRUMENTS					
Disclosure	IFRS 7	NZ IFRS 7		NZ IFRS 7: Although NZ IFRS 7 supersedes NZ IAS 30, financial institutions which fall within the scope of NZ IAS 30 must continue to comply with NZ IAS 30 and the disclosure requirements in NZ IAS 32.	TRUE
Presentation	IAS 32	NZ IAS 32		No significant Differences	TRUE
Recognition & Measurement	IAS 39	NZ IAS 39		No significant Differences	TRUE
Presentation of Financial Statements	IAS 1	NZ IAS 1	Requires some additional disclosures, including auditor's remuneration and donations made. Additional reporting requirements when prospective financial information is provided. No departure from financial reporting standards is allowed		TRUE
Income Taxes	IAS 12	NZ IAS 12	NZ IAS 12: Requires disclosure of movements in the imputation credit account and dividend withholding payments account of the parent and credits available to shareholders of the parent at balance sheet date.		TRUE
PPE	IAS 16	NZ IAS 16	NZ IAS 16: Under the revaluation model, most valuations must be conducted either by an independent valuer or subject to the review of an independent valuer.		TRUE
Revenue Recognition	IAS 18	NZ IAS 18		No significant Differences	TRUE
Related Party Disclosures	IAS 24	NZ IAS 24		No significant Differences	TRUE
Consolidation: Consolidated & Separate Financial Statements	IAS 27	NZ IAS 27		No significant Differences	TRUE
Impairment of Assets	IAS 36	NZ IAS 36		No significant Differences	TRUE
Intangible Assets	IAS 38	NZ IAS 38		No significant Differences	TRUE

	Reference	Link
Γ		http://www.pwc.com/extweb/pwcpublications.nsf/docid/8A2
l	AIFRS,NZ IFRS and IFRS similar but not the same - PricewaterhouseCoopers March 2006	8C613829B68FECA257177000C1993
	NZ IFRS and NZ GAAP - A Comparison - Deloitte, April 2005	



Peru

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?
Business Combinations	IFRS 3	IFRS 3 (*)			TRUE
FINANCIAL INSTRUMENTS					
Disclosure	IFRS 7	IFRS 7		In Peru must be used since 2009, instead of 2007 as required by the standard.	TRUE
Presentation	IAS 32	IAS 32			TRUE
Recognition & Measurement	IAS 39	IAS 39 (*)			TRUE
Presentation of Financial Statements	IAS 1	IAS 1			TRUE
Income Taxes	IAS 12	IAS 12			TRUE
PPE	IAS 16	IAS 16 (*)	The same, however, in Peru until 2004. The Comapanies adjust is financial statements for inflation, which is not in accordance with IFRS	See comment in key similarities	FALSE
Revenue Recognition	IAS 18	IAS 18			TRUE
Related Party Disclosures	IAS 24	IAS 24			TRUE
Consolidation: Consolidated & Separate Financial Statements	IAS 27	IAS 27			TRUE
Impairment of Assets	IAS 36	IAS 36 (*)			TRUE
Intangible Assets	IAS 38	IAS 38 (*)			TRUE



Philippines

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent ?	Notes: Results of compliance audit
Business Combinations	IFRS 3	SFAS 22	Identical to IFRS without modifications		TRUE	
FINANCIAL INSTRUMENTS						
Disclosures	IFRS 7	PFRS 7	Identical to IFRS without modifications		TRUE	
Presentation	IAS 32	PAS 32	Identical to IFRS without modifications		TRUE	Incomplete disclosures on Loans. The redemption feature of the preferred shares is not clear as to wether it is redeemable at the option of the copany or the holder.
Recognition & Measurement	IAS 39	PAS 39	Identical to IFRS without modifications	certain commodity derivative contracts of mining companies shall be 'grandfathered' and exempted from the fair value requirements of PAS 39	TRUE	Incomplete disclosures on Finanacial Assets and Liabilities.
Presentation of Financial Statements	IAS 1	SFAS 1	Identical to IFRS without modifications		TRUE	No statement of change in equity. Notes to Financial Statements are not presented in a systematic manner. No discussion on company going concern issues despite material deficits.
Income Taxes	IAS 12	SFAS 52	Identical to IFRS without modifications		TRUE	Incomplete disclosures on Income Tax
PPE	IAS 16	SFAS 16	Identical to IFRS without modifications		TRUE	Incomplete disclosures on PP&E. No explanatory note on "Fixed Asset Clearing Accounts"
Revenue	IAS 18	SFAS 18	Identical to IFRS without modifications		TRUE	There is incomplete discolsure on specific Revenue Recognition policy.
Related Party Disclosures	IAS 24	SFAS 24	Identical to IFRS without modifications		TRUE	Incomplete disclosures on Related Party Transactions. i.e., details & volume of transaction, interest rate, key management personnel compensation
Consolidated & Separate Financial Statements	IAS 27	SFAS 27	Identical to IFRS without modifications		TRUE	
Impairment of Assets	IAS 36	SFAS 36	Identical to IFRS without modifications		TRUE	There is no discussion on Impairment of Assets
Intangible Assets	IAS 38	SFAS 38	Identical to IFRS without modifications		TRUE	

Source: <u>Summary of findings from 2006 audited financial statements</u>

http://www.iasplus.com/country/philippi.htm

Note: The Philippines has adopted all IFRSs for 2005 without modification. These Philippine equivalents to IFRSs apply to all entities with public accountability. That includes those whose securities are listed in a public market or are in process of listing; all financial institutions including banks, insurance companies, security brokers, pension funds, mutual funds, and investment banking entities; public utilities; and other economically significant entities, defined as total assets in 2004 of at least 250 million pesos (US\$5 million) or

liabilities of at least 150 million (US\$3 million). The auditor's report will refer to "conformity with Philippine Financial Reporting Standards".

Russia

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Business Combinations	IFRS 3	amended, Fed Law 129 FZ, 21 November 1996, Fed Law 208 FZ, 26 Dec 1995 as amended, PBU 4/99, PBU 19/02, Min Fin Order 44h, 20	Cost of acquisition is the amount of cash and other considerations given. Cost of restructuring an entity is a post acquisition expense	Negative goodwill is credited to income statement No specific guidance for contingent considerations Acquireds assets and liabilities are measured at book value.	FALSE	IFRS Compared to Russian GAAP - KPMG LLP 2005
FINANCIAL INSTRUMENTS						
Disclosure	IFRS 7	Fed Law 39 FZ, 22 April 1996 as amended, Fed Law 208 ZF, 26 December 1995 as amended, PBU 51/01, PBU 19/02, Min Fin Order 94h, 31 October 2000 as amended		Derevatives are not recognized on the balance sheet except to the extent of any consideration given or received	FALSE	IFRS Compared to Russian GAAP - KPMG LLP 2005
Presentation	IAS 32	Fed Law 39 FZ, 22 April 1996 as amended, Fed Law 208 ZF, 26 December 1995 as amended, PBU 51/01, PBU 19/02, Min Fin Order 94h, 31 October 2000 as amended		Financial instruments are classified as Marketable and Non Marketable, whereas IFRS classifies them as Loans and Receivables, Held to Maturity Assets, Fair Value through Profit and Loss, or Available for Sale categories.	FALSE	IFRS Compared to Russian GAAP - KPMG LLP 2005
Recognition & Measurement		Fed Law 39 FZ, 22 April 1996 as amended, Fed Law 208 ZF, 26 December 1995 as amended, PBU 51/01, PBU 19/02, Min Fin Order 94h, 31 October 2000 as amended	amortized cost, however, the cost is amortized on a straight line than on	Derevatives are not recognized on the balance sheet Financial Investments are classified as marketable and non- marketable and only marketable investments are measured at market value. Financial instruments are derecognized only when disposed No detailed guidance on the measurement of impairment losses No guidance on hedge accounting Embedded derevatives are not seperated from host contract	FALSE	IFRS Compared to Russian GAAP - KPMG LLP 2005



Russia

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Presentation of Financial Statements	IAS 1	PBU 4/99; min fin order 34h, 29 July 1998 as amended, Min Fin Order 67h, 22 July 2003 as amended, Min Fin Order 112, 30 Dec 1996 as amended		No statement of recognized income or expense is required Consolidated statements sometimes do not include a statement of cash flows Statement of changes in equity and cash flow statement are presented as part of the notes to the balance sheet and income statement Specific criteria that mandate consolidated financial statements are different The financial statements must be presented in Russian		IFRS Compared to Russian GAAP - KPMG LLP 2005
Income Taxes	IAS 12	PBU 18/02, Min	All income taxes are recognized on the income statement	The total income tax expense is the sum of current tax expense (or recovery) plus all the change in the deferred tax liabilities and assets during the period. Current tax represents only the amount of payable income tax in respect of the taxable profit for a period and is measured on rates that are enacted Differences exist in the presentation of current tax assets and liabilities on the balance sheet Differences exist on the treatment of taxes withheld on dividends received	FALSE	IFRS Compared to Russian GAAP - KPMG LLP 2005
PPE	IAS 16	PBU 6/01, PBU 8/01, PBU 13/02, Min Fin Order 91h, 13 October 2003	Fixed assets are depreciated over their life time Fixed assets comprising of components with different useful lives are accounted seperately Revaluation of assets and asset groups is permitted on a regular basis Revaluation surpluses are recognized in equity Gain or loss on disposal of assets is similar	Fixed assets are recognized at cost, but cost is based on the nominal price stated in the contract Costs of future dismantling and restoration are not capitalized Depreciation of assets is suspended in cases where asset is idle or is being restored No requirement to review depreciation method No requirement to review asset's useful life Subsequent expenditure is capitalized only when it will give rise to future economic benefits in excess of orginally assessed Fixed assets may be revalued using entity developed indices that do not necessarily result in a fair value	FALSE	IFRS Compared to Russian GAAP - KPMG LLP 2005
Revenue Recognition	IAS 18	PBU 2/94, PBU 9/99, PBU 10/99	Revenue is recognized if future economic benefits will flow into entity amount collected in agency relationships are not considered as revenues Royalites are recognized on an accrual basis No specific guidance on software revenues Revenues can still be recognized out of a non cash transaction	Revenue from sale of goods is recognized when legal title passes Construction contracts can use the completed contract	TRUE	IFRS Compared to Russian GAAP - KPMG LLP 2005



Russia

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Related Party Disclosures	IAS 24	22 March 1991 as amended,	Related party relationships include relationships of control and influence No special measurement and recognition requirements for related party transactions Disclosure of related party relationships between parents and subsidiaries is required even if they have no transactions	are made for each party Only joint-stock companies are required to disclose related party		IFRS Compared to Russian GAAP - KPMG LLP 2005
Consolidation: Consolidated & Separate Financial Statements	IAS 27	4/99, Min Fin	Venture capitalists have no special exemption from consolidation Difference between reporting dates of parent and subsidiary cannot be more than 3 months	Consolidation is based on control as yielded by legal power and not voting rights. Voting rights are not take into consideration SPEs that benefit a sponsor are not consolidated Subsidiaries are not consolidated if they are acquired with the intent of disposing them Minority interests are classified seperately Intragroup transactions are eliminated in full Minority interests are computed based on the carrying amounts in the subsidiary		IFRS Compared to Russian GAAP - KPMG LLP 2005
Impairment of Assets	IAS 36	PBU 5/01, PBU 10/99, PBU 19/02, Min Fin Order 34h, 29 July 1998 as amended		Only limited impairment requirements in respect of non-marketable financial investments, trade receivables, inventories, and assets associated with discounted ops. Detailed impairment testing is not required. Any decline in value of assets can be recognized voluntarily Goodwill and intangible assets are not tested for impairment	FALSE	IFRS Compared to Russian GAAP - KPMG LLP 2005
Intangible Assets	IAS 38		Intangible Assets are recognized at initial costs Intangibles are generally amortized over their useful lives, differences exist in R&D capitalization, and treatment of goodwill	There is a perspective list of items that can be recognized as intangibles Cost of a seperately acquired intangible is the the cost stated in contract Cost of intangible acquired through acquisition is based on the financial statements of subsidiary Coodwill is the difference between cost of acquisition and the	FALSE	IFRS Compared to Russian GAAP - KPMG LLP 2005

Reference	Link
	http://www.pwc.com/extweb/pwcpublications.nsf/docid/8A28C6138
AIFRS,NZ IFRS and IFRS similar but not the same - PricewaterhouseCoopers March 2006	29B68FECA257177000C1993



Singapore

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?
Business Combinations	IFRS 3	SFRS 32	FRS 103 is consistent with IFRS in all material aspects, except for their effective dates. FRS 103 is effective for business combinations occuring after July 2004 whilst IFRS 3 is effective for combinations after March 2004		TRUE
FINANCIAL					
INSTRUMENTS Disclosure	IFRS 7	SFRS 7	SFRS 7 is consistent with IFRS 7 in all material aspects		TRUE
Presentation	IAS 32	SFRS 32	SFRS 32 is consistent with IAS 32 in all material except for accounting for IPO costs as prescribed under RAP 9. Certain costs allowed to be deducted under RAP 9 may be required to be included in the income statement under IAS 32		TRUE
Recognition & Measurement	IAS 39	SFRS 39	SFRS 39 is consistent based on the 2005 and 2006 revisions that address recognition of financial assets and liabilities, cash flow hedge accounting or forecasting intra group transactions, fair value of options, financial guarantee contracts		TRUE
Presentation of Financial Statements	IAS 1	SFRS 1	SFRS 1 is consistent with IAS in all material	Amendments by IAS till 2007 have been adopted by Singapore	TRUE
Income Taxes	IAS 12	SFRS 12		Differences exist in relation to accounting for unremitted foreign income. Under RAP 8, no deferred tax is accounted for temporary difference arising from foreign income not yet remitted to Singapore if: (a) the entity is able to control the timing of the reversal of termporary difference; (b) it is probable that the temporary difference will not reverse in the future Under IFRS deferrred tax is to be accounted for temporary difference arising from such unremitted foreign income.	TRUE
PPE	IAS 16	SFRS 16	SFRS 16 is consistent with IAS 16 in all material aspects except an exemption that was specified	Exemption is applicable to enterprises that performed revaluation before 1 Jan 1984 or a performed a one off revaluation between Jan 1984 and Dec. 1996	TRUE
Revenue Recognition	IAS 18	SFRS 18	SFRS 18 is similar to IFRS 18 in all aspects except for revenue recognition of pre-sold unfinished properties	Under FRS 18, equity interest on uncompleted properties are considered to have passed to the buyers of properties upon entering into the sale of purchase agreements. Accordingly revenues an costs on such properties are accounted on a percentage completion basis	FALSE
Related Party Disclosures	IAS 24	SFRS 24	SFRS 24 is consistent with IAS 24 in all material aspects		TRUE



Singapore

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?
				SFRS 27 requires that the ultimate holding company or	
				any intermediate parent that seeks exemption from	
			SFRS 27 is consistent with IAS 27 in all material	consolidation to produce consolidated financial	
	IAS 27	SFRS 27	aspects except in one of the conditions for	statements for public use and these statements need not	FALSE
Consolidation:			exemption from consolidation	comply with any specific accounting framework	
Consolidated & Separate				IAS 27 requires the consolidated financial statements to	
Financial Statements				comply with the IFRS framwork	
				IAS 36 is applicable to goodwill and intangible assets	
	1AC 26 CEDS 26	SFRS 36 is consistent with IAS 36 in all aspects	acquired in business combinations for which the date of	TRUE	
	IAS 36 SFRS 36		except for the transitional dates	agreement is on or after March 31 2004, FRS is	IKUE
Impairment of Assets				applicable for all assets acquired after 1 July 2004	
	IAS 38	SFRS 38	SFRS 38 is consistent with IAS 38 in all aspects	Similar differences as described in SFRS 36 apply here	TRUE
Intangible Assets	00		except for the transitional dates	The second of th	

	Reference	Link				
		http://www.pwc.com/extweb/pwcpublications.nsf/doci				
Comparison between Singapore Financial R	eporting Standards and International Financial Reporting	d/8F377DC7B3F54E3FCA257203000F4EA2/\$file/3-				
Standards - Pricewat	erhouseCoopers, September 2005	<u>Comparison.pdf</u>				
		http://www.iasplus.com/dttpubs/07singaporechanges.p				
Changes to Financial Reporting Framework in Singapore - Deloitte Assurance & Advisory, October 2007 df						
Comparison between Singapore Financial Reporting Standards and International Financial Reporting Standards - PricewaterhouseCoopers, September 2005						
Changes to Financial Reporting Framework in Singapore - Deloitte Assurance & Advisory, October 2007						



Thailand

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?
Business Combinations	IFRS 3	TAS 43	Based on the reision announced prior to March 2007		TRUE
FINANCIAL INSTRUMENTS					
Disclosures	IFRS 7				
Presentation	IAS 32	TAS 48		Option to measure the liability component either as a residual amount after seperating the equity component, or by using a relative-fair-value method.	FALSE
Recognition & Measurement	IAS 39	TAS 40	Initial measurement of financial instrument is at fair value	Does not address the option to designate any financial asset or financial liability to be measured at the fair value through profit and loss. Allows the reclassification of financial instruments into or out of the trading category	FALSE
Presentation of Financial Statements	IAS 1	TAS 35	Same, however non-public entities can alect not to adopt TAS 25 (<i>Cash Flow Statements</i>)		TRUE
Income Taxes	IAS 12	TAS 56		Differed taxes are not currently addressed	FALSE
PPE	IAS 16	TAS 32		Does not address Unit of measure for depreciation or resudual value	FALSE
Revenue	IAS 18	TAS 37	Genraly compliant, but may be difficult to implement in practice as there are no nuances for various industries. Both allow the accrual method for sale recognition	In the case of real estate, precent completion, installment or the accrual method can be used	FALSE
Related Party Disclosures	IAS 24	TAS 47	Differences related to related party definition and additional required disclosures are not directly addressed in TAS, but the Thai SEC has other requirments that could negate the differences in pratice	Does not address compensation of key management	FALSE
Consolidated & Separate Financial Statements	IAS 27	TAS 44	Equivalent to IAS, but optional for non-public entities		TRUE
Impairment of Assets	IAS 36	TAS 36		IAS requires assets to be tested for impairment anually irrespective of any indication of impairment exists. TAS requires the recoverable amount to be measured whenever there is an indication that the asset may be impaired	FALSE
Intangible Assets	IAS 38	TAS 51			TRUE

NOTE: ALL STANDARDS ARE EXPECTED TO BE COMPLIANT ONCE THEY ARE ISSUED IN THE 2008-2011 TIMEFRAME



United States

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Business Combinations	IFRS 3			Significant differences exist in identifying negative goodwill, IPR&D costs that are expensed per USGAAP and capitalized per IFRS. Identifiable assets maintained at fair value per IFRS and not per GAAP	FALSE	Ernst and Young: US GAAP vs IFRS, The Basics (Pg: 7)
FINANCIAL INSTRUMENTS						
Disclosure	IFRS 7		Mostly similar: terms and conditions disclosed, only specific qualitative risks related to the nature of company's operations is disclosed, certain quantitative risk related disclosures are required, fair value of each class of financial asset and liability is to be disclosed	Significant Differences: Required Qualitative	FALSE	KPMG: IFRS Compared to USGAAP: An Overview (Pg: 140)
Presentation	IAS 32		Similar Requirements for IFRS and USGAAP for SEC Registrants	Non-SEC Registrants do not have presentation requirements	TRUE	KPMG: IFRS Compared to USGAAP: An Overview (Pg: 140)
Recognition & Measurement	IAS 39					
Presentation of Financial Statements	IAS 1		Similar Requirements		TRUE	Deloitte: IFRS and USGAAP - A Pocket Comparison (Pg. 8)
Income Taxes	IAS 12		Similar Requirements: Income Tax Expense recognition, deferred taxes	Some Differences: Deferred taxes for differences in tax bases between jurisdictions, exchange gains or losses	FALSE	KPMG: IFRS Compared to USGAAP: An Overview (Pg: 93)
PPE	IAS 16		Similar Requirements: Recognition of costs, depreciation	Some Differences: Review of estimates of useful life and residual value, review of method of depreciation, revaluation of PPE at fair value if it can be measured reliably	FALSE	KPMG: IFRS Compared to USGAAP: An Overview (Pg: 54)
Revenue Recognition	IAS 18		Similar Requirements	Differences: USGAAP has more detailed instructions and extensive guidance on revenue recognition in construction contracts, service contracts, software revenue recognition, sales of real estate,	TRUE	KPMG: IFRS Compared to USGAAP: An Overview (Pg: 102)



United States

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?	Reference
Consolidation: Consolidated & Separate Financial Statements	IAS 27		Similar Requirements: Consolidation based on a controlling financial interest model, subsidiary consolidation, treatment of losses in a subsidiary	Differences: Definition and treatment of SPEs, VIEs, IFRS does not have the concept of a QSPE that allows transfer of financial assets, IFRS requires uniform accounting policies throughout group, treatment of put options held by minority interests, accoun		KPMG: IFRS Compared to USGAAP: An Overview (Pg: 24)
Impairment of Assets	IAS 36		Similar Requirements: Impairment of tangible and intangible assets, impairment testing, goodwill measurement	Differences: Goodwill allocation (to Cash generating units per IFRS and Reporting units per USGAAP), calculation of impairment loss.	TRUE	KPMG: IFRS Compared to USGAAP: An Overview (Pg: 83)
Intangible Assets	IAS 38		Similar Requirements: Definition of intangibles, recognition of acquired goodwill and intangibles, intangibles with finite useful lives	Differences: Revaluation of intangible assets, capitalization of internal development expenditure, internal research expenditure	TRUE	KPMG: IFRS Compared to USGAAP: An Overview (Pg: 56)

Reference	Source	Link	
	KPMG: IFRS Compared to		http://www.kpmg.com.cn/en/virtual library/Au dit/IFRScompare 2007.pdf



Vietnam

	IFRS Rule	Local Rule	Key Similarities	Key Differences	Equivalent?
				In Viet Nam, there is no definition of consolidated accounts nor any detailed rules	
	IFRS 3	VAS 11		regarding the recognition of investments in other enterprises, except for joint	FALSE
Business Combinations				ventures (refer IAS 31).	
FINANCIAL INSTRUMENTS					
Disclosures	IFRS 7			Many differences	FALSE
Presentation	IAS 32			There is no corresponding standard or system.	FALSE
Decemition 9				The content of this IAS is almost nonexistent under the Vietnamese Accounting	
Recognition & Measurement	IAS 39			System except that the VAS allows for a devaluation of short-term investments if the	FALSE
ivieasurement				market value at the end of the year is lessthan the original purchase cost.	
Presentation of Financial	IAS 1	VAS 21		• Substance over form and materiality are not mentioned as governing a company's	FALSE
Statements	IA3 I	VA3 21		accounting policies.	FALSE
				• Inventory includes tools and implements (i.e., assets which are too small to qualify	
				as fixed assets), materials and equipment for basic construction (this includes tools,	
Inventory	AIS 2	VAS 2		etc.) and goods on consignment, which includes the value of labor and services	FALSE
				which have been rendered to customers in accordance with orders or contracts, but	
				which the customer has not yet accepted for settlement.	
Income Taxes	IAS 12	VAS 17		Viet Nam does not account for deferred tax.	FALSE
PPE	IAS 16			Multiple differences.	FALSE
Revenue	IAS 18	VAS 14	Multiple similarities.		TRUE
Related Party Disclosures	IAS 24	VAS 26		There is no provision for this Standard.	FALSE
Consolidated & Separate	IAS 27	VAS 25			FALSE
Financial Statements	IA3 27	VA3 23		Mention is not made of consolidating subsidiaries' financial statements.	FALSE
Impairment of Assets	IAS 36			There is no provision for this Standard.	FASLE
				The initial recognition and valuation of intangible assets is similar to IAS. However	
Intangible Assets	IAS 38	VAS 04		the Vietnamese System does not allow for revaluations or review of amortization	FALSE
ilitaligible Assets	IA3 30	VA3 04		periods. Research and Development costs are capitalized and amortized over their	FALSE
				economic life in accordance with MOF's decision 166 of 31 December 1999.	

	Reference	Link
Г	Vietnam Accounting Standards (VAS) vs Current Accounting Regulations ,	
	2003Vietnam Auditing Company - Deloitte Touche Tohmatsu	http://www.iasplus.com/resource/vas.pdf



MBA Research Team

- Andrew Wilhelms, Team Lead, joins the ABAC research team with 5 years experience in the organizational and leadership development industry. Before joining Marshall, Andrew worked for Linkage, an organizational development consulting company that specializes in leadership development. Specifically, he served as the Program Director for Linkage's Global Institute for Leadership Development (GILD). His expertise and experience is in the areas of leadership development, succession planning, high-potential accelerated development, and talent management.
- Carlos Chait joins the ABAC research team with extensive experience in labor and contract law with a private business litigation firm. He advised several Fortune 100 companies in their defense against unpaid compensation and unlawful termination claims, while earning his Juris Doctor. Mr. Chait completed his Bachelor of Arts in International Trade Relations, with a concentration on WTO dispute settlement procedures, at the University of California, Berkeley. He plans to practice as an attorney in the field of corporate law. Originally from Chile, Mr. Chait is also fluent in Spanish.
- **Kenneth Chalmers** joins the ABAC research team with three years of work experience in the banking and entertainment industries. Most recently, Mr. Chalmers worked at an international logistics firm redesigning global supply chain's for multinational firms. Mr. Chalmers earned his Bachelor of Arts in Economics at the University of California Los Angeles, with a minor in Political Science. He is also fluent in French.
- **Kim Centeno** joins the ABAC research team with five years experience in marketing strategy & communications in a wide range of industries. Prior to coming to business school, she served as the Brand Manager for Lucky Me! Instant Noodles, the fastest selling product in the Philippines. She was also a marketing consultant non-profit organizations including Gawad Kalinga Foundation and Unicef. Originally from the Philippines, Ms. Centeno earned her Bachelor of Science in Management Engineering from the Ateneo de Manila University.
- Sameer Karnik joins the ABAC research team with four years experience in the pharmaceutical industry, where he researched and developed next generation cancer therapies and negotiated them through the FDAs drug approval process. Most recently, he analyzed transfer pricing practices between countries for transfer of intangible goods within corporations. Mr. Karnik earned his Master of Science in Biomedical Engineering from Stony Brook University.



MBA Research Team

- Karen Miao joins the ABAC research team with seven years of work experience including two years of service as a U.S. Peace Corps Volunteer and five years of operation consulting experience in the financial services industry for Charles Schwab. For the Peace Corps, she served as a Secondary Teacher Trainer in English and Environmental Education in the Philippines. At Charles Schwab, she managed projects overseeing tax remediation for international clients and established a change management and training program used in four client-service locations. Ms. Miao completed her Bachelor of Arts in Education with a focus on English and Psychology at the University of Michigan.
- Kristin Piccirillo joins the ABAC research team with 3 years experience in internet retail and online marketing at both
 entrepreneurial start-ups and global leaders like Nike, Inc. Ms. Piccirillo has traveled extensively in China, Japan, New
 Zealand and Australia. Ms. Piccirillo completed her Bachelor of Science in Systems Engineering at Washington
 University in St. Louis.
- Pavan Tallapragada joins the ABAC research team with experience in project management and finance. He is
 specializing in finance and strategy during his MBA and worked in economic and valuation services for a big 4
 accounting firm as an intern. Pavan has a bachelors degrees in civil engineering from the Indian Institute of
 Technology, Madras and a masters degree from The University of Cincinnati. Prior to business school, Pavan worked
 in the engineering and construction sector in project controls on multi-million dollar construction projects across the
 United States.
- Julian Timmerman joins the ABAC research team with 5 years experience in aerospace engineering and technical sales. As an engineer, he specialized in start-up programs in aerospace and wind energy. As a technical sales engineer, Mr. Timmerman traveled extensively to China setting up manufacturing facilities. Prior to joining Business School, he traveled for a year around South and South-East Asia. Mr. Timmerman completed his Bachelor of Science in Engineering Science at the University of Maryland, College Park.
- **Jennifer (Jie) Yan** joins the ABAC research team with three years experience in marketing and business development for Singapore Tourism Board in both China and Singapore. She also advised DFS(Mid-Pacific), LVMH (Moet Hennessy Louis Vuitton) on China market development. In addition, she is conducting strategic and tactical intelligence and analysis with Warner Bros. Worldwide Anti-Piracy for America, Asia Pacific and Europe. Originally from China, Ms. Yan completed her Bachelor of Arts in Chinese Literature and Business from Fudan University and fluent in Mandarin.

