The methodologies of drafting the ad-valorem percentage criterion

Stefano Inama
7th Technical Working Group Meeting on Rules of Origin, 30 – 31 July 2018
Value added:

...To determine origin by this method, one must consider the extent of the manufacturing or processing undergone in a country, by reference to the value thereby added to the goods...

Value of non originating materials

...The value added may also be calculated by reference to the materials or components of foreign or undetermined origin used in manufacturing or producing the goods. The goods retain origin in a specific country only if the materials or components do not exceed a specified percentage of the value of the finished product...

...This method may be applied either in combination with the two other methods...change of tariffs classification or specific working, or by a general rule prescribing a uniform percentage, without reference to a list of individual products.
Advantages according to Kyoto Convention 1974

- Precision and simplicity
- Value of constituent materials imported or of undetermined origin can be established from available commercial records or documents
- Where the value of the exported goods is based on the ex-works price or the price at exportation, both prices are readily ascertained and can be supported by commercial documents
Disadvantages according to Kyoto Convention 1974

• Difficulties especially in borderline cases in which a slight difference above or below the prescribed percentage causes a product to meet, or fail to meet, the origin requirements

• Origin attributed depends largely on fluctuating world market prices for raw materials and currency fluctuations
  → may appreciably distort RoO application

• Elements as cost of manufacture or total cost of products used, may be taken as the basis for calculating value added, but are often difficult to establish and may have a different makeup/interpretation in export and/or import country
  -> Disputes may arise as to whether certain factors, particularly overheads, are to be allocated to cost of manufacture or, for example, to selling, distribution, or other costs.
Where the substantial transformation criterion is expressed in terms of the ad valorem percentage rule, the values to be taken into consideration should be:

for the materials imported, the dutiable value at importation or, in the case of materials of undetermined origin, the first ascertainable price paid for them in the territory of the country in which manufacture took place; and

for the goods produced, either the ex-works price or the price at exportation, according to the provisions of national legislation.
Article 9, paragraph 2 (iii) of the ARO, provides for the Technical Committee to consider and draft rules of origin recurring to other criteria that the CTC:

“When, upon completion of the work under subparagraph (ii) (i.e. the work based on the change of tariff heading criterion) for each product sector or individual product category ... the exclusive use of the HS nomenclature does not allow for the expression of substantial transformation.

The Technical Committee:
— shall consider and elaborate upon, on the basis of the criterion of substantial transformation, the use, in a supplementary or exclusive manner, of other requirements, including ad valorem percentages and/or manufacturing or processing operations, when developing rules of origin for particular products or a product sector;
Lessons Learned the evolution of Kyoto conventions and WTO Agreement

• The ad valorem percentage criterion is NOT the preferred methodology to draft RoO.
• It is mostly used in conjunction with other methodologies especially in electronics and machinery.
• When used, the preferred method is for the non-originating materials, the customs value (as numerator) and for the goods produced the ex works price.

\[
\text{Max} \quad \frac{\text{Value of not originating materials}}{\text{ex – works price}} \times 100
\]
Methodologies of calculation of Ad Valorem Percentage
Value added calculation by addition (VA)

\[ \frac{\text{VOM} + \text{direct cost of processing}}{\text{Ex - factory price}} \times 100 \]

- **VOM** = value of origin originating materials
- **Direct of processing** = sum of the cost of local labour and direct processing costs
- **Ex factory Price** = price of the product when leaving the factory including profit

- The most classic example of such calculation of Value addition (35%) is the US GSP and AGOA and COMESA (ex-works cost as denominator)
Value added calculation by subtraction of the value of non-originating materials

Build-down Method:
Based on the Value of Non-Originating Materials (VAVNOM)

\[
\frac{\text{Value of the Good} - \text{V NOM}}{\text{Value of the Good}} \times 100
\]

• **Value of the good** = transaction value of the good excluding any costs incurred in the international shipment

• **Value of a material** = transaction value of the material at the time of importation
Value added calculation by Value of originating materials (VOM)

**Build-up Method:**
Based on the Value of Originating Materials (VOM)

\[
\frac{\text{Value of Originating Materials}}{\text{Value of the Good}} \times 100
\]

- **Value of the good** = transaction value of the good excluding any costs incurred in the international shipment
- **Value of a material** = transaction value of the material at the time of importation
Maximum allowance of non-originating materials

\[
\frac{VNOM}{\text{Ex Works Price}} \times 100
\]

- **VNMO** = customs value of the non-originating materials
- **Ex works price** = price paid for the product ex works to the manufacturer in the European Union or (Partner) where undertaking the last working or processing is carried out, provided the price includes the value of all the materials used, minus any internal taxes paid which are, or may be, repaid when the product obtained is exported
## Methodologies of African RECs
### Ad Valorem Percentage Criterion Calculation

<table>
<thead>
<tr>
<th>Method of Calculation</th>
<th>EAC</th>
<th>SADC</th>
<th>COMESA 1</th>
<th>COMESA 2</th>
<th>ECOWAS</th>
<th>ECCAS 1</th>
<th>ECCAS 2</th>
<th>TFTA 1</th>
<th>TFTA 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex-works price</td>
<td>Ex-works price</td>
<td>Value of materials used in the production of the goods</td>
<td>Ex-Factory Cost</td>
<td>Ex-factory cost</td>
<td>Value of materials used in the production of the goods</td>
<td>Ex-factory cost</td>
<td>Ex works price</td>
<td>Ex works price</td>
<td></td>
</tr>
<tr>
<td>Method of calculation</td>
<td>Max. VNOM</td>
<td>Max. VNOM</td>
<td>Max. VNOM</td>
<td>Value added by subtraction VAVNOM</td>
<td>Value added by subtraction VAVNOM</td>
<td>Max. VNOM</td>
<td>Value added by subtraction VAVNOM</td>
<td>Max. VNOM</td>
<td>Min. VOM</td>
</tr>
</tbody>
</table>
# Methodologies of African RECs

## Ad Valorem Percentage Criterion Calculation

<table>
<thead>
<tr>
<th>Method of calculation</th>
<th>EAC</th>
<th>SADC</th>
<th>COMESA 1</th>
<th>COMESA 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Value of non-originating materials (VNOM)</td>
<td>VNOM</td>
<td>VNOM</td>
<td>Ex-factory cost of the finished product – CIF Value of non-originating materials</td>
</tr>
<tr>
<td>Denominator</td>
<td>Ex-works price</td>
<td>Ex-works price</td>
<td>Value of materials used in the production of the goods</td>
<td>Ex-Factory Cost</td>
</tr>
<tr>
<td>Method of calculation</td>
<td>Max. VNOM</td>
<td>Max. VNOM</td>
<td>Max. VNOM</td>
<td>Value added by subtraction VAVNOM</td>
</tr>
</tbody>
</table>
## Methodologies of African RECs
### Ad Valorem Percentage Criterion Calculation

<table>
<thead>
<tr>
<th>Methodologies of African RECs</th>
<th>Method of calculation</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECOWAS</td>
<td>Ex-factory cost</td>
<td>Ex-factory price of the finished product before tax – CIF value of non-originating materials</td>
<td>Value of materials used in the production of the goods</td>
<td>Ex-factory cost</td>
</tr>
<tr>
<td>ECCAS 1</td>
<td>VNOM</td>
<td>VOM</td>
<td>Ex works price</td>
<td>Ex works price</td>
</tr>
<tr>
<td>ECCAS 2</td>
<td>Cost Price Ex-works before tax – CIF value of non-originating materials</td>
<td>VNOM</td>
<td>VOM</td>
<td></td>
</tr>
<tr>
<td>TFTA 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFTA 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Value added by subtraction**

- VAVNOM
- Max. V NOM
- Value added by subtraction VAVNOM
- Max. V NOM
- Min. VOM
# Methodologies of EU EPA
## Ad Valorem Percentage Criterion Calculation

<table>
<thead>
<tr>
<th>Methodology</th>
<th>EU EPA (CARIFORUM, ESA, SADC, Pacific)</th>
<th>EU MAR (EAC)</th>
<th>EU EPA (Cameroon)</th>
<th>EU MAR (ECOWAS)</th>
<th>EBA</th>
<th>US-GSP</th>
<th>AGOA</th>
<th>Japan-GSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>VNOM</td>
<td>VNOM</td>
<td>VNOM</td>
<td>VNOM</td>
<td>VNOM</td>
<td>Value of originating materials plus direct processing cost</td>
<td>Value of originating materials plus direct processing cost</td>
<td>VONM</td>
</tr>
<tr>
<td>Denominator</td>
<td>Ex-Works Price</td>
<td>Ex-Works Price</td>
<td>Ex-Works Price</td>
<td>Ex-Works Price</td>
<td>Ex-Works Price</td>
<td>Appraised value of the article at the time of entry into the United States</td>
<td>Appraised value of the article at the time of entry into the United States</td>
<td>FOB price</td>
</tr>
<tr>
<td>Method of calculation</td>
<td>Max. VNOM</td>
<td>Max. VNOM</td>
<td>Max. VNOM</td>
<td>Max. VNOM</td>
<td>Max. VNOM</td>
<td>Value added by addition</td>
<td>Value added by addition</td>
<td>Max. VNOM</td>
</tr>
</tbody>
</table>
Some initial considerations...
AU RECs are mostly using a value of materials methodology

• It clearly emerges from the tables that most of African RECs namely EAC, SADC, COMESA 2, ECOWAS are utilizing a calculation methodology based on value of materials

• EPAs with EU methodology is using value of materials

• In some cases the wording of the RoO contained in some RECs refers to “value added”

• However at a closer look to the legal text it emerges that the actual calculation methodology is a value added obtained by a subtraction of value of non originating material

• This methodology of value of materials based on transactional value is the most commonly used and is the result of the evolution of the Ad valorem percentage criterion
Sample Calculation under Value Added by addition (VA) and Value Added by substraction of the value of Non-Originating Materials (VAVNOM)

2-sides of the same coin

<table>
<thead>
<tr>
<th></th>
<th>VAVNOM Build-down Method</th>
<th>Value Added Calculation by addition (VA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Non-Originating Materials</td>
<td>40 USD</td>
<td>40 USD</td>
</tr>
<tr>
<td>(b) Originating Material</td>
<td>10 USD</td>
<td>10 USD</td>
</tr>
<tr>
<td>(c) Cost of processing and manufacturing</td>
<td>50 USD</td>
<td>50 USD</td>
</tr>
<tr>
<td>(d) Ex-Works Cost</td>
<td>92 USD</td>
<td>92 USD</td>
</tr>
<tr>
<td>(e) Profit</td>
<td>8 USD</td>
<td>8 USD</td>
</tr>
<tr>
<td>(f) Ex-Works Price</td>
<td>100 USD</td>
<td>100 USD</td>
</tr>
</tbody>
</table>

Calculation

\[
\frac{f - a}{f} = \frac{60}{100} \times 100\% = 60\%
\]

\[
\frac{b + c}{f} = \frac{60}{100} \times 100\% = 60\%
\]

Value of the Good − VNOM

\[
\frac{\text{Value of the Good} − VNOM}{\text{Value of the Good}} \times 100
\]

\[
\frac{\text{VOM} + \text{direct cost of processing}}{\text{Ex} − \text{factory price}} \times 100
\]
# Evolution of the NAFTA percentage-based RoO

<table>
<thead>
<tr>
<th>Regional Value Content</th>
<th>NAFTA</th>
<th>CHL-USA</th>
<th>CAFTA</th>
<th>USA-SIN</th>
<th>USA-AUS</th>
<th>USA-KOR</th>
<th>TPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of PSRO</td>
<td>1,125</td>
<td>1,043</td>
<td>1,017</td>
<td>2,974</td>
<td>965</td>
<td>758</td>
<td>1,245</td>
</tr>
<tr>
<td>Net cost</td>
<td>323</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Transaction</td>
<td>248</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Build-up</td>
<td>0</td>
<td>164</td>
<td>146</td>
<td>239</td>
<td>148</td>
<td>147</td>
<td>398</td>
</tr>
<tr>
<td>Build-down</td>
<td>0</td>
<td>157</td>
<td>147</td>
<td>213</td>
<td>144</td>
<td>152</td>
<td>457</td>
</tr>
<tr>
<td>Numerator</td>
<td>Korea-US</td>
<td>Korea-EU</td>
<td>Korea-ASEAN</td>
<td>Korea-Singapore</td>
<td>Korea-Australia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtraction of VNOM from Adjusted Value (AV) of good</td>
<td>Subtraction of the VNOM from FOB</td>
<td>Subtraction of VNOM from the Customs Value (CV)</td>
<td>Subtraction of VNOM from AV of the good</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator</td>
<td>AV</td>
<td>Ex-works price</td>
<td>FOB Price</td>
<td>CV</td>
<td>AV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method of calculation</td>
<td>Regional Value Content (RVC)</td>
<td>Max. VNOM</td>
<td>RVC</td>
<td>RVC</td>
<td>RVC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSRO</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of percentage</td>
<td>CH 25-97: 35%-60%</td>
<td>CH 1-24: 30%-50%</td>
<td>Min. 40%-45%</td>
<td>Min. 45%</td>
<td>Min. 40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consideration of freight and insurance</td>
<td>Yes</td>
<td>Not Specified</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Ad Valorem Percentage Criterion Calculation

**Methodologies of Korean FTAs**

<table>
<thead>
<tr>
<th></th>
<th>Korea-India CEPA</th>
<th>Korea-Chile</th>
<th>Korea-Peru</th>
<th>Korea-Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator</strong></td>
<td>Subtraction of VNOM from the FOB value</td>
<td>Subtraction of VNOM from AV of the good.</td>
<td>Subtraction of VNOM from the FOB value</td>
<td></td>
</tr>
<tr>
<td><strong>Denominator</strong></td>
<td>FOB value</td>
<td>AV</td>
<td>FOB value</td>
<td>Ex-works price</td>
</tr>
<tr>
<td><strong>Method of calculation</strong></td>
<td>RVC</td>
<td>RVC</td>
<td>RVC</td>
<td>Max. VNOM</td>
</tr>
<tr>
<td><strong>PSRO</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Level of percentage</strong></td>
<td>Min. 35%</td>
<td>Min. 45%</td>
<td>Min. 40%-50%</td>
<td>CH 1-24: 30%-50% CH 25-97: 15%-50%</td>
</tr>
<tr>
<td><strong>Consideration of freight and insurance</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Not Specified</td>
</tr>
<tr>
<td><strong>Cumulation</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
A rather unique Methodology: Maximum allowance of non-originating material over the total cost of materials used

\[
\frac{\text{Value of non originating material}}{\text{Total cost of material used in the production of the good}} \times 100
\]

- Rather unique use in African RECs namely COMESA, and ECCAS
- Total cost of material used in the production of the **good**: excludes any cost of labour and local content in terms of processing costs
Will an Iphone be originating in China?

- Rules of origin reflecting value chains: assembly of parts

Retail price: $500.00 (Profit margin: 64%)

iPhone: $179.00

Source: Xing and Detert, 2010
Example of maximum allowance of non-originating material over the total cost of materials used

• As such this calculation is extremely restrictive
  -> requires a minimum value of originating materials over the total value of the materials used in the production of the good

• For example: an iPhone or iPad assembled in the AfCFTA would not be able to comply
  ➢ Majority of materials used in the production of these products would not be originating
  ➢ But the process of assembling an iPhone/iPad from non originating material may be undoubtedly a substantial transformation
Differences in the denominator

- The majority of preferential RoO are using the ex works-price or the ex-factory price.
- Some RECs are using the ex factory cost or similar definition aiming at excluding profit.
- The difference in denominator affects the calculation
- In a value added calculation by addition the ex-factory cost inflates the value added
- There is hardly any precedent outside these RECs using the ex factory cost.
- The use of ex-factory cost is not in line with the principle of transaction value contained in the WTO customs Valuation agreement
Issue of Cost of Freight and Insurance in Value of Non-Originating

Example:

- A manufacturer based in Lilongwe, Malawi is manufacturing steel frames using non-originating steel tubes.
- The **applicable RoO is a 70% allowance of non-originating inputs**.
- The manufacturer purchases steel tubes from China to manufacture the steel frames for **10,000 USD**.
- The cost of insurance and freight of the container of steel tubes from China to Lilongwe is an average of **1,250 USD for ocean freight** and **3,600 USD for land transport**.
- After manufacturing the steel tubes into steel frames by cuttings, soldering, galvanizing, coating the manufacturer sell the frames sold to a South Africa importer at an ex-works price of **16,000 USD**.
## Issue of Cost of Freight and Insurance in Value of Non-Originating and Originating Materials (ctd)

<table>
<thead>
<tr>
<th></th>
<th>Without Freight and Insurance</th>
<th>With Freight and Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Foreign Materials</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>(b) Ocean Freight</td>
<td>1250</td>
<td>1250</td>
</tr>
<tr>
<td>(c) Inland Freight</td>
<td>3600</td>
<td>3600</td>
</tr>
<tr>
<td>(d) Ex-Works Price</td>
<td>16,000</td>
<td>16,000</td>
</tr>
<tr>
<td>(e) Value Added Calculation</td>
<td>[\frac{a}{d} = \frac{10000}{16000} \times 100% = 62.5% &lt; 70%]</td>
<td>[\frac{a + b + c}{d} = \frac{10000 + 3600 + 1250}{16000} \times 100% = 92.8% &gt; 70%]</td>
</tr>
</tbody>
</table>
Some preliminary conclusions...
Method Based on Value of Non-Originating Materials

\[ \text{AfCFTA} = \frac{\text{VNOM}}{\text{EW}} \times 100 \]

- \text{AfCFTA} is the value content, expressed as a percentage
- \text{EW} is the ex-works price as already defined in definition (m) of article 1 of Draft Appendix 1 of AfCFTA
- \text{VNOM} is the value of non-originating materials that are acquired and used by the producer in the production of the good; does not include the value of a material that is self-produced.

The definition of self produced material or absorption principle may need to be included in the definition of calculation methodology.
Further Definition of the denominator: Ex-works price

- The ex-works price in AfCFTA could be defined as follows:

  "ex-works price" means the price paid for the product ex-works to the manufacturer in AfCFTA states in whose undertaking the last working or processing is carried out determined under articles 1 through 8, article 15 and the corresponding interpretive notes of the Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade (the Customs Valuation Agreement).

- Alternatively AU members states may maintain the current definition of ex works price contained in the draft appendix and avoid any further complex definition of the ex-works price.
Further definition of Numerator: Value of non-originating material

It is proposed to exclude the freight and insurance from the value of non-originating materials:

(a) The following expenses are deducted from the value of the non-originating material:

i. the costs of freight, insurance, packing and all other costs incurred in transporting the material to the location of the producer;

ii. duties, taxes and customs brokerage fees on the material paid in the territory of one or more AU member states other than duties or taxes that are waived, refunded, refundable or otherwise recoverable, including credit against duty or tax paid or payable;

iii. the cost of waste and spoilage resulting from the use of the material in the production of the good, less the value of renewable scrap or by products;

iv. the cost of originating materials used in the production of the non-originating material;
Thank You for your kind attention

Stefano Inama, Chief
Technical Cooperation and Enhanced Integrated Framework
Division for Africa, Least Developed Countries and Special Programmes (ALDC)
United Nations Conference on Trade and Development

Stefano.inama@unctad.org