

EYIEL *Monographs*

Studies in European and International Economic Law 4

Sophia Müller

# The Use of Alternative Benchmarks in Anti-Subsidy Law

A Study on the WTO, the EU and China



Springer

# European Yearbook of International Economic Law

## **EYIEL Monographs - Studies in European and International Economic Law**

### **Volume 4**

#### **Series editors**

Marc Bungenberg, Saarbrücken, Germany

Christoph Herrmann, Passau, Germany

Markus Krajewski, Erlangen, Germany

Jörg Philipp Terhechte, Lüneburg, Germany

Andreas R. Ziegler, Lausanne, Switzerland

EYIEL Monographs is a subseries of the European Yearbook of International Economic Law (EYIEL). It contains scholarly works in the fields of European and international economic law, in particular WTO law, international investment law, international monetary law, law of regional economic integration, external trade law of the EU and EU internal market law. The series does not include edited volumes. EYIEL Monographs are peer-reviewed by the series editors and external reviewers.

More information about this series at <http://www.springer.com/series/15744>

Sophia Müller

# The Use of Alternative Benchmarks in Anti-Subsidy Law

A Study on the WTO, the EU and China

 Springer

Sophia Müller  
Frankfurt, Germany

ISSN 2364-8392                      ISSN 2364-8406 (electronic)  
European Yearbook of International Economic Law  
EYIEL Monographs - Studies in European and International Economic Law  
ISBN 978-3-319-77612-5              ISBN 978-3-319-77613-2 (eBook)  
<https://doi.org/10.1007/978-3-319-77613-2>

Library of Congress Control Number: 2018939159

© Springer International Publishing AG, part of Springer Nature 2018

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Printed on acid-free paper

This Springer imprint is published by the registered company Springer International Publishing AG part of Springer Nature.

The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

# Preface

This study is a truly global product of research. Its completion has sent me well around the world—from Passau to Beijing, Shanghai, and finally Brussels. Each stay has left its traces on both work and authoress and has shaped the study’s content in its very unique way. The months and years spent on the completion of my thesis have been challenging academically and personally—but at the same time so diverse and enriching that I would not like to have missed one single moment.

I would like to deeply thank my supervisor Professor Christoph Herrmann, who already in the year 2014, when China’s WTO accession provisions had not yet been that heavily discussed in the scientific community, showed immediate curiosity concerning my somewhat “exotic” research topic and with his constant support and encouragement enabled me to conclude this study in a way I could never have imagined.

I also would like to give my thanks to Professor Marc Bungenberg for his second assessment of my dissertation and, especially, his vivid interest in my research from very early on.

My time in China would never have been possible without Dean Meng Wan and Professor Yanxia Yao from Beijing Foreign Studies University, whom I would like to thank again for their warm welcome and hospitality during my time in Beijing.

I would also like to thank Professor Zhijie Yuan of Beijing Normal University and the students of his German Law class, whom I had the pleasure to teach and whose dedication in learning was both deeply impressive and inspiring.

The teams of law firms GvW Graf von Westphalen in Shanghai around Mr. Patrick Heid and of Cleary Gottlieb Steen & Hamilton in Brussels around Dr. Till Müller-Ibold also deserve my thanks for providing me with exciting insights in trade remedies law and China-related legal practice.

Some special thanks go to Dr. Xueping Liu and Ms. Fanglei Wang for making me increasingly familiar with the charms of Chinese language—and the culinary trials of Chinese cuisine.

Last, I would like to deeply thank my family and friends, who shared both worries and joys of the working process—and the final smile when everything was done.

Frankfurt, Germany  
January 2018

Sophia Müller

# Contents

<b>1</b>	<b>Introduction</b> . . . . .	1
1.1	Research Objective . . . . .	4
1.2	Object and Scope of the Study . . . . .	5
1.3	Methodical Approach and Course of the Study . . . . .	5
<b>2</b>	<b>The Significance of the Use of Alternative Benchmark Methodologies in the Process of WTO Anti-Subsidy Investigations</b> . . . . .	7
2.1	The WTO as Institution of International Trade Regulation . . . . .	7
2.1.1	The GATT 1947 as Predecessor of the WTO . . . . .	8
2.1.2	The Foundation of the WTO . . . . .	9
2.1.3	The WTO in 2018 . . . . .	10
2.2	The Case for the Regulation of Subsidisation in International Trade Law . . . . .	12
2.2.1	Free Trade as Guarantor of Maximum National Welfare . . . . .	12
2.2.2	Subsidisation as Trade Distortion . . . . .	14
2.2.3	The Necessity of Regulating Subsidisation . . . . .	15
2.3	WTO Regulation of Subsidies . . . . .	16
2.3.1	The Theoretical Concept of Subsidisation in WTO Law . . . . .	16
2.3.2	The WTO Legal Framework for Subsidies Regulation . . . . .	17
2.3.3	The Substantive Prerequisites for Imposing a Countervailing Duty . . . . .	19
2.3.3.1	Countervailable Subsidy . . . . .	19
2.3.3.2	Injury . . . . .	21
2.3.3.3	Causation . . . . .	21
2.3.4	The Course of Procedure of an Anti-Subsidy Investigation . . . . .	22
2.3.4.1	Initiation . . . . .	22
2.3.4.2	Investigation . . . . .	23
2.3.4.3	Imposition of the Countervailing Duty . . . . .	23
2.4	The Calculation of the Amount of Benefit . . . . .	24

2.4.1	The Benefit as Countervailable Part of the Governmental Financial Contribution . . . . .	24
2.4.2	Benefit Calculation in MES . . . . .	26
2.4.2.1	Article 14 ASCM as Framework for the Benefit Calculation . . . . .	26
2.4.2.2	The Market Benchmark as Foundation of the Benefit Calculation . . . . .	28
2.4.2.3	The Determination of the Relevant Market . . . . .	29
2.4.2.4	The Market Conception in WTO Anti-Subsidy Law . . . . .	30
2.4.3	Benefit Calculation in NMES . . . . .	39
2.4.3.1	The Necessity of a Meaningful Market Benchmark . . . . .	39
2.4.3.2	The Alternative Benchmark Methodologies . . . . .	40
2.5	Chapter Summary . . . . .	41
<b>3</b>	<b>The WTO Framework for the Use of Alternative Benchmark Methodologies in Anti-Subsidy Investigations Against China . . . . .</b>	<b>43</b>
3.1	The General Alternative Benchmark Regime in WTO Anti-Subsidy Law . . . . .	43
3.1.1	Excursus: Alternative Benchmark Regimes Outside the ASCM . . . . .	44
3.1.1.1	The Alternative Benchmark Regime in Article VI:1 GATT 1947 . . . . .	44
3.1.1.2	The Alternative Benchmark Regime in Article 15 Subsidies Code . . . . .	46
3.1.1.3	The Alternative Benchmark Regime in the ADA . . . . .	48
3.1.1.4	Conclusion . . . . .	49
3.1.2	The Alternative Benchmark Regime of Article 14 ASCM . . . . .	50
3.1.2.1	The Alternative Benchmark Regime of Article 14(d) ASCM . . . . .	50
3.1.2.2	The Alternative Benchmark Regime of Article 14(b) ASCM . . . . .	62
3.1.2.3	The Alternative Benchmark Regimes Under Article 14(a) and (c) ASCM . . . . .	68
3.1.2.4	The Legal Impact of the Appellate Body's Alternative Benchmark Regime on Article 14 ASCM . . . . .	69
3.1.3	Conclusion . . . . .	71
3.2	The China-Specific Alternative Benchmark Regime for Anti-Subsidy Investigations . . . . .	72
3.2.1	The Background of the Adoption of China-Specific WTO Rules . . . . .	72

3.2.1.1	The WTO Accession Process of China . . . . .	72
3.2.1.2	The Legal Basis for the Integration of a Country-Specific Legal Regime into WTO Law . . . . .	73
3.2.1.3	The Rationale of the China-Specific Provisions . . . . .	75
3.2.2	The China-Specific Alternative Benchmark Regime for NMES in Section 15(b) CAP . . . . .	76
3.2.2.1	The Permissibility of Using Alternative Benchmarks . . . . .	77
3.2.2.2	The Prerequisites for the Use of Alternative Benchmarks . . . . .	77
3.2.2.3	The Selection of the Alternative Benchmark . . . . .	84
3.2.3	The Integration of the China-Specific Alternative Benchmark Regime into General WTO Anti-Subsidy Law . . . . .	86
3.2.3.1	The Rank of Accession Protocols in WTO Law . . . . .	87
3.2.3.2	The Implications of the Chapeau for China’s Alternative Benchmark Regime . . . . .	88
3.2.4	Conclusion . . . . .	94
3.3	Chapter Summary . . . . .	94
<b>4</b>	<b>The Current EU Approach in the Application of Alternative Benchmarks in Anti-Subsidy Investigations Against China . . . . .</b>	<b>97</b>
4.1	The Use of Alternative Benchmark Methodologies in EU Anti-Subsidy Cases Against China: A Case Study . . . . .	97
4.1.1	The Alternative Benchmark Regime of the EU . . . . .	98
4.1.1.1	Article 6 BASR . . . . .	98
4.1.1.2	Guidelines of the Commission (98/C 394/04) . . . . .	100
4.1.2	The Use of Alternative Benchmarks in EU Anti-Subsidy Investigations Against China . . . . .	101
4.1.2.1	The EU Anti-Subsidy Investigation Procedure . . . . .	102
4.1.2.2	An Overview on EU Anti-Subsidy Cases Against China . . . . .	103
4.1.2.3	Case Study on the Use of Alternative Benchmarks in NMES . . . . .	105
4.1.3	Conclusion . . . . .	118
4.2	WTO Law Conformity of the EU’s Alternative Benchmark Approach in Anti-Subsidy Investigations Against China . . . . .	119
4.2.1	Conformity with Article 14 ASCM . . . . .	119
4.2.1.1	Conformity As Such . . . . .	119
4.2.1.2	Conformity As Applied . . . . .	121
4.2.2	Conformity with Section 15(b) CAP . . . . .	129
4.2.2.1	Conformity As Such . . . . .	129
4.2.2.2	Conformity As Applied . . . . .	130

4.2.3	Overall WTO Law Conformity of the EU Approach on the Use of Alternative Benchmark Methodologies in Anti-Subsidy Investigations Against China . . . . .	132
4.2.3.1	Conformity As Such . . . . .	132
4.2.3.2	Conformity As Applied . . . . .	132
4.2.4	Conclusion . . . . .	134
4.3	Prospective Developments of the EU Approach on the Use of Alternative Benchmark Methodologies in Anti-Subsidy Investigations . . . . .	136
4.3.1	Prospects on the Basis of the WTO Framework in the Current 2011 State of Appellate Body Interpretation . . . . .	136
4.3.1.1	General Changes . . . . .	136
4.3.1.2	China-Specific Changes . . . . .	137
4.3.2	Prospects upon Possible Developments at WTO Level . . . . .	137
4.3.2.1	General Changes . . . . .	137
4.3.2.2	China-Specific Changes . . . . .	138
4.3.3	Conclusion . . . . .	138
4.4	Chapter Summary . . . . .	138
<b>5</b>	<b>The Need for Reforming the Alternative Benchmark Regime in WTO Anti-Subsidy Law . . . . .</b>	<b>141</b>
5.1	The Use of Alternative Benchmark Methodologies in NMES: A Global Perspective . . . . .	141
5.1.1	The Existence of Country-Specific Anti-Subsidy Rules in the WTO Legal Hemisphere . . . . .	141
5.1.2	Alternative Benchmark Regimes for NMES in the Anti-Subsidy Law of Other Countries . . . . .	142
5.1.2.1	US Anti-Subsidy Law . . . . .	143
5.1.2.2	Canadian Anti-Subsidy Law . . . . .	144
5.1.2.3	Australian Anti-Subsidy Law . . . . .	144
5.1.3	The Role of the Use of Alternative Benchmarks in NMES in Anti-Subsidy Law in WTO Dispute Settlement . . . . .	145
5.2	Justification of Current Developments in WTO Anti-Subsidy Law and Practice Concerning the Use of Alternative Benchmarks . . . . .	146
5.2.1	Concepts for the Justification of the Exercise of Authority in the WTO . . . . .	147
5.2.1.1	The Concepts of Legality and Legitimacy . . . . .	147
5.2.1.2	The Significance of Legality and Legitimacy for the WTO . . . . .	148
5.2.1.3	The Parameters for the Assessment of Legality and Legitimacy in the WTO . . . . .	150
5.2.2	Justification of the Introduction of Country-Specific Accession Commitments in Anti-Subsidy Law . . . . .	151
5.2.2.1	Legality of Country-Specific Accession Commitments in Anti-Subsidy Law . . . . .	151

5.2.2.2	Legitimacy of the Country-Specific Accession Commitments in Anti-Subsidy Law . . . . .	168
5.2.2.3	Conclusion . . . . .	171
5.2.3	Justification of the Establishment of a General Alternative Benchmark Regime for NMES in Anti-Subsidy Law . . . . .	172
5.2.3.1	Legality of the Establishment of a General Alternative Benchmark Regime for NMES in Anti-Subsidy Law . . . . .	172
5.2.3.2	Legitimacy of the Establishment of a General Alternative Benchmark Regime for NMES in Anti-Subsidy Law . . . . .	178
5.3	Chapter Summary . . . . .	181
<b>6</b>	<b>Rethinking the Alternative Benchmark Regime in WTO Anti-Subsidy Law . . . . .</b>	<b>183</b>
6.1	Substantive Issues of Reform . . . . .	183
6.1.1	The Problematic Issues of the Present Alternative Benchmark Approach . . . . .	184
6.1.1.1	Problematic Issues in the Determination of Market Distortion . . . . .	184
6.1.1.2	Problematic Issues in the Selection of the Alternative Benchmark . . . . .	185
6.1.2	The Objectives of the Reform Proposal . . . . .	186
6.1.3	Test Criteria for Legal Reform . . . . .	187
6.1.4	Substantive Legal Reform Proposals . . . . .	187
6.1.4.1	Reforming the Determination of Market Distortion . . . . .	187
6.1.4.2	Reforming the Selection of the Alternative Benchmark . . . . .	203
6.2	Implementation of the Reform Proposal at WTO Level . . . . .	212
6.2.1	Necessity of Amendment as Suitable Means of Implementation . . . . .	212
6.2.2	Risks of an Amendment . . . . .	213
6.2.3	Realisability of an Amendment . . . . .	214
6.2.3.1	The Status Quo of the Current Doha Development Agenda . . . . .	214
6.2.3.2	The Doha Round’s Reform Proposals on the Use of Alternative Benchmark Methodologies (2008) . . . . .	215
6.2.3.3	Substantive Overlap of the 2008 Draft Proposals and the Study’s Reform Proposals . . . . .	217
6.2.3.4	Realisability of the Study’s Reform Proposals . . . . .	219
6.2.4	Conclusion . . . . .	219
6.3	Draft Reform Proposal for an Alternative Benchmark Regime for NMES in WTO Anti-Subsidy Law . . . . .	220
6.4	Chapter Summary . . . . .	222

- 7 Summary** . . . . . 223
  - 7.1 Major Findings of the Study . . . . . 223
    - 7.1.1 China’s Applicable WTO Anti-Subsidy Law . . . . . 223
    - 7.1.2 WTO Law Compatibility As Such and As Applied of Current EU Anti-Subsidy Law and Practice . . . . . 224
    - 7.1.3 Legality and Legitimacy of the Introduction of Country-Specific Accession Commitments in Anti-Subsidy Law . . . . . 225
    - 7.1.4 Legality and Legitimacy of the Introduction of an Alternative Benchmark Regime for NMES in General WTO Anti-Subsidy Law by Means of Appellate Body Reports . . . . . 226
  - 7.2 A Reform Proposal Concerning the Alternative Benchmark Regime for NMES in Anti-Subsidy Law . . . . . 226
  - 7.3 Future Prospects and Developments . . . . . 227
  
- Table of Treaties and Legal Instruments (as of 1 January 2018)** . . . . . 229
  
- Tables of Cases (as of 1 January 2018)** . . . . . 233
  
- Tables of Investigations (as of 1 January 2018)** . . . . . 239
  
- Bibliography** . . . . . 243
  
- Index** . . . . . 253

# Abbreviations

ADA	Anti-Dumping Agreement
ASCM	Agreement of Subsidies and Countervailing Measures
BASR	Basic Anti-Subsidy Regulation
CAP	Protocol of Accession of the People's Republic of China
CIRR	Commercial Interest Reference Rate
CRS	Cold-rolled steel
DSR	Dispute Settlement Reports
DSU	Dispute Settlement Understanding
EC	European Community
ECJ	European Court of Justice
e.g.	<i>exempli gratia</i> (for example)
EU	European Union
F.2d.	Federal Reporter, second series
Fed. Reg.	Federal Register
FIT	Feed-in tariff
GA	General Assembly
GATT	General Agreement on Tariffs and Trade
GC	General Court
GDP	Gross domestic product
HRS	Hot-rolled steel
i.e.	<i>id est</i> (that is to say)
ICITO	International Committee for the International Trade Organization
IMF	International Monetary Fund
ITO	International Trade Organization
LUR	Land-use right
MES	Market economy situation
MFN	Most-favoured nation
NME	Non-market economy
NMES	Non-market economy situation
No.	Number
OECD	Organisation for Economic Development and Cooperation

OJ	Official Journal of the EU
p.	Page
para.	Paragraph
Pub. L.	Public Law
RSC	Revised Statutes of Canada
SCM Agreement	Agreement of Subsidies and Countervailing Measures
SIMA	Special Import Measures Act
SLI	Select Legislative Instrument
SOCB	State-owned commercial bank
SOE	State-owned enterprise
Stat.	United States Statutes at Large
TBT	Technical Barriers to Trade
TEU	Treaty of the European Union
TiSA	Trade in Services Agreement
TPP	Trans-Pacific Partnership
TTIP	Transatlantic Trade and Investment Partnership
UN	United Nations
UNTS	United Nations Treaty Series
USC	United States Code
VCLT	Vienna Convention on the Law of Treaties
WTO	World Trade Organization

# Chapter 1

## Introduction



“*Silence is a source of great strength.*”<sup>1</sup> In principle, this is also true for the area of law. But the way this strength unfolds itself is a double-edged sword. On the one hand, silence in legal provisions ensures flexibility, so that the provisions readily adapt to new developments and circumstances. On the other hand, the ampler the amount of silence in a provision, the easier it can be subject to arbitrariness and misuse. This dilemma is particularly acute in anti-subsidy law. Here, an imprecise legal framework, additionally afflicted with lacunae, makes the anti-subsidy remedy an easy means for WTO members to implement protectionist interests.<sup>2</sup>

Especially Article 14 ASCM,<sup>3</sup> the provision that regulates the calculation of the amount of benefit conferred to a producer through the subsidy, which ultimately determines the final amount of countervailing duty, is deemed “*one of the most important*”,<sup>4</sup> but also one of the “*least developed provisions*”<sup>5</sup> of the ASCM.

Basically, the amount of benefit is determined by assessing the financial contribution received by the producer in comparison to the market conditions otherwise prevailing in the respective country of origin. Put differently, the prices or costs for the producer, which are affected through the subsidy, are compared to respective in-country market prices. As long as the existing in-country market prices that are used for the benefit calculation are undistorted, the resulting margin reflects the actual benefit conferred.

---

<sup>1</sup>Laozi, Daodejing, at chapter 26, for the original Chinese text (静为躁君, *jing wei zao jun*, literally translating as “the still is the ruler of the temperamental”) see <http://ctext.org/dao-de-jing/ens> (last visited 1 January 2018).

<sup>2</sup>Zhao/Wang, Policy Research Working Paper No. 4560 (2008), 1, at 36.

<sup>3</sup>Agreement on Subsidies and Countervailing Measures, LT/UR/A-1A/9, 15 April 1994, 1869 UNTS 14.

<sup>4</sup>Durling in Wolfrum et al. (eds.), at para. 24.

<sup>5</sup>Durling in Wolfrum et al. (eds.), at para. 24.

But how to proceed with the calculation in cases where there is no or no reliable in-country market price turns out problematic. Which are the circumstances that render an existing in-country price unreliable? What type of market is the base that is actually being referred to for assessing unreliability? May surrogates be used instead? As indicated, dealing with NMES in the course of benefit calculation poses numerous questions.

Answers are scarce as yet. The Appellate Body has addressed the use of alternative benchmarks in the course of benefit calculation in NMES majorly in *US – Softwood Lumber IV*<sup>6</sup> and *US – Anti-Dumping and Countervailing Duties (China)*.<sup>7</sup>

Based on Article 14 ASCM, the tribunal has derived prerequisites which have to be fulfilled in order to reject an existing in-country price and to resort to an alternative benchmark methodology to create a surrogate market price for the purpose of benefit calculation. The prerequisites have, however, remained fragmentary and imprecise to date. The existing legal framework only provides little guidance for the process of reasoning. Consequently, it equips investigating authorities with a large amount of discretion in the use of alternative benchmark methodologies, i.e. in the determination of a surrogate market price that resembles the market price that would prevail in the country under investigation to the closest possible extent if not for the distortive government influence.

In NMES, benefit calculation in anti-subsidy investigations enters the grey area, where the discretion of the investigating authority ends and protectionism begins. As the alternative price tends to be higher than the price that actually exists or would exist on the in-country market, the amount of the benefit conferred and, ultimately, the amount of countervailing duty, is inflated.<sup>8</sup> This can result in excess duties, e.g. an amount of countervailing duty of over 600%, which was the case for several producers in US investigation *Circular Welded Carbon Quality Steel Pipe (China)*.<sup>9</sup> Anti-subsidy, the supposed “*less-evil brother to anti-dumping*”,<sup>10</sup> is apparently catching up.

The high degree of flexibility in the use of alternative benchmark methodologies becomes particularly virulent in the case of China. Being the most prominent country

---

<sup>6</sup>Appellate Body Report, *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, WT/DS257/AB/R, adopted 17 February 2004, DSR 2004: II, 571.

<sup>7</sup>Appellate Body Report, *United States – Definitive Anti-Dumping and Countervailing Duties on Certain Products from China*, WT/DS379/AB/R, adopted 25 March 2011, DSR 2011:V, 2869.

<sup>8</sup>Zheng, 19 *Minnesota Journal of International Law* (2010), 1, at 33 et seq.; Ahn/Lee, 14 *Journal of International Economic Law* (2011), 329, at 349; Detlof/Fridh, 63 *Global Trade and Customs Journal* (2007), 265, at 280. The effect can also be stated for anti-dumping law, see MacLean in Herrmann/Terhechte (eds.), 189, at 199.

<sup>9</sup>For Tianjin Shuangjie Steel Pipe Co., Ltd., Shuangjie Steel Pipe Group Co., Ltd., Tianjin Wa Song Imp. & Exp. Co., Ltd., and Tianjin Shuanglian Galvanizing Products Co., Ltd. a net subsidy rate in the amount of 615.92 % was determined, see *Circular Welded Carbon Quality Steel Pipe from the People’s Republic of China*, Case C-570-911, Final Affirmative Countervailing Duty and Final Affirmative Determination of Critical Circumstances, 73 Fed. Reg. 31966, 5 June 2008, at 31969.

<sup>10</sup>Zhao/Wang, Policy Research Working Paper No. 4560 (2008), 1, at 36.

investigated in anti-subsidy proceedings,<sup>11</sup> the singular character of China's economy is deemed to generally render the employment of existing in-country prices impossible. On the legal side, its Protocol of Accession<sup>12</sup> confers to China a special role by stipulating a written country-specific alternative benchmark regime for anti-subsidy law in Section 15(b) CAP—a complete novelty in the WTO legal hemisphere. Thus, anti-subsidy investigations against China usually resort to alternative prices for the benefit calculation. Countervailing duties in the amount similar to the above mentioned 600% and higher are looming constantly.

Concurrently, the number of countries launching anti-subsidy investigations against China is on the rise. After Canada and the US have started applying anti-subsidy law towards China in 2004 and 2006 respectively,<sup>13</sup> the EU followed the North-American lead in 2010, initiating the *Coated Fine Paper (China)* case.<sup>14</sup> Although the EU has only started twelve anti-subsidy investigations in total against China to date,<sup>15</sup> there are indications that let assume EU anti-subsidy practice will gain in importance in the near future.<sup>16</sup> The expiry of the permission to use alternative benchmark methodologies in anti-dumping proceedings against China on 11 December 2016,<sup>17</sup> presently still the “cornerstone of EU trade defence policy and practice as a whole”,<sup>18</sup> furthers the quest for new strategies in EU trade defence. Although the recent reform of EU anti-dumping law indicates that the EU relies on continuation of its well-established trade remedy policy, the increasingly active role of China in front of the WTO judiciary, in particular with regard to matters of

---

<sup>11</sup>Of the total number of 445 anti-subsidy investigations initiated from 1 January 1995 to 31 December 2016, 119 have been conducted against China (27%). Data from WTO statistics available at [http://www.wto.org/english/tratop\\_e/scm\\_e/CV\\_InitiationsByExpCty.pdf](http://www.wto.org/english/tratop_e/scm_e/CV_InitiationsByExpCty.pdf) (last visited 1 January 2018).

<sup>12</sup>Protocol on the Accession of the People's Republic of China, WT/L/432, 23 November 2001.

<sup>13</sup>Ahn/Lee, 14 *Journal of International Economic Law* (2011), 329, at 339 and 350.

<sup>14</sup>OJ C 99/13, 17 April 2010.

<sup>15</sup>As of 1 January 2018, see <http://trade.ec.europa.eu/tdi/completed.cfm> (last visited 1 January 2018).

<sup>16</sup>Vermulst/Gatta, 11 *World Trade Review* (2012), 527, at 529.

<sup>17</sup>Section 15(a)(ii) CAP, which permitted the use of alternative methodologies in anti-dumping investigations against China, was set to expire “[i]n any event [...] 15 years after the date of accession” (Section 15(d), second sentence CAP). Uncontroversially accepted upon conclusion of the CAP in 2001, the question whether the use of alternative benchmark methodologies in anti-dumping proceedings against China could be continued beyond this deadline has been disputed and discussed intensely in recent years, see Kleimann, EUI Working Paper RSCAS No. 37 (2016); Zang, 14 *Journal of International Economic Law* (2012), 869, at 877; Gatta, 9 *Global Trade and Customs Journal* (2014), 165; Miranda, 9 *Global Trade and Customs Journal* (2014), 94; Tietje/Nowrot, Policy Papers on Transnational Economic Law No. 34 (2011), 2, at 10 et seq.; Ahn/Lee, 14 *Journal of International Economic Law* (2011), 329, at 343; Cornelis, 1 *Global Trade and Customs Journal* (2007), 105, at 109; O'Connor (2011), available at <http://www.voxeu.org/article/chinamarketeconomy> (last visited 1 January 2018).

<sup>18</sup>Vermulst/Gatta, 11 *World Trade Review* (2012), 527, at 531.

anti-dumping law,<sup>19</sup> however, clearly shows that this quest is not to be conducted at the expense of China.

In the light of these developments, the use of alternative benchmarks in anti-subsidy investigations calls for close scrutiny.

## 1.1 Research Objective

It is the objective of this study to contribute to the scientific discussion by ultimately suggesting a viable future concept for the use of alternative benchmarks in NMES in anti-subsidy investigations in WTO law.

Studying anti-subsidy law between the poles of the WTO, the EU and China lets four aspects in particular come to the fore:

- With the overall legal relationship between the WTO *acquis* and the new generation of accession protocols still unclear, the emergence and manifestation of an alternative benchmark regime for NMES in general WTO anti-subsidy law through Appellate Body jurisprudence and the parallel existence of a China-specific framework raise the question to the exact relationship between the two legal regimes. Which is China's applicable WTO anti-subsidy law?
- In creating its own anti-subsidy legal framework, the EU has closely adhered to the WTO role model. But some of the EU-genuine features in law and case practice, which have evolved especially in investigations against China since the EU started applying anti-subsidy law in NMES in 2010, make one wonder whether they truly find themselves in accordance with WTO law prerequisites. Are EU anti-subsidy law and practice in conformity with WTO anti-subsidy law as such and as applied?
- The adoption of China-specific rules in the CAP upon accession has shattered the once uniform applicability of the framework of WTO rules towards all members without exception and without differentiation. In the light of the WTO having been deliberately designed as opposed to the "GATT à la carte" of its predecessor, splitting the rules framework presents itself as highly dubious approach. Is the introduction of country-specific accession commitments into the WTO legal anti-subsidy framework legal and legitimate, i.e. justified?
- Apart from structural dissonance, the extension of the applicability of anti-subsidy law to NMES has substantively upset WTO law. Although economically mystifying in its conception, the law has allowed for the applicability of anti-subsidy law in NMES nevertheless. But not only economic inconsistencies spread uncertainty regarding the validity of this approach. Does general WTO

---

<sup>19</sup>Request for Consultations by China, *US – Measures Related to Price Comparison Methodologies*, WT/DS515/1, 15 December 2016 and the correspondent Request for Consultations by China, *EU – Measures Related to Price Comparison Methodologies*, WT/DS516/1, 15 December 2016.

anti-subsidy law permit the introduction of an alternative benchmark regime for NMES through Appellate Body reports in terms of legality and legitimacy?

After disclosing existing deficiencies of the current concept and establishing the need for reform, the thesis discusses various ideas to eliminate the deficits of the present alternative benchmark regime. Circuiting economic Scylla and legal Charybdis, this study develops a reform proposal for a new alternative benchmark regime that has the ability to effect the direly necessary enhancements with regard to legal certainty and transparency.

## 1.2 Object and Scope of the Study

The thesis focuses on the use of alternative benchmark methodologies for NMES in anti-subsidy law in the process of benefit calculation, i.e. on the determination of a comparable in-country price as substitute for altogether non-existing or distorted and consequently discarded existing in-country prices. The legal prerequisites that have to be observed and the methodologies that may be employed to generate price substitutes form the object of the study.

The final determination of the amount of benefit, i.e. the overall process of price comparison that brings together the in-country price with the export price, is excluded from the scope of this study. Furthermore, a general solution regarding the integration of the new generation of accession protocols like the CAP into the present WTO framework is not within the scope of this study.

## 1.3 Methodical Approach and Course of the Study

This study unites issues prevalent to anti-subsidy investigations in general and generalizable issues emerging from the example of EU anti-subsidy investigations against China in order to reach its aim of suggesting a viable concept for an alternative benchmark regime for NMES in anti-subsidy law. More precisely, it conducts a five-step approach.

First, the WTO as legal environment and subsidisation as factual environment of the study are presented briefly. Then, the general mechanisms of benefit calculation for both MES and NMES are introduced. In this connection, the paramount influence of the use of alternative benchmarks on calculating the amount of countervailing duty is demonstrated.

Second, the legal prerequisites at WTO level for the use of alternative benchmark methodologies in anti-subsidy law against China are examined. This analysis covers the general WTO prerequisites for the use of alternative benchmarks in anti-subsidy proceedings as derived from Article 14 ASCM by the interpretation of the Appellate Body in *US – Softwood Lumber IV* and *US – Anti-Dumping and Countervailing*

*Duties (China)* as well as the China-specific provision of Section 15(b) CAP. Thus, the complete existing regulatory framework for the determination of a comparable in-country price substitute in NMES as “legal backbone” of China’s applicable WTO law is shown. Its lack of clarity and lacunae are uncovered, which demonstrates the abusive and discriminatory potential of these provisions. Because these once solely China-specific provisions have been adopted in accession protocols of other acceding countries, the significance of such provisions now extends beyond a mere China-specific context. Therefore, the scrutiny of China’s alternative benchmark regime exemplary offers the possibility to examine the most comprehensive existing legal framework at WTO level in this regard. Ultimately assisting in clarifying the interdependency between general and country-specific alternative benchmark regime forms a major long-term objective of this study, for which a foundation is built in its course.

Third, the example of EU anti-subsidy investigations against China is employed to scrutinise the use of alternative benchmark methodologies in case practice. After introducing the respective legal framework on EU level, this study conducts an analysis of EU anti-subsidy cases against China, hereby identifying evolving patterns of reasoning in connection with the use of alternative benchmarks regarding the different types of subsidies. Subsequently, the EU alternative benchmark regime is scrutinised with respect to conformity with WTO law as such and as applied. After examining the present EU approach against China, further latitude granted to the EU by the WTO framework is fathomed, thus depicting the utmost legally possible approach for the EU to adopt. All in all, the analysis of EU cases against China visualises the effect of the fragmentary and imprecise prerequisites for the use of alternative benchmarks at WTO level: once an investigating authority has developed a feasible approach for alleging distortion of existing in-country prices and consequently applying price substitutes, it keeps reapplying it—however arbitrary the reasoning might seem. Countries investigated are almost entirely at the discretion of the investigating authorities. Actual breaches of WTO law are hardly provable. These effects obtrude the notion of reform.

Therefore, in a fourth step, the need to reform the current alternative benchmark regime for NMES in WTO anti-subsidy law, which is easily prone to protectionism on the one hand and subject to the inclination of the members to fully take advantage of this latitude on the other, is ascertained by taking the global perspective. Recollecting the rationales of both anti-subsidy law and the WTO itself, the thesis distinguishes between the mere legality and the legitimacy of the exercise of political authority to show that the very position of the WTO as leading organisation in international trade will be undermined if the developments in NMES anti-subsidy law on alternative benchmarks are allowed to continue as before.

Fifthly and lastly, the study develops a reform proposal that tackles the deficits that have been identified. After discussing various substantive options for improvement, it considers the available legal means of implementation at WTO level and concludes with stipulating a concrete reform proposal for a future alternative benchmark regime for NMES in WTO anti-subsidy law.

## Chapter 2

# The Significance of the Use of Alternative Benchmark Methodologies in the Process of WTO Anti-Subsidy Investigations



The use of alternative benchmarks in anti-subsidy investigations is embedded in the context of the WTO regulation of subsidies. This chapter hence sets a common basic understanding by presenting the factual and legal environment of the issues under scrutiny. It presents the WTO as major institution for international trade regulation (Sect. 2.1) and lays down the case for the regulation of subsidies (Sect. 2.2) as well as the respective legal framework in WTO law (Sect. 2.3). The particularities of the benefit calculation conclude the chapter (Sect. 2.4).

## 2.1 The WTO as Institution of International Trade Regulation

When it comes to international trade regulation, no way skirts the major organisation in this area—the WTO.

For decades, the WTO and its predecessor, the GATT 1947,<sup>1</sup> have shaped the area of global trade by a multitude of agreements. As Article XVI:1 WTO Agreement explicitly states that the WTO shall be guided by the decisions, procedures and customary practices that have developed under the GATT 1947, even today the destiny of the WTO is still largely influenced by its predecessor.

---

<sup>1</sup>General Agreement on Tariffs and Trade, LT/UR/A-1A/1/GATT/2, 30 October 1947, 55 UNTS 194.

### 2.1.1 *The GATT 1947 as Predecessor of the WTO*

The origins of GATT 1947 lie in the Bretton Woods Conference of 1944.<sup>2</sup> To avoid the interwar experience of global economic seclusion—where in particular US trade policy had been overly restrictive<sup>3</sup>—the US and the United Kingdom sought to reduce trade barriers and discriminatory trade policies to open up markets.<sup>4</sup> Apart from the IMF and the World Bank, the ITO has been envisioned as third pillar in a new economic global order.<sup>5</sup> At the Geneva meeting of 1947 the 23 negotiating parties discussed the ITO charter, but also already agreed on tariff reductions and “general clauses” that were to preserve the commitments on tariff reductions,<sup>6</sup> in particular the three principles which still serve as the cornerstones of the WTO today: the most-favoured nation principle, reciprocity and economic liberalism.<sup>7</sup> These agreements formed the GATT 1947.<sup>8</sup> While the draft ITO charter was completed only one year later at the Havana meeting, the negotiating parties enacted the Protocol of Provisional Application for the GATT 1947, so that it already came into effect on 1 January 1948.<sup>9</sup> The contracting parties committed themselves only “to the fullest extent not inconsistent with existing legislation”.<sup>10</sup> This “grandfather clause” made it possible to provisionally apply the GATT 1947 without prior ratification of the treaty through the negotiating parties’ national legislatures.<sup>11</sup> The ITO itself, however, then never came into existence.<sup>12</sup> Instead, the GATT 1947 as “*bargaining vehicle*”<sup>13</sup> with only narrow regulatory scope and almost entire

---

<sup>2</sup>Winham in Bethlehem et al. (eds.), 5, at 14.

<sup>3</sup>One particularly infamous example for the United States’ protectionist trade policy is the Smoot-Hawley Tariff Act of 1930, Pub. L. 71-361, 46 Stat. 59019, 17 June 1930, imposing on imports the highest tariffs ever in US history, see Barton et al., Evolution of the trade regime, at 33; Mavroidis in Horn/Mavroidis (eds.), 1, at 2; Bagwell/Staiger/Sykes in Horn/Mavroidis (eds.), 68, at 94.

<sup>4</sup>Irwin, 85 AEA Papers and Proceedings (1995), 323, at 324.

<sup>5</sup>Winham in Bethlehem et al. (eds.), 5, at 14; Jackson in Bethlehem et al. (eds.), 30, at 33; Jackson, The World Trading System, at 32.

<sup>6</sup>Jackson, The World Trading System, at 37; Irwin, 85 AEA Papers and Proceedings (1995), 323, at 325.

<sup>7</sup>Barton et al., Evolution of the trade regime, at 39.

<sup>8</sup>Jackson, The World Trading System, at 37.

<sup>9</sup>Barton et al., Evolution of the trade regime, at 42; Jackson, The World Trading System, at 39; Jackson in Bethlehem et al. (eds.), 30, at 34.

<sup>10</sup>Kock, International Trade and Policy, at 65.

<sup>11</sup>Ratification was to happen later jointly with the completed draft ITO charter, see Jackson, The World Trading System, at 40.

<sup>12</sup>The US officially gave up all attempts to ratify the draft ITO charter in 1951, which practically buried the idea of creating an international organisation for the regulation of global trade, see Jackson in Bethlehem et al. (eds.), 30, at 34; Barton et al., Evolution of the trade regime, at 42; Irwin, 85 AEA Papers and Proceedings (1995), 323, at 325.

<sup>13</sup>Barton et al., Evolution of the trade regime, at 38.

lack of organisational structure<sup>14</sup> had to fill the void.<sup>15</sup> Advancing economic integration and liberalisation, it gradually evolved into a *de facto* international organisation in the area of global trade regulation.<sup>16</sup>

While further tariff reductions formed the agenda of the first five negotiation rounds, the focus of the contracting parties tentatively shifted from tariff to non-tariff barriers in the Kennedy Round (1963–1967) and in particular in the following Tokyo Round (1973–1979).<sup>17</sup> But two oil crises, the rising number of developing countries amongst the contracting parties with only few rights and obligations under the GATT 1947 and the weakened role of the United States as the “motor of GATT” clearly showed that the GATT 1947 in its present state no longer provided an adequate means for trade regulation.<sup>18</sup> To remove existent deficiencies and to build the future of international trade regulation on solid ground, the contracting parties of the GATT 1947 entered into the eighth and last negotiation round, the Uruguay Round (1986–1994).

### 2.1.2 *The Foundation of the WTO*

In 1994, the final agreement of the Uruguay Round, the Final Act,<sup>19</sup> was signed.<sup>20</sup> It *inter alia* comprised the Agreement of Marrakech establishing the World Trade Organization.<sup>21</sup> What had failed 50 years before, now came into existence: with the concluded agreements taking effect on 1 January 1995, the WTO as a new “*legal and institutional foundation of the multilateral trading system*”<sup>22</sup> was created to finally take its place next to the IMF and the World Bank.<sup>23</sup> The “provisional

---

<sup>14</sup>The constituted body of the GATT 1947 was the ICITO, which had been created as interim organisational structure for the preparation of the ITO. During the time of provisional application of the GATT 1947, it served as the *de facto* GATT Secretariat, see Jackson in Bethlehem et al. (eds.), 30, at 35.

<sup>15</sup>Jackson, *The World Trading System*, at 59; Irwin, 85 AEA Papers and Proceedings (1995), 323, at 325; Barton et al., *Evolution of the trade regime*, at 43 et seq.

<sup>16</sup>Jackson, *The World Trading System*, at 59.

<sup>17</sup>Winham in Bethlehem et al. (eds.), 5, at 16; Barton et al., *Evolution of the trade regime*, at 45; Jackson, *The World Trading System*, at 73.

<sup>18</sup>Barton et al., *Evolution of the trade regime*, at 45 et seq.

<sup>19</sup>Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, LT/UR/A/1, 15 April 1994, 1867 UNTS 14.

<sup>20</sup>Jackson, *The World Trading System*, at 46.

<sup>21</sup>Marrakech Agreement Establishing the World Trade Organization, LT/UR/A/2, 15 April 1994, 1867 UNTS 154.

<sup>22</sup>Blackhurst in Krueger (ed.), 31, at 32.

<sup>23</sup>Winham in Bethlehem et al. (eds.), 5, at 24.

application” of the GATT 1947 ended by withdrawal of all contracting parties on 30 August 1995.<sup>24</sup>

Unlike its predecessor, the WTO is “*not a ‘best endeavors’ organization*”.<sup>25</sup> It was designed as formal international body empowered to set binding rules for its members in the area of global trade.<sup>26</sup> The “single undertaking” approach made the newly agreed commitments binding on all members (Article II:2 WTO Agreement), ending previous grandfathering and the “GATT à la carte”.<sup>27</sup> Furthermore, the competences of the WTO were expanded to include more non-tariff barrier issues to trade, e.g. intellectual property (TRIPs) and trade in services (GATS).<sup>28</sup> Unlike the GATT 1947, the WTO was endowed with a proper institutional framework comprising the Ministerial Conference as highest decision-making organ,<sup>29</sup> the General Council as its permanent representative<sup>30</sup> as well as the Secretariat in Geneva as supporting administrative body.<sup>31</sup>

The WTO is a “*member-driven, consensus-based organisation*”.<sup>32</sup> Power still lays in the hands of the members, i.e. of the Ministerial Conference and the General Council, as the WTO Agreement does not delegate power.<sup>33</sup>

Decisions are generally made by negotiation and consensus (Article IX:1 WTO Agreement). To arrive at a consensus, informal meetings and discussions play a vital role—otherwise, consensus is almost impossible.<sup>34</sup> Transparency and processing information are key features to keep decision-making fair and balanced. Only if consensus cannot be reached and other stipulations do not exist, the issue may be decided by majority voting (Article IX:1 WTO Agreement).

### 2.1.3 *The WTO in 2018*

Over 20 years after its foundation, the WTO has arrived at crossroads. The accession of new members, especially from Eastern Europe and Asia, has provoked an internal crisis questioning the WTO’s self-conception as well as the

<sup>24</sup>Jackson, *The World Trading System*, at 64; Jackson in Bethlehem et al. (eds.), 30, at 38 et seq.

<sup>25</sup>Blackhurst in Krueger (ed.), 31, at 32.

<sup>26</sup>Article II:2 WTO Agreement; Article 3.2 DSU in connection with Annex 1; Article VIII:1 WTO Agreement.

<sup>27</sup>Barton et al., *Evolution of the trade regime*, at 65 et seq.; Jackson, *The World Trading System*, at 47; Winham in Bethlehem et al. (eds.), 5, at 20.

<sup>28</sup>Barton et al., *Evolution of the trade regime*, at 47; Jackson in Bethlehem et al. (eds.), 30, at 38.

<sup>29</sup>Jackson in Bethlehem et al. (eds.), 30, at 39.

<sup>30</sup>Jackson in Bethlehem et al. (eds.), 30, at 43.

<sup>31</sup>Jackson in Bethlehem et al. (eds.), 30, at 43.

<sup>32</sup>Bansal, *The World Trade Organisation*, at vi.

<sup>33</sup>Bansal, *The World Trade Organisation*, at vi.

<sup>34</sup>Jackson in Bethlehem et al. (eds.), 30, at 44.

validity of the institution's basic principles.<sup>35</sup> Whereas the WTO had been designed as a “*menu du jour*”,<sup>36</sup> accession procedures have created country-specific rules within a supposedly equality-based binding legal regime that let presume a reversal towards a “*WTO à la carte*”.<sup>37</sup>

Externally, the recent global economic and financial crisis has led members to reconsider whether further enhancement of globalisation is truly beneficial for their economic interests.<sup>38</sup> Moreover, issues like human rights or environmental protection, genuinely alien to trade, are now seen as being deeply connected and thus part of trade regulation.<sup>39</sup>

The WTO has so far not been able to provide a satisfactory and convincing solution for these challenges. Attempts to trade policy reform are constantly overshadowed by the impasse of the Doha Round that started in 2001.<sup>40</sup> The small-scale reforms of the Bali Package of 2013<sup>41</sup> and the Nairobi Package of 2015<sup>42</sup> do only insufficiently address the needs of the WTO members, so that they increasingly seek to realise their economic policy goals at regional level—mega-regionals like TTIP, TPP or TiSA are examples of what this “*new regionalism*”<sup>43</sup> might grow into.<sup>44</sup> How the shift to bi- and plurilateral cooperation will affect the role of the WTO as major forum for the regulation of global trade in the future remains to be seen.<sup>45</sup>

---

<sup>35</sup>Meunier (2009), available at [https://www.princeton.edu/~pcglobal/conferences/wtoreform/Meunier\\_memo.pdf](https://www.princeton.edu/~pcglobal/conferences/wtoreform/Meunier_memo.pdf), 1, at 3 et seq.

<sup>36</sup>Hoekman/Mavroidis, 26 *European Journal of International Law* (2015), 319, at 321.

<sup>37</sup>Hoekman/Mavroidis, 26 *European Journal of International Law* (2015), 319, at 319.

<sup>38</sup>Meunier (2009), available at [https://www.princeton.edu/~pcglobal/conferences/wtoreform/Meunier\\_memo.pdf](https://www.princeton.edu/~pcglobal/conferences/wtoreform/Meunier_memo.pdf), 1, at 1.

<sup>39</sup>Meunier (2009), available at [https://www.princeton.edu/~pcglobal/conferences/wtoreform/Meunier\\_memo.pdf](https://www.princeton.edu/~pcglobal/conferences/wtoreform/Meunier_memo.pdf), 1, at 2.

<sup>40</sup>Koul, Guide to the WTO & GATT, at 30 et seq.

<sup>41</sup>Bali Ministerial Declaration, WT/MIN(13)/DEC, 11 December 2013.

<sup>42</sup>Nairobi Ministerial Declaration, WT/MIN(15)/DEC, 21 December 2015.

<sup>43</sup>Francois, 15 CESifo Forum (2014), 14, at 14.

<sup>44</sup>Francois, 15 CESifo Forum (2014), 14, at 14; Hoekman, Supply Chains, Mega-Regionals and Multilateralism, at 8 et seq. and 30 et seq.

<sup>45</sup>The effect of the recent surge of regional trade agreements on the WTO is yet assessed very differently, see e.g. Meléndez-Ortiz, in WEF (ed.), at 6 and 13 et seq.; Baldwin, in WEF (ed.), at 8 and 26 et seq.; Bhagwati (2014), available at [http://www.notenstein-laroche.ch/sites/nlr\\_ch/files/attachments/white\\_paper\\_series\\_jagdish\\_bhagwati.pdf](http://www.notenstein-laroche.ch/sites/nlr_ch/files/attachments/white_paper_series_jagdish_bhagwati.pdf), at 5 et seq.; Stoler (2013), at 1 and seq. and 6, available at <http://e15initiative.org/wp-content/uploads/2015/09/E15-Regional-Trade-Agreements-Stoler-FINAL.pdf>.

## 2.2 The Case for the Regulation of Subsidisation in International Trade Law

Subsidisation by governments is regulated by a large array of rules in international trade law. The reason why regulation is deemed necessary is not immediately obvious, though. It roots in the prevalence of economic models postulating free trade on private markets as basis for global welfare.

### 2.2.1 *Free Trade as Guarantor of Maximum National Welfare*

All countries ultimately aim at maximising their national welfare.<sup>46</sup> This includes the optimum supply of the population with goods.<sup>47</sup> Instead of pursuing the goal of optimising national welfare autonomously, a country concentrates on the selective production of only those goods it can provide for more efficiently than other countries, so that consequently, they engage in trade.<sup>48</sup> But views differ on how maximum national welfare can be realised. Several economic models exist.

The most prevalent is the so-called theory of comparative advantages.<sup>49</sup> Developed by David Ricardo and John Stuart Mill,<sup>50</sup> maximum efficiency and national welfare are achieved if each country focuses on producing the goods it can manufacture at lower opportunity costs than other countries.<sup>51</sup> Opportunity costs are the amounts of one good that need to be given up in order to produce one additional unit of another good.<sup>52</sup> Using opportunity costs instead of mere production costs like the

---

<sup>46</sup>Bagwell/Staiger, 89 *American Economic Review* (1999), 215, at 215.

<sup>47</sup>Winham in Bethlehem et al. (eds.), 5, at 6 et seq.

<sup>48</sup>Schwartz/Harper, 70 *Michigan Law Review* (1972), 831, at 840; Hoekmann/Kostecki, *Political Economy of the World Trading System*, at 7 and 32 et seq.; Winham in Bethlehem et al. (eds.), 5, at 8.

<sup>49</sup>The theory has been developed based on trade in goods, so that other areas of trade, e.g. services, will not be mentioned separately in the following. The validity of the theory, however, extends to these areas as well.

<sup>50</sup>Whereas the original idea of the concept of comparative advantages goes back to *Robert Torrens*' 'Essay on the External Corn Trade' (1815), it was made popular in economics through *David Ricardo* in *On the Principles of Political Economy and Taxation* (1817) and *James Mill* in *Elements of Political Economy* (1821), see Suranovic, *International Trade*, at 40-0.

<sup>51</sup>Schwartz/Harper, 70 *Michigan Law Review* (1972), 831, at 840; Winham in Macrory et al. (eds.), 3, at 5; Hoekmann/Kostecki, *Political Economy of the World Trading System*, at 33; extensively on the notion of comparative advantage Sykes, 1 *Journal of International Economic Law* (1998), 49, at 49 et seq.

<sup>52</sup>Suranovic, *International Trade*, at 40-0.