



UNITED STATES INTERNATIONAL TRADE COMMISSION

Washington, DC



**CARBON AND CERTAIN ALLOY STEEL WIRE ROD FROM BRAZIL, INDONESIA,
MEXICO, MOLDOVA, TRINIDAD & TOBAGO, AND UKRAINE**

Prehearing Staff Report
Investigation Nos. 701-TA-417 and 731-TA-953, 957-959, 961, and 962
(Second Review)

Staff assigned:

Mary Messer, *Investigator* (205-3193)
Karl Tsuji, *Industry Analyst* (205-3434)
Aimee Larsen, *Economist* (205-3179)
David Boyland, *Accountant* (708-4725)
Mara Alexander, *Statistician* (205-2538)
Carolyn Holmes, *Statistical Assistant* (205-3168)
David Fishberg, *Attorney* (708-2614)
Douglas Corkran, *Supervisory Investigator* (205-3057)

PREFACE

As required by section 207.64 of the U.S. International Trade Commission's Rules of Practice and Procedure (19 CFR § 207.64), this prehearing staff report contains information concerning investigation Nos. 701-TA-417 and 731-TA-953, 957-959, 961, and 962 (Second Review): Carbon and Certain Alloy Steel Wire Rod from Brazil, Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine.

The Commission will hold a public hearing in connection with this proceeding beginning at 9:30 a.m. on Tuesday, April 22, 2014, in the Hearing Room of the U.S. International Trade Commission Building, Washington, DC. Requests to appear at the hearing are due to be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on Tuesday, April 15, 2014.¹ All persons desiring to appear at the hearing and make oral presentations may file prehearing statements and should attend a prehearing conference (if deemed necessary). Prehearing briefs must be in conformity with section 207.65 of the Commission's rules (19 CFR § 207.65), and should, to the extent possible, refer to the record and include information and arguments which the party believes relevant to the subject matter of the Commission's determinations under section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)). Prehearing briefs must be filed on or before April 11, 2014. If prehearing briefs contain business proprietary information, a non-proprietary version is due April 14, 2014.

All oral presentations shall be in conformity with section 207.66 of the rules (19 CFR § 207.66) and each party shall limit its presentation to:

- (a) a summary of the information and arguments contained in its prehearing brief;

¹ Notices of participation must include a list of witnesses and should indicate the amount of time requested for presentations.

- (b) an analysis of the information and arguments contained in the prehearing briefs of other parties; and
- (c) information not available at the time its prehearing brief was filed.

Persons other than parties in this proceeding appearing at the hearing shall limit their presentations to brief statements of their positions with respect to the subject matter of the proceeding.

CONTENTS

Page

Part I: Introduction and overview	I-1
Background.....	I-1
The original investigations	I-3
The first five-year review	I-5
Summary data	I-6
Related investigations	I-11
Title VII investigations	I-11
Safeguard investigation	I-14
Statutory criteria and organization of the report	I-15
Statutory criteria	I-15
Organization of report.....	I-17
Commerce’s reviews	I-19
Administrative reviews.....	I-19
Changed circumstances reviews	I-22
Scope inquiry reviews.....	I-23
Anti-circumvention Inquiry	I-23
Five-year reviews.....	I-25
The subject merchandise	I-27
Commerce’s scope	I-27
Tariff treatment	I-29
The product	I-30
Description and applications	I-30
Manufacturing processes	I-33
Domestic like product issues.....	I-40
U.S. market participants.....	I-41
U.S. producers	I-41

CONTENTS

	Page
U.S. importers.....	I-43
U.S. purchasers	I-48
Apparent U.S. consumption and U.S. market shares.....	I-49
Merchant market apparent U.S. consumption and U.S. market shares.....	I-52
Part II: Conditions of competition in the U.S. market.....	II-1
U.S. market characteristics.....	II-1
Channels of distribution	II-2
Geographic distribution	II-3
Supply and demand considerations	II-4
U.S. supply	II-4
U.S. demand	II-18
Substitutability issues.....	II-24
Lead times	II-24
Knowledge of country sources	II-25
Factors affecting purchasing decisions.....	II-26
Comparisons of domestic products, subject imports, and nonsubject imports	II-30
Elasticity estimates.....	II-40
U.S. supply elasticity	II-40
U.S. demand elasticity	II-40
Substitution elasticity	II-41
Part III: Condition of the U.S. industry	III-1
Overview	III-1
Background.....	III-3
Changes in existing operations	III-3
Anticipated Changes in existing operations.....	III-5
U.S. production, capacity, and capacity utilization	III-6
Constraints on capacity	III-7
Alternative products.....	III-8

CONTENTS

	Page
U.S. producers' U.S. shipments and exports	III-9
U.S. producers' U.S. shipments, by application	III-12
U.S. producers' inventories	III-14
U.S. producers' imports and purchases	III-15
U.S. employment, wages, and productivity	III-17
Financial experience of U.S. producers	III-18
Background	III-18
Operations on wire rod	III-20
Capital expenditures and research and development expenses	III-42
Part IV: U.S. imports and the foreign industries	IV-1
U.S. imports	IV-1
Overview	IV-1
Imports from subject and nonsubject countries	IV-3
U.S. shipments of imports, by application	IV-9
U.S. importers' imports subsequent to December 31, 2013	IV-10
U.S. importers' inventories	IV-11
Cumulation considerations	IV-12
Fungibility	IV-12
Presence in the market	IV-13
Geographical markets	IV-13
Subject country producers	IV-14
The industry in Brazil	IV-16
Overview	IV-16
Operations on wire rod	IV-18
The industry in indonesia	IV-27
Overview	IV-27
Operations on wire rod	IV-28
The industry in Mexico	IV-36

CONTENTS

	Page
Overview.....	IV-36
Operations on wire rod	IV-38
The industry in Moldova	IV-48
Overview.....	IV-48
Operations on wire rod	IV-49
The industry in Trinidad & Tobago.....	IV-52
Overview.....	IV-52
Operations on wire rod	IV-53
The industry in Ukraine	IV-61
Overview.....	IV-61
Operations on wire rod	IV-63
Global market.....	IV-73
Production	IV-73
Consumption	IV-75
Prices	IV-77
Additional global supply and demand factors.....	IV-86
Part V: Pricing data	V-1
Factors affecting prices	V-1
Raw material costs	V-1
Transportation costs to the U.S. market	V-4
U.S. inland transportation costs	V-4
Pricing practices	V-5
Pricing methods.....	V-5
Sales terms and discounts	V-6
Price leadership	V-7
Price data.....	V-7
Price trends.....	V-17
Price comparisons	V-18

CONTENTS

	Page
Appendixes	
A. <i>Federal Register</i> notices	A-1
B. List of hearing witnesses (reserved)	B-1
C. Summary data	C-1
D. Comments by U.S. producers, importers, purchasers, and foreign producers regarding the effects of the orders and the likely effects of revocation	D-1
E. Smaller diameter wire rod from Deacero	E-1

Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

On June 3, 2014, the U.S. International Trade Commission (“Commission” or “USITC”) gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”),¹ that it had instituted reviews to determine whether revocation of the countervailing duty order on carbon and certain alloy steel wire rod (“wire rod”) from Brazil and the antidumping duty orders on wire rod from Brazil, Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine would likely lead to the continuation or recurrence of material injury to a domestic industry.^{2 3} On September 6, 2013, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act.⁴

¹ 19 U.S.C. 1675(c).

² *Carbon and Certain Alloy Steel Wire Rod From Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine: Institution of five-year reviews*, 78 FR 33103, June 3, 2013. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

³ In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of five-year reviews of the subject antidumping and countervailing duty orders concurrently with the Commission’s notice of institution. *Initiation of Five-Year (“Sunset”) Review*, 78 FR 33063, June 3, 2013.

⁴ *Carbon and Certain Alloy Steel Wire Rod From Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine: Notice of Commission Determination To Conduct Full Five-Year Reviews*, 78 FR 60316, October 1, 2013. The Commission received a joint response to the notice of institution from six U.S. producers of wire rod (ArcelorMittal USA LLC (“ArcelorMittal USA”), Cascade Steel Rolling Mills Inc. (“Cascade”), Evraz Rocky Mountain Steel (currently known as “Evraz Pueblo”), Gerdau Ameristeel US Inc. (“Gerdau”), Keystone Consolidated Industries, Inc. (“Keystone”), and Nucor Corp. (“Nucor”)); one U.S. importer of subject merchandise from Mexico (Deacero USA, Inc. (“Deacero USA”)); and two producers and exporters of the subject merchandise in Mexico (Deacero S.A. de C.V. (“Deacero”) and Ternium Mexico, S.A. de C.V. (“Ternium Mexico”). The Commission found that the domestic interested party group response and the respondent interested party group response with respect to Mexico were adequate and determined to conduct a full review of the order on wire rod from Mexico. The Commission also found that the respondent interested party group response with regard to the reviews concerning subject imports from Brazil, Indonesia, Moldova, Trinidad & Tobago, and Ukraine to be
(continued...)

The following tabulation presents information relating to the background and schedule of this proceeding:⁵

Effective date	Action
October 22, 2002	Commerce's countervailing duty order on wire rod from Brazil (67 FR 64871)
October 29, 2002	Commerce's antidumping duty orders on wire rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine (66 FR 65945)
July 30, 2008	Commerce's first continuation of countervailing duty order on wire rod from Brazil and antidumping duty orders on wire rod from Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine (73 FR 44218)
June 3, 2013	Commission's institution of five-year reviews (78 FR 33103)
June 3, 2013	Commerce's initiation of five-year reviews (78 FR 33063)
October 1, 2013	Commission's determinations to conduct full five-year reviews (78 FR 60316)
October 2, 2013	Commerce's final results of expedited five-year review of the countervailing duty order on wire rod from Brazil (78 FR 60850)
October 24, 2013	Commerce's final results of expedited five-year reviews of the antidumping duty orders on wire rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine (78 FR 63450)
December 11, 2013	Commission's scheduling of the reviews (78 FR 76653, December 18, 2013)
April 22, 2014	Scheduled date for the Commission's hearing
May 30, 2014	Scheduled date for the Commission's vote
June 16, 2014	Scheduled date for the Commission's determinations and views

(...continued)

inadequate because it did not receive a response from any respondent interested parties with respect to those orders. Notwithstanding the inadequate respondent interested party group responses, the Commission determined to conduct full reviews of the orders on wire rod from Brazil, Indonesia, Moldova, Trinidad & Tobago, and Ukraine in order to promote administrative efficiency in light of the Commission's determination to conduct a full review of the order on wire rod from Mexico.

⁵ The Commission's notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy are referenced in appendix A and may also be found at the Commission's web site (internet address www.usitc.gov). Commissioners' votes on whether to conduct expedited or full reviews may also be found at the web site. Appendix B is reserved for the witnesses appearing at the Commission's hearing.

THE ORIGINAL INVESTIGATIONS

The original investigations resulted from petitions filed by counsel on behalf of Co-Steel Raritan, Inc., Perth Amboy, New Jersey; GS Industries, Inc., Charlotte, North Carolina; Keystone Consolidated Industries, Inc., Dallas, Texas; and North Star Steel Texas, Inc., Edina, Minnesota, on August 31, 2001, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of wire rod from Brazil, Canada, Germany, Trinidad & Tobago, and Turkey and less-than-fair-value (“LTFV”) imports of wire rod from Brazil, Canada, Egypt, Germany, Indonesia, Mexico, Moldova, South Africa, Trinidad & Tobago, Ukraine, and Venezuela. In October 2002, the Commission determined that a domestic industry was materially injured by reason of subsidized imports of wire rod from Brazil and Canada and by reason of LTFV imports of wire rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine.⁶ The U.S. Department of Commerce published

⁶ *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine, Inv. Nos. 701-TA-417-421, 731-TA-953, 954, 956-959, 961, and 962 (Final)*, USITC Publication 3546 (October 2002) (“Original Determination”). Subsequent to Commerce’s final negative countervailing duty determinations with respect to Trinidad & Tobago and Turkey, the Commission terminated the countervailing duty investigations concerning those countries. 67 FR 62075, October 3, 2002. The investigations concerning subject imports from Egypt, South Africa, and Venezuela were terminated after the Commission found in its preliminary determination that imports from those three subject countries were negligible. *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Egypt, Germany, Indonesia, Mexico, Moldova, South Africa, Trinidad and Tobago, Turkey, Ukraine, and Venezuela, Inv. Nos. 701-TA-417-421, 731-TA-953-963 (Preliminary)*, USITC Publication 3456 (October 2001). The antidumping and countervailing duty investigations concerning subject imports from Germany were terminated after the Commission found in its final determination that imports from Germany were negligible. *Carbon and Certain Alloy Steel Wire Rod From Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine, Inv. Nos. 701-TA-417-421 and 731-TA-953, 954, 956-959, 961, and 962 (Final)*, USITC Publication 3546 (October 2002).

countervailing duty orders on subject imports from Brazil and Canada on October 22, 2002.⁷

Commerce published antidumping duty orders on subject imports from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine on October 29, 2002.⁸ Effective January 23, 2004, Commerce revoked the countervailing duty order on subject imports from Canada.⁹

The only litigation concerning the Commission's determinations on subject imports at issue in these reviews was an appeal of the Commission's affirmative determination on subject imports from Trinidad & Tobago.¹⁰ The Court of International Trade ("CIT") affirmed that determination. However, the Federal Circuit vacated and remanded so that: (1) the Commission could ascertain whether imports from subject countries other than Trinidad & Tobago were an alternative cause of injury to the domestic industry and (2) to conduct the analysis required by the decision in *Bratsk Aluminum Smelter v. United States*, 444 F.3d 1369 (Fed. Cir. 2006). On first remand, the Commission reached a negative determination applying the replacement/benefit test it perceived was mandated by the Federal Circuit.¹¹ The CIT affirmed.

⁷ *Notice of Countervailing Duty Orders: Carbon and Certain Alloy Steel Wire Rod From Brazil and Canada*, 67 FR 64871, October 22, 2002.

⁸ *Notice of Amended Final Determination of Sales at Less Than Fair Value and Antidumping Duty Order: Carbon and Certain Alloy Steel Wire Rod from Canada*, 67 FR 65944, October 29, 2002; *Notice of Antidumping Duty Orders: Carbon and Certain Alloy Steel Wire Rod from Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine*, 67 FR 65945, October 29, 2002.

⁹ *Carbon and Certain Alloy Steel Wire Rod from Canada: Final Results of Countervailing Duty Changed Circumstances Review and Revocation of Countervailing Duty Order, in Whole*, 69 FR 3330, January 23, 2004.

¹⁰ *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Egypt, Germany, Indonesia, Mexico, Moldova, South Africa, Trinidad and Tobago, Turkey, Ukraine, and Venezuela*, Inv. Nos. 701-TA-417-421, 731-TA-953-963 (Preliminary), USITC Publication 3456 (October 2001), pp. 36-38.

¹¹ *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago*, Inv. No. 731-TA-961 (Final) (Remand), USITC Publication 3903 (January 2007).

On appeal, the Federal Circuit again vacated and remanded. On second remand, the Commission reached an affirmative determination.¹² The CIT affirmed. There were no further proceedings.

THE FIRST FIVE-YEAR REVIEWS

The Commission instituted its first five-year reviews of the countervailing duty order on wire rod from Brazil and the antidumping duty orders on wire rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine on September 4, 2007.¹³ In June 2008, the Commission completed its full first five-year reviews of the subject orders and determined that revocation of the countervailing duty order on subject imports from Brazil and antidumping orders on subject imports from Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.¹⁴

¹² *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago, Inv. No. 731-TA-961 (Final) (Second Remand)*, USITC Publication 4170 (June 2010). Commissioners Okun, Pearson, and Pinkert dissented.

¹³ *Carbon and Certain Alloy Steel Wire Rod From Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine*, 72 FR 50696, September 4, 2007.

¹⁴ *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine, Inv. Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review)*, USITC Publication 4014 (June 2008). The Commission determined that subject imports from Canada would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. Commissioner Okun dissented from the determination concerning subject imports from Trinidad & Tobago. Commissioner Pearson dissented from the determinations concerning subject imports from Mexico and Trinidad & Tobago. Commissioners Lane and Pinkert dissented from the determination concerning subject imports from Canada.

Following affirmative determinations in the first five-year reviews by Commerce and the Commission,¹⁵ Commerce issued a continuation of the countervailing duty order on wire rod from Brazil and the antidumping duty orders on wire rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine, effective July 30, 2008.¹⁶ The Commission's determinations in the first five-year reviews were not appealed.

SUMMARY DATA

Table I-1 presents a summary of data for the final years of the original investigations (2001) and the first five-year reviews (2007), and a summary of data collected in the current full second five-year reviews (2008-13). A summary of data from the original investigations and first-five year reviews is presented separately in appendix C.

¹⁵ *Carbon and Certain Alloy Steel Wire Rod From Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine*, 73 FR 41116, July 17, 2008; *Carbon and Certain Alloy Steel Wire Rod from Brazil: Final Results of Expedited Five-Year Sunset Review of the Countervailing Duty Order*, 73, FR 1323, January 8, 2008; *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 73 FR 1321, January 8, 2008.

¹⁶ *Carbon and Certain Alloy Steel Wire Rod From Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine: Continuation of Antidumping and Countervailing Duty Orders*, 73 FR 44218, July 30, 2008.

Table I-1

Wire rod: Comparative data from the original investigations, first five-year reviews, and second five-year reviews, 2001, 2007, and 2008-13

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton)

Item	Original invs.	First reviews	Second reviews					
	2001	2007	2008	2009	2010	2011	2012	2013
Quantity (short tons)								
U.S. consumption	***	5,858,981	***	***	***	***	***	5,300,149
Share of quantity (percent)								
Share of U.S. consumption:								
U.S. producers' share	***	***	***	***	***	***	***	67.9
U.S. importers' share:								
Brazil	***	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canada	***	***	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Indonesia	***	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	***	0.1	***	***	***	***	***	0.2
Moldova	***	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad & Tobago	***	1.6		0.0	0.0	0.0	0.0	0.0
Ukraine	***	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject sources	***	***	***	***	***	***	***	0.2
Grade 1080 tire cord/bead from subject sources	(²)	***	***	***	***	***	***	1.8
All other sources ³	***	***	***	***	***	***	***	30.1
Subtotal, nonsubject	***	***	***	***	***	***	***	31.9
Total imports	***	30.4	***	***	***	***	***	32.1
Value (1,000 dollars)								
U.S. consumption	***	3,403,602	***	***	***	***	***	3,756,412
Share of value (percent)								
Share of U.S. consumption:								
U.S. producers' share	***	***	***	***	***	***	***	67.3
U.S. importers' share:								
Brazil	***	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canada	***	***	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Indonesia	***	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	***	0.1	***	***	***	***	***	0.2
Moldova	***	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad & Tobago	***	0.0	***	0.0	0.0	0.0	0.0	0.0
Ukraine	***	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject Sources	***	***	***	***	***	***	***	0.2
Grade 1080 tire cord/bead from subject sources	(²)	***	***	***	***	***	***	1.7
All other sources ³	***	***	***	***	***	***	***	30.8
Subtotal, nonsubject	***	***	***	***	***	***	***	32.5
Total imports	***	31.2	***	***	***	***	***	32.7

Continued on the following page.

Table I-1--Continued

Wire rod: Comparative data from the original investigations, first five-year reviews, and second five-year reviews, 2001, 2007, and 2008-13

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton)

Item	Original invs.	First reviews	Second reviews					
	2001	2007	2008	2009	2010	2011	2012	2013
U.S. imports from--								
Brazil								
Quantity	***	0	0	0	0	0	0	0
Value	***	0	0	0	0	0	0	0
Unit value	***	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Canada								
Quantity	***	***	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Value	***	***	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Unit value	***	***	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Indonesia								
Quantity	***	0	0	0	0	0	0	0
Value	***	0	0	0	0	0	0	0
Unit value	***	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Mexico								
Quantity	***	8,244	***	***	***	***	***	10,333
Value	***	4,263	***	***	***	***	***	6,128
Unit value	***	\$517	***	***	***	***	***	\$593
Moldova								
Quantity	***	0	0	0	0	0	0	0
Value	***	0	0	0	0	0	0	0
Unit value	***	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Trinidad & Tobago								
Quantity	***	95,325	21,794	0	0	0	0	0
Value	***	46,228	14,298	0	0	0	0	0
Unit value	***	\$485	\$656	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Ukraine								
Quantity	***	0	0	0	0	0	0	0
Value	***	0	0	0	0	0	0	0
Unit value	***	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Subtotal, subject								
Quantity	***	***	***	***	***	***	***	10,333
Value	***	***	***	***	***	***	***	6,128
Unit value	***	***	***	***	***	***	***	\$593
1080 tire cord/bead from subject sources:								
Quantity	(²)	***	139,459	71,759	129,184	116,513	102,517	96,639
Value	(²)	***	126,654	50,808	91,621	103,073	84,521	64,506
Unit value	(²)	***	\$908	\$708	\$709	\$885	\$824	\$667
Other nonsubject: ³								
Quantity	***	992,163	1,536,768	777,083	1,284,771	1,059,512	1,391,895	1,593,718
Value	***	574,316	1,360,431	550,614	988,457	992,791	1,159,903	1,156,290
Unit value	***	\$579	\$885	\$709	\$769	\$937	\$833	\$726
Subtotal, nonsubject								
Quantity	***	***	1,676,227	848,842	1,413,955	1,176,024	1,494,413	1,690,357
Value	***	***	1,487,085	601,423	1,080,078	1,095,863	1,244,424	1,220,797
Unit value	***	***	\$887	\$709	\$764	\$932	\$833	\$722
All countries:								
Quantity	***	1,782,699	***	***	***	***	***	1,700,690
Value	***	1,063,201	***	***	***	***	***	1,226,925
Unit value	***	\$596	***	***	***	***	***	\$721

Continued on the following page.

Table I-1--Continued

Wire rod: Comparative data from the original investigations, first five-year reviews, and second five-year reviews, 2001, 2007, and 2008-13

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton)

Item	Original invs.	First reviews	Second reviews					
	2001	2007	2008	2009	2010	2011	2012	2013
U.S. industry:								
Capacity (<i>quantity</i>)	***	5,429,678	5,546,751	5,295,752	4,965,095	5,173,168	5,131,954	5,073,815
Production (<i>quantity</i>)	***	4,067,549	4,055,641	2,837,165	3,384,322	3,907,416	3,879,060	3,655,088
Capacity utilization (<i>percent</i>)	***	74.9	73.1	53.6	68.2	75.5	75.6	72.0
U.S. shipments:								
Quantity	***	4,076,282	4,050,961	2,833,426	3,340,954	3,876,145	3,809,728	3,599,459
Value	***	2,340,401	3,485,005	1,651,451	2,246,759	3,012,054	2,826,974	2,529,487
Unit value	***	\$574	\$860	\$583	\$672	\$777	\$742	\$703
Export shipments:								
Quantity	***	***	39,707	39,301	42,049	34,687	26,748	24,319
Value	***	***	31,925	22,886	26,912	28,888	31,597	22,566
Unit value	***	***	\$804	\$582	\$640	\$833	\$1,181	\$928
Ending inventory	***	152,512	231,279	195,717	196,677	193,261	235,848	266,868
Inventories/total shipments	***	***	5.7	6.8	5.8	4.9	6.1	7.4
Production workers	***	2,397	2,339	2,083	2,173	2,239	2,269	2,192
Hours worked (<i>1,000</i>)	***	5,174	4,741	3,825	4,220	4,552	4,587	4,258
Wages paid (\$1,000)	***	161,821	170,467	128,170	145,939	166,385	174,648	156,838
Hourly wages	***	\$31.28	\$35.96	\$33.51	\$34.58	\$36.55	\$38.07	\$36.83
Productivity (<i>short tons per 1,000 hours</i>)	***	786.0	855.4	741.7	802.0	858.4	845.7	858.4
Unit labor costs	***	\$39.78	\$42.03	\$45.18	\$43.12	\$42.58	\$45.02	\$42.91
Financial data:								
Net sales:								
Quantity	***	4,087,541	4,126,388	2,881,432	3,384,018	3,920,918	3,836,475	3,623,777
Value	***	2,347,208	3,547,031	1,679,395	2,274,325	3,048,561	2,858,572	2,552,054
Unit value	***	\$574	\$860	\$583	\$672	\$778	\$745	\$704
Cost of goods sold	***	2,219,518	3,116,677	1,652,958	2,083,987	2,743,826	2,622,588	2,358,335
Gross profit (loss)	***	127,690	430,354	26,437	190,338	304,735	235,984	193,719
Operating income (loss)	***	74,869	347,095	(42,915)	98,754	218,013	148,351	107,694
Unit COGS	***	\$543	\$755.30	\$573.66	\$615.83	\$699.79	\$683.59	\$650.79
Unit operating income	***	\$18	\$84.12	\$(14.89)	\$29.18	\$55.60	\$38.67	\$29.72
COGS/sales (<i>percent</i>)	***	94.6	87.9	98.4	91.6	90.0	91.7	92.4
Operating income (loss)/sales (<i>percent</i>)	***	3.2	9.8	(2.6)	4.3	7.2	5.2	4.2

¹ As Canada is no longer subject to an antidumping duty order, data for Canada are not presented separately from the "all other sources" line for the 2008-13 annual periods.

² Data on 1080 tire cord/tire bead wire rod were not reported separately in the original investigations.

³ Data on U.S. imports from the Canadian exporter Stelco, which had in previous proceedings been reported separately from the "all other sources" line have been combined into the "all other sources" line.

⁴ Undefined.

Source: Compiled from official Commerce statistics and data submitted in response to Commission questionnaires; Investigation Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review): *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine--Staff Report*, INV-FF-058, May 15, 2008, table I-1.

As the data presented in table I-1 show, apparent U.S. consumption of wire rod totaled approximately 5.3 million short tons (\$3.8 billion) in 2013. U.S. producers' U.S. shipments of wire rod totaled 3.6 million short tons (\$2.5 billion) in 2013, and accounted for 67.9 percent of the quantity of apparent U.S. consumption. There were no reported U.S. imports from five of the six countries subject to these reviews during 2013. U.S. imports from Mexico (i.e., the only subject country reporting subject imports during 2013) totaled 10,333 short tons (\$6.1 million) in 2013 and accounted for 0.2 percent of the quantity of apparent U.S. consumption, whereas total nonsubject U.S. imports (primarily wire rod from China, Canada, and Japan) totaled 1.7 million short tons (\$1.2 billion) in 2013 and accounted for 31.9 percent of the quantity of apparent U.S. consumption. The quantity of apparent U.S. consumption has decreased irregularly since 2001, while U. S. producers' share of consumption has fluctuated upward, reaching its highest levels in 2009 and 2011 before falling to 67.9 percent in 2013. Since the original investigations and the first five-year reviews, the share of subject imports declined overall, while the share of nonsubject imports generally increased, led by increases in imports from China in recent years.

The three leading sources of subject imports in 2001 and 2007 were, in descending order of magnitude, Canada (no longer subject), Trinidad & Tobago, and Mexico. As previously indicated, the only source of subject imports in 2013 was Mexico. U.S. imports of wire rod from Brazil, Moldova, and Ukraine largely ceased following the imposition of duties in 2002, while U.S. imports of wire rod from Indonesia, the smallest supplier during the original investigations, ceased after 2005. The U.S. imports of wire rod from Trinidad & Tobago ceased after 2008.

The U.S. producers' reported capacity was lower in 2007 than reported in 2001, while production and capacity utilization fluctuated to a level in 2007 that was higher than reported in 2001. U.S. producers' reported capacity increased from 2007 to 2008 but generally fell thereafter, whereas production and capacity utilization fluctuated from 2007 to 2012 with the lowest levels reported during 2009-10. The quantity of U.S. producers' U.S. shipments fluctuated upward from the original investigations (2001) to the first reviews (2007), but fluctuated downward thereafter. The level of employment remained relatively flat from the end of the original investigations through 2007, but declined overall from 2007 to 2013.

RELATED INVESTIGATIONS

Title VII investigations

The Commission has conducted a number of previous import relief investigations on wire rod products or similar merchandise. Table 1-2 presents data on previous and related title VII investigations.

Table I-2

Wire rod: Previous and related title VII investigations

Original investigation				First review		Second review		Current status
Date ¹	Number	Country	Outcome	Date ¹	Outcome	Date ¹	Outcome	
1982	731-TA-88	Venezuela	Negative	-	-	-	-	-
1982	731-TA-113	Brazil	Affirmative	-	-	-	-	ITA revoked 9/20/85
1982	731-TA-114	Trinidad & Tobago	Affirmative	-	-	-	-	ITA revoked 12/14/87
1982	701-TA-148	Brazil	Affirmative ²	-	-	-	-	Investigation terminated 8/21/85
1982	701-TA-149	Belgium	Affirmative ²	-	-	-	-	Petition withdrawn 11/9/82
1982	701-TA-150	France	Affirmative ²	-	-	-	-	Petition withdrawn 11/9/82
1983	701-TA-209	Spain	Affirmative	-	-	-	-	ITA revoked 9/11/85
1983	731-TA-157	Argentina	Affirmative	1998	Negative	-	-	-
1983	731-TA-158	Mexico	Negative ²	-	-	-	-	-
1983	731-TA-159	Poland	Negative	-	-	-	-	-
1983	731-TA-160	Spain	Affirmative	-	-	-	-	ITA revoked 9/16/85
1984	731-TA-205	E. Germany	Affirmative ²	-	-	-	-	Petition withdrawn 8/1/85
1985	701-TA-243	Portugal	Negative ²	-	-	-	-	-
1985	701-TA-244	Venezuela	Affirmative ²	-	-	-	-	Petition withdrawn 7/24/85
1985	731-TA-256	Poland	Affirmative ²	-	-	-	-	Petition withdrawn 9/10/85
1985	731-TA-257	Portugal	Affirmative ²	-	-	-	-	Petition withdrawn 11/20/85
1985	731-TA-258	Venezuela	Affirmative ²	-	-	-	-	Petition withdrawn 8/30/85
1992	701-TA-314	Brazil	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	701-TA-315	France	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	701-TA-316	Germany	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	701-TA-317	United Kingdom	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-552	Brazil	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-553	France	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-554	Germany	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-555	United Kingdom	Affirmative	1999	-	-	-	ITA revoked 11/15/99
1992	731-TA-572	Brazil	Negative	-	-	-	-	-
1993	731-TA-646	Brazil	Negative	-	-	-	-	-

Table continued on next page.

Table I-2--*Continued*

Wire rod: Previous and related title VII investigations

Original investigation				First review		Second review		Current status
Date ¹	Number	Country	Outcome	Date ¹	Outcome	Date ¹	Outcome	
1993	731-TA-647	Canada	Affirmative ²	-	-	-	-	Petition withdrawn 4/18/94
1993	731-TA-648	Japan	Negative	-	-	-	-	-
1993	731-TA-649	Trinidad & Tobago	Negative ²	-	-	-	-	-
1994	701-TA-359	Germany	Negative ²	-	-	-	-	-
1994	731-TA-686	Belgium	Affirmative ²	-	-	-	-	Petition withdrawn 7/7/94
1994	731-TA-687	Germany	Negative ²	-	-	-	-	-
1997	701-TA-368	Canada	Negative	-	-	-	-	-
1997	701-TA-369	Germany	Negligible ³	-	-	-	-	-
1997	701-TA-370	Trinidad & Tobago	Negative	-	-	-	-	-
1997	701-TA-371	Venezuela	Negative	-	-	-	-	-
1997	731-TA-763	Canada	Negative	-	-	-	-	-
1997	731-TA-764	Germany	Negative	-	-	-	-	-
1997	731-TA-765	Trinidad & Tobago	Negative	-	-	-	-	-
1997	731-TA-766	Venezuela	Negative	-	-	-	-	-
2001	701-TA-417	Brazil	Affirmative	2007	Affirmative	2013	-	Current review
2001	701-TA-418	Canada	Affirmative	-	-	-	-	ITA revoked 1/23/04
2001	701-TA-419	Germany	Negative	-	-	-	-	-
2001	701-TA-420	Trinidad & Tobago	Negative ⁴	-	-	-	-	-
2001	701-TA-421	Turkey	Negative ⁴	-	-	-	-	-
2001	731-TA-953	Brazil	Affirmative	2007	Affirmative	2013	-	Current review
2001	731-TA-954	Canada	Affirmative	2007	Negative	-	-	-
2001	731-TA-955	Egypt	Negligible ³	-	-	-	-	-
2001	731-TA-956	Germany	Negligible ³	-	-	-	-	-
2001	731-TA-957	Indonesia	Affirmative	2007	Affirmative	2013	-	Current review
2001	731-TA-958	Mexico	Affirmative	2007	Affirmative	2013	-	Current review
2001	731-TA-959	Moldova	Affirmative	2007	Affirmative	2013	-	Current review
2001	731-TA-960	South Africa	Negligible ³	-	-	-	-	-
2001	731-TA-961	Trinidad & Tobago	Affirmative	2007	Affirmative	2013	-	Current review
2001	731-TA-962	Ukraine	Affirmative	2007	Affirmative	2013	-	Current review
2001	731-TA-963	Venezuela	Negligible ³	-	-	-	-	-
2005	731-TA-1099	China	Negative ²	-	-	-	-	-
2005	731-TA-1100	Germany	Negative ²	-	-	-	-	-
2005	731-TA-1101	Turkey	Negative ²	-	-	-	-	-
2014	701-TA-512	China	Affirmative ²	-	-	-	-	Final determination pending
2014	731-TA-1248	China	Affirmative ²	-	-	-	-	Final determination pending

¹ "Date" refers to the year in which the investigation or review was instituted by the Commission.² Preliminary determination.³ The Commission found subject imports to be negligible, and its investigation was thereby terminated.⁴ The Department of Commerce made a negative determination.

Source: Various Commission publications.

Safeguard investigation

In 1999, the Commission conducted a safeguard investigation under section 202 of the Trade Act of 1974 to determine whether steel wire rod was being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the imported article. The Commission was equally divided in its injury determination.¹⁷ The President considered the determination of the Commissioners voting in the affirmative and issued Proclamation 7273 imposing relief in the form of a Tariff Rate Quota (“TRQ”) on imports of steel wire rod for a period of three years and one day, effective March 1, 2000.

Imports of subject products in excess of the quarterly or the annual quota amounts were assessed duties in addition to the column-1 general rates of duty in the amounts of 10 percent ad valorem in the first year of relief (in-quota quantity of 1,580,000 short tons); 7.5 percent ad valorem in the second year of relief (in-quota quantity of 1,611,600 short tons); and 5 percent ad valorem in the third year of relief (in-quota quantity of 1,643,832 short tons). The President subsequently issued Proclamation 7505 effective November 24, 2001, modifying the TRQ, by providing that the in-quota quantity of the TRQ be allocated among these four supplier

¹⁷ Pursuant to section 311(a) of the North American Free Trade Agreement (“NAFTA”) Implementation Act, the Commission made negative findings with respect to imports of wire rod from Canada and Mexico.

country groupings: European Community; Commonwealth of Independent States; Trinidad and Tobago; and all other countries.¹⁸

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation “would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury.”

Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--

(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,

(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,

¹⁸ *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine, Investigation Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review)*, USITC Publication 4014, June 2008, pp. I-11-I-12.

(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and

(D) in an antidumping proceeding . . . , (Commerce's findings) regarding duty absorption . . .

(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including--

(A) any likely increase in production capacity or existing unused production capacity in the exporting country,

(B) existing inventories of the subject merchandise, or likely increases in inventories,

(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and

(D) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.

(3) PRICE.--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--

(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and

(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to--

(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,

(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and

(C) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.

The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a)(6) of the Act states further that in making its determination, “the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement.”

Organization of report

Information obtained during the course of the reviews that relates to the statutory criteria is presented throughout this report. A summary of trade and financial data for wire rod as collected in the reviews is presented in appendix C. U.S. industry data are based on the questionnaire responses of ten U.S. producers of wire rod that are believed to have accounted for all domestic production of wire rod in 2013. U.S. import data and related information are based on Commerce’s official import statistics and the questionnaire responses of 36 U.S. importers of wire rod. The U.S. producers and importers and their shares of U.S. production and U.S. imports, respectively, are presented later in *Part I* of this report (see “U.S. Market Participants”). Foreign industry data and related information are based on the questionnaire responses of one producer in Brazil, one producer in Indonesia, three producers in Mexico, one

producer in Trinidad & Tobago, and two producers in Ukraine. Coverage information on the eight responding producers in the subject countries are presented in country-specific sections in *Part IV* of this report. The producer of wire rod in Moldova did not provide a response to the Commission's questionnaire. Therefore, the foreign industry data and related information for the wire rod industry in Moldova are based on publicly available industry information and ***. Responses by U.S. producers, importers, purchasers, and foreign producers of wire rod to a series of questions concerning the significance of the existing antidumping and countervailing duty orders and the likely effects of revocation of such orders are presented in appendix D.

COMMERCE'S REVIEWS

Administrative reviews¹⁹

Commerce has completed one or more administrative reviews of the outstanding antidumping duty orders on wire rod from Brazil, Canada, Indonesia, Mexico, and Trinidad & Tobago. Commerce has completed no administrative reviews of the outstanding antidumping duty orders on wire rod from Moldova and Ukraine, nor of the countervailing duty order on wire rod from Brazil.²⁰

Brazil

Commerce completed one antidumping duty administrative review with regard to the antidumping duty order on imports of wire rod from Brazil prior to the first five-year review. The results of the administrative review are shown in table I-3. Commerce has not conducted any administrative reviews since it issued its final results of the first expedited five-year review.

Table I-3

Wire rod: Administrative review of the antidumping duty order for Brazil

Date results published	Period of review	Producer or exporter	Margin (percent)
May 17, 2005 (70 FR 28271)	4/10/2002 - 9/30/2003	Belgo	98.69
		All others	74.35

Source: Cited *Federal Register* notice.

¹⁹ No duty absorption findings have been made for any of the subject countries. *Issues and Decision Memorandum for the Final Results of Expedited Second Sunset Reviews of the Antidumping Duty Orders on Carbon and Certain Alloy Steel Wire Rod from Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine*, October 17, 2013, p. 5.

²⁰ For previously reviewed or investigated companies not included in an administrative review, the cash deposit rate continues to be the company-specific rate published for the most recent period.

Indonesia

Commerce completed one antidumping duty administrative review with regard to subject imports of wire rod from Indonesia prior to the first five-year review. The results of the administrative review are shown in table I-4. Commerce has not conducted any administrative reviews since it issued its final results of the first expedited five-year review.

Table I-4

Wire rod: Administrative review of the antidumping duty order for Indonesia

Date results published	Period of review	Producer or exporter	Margin (percent)
October 19, 2005 (70 FR 60787)	10/1/2003 - 9/30/2004	P.T. Ispat Indo	0.38 ¹
		All others	4.06

¹ *De minimis* margin (i.e., margin is less than 0.5 percent), therefore no cash deposit was required to be paid to Customs.

Source: Cited *Federal Register* notice.

Mexico

Commerce completed five antidumping duty administrative reviews with regard to subject imports of wire rod from Mexico. The results of the administrative reviews are shown in table I-5.

Table I-5

Wire rod: Administrative reviews of the antidumping duty order for Mexico

Date results published	Period of review	Producer or exporter	Margin (percent)
May 16, 2005 (70 FR 25809)	4/10/2002 - 9/30/2003	Hylsa	5.45
		Sicartsa	1.06
		All others	20.11
May 15, 2006 (71 FR 27989)	10/1/2003 - 9/30/2004	Hylsa	1.81
		Sicartsa	1.26
		All others	20.11
March 13, 2008 (73 FR 13532)	10/1/2005 - 9/30/2006	Hylsa	17.94
March 7, 2012 (77 FR 13545)	10/01/2009 - 9/30/2010	Arcelor Mittal Las Truchas ¹	5.59
May 14, 2013 (78 FR 28190)	10/01/2010 - 9/30/2011	Deacero	12.08

¹ Arcelor Mittal Las Truchas is the successor-in-interest to Sicartsa (76 FR 45509, July 29, 2011).

Source: Cited *Federal Register* notices.

Trinidad & Tobago

Commerce completed six antidumping duty administrative reviews with regard to subject imports of wire rod from Trinidad & Tobago. The results of the administrative reviews are shown in table I-6.

Table I-6
Wire rod: Administrative reviews of the antidumping duty order for Trinidad & Tobago

Date results published	Period of review	Producer or exporter	Margin (percent)
March 15, 2005 (70 FR 12648)	4/10/2002 - 9/30/2003	CIL	3.61
		All others	11.40
November 16, 2005 (70 FR 69512)	10/1/2003 - 9/30/2004	CIL	4.13
		All others	11.40
March 6, 2007 (72 FR 9922)	10/1/2004 - 9/30/2005	Mittal Steel Point Lisas	0.06 ¹
		All others	11.40
November 7, 2007 (72 FR 62824)	10/1/2005 - 9/30/2006	Mittal Steel Point Lisas	0.40 ¹
		All others	11.40
March 12, 2009 (74 FR 10722)	10/01/2006 - 9/30/2007	Arcelor Mittal Point Lisas ²	1.56
February 25, 2010 (75 FR 8650)	10/01/2007 - 9/30/2008	Arcelor Mittal Point Lisas ²	23.95

¹ *De minimis* margin (i.e., margin is less than 0.5 percent), therefore no cash deposit was required to be paid to Customs.

² ArcelorMittal Point Lisas Limited is the successor-in-interest to Mittal Steel Point Lisas (73 FR 30052, May 23, 2008).

Source: Cited *Federal Register* notices.

Changed circumstances reviews

Commerce completed four changed circumstances reviews with regard to imports of wire rod subject to these second five-year reviews. The results of the changed circumstances reviews are shown in table I-7.

Table I-7
Wire rod: Changed circumstances reviews

Publication date (FR cite)	Requestor	Final result
November 12, 2003 (68 FR 64079)	Petitioners	Commerce initiated a changed circumstances review to clarify the technical descriptions of certain grade 1080 tire cord/bead quality wire rod that were originally excluded from the scope of the countervailing duty order. In its final results, Commerce amended the technical description so that certain grade 1080 tire cord/bead quality steel wire rod “having no non-deformable inclusions greater than 20 microns and no deformable inclusions greater than 35 microns” rather than just those “having no inclusions greater than 20 microns” were revoked from the countervailing duty order, effective July 24, 2003.
May 23, 2008 (73 FR 30052)	ArcelorMittal Point Lisas	Commerce determined that ArcelorMittal Point Lisas is the successor-in-interest to Mittal Steel Point Lisas Ltd.
May 13, 2009 (74 FR 22514)	Ternium Mexico	Commerce determined that Ternium Mexico is the successor-in-interest to Hylsa.
July 29, 2011 (76 FR 45509)	ArcelorMittal Las Truchas	Commerce determined that ArcelorMittal Las Truchas is the successor-in-interest to Sicartsa.

Source: Cited *Federal Register* notices.

Scope inquiry reviews

On May 11, 2004, Commerce initiated a scope inquiry to clarify the exclusion for grade 1080 tire cord quality wire rod and tire bead quality wire rod from the antidumping and countervailing duty orders on wire rod from Brazil. On May 9, 2005, Commerce issued a final scope ruling and determined that for grade 1080 tire cord quality wire rod and tire bead quality wire rod, the phrase, “having no inclusions greater than 20 microns” means no inclusions greater than 20 microns in any direction.²¹

Anti-circumvention inquiry

On June 8, 2011, at the request of the domestic industry, Commerce initiated a circumvention inquiry into whether Mexican wire rod producers Deacero and Ternium Mexico shipped wire rod with an actual diameter measuring 4.75 mm to 5.00 mm in a manner that constituted merchandise altered in form or appearance in such minor respects that it should be included within the scope.²² On October 1, 2012, Commerce published its final determination of circumvention, finding that (1) Ternium was not covered by the affirmative anti-circumvention inquiry because it had not shipped wire rod with diameters of 4.75 to 5.0 mm to the United States; and (2) shipments of wire rod with an actual diameter of 4.75 mm to 5.00 mm by Deacero constituted merchandise altered in form or appearance in such minor respects that it

²¹ *Notice of Scope Rulings*, 70 FR 55110 (September 20, 2005).

²² *Carbon and Certain Alloy Steel Wire Rod from Mexico: Initiation of Anti-Circumvention Inquiry of Antidumping Duty Order*, 76 FR 33218, June 8, 2011.

should be included within the scope of the order on wire rod from Mexico.²³ Deacero appealed Commerce's final circumvention finding to the CIT and a remand order was issued on September 30, 2013.²⁴ Pursuant to the direction from the CIT, Commerce reversed its final determination "under respectful protest" and found on final remand that wire rod with an actual diameter of 4.75 mm to 5.00 mm shipped to the United States by Deacero is outside the scope of the order and, thus, such shipments do not constitute a circumventing minor alteration.²⁵ The CIT ruling on Commerce's final remand determination is pending.

Certain data and other information concerning the Mexican production, U.S. imports, and U.S. purchases of the imported smaller diameter wire rod (4.75 mm to 5.0 mm) produced by Deacero in Mexico were requested in these reviews. Such information provided in response to questionnaires transmitted to U.S. importers, purchasers, and foreign producer Deacero is presented separately in appendix E.

²³ *Carbon and Certain Alloy Steel Wire Rod from Mexico: Affirmative Final Determination of Circumvention of the Antidumping Order*, 77 FR 59892, October 1, 2012.

²⁴ *Deacero S.A. de C.V. and Deacero USA Inc. v. United States and Arcelormittal USA LLC, Gerdau Ameristeel U.S. Inc., Evraz Rocky Mountain Steel, and Nucor Corporation*, Court No. 12-00345; Slip Op. 13-126 (CIT 2013) ("Deacero Remand").

²⁵ *Final Results of Redetermination Pursuant to Court Remand (Deacero Remand)*, Office of Enforcement & Compliance, International Trade Administration, January 28, 2014.

Five-year reviews

Commerce has issued the final results of its expedited second five-year reviews of the countervailing duty order concerning Brazil and the antidumping duty orders concerning Brazil, Indonesia, Mexico, Moldova, Trinidad & Tobago, and Ukraine.²⁶ Table I-8 presents information with respect to the countervailable subsidies and table I-9 presents information with respect to the dumping margins.

Table I-8

Wire rod: Commerce's original and first and second five-year countervailable subsidy margins for producers/exporters in Brazil

Producer/exporter	Original margin (percent)	First five-year review margin (percent)	Second five-year review margin (percent)
Belgo Mineira ¹	6.74	6.74	6.74
Gerdau SA	2.76	2.76	2.31
All others	5.64	5.64	4.53

¹ ArcelorMittal Brasil is the successor to Belgo Mineira.

Source: Countervailing duty order, 67 FR 64871, October 22, 2002; final results of first expedited sunset review, 73 FR 1323, January 8, 2008; final results of second expedited sunset review, 78 FR 60850, October 2, 2013.

²⁶ *Carbon and Certain Alloy Steel Wire Rod From Brazil: Final Results of the Expedited Second Sunset Review of the Countervailing Duty Order*, 78 FR 60850, October 2, 2013; *Carbon and Certain Alloy Steel Wire Rod From Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine: Final Results of the Expedited Second Sunset Reviews of the Antidumping Duty Orders*, 78 FR 63450, October 24, 2013.

Table I-9

Wire rod: Commerce's original and first and second five-year dumping margins for producers/exporters, by subject country

Producer/exporter	Original margin (percent)	First five-year review margin (percent)	Second five- year review margin (percent)
Brazil			
Belgo Mineira ¹	94.73	94.73	94.73
All others	74.35	74.45	74.45
Indonesia			
PT Ispat Indo	4.06	4.06	4.05
All others	4.06	4.06	4.05
Mexico			
Sicartsa/ArcelorMittal Las Truchas	20.11	20.11	20.11
All others	20.11	20.11	20.11
Moldova			
Moldova-wide rate	369.10	369.10	369.10
Trinidad & Tobago			
Caribbean Ispat/ArcelorMittal Point Lisas	11.40	11.40	11.40
All others	11.40	11.40	11.40
Ukraine			
Krivorozhstal	116.37	116.37	116.37
All others	116.37	116.37	116.37

¹ ArcelorMittal Brasil is the successor to Belgo Mineira.

Source: Antidumping duty order, 67 FR 34899, May 16, 2002; final results of expedited sunset review, 73 FR 1321, January 8, 2008; final results of second expedited sunset review, 78 FR 63450, October 24, 2013.

THE SUBJECT MERCHANDISE

Commerce's scope

The scope of these reviews as defined by Commerce in its expedited second five-year review antidumping duty determinations is as follows:

The merchandise subject to these orders is certain hot-rolled products of carbon steel and alloy steel, in coils, of approximately round cross section, 5.00 mm or more, but less than 19.00 mm, in solid cross-sectional diameter.

Specifically excluded are steel products possessing the above-noted physical characteristics and meeting the Harmonized Tariff Schedule of the United States ("HTSUS") definitions for (a) stainless steel; (b) tool steel; c) high nickel steel; (d) ball bearing steel; and (e) concrete reinforcing bars and rods.

Also excluded are (f) free machining steel products (i.e., products that contain by weight one or more of the following elements: 0.03 percent or more of lead, 0.05 percent or more of bismuth, 0.08 percent or more of sulfur, more than 0.04 percent of phosphorus, more than 0.05 percent of selenium, or more than 0.01 percent of tellurium). Also excluded from the scope are 1080 grade tire cord quality wire rod and 1080 grade tire bead quality wire rod. This grade 1080 tire cord quality rod is defined as: (i) grade 1080 tire cord quality wire rod measuring 5.0 mm or more but not more than 6.0 mm in cross-sectional diameter; (ii) with an average partial decarburization of no more than 70 microns in depth (maximum individual 200 microns); (iii) having no non-deformable inclusions greater than 20 microns and no deformable inclusions greater than 35 microns; (iv) having a carbon segregation per heat average of 3.0 or better using European Method NFA 04-114; (v) having a surface quality with no surface defects of a length greater than 0.15 mm; (vi) capable of being drawn to a diameter of 0.30 mm or less with 3 or fewer breaks per ton, and (vii) containing by weight the following elements in the proportions shown: (1) 0.78 percent or more of carbon, (2) less than 0.01 percent of aluminum, (3) 0.040 percent or less, in the aggregate, of phosphorus and sulfur, (4) 0.006 percent or less of nitrogen, and (5) not more than 0.15 percent, in the aggregate, of copper, nickel and chromium.

This grade 1080 tire bead quality rod is defined as: (i) grade 1080 tire bead quality wire rod measuring 5.5 mm or more but not more than 7.0 mm in cross-sectional diameter; (ii) with an average partial decarburization of no more than 70 microns in depth (maximum

individual 200 microns); (iii) having no non-deformable inclusions greater than 20 microns and no deformable inclusions greater than 35 microns; (iv) having a carbon segregation per heat average of 3.0 or better using European Method NFA 04-114; (v) having a surface quality with no surface defects of a length greater than 0.2 mm; (vi) capable of being drawn to a diameter of 0.78 mm or larger with 0.5 or fewer breaks per ton; and (vii) containing by weight the following elements in the proportions shown: (1) 0.78 percent or more of carbon, (2) less than 0.01 percent of soluble aluminum, (3) 0.040 percent or less, in the aggregate, of phosphorus and sulfur, (4) 0.008 percent or less of nitrogen, and (5) either not more than 0.15 percent, in the aggregate, of copper, nickel and chromium (if chromium is not specified), or not more than 0.10 percent in the aggregate of copper and nickel and a chromium content of 0.24 to 0.30 percent (if chromium is specified).

For purposes of the grade 1080 tire cord quality wire rod and the grade 1080 tire bead quality wire rod, an inclusion will be considered to be deformable if its ratio of length (measured along the axis - that is, the direction of rolling - of the rod) over thickness (measured on the same inclusion in a direction perpendicular to the axis of the rod) is equal to or greater than three. The size of an inclusion for purposes of the 20 microns and 35 microns limitations is the measurement of the largest dimension observed on a longitudinal section measured in a direction perpendicular to the axis of the rod. This measurement methodology applies only to inclusions on certain grade 1080 tire cord quality wire rod and certain grade 1080 tire bead quality wire rod that are entered, or withdrawn from warehouse, for consumption on or after July 24, 2003.

The designation of the products as "tire cord quality" or "tire bead quality" indicates the acceptability of the product for use in the production of tire cord, tire bead, or wire for use in other rubber reinforcement applications such as hose wire. These quality designations are presumed to indicate that these products are being used in tire cord, tire bead, and other rubber reinforcement applications, and such merchandise intended for the tire cord, tire bead, or other rubber reinforcement applications is not included in the scope. However, should the petitioners or other interested parties provide a reasonable basis to believe or suspect that there exists a pattern of importation of such products for other than those applications, end-use certification for all products meeting the physical description of subject merchandise that are not specifically excluded are included in this scope.

The products subject to these orders are currently classifiable under subheadings 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7213.99.0060, 7213.99.0090,

7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, and 7227.90.6085 of the HTSUS.²⁷

Tariff treatment

Wire rod is imported under the following statistical reporting numbers of the Harmonized Tariff Schedule of the United States (“HTSUS” or “HTS”): 7213.91.3011, 7213.91.3015, 7213.91.3020 (added on July 1, 2008), 7213.91.3092 (discontinued on July 1, 2008), 7213.91.3093 (added on July 1, 2008),²⁸ 7213.91.4500, 7213.91.6000, 7213.99.0030, 7213.99.0090, 7227.20.0000 (discontinued on July 1, 2008), 7227.20.0030 (added on July 1, 2008), 7227.20.0080 (added on July 1, 2008),²⁹ 7227.90.6010, 7227.90.6020 (added on July 1, 2008), 7227.90.6080 (discontinued on July 1, 2008), and 7227.90.6085 (added on July 1,

²⁷ On October 1, 2012, Commerce published its final determination of circumvention, finding that shipments of wire rod with an actual diameter of 4.75 mm to 5.00 mm produced in Mexico and exported to the United States by Deacero constitute merchandise altered in form or appearance in such minor respects that it should be included within the scope of the order on wire rod from Mexico. *Issues and Decision Memorandum for the Final Results of Expedited Second Sunset Reviews of the Antidumping Duty Orders on Carbon and Certain Alloy Steel Wire Rod from Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine*, October 17, 2013, pp. 6-8. Pursuant to the CIT’s remand order, Commerce reversed its final determination “under respectful protest” and found that wire rod with an actual diameter of 4.75 mm to 5.00 mm shipped to the United States by Deacero is outside the scope of the order. The CIT ruling on Commerce’s final remand determination is pending. *Final Results of Redetermination Pursuant to Court Remand (Deacero Remand)*, Office of Enforcement & Compliance, International Trade Administration, January 28, 2014.

²⁸ HTS 7213.91.3092 was replaced with two new breakouts, including 7213.91.3020 (covering welding-quality, nonalloy wire rod, with a circular diameter of less than 14 mm, not tempered, not treated and not partly manufactured) and 7213.91.3093 (covering other than of welding quality, nonalloy wire rod with a circular diameter of less than 14 mm, not tempered, not treated and not partly manufactured). *HTSUS 2008 - Supplement 1*, “Change Record,” July 1, 2008, p. 11; *HTSUS 2008 - Supplement 1*, “Chapter 72 Iron and Steel,” July 1, 2008, p. XV 72-18; and *HTSUS 2008 – Revision 2*, “Chapter 72 Iron and Steel,” April 16, 2008, p. XV 72-18.

²⁹ HTS 7227.20.0000 was replaced with two new breakouts, including 7227.20.0030 (covering welding-quality, silico-manganese alloy wire rod) and 7227.20.0080 (covering other than of welding quality, silico-manganese alloy wire rod). *HTSUS 2008 - Supplement 1*, “Change Record,” July 1, 2008, p. 11; *HTSUS 2008 - Supplement 1*, “Chapter 72 Iron and Steel,” July 1, 2008, p. XV 72-36; and *HTSUS 2008 – Revision 2*, “Chapter 72 Iron and Steel,” April 16, 2008, p. XV 72-36.

2008).³⁰ At the time of the original investigations general U.S. tariffs on wire rod, applicable to U.S. imports that are products of the subject countries and reported under these provisions, ranged from 0.8 to 0.9 percent ad valorem for nonalloy steel and were 1.8 percent ad valorem for alloy steel. By January 1, 2004, these tariffs had been eliminated, resulting in a general duty rate of “Free.”

THE PRODUCT

Description and applications³¹

Wire rod is a hot-rolled intermediate steel product of circular or approximately circular cross section that typically is produced in nominal fractional diameters up to 47/64 inch (18.7 mm) and sold in irregularly wound coils, primarily for subsequent drawing and finishing by wire

³⁰ HTS 7227.90.6080 was replaced with two new breakouts, including 7227.90.6020 (covering welding-quality, other alloy wire rod) and 7227.90.6085 (covering other than of welding quality, other alloy wire rod). *HTSUS 2008 - Supplement 1*, “Change Record,” July 1, 2008, p. 11; *HTSUS 2008 - Supplement 1*, “Chapter 72 Iron and Steel,” July 1, 2008, p. XV 72-36; and *HTSUS 2008 – Revision 2*, “Chapter 72 Iron and Steel,” April 16, 2008, p. XV 72-36.

As of January 1, 2014, HTS 7227.90.6085 was replaced with four new breakouts, including 7227.90.6030 (covering other alloy wire rod with a circular diameter of less than 14 mm) and 7227.90.6035 (covering other alloy wire rod with a circular diameter of 14 mm or more but less than 19 mm). The other two new breakouts, 7227.90.6040 (other alloy bars and rods with a circular diameter of 19 mm or more) and 7227.90.6090 (cross-section shapes other than circular), are considered bar and rod products outside the scope of these investigations. *HTSUS 2014 - Basic*, “Change Record,” January 1, 2014, pp. 6-7; and *HTSUS 2014 - Basic*, “Iron and Steel,” January 1, 2014, p. XV 72-36.

³¹ *Carbon and Certain Alloy Steel Wire Rod from China*, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary), USITC Publication 4458, March 2014, pp. I-10 – I-12; *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine*, Inv. Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review), USITC Publication 4014, June 2008, pp. I-22 – I-24; and *Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey*, Inv. Nos. 731-TA-1099-1101 (Preliminary), USITC Publication 3832, January 2006, pp. I-6 – I-7.

drawers.³² Wire rod is essentially used only to manufacture wire, which is either fabricated into downstream wire products or incorporated into finished products.³³ Wire rod sold in the United States is categorized by “quality” according to end use. End-use categories are broad descriptions with overlapping metallurgical qualities, chemistries,³⁴ and physical characteristics.³⁵

Table I-10 presents quality and commodity descriptions for 11 major types of wire rod, as indicated by the Iron and Steel Society. Industrial quality wire rod currently accounts for the majority of wire rod consumed in the United States. It is primarily intended for drawing into industrial (or standard) quality wire that, in turn, is used to manufacture such products as nails, reinforcing wire mesh and chain link fence. Most of the industrial quality wire rod is produced and sold in the smallest cross-sectional diameter that is hot rolled in substantial commercial quantities (7/32 inch or 5.6 mm). Industrial quality wire rod generally is manufactured from low- or medium-low-carbon steel.³⁶ Other relatively large-volume qualities of wire rod consumed in the United States include high- and medium-high carbon and cold-heading quality.

³² Wire drawers (also referred to as redrawers) manufacture wire and wire products and may be independent of the wire rod manufacturers or may be affiliated parties.

³³ *Carbon and Certain Alloy Steel Wire Rod from China, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary)*, USITC Publication 4458, March 2014, p. I-11.

³⁴ Steel chemistries are designated as “grades” of standardized composition ranges for carbon, nonferrous metals, and nonmetallic elements. See e.g., table 2-1, Standard Steels for Wire Rods and Wire Nonresulfurized Carbon Steels, Manganese Maximum Not Exceeding 1.00 Percent. Iron and Steel Society, *Steel Products Manual: Carbon Steel Wire and Rods*, August 1993, p. 6.

Wire rod of AISI/SAE grade 1080 steel contains 0.75-0.88 percent carbon, 0.60-0.90 manganese, a maximum of 0.040 percent phosphorous, and 0.050 percent sulfur. Ibid.

³⁵ Steel ductility, hardness, and tensile strength are positively correlated with carbon content. Alloying elements can be added at the steel melting stage of the manufacturing process to impart various characteristics to the wire rod.

³⁶ Iron and Steel Society, *Steel Products Manual: Carbon Steel Wire and Rods*, August 1993, p. 36.

High- and medium-high carbon wire rod are intended for drawing into wire for such products as strand, upholstery spring, mechanical spring, rope, screens, and pre-stressed concrete wire.³⁷

Table I-10
Wire rod: Quality, end uses, and important characteristics

Quality	End uses	Important characteristics
Chain quality	Electric welded chain	Butt-welding properties and uniform internal soundness
Cold-finishing quality	Cold-drawn bars	Surface quality
Cold-heading quality	Cold-heading, cold-forging, cold-extrusion products	Internal soundness, good surface quality, may require thermal treatments
Concrete reinforcement	Nondeformed rods for reinforcing concrete (plain round or smooth surface rounds)	Chemical composition important only insofar as it affects mechanical property
Fine wire	Insect screen, weaving wire, florist wire	Rods must be suitable for drawing into wire sizes as small as 0.035 inch (0.889 mm) without intermediate annealing; internal quality important
High carbon and medium-high carbon	Strand and rope, tire bead, upholstery spring, mechanical spring, screens, aluminum conductors steel reinforced core, pre-stressed concrete strand; pipe wrap wire is a subset	Requires thermal treatment prior to drawing; however, it is not intended to be used for music wire or valve spring wire
Industrial (standard) quality	Nails, coat hangers, mesh for concrete reinforcement, fencing	Can only be drawn a limited number of times before requiring thermal treatment
Music spring wire	Springs subject to high stress; valve springs are a subset	Restrictive requirements for chemistry, cleanliness, segregation, decarburization, surface imperfections
Scrapless nut	Fasteners produced by cold heading, cold expanding, cold punching, thread tapping	Internal soundness, good surface quality
Tire cord	Tread reinforcement in pneumatic tires	Restrictive requirements for cleanliness, segregation, decarburization, chemistry, surface imperfections
Welding quality	Wire for gas welding, electric arc welding, submerged arc welding, metal inert gas welding	Restrictive requirements for uniform chemistry

Source: Iron and Steel Society, *Steel Products Manual: Carbon Steel Wire and Rods*, August 1993, pp. 35-37.

³⁷ The end uses of very high quality wire rod are those where manufacturing process involve large amounts of cold deformation of the steel such as in recessed quality cold heading; those that are safety critical, such as automotive wheel bolts and tire reinforcing wire; those that have very demanding consistency requirements or unusual steel chemistry requirements, such as certain welding grades; and other applications that put unusual and demanding requirements on the steel.

Manufacturing processes³⁸

The manufacturing process for wire rod consists of several stages: (1) melting and refining to set the steel's chemical and metallurgical properties; (2) casting the steel into a semifinished shape (billet); (3) hot-rolling the billet into rod on a multistand, high-speed rolling mill; and (4) coiling and controlled cooling of the wire rod as it passes along a Stelmor deck, a specialized conveyor unique to the wire rod industry. The equipment used to produce wire rod is much the same throughout the world and without significant differences in production technology.³⁹

U.S. and foreign wire rod manufacturers have made capital investments in their production facilities to improve processing efficiencies and product quality. Standards of product quality (e.g., tighter dimensional tolerances, control over residuals, and coil weight) have become higher across the entire range of wire rod products largely in response to customer demands for improved performance on the customer's equipment. These improvements have tended to blur the distinctions among quality terms over time.⁴⁰

³⁸ *Carbon and Certain Alloy Steel Wire Rod from China*, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary), USITC Publication 4458, March 2014, pp. I-13 – I-18; *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine*, Inv. Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review), USITC Publication 4014, June 2008, pp. I-22 – I-24; and *Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey*, Inv. Nos. 731-TA-1099-1101 (Preliminary), USITC Publication 3832, January 2006, pp. I-6 – I-7.

³⁹ *Carbon and Certain Alloy Steel Wire Rod from China*, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary), USITC Publication 4458, March 2014, p. I-13.

⁴⁰ *Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey*, Invs. Nos. 731-TA-1099-1101 (Preliminary), USITC Publication 3832, January 2006, p. I-8.

Melting stage

There are two primary process routes by which steel for rod is made in the United States and in foreign countries: the integrated process, which employs blast furnaces and basic oxygen furnaces (“BOFs”), and the nonintegrated (or “minimill”) production process, which utilizes an electric arc furnace (“EAF”) to produce raw steel. In both processes, pig iron, ferrous scrap, and/or direct reduced iron (“DRI”)⁴¹ are charged into BOFs or EAFs. In the United States, steel for rod production is melted from ferrous scrap in an EAF, along with other raw materials that may also be added as part of the EAF charge.⁴² Alloy agents are added to the liquid steel to impart specific properties to finished steel products. The molten steel is poured or tapped from the furnace to a ladle, which is an open topped, refractory lined vessel that has an off-center opening in its bottom and is equipped with a nozzle. Meanwhile, the primary steelmaking vessel (either EAF or BOF) may be charged with new materials to begin another refining cycle.

Molten steel typically is treated in a ladle metallurgy station, where its chemistry is refined to give the steel those properties required for specific applications. At the ladle

⁴¹ The advantage of using DRI or pig iron (BOF steel) is the low levels of residual elements (e.g., copper, chromium, nickel, molybdenum, and tin) and reduced gaseous content (particularly nitrogen) that they impart to the steel. Compared to BOF steel, EAF scrap-based steel contains higher levels of certain residuals, which adversely affect yields and drawing efficiencies, and limit such scrap-based steel use in certain critical applications.

⁴² Minimills use ferrous scrap as their primary raw material but may add DRI or hot-briquetted iron and/or pig iron to the mix, depending on the specifications for the end product and the relative costs of the raw materials. Minimills that produce high quality rod products, such as high carbon, cold heading quality, tire cord quality, and/or other special quality wire rod may use less ferrous scrap and more DRI than other steelmakers, however the production process in general does not change.

Both steelmaking processes are increasingly overlapped in terms of chemistries (and are not considered material differences), with increasing blast furnace use of scrap and EAF use of DRI and pig iron. *Carbon and Certain Alloy Steel Wire Rod from China*, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary), USITC Publication 4458, March 2014, p. I-14.

metallurgy, or secondary steel making, station the chemical content (particularly that of carbon and sulfur) is adjusted, and alloying agents may be added.⁴³ The steel may be degassed (eliminating oxygen and hydrogen) at low pressures.⁴⁴ Ladle metallurgy stations are equipped with electric arc power to adjust the temperature of the molten steel for optimum casting and to allow it to serve as a holding reservoir for the tundish.

⁴³ Boron can be added as ferroboration to molten steel (in concentrations of 0.0015–0.0030 percent or 15–30 parts per million (ppm)) to increase the hardenability of the steel. However, because of boron's high reactivity with any dissolved oxygen and nitrogen in the molten steel, ferroboration is the last addition at the ladle metallurgy station, under controlled conditions, and only after the molten steel is "killed" (deoxidized or degassed). Shieldalloy Metallurgical Corp., "Boron," *Ferroalloys & Alloying Additives Online Handbook*, November 23, 2000.

Boron enhances the ductility (drawability) of low carbon steels, hardness of cold heading grade steels, and heat treatability and tensile strength of higher carbon steels. *Carbon and Certain Alloy Steel Wire Rod from China, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary)*, USITC Publication 4458, March 2014, p. I-14.

Chinese wire rod often contains trace additions of boron (exceeding 0.0008 percent or 8 ppm) for it to be classified as alloy steel rather than carbon steel. In July 2010, the Chinese government removed a VAT rebate for carbon steel exports but continued offering the rebate for alloy steel exports. Subsequently, Chinese producers reportedly added boron to claim the rebate for their alloy steel exports, rather than for metallurgical purposes. *HTSUS* (2014), "Chapter 72 Iron and Steel, Note 1(f) Other Alloy Steel," January 1, 2014, p. XV 72-2; and *Carbon and Certain Alloy Steel Wire Rod from China, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary)*, USITC Publication 4458, March 2014, p. I-14.

Articles appearing in the industry and trade press mention boron additions to wire rod as a means of both avoiding Chinese export taxes and of gaining tax rebates. See, e.g., Frizell, Samuel, "Chinese Wire Rod Imports Spike," *American Metal Market*, August 19, 2013; Nagi, Catherine, "Chinese Rod Hits Shores But Avoids Import Data," *American Metal Market*, January 11, 2013; and Cowden, Michael, "Chinese Wire Rod Imports Rising: Trader," *American Metal Market*, May 22, 2012.

⁴⁴ Liquid steel absorbs gasses from the atmosphere and from the materials used in the steelmaking process. These gasses, chiefly oxygen and hydrogen, cause embrittlement, voids, and nonmetallic inclusions. Low pressures, such as in a vacuum, aid the release of oxygen in gas form without the need for additions of deoxidizers such as silicon, aluminum, or titanium, which form nonmetallic inclusions. Additionally, carbon content may be reduced more easily at low pressure (because it combines with oxygen to form carbon monoxide and is released in gas form), resulting in a more ductile steel. Moreover, hydrogen gas causes embrittlement, low ductility, and blow holes in steel; vacuum treatment more easily removes hydrogen from the steel. Hence the use of deoxidizing processes results in more efficient process and cleaner steel.

Casting stage

Once molten steel with the requisite properties has been produced, it is cast into a form that can enter the rolling process. Continuous (strand) casting is the method primarily used in the United States. In strand casting, the ladle containing molten steel is transferred from the ladle metallurgy station to the caster and the molten steel is poured at a controlled rate into a tundish (reservoir dam), which in turn controls the rate of flow of the molten steel in to the molds at the top of the caster. The tundish may have a special design or employ electromagnetic stirring to ensure homogeneity of the steel. The strand caster is designed to produce billets in the desired cross sectional dimensions, based on the dimensions of the rod and the design of the rolling mill. Billets may be sent directly (“hot charged”) into the rolling mill or, depending upon the rolling mill's schedule, sent to a storage yard. While in storage, they may be inspected and subjected to one or more conditioning operations (e.g., grinding or turning) to prepare them for hot rolling. This preparation is more common with cold heading quality rods intended to be made into fasteners.⁴⁵

Rolling stage

The wire rod rolling process determines the rod's size (diameter) and dimensional precision, depth of decarburization, surface defects and seams, amount of mill scale, structural grain size, and within limits set by the chemistry, tensile strength and other physical properties. There is little or no difference among the wire rod rolling mills in the United States, or between

⁴⁵ The purpose of these surface treatments is to make the steel billet softer and more ductile (annealing); in the case of surface grinding, seam and folds are removed.

U.S. mills and their foreign competitors.⁴⁶ A larger billet will produce a heavier coil. Also, usable coil size may be limited by the capabilities of the wire drawer's equipment and machinery.

Modern rod rolling mills consist of five parts: a roughing mill, an intermediate mill, a pre finishing mill, a no twist finishing mill, and a coiler combined with a conveyor cooling bed along which the coiled rod travels prior to being collected, tied, compacted, and readied for shipment. Wire rod mills typically consist of 22 to 29 rolling stands and the specialized Stelmor conveyor deck;⁴⁷ the need for uniform metallurgical properties requires close temperature control accomplished by accelerating or retarding the rod's cooling as it is rolled and conveyed along the Stelmor deck. This is accomplished by water quench, forced air drafts, or by lowering removable hoods overtop the deck. Metallurgical quality, temperature, and dimensional tolerance usually are inspected in-line.

Exiting the reheat furnace, the billet is initially reduced on the roughing mill (which usually consists of approximately five stands). It then is passed through and successively reduced in size on several more stands, termed intermediate rolling. After the last intermediate rolling stand, the rolling mill usually splits into dual lines and the product is passed along to a

⁴⁶ The rolling process, however, can be optimized for various quality levels. The rolling process for higher quality steel, such as for cold heading quality and other surface sensitive products, must be designed to maximize surface integrity. This is managed by the number of rolling stands used to get to a specific end diameter, the design of the reductions taken at each step, and the design of the guiding equipment used to keep the steel moving on the proper path through the mill.

⁴⁷ The Stelmor conveyor deck allows for controlled cooling of the wire rod. The cooling speed imparts certain physical characteristics, thereby enabling producers to produce a wider range of wire rod qualities. Likewise, the Stelmor deck may be optimized for specific end products. For example, ***. Most, if not all, U.S. wire rod producers have installed controlled cooling capacities.

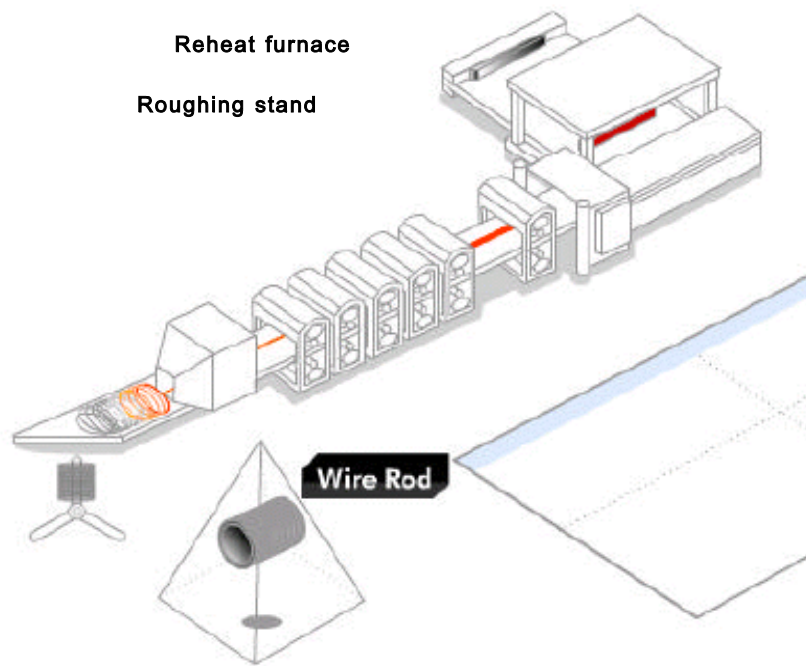
pre finishing mill which reduces it further in diameter. Rod mills often employ a “twist” mill for primary and intermediate rolling, but the final rolling is nearly always on a no twist Morgan vee mill (the rolls in each of approximately five stands are set at 90-degree angles to allow the rod to be rolled without twisting). This produces a nearly uniform non-oriented grain structure in the steel.

Cooling stage

After exiting the last finishing stand, the rod is coiled into concentric loops and placed on a conveyor which moves the hot wire rod along while it cools. During rolling, the rod is water cooled as it travels along the Stelmor deck; cooling practices are varied depending on the designated end use of the rod and the customer’s preferences. The speed at which the rod is cooled affects the consistency and formation of its metallurgical structure (grain structure and physical properties such as tensile strength). It also affects scale buildup, which determines yield losses at the wire drawer. The cooling rate may be varied through the use of removable covers (insulating hoods which may be independently raised or lowered) over the deck or blown air cooling, or a combination of the two, or through varying the speed of the roller table. The end user often specifies the cooling practice of the rod purchased.

At the end of the cooling deck, workers crop the ends of each rod to remove the part of the rod which may be of lower quality due to uneven temperature control; the cropped ends are also used for testing and inspection. The rod is then collected onto a carrier, transferred to a “c” hook, compacted, tied, and readied for shipment, or for further finishing or in-house fabrication. Figure I-1 illustrates the reheat through cooling stages of the wire rod production process.

Figure I-1
Wire rod: Reheat and rolling process



Source: POSCO Web site, http://www.steel-n.com/esales/general/us/catalog/wire_rod/, accessed March 10, 2008.

Domestic producers manufacture various types of wire rod on essentially the same equipment, in the same facilities, and with the same production personnel. While changes to production processes are limited, changes in chemical composition, alloying elements and other raw materials, stand fittings, and cooling speed determine the quality of the wire rod produced. The basic equipment, machinery, facilities, and production personnel, however, remain, the same for the production of industrial quality, tire cord quality, welding quality, and cold heading quality wire rod.

DOMESTIC LIKE PRODUCT ISSUES

In its original determinations and full first five-year reviews, the Commission defined the domestic like product as all wire rod products, which included grade 1080 tire cord and tire bead quality wire rod excluded from Commerce's scope, and it defined the domestic industry as all domestic producers of wire rod.⁴⁸ In its notice of institution in these current second five-year reviews, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry.⁴⁹ The domestic producers indicated in their responses to the Commission's notice of institution in these current reviews that they agree with the Commission's definitions of domestic like product and domestic industry. Respondent Deacero indicated in its response that it "does not object" to the Commission's definitions of the domestic like product and domestic industry and respondent Ternium did not comment on the definitions.⁵⁰ No party requested that the Commission collect data concerning other possible domestic like products in their comments on the Commission's draft questionnaires. No other interested party provided further comment on the domestic like product.

⁴⁸ *Carbon and Certain Alloy Steel Wire Rod From Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine: Investigations Nos. 701-TA-417-421 (Final) and Investigations Nos. 731-TA-953, 954, 956-959, 961, and 905 (Final)*, USITC Publication 3546, October 2002, p. 7; and *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine, Investigation Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review)*, USITC Publication 4014, June 2008, pp. 8-10.

⁴⁹ *Carbon and Certain Alloy Steel Wire Rod From Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine: Institution of five-year reviews*, 78 FR 33103, June 3, 2013.

⁵⁰ *Response of ArcelorMittal USA LLC, Cascade Steel Rolling Mills Inc., Evraz Rocky Mountain Steel, Gerdau Ameristeel US Inc., Keystone Consolidated Industries, Inc., and Nucor Corp.*, July 2, 2013, p. 31; and *Response of Deacero S.A. de C.V. and Deacero USA, Inc.*, July 3, 2013, p. 15.

U.S. MARKET PARTICIPANTS

U.S. producers

During the original investigations, 12 firms supplied the Commission with complete information on their U.S. operations with respect to wire rod. These 12 firms accounted for over *** percent of U.S. production of wire rod products during 2001.⁵¹ During the full first five-year reviews, 10 firms supplied the Commission with information on their U.S. operations. These 10 firms accounted for all known production of wire rod in the United States during 2007.⁵²

In these current second five-year reviews, the Commission issued U.S. producers' questionnaires to 10 firms, all of which provided the Commission with information on their wire rod operations. These 10 firms are believed to account for all known U.S. production of wire rod in 2013.⁵³ Presented in table I-11 is a list of current domestic producers of wire rod and each company's position on the continuation of the orders, production locations(s), related and/or affiliated firms, and share of reported production of wire rod in 2008-13.

⁵¹ The 12 U.S. producers that supplied the Commission with complete questionnaire information during the original investigations are: ***.

⁵² The 10 U.S. producers that supplied the Commission with usable questionnaire information during the first five-year reviews are: ArcelorMittal USA; Cascade; Charter Steel, Division of Charter Manufacturing ("Charter"); Gerdau Ameristeel; Keystone; Nucor; Oklahoma Steel and Wire, which is the wire products related firm of Mid American Steel and Wire Co. ("Mid American"); Republic Engineered Products ("Republic"); Rocky Mountain Steel Mills ("Rocky Mountain"); and Sterling Steel Co., LLC ("Sterling").

⁵³ The 10 U.S. producers that supplied the Commission with usable questionnaire information during the second five-year reviews are: ArcelorMittal USA, Cascade, Charter, Evraz Pueblo (formerly known as Rocky Mountain), Gerdau, Keystone, Mid American, Nucor, Republic, and Sterling.

Table I-11

Wire rod: U.S. producers, positions on orders, U.S. production locations, related and/or affiliated firms, and shares of 2008-13 reported U.S. production

Firm	Position on orders	U.S. production locations	Parent firm	Share of 2008-13 U.S. production
ArcelorMittal USA	*** ¹	Georgetown, SC East Chicago, IN	ArcelorMittal SA (Luxembourg) ²	***
Cascade	***	McMinnville, OR	Schnitzer Steel Industries, Inc. (Portland, OR)	***
Charter	***	Cuyahoga Heights, OH Fostoria, OH Saukville, WI	Charter Manufacturing (Mequon, WI)	***
Evrar Pueblo	***	Pueblo, CO	Evrar North America (Chicago, IL) ³	***
Gerdau	***	Beaumont, TX Jacksonville, FL Perth Amboy, NJ (idled)	Gerdau SA (Brazil) ⁴	***
Keystone	***	Peoria, IL	Contran Corp. (Dallas, TX)	***
Mid American	***	Madill, OK	-	***
Nucor	***	Wallingford, CT Norfolk, NE Kingman, AZ Darlington, SC	-	***
Republic	*** ⁵	Lorain, OH	Industrias ICH (Mexico) (50%) Grupo Simec (Mexico) (49%) Pacific Steel (Mexico) (2%)	***
Sterling	***	Sterling, IL	Leggett & Platt, Inc. (Carthage, MO)	***
				100.0

¹ ***.

² ArcelorMittal SA has subsidiary wire rod producers in Algeria, Argentina, Bosnia and Herzegovina, Brazil, Canada, Costa Rica, Czech Republic, France, Germany, Mexico, Morocco, Poland, Spain, Trinidad & Tobago, and Ukraine.

³ ***.

⁴ ***.

⁵ ***.

Source: Compiled from data submitted in response to Commission questionnaires.

No domestic producer reported production of wire rod in a foreign trade zone. Five domestic producers (***) reported that since January 1, 2008, they have been involved in toll agreements regarding the production of wire rod.⁵⁴

⁵⁴ ***.

Although no U.S. producers reported the direct imports of subject merchandise and no U.S. producers reported domestic purchases of the subject merchandise from U.S. importers, two U.S. producers reported that they are related to foreign producers of the subject merchandise. Gerdau reported that it is a wholly-owned subsidiary of wire rod producer Gerdau SA of Brazil. ArcelorMittal USA reported that it is a wholly-owned subsidiary of ArcelorMittal SA (Luxembourg), which has subsidiary wire rod producers in numerous countries, including subject countries Brazil, Mexico, Trinidad & Tobago, and Ukraine.

U.S. importers

In the original investigations, 27 U.S. importing firms supplied the Commission with usable information on their operations involving the importation of wire rod, accounting for *** percent of U.S. imports of wire rod during 2001. Of the responding U.S. importers, one was also a domestic producer: Charter ***. In the

Commission's full first five-year reviews, 26 firms supplied usable import data, accounting for approximately 73 percent of total U.S. imports of wire rod in 2007, and 90 percent of subject imports in that year. Reporting U.S. importers of wire rod at that time imported primarily from the subject countries of Brazil, Canada (no longer subject), Mexico, Trinidad & Tobago, and nonsubject Germany. No domestic producer reported direct imports during the Commission's first five-year review.

In these current second five-year reviews, the Commission issued U.S. importers' questionnaires to approximately 125 firms believed to be importers of wire rod, as well as to all U.S. producers of wire rod.⁵⁵ Usable questionnaire responses were received from 36 importing firms, representing virtually all U.S. imports of wire rod from Mexico in 2013, and 84.8 percent of U.S. imports of wire rod from nonsubject countries in that year, primarily from China, Canada, and Japan.⁵⁶ There were no reported U.S. imports from Brazil, Indonesia, Moldova, Trinidad & Tobago, or the Ukraine during 2013. U.S. imports of wire rod from Brazil, Moldova, and Ukraine largely ceased following the imposition of duties in 2002 and the U.S. imports of wire rod from Indonesia and Trinidad & Tobago ceased after 2005 and 2008, respectively.

Table I-12 lists all responding U.S. importers of wire rod from subject and nonsubject sources, their locations, and their shares of U.S. imports during 2008-13. Reported subject imports were concentrated in a few firms. Five importers reported importing subject wire rod

⁵⁵ None of the U.S. producers reported direct imports of wire rod.

⁵⁶ The questionnaire import coverage calculation for nonsubject countries is based on the share of reported U.S. imports from nonsubject sources relative to such data as reported by official Commerce import statistics. The questionnaire import coverage calculation for Mexico is based on an examination of importing firms as reported in proprietary Customs documents.

from Mexico during 2008-13, with *** alone accounting for *** percent of total reported imports from Mexico during 2013. Thirty-four importers reported U.S. imports of nonsubject wire rod during 2008-13, with the largest three nonsubject importers (***) accounting for slightly more than one half of reported imports from nonsubject sources during 2008-13.

Table I-12

Wire rod: Reporting U.S. importers, parent companies, sources of imports, locations, and shares of reported imports, 2008-13

* * * * *

Table I-12--*Continued*

Wire rod: Reporting U.S. importers, parent companies, sources of imports, locations, and shares of reported imports, 2008-13

*	*	*	*	*	*	*
---	---	---	---	---	---	---

U.S. purchasers

The Commission received 35 usable questionnaire responses from firms that bought wire rod during 2008-13. The majority of purchasers (32 of 35) reported that they were end users of wire rod, two reported that they were distributors, and one reported that it was an independent wire producer and seller. All 35 purchasers reported their firms' total purchases of wire rod by country. Approximately 68.6 percent of total reported purchases of wire rod was U.S.-produced wire rod, 2.9 percent was from Brazil (all nonsubject products including tire bead and tire cord), 0.2 percent was from Mexico, and the remaining 28.2 percent was wire rod from nonsubject countries (primarily Canada and China, but also included Germany, the Netherlands, Korea, UAE, Japan, the United Kingdom, Turkey, Spain, and South Africa). No purchaser reported buying wire rod from any subject country. In general, responding U.S. purchasers were located in the Midwest and the Southeast. The largest purchasers of wire rod in 2013 were ***.

APPARENT U.S. CONSUMPTION AND U.S. MARKET SHARES

Data concerning apparent U.S. consumption of wire rod during 2008-13 are shown in table I-13. U.S. market share data are presented in table I-14.

The quantity of apparent U.S. consumption fell from a six-year high of *** short tons during 2008 to a six-year low of *** short tons in 2009. Apparent U.S. consumption generally increased thereafter to 5.3 million short tons in 2013. The U.S. producers' share of apparent U.S. consumption, which fluctuated between *** and *** percent during 2008-13, was at a six-year low during 2013. The share of U.S. consumption held by subject imports from Mexico fluctuated during 2008-13, but remained below *** percent in all annual periods. There were no reported U.S. imports from Brazil, Indonesia, Moldova, or the Ukraine during 2008-13. There were U.S. imports of wire rod from Trinidad & Tobago only during 2008. These imports accounted for *** percent of apparent U.S. consumption in that year.

Table I-13

Wire rod: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
U.S. producers' U.S. shipments	4,050,961	2,833,426	3,340,954	3,876,145	3,809,728	3,599,459
Imports from--						
Brazil	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0
Mexico	***	***	***	***	***	10,333
Moldova	0	0	0	0	0	0
Trinidad & Tobago	21,794	0	0	0	0	0
Ukraine	0	0	0	0	0	0
Subtotal, subject	***	***	***	***	***	10,333
1080 tire cord/tire bead from subject sources	139,459	71,759	129,184	116,513	102,517	96,639
All other sources	1,536,768	777,083	1,284,771	1,059,512	1,391,895	1,593,718
Subtotal, nonsubject	1,676,227	848,842	1,413,955	1,176,024	1,494,413	1,690,357
Total U.S. imports	***	***	***	***	***	1,700,690
Apparent U.S. consumption	***	***	***	***	***	5,300,149
Value (1,000 dollars)						
U.S. producers' U.S. shipments	3,485,005	1,651,451	2,246,759	3,012,054	2,826,974	2,529,487
Imports from--						
Brazil	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0
Mexico	***	***	***	***	***	6,128
Moldova	0	0	0	0	0	0
Trinidad & Tobago	14,298	0	0	0	0	0
Ukraine	0	0	0	0	0	0
Subtotal, subject	***	***	***	***	***	6,128
1080 tire cord/tire bead from subject sources	126,654	50,808	91,621	103,073	84,521	64,506
All other sources	1,360,431	550,614	988,457	992,791	1,159,903	1,156,290
Subtotal, nonsubject	1,487,085	601,423	1,080,078	1,095,863	1,244,424	1,220,797
Total U.S. imports	***	***	***	***	***	1,226,925
Apparent U.S. consumption	***	***	***	***	***	3,756,412

Source: Compiled from data submitted in response to Commission questionnaires.

Table I-14
Wire rod: U.S. consumption and market shares, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
Apparent U.S. consumption	***	***	***	***	***	5,300,149
Share of quantity (percent)						
U.S. producers' U.S. shipments	***	***	***	***	***	67.9
Imports from--						
Brazil	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	***	***	***	***	***	0.2
Moldova	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad & Tobago	***	0.0	0.0	0.0	0.0	0.0
Ukraine	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject	***	***	***	***	***	0.2
1080 tire cord/tire bead from nonsubject sources	***	***	***	***	***	1.8
All other sources	***	***	***	***	***	30.1
Subtotal, nonsubject	***	***	***	***	***	31.9
Total U.S. imports	***	***	***	***	***	32.1
Value (1,000 dollars)						
Apparent U.S. consumption	***	***	***	***	***	3,756,412
Share of value (percent)						
U.S. producers' U.S. shipments	***	***	***	***	***	67.3
Imports from--						
Brazil	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	***	***	***	***	***	0.2
Moldova	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad & Tobago	***	0.0	0.0	0.0	0.0	0.0
Ukraine	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject	***	***	***	***	***	0.2
1080 tire cord/tire bead from nonsubject sources	***	***	***	***	***	1.7
All other sources	***	***	***	***	***	30.8
Subtotal, nonsubject	***	***	***	***	***	32.5
Total U.S. imports	***	***	***	***	***	32.7

Source: Compiled from data submitted in response to Commission questionnaires.

MERCHANT MARKET APPARENT U.S. CONSUMPTION AND U.S. MARKET SHARES

Data concerning merchant market apparent U.S. consumption of wire rod during 2008-13 are shown in table I-15. U.S. merchant market share data are presented in table I-16.⁵⁷

The quantity of merchant market apparent U.S. consumption fell from a six-year high of *** short tons during 2008 to a six-year low of *** short tons in 2009. Merchant market apparent U.S. consumption generally increased thereafter to *** short tons in 2013. The U.S. producers' share of merchant market apparent U.S. consumption, which fluctuated between *** and *** percent during 2008-13, was at a six-year low during 2013. The share of merchant market U.S. consumption held by subject imports from Mexico fluctuated during 2008-13, but remained at or below *** percent in all annual periods. Imports from Trinidad & Tobago during 2008 accounted for *** percent of merchant market apparent U.S. consumption in that year.

⁵⁷ Merchant market apparent consumption does not include internal consumption and transfers to related firms by U.S. producers.

Table I-15

Wire rod: U.S. merchant market shipments of domestic product, U.S. imports, and merchant market apparent U.S. consumption, 2008-13

* * * * *

Table I-16
Wire rod: Merchant market U.S. consumption and market shares, 2008-13

* * * * *

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

U.S. producers and importers typically sell wire rod directly to wire drawing firms and/or produce and sell wire or wire products. Internal consumption and transfers to related firms accounted for more than one-quarter of U.S. producers' U.S. shipments of domestically produced wire rod in 2013. U.S. shipments of domestically produced wire rod, in turn, accounted for 67.9 percent of apparent U.S. consumption in 2013. Imports from the subject countries were limited and accounted for 0.2 percent of the total U.S. market in 2013; and imports from nonsubject countries (as well as grade 1080 tire bead and tire cord wire rod from subject countries) accounted for 31.9 percent.¹

Wire rod is used primarily in construction, automotive, energy, and agriculture industries as a variety of downstream products. In the U.S. market, carbon quality wire rod is most commonly consumed. As shown in figure II-1, high and medium-high carbon industrial and standard quality wire rod and low and medium-low carbon industrial and standard quality wire rod accounted for more than three-fourths of all types of U.S. shipments of wire rod during 2013.² Similarly, the majority of purchasers reported buying low and medium-low carbon industrial and standard quality rods.

¹ U.S. shipments of wire rod imported from Mexico were sold in small quantities during each year between 2008 and 2013; U.S. shipments of wire rod imported from Trinidad and Tobago were sold in 2008. There were no imports from Brazil, Indonesia, Moldova, and Ukraine during 2008-13.

² Ten U.S. producers and two importers of subject product from Mexico reported their U.S. shipments by type of wire rod in 2013.

Figure II-1
Wire rod: U.S. producers' U.S. shipments, by type, 2013

* * * * *

CHANNELS OF DISTRIBUTION

The majority of wire rod sold in the United States is shipped to end users. U.S. producers and importers of product from Trinidad and Tobago and nonsubject countries sold mainly to end users while importers of wire rod from Mexico sold to end users in 2008-09, to distributors in 2010-11 and then split between both channels in 2012-13 as shown in table II-1.

Table II-1

Wire rod: U.S. producers' and importers' share of reported U.S. shipments, by sources and channels of distribution, 2008-2013¹

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Share of quantity (percent)						
U.S. producers' U.S. shipments to:						
Distributors	12.3	7.3	4.4	12.0	13.3	13.1
End users	87.7	92.7	95.6	88.0	86.7	86.9
U.S. importers' U.S. shipments of imports from Mexico to:						
Distributors	***	***	***	***	***	***
End users	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from Trinidad & Tobago to:						
Distributors	***	***	***	***	***	***
End users	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from all other sources to:						
Distributors	***	***	***	***	***	***
End users	***	***	***	***	***	***

¹ There were no subject imports from Brazil, Indonesia, Moldova, and Ukraine between 2008 and 2013.

Source: Compiled from data submitted in response to Commission questionnaires.

GEOGRAPHIC DISTRIBUTION

U.S. producers and importers from Mexico reported selling wire rod to all regions in the contiguous United States (table II-2). Five of the 10 responding producers and one of four responding importers from Mexico reported selling nationwide. The sole responding importer of wire rod from Trinidad and Tobago reported that it only sold to markets ***. The majority of U.S. producers' sales (79.2 percent) were shipped between 101 and 1,000 miles, 13.7 percent was shipped within 100 miles of their production facility, and 7.2 percent was shipped over 1,000 miles. Importers of wire rod from Mexico shipped the majority of their product (*** percent) over 1,000 miles and the remaining *** percent was shipped between 101 and 1,000 miles. The importer of wire rod from Trinidad and Tobago reported that *** percent of its sales were shipped *** from its firm's U.S. point of shipment.

Table II-2

Wire rod: Geographic market areas in the United States served by U.S. producers and importers, by number of responding firms

Region	U.S. producers	Importers of product from Mexico	Importers of product from Trinidad and Tobago
Northeast	9	1	***
Midwest	10	1	***
Southeast	9	2	***
Central Southwest	8	2	***
Mountain	7	1	***
Pacific Coast	7	3	***
Other ¹	1	0	***

¹ All other U.S. markets, including AK, HI, PR, and VI, among others.

Source: Compiled from data submitted in response to Commission questionnaires.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of wire rod have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced wire rod to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and the ability to produce alternative products; however, other factors such as insufficient export markets and low levels of inventories tend to moderate this degree of responsiveness.

Industry capacity

Domestic capacity utilization decreased irregularly from 73.1 percent in 2008 to 72.0 percent in 2013. Domestic capacity decreased by 8.5 percent and U.S. production fell by 9.9 percent from 2008 to 2013. This relatively moderate level of capacity utilization suggests that

U.S. producers may have moderate excess capacity to increase production of product in response to an increase in prices.

Alternative markets

U.S. producers' exports, as a share of total shipments, did not exceed 1.4 percent between 2008 and 2013. U.S. producers' export shipments declined from 1.0 percent in 2008 to 0.7 percent in 2013 indicating that U.S. producers may have limited ability to shift shipments between the U.S. market and other markets in response to price changes. Three U.S. producers stated that it would be difficult to shift their shipments to other markets. U.S. producers reported tariff barriers to trade in other markets, specifically in Argentina, Brazil, and Honduras.

Internal consumption and transfers to related firms

U.S. producers' internal consumption increased from *** percent of total shipments in 2008 to *** percent in 2013. Their transfers to related firms increased from *** percent of total shipments in 2008 to *** percent in 2013.

Inventory levels

U.S. producers' inventories increased from 5.7 percent of total shipments in 2008 to 7.4 percent in 2013. These inventory levels suggest that U.S. producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Nine of ten responding U.S. producers stated that they could switch production from wire rod to other products. Other products that producers reportedly produce on the same equipment as wire rod are concrete reinforcing bar (rebar) and other nonsubject bar and rod

products. The relatively large volume of these other products produced on shared equipment increases domestic producers' ability to switch production to wire rod.

Changes in supply

Six of 10 U.S. producers, 8 of 19 importers, and 17 of 31 responding purchasers reported changes that affected U.S. supply since 2008. The majority of firms noted the fluctuating U.S. capacity due to plant closures in 2009 (Gerdau's mill in Perth Amboy, New Jersey and ArcelorMittal's plant in Georgetown, South Carolina), the re-opening of mills in 2011 (ArcelorMittal's plant in Georgetown, South Carolina), and the added capacity of Nucor's plant in Darlington, South Carolina in 2013. Other changes include: increased cost for raw material inputs and energy, increased transportation costs and delivery times, and increased imports of Chinese product.

Supply constraints

Ten of 34 responding purchasers reported issues with supply from about one-half of U.S. producers, particularly during 2011. Several purchasers reported that there was a lack of domestic capacity that resulted in delays in delivery times during 2011.³ Three purchasers, ***, ***, and ***, reported sporadic allocation issues with several U.S. producers including: ArcelorMittal USA, Charter, Evraz, Georgetown, Gerdau, Keystone, Nucor, and Sterling Steel. Additionally, ***

³ For example, ***, ***, ***.

reported that several mills (Charter, Evraz, Georgetown, Gerdau, Keystone, and Nucor) were unable to produce the grade and quality it required. *** reported that Gerdau was unable to supply normal quantities of wire rod during the first half of 2013 due to “major software implementation.”

Supply of subject imports

The sensitivity of supply of wire rod imports from Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine to changes in price in the U.S. market depends upon such factors as the existence of excess capacity, the levels of inventories, and the existence of export markets. The Commission received no questionnaire responses from Moldovan suppliers in these reviews. Relevant information for Brazil, Indonesia, Mexico, Trinidad and Tobago, and Ukraine follows.

Subject imports from Brazil

The Commission received one questionnaire response from Brazilian producer of wire rod, ArcelorMittal Brasil.⁴ Based on available information, ArcelorMittal Brasil has the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of wire rod to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the ability to produce alternative products and the existence of alternate markets; however, other factors such as limited capacity and low levels of inventories tend to moderate this degree of responsiveness.

⁴ According to ***, ArcelorMittal Brasil accounted for *** percent of total wire rod rolling capacity in Brazil during 2013.

Industry capacity

Reported capacity remained constant at *** short tons during 2008-13. ArcelorMittal Brasil's reported capacity utilization decreased from *** percent in 2008 to *** percent in 2013.

Alternative markets

ArcelorMittal Brasil reported that *** of its shipments were either shipped to its home market or were consumed internally (figure II-2). Its total exports, as a share of total shipments, declined from *** percent in 2008 to *** percent in 2013. ArcelorMittal Brasil exported primarily to countries ***; it did not export to the United States during 2008-13. It reported that ***. The main reasons included: ***.

Figure II-2
Wire rod: Shares of total shipments of wire rod by Brazilian producer, by destination, 2008-13

* * * * *

Inventory levels

ArcelorMittal Brasil's inventories, relative to total shipments, increased from *** percent in 2008 to *** percent in 2013.

Production alternatives

ArcelorMittal Brasil reported that it produces rebar and other bar/rod products on the same equipment and machinery used to produce wire rod. It reported that its production ***.

Subject imports from Indonesia

The Commission received one questionnaire response from Indonesian producer of wire rod, Ispat Indo.⁵ Based on available information, Ispat Indo has the ability to respond to changes in demand with moderate changes in the quantity of shipments of wire rod to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and the existence of alternate markets; however, other factors such as low levels of inventories and the inability to produce alternate products tend to moderate this degree of responsiveness.

Industry capacity

Reported capacity remained constant at *** short tons during 2008-13. Ispat Indo's reported capacity utilization decreased from *** percent in 2008 to *** percent in 2013.

Alternative markets

Ispat Indo reported that *** of its shipments were shipped to its home market (figure II-3). Its total exports, as a share of total shipments, declined from *** percent in 2008 to *** percent in 2013. Ispat Indo exported *** to Asia; it did not export to the United States during 2008-13. It reported that ***

⁵ According to ***, Ispat Indo accounted for *** percent of total wire rod rolling capacity in Indonesia during 2013.

***. It reported that ***.

Figure II-3

Wire rod: Shares of total shipments of wire rod by Indonesian producer, by destination, 2008-13

* * * * *

Inventory levels

Ispat Indo's inventories, as a share of total shipments, decreased from *** percent in 2008 to *** percent in 2013.

Production alternatives

Ispat Indo reported that it does not produce other products on the same equipment and machinery used to produce wire rod.

Subject imports from Mexico

The Commission received three questionnaire responses from Mexican producers of wire rod.⁶ Based on available information, producers of wire rod from Mexico have the ability to respond to changes in demand with moderate-to large changes in the quantity of shipments of wire rod to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the existence of alternate markets; the ability to produce alternate products, and some unused capacity; and however, low levels of inventories tend to moderate this degree of responsiveness.

Industry capacity

Mexican producers' capacity utilization fluctuated during 2008-13, increasing from 88.5 percent in 2008 to 98.1 percent in 2011 before falling to 85.0 percent in 2013. Reported capacity increased from 2.4 million short tons in 2008 to 2.8 million short tons in 2013.

Alternative markets

Mexican producers reported that *** of their shipments was either shipped to its home market or was consumed internally (figure II-4). Their total exports, as a share of total shipments, increased from *** percent in 2008 to 16.0 percent in 2013. Mexican producers exported primarily to ***. Mexican producers Deacero and Ternium both reported that ***

⁶ According to ***, the three Mexican producers (ArcelorMittal las Truchas, Deacero, and Ternium) accounted for *** percent of total wire rod rolling capacity in Mexico during 2013.

***. Deacero also stated that the developing customers in the United States can be difficult due to the lengthy supplier qualification process that U.S. purchasers require. ArcelorMittal Las Truchas reported that ***.

Figure II-4
Wire rod: Shares of total shipments of wire rod by Mexican producers, by destination, 2008-13

* * * * *

Inventory levels

Mexican producers' inventories, as a share of total shipments, fluctuated during 2008-13, increasing from 5.5 percent in 2008 to 7.6 percent in 2012 before falling to 6.7 percent in 2013.

Production alternatives

All three Mexican producers reported that they produce other products on the same equipment and machinery used to produce wire rod. Mexican producer Ternium reported

***.

Subject imports from Trinidad and Tobago

The Commission received one questionnaire response from Trinidad and Tobago producer, ArcelorMittal Point Lisas.⁷ Based on available information, this producer of wire rod from Trinidad and Tobago has the ability to respond to changes in demand with large changes in the quantity of shipments of wire rod to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, existence of alternate markets, moderate levels of inventories, and the ability to produce alternate products.

Industry capacity

ArcelorMittal Point Lisas' capacity remained constant at *** short tons during 2008-13. Its capacity utilization fluctuated during 2008-13, increasing from *** percent in 2008 to *** percent in 2011 before falling to *** percent in 2013.

Alternative markets

ArcelorMittal Point Lisas reported that *** of its shipments were exported, with *** percent of its shipments wire rod sold in its home market (figure II-5). Its total exports, as a share of total shipments, increased from *** percent in 2008 to *** percent in 2011 before falling to *** percent in 2013. ArcelorMittal Point Lisas exported

⁷ ArcelorMittal Point Lisas accounted for *** production of wire rod in Trinidad and Tobago during 2008-13.

primarily to ***. It reported that ***.

Figure II-5

Wire rod: Shares of total shipments of wire rod by Trinidad and Tobago producer, by destination, 2008-13

* * * * *

Inventory levels

ArcelorMittal Point Lisas' inventories, as a share of total shipments, increased from *** percent in 2008 to *** percent in 2011 before falling to *** percent in 2013.

Production alternatives

ArcelorMittal Point Lisas reported that it produces rebar in coil using the same machinery and equipment it uses to produce wire rod. It reported that ***.

Subject imports from Ukraine

The Commission received two questionnaire responses from Ukrainian producers of wire rod.⁸ Based on available information, producers of wire rod from Ukraine have the ability to respond to changes in demand with large changes in the quantity of shipments of wire rod to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the existence of alternate markets, and the ability to produce alternate products; however, low levels of inventories tend to moderate this degree of responsiveness.

Industry capacity

Ukrainian producers' capacity utilization fluctuated during 2008-13, increasing from *** percent in 2008 to *** percent in 2010 before falling to *** percent in 2013. Reported capacity increased from *** short tons in 2008 to *** short tons in 2013.

⁸ According to ***, the two Ukrainian producers (ArcelorMittal Kryvyi Rih and Yenakieve Iron and Steel Works) accounted for *** in Ukraine in 2013.

Alternative markets

Ukrainian producers reported that the majority of their shipments were exported (figure II-6). Their total exports, as a share of total shipments, increased from *** percent in 2008 to *** percent in 2010 before falling to *** percent in 2013. Ukrainian producers did not export to the United States during 2008-13. ArcelorMittal Kryvyi Rih reported that ***. Ukrainian producer Yenakiieve Steel reported that ***. It also noted that ***.

Figure II-6
Wire rod: Shares of total shipments of wire rod by Ukrainian producers, by destination, 2008-13

* * * * *

Inventory levels

Ukrainian producers' inventories, as a share of total shipments, increased irregularly from *** percent in 2008 to *** percent in 2013.

Production alternatives

Both Ukrainian producers reported that they produce other products on the same equipment and machinery that is used to produce wire rod. ArcelorMittal Kryvyi Rih reported that ***. Yenakiieve Steel reported that ***.

Nonsubject imports

The largest sources of nonsubject imports during 2008-13 were China, Canada, and Japan. Combined, these countries accounted for 80.3 percent of nonsubject imports in 2013.

New suppliers

Sixteen of 35 purchasers reported new suppliers including, Nucor Steel's new mill in Darlington, South Carolina and Kingman, Arizona; Beitai Steel (China); Duferco (nonsubject importer); Samsung Steel; Metal One; and Tangshan (China). Eighteen of 33 purchasers anticipate new suppliers to enter into the market, with several of the purchasers noting an increase of suppliers from China.

U.S. demand

Based on available information, the overall demand for wire rod is likely to experience moderate changes in response to changes in price. The main contributing factors are the lack of

substitute products, which reduces responsiveness, and the large cost share of wire rod in most of its end-use products which increases the potential to import downstream products, thus increasing demands' responsiveness to price changes.

End uses

U.S. demand for wire rod depends on the demand for a variety of U.S.-produced downstream products. Reported end uses include fasteners, wire garment hangers, wire mesh, nails, concrete reinforcing mesh, baling wire, industrial wire, tire cord/bead, shelving wire, sod staples, suspension springs, and PC strand. All ten responding U.S. producers, 19 of 20 responding importers, 28 of 35 purchasers, and all 8 responding foreign producers reported no changes in end uses. A few firms noted an increase in wire rod consumption in certain applications, particularly, the automotive sector.

Business cycles

Short-term demand for wire rod tends to be cyclical and follow trends in the construction industry. Five of ten U.S. producers, 6 of 22 importers, and 17 of 31 purchasers indicated that the market was subject to business cycles. Several firms noted that demand for wire rod is driven by downstream products used in the automotive and construction industry which is seasonal. Several firms noted that demand tends to fall in the winter when construction slows down.

The majority of firms (5 of 6 producers, 16 of 19 importers, and 14 of 26 purchasers) reported that wire rod is not subject to distinct conditions of competition. However, several firms noted that they must compete with foreign producers of finished wire products. Other

firms noted the volume of U.S. imports of wire rod, particularly the increasing imports of wire rod from China.

Five of 8 producers, 2 of 10 importers, and 14 of 19 purchasers reported that there have been changes to business cycles and/or conditions of competition since 2008. Three producers and 5 purchasers stated that the market has not recovered from the economic recession and the recovery of the construction industry has been slow. Two producers and one purchaser reported that conditions of competition have changed due to the growing imports of wire rod from China. One purchaser noted the consolidation of mills, as well as the new production or expansion of existing production capacity has changed the condition of competition since 2008. One producer (***) reported that there are now shorter lead times for customers to place orders, averaging 30-33 day rolling schedule.

Apparent U.S. consumption

Apparent U.S. consumption of wire rod fluctuated during 2008-13, falling in 2009 during the general economic recession and then slowly beginning to recover during 2010-13. Overall, apparent U.S. consumption in 2013 was *** percent lower than in 2008.

Demand trends

Table II-3 presents firm responses regarding U.S. demand for wire rod since 2008. While firm responses in table II-3 are varied, the majority of firms described similar trends and factors in their narrative responses. The majority of producers and importers noted the financial recession and its negative effect on demand for wire rod, particularly in the construction industry. Four producers and five importers reported that while demand has improved since

the recession, demand has not returned to pre-recession levels. Several importers reported an improved and increased demand for wire rod in residential and commercial construction, and the automotive market. The majority of purchasers attributed an increased or fluctuated demand to the financial recession and a slowly recovering market. Several purchasers noted that demand in the construction market has recovered slightly but has still not reached 2008 levels. Three purchasers reported that demand for wire rod has decreased in the United States because firms have moved to importing finished products versus producing the finished good that uses wire rod domestically. A plurality of firms expect demand to increase over the next two years. The majority of firms reported that they anticipate demand for wire rod to continue to slowly increase, particularly in automotive markets and construction.

Table II-3

Wire rod: Firms' responses regarding U.S. demand, by number of responding firms

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand inside the United States since 2008:				
U.S. producers	0	2	8	0
Importers	7	5	5	5
Purchasers	9	1	12	11
Foreign producers	0	2	3	1
Anticipated demand inside the United States:				
U.S. producers	4	2	1	3
Importers	7	8	2	6
Purchasers	13	2	5	12
Foreign producers	5	1	0	1
Demand for purchasers' final products since 2008:				
Purchasers	11	1	7	15

Source: Compiled from data submitted in response to Commission questionnaires.

Substitute products

Substitutes for wire rod are very limited. All U.S. producers, the majority of importers (20 of 22) and purchasers (30 of 34), and all foreign producers (8) reported that there were no substitutes and did not anticipate any future changes in substitutes.⁹ Two importers and four purchasers identified substitutes for wire rod.¹⁰ *** reported that rebar can be substituted for wire rod in concrete reinforcement. *** reported that aluminum and welding can be used in place of wire rod for fastening components. *** reported that plastic and glass can be substituted for wire rod in refrigerator shelves and stamped steel can be substituted in HVAC screens. *** reported that plastic strapping and twine can be used in place of wire rod for tying up bales of materials to be recycled as well as tying up finished goods for shipping. *** reported that synthetics can be substituted for wire rod for static load suspenders. All three purchasers reported that changes in price of these substitutes do not affect the price for wire rod.

The majority of firms (all 10 producers, 24 of 25 importers, 29 of 32 purchasers, and all 8 foreign producers) reported that there have not been changes in substitutes since 2008.

⁹ Purchasers were asked if smaller diameter wire rod was interchangeable with wire rod with a diameter of 5.00 mm or greater. Twenty-one of 34 responding purchasers reported that smaller diameter wire rod was interchangeable with wire rod. Purchasers reported that they use smaller wire rod in the following applications: nails, bailing wire, multiple fencing applications, and wire mesh products. One purchaser, *** reported that using the smaller diameter wire rod has reduced its production costs because the 4.75 mm rod takes less draft (or die) to reduce the same wire gauge as when using 5.550 mm wire rod thereby increasing the speed of production; it reported that using less dies results in decreased electricity as well as lubricant.

¹⁰ While not a direct substitute, *** reported that imported finished products was a substitute for wire rod used in manufacturing domestically produced products. It reported that the price of imported finished products (fasteners) has an effect on its wire rod purchasing decisions. It stated that it has to purchase at a highly competitive price in order to stay competitive, as a manufacturer, with fasteners coming in from China.

Additionally, the majority of U.S. producers (all 10), importers (23 of 24), purchasers (27 of 30), and foreign producers (all 8) reported that they do not anticipate new substitutes in the near future. However, one importer and three purchasers reported that there have been changes in substitutes since 2008 and that they anticipate new substitutes. *** reported that due to weight restrictions based on improved vehicle efficiencies, customers are looking to reduce the weight of parts while maintaining strength, therefore, suggesting that new substitutes will be created to replace wire rod. *** reported that there has been advancement in the use of carbon fiber, rubber belting and synthetics as substitutes for wire rod and *** identified plastics for bail ties.

Cost share

Wire rod accounts for a large share of the cost of the end-use products in which it is used, although cost shares vary widely due to the wide range of products that use wire rod. Eight producers, six importers and 34 purchasers reported the cost share of wire rod in final products which ranged from 29 percent to 100 percent. Wire rod accounted for 60 percent or greater of the total cost in 83 of the 104 final products reported by firms. Cost share information for products most commonly reported by firms include:

- 40 to 90 percent of the cost of various types of wire
- 60 to 90 percent of the cost of various meshes
- 45 to 85 percent of the cost of nails, staples, and fasteners
- 60 to 80 percent of the cost of chain link and barbed wire for fencing
- 33 to 60 percent of the cost of tire cord/tire bead

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported wire rod depends upon such factors as relative prices, quality (*e.g.*, grade standards, reliability of supply, defect rates, etc.), and conditions of sale (*e.g.*, price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available information, staff believes that where there are identical forms of wire rod, there is usually a high degree of substitutability between domestically produced wire rod and wire rod imported from subject sources. For common types of wire rod (such as industrial or standard quality), product typically will be highly substitutable with other product of the same specification even when the products are not identical, although there may be a need for retooling of the process to adjust to small differences. For specialty grades, however, not all sources can produce each product, and even differences between wire rod with the same specifications from different sources may limit the degree of substitution.¹¹

Lead times

Wire rod is primarily produced-to-order. U.S. producers reported that 97.0 percent of their commercial shipments were produced-to-order, with lead times averaging 20-45 days. The remaining 3.0 percent of domestic producers' commercial shipments came from inventories, with lead times averaging 3-7 days. Mexican importer *** reported that *** of its commercial shipments were produced-to-order, with lead

¹¹ *Carbon and Certain Alloy Steel Wire Rod From Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine*: Investigation Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review), USITC Publication 4014, June 2008, p. II-11.

times averaging *** days. Mexican importer *** reported that *** percent of its commercial shipments were produced-to-order, with lead times averaging *** days; the remaining *** percent of its commercial shipments came from inventories, with lead times averaging *** days.

Knowledge of country sources

Thirty-four purchasers indicated they had marketing/pricing knowledge of domestic product, 15 of Mexican product, 5 of Brazilian product, 1 of Indonesian product, and 23 of nonsubject countries. No purchasers reported marketing/pricing knowledge of product from Moldova, Trinidad and Tobago, and Ukraine.

As shown in table II-4, most purchasers and their customers never make purchasing decisions based on the country of origin. Almost half of purchasers reported that they always or usually make purchasing decisions based on the producer; however, the majority of purchasers reported that their customers do not make purchasing decisions based on the producer. Of the 17 purchasers that reported that they always or usually make decisions based the manufacturer, 11 firms cited quality; other reasons cited include availability, price, supplier reliability, and transportation costs.

Table II-4

Wire rod: Purchasing decisions based on producer and country of origin, by number of reporting firms

Purchaser/Customer Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	8	9	11	8
Purchaser's customers make decision based on producer	1	1	14	17
Purchaser makes decision based on country	3	4	15	12
Purchaser's customers make decision based on country	0	2	15	16

Source: Compiled from data submitted in response to Commission questionnaires.

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for wire rod were quality (32 firms), price (29 firms), and availability (16 firms) as shown in table II-5. Quality was the most frequently cited first most important factor (cited by 14 firms), followed by price (12 firms); quality was the most frequently reported second most important factor (15 firms); and availability was the most frequently reported third most important factor (10 firms).

Table II-5

Wire rod: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by number of reporting firms

Factor	First	Second	Third	Total
Quality	14	15	3	32
Price	12	8	9	29
Availability	1	5	10	16
Other ¹	8	7	13	28

¹ Other factors delivery, payment terms, extension of credit, supplier-customer relationship, total cost, traditional supplier for the first factor; supplier reliability, delivery time, product range and product specifications for the second factor; and delivery time, supplier relationship, payment terms, product range, reliability of supplier, and traditional supplier for the third factor.

Source: Compiled from data submitted in response to Commission questionnaires.

Purchasers were asked to identify the factors that determine the quality of wire rod.

Purchasers reported several specific factors including: grade; meeting specifications; uniformity; chemical properties; tensile strength; surface quality and condition; formability; drawability; workability; diameter tolerance; steel purity; packaging; and factors related to the shape, consistent dimensions, size tolerance, and roundness. More generally, purchasers sought minimal problems when manufacturing which included minimal breakage and welds as expected. According to purchaser ***, "Carbon and alloy steel wire rod is not a homogenous product. The end uses of wire rod vary greatly. The technical requirements for the different types of wire rod vary greatly. This variation in technical

and quality requirements is most significant in the specialty value added products such as welding quality wire rod.”¹²

The majority of purchasers (23 of 35) reported that they “usually” purchase the lowest-priced product for their purchases, 12 reported “sometimes”, 1 reported “always” and 1 reported “never”. When asked if they purchased wire rod from one source although a comparable product was available at a lower price from another source, 23 purchasers reported reasons including quality and consistency of product, payment terms, shorter lead times, delivery reliability, product availability, low minimum order requirements, technical service, product specifications, use of long-term contracts, supplier loyalty, and length of time to fill order. Fourteen of 34 responding purchasers reported that certain types of product were only available from a single source.¹³ One purchaser (***) reported that 50 percent of its proprietary specifications are currently not produced in the United States. One purchaser (***) stated that the C1090 5.5 mm wire rod is only available from Japanese and German producers.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-6). The factors rates as “very important” by more than half of responding purchasers were price (35), availability (33), product consistency (32), delivery time (29), reliability of

¹² Purchaser questionnaire response, section III-15.

¹³ Eight of these 14 purchasers noted that the 4.75 mm wire rod is not produced in the United States and is only available from Canadian and Mexican producers.

supply (29), quality meets industry standards (28), U.S. transportation costs (24), and delivery terms (19).

Table II-6

Wire rod: Importance of purchase factors, as reported by U.S. purchasers, by number of responding firms

Factor	Very important	Somewhat important	Not important
Availability	33	2	0
Delivery terms	19	14	2
Delivery time	29	5	1
Discounts offered	7	23	5
Extension of credit	13	16	6
Minimum quantity requirements	6	17	12
Packaging	15	18	3
Price	35	1	0
Product consistency	32	4	0
Product range	7	24	5
Quality exceeds industry standards	10	17	8
Quality meets industry standards	28	6	1
Reliability of supply	29	6	0
Technical support/service	13	19	4
U.S. transportation costs	24	10	2

Source: Compiled from data submitted in response to Commission questionnaires.

Supplier certification

Twenty-eight of 33 responding purchasers require that all of the wire rod they purchase be certified. Purchasers reported that the time to qualify a new supplier ranged from 30 to 365 days. Eleven of 34 responding purchasers reported that domestic or foreign supplier has failed in its attempt to qualify product, or had lost its approved status since 2008. Four purchasers identified domestic suppliers with product quality issues including: Nucor Steel, ArcelorMittal (U.S.-based), CMC, Evraz, Gerdau, Keystone, Charter Steel, and Georgetown. Three purchasers reported that Chinese suppliers have failed to qualify product due to quality issues. According to ***, it is very difficult for mills to produce wire rod that consistently meets welding quality standards. It reported that it has tested many suppliers since 2008, of

which many have either never been approved or lost their approved supplier status because of poor performance and lack of supply. *** stated that approximately 60 percent of the suppliers qualify and 40 percent do not receive an approved supplier status.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2008 (table II-7); reasons reported for changes in sourcing included price, availability, and product range. Nineteen of 33 responding purchasers reported that they had changed suppliers since 2008. Most purchasers noted the large number of wire rod suppliers and stated that they change suppliers most often because of price and availability.

Table II-7

Wire rod: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	1	8	11	5	10
Brazil	29	0	2	0	2
Indonesia	32	0	0	0	0
Mexico	15	10	4	0	5
Moldova	32	0	0	0	0
Trinidad and Tobago	30	1	0	0	2
Ukraine	32	0	0	0	0
All other sources	7	4	10	7	5

Source: Compiled from data submitted in response to Commission questionnaires.

Importance of purchasing domestic product

Purchasing U.S.-produced product was not an important factor in purchasers' decisions. In aggregate, the 33 responding purchasers reported that approximately 80.7 percent of their total purchases of wire rod in 2013 did not require domestic product. Nineteen of 34 responding purchasers reported that they were required to purchase some domestic product by law or regulation (e.g., "Buy American" provisions) which accounted for 14.4 percent of total

purchases in 2013; ten purchasers reported that approximately 3.7 percent of total purchases had domestic requirements by customers; and four purchasers reported that approximately 1.2 percent of total purchases in 2013 were required domestic product for other reasons including specific product requirements or application end-use.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing wire rod produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 15 factors (table II-8) for which they were asked to rate the importance.¹⁴

Purchaser responses were sparse except for comparisons between U.S.-Mexico, U.S.-Brazil, and U.S.-nonsubject countries. In general, purchasers indicated that U.S. product was superior in terms of delivery times and technical support in most country comparisons. When comparing products from the United States and Brazil, most purchasers reported that U.S. product was superior to Brazilian product in terms of delivery time and U.S. transportation costs, and a plurality ranked U.S. superior in availability, delivery terms, technical support/service. Most U.S. purchasers reported that U.S. product was comparable to product from Brazil for all other characteristics.

¹⁴ Purchasers did not provide country comparisons for the following country pairs: Brazil vs. Moldova; Brazil vs. Ukraine; Indonesia vs. Mexico; Indonesia vs. Moldova; Indonesia vs. Trinidad and Tobago; Indonesia vs. Ukraine; Mexico vs. Ukraine; Moldova vs. Ukraine; Trinidad vs. Ukraine; and Ukraine vs. nonsubject countries.

When comparing products from the United States and Mexico, most purchasers reported that the products were comparable in the majority of factors. The exceptions to these were delivery time, wherein a plurality of purchasers reported that the U.S. product was superior, as well as product range and technical support/service wherein a plurality reported the products were comparable.

When comparing domestic product with product imported from nonsubject countries, most purchasers reported that the products were comparable in most factors. The exceptions were availability, delivery terms, delivery times, and technical support, wherein a plurality of purchasers reported that domestic product was superior. Additionally, purchasers were split on price, wherein 11 purchasers reported that the products were comparable in price and 12 purchasers reported that nonsubject prices were lower.

Table II-8

Wire rod: Purchasers' comparisons between U.S.-produced and imported product

Factor	U.S. vs. Brazil			U.S. vs. Indonesia			U.S. vs. Mexico			U.S. vs. Moldova		
	S	C	S	S	S	I	S	C	I	S	C	I
Availability	3	3	1	3	0	0	8	11	2	1	0	1
Delivery terms	3	2	2	3	0	0	7	12	2	1	1	0
Delivery time	4	1	2	3	0	0	10	9	2	1	0	1
Discounts offered	2	5	0	2	1	0	5	12	4	0	2	0
Extension of credit	1	4	2	2	0	1	1	16	3	0	1	1
Minimum quantity requirements	3	4	0	3	0	0	3	16	1	1	0	1
Packaging	1	5	1	2	1	0	4	16	1	0	2	0
Price ¹	0	5	1	2	1	0	4	12	5	0	2	0
Product consistency	2	4	1	3	0	0	5	16	0	1	1	0
Product range	2	3	2	2	1	0	6	10	5	0	1	1
Quality exceeds industry standards	2	3	2	3	0	0	6	14	0	1	0	1
Quality meets industry standards	2	4	1	3	0	0	3	17	0	1	1	0
Reliability of supply	2	4	1	2	1	0	7	13	1	0	1	1
Technical support/service	3	3	1	3	0	0	9	10	2	1	1	0
U.S. transportation costs ¹	4	3	0	3	0	0	6	12	3	1	1	0
Factor	U.S. vs. Trinidad and Tobago			U.S. vs. Ukraine			U.S. vs. nonsubject countries			Brazil vs. Indonesia		
	S	C	S	S	S	I	S	C	I	S	C	I
Availability	2	2	0	1	0	0	12	9	4	1	0	0
Delivery terms	2	2	0	1	0	0	13	9	3	1	0	0
Delivery time	2	1	1	1	0	0	19	3	3	1	0	0
Discounts offered	0	3	0	0	1	0	3	16	4	0	1	0
Extension of credit	0	3	1	0	0	1	3	18	3	0	1	0
Minimum quantity requirements	2	1	1	1	0	0	8	13	3	0	1	0
Packaging	0	4	0	0	1	0	4	19	1	0	1	0
Price ¹	0	4	0	0	1	0	1	11	12	0	1	0
Product consistency	1	3	0	1	0	0	3	16	5	1	0	0
Product range	0	4	0	0	1	0	2	19	3	1	0	0
Quality exceeds industry standards	1	2	1	1	0	0	3	16	6	1	0	0
Quality meets industry standards	1	2	0	1	0	0	2	19	2	0	1	0
Reliability of supply	1	2	1	0	1	0	6	14	4	0	1	0
Technical support/service	2	1	1	1	0	0	12	10	2	0	1	0
U.S. transportation costs ¹	2	2	0	1	0	0	7	14	3	0	1	0

Table continued on following page.

Table II-8--Continued

Wire rod: Purchasers' comparisons between U.S.-produced and imported product

Factor	Brazil vs. Mexico			Brazil vs. Trinidad and Tobago			Brazil vs. nonsubject countries			Indonesia vs. nonsubject countries		
	S	C	S	S	S	I	S	C	I	S	C	I
Availability	1	3	1	0	1	0	0	4	0	0	0	1
Delivery terms	1	4	0	0	1	0	0	4	0	0	0	1
Delivery time	1	3	1	0	1	0	1	3	0	0	0	1
Discounts offered	1	4	0	0	1	0	1	3	0	0	0	1
Extension of credit	0	5	0	0	1	0	0	4	0	0	0	1
Minimum quantity requirements	0	4	1	0	1	0	0	4	0	0	0	1
Packaging	2	3	0	0	1	0	1	3	0	0	0	1
Price ¹	0	4	1	0	1	0	0	4	0	0	0	1
Product consistency	3	3	0	0	1	0	0	4	0	0	0	1
Product range	2	3	0	0	1	0	0	4	0	0	0	1
Quality exceeds industry standards	3	2	0	0	1	0	0	4	0	0	0	1
Quality meets industry standards	1	4	0	0	1	0	0	4	0	0	0	1
Reliability of supply	1	4	0	0	1	0	0	4	0	0	0	1
Technical support/service	2	3	0	0	1	0	0	4	0	0	0	1
U.S. transportation costs ¹	0	4	1	0	1	0	0	5	0	0	1	0
Factor	Mexico vs. Moldova			Mexico vs. Trinidad and Tobago			Mexico vs. nonsubject countries			Moldova vs. Trinidad and Tobago		
	S	C	S	S	S	I	S	C	I	S	C	I
Availability	0	1	0	1	1	0	2	7	3	0	0	1
Delivery terms	0	0	1	1	1	0	2	7	3	0	1	0
Delivery time	1	0	0	1	1	0	4	5	3	0	0	1
Discounts offered	0	0	1	0	2	0	2	9	1	0	1	0
Extension of credit	0	1	0	0	2	0	1	10	1	0	1	0
Minimum quantity requirements	0	1	0	1	1	0	1	10	1	0	0	1
Packaging	0	0	1	0	2	0	2	9	1	0	1	0
Price ¹	0	1	0	0	2	0	0	7	5	0	1	0
Product consistency	0	0	1	0	2	0	1	10	1	0	1	0
Product range	0	0	1	0	1	0	2	6	3	0	0	1
Quality exceeds industry standards	0	0	1	0	2	0	1	8	3	0	0	1
Quality meets industry standards	0	1	0	0	1	0	1	8	2	0	1	0
Reliability of supply	0	1	0	1	1	0	2	8	2	0	0	1
Technical support/service	0	0	1	1	1	0	2	9	1	0	1	0
U.S. transportation costs ¹	0	2	0	1	1	0	3	9	0	0	1	0

Table continued on following page.

Table II-8--Continued**Wire rod: Purchasers' comparisons between U.S.-produced and imported product**

Factor	Moldova vs. nonsubject countries			Trinidad and Tobago vs. nonsubject countries		
	S	C	S	S	S	I
Availability	0	0	1	0	2	1
Delivery terms	0	1	0	0	3	0
Delivery time	0	0	1	0	3	0
Discounts offered	0	1	0	0	2	0
Extension of credit	0	1	0	0	3	0
Minimum quantity requirements	0	0	1	0	2	0
Packaging	0	1	0	0	3	0
Price ¹	0	1	0	0	2	1
Product consistency	0	1	0	0	2	0
Product range	0	0	1	0	2	0
Quality exceeds industry standards	0	0	1	0	2	1
Quality meets industry standards	0	1	0	0	2	0
Reliability of supply	0	1	1	0	1	2
Technical support/service	0	1	0	0	3	0
U.S. transportation costs ¹	0	1	0	0	3	0

¹ A rating of superior means that price/U.S. transportation costs is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.

Note.--S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior.

Source: Compiled from data submitted in response to Commission questionnaires.

In order to determine whether U.S.-produced wire rod can generally be used in the same applications as imports from subject countries, U.S. producers, importers, and purchasers were asked whether the products can "always," "frequently," "sometimes," or "never" be used interchangeably. As shown in table II-9, most U.S. producers reported that wire rod from all country pairs was "always" interchangeable and a plurality of importers and purchasers reported that wire rod from all country pairs was "always" or "frequently" interchangeable. Several firms noted that product interchangeability depends on the mill, not the country in which the wire rod is produced. The majority of firms reported that the interchangeability depends on the end application and the quality of wire rod required; low quality wire rod used

in IQ or mesh will tend to be more interchangeable, however, wire rod used to make cold heading fasteners or tie cord will be more difficult to interchange. Importer *** noted that for the non-standard grades of alloy welding rods, there are no U.S mills that produce the very tight chemistry ranges required, and therefore it sources from the Netherlands. One purchaser reported that wire rod from Mexico or China often has poor surface quality with rust. *** reported that wire rod from Moldova and Ukraine is lower in quality and therefore, low carbon wire rod used for mesh making is the only type that is interchangeable. *** stated that “Wire rod produced in Mexico can be interchangeable; however, some grades are not regularly produced in the U.S. and therefore, availability is limited. Wire rod imported from the other countries that are used to make automotive parts are tested extensively and approved by the automaker for specific parts and performance; therefore, it has limit interchangeability.”¹⁵

¹⁵ Importer questionnaire response, section III-30.

Table II-9

Wire rod: Interchangeability between wire rod produced in the United States and in other countries, by country pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. Brazil	8	1	0	0	2	5	0	0	5	1	3	1
U.S. vs. Indonesia	8	1	0	0	1	5	1	0	2	1	2	0
U.S. vs. Mexico	8	1	1	0	1	10	2	0	8	7	7	0
U.S. vs. Moldova	8	1	0	0	1	3	2	0	2	0	3	0
U.S. vs. Trinidad and Tobago	8	1	0	0	1	7	1	0	4	2	3	0
U.S. vs. Ukraine	8	1	0	0	1	4	1	0	2	0	1	0
Subject countries comparisons:												
Brazil vs. Indonesia	7	1	0	0	1	4	2	0	2	0	3	1
Brazil vs. Mexico	7	1	0	0	1	5	2	0	2	3	4	1
Brazil vs. Moldova	7	1	0	0	1	4	1	0	1	0	2	0
Brazil vs. Trinidad and Tobago	7	1	0	0	1	4	1	0	2	1	2	1
Brazil vs. Ukraine	7	1	0	0	1	4	1	0	1	0	1	0
Indonesia vs. Mexico	7	1	0	0	1	5	2	0	3	1	3	0
Indonesia vs. Moldova	7	1	0	0	1	4	1	0	1	0	2	0
Indonesia vs. Trinidad and Tobago	7	1	0	0	1	4	1	0	2	1	2	0
Indonesia vs. Ukraine	7	1	0	0	1	4	1	0	1	0	1	0
Mexico vs. Moldova	7	1	0	0	1	5	1	0	1	0	2	0
Mexico vs. Trinidad and Tobago	7	1	0	0	1	5	2	0	3	0	4	0
Mexico vs. Ukraine	7	1	0	0	1	5	1	0	1	0	2	0
Moldova vs. Trinidad and Tobago	7	1	0	0	1	4	1	0	2	0	2	0
Moldova vs. Ukraine	7	1	0	0	1	4	1	0	1	0	1	0
Trinidad and Tobago vs. Ukraine	7	1	0	0	1	4	1	0	1	0	1	0
Nonsubject countries comparisons:												
U.S. vs. nonsubject	9	1	0	0	2	8	5	2	8	14	6	1
Brazil vs. nonsubject	7	1	0	0	2	4	1	1	2	3	3	0
Indonesia vs. nonsubject	7	1	0	0	2	4	1	1	2	1	2	0
Mexico vs. nonsubject	7	1	0	0	2	5	2	1	3	7	4	0
Moldova vs. nonsubject	7	1	0	0	2	3	2	1	2	1	2	0
Trinidad and Tobago vs. nonsubject	7	1	0	0	3	4	2	1	2	1	3	0
Ukraine vs. nonsubject	7	1	0	0	2	3	2	1	2	1	1	0

Note.—A=Always, F=Frequently, S=Sometimes, N=Never.

Source: Compiled from data submitted in response to Commission questionnaires.

As can be seen from table II-10, 17 responding purchasers reported that domestically-produced product “always” met minimum quality specifications.¹⁶ The majority of purchasers reported that they did not have any knowledge of the quality specifications of wire rod from most subject countries. However, seven of seventeen responding purchasers reported that the Mexican product “always” met minimum quality specifications.

Table II-10

Wire rod: Ability to meet minimum quality specifications, by source and number of reporting firms¹

Source	Always	Usually	Sometimes	Rarely or never	Don't know
United States	17	15	0	1	0
Brazil	2	2	1	0	25
Indonesia	0	0	1	0	27
Mexico	7	9	1	0	15
Moldova	0	1	0	0	27
Trinidad and Tobago	1	2	0	0	25
Ukraine	0	0	0	0	28
Other: Canada	4	3	0	0	0
Other: China	8	12	1	0	0
Other: Turkey	3	7	0	0	0

¹ Purchasers were asked how often domestically produced or imported wire rod meets minimum quality specifications for their own or their customers' uses.

Source: Compiled from data submitted in response to Commission questionnaires.

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of wire rod from the United States,

¹⁶ ***. Purchaser questionnaire response, section III-13.

subject, or nonsubject countries. As seen in table II-11, most producers reported that there were “never” differences other than price and a plurality of importers and purchasers reported that there were “sometimes” or “never” differences other than price. The most common difference reported by firms was shorter delivery and lead times. Other differences included: grade ranges, purity levels, steel quality, technical support, availability of ultra-high carbon for certain end-use applications, and availability of smaller diameter wire rod.

Table II-11

Wire rod: Significance of differences other than price between wire rod produced in the United States and in other countries, by country pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. Brazil	0	0	3	6	1	0	2	2	3	2	2	4
U.S. vs. Indonesia	0	0	3	6	1	0	2	2	3	0	0	3
U.S. vs. Mexico	0	0	3	6	3	2	3	2	4	4	7	7
U.S. vs. Moldova	0	0	3	6	1	0	2	1	4	0	0	2
U.S. vs. Trinidad and Tobago	0	0	3	6	1	1	3	1	3	2	1	3
U.S. vs. Ukraine	0	0	3	6	1	0	2	1	2	0	0	2
Subject countries comparisons:												
Brazil vs. Indonesia	0	0	2	6	1	0	2	2	2	0	0	2
Brazil vs. Mexico	0	0	2	6	2	0	2	2	2	2	3	2
Brazil vs. Moldova	0	0	2	6	1	0	2	1	2	0	0	1
Brazil vs. Trinidad and Tobago	0	0	2	6	1	0	2	1	2	1	1	1
Brazil vs. Ukraine	0	0	2	6	1	0	2	1	2	0	0	1
Indonesia vs. Mexico	0	0	2	6	2	0	2	2	2	0	1	2
Indonesia vs. Moldova	0	0	2	6	1	0	2	1	2	0	0	1
Indonesia vs. Trinidad and Tobago	0	0	2	6	1	0	2	1	2	0	1	1
Indonesia vs. Ukraine	0	0	2	6	1	0	2	1	2	0	0	1
Mexico vs. Moldova	0	0	2	6	2	0	2	1	2	0	0	1
Mexico vs. Trinidad and Tobago	0	0	2	6	2	0	2	1	2	1	1	2
Mexico vs. Ukraine	0	0	2	6	2	0	2	1	2	0	0	1
Moldova vs. Trinidad and Tobago	0	0	2	6	1	0	2	1	2	0	1	1
Moldova vs. Ukraine	0	0	2	6	1	0	2	1	2	0	0	1
Trinidad and Tobago vs. Ukraine	0	0	2	6	1	0	2	1	2	0	0	1
Nonsubject countries comparisons:												
U.S. vs. nonsubject	0	0	2	8	5	4	4	2	6	7	9	7
Brazil vs. nonsubject	0	0	1	7	3	1	2	2	2	2	2	2
Indonesia vs. nonsubject	0	0	1	7	3	1	2	2	2	1	1	2
Mexico vs. nonsubject	0	0	1	7	4	1	2	1	2	3	6	2
Moldova vs. nonsubject	0	0	1	7	3	1	2	1	2	1	1	1
Trinidad and Tobago vs. nonsubject	0	0	1	7	3	1	2	2	2	1	1	2
Ukraine vs. nonsubject	0	0	1	7	3	1	2	1	2	1	1	2

Note.--A = Always, F = Frequently, S = Sometimes, N = Never.

Source: Compiled from data submitted in response to Commission questionnaires.

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties are encouraged to comment on these estimates and should do so as an attachment to their prehearing or posthearing brief.

U.S. supply elasticity

The domestic supply elasticity¹⁷ for wire rod measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of wire rod. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced wire rod. Analysis of these factors earlier indicates that the U.S. industry is likely to be able to slightly increase or decrease shipments to the U.S. market; an estimate in the range of 1 to 3 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for wire rod measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of wire rod. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of the wire rod in the production of any downstream products. Based on the available information, the aggregate demand for wire rod is likely to be moderately elastic; a range of -0.5 to -0.75 is suggested.

¹⁷ A supply function is not defined in the case of a non-competitive market.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.¹⁸ Product differentiation, in turn, depends upon such factors as quality (*e.g.*, chemistry, appearance, etc.) and conditions of sale (*e.g.*, availability, sales terms/ discounts/ promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced wire rod and imported wire rod is likely to be in the range of 3 to 5.

¹⁸ The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

PART III: CONDITION OF THE U.S. INDUSTRY

OVERVIEW

The 2008-13 years were less tumultuous ones for the domestic wire rod industry—albeit with production curtailments and resumptions, capacity expansions, facilities openings or re-openings, and facilities shutdowns—compared to events of prior years.¹ Nucor opened a new wire rod mill at its Darlington, South Carolina, facility in October 2013, and reopened a previously idled facility at Kingman, Arizona, in November 2010. ArcelorMittal’s Georgetown, South Carolina facility, Evraz Pueblo’s Pueblo, Colorado facility, and Keystone’s Peoria, Illinois facility underwent production curtailments and resumptions during 2008-12. At Gerdau’s Perth Amboy, New Jersey facility, the rolling mill was shutdown after June 2009; previously, the melt shop was shutdown in February 2007.² Gerdau also invested in melting and rolling capacity expansions at its Jacksonville, Florida facility during 2008-10. Table III-1 summarizes important events that have occurred in the U.S. industry since January 2008.

¹ Previously, during 2002-06, the industry underwent extensive restructuring through bankruptcies, corporate consolidations, facilities acquisitions, and new entrants. See “Overview” and table III-1 Wire rod: Survey of industry events, 2002-06 in: *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine*, Inv. Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review), USITC Publication 4014, June 2008, pp. III-1 to III-2.

² *American Metal Market*, “Melt Shop Closure Saves Money for Ameristeel,” February 8, 2007.

Table III-1
Wire rod: Survey of industry events, 2008-13

Period	Company	Description of event (curtailment, expansion, opening, reopening, resumption, shutdown)
January 2008	Keystone	Curtailment and resumption: Resumption of operations after a late-December outage was hindered by various difficulties at the Peoria, IL, facility, which reportedly resulted in an estimated 6,000-7,000 tons of lost production.
January 2008	Gerdau	Expansion: Investment plans were announced for boosting the annual rolling capacity by 400,000 at the Jacksonville, FL, facility, with completion anticipated by 2010. Rolling capacity expansion would enable Gerdau to match the recently expanded melting capacity at this facility which currently exceeds 1 million tons.
October-November 2008	Keystone	Curtailment and resumption: The Peoria, IL, facility was reopened after a temporary shutdown for furnace maintenance, but management placed a majority of employees on a week-to-week layoff schedule, due to reportedly “generally slow” business conditions.
October 2008-January 2009	ArcelorMittal	Curtailment and resumption: The Georgetown, SC, facility, was temporarily idled in October-November 2008 and again in December 2008- January 2009, as part of parent company ArcelorMittal SA’s plans to cutback fourth-quarter 2008 output of all steel mill products by 30 percent worldwide and by 35 percent in the United States, which resulted in the temporary lay-offs of some 300 employees. Although the facility reopened in January 2009, 51 employees were permanently laid-off.
November-December 2008	Evrar Pueblo	Curtailment and resumption: The bar and rod mill at the Pueblo, CO, facility was temporarily idled due to lack of customer orders.
June 2009	Gerdau	Shutdown: Halting of production announced at the Perth Amboy, NJ, rolling mill, followed by addition of another shift at the Beaumont, TX, facility to meet customer orders and to stock the warehouse.
July 2009	ArcelorMittal	Shutdown: Georgetown, SC, facility closed down, after labor negotiations failed to reach agreement for keeping the facility open. Halting in late June of the melt shop (with 1 million tons of annual capacity) and in early July of the rolling-mill operations (with 750,000 tons of annual capacity) affected some 265 hourly employees and 53 salaried employees.
November 2010	Nucor	Reopening: Restarted operations at Kingman, AZ, facility, previously acquired in 2003 from the former North Star Steel Co., to produce both wire rods and concrete reinforcing bars. This rolling mill has an anticipated output capacity rating of 500,000 tons annually, but the July 2009 air-quality permit limited production to 350,000 tons annually. Other Nucor bar mills with excess melting capacity supply billets to the Kingman rolling mill.
January 2011	ArcelorMittal	Reopening: Georgetown, SC, facility resumed production. This facility, being capable of melting 1 million short tons of crude steel and roll 750,000 tons of wire rod annually, actually rolled about 380,000 tons annually between 2006 and 2008. With plans to continue the previous practice of rolling to order, rather than also for building-up warehouse inventory, initial production was estimated to reach about 264,000 tons of wire rods annually. Reopening of this facility was anticipated to bring back 185 union employees, under a new labor agreement that was ratified back in June 2010, and 44 managers.
Fourth-quarter 2012	ArcelorMittal	Curtailment: Operations at the Georgetown, SC, facility were cutback from three to two shifts, along with laying-off of 30 employees.
October 2013	Nucor	Opening: Shipments commenced from the newly constructed wire-rod mill at the Darlington, SC facility. This new wire-rod mill has an annual output capacity rating of 300,000 tons and is capable of producing wire rods with diameters down to 5.5 mm and coiled bars up to 2 inches in diameter, in a full range of low-, medium-, and high-carbon contents.

Source: American Metal Market, Metal Bulletin, and individual company Internet web sites.

BACKGROUND

Information in this section is based on the questionnaire responses of 10 producers that are believed to have accounted for all known U.S. production during 2013.

CHANGES IN EXISTING OPERATIONS

Domestic producers were asked to indicate whether their firm had experienced any plant openings, relocations, expansions, acquisitions, consolidations, closures, or prolonged shutdowns because of strikes or equipment failure; curtailment of production because of shortages of materials or other reasons, including revision of labor agreements; or any other change in the character of their operations or organization relating to the production of wire rod since 2008. Eight domestic producers indicated that they had experienced such changes; their responses are presented in table III-2.

Table III-2

Wire rod: Changes in the character of U.S. operations since January 1, 2008

* * * * *

ANTICIPATED CHANGES IN EXISTING OPERATIONS

The Commission asked domestic producers to report anticipated changes in the character of their operations relating to the production of wire rod. Four domestic producers (***) indicated that they do not anticipate any changes in the character of their operations. The responses of the remaining six domestic producers appear in table III-3.

Table III-3

Wire rod: Anticipated changes in the character of U.S. operations

*	*	*	*	*	*	*
---	---	---	---	---	---	---

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-4 presents U.S. producers' production, capacity, and capacity utilization. U.S. capacity for wire rod fell from 2008 to 2010, increased in 2011, and fell thereafter to a level that was 8.5 percent lower than reported for 2008. Domestic production fluctuated during the six-year period to a level in 2013 that is 9.9 percent lower than that reported in 2008. Capacity utilization also fluctuated during 2008-13 ranging from a high of 75.6 percent (2012) to a low of 53.6 percent (2009).

Table III-4
Wire rod: U.S. producers' production, capacity, and capacity utilization, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
Capacity	5,546,751	5,295,752	4,965,095	5,173,168	5,131,954	5,073,815
Production	4,055,641	2,837,165	3,384,322	3,907,416	3,879,060	3,655,088
Ratio (percent)						
Capacity utilization	73.1	53.6	68.2	75.5	75.6	72.0

Source: Compiled from data submitted in response to Commission questionnaires.

While aggregate production quantity declined overall from 2008 to 2013 with most firms reporting decreases in production over the period, three firms (***) reported overall increases in production, ranging between *** and *** percent from 2008 to 2013. Although five U.S. producers reported no changes in reported capacity to produce wire rod, two firms (***) reported overall declines in capacity and three firms (***) reported overall increases in capacity. ***.

.³.

CONSTRAINTS ON CAPACITY

All U.S. producers, ***, reported constraints in the manufacturing process. Reported constraints in the manufacturing process for the U.S. producers include melting capacity, which is constrained by environmental air permits; steel availability; speed of

³ Gerdau's Perth Amboy facility, which is dedicated to wire rod production, has an annual capacity of 750,000 short tons. *Carbon and Certain Alloy Steel Wire Rod from China, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary)*, USITC Publication 4458 (March 2014), p. III-3.

equipment, rolling capacity, employee resources, market conditions, and import competition. Three U.S. producers (***) that collectively accounted for *** of domestic production in 2013 specifically noted that they are not operating at full capacity due to the market conditions and that weakened demand due to import competition limits their ability to produce more wire rod.

ALTERNATIVE PRODUCTS

All producers *** reported production or anticipating production of other products, including rebar, on the same equipment and machinery used to produce wire rod. Table III-5 presents the U.S. wire rod producers' overall capacity and production of wire rod and other products produced on the same production equipment used to produce wire rod. U.S. producers were asked to describe the constraints that set the limits on their firm's ability to shift production capacity between products. *** stated that they can readily shift between coiled reinforcing bar and coiled carbon wire rod and *** indicated that it has some ability to shift between wire rod and rebar. However, *** stated that it cannot easily shift production between wire rod and rebar. *** reported that their ability to switch production is dependent on customer demand for those products. Charter stated ***. Republic ***.

Table III-5**Wire rod: U.S. producers' overall capacity, production, and capacity utilization, 2008-13**

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
Overall capacity	8,164,642	7,959,617	7,740,303	7,918,772	8,010,018	8,918,066
Production:						
Subject merchandise	4,055,641	2,837,164	3,384,322	3,907,416	3,879,060	3,655,088
Rebar	1,099,208	758,281	790,189	808,532	879,761	1,070,115
Other bar/rod products	1,155,617	631,750	977,433	1,123,174	1,122,994	1,488,908
Subtotal, nonsubject production	2,254,825	1,390,031	1,767,622	1,931,706	2,002,755	2,559,023
Total production	6,310,466	4,227,195	5,151,944	5,839,122	5,881,815	6,214,111
Ratio (percent)						
Overall capacity utilization	77.3	53.1	66.6	73.7	73.4	69.7
Share of quantity (percent)						
Share of production:						
Subject merchandise	64.3	67.1	65.7	66.9	66.0	58.8
Rebar	17.4	17.9	15.3	13.8	15.0	17.2
Other bar/rod products	18.3	14.9	19.0	19.2	19.1	24.0
Subtotal, nonsubject production	35.7	32.9	34.3	33.1	34.0	41.2
Total production	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments.

Table III-6

Wire rod: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2008-13¹

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
Commercial U.S. shipments	2,954,594	2,032,965	2,414,644	2,944,416	2,815,567	2,595,200
Internal consumption	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***
Subtotal, U.S. shipments	4,050,961	2,833,426	3,340,954	3,876,145	3,809,728	3,599,459
Export shipments	39,707	39,301	42,049	34,687	26,748	24,319
Total shipments	4,090,668	2,872,727	3,383,003	3,910,832	3,836,476	3,623,778
Value (1,000 dollars)						
Commercial U.S. shipments	2,590,276	1,194,142	1,668,054	2,340,739	2,143,895	1,875,625
Internal consumption	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***
Subtotal, U.S. shipments	3,485,005	1,651,451	2,246,759	3,012,054	2,826,974	2,529,487
Export shipments	31,925	22,886	26,912	28,888	31,597	22,566
Total shipments	3,516,930	1,674,337	2,273,671	3,040,942	2,858,571	2,552,053
Unit value (dollars per short ton)						
Commercial U.S. shipments	877	587	691	795	761	723
Internal consumption	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***
Subtotal, U.S. shipments	860	583	672	777	742	703
Export shipments	804	582	640	833	1,181	928
Total shipments	860	583	672	778	745	704
Share of quantity (percent)						
Commercial U.S. shipments	72.2	70.8	71.4	75.3	73.4	71.6
Internal consumption	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***
Subtotal, U.S. shipments	99.0	98.6	98.8	99.1	99.3	99.3
Export shipments	1.0	1.4	1.2	0.9	0.7	0.7
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0
Share of value (percent)						
Commercial U.S. shipments	73.7	71.3	73.4	77.0	75.0	73.5
Internal consumption	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***
Subtotal, U.S. shipments	99.1	98.6	98.8	99.1	98.9	99.1
Export shipments	0.9	1.4	1.2	0.9	1.1	0.9
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0

¹ Several U.S. producers included tolling activity in their shipment data. Further information concerning the tolling activity reported by U.S. producers is included in the section of Part I entitled "U.S. Producers".

Source: Compiled from data submitted in response to Commission questionnaires.

The quantity of U.S. producers' U.S. shipments declined steeply from 2008 to 2009, increased from 2009 to 2011, and fell to a level in 2013 that was 11.1 percent lower than the

level reported in 2008. The value and unit value of U.S. producers' U.S. shipments followed a similar trend, declining overall by 27.3 percent and 18.3 percent, respectively.

Commercial U.S. shipments accounted for between 70.8 and 75.3 percent of U.S. producers' total shipments of wire rod during 2008-13, whereas internal consumption accounted for between *** and *** percent of U.S. producers' total shipments of wire rod and transfers to related firms accounted for between *** and *** percent. Seven firms, ***, reported internally consuming or transferring wire rod to a related firm to produce a downstream product. U.S. producers reported internal consumption and company transfers of wire rod for the production of nails, garment hangers, wire shelving, prestressed concrete strand, oil tempered and other high carbon wire, drawn wire (including tire bead, high carbon and fine wire quality), cold finished bars, cold headed parts, mesh, agricultural fencing, armoring wire, galvanized wire, concrete reinforcing mesh, and bed spring components.

U.S. producers' total exports of wire rod accounted for between 0.7 to 1.4 percent of their total shipments during 2008-13. Five out of ten producers reported exports of wire rod, predominately to Canada and Mexico, as well as to ***. U.S. producers contend that it is hard to compete in export markets due to the lower priced product there, particularly from the Chinese producers. Evraz does export some high end value products to Mexico.⁴

⁴ *Carbon and Certain Alloy Steel Wire Rod from China, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary)*, USITC Publication 4458 (March 2014), p. III-6.

U.S. PRODUCERS' U.S. SHIPMENTS, BY APPLICATION

Table III-7 presents U.S. producers' U.S. shipments by type in 2013. All U.S. producers reported U.S. shipments of high/medium-high carbon industrial/standard quality wire rod and *** reported U.S. shipments of low/medium-low carbon industrial/standard quality wire rod. These two types of wire rod together accounted for more than three-fourths of all types of U.S. producers' U.S. shipments during 2013.

Table III-7
Wire rod: U.S. producers' U.S. shipments, by type, 2013

Item	Quantity (short tons)	Share (percent)	Number of reporting firms
Low/medium-low carbon industrial/standard quality	1,768,913	49.1	9
High/medium-high carbon industrial/standard quality	1,002,954	27.9	10
Tire cord or tire bead quality	***	***	***
Welding quality	***	***	***
Cold heading quality ("CHQ")	***	***	***
Other specialty carbon and alloy quality	***	***	***
All other wire rod	***	***	***
Total, U.S. shipments	3,599,459	100.0	10

Source: Compiled from data submitted in response to Commission questionnaires.

Cold heading quality (“CHQ”) wire rod, which accounted for *** percent of all types of U.S. producers’ U.S. shipments in 2013, is produced by *** domestic producers and welding quality wire rod, which accounted for *** percent of all types of U.S. producers’ U.S. shipments in 2013, is produced by *** domestic producers. *** is the largest domestic producer of these types of wire rod. *** together accounted for almost all domestic production of tire cord or tire bead quality wire rod, which accounted for *** percent of all types of U.S. producers’ U.S. shipments in 2013.⁵ Other specialty carbon and alloy quality wire rod is produced by five producers (the largest of which is ***) and all other wire rod is produced by three producers (the largest of which is ***).⁶

U.S. producers were asked to describe the qualitative differences among the different types of wire rod. Three firms (***) said there were no or little differences. Other firms stated that wire rod is on a continuum of grades, qualities, chemistry variances, and end uses and that the qualitative differences between each relate to charge design and scrap cost to create a higher carbon product. One firm stated that some overlap occurs especially if higher quality materials are used in a lower quality application. For example,

⁵ ArcelorMittal makes a wide variety of wire rod grades at its facilities, including low, medium, high carbon, tire cord, tire bead, and welding wire rod. Evraz produces low carbon mesh and industrial grade wire rod, however its product mix is weighted heavily toward high and medium carbon steels. Evraz also produces medium carbon grades of wire rod for the furniture and bedding spring rod business, as well as high carbon rod for the making of PC strand, rubber reenforcement and wire row. In addition, Evraz produces welding quality wire rod. *Carbon and Certain Alloy Steel Wire Rod from China, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary)*, USITC Publication 4458 (March 2014), p. III-8.

⁶ Gerdau produces a wide variety of wire rod types ranging from low to high carbon rod, welding rod, cold-heading quality rod and many other special types of rod as well. *Carbon and Certain Alloy Steel Wire Rod from China, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary)*, USITC Publication 4458 (March 2014), p. III-8.

CHQ could be used in some industrial quality applications or welding wire could be used in industrial quality applications. One firm stated that CHQ, other special carbon and alloy, and tire cord are the highest quality.

U.S. PRODUCERS' INVENTORIES

Table III-8 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments during 2008-13. U.S. producers' inventories of wire rod fell sharply from 2008 to 2009, remained relatively stable through 2011, before increasing to a six-year high in 2013. Overall, inventories were 15.4 percent higher in 2013 than in 2008, with *** accounting for the largest share of the increase. Inventories relative to total shipments fluctuated during 2008-13, ranging from a low of 4.9 percent in 2011 to a high of 7.4 percent in 2013.

Table III-8
Wire rod: U.S. producers' inventories, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (<i>short tons</i>)						
U.S. producers' end-of-period inventories	231,279	195,717	196,677	193,261	235,848	266,868
Ratio (<i>percent</i>)						
Ratio of inventories to--						
U.S. production	5.7	6.9	5.8	4.9	6.1	7.3
U.S. shipments	5.7	6.9	5.9	5.0	6.2	7.4
Total shipments	5.7	6.8	5.8	4.9	6.1	7.4

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producers reported no direct imports or domestic purchases of domestically produced or imported wire rod from the subject countries during 2008-13. *** U.S. producer (***) reported the domestic purchase of *** wire rod *** during ***. *** explained that this domestic purchase of wire rod produced by *** was for resale purposes. Two U.S. producers, however, reported that they are related to foreign producers of the subject merchandise: Gerdau and ArcelorMittal USA.

Gerdau reported that it is a wholly-owned subsidiary of wire rod producer Gerdau SA of Brazil. Gerdau SA did not provide a response to the Commission's foreign producer questionnaire in these reviews; however, U.S. imports of wire rod from Brazil are believed to be nonsubject grade 1080 tire cord or tire bead quality wire rod during 2008-13.

ArcelorMittal USA reported that it is a wholly-owned subsidiary of ArcelorMittal SA (Luxembourg), which has subsidiary wire rod producers in numerous countries, including subject countries Brazil, Mexico, Trinidad & Tobago, and Ukraine. There were no reported imports of subject merchandise from Brazil or Ukraine during 2008-13 and there were no reported imports of subject merchandise from Trinidad & Tobago by ArcelorMittal firms during 2008-13.

Table III-9 presents data on ArcelorMittal USA's U.S. production and U.S. imports of wire rod from Mexico during 2008-13 as reported by the following ArcelorMittal related firms: ***.

Table III-9
Wire rod: ArcelorMittal's U.S. production, imports, and import ratios to U.S. production, 2008-13

* * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-10 shows U.S. producers' employment-related data during 2008-13. Several employment-related indicators fell steeply from 2008 to 2009 and recovered somewhat thereafter to levels below those reported in 2008. The level of production-related workers (PRWs), total hours worked, and total wages paid fell overall by 6.3, 10.2, and 8.0 percent, respectively, from 2008 to 2013. Although seven domestic producers reported overall declines in the number of PRWs, the largest declines were primarily attributed to the employment indicators reported by ***. Hourly wages, unit labor costs, and productivity fluctuated during 2008-13, but were slightly higher in 2013 than in 2008.

Table III-10

Wire rod: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Production related workers (PRWs) (<i>number</i>)	2,339	2,083	2,173	2,239	2,269	2,192
Total hours worked (<i>1,000 hours</i>)	4,741	3,825	4,220	4,552	4,587	4,258
Hours worked per PRW (<i>hours</i>)	2,027	1,836	1,942	2,033	2,022	1,943
Wages paid (<i>\$1,000</i>)	170,467	128,170	145,939	166,385	174,648	156,838
Hourly wages (<i>dollars per hour</i>)	\$35.96	\$33.51	\$34.58	\$36.55	\$38.07	\$36.83
Productivity (<i>short tons per 1,000 hours</i>)	855.4	741.7	802.0	858.4	845.7	858.4
Unit labor costs (<i>dollars per short ton</i>)	\$42.03	\$45.18	\$43.12	\$42.58	\$45.02	\$42.91

Source: Compiled from data submitted in response to Commission questionnaires.

FINANCIAL EXPERIENCE OF U.S. PRODUCERS

Background

This section of the report presents the wire rod financial results of ten U.S. producers. Wire rod financial results were reported primarily on the basis of U.S. generally accepted accounting principles (GAAP) and for calendar-year periods.⁷ While no single U.S. producer accounts for the majority of overall wire rod sales volume, the three largest volume producers accounted for *** percent of total sales volume during 2008-13: ***. The remaining producers ranged from *** percent of total sales volume (***) to *** percent of total sales volume (***)).

The majority of the industry's wire rod revenue reflects commercial sales (73.3 percent of total sales), followed by transfers (*** percent of total sales) and a relatively small amount classified as internal consumption (*** percent of total sales). While most U.S. producers also reported transfers, only *** reported that transfers are the majority of their wire rod revenue.⁸ Internal consumption was only reported by ***.⁹

⁷ The exceptions were Gerdau, reporting its financial results on the basis of International Financial Reporting Standards (IFRS) and Charter, reporting its financial results for fiscal-year periods ending August 31.

⁸ ***. March 6, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor. March 5, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor. March 4, 2014 e-mail with attachment from *** to USITC auditor. March 5, 2014 e-mail with attachment from *** to USITC auditor. March 28, 2014 e-mail with attachment from *** to USITC auditor. March 7, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor. February 28, 2014 e-mail with attachment from *** to USITC auditor.

⁹ ***. March 5, 2014 e-mail with attachment from *** to USITC auditor. ***. March 7, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor.

Several U.S. producers also included tolling activity in their trade information and financial results. Revenue and other financial elements specific to wire rod tolling operations are not presented separately in the relevant tables below.¹⁰

Four producers, ***, reported that they purchase primary raw materials from related parties: ***.^{11 12}

¹⁰ Tolling activity introduces a limited degree of potential double counting with respect to wire rod sales volume. Given the eliminating effect of toll-processing fees that are included in revenue and in cost of goods sold, tolling activity in general does not appear to distort or otherwise undermine the validity of the industry's consolidated financial results.

¹¹ *** U.S. producer questionnaires, response to question III-7. ***. March 18, 2014 e-mail with attachment from *** to USITC auditor.

¹² ***. March 28, 2014 e-mail with attachment from *** to USITC auditor.

With respect to inputs other than raw material which are purchased from a related company, ***.^{13 14}

Operations on wire rod

Table III-11 presents income-and-loss data for the U.S. industry's wire rod operations. Table III-12 presents a variance analysis of these financial results.¹⁵ Table III-13 presents selected company-specific financial information.

¹³ *** U.S. producer questionnaire, response to question III-7.

¹⁴ With regard to input purchases from related companies, the Commission's standard practice requires the elimination of the related company's profit or loss from the relevant COGS reported in the financial section of the U.S. producer questionnaire. The intent of this adjustment is for the related company's actual cost to be recognized in determining the financial results reported to the Commission. The U.S. producers referenced above generally indicated that they complied with the Commission's requested input valuation.

***. *** U.S. producer questionnaire, response to question III-7.

¹⁵ The Commission's variance analysis is calculated in three parts: sales variance, COGS variance, and sales, general and administrative (SG&A) expenses variance. Each part consists of a price variance (in the case of the sales variance) or a cost variance (in the case of the COGS and SG&A expenses variances) and a volume (quantity) variance. The sales or cost variance is calculated as the change in unit price/cost times the new volume, while the volume variance is calculated as the change in volume times the old unit price/cost. Summarized at the bottom of table III-12, the price variance is from sales, the cost/expense variance is the sum of those items from COGS and SG&A, respectively, and the net volume variance is the sum of the price, COGS, and SG&A volume variances.

Most U.S. producers indicated that product mix did not change substantially during 2008-13 which generally enhances the utility of the Commission's variance analysis. USITC auditor prehearing notes. ***. March 4, 2014 e-mail with attachment from *** to USITC auditor.

Table III-11
Wire rod: Results of operations of U.S. producers, 2008-13

Item	Fiscal year					
	2008	2009	2010	2011	2012	2013
	Quantity (short tons)					
Commercial sales	2,993,932	2,072,311	2,456,711	2,979,103	2,842,314	2,619,518
Internal consumption	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***
Total net sales quantity	4,126,388	2,881,432	3,384,018	3,920,918	3,836,475	3,623,777
	Value (\$1,000)					
Commercial sales	2,621,392	1,217,068	1,694,976	2,369,626	2,175,493	1,898,192
Internal consumption	***	***	***	***	***	***
Transfers to related firms	***	***	***	***	***	***
Total net sales value	3,547,031	1,679,395	2,274,325	3,048,561	2,858,572	2,552,054
Cost of goods sold:						
Raw materials	2,146,334	991,037	1,395,604	1,975,923	1,801,045	1,579,821
Direct labor	184,687	109,149	132,708	156,676	152,847	139,485
Other factory costs	785,656	552,772	555,675	611,227	668,696	639,029
Total cost of goods sold	3,116,677	1,652,958	2,083,987	2,743,826	2,622,588	2,358,335
Gross profit	430,354	26,437	190,338	304,735	235,984	193,719
SG&A expenses	83,259	69,352	91,584	86,722	87,633	86,025
Operating income or (loss)	347,095	(42,915)	98,754	218,013	148,351	107,694
Interest expense	21,662	16,828	10,972	8,532	1,552	3,424
Other expenses	11,226	12,672	11,590	10,953	9,984	8,452
Other income items	848	845	1,075	856	406	612
Net income or (loss)	315,055	(71,570)	77,267	199,384	137,221	96,430
Depreciation/amortization	53,415	52,222	46,948	46,192	47,134	48,420
Estimated cash flow from operations	368,470	(19,348)	124,215	245,576	184,355	144,850
	Ratio to net sales (percent)					
Raw materials	60.5	59.0	61.4	64.8	63.0	61.9
Direct labor	5.2	6.5	5.8	5.1	5.3	5.5
Other factory costs	22.1	32.9	24.4	20.0	23.4	25.0
Cost of goods sold	87.9	98.4	91.6	90.0	91.7	92.4
Gross profit ¹	12.1	1.6	8.4	10.0	8.3	7.6
SG&A expenses	2.3	4.1	4.0	2.8	3.1	3.4
Operating income or (loss)	9.8	(2.6)	4.3	7.2	5.2	4.2
Net income or (loss)	8.9	(4.3)	3.4	6.5	4.8	3.8

Table continued on next page.

Table III-11-- *Continued*

Wire rod: Results of operations of U.S. producers, 2008-13

Item	Fiscal year					
	2008	2009	2010	2011	2012	2013
	Ratio to cost of goods sold (percent)					
Raw materials	68.9	60.0	67.0	72.0	68.7	67.0
Direct labor	5.9	6.6	6.4	5.7	5.8	5.9
Other factory costs	25.2	33.4	26.7	22.3	25.5	27.1
	Unit values (dollars per short ton)					
Commercial sales	876	587	690	795	765	725
Internal consumption	***	***	***	***	***	***
Transfers	***	***	***	***	***	***
Total net sales	860	583	672	778	745	704
Cost of goods sold:						
Raw materials	520	344	412	504	469	436
Direct labor	45	38	39	40	40	38
Other factory costs	190	192	164	156	174	176
Total cost of goods sold	755	574	616	700	684	651
Gross profit	104	9	56	78	62	53
SG&A expenses	20	24	27	22	23	24
Operating income or (loss)	84	(15)	29	56	39	30
	Number of firms reporting					
Operating losses	1	5	2	1	2	3
Data	10	10	10	10	10	10

¹ The following reconciles period-to-period changes in the components of the COGS-to-sales ratio to corresponding changes in gross profit ratio. A period-to-period change that increases the COGS-to-sales ratio yields a corresponding decline in gross profit ratio, while a period-to-period change that decreases the COGS-to-sales ratio yields a corresponding increase in gross profit ratio.

Item	Fiscal year				
	2008-09	2009-10	2010-11	2011-12	2012-13
	Ratio to net sales (percent)				
Raw materials	(1.5)	2.4	3.5	(1.8)	(1.1)
Direct labor	1.3	(0.7)	(0.7)	0.2	0.1
Other factory costs	10.8	(8.5)	(4.4)	3.3	1.6
Cost of goods sold	10.6	(6.8)	(1.6)	1.7	0.7
Gross profit	(10.6)	6.8	1.6	(1.7)	(0.7)

Source: Compiled from data submitted in response to Commission questionnaires.

Table III-12

Wire rod: Variance analysis on the operations of U.S. producers, 2008-13

Item	Fiscal year				
	2008-09	2009-10	2010-11	2011-12	2012-13
Total net revenue:	Value (\$1,000)				
Price variance	(797,475)	302,006	413,397	(124,334)	(148,036)
Volume variance	(1,070,161)	292,924	360,839	(65,655)	(158,482)
Total net sales variance	(1,867,636)	594,930	774,236	(189,989)	(306,518)
Cost of sales:					
Raw materials:					
Cost variance	507,735	(231,708)	(358,896)	132,323	121,372
Volume variance	647,562	(172,859)	(221,423)	42,555	99,852
Net raw material variance	1,155,297	(404,567)	(580,319)	174,878	221,224
Direct labor:					
Cost variance	19,817	(4,521)	(2,913)	455	4,888
Volume variance	55,721	(19,038)	(21,055)	3,374	8,474
Net direct labor variance	75,538	(23,559)	(23,968)	3,829	13,362
Other factory costs:					
Cost variance	(4,153)	93,513	32,610	(70,633)	(7,406)
Volume variance	237,037	(96,416)	(88,162)	13,164	37,073
Net other factory cost	232,884	(2,903)	(55,552)	(57,469)	29,667
Net cost of sales:					
Cost variance	523,399	(142,716)	(329,199)	62,145	118,854
Volume variance	940,320	(288,313)	(330,640)	59,093	145,399
Total net cost of sales	1,463,719	(431,029)	(659,839)	121,238	264,253
Gross profit variance	(403,917)	163,901	114,397	(68,751)	(42,265)
SG&A expenses:					
Expense variance	(11,213)	(10,135)	19,392	(2,779)	(3,250)
Volume variance	25,120	(12,097)	(14,530)	1,868	4,858
Total SG&A variance	13,907	(22,232)	4,862	(911)	1,608
Operating income variance	(390,010)	141,669	119,259	(69,662)	(40,657)
Summarized as:					
Price variance	(797,475)	302,006	413,397	(124,334)	(148,036)
Net cost/expense variance	512,186	(152,852)	(309,806)	59,367	115,604
Net volume variance	(104,721)	(7,485)	15,668	(4,695)	(8,225)

Source: Compiled from data submitted in response to Commission questionnaires.

Table III-13
Wire rod: Results of operations of U.S. producers, by firm, 2008-13

* * * * *

Table III-13--*Continued*
Wire rod: Results of operations of U.S. producers, by firm, 2008-13

* * * * *

Table III-13--*Continued*
Wire rod: Results of operations of U.S. producers, by firm, 2008-13

* * * * *

Table III-13--*Continued*

Wire rod: Results of operations of U.S. producers, by firm, 2008-13

* * * * *

Table III-13--*Continued*

Wire rod: Results of operations of U.S. producers, by firm, 2008-13

* * * * *

Table III-13--*Continued*

Wire rod: Results of operations of U.S. producers, by firm, 2008-13

* * * * *

Table III-13--*Continued*

Wire rod: Results of operations of U.S. producers, by firm, 2008-13

* * * * *

Table III-13--*Continued*

Wire rod: Results of operations of U.S. producers, by firm, 2008-13

* * * * *

Sales volume

Table III-13 shows that all U.S. producers reported lower sales volume between 2008 and 2009. In general, U.S. producers attributed this pattern to the impact of the recession on wire rod demand.¹⁶ *** reported lower sales volume between 2008 and 2009 (** percent and ** percent, respectively), their volume declines on a percentage basis were *** compared to the other U.S. producers. ***.¹⁷ ***.¹⁸

*** reported the *** company-specific percentage decline in sales volume between 2008 and 2009 (***). ***.¹⁹ ***

¹⁶ USITC auditor notes (prehearing). ***. March 5, 2014 e-mail with attachment from *** to USITC auditor.

¹⁷ March 4, 2014 e-mail with attachment from *** to USITC auditor.

¹⁸ ***. February 28, 2014 e-mail with attachment from *** to USITC auditor.

¹⁹ March 6, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor.

***²⁰.

Sales value

In addition to the underlying base price, wire rod revenue includes surcharges related to primary inputs, as well as fuel costs associated with freight. In general, however, application of surcharges is not uniform among the U.S. producers. With regard to companies indicating that their revenue includes surcharges, ***

²⁰ ***. March 4, 2014 e-mail with attachment from *** to USITC auditor.

***.²¹ ***.²² ***.²³

Other companies, primarily referencing raw material inputs, generally indicated that they do not use surcharges. ***.²⁴ ***.²⁵ ***

²¹ March 5, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor.

²² March 5, 2014 e-mail with attachment from *** to USITC auditor.

²³ March 4, 2014 e-mail with attachment from *** to USITC auditor.

²⁴ March 6, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor.

²⁵ March 4, 2014 e-mail with attachment from *** to USITC auditor.

***.²⁶ ***.²⁷ ***.²⁸ ***.²⁹

As shown in table III-13, the period-to-period directional trend of company-specific average sales values was the same for all U.S. producers. Directionally, the trend of average sales value and average raw material cost was also the same.³⁰ While company-specific average sales values were

²⁶ March 4, 2014 e-mail with attachment from *** to USITC auditor.

²⁷ March 28, 2014 e-mail with attachment from *** to USITC auditor. ***. Ibid.

²⁸ March 7, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor.

²⁹ February 28, 2014 e-mail with attachment from *** to USITC auditor.

³⁰ Notwithstanding the fact that average sales value and average raw material costs reflect the same directional trend, the corresponding magnitude of company-specific changes in average sales value and average raw material costs were not necessarily the same. ***. March 4, 2014 e-mail with attachment from *** to USITC auditor.

generally in a similar range, *** average sales values compared to the other U.S. producers.³¹

Cost of goods sold and gross profit

On an overall basis, the total cost of raw materials in table III-11 reflects a composite of inputs which includes various grades of ferrous scrap, DRI, alloys, and steel billets.³² As a share of

³¹ ***. March 5, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor. ***. Ibid.

***. March 4, 2014 e-mail with attachment from *** to USITC auditor.

³² While the directional trend of company-specific average raw material costs was almost uniformly the same (see table III-13), the relatively wide range of company-specific average raw material costs appears to reflect differences such as company-specific product mix, as well as variations in underlying raw material.

With regard to its primary raw materials, *** referenced scrap and indicated that it accounts for *** percent of COGS. February 28, 2014 e-mail with attachment from *** to USITC auditor. *** reported that scrap and alloys represent their primary raw material inputs. ***. March 5, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor. March 4, 2014 e-mail with attachment from *** to USITC auditor. March 5, 2014 e-mail with attachment from *** to USITC auditor. *** reported that its primary raw material inputs are scrap, pig iron, and alloys. March 4, 2014 e-mail with attachment from *** to USITC auditor. *** listed scrap, DRI, additives, and fluxes as the primary raw material inputs. March 6, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor. ***. March 28, 2014 e-mail with attachment from *** to USITC auditor. ***. March 7, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor.

wire rod COGS, raw material costs ranged from a low of 60.0 percent in 2009 to a high of 72.0 percent in 2011.

Other factory costs, the second largest component of total wire rod COGS, was at its highest level as a share of total COGS in 2009, at 33.4 percent, and at its lowest level in 2011, at 22.3 percent.³³ Notwithstanding the importance of fixed and semi-fixed manufacturing costs (see footnote 33), other factory costs also include energy costs (e.g., electricity and natural gas) which, to a large extent, are variable in terms of cost behavior.³⁴ As described by *** and similar to

³³ This pattern, in general, is consistent with changes in underlying wire rod production and sales volumes. Other factory costs represent a combination of fixed, variable, and mixed (semi-fixed/semi-variable) costs which differ by company based on factors such as manufacturing operations, product mix, and company-specific accounting choices regarding cost assignment. All things being equal, the directional trend of other factory costs (on an average basis and as a share of total COGS), would tend to be the opposite of the directional trend of corresponding production and sales volume due to the presence of fixed manufacturing costs and changes in fixed cost absorption. ***. March 5, 2014 e-mail with attachment from *** to USITC auditor.

In addition to fixed cost absorption, changes in the relative and absolute levels of other factory costs also reflect additional company-specific factors; e.g., in 2008 and 2009, ***. March 18, 2014 e-mail with attachment from *** to USITC auditor. ***. March 7, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor. ***.

³⁴ March 6, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor. March 5, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor. March 4, 2014 e-mail with attachment from *** to USITC auditor. March 5, 2014 e-mail with attachment from *** to USITC auditor. March 7, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor. February 28, 2014 e-mail with attachment from *** to USITC auditor.

the pattern reported by other U.S. producers, ***.³⁵

Table III-11 shows that direct labor, the smallest component of COGS, ranged from a low of 5.7 percent of total COGS in 2011 to a high of 6.6 percent in 2009. Notwithstanding the more variable nature of direct labor, the higher share of direct labor in 2009 is generally consistent with lower production and sales volumes in that year.

As shown in table III-11, overall sales volume declined substantially between 2008 and 2009, recovered somewhat between 2009 and 2011, and then declined between 2011 and 2013. While metal margin (the difference between average sales value and average raw material cost) as a ratio to sales was lower in the second half of the period, the ratio increased between 2011 and 2013 (see table III-13).³⁶ In general and given the pattern of metal margin, the industry's declining gross profitability between 2011 and 2013 appears to be more related to factors such as the direct

³⁵ March 4, 2014 e-mail with attachment from *** to USITC auditor.

³⁶ As a general term (i.e., not specific to wire rod in particular), "metal margin" usually refers to the difference between current sales value and the corresponding relevant market price for the primary metal input, in this case ferrous scrap. For purposes of this report, "metal margin" refers to the difference between average sales value and average raw material costs, as recognized for financial reporting purposes. As shown in Table III-13, company-specific metal margins were not uniform. In addition to variations in underlying cost classification, direct comparability of metal margin is, in all likelihood, also limited by company-specific differences such as the timing of raw material purchases and corresponding inventory turnover (raw material, work in process, and finished goods).

and indirect impact of reduced sales volume and increasing levels of other factory costs (on a relative basis) (see note 1 to table III-11).³⁷

*** reported the *** company-specific gross profit ratios and were *** companies to report operating losses throughout most of the period (see table III-13). As described by ***.³⁸

***.³⁹

³⁷ For example and as shown in table III-13, ***. March 4, 2014 e-mail with attachment from *** to USITC auditor.

³⁸ March 6, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor. ***.

³⁹ March 4, 2014 e-mail with attachment from *** to USITC auditor.

***, which generated the *** company-specific gross profit ratios for most of the period, confirmed that this pattern primarily reflects the ***.⁴⁰ ***.⁴¹

SG&A expenses and operating income or (loss)

Table III-13 shows that larger-volume wire rod producers reported SG&A expense ratios (SG&A expenses divided by total revenue) which were generally in a similar range. While company-specific variations in the level of SG&A expenses generally appear to be consistent with changes in corresponding sales volume,⁴² several of the large-volume producers (***)

⁴⁰ ***. February 28, 2014 e-mail with attachment from *** to USITC auditor.

⁴¹ March 28, 2014 e-mail with attachment from *** to USITC auditor

⁴² ***.

***. March 6, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor. March 7, 2014 e-mail from *** to USITC auditor.

reported patterns of SG&A expenses which appear somewhat unusual. In response to questions regarding the pattern of their SG&A expenses, the following explanations were provided: ***,⁴³

***,⁴⁴ ***.⁴⁵

⁴³ March 4, 2014 e-mail with attachment from *** to USITC auditor.

⁴⁴ March 18, 2014 e-mail with attachment from *** to USITC auditor.

⁴⁵ March 12, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor. ***. March 18, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor.

As shown in table III-11, the industry's SG&A expense ratio peaked in 2009 (4.1 percent) and then fluctuated somewhat lower but remained above the lowest level reported (2.3 percent in 2008). The absence of substantial changes in the industry's SG&A expense ratio indicates that SG&A expenses were generally a secondary factor in terms of explaining wire rod operating results; i.e., revenue and cost factors impacting financial results at the gross level appear to be more important.

Capital expenditures and research and development expenses

Table III-14 presents capital expenditures and research and development (R&D) expenses by firm.

***.⁴⁶ ***.⁴⁷ The following company-specific capital expenditures were also noteworthy:

⁴⁶ March 7, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor.

⁴⁷ March 5, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor.

Table III-14
Wire rod: Capital expenditures and research and development expenses of U.S. producers, 2008-13

* * * * *

***.⁴⁸ ***
 ,

⁴⁸ February 27, 2014 e-mail from *** to USITC auditor.

***;⁴⁹ and ***.⁵⁰

As shown in table III-14, R&D expenses were reported by less than half the U.S. producers and were ***.⁵¹ ***.⁵² ***.⁵³

⁴⁹ ***. February 28, 2014 e-mail with attachment from *** to USITC auditor.

⁵⁰ March 4, 2014 e-mail with attachment from *** to USITC auditor

⁵¹ March 4, 2014 e-mail with attachment from *** to USITC auditor.

⁵² March 6, 2014 e-mail with attachments (incl. revised table II-6) from *** to USITC auditor.

⁵³ March 7, 2014 e-mail with attachment from counsel on behalf of *** to USITC auditor.

PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRIES

U.S. IMPORTS

Overview

In these current second five-year reviews, the Commission issued U.S. importers' questionnaires to approximately 125 firms believed to be importers of wire rod,¹ as well as to all U.S. producers of wire rod.² Usable questionnaire responses were received from 36 firms: 5 firms representing almost all U.S. imports of wire rod from Mexico in 2013 (based on proprietary Customs information and questionnaire responses)³ and 35 firms representing 94.6 percent of U.S. imports of wire rod from nonsubject countries (based on official U.S. import statistics for nonsubject countries) during 2008-13. There were no reported U.S. imports from Brazil,⁴ Indonesia, Moldova, Trinidad & Tobago, or Ukraine during 2013.⁵ U.S. imports of wire

¹ The Commission issued questionnaires to those firms identified in the responses to the Commission's notice of institution, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports during 2008-13 under the following HTS subheadings: 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3092 (deleted on July 1, 2008), 7213.91.3093 (added on July 1, 2008), 7213.91.4500, 7213.91.6000, 7213.99.0030, 7213.99.0090, 7227.20.0000, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6080 (deleted on July 1, 2008), and 7227.90.6085 (added on July 1, 2008).

² None of the U.S. producers reported direct imports of wire rod.

³ Proprietary Customs information indicates that the only other sizeable importer of merchandise from Mexico under the applicable HTS numbers for wire rod was ***. However, in response to the Commission's importer questionnaire, *** reported that it has not imported wire rod into the United States from any country since January 1, 2008.

⁴ Import data reported for Brazil in official statistics have been reclassified in this report as nonsubject 1080 tire cord and tire bead.

⁵ One U.S. importer of wire rod from Trinidad & Tobago provided a response to the Commission's questionnaire. (***) reported U.S. imports of *** short tons (\$***) of wire rod from Trinidad & Tobago during 2008, accounting for *** percent of total U.S. imports of wire rod from Trinidad & Tobago in 2008 based on Census data. *** is believed to have accounted for virtually all U.S. imports of wire rod

(continued...)

rod from Brazil, Moldova, and Ukraine largely ceased following the imposition of duties in 2002 and the U.S. imports of wire rod from Indonesia and Trinidad & Tobago ceased after 2005 and 2008, respectively.

In light of the data coverage by the Commission's questionnaires, import data in this report are based on official Commerce statistics for wire rod imported from Trinidad & Tobago and nonsubject sources and on questionnaire responses for wire rod imported from Mexico. All imports of wire rod from Brazil reported in official statistics are believed to be grade 1080 tire cord and tire bead wire rod and have therefore been classified as nonsubject imports in this report. No other subject country reported U.S. imports of the excluded grade 1080 tire cord or tire bead based on questionnaire data. Also, U.S. imports of wire rod with a diameter of 4.75 mm to 5.00 mm shipped to the United States by Deacero in Mexico have been found by Commerce on remand to be outside the scope of the order and have been removed from official U.S. imports from Mexico (as well as the calculation of apparent consumption) presented in this report. Certain data and other information concerning Deacero's production and U.S. imports and U.S. purchases of Deacero's smaller diameter wire rod are presented separately in appendix E.

(...continued)

from Trinidad & Tobago during 2008. *** did not provide a response to the Commission's importer questionnaire.

One importer (***) reported entering or withdrawing wire rod from a foreign trade zone. The firm, which accounted for *** percent of responding U.S. importers' U.S. imports from nonsubject sources during 2008-13, provided data concerning its nonsubject U.S. imports of wire rod from ***. Another importer (***) reported entering or withdrawing wire rod from a bonded warehouse. The importer, which accounted for *** percent of responding U.S. importers' U.S. imports from nonsubject sources during 2008-13, provided data concerning its nonsubject U.S. imports of wire rod from ***. *** reported imports of wire rod under the temporary importation under bond ("TIB") program. ***.

Imports from subject and nonsubject countries

Table IV-1 presents information on subject U.S. imports of wire rod from Brazil, Indonesia, Mexico, Moldova, Trinidad & Tobago, Ukraine, and imports from all other sources during 2008-13. There were no reported U.S. imports of subject wire rod from Brazil, Indonesia, Moldova, and Ukraine during 2008-13 and U.S. imports of wire rod from Trinidad & Tobago ceased after 2008. During 2008, U.S. imports of wire rod from Trinidad & Tobago amounted to 21,793 short tons (\$14.3 million) and accounted for *** percent of total U.S. imports of wire rod. The quantity of imports of wire rod from Mexico, which accounted for *** percent of total U.S. imports of wire rod in 2008, fluctuated during 2008-13 but was higher in 2013 than in 2008. During 2013, U.S. imports of subject wire rod from Mexico amounted to 10,333 short tons

(\$6.1 million) and accounted for 0.6 percent of total wire rod imports. Imports of wire rod from nonsubject sources fell by 49.4 percent from 2008 to 2009 but fluctuated thereafter to a level that was 0.8 percent higher than that reported in 2008.

Table IV-1 also presents data on the ratio of U.S. imports to U.S. production. Imports of wire rod from subject sources were less than *** percent of U.S. production during 2008-13, while imports of wire rod from nonsubject sources ranged from 29.9 to 46.2 percent of U.S. production. Total imports of wire rod were equivalent to 46.2 percent of U.S. production in 2013, or *** percentage points higher than reported in 2008.

Table IV-1
Wire rod: U.S. imports, by source, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
U.S. imports from-- Brazil ¹	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0
Mexico ²	***	***	***	***	***	10,333
Moldova	0	0	0	0	0	0
Trinidad & Tobago	21,794	0	0	0	0	0
Ukraine	0	0	0	0	0	0
Subtotal, subject	***	***	***	***	***	10,333
1080 tire cord/bead from subject sources ¹	139,459	71,759	129,184	116,513	102,517	96,639
All other sources	1,536,768	777,083	1,284,771	1,059,512	1,391,895	1,593,718
Subtotal, nonsubject	1,676,227	848,842	1,413,955	1,176,024	1,494,413	1,690,357
Total U.S. imports	***	***	***	***	***	1,700,690
Value (\$1,000)						
U.S. imports from-- Brazil ¹	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0
Mexico ²	***	***	***	***	***	6,128
Moldova	0	0	0	0	0	0
Trinidad & Tobago	14,298	0	0	0	0	0
Ukraine	0	0	0	0	0	0
Subtotal, subject	***	***	***	***	***	6,128
1080 tire cord/bead from subject sources ¹	126,654	50,808	91,621	103,073	84,521	64,506
All other sources	1,360,431	550,614	988,457	992,791	1,159,903	1,156,290
Subtotal, nonsubject	1,487,085	601,423	1,080,078	1,095,863	1,244,424	1,220,797
Total U.S. imports	***	***	***	***	***	1,226,925
Unit value (dollars per short ton)						
U.S. imports from-- Brazil ¹	(³)	(³)	(³)	(³)	(³)	(³)
Indonesia	(³)	(³)	(³)	(³)	(³)	(³)
Mexico ²	***	***	***	***	***	593
Moldova	(³)	(³)	(³)	(³)	(³)	(³)
Trinidad & Tobago	656	(³)	(³)	(³)	(³)	(³)
Ukraine	(³)	(³)	(³)	(³)	(³)	(³)
Subtotal, subject	***	***	***	***	***	593
1080 tire cord/bead from subject sources ¹	908	708	709	885	824	667
All other sources	885	709	769	937	833	726
Subtotal, nonsubject	887	709	764	932	833	722
Total U.S. imports	***	***	***	***	***	721

Table continued on following page.

Table IV-1--Continued

Wire rod: U.S. imports, by source, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Share of quantity (percent)						
U.S. imports from-- Brazil ¹	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia	0.0	0.0	0.0	0.0	0.0	0.0
Mexico ²	***	***	***	***	***	0.6
Moldova	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad & Tobago	***	0.0	0.0	0.0	0.0	0.0
Ukraine	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject	***	***	***	***	***	0.6
1080 tire cord/bead from subject sources ¹	***	***	***	***	***	5.7
All other sources	***	***	***	***	***	93.7
Subtotal, nonsubject	***	***	***	***	***	99.4
Total U.S. imports	100.0	100.0	100.0	100.0	100.0	100.0
Share of value (percent)						
U.S. imports from-- Brazil ¹	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia	0.0	0.0	0.0	0.0	0.0	0.0
Mexico ²	***	***	***	***	***	0.5
Moldova	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad & Tobago	***	0.0	0.0	0.0	0.0	0.0
Ukraine	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject	***	***	***	***	***	0.5
1080 tire cord/bead from subject sources ¹	***	***	***	***	***	5.3
All other sources	***	***	***	***	***	94.2
Subtotal, nonsubject	***	***	***	***	***	99.5
Total U.S. imports	100.0	100.0	100.0	100.0	100.0	100.0
Ratio to U.S. production (percent)						
U.S. imports from-- Brazil ¹	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia	0.0	0.0	0.0	0.0	0.0	0.0
Mexico ²	***	***	***	***	***	0.3
Moldova	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad & Tobago	0.5	0.0	0.0	0.0	0.0	0.0
Ukraine	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject	***	***	***	***	***	0.3
1080 tire cord/bead from subject sources ¹	3.4	2.5	3.8	3.0	2.6	2.6
All other sources	37.9	27.4	38.0	27.1	35.9	43.6
Subtotal, nonsubject	41.3	29.9	41.8	30.1	38.5	46.2
Total U.S. imports	***	***	***	***	***	46.5

¹ Official import statistics for Brazil have been reclassified as 1080 tire cord/tire bead imports from subject sources. The 1080 tire cord/bead imports are excluded from the scope, but remain as part of the domestic like product.

² U.S. imports from Mexico rely on questionnaire data so as to exclude U.S. imports of smaller diameter wire rod produced by Mexican producer Deacero. Data presented do not include ***.

³ Undefined.

Source: Compiled from data submitted in response to Commission questionnaires and from official statistics of the U.S. Department of Commerce.

Table IV-2 presents data for U.S. imports of wire rod from the top ten nonsubject sources. Imports of wire rod from all nonsubject sources combined fell from 2008 to 2009 but fluctuated upward from 2009 to 2013. The leading nonsubject source of wire rod imports during 2013 was China, which is currently the subject of ongoing antidumping and countervailing duty investigations.⁶ U.S. imports from China, which accounted for 36.4 percent of total imports in 2013, fluctuated during 2008-13. U.S. imports from China were 49.1 percent higher in 2013 than reported in 2008. Other leading sources of wire rod imports from nonsubject countries include Canada and Japan, which accounted for 28.3 and 15.1 percent of total imports in 2013, respectively.

⁶ *Carbon and Certain Alloy Steel Wire Rod from China, Inv. Nos. 701-TA-512 and 731-TA-1248 (Preliminary)*, USITC Publication 4458 (March 2014). The Commission made affirmative preliminary determinations on March 20, 2014 (79 FR 16373, March 25, 2014).

Table IV-2

Wire rod: Imports from nonsubject countries and nonsubject wire rod, by source, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
U.S. imports from--						
China	415,125	8,416	16,931	357	242,047	618,818
Canada	535,752	342,094	542,513	501,045	491,132	480,813
Japan	232,038	125,007	216,463	236,084	262,275	257,503
Brazil ¹	139,459	71,759	129,184	116,513	102,517	96,639
Germany	124,567	44,529	60,308	91,892	72,565	73,016
United Kingdom	13,314	26,960	56,422	46,323	70,107	56,395
Korea	18,020	13,461	16,687	9,868	25,575	37,567
Turkey	148,332	97,057	189,372	109,574	165,819	33,182
Spain	6,129	18,594	36,623	19,574	28,743	32,725
South Africa	0	0	28,188	11,454	11,316	1,629
All other sources	43,491	100,965	121,263	33,342	22,316	2,070
Nonsubject imports	1,676,227	848,842	1,413,955	1,176,024	1,494,413	1,690,357
Share of total imports (percent)²						
U.S. imports from--						
China	***	***	***	***	***	36.4
Canada	***	***	***	***	***	28.3
Japan	***	***	***	***	***	15.1
Brazil ¹	***	***	***	***	***	5.7
Germany	***	***	***	***	***	4.3
United Kingdom	***	***	***	***	***	3.3
Korea	***	***	***	***	***	2.2
Turkey	***	***	***	***	***	2.0
Spain	***	***	***	***	***	1.9
South Africa	***	***	***	***	***	0.1
All other sources	***	***	***	***	***	0.1
Nonsubject imports	***	***	***	***	***	99.4

¹ Consistent with the treatment in table VI-1, all U.S. imports from Brazil have been classified as nonsubject 1080 tire cord/tire bead quality merchandise.

² Total U.S. imports are presented in table VI-1.

³ ***.

Source: Compiled from data submitted in response to Commission questionnaires and from official statistics of the U.S. Department of Commerce.

U.S. SHIPMENTS OF IMPORTS, BY APPLICATION

Table IV-3 presents responding U.S. importers' U.S. shipments of imports, by type and source, in 2013. *** firms reported subject U.S. imports of wire rod from Mexico during 2013, *** of which were high/medium-high or low/medium-low carbon industrial/standard quality wire rod. Thirty U.S. importers of wire rod from nonsubject sources reported data concerning their U.S. shipments, by type, during 2013. Slightly more than one-half of these U.S. shipments were high/medium-high or low/medium-low carbon industrial/standard quality wire rod and about one-quarter were CHQ wire rod. Smaller amounts of welding, tire cord/tire bead, and other specialty carbon and alloy quality wire rod were also reported by U.S. importers of nonsubject wire rod during 2013.

Table IV-3
Wire rod: U.S. importers' U.S. shipments, by type, 2013

Item	Quantity (short tons)	Share (percent)	Number of reporting firms
Mexico			
Low/medium-low carbon industrial/standard quality	***	***	***
High/medium-high carbon industrial/standard quality	***	***	***
Tire cord or tire bead quality	***	***	***
Welding quality	***	***	***
Cold heading quality ("CHQ")	***	***	***
Other specialty carbon and alloy quality	***	***	***
All other wire rod	***	***	***
Total, U.S. shipments	***	***	***
Nonsubject			
Low/medium-low carbon industrial/standard quality	457,004	34.3	15
High/medium-high carbon industrial/standard quality	248,479	18.7	10
Tire cord or tire bead quality	69,811	5.2	8
Welding quality	***	***	***
Cold heading quality ("CHQ")	340,682	25.6	8
Other specialty carbon and alloy quality	***	***	***
All other wire rod	***	***	***
Total, U.S. shipments	1,331,990	100.0	30

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. IMPORTERS' IMPORTS SUBSEQUENT TO DECEMBER 31, 2013

The Commission requested importers to indicate whether they had imported or arranged for the importation of wire rod for delivery after December 31, 2013. Twenty-six of thirty-three responding importers reported that they imported or arranged for imports of wire rod in 2014 and eight indicated they had no such arrangements. Table IV-4 presents data reported by U.S. importers concerning their arranged imports of wire rod.

Table IV-4
Wire rod: U.S. importers' arranged imports, 2014

Item	2014			
	Jan-Mar	Apr-June	July-Sept	Oct-Dec
Quantity (<i>short tons</i>)				
U.S. importers' imports arranged from--				
Brazil	0	0	0	0
Indonesia	0	0	0	0
Mexico	***	***	0	0
Moldova	0	0	0	0
Trinidad & Tobago	0	0	0	0
Ukraine	0	0	0	0
All other sources [†]	278,358	237,093	25,307	25,376
Total, all sources	***	***	25,307	25,376

[†] Other sources reported are: ***.

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. IMPORTERS' INVENTORIES

Table IV-5 presents data for inventories of U.S. imports of wire rod in the United States. As the data illustrate, inventories of subject imports were present in the United States in minor quantities only during 2008 and 2011. *** accounted for all of the inventories of subject imports from Trinidad & Tobago held in the United States during 2008 and *** accounted for all of the inventories of subject imports from Mexico held in the United States during 2011. These inventories accounted for less than *** percent of U.S. shipments of such imports during 2008-13 as reported by responding U.S. importers. The inventory levels of nonsubject imports were higher than subject imports, equivalent to between 4.5 and 8.1 percent of U.S. shipments of such imports during 2008-13. Eighteen importers of wire rod from nonsubject sources reported holding inventories. During 2013, the leading nonsubject importers holding inventories of wire rod in the United States were ***.

Table IV-5
Wire rod: U.S. importers' end-of-period inventories of imports, by source, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Imports from Mexico:						
Inventories (<i>short tons</i>)	***	***	***	***	***	***
Ratio to U.S. imports (<i>percent</i>)	***	***	***	***	***	***
Ratio to U.S. shipments of imports (<i>percent</i>)	***	***	***	***	***	***
Imports from Trinidad & Tobago:						
Inventories (<i>short tons</i>)	***	***	***	***	***	***
Ratio to U.S. imports (<i>percent</i>)	***	***	***	***	***	***
Ratio to U.S. shipments of imports (<i>percent</i>)	***	***	***	***	***	***
Imports from nonsubject sources:						
Inventories (<i>short tons</i>)	100,972	54,991	66,339	61,711	88,238	105,967
Ratio to U.S. imports (<i>percent</i>)	7.9	8.5	6.3	6.9	4.4	7.8
Ratio to U.S. shipments of imports (<i>percent</i>)	8.1	8.0	6.3	6.8	4.5	8.0

Source: Compiled from data submitted in response to Commission questionnaires.

CUMULATION CONSIDERATIONS

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

Different countries sell different ranges of wire rod grades in the United States. U.S. producers' and U.S. importers' U.S. shipments, by type, for 2013 were presented earlier in this report at tables III-7 and IV-4. The first two categories, low and medium-low carbon industrial and standard quality wire rod, and high and medium-high carbon industrial and standard quality wire rod (other than tire cord and tire bead) are typically classified as "standard," "commodity," or "industrial" grades. The next four categories, tire cord and tire bead wire rod, welding quality wire rod, CHQ wire rod, and other specialty carbon and alloy quality wire rod, are considered "specialty quality" or "specialty" grades. The remaining "all other" category includes any other types of wire rod.

During 2013, 77.0 percent of U.S. producers' total U.S. shipments were of the standard grades. The remaining 23.0 percent of total U.S. shipments were comprised of specialty grades, which were dominated by CHQ wire rod, with lesser amounts of tire cord/tire bead, welding, and other specialty carbon and alloy quality wire rod. *** firms reported subject U.S.

imports of wire rod from Mexico during 2013, *** of which were high/medium-high or low/medium-low carbon industrial/standard quality wire rod.

Presence in the market

As previously indicated, there were no U.S. imports of subject wire rod from Brazil, Indonesia, Moldova, or Ukraine during 2008-13. According to official import statistics for calendar year 2008, subject wire rod was imported into the United States from Trinidad & Tobago during four months of the year and subject wire rod was imported into the United States from Mexico during nine months of that year. Subject U.S. imports from Mexico entered the U.S. market during at least nine months during 2009-13 (i.e., nine months of 2009, eleven months of 2010, ten months of 2011, and 12 months of 2012 and 2013).⁷

Geographical markets⁸

As noted previously, wire rod produced in the United States is shipped nationwide. During 2008, imports from Trinidad & Tobago entered the United States through New Orleans, Louisiana; Philadelphia, Pennsylvania; and San Juan, Puerto Rico. During 2008-13, imports from Mexico entered the United States through Laredo and El Paso, Texas; Los Angeles, California; Nogales, Arizona; Seattle, Washington; New Orleans, Louisiana; and Mobile, Alabama. The vast majority of imports from Mexico entered through Laredo, Texas.

⁷ The analysis of the monthly presence of Mexican wire rod in the U.S. market excludes *** nonsubject smaller diameter wire rod. ***.

⁸ Additional information on geographic markets may be found in Part II of this report.

SUBJECT COUNTRY PRODUCERS

Table IV-6 presents 2013 capacity, production, and export data, for the subject countries.

Table IV-6
Wire rod: Comparison of capacity, production, net capacity changes, exports, and net exports, in subject countries, 2013

Item	Capacity		Production		Net capacity change (2008-13)	
	Published	Reported	Published	Reported	Published	Reported
Quantity (1,000 short tons)						
Brazil	***	***	***	***	***	***
Indonesia	***	***	***	***	***	***
Mexico	***	2,758	***	2,345	***	341
Moldova	***	*** ¹	*** ¹	*** ¹	***	*** ¹
Trinidad & Tobago	***	***	*** ²	***	***	***
Ukraine	***	***	***	***	***	***
Total	***	***	***	***	***	***
Exports						
Item	Exports		Net exports			
	Published	Reported	Published	Reported	Published	Reported
Quantity (1,000 short tons)						
Brazil	293	***	(56)			
Indonesia	56 ³	***	(456) ³			
Mexico	361	380	319			
Moldova⁴	102	(¹)	90			
Trinidad & Tobago	121	***	119			
Ukraine	1,454	***	1,420			

¹ The "reported" data presented for Moldova in this table are data published by *** because Moldova Steel Works, the sole producer of wire rod in Moldova, did not provide a response to the Commission's questionnaire in these reviews. The production data presented for Moldova are capacity data published by *** because country-specific production data for Moldova are not prepared by ***. Global Trade Atlas does not publish external trade data for Moldova.

² The production data presented for Trinidad & Tobago are capacity data published by *** because country-specific production data for Trinidad & Tobago are not prepared by ***. Global Trade Atlas does not publish external trade data for Trinidad & Tobago.

³ Export and net export data presented are for 2012, the most recent year for which data are available.

⁴ Data for Moldova's and Trinidad & Tobago's imports and exports were constructed from the reported exports and imports, respectively, of their trading partners whose data were reported to GTIS/GTA.

Note.—Global Trade Atlas export and net export data presented may include grade 1080 tire cord and tire bead wire rod.

Source: "Published" data from *** and Global Trade Atlas (7213.91 (Bars And Rods, Hot-Rolled, In Irregularly Wound Coils, Of Iron Or Nonalloy Steel, Of Circular Cross-Section Measuring Less Than 14 Mm In Diameter), 7213.99 (721399, Bars And Rods, Hot-Rolled, In Irregularly Wound Coils, Of Iron Or Nonalloy Steel, nesoi), 7227.20 (Bars And Rods Of Silico-Manganese Steel, Hot-Rolled, In Irregularly Wound Coils), and 7227.90 (Bars And Rods Of Alloy Steel (Other Than Stainless), Hot-Rolled, In Irregularly Wound Coils); "Reported" data from Commission questionnaire responses.

The Commission asked U.S. importers and producers of wire rod in the subject countries to identify tariff or nontariff barriers to trade (for example, antidumping or countervailing duty findings or remedies, tariffs, quotas, or regulatory barriers) concerning their exports of wire rod to countries other than the United States. The Commission also asked the subject foreign producers to identify ongoing investigations in countries other than the United States that could result in tariff or non-tariff barriers to trade for their exports of wire rod. Responding firms provided the following information concerning barriers to trade:

- Colombia is currently conducting a global safeguard investigation on wire rod, as well as rebar and wire round. Although a final determination has not been issued, Colombia imposed a provisional safeguard tariff of 21.29 percent on imports of wire rod in 2013.
- Malaysia imposed an antidumping duty order against imports of wire rod from Indonesia in 2013.
- Mexico imposed an antidumping duty order against wire rod imports from Ukraine.
- There are ongoing antidumping investigations in Russia, Belarus, and Kazakhstan concerning wire rod produced in Ukraine.

THE INDUSTRY IN BRAZIL

Overview

During the original investigations, the Commission identified five producers of wire rod in Brazil. Three firms, accounting for *** percent of Brazilian production of wire rod, provided data in response to the Commission's questionnaire in the original investigations: Barra Mansa, Belgo-Mineira ("Belgo"), and Gerdau. Barra Mansa estimated that it accounted for *** percent of Brazilian production in 2001, Belgo estimated that it accounted for *** percent, and Gerdau estimated that it accounted for *** percent. The three responding Brazilian firms collectively accounted for all exports of the subject merchandise from Brazil to the United States.

Responses to the Commission's foreign producer questionnaire in the Commission's first five-year reviews were received from ArcelorMittal Brasil (successor to Belgo) and Gerdau (Açominas and Aços Longos), while Barra Mansa, part of Votorantim Metais' Steel Business Unit, did not respond. ArcelorMittal Brasil estimated that it accounted for *** percent of Brazilian production in 2007, and Gerdau estimated that it accounted for *** percent of production of wire rod in Brazil during that year, totaling *** percent coverage of the wire rod industry in Brazil.

The following five firms were identified by parties as currently operating producers of wire rod in Brazil in these current second five-year reviews: ArcelorMittal Brasil, Barra Mansa, Companhia Siderúrgica Nacional (“CSN”), Gerdau Aços Brasil, and Villares Metals.⁹ ArcelorMittal Brasil was the only wire rod producer in Brazil that responded to the Commission's foreign producer questionnaire in these second five-year reviews. It reported no exports of the subject merchandise to the United States during 2008-13. According to ***, production in Brazil during 2013 was *** short tons. Reported production by ArcelorMittal Brasil was *** short tons, yielding a theoretical coverage of *** percent of Brazilian production during 2013 by the responding firm. *** firm-by-firm capacity data indicate that ArcelorMittal Brasil accounted for *** percent of total wire rod rolling capacity in Brazil during 2013. Total wire rod rolling capacity and production data reported by *** include grade 1080 tire cord and tire bead wire rod, which are believed to have accounted for all exports of wire rod to the United States during 2008-13.¹⁰

⁹ The following two additional firms in Brazil were identified by *** as having wire rod rolling capacity during 2013: Sinobras (approximately *** short tons of capacity) and GV do Brasil (approximately *** short tons of capacity). *** estimated that these two firms accounted for approximately *** percent of total wire rod rolling capacity in Brazil during 2013.

¹⁰ According to Customs data, ***. Therefore, official import statistics are believed to be 1080 tire cord/bead or other nonsubject wire rod and have been reclassified as such for purposes of this report.

Table IV-7 presents comparative information available from the original investigations, the first five-year reviews, and these current second five-year reviews. Capacity reported by *** for 2013 for all Brazilian producers was *** short tons, and production was *** short tons, yielding a capacity utilization of *** percent.

Table IV-7
Wire rod: Comparison of selected Brazilian industry data, 2001, 2007, and 2013

* * * * *

Operations on wire rod

Data provided by ArcelorMittal Brasil concerning its wire rod operations in Brazil during calendar years 2008-13 are presented in table IV-8.

Table IV-8
Wire rod: Brazil's capacity, production, shipments, and inventories, 2008-13

* * * * *

Table IV-8--*Continued*

Wire rod: Brazil's capacity, production, shipments, and inventories, 2008-13

* * * * *

Capacity and production in Brazil

ArcelorMittal Brasil's capacity to produce wire rod in Brazil, which was based on operating *** hours per week and *** weeks per year, remained constant at *** short tons during 2008-13. The firm's production fluctuated during 2008-13, but was *** percent lower at *** short tons in 2013 than reported in 2008. Capacity utilization was *** percent during 2013 and ranged between *** and *** percent during 2008-13.

As previously noted, *** data indicate that ArcelorMittal Brasil accounted for *** percent of total wire rod rolling capacity in Brazil during 2013. According to ***, there was an increase in the wire rod rolling capacity in Brazil in the amount of *** short tons during 2008-13 and three new mills were forecasted to come online in Brazil during 2013-15. The three mills are GV do Brasil in Pindamonhangaba (2013), CSN in Volta Redonda (2013), and Siderúrgica Latino-Americana S/A (Silat) in Caucaia (2015), with an estimated combined capacity of approximately *** short tons in 2013, *** short tons in 2014, and *** short tons in 2015.

In addition to the production of wire rod, ArcelorMittal Brasil reported the production of *** using shared equipment and machinery in its facilities in Brazil. Table IV-9 presents ArcelorMittal Brasil's overall capacity and production of wire rod and other products produced on the same production equipment used to produce wire rod.

Table IV-9

Wire rod: Brazil overall capacity, production, and capacity utilization, 2008-13

* * * * *

ArcelorMittal Brasil estimated that wire rod accounted for *** percent of its 2013 total sales. The overall production data presented indicate that wire rod accounted for between *** and *** percent of the firm's overall production on the same machinery and equipment as wire rod during 2008-13. *** was reported by the firm to be the constraint that set the limit on its production capacity and *** was the constraint that set the limit on its ability to shift production capacity between products. ArcelorMittal Brasil reported ***. It explained ***. It estimated

***. The Brazilian producer reported that it did not have a business plan or any internal documents that describe, discuss, or analyze expected future market conditions for wire rod.

Shipments of wire rod produced in Brazil

ArcelorMittal Brasil's total shipments of wire rod fell overall by 5.8 percent from 2008 to 2013. The firm's internal consumption and home market together accounted for the majority of the firm's total shipments of wire rod, and an increasing share during 2008-13. During 2013, internal consumption and home market shipments accounted for *** percent of the firm's total shipments of wire rod.

ArcelorMittal Brasil's export shipments of wire rod decreased absolutely overall from *** short tons in 2008 to *** short tons in 2013. The firm reported that there were no exports of subject wire rod to the United States during 2008-13. ArcelorMittal Brasil reported that its principal *** markets include ***, its principal *** markets include ***, and that its *** export markets include ***. Detailed information on the export destinations for Brazilian wire rod as published by the *Global Trade Atlas* is presented in table IV-10. These data include grade 1080 tire cord and tire bead, which is not subject to these reviews, and are therefore overstated.

Table IV-10
Wire rod: Brazil's exports, by destination, 2008-13

Destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
United States	144,438	79,433	125,993	114,440	102,006	105,979
Argentina	19,978	29,766	25,225	23,505	10,865	24,729
Korea	28,703	8,756	35,700	45,308	18,345	22,421
Chile	20,890	12,510	17,809	2,603	3,831	20,835
Malaysia	-	2,163	13,098	9,793	13,265	14,247
Canada	18,755	12,426	18,346	34,278	28,372	12,732
Colombia	83,618	75,003	50,125	45,989	29,350	10,542
Peru	70,159	56,841	26,666	14,017	6,087	9,845
Portugal	10,623	15,344	8,009	4,453	2,348	8,975
Nigeria	-	36,596	-	440	5,510	7,647
All other	253,626	375,587	185,398	186,218	53,480	54,554
World	650,790	704,426	506,372	481,044	273,459	292,505
Value (\$1,000 dollars)						
United States	120,679	48,512	82,639	94,688	76,714	65,759
Argentina	14,871	13,082	14,771	15,392	7,456	15,389
Korea	19,286	4,038	25,250	40,144	14,880	15,017
Chile	13,774	5,157	9,991	1,642	2,259	11,338
Malaysia	-	1,127	7,800	7,989	10,797	10,586
Canada	12,653	6,421	9,575	23,678	20,422	8,059
Colombia	60,343	32,783	27,232	27,578	17,522	5,769
Peru	53,147	25,049	14,363	9,130	3,695	5,446
Portugal	8,553	7,415	4,993	3,107	1,470	4,055
Nigeria	-	14,781	-	236	2,949	4,057
All other	198,767	163,159	107,180	124,643	35,730	33,078
World	502,073	321,524	303,792	348,227	193,894	178,553

Table continued on the following page.

Table IV-10--Continued
Wire rod: Brazil's exports, by destination, 2008-13

Destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Unit value (per short ton)						
United States	836	611	656	827	752	620
Argentina	744	439	586	655	686	622
Korea	672	461	707	886	811	670
Chile	659	412	561	631	590	544
Malaysia	-	521	595	816	814	743
Canada	675	517	522	691	720	633
Colombia	722	437	543	600	597	547
Peru	758	441	539	651	607	553
Portugal	805	483	623	698	626	452
Nigeria	-	404	-	535	535	531
All other	784	434	578	669	668	606
World	771	456	600	724	709	610
Share of quantity (percent)						
United States	22.2	11.3	24.9	23.8	37.3	36.2
Argentina	3.1	4.2	5.0	4.9	4.0	8.5
Korea	4.4	1.2	7.1	9.4	6.7	7.7
Chile	3.2	1.8	3.5	0.5	1.4	7.1
Malaysia	-	0.3	2.6	2.0	4.9	4.9
Canada	2.9	1.8	3.6	7.1	10.4	4.4
Colombia	12.8	10.6	9.9	9.6	10.7	3.6
Peru	10.8	8.1	5.3	2.9	2.2	3.4
Portugal	1.6	2.2	1.6	0.9	0.9	3.1
Nigeria	-	5.2	-	0.1	2.0	2.6
All other	39.0	53.3	36.6	38.7	19.6	18.7
World	100.0	100.0	100.0	100.0	100.0	100.0

Note.-Data include grade 1080 tire cord and tire bead.

Source: Compiled from *Global Trade Atlas*, as reported by the Foreign Trade Secretariate SECEX in Brazil to GTIS (HS codes 7213.91, 7213.99, 7227.20, and 7227.90).

Shipments, by type

Table IV-11 presents data on ArcelorMittal Brasil’s total shipments, by type, during 2013. As the data indicate, high/medium-high carbon industrial/standard quality wire rod and low/medium-low carbon industrial/standard quality wire rod together accounted for almost *** of all types of ArcelorMittal Brasil’s total shipments during 2013.

Table IV-11
Wire rod: ArcelorMittal Brasil’s total shipments, by type, 2013

* * * * *

THE INDUSTRY IN INDONESIA

Overview

Seven producers of wire rod in Indonesia were identified in the Commission's original investigations. Data presented in the Commission's final report were obtained from only one producer, PT Ispat Indo, which reported that it accounted for *** percent of Indonesian production of wire rod and *** percent of exports to the United States in 2001. In the first five-year reviews, the Commission received no responses to its questionnaires from Indonesian producers.

According to ***, there are four firms in Indonesia that maintain wire rod rolling capacity: Gunung Garuda in Bekasi (estimated *** short tons of capacity), Hanil Jaya Metalworks in Surabaya (estimated *** short tons of capacity), PT Ispat Indo in Surabaya (estimated *** short tons of capacity),¹¹ and PT Krakatau Steel in Cilegon (estimated *** short tons of capacity). PT Ispat Indo, which was identified by domestic interested parties to be the largest wire rod producer in Indonesia today, was the only wire rod producer in Indonesia that responded to the Commission's foreign producer questionnaire in these second five-year reviews. The firm reported no exports of the subject merchandise to the United States during 2008-13. According to ***, production in Indonesia during 2013 was *** short tons. Reported production by PT Ispat Indo was *** short tons, yielding a theoretical coverage of *** percent of Indonesian production during 2013 by the responding

¹¹ PT Ispat Indo's reported capacity of *** short tons is larger than reported by ***.

firm. *** firm-by-firm capacity data indicate that PT Ispat Indo accounted for *** percent of total wire rod rolling capacity in Indonesia during 2013.

Table IV-12 presents comparative information available from the original investigations, the first five-year reviews, and these current second five-year reviews. Capacity reported by *** for 2013 for all Indonesia producers was *** short tons, and production was *** short tons, yielding a capacity utilization of *** percent.

Table IV-12
Wire rod: Comparison of selected Indonesian industry data, 2001, 2007, and 2013

* * * * *

Operations on wire rod

Data provided by PT Ispat Indo concerning its wire rod operations in Indonesia during calendar years 2008-13 are presented in table IV-13.

Table IV-13

Wire rod: Indonesia's capacity, production, shipments, and inventories, 2008-13

*	*	*	*	*	*	*
---	---	---	---	---	---	---

Table IV-13--*Continued*

Wire rod: Indonesia's capacity, production, shipments, and inventories, 2008-13

* * * * *

Capacity and production in Indonesia

As previously noted, *** data indicate that PT Ispat Indo accounted for *** percent of total wire rod rolling capacity in Indonesia during 2013. According to ***, there has been no change in the wire rod rolling capacity in Indonesia during 2008-13. In fact, PT Ispat Indo's capacity to produce wire rod in Indonesia, which was based on operating *** hours per week and *** weeks per year, remained constant at *** short tons during 2008-13. The firm's production fluctuated during 2008-13, but was *** percent lower at *** short tons in 2013 than reported in 2008. Capacity utilization was *** percent during 2013 and ranged between *** and *** percent during 2008-13.

PT Ispat Indo reported the production of no other products in addition to wire rod using shared equipment and machinery in its facilities in Indonesia. PT Ispat Indo estimated that wire rod accounted for *** percent of its 2013 total sales. The firm reported *** set the limit on its production capacity and that since it produces no other products it does not shift production capacity between products. It added *** limit the availability to shift such production. PT Ispat Indo reported ***. The firm further reported ***. The Indonesia producer reported that it did not have a business plan or any internal documents that describe, discuss, or analyze expected future market conditions for wire rod. The firm explained ***.

***.

Shipments of wire rod produced in Indonesia

PT Ispat Indo's total shipments of wire rod fell from 2008 to 2010, increased in 2011, and fell thereafter. The firm's total shipments fell overall by *** percent from 2008 to 2013. The firm's home market shipments accounted for the majority of the firm's total shipments of wire rod and an increasing share during 2008-13. During 2013, internal consumption and home market shipments accounted for *** percent of the firm's total shipments of wire rod.

PT Ispat Indo's export shipments of wire rod have fallen absolutely and as a share of total shipments overall from *** percent in 2008 to *** percent in 2013. The firm reported that there were no exports of subject wire rod to the United States or the European Union countries during 2008-13. Principal *** markets for PT Ispat Indo's wire rod include *** and *** export markets include ***. Detailed information on the export destinations for Indonesian wire rod as published by the *Global Trade Atlas* for 2008-12 is presented in table IV- 14.¹² These data include grade 1080 tire cord and tire bead, which is not subject to these reviews, and may therefore be overstated.

¹² *Global Trade Atlas* data for Indonesia are not yet available for calendar year 2013.

Table IV-14

Wire rod: Indonesia's exports, by destination, 2008-12

Destination	Calendar year				
	2008	2009	2010	2011	2012
Quantity (short tons)					
Australia	26,590	20,423	7,343	33,308	31,832
Bangladesh	5,464	7,726	7,509	12,911	11,498
Pakistan	4,944	11,208	14,166	12,062	2,402
New Zealand	3,337	2,112	3,751	2,907	1,751
United Arab Emirates	6,212	-	-	-	1,720
Philippines	9,177	5,843	5,010	10,364	1,580
Sri Lanka	2,310	-	56	16,445	1,239
Malaysia	5,022	4,073	1,540	4,308	1,293
India	34,505	16,967	9,204	2,186	1,048
Brunei Darussalam	-	-	-	1,578	794
All other ¹	109,971	126,652	97,878	85,303	802
World	207,533	195,002	146,457	181,372	55,960
Value (\$1,000 dollars)					
Australia	20,450	10,017	4,129	22,326	19,956
Bangladesh	4,540	3,646	4,858	9,012	8,344
Pakistan	3,458	5,620	8,285	8,522	1,700
New Zealand	2,258	1,079	2,145	1,976	1,153
United Arab Emirates	4,930	-	-	-	1,201
Philippines	6,739	3,127	3,145	7,302	1,109
Sri Lanka	1,548	-	31	11,054	789
Malaysia	3,461	2,397	1,194	3,129	1,107
India	21,985	8,219	5,261	1,575	714
Brunei Darussalam	-	-	-	1,053	526
All other ¹	73,076	61,773	58,202	59,542	639
World	142,446	95,880	87,250	125,490	37,238

Table continued on the following page.

Table IV-14--Continued
Wire rod: Indonesia's exports, by destination, 2008-12

Destination	Calendar year				
	2008	2009	2010	2011	2012
Unit value (per short ton)					
Australia	769	491	562	670	627
Bangladesh	831	472	647	698	726
Pakistan	700	501	585	707	708
New Zealand	677	511	572	680	658
United Arab Emirates	794	-	-	-	698
Philippines	734	535	628	705	702
Sri Lanka	670		560	672	637
Malaysia	689	589	775	726	856
India	637	484	572	720	681
Brunei Darussalam	-	-	-	667	662
All other ¹	664	488	595	698	797
World	686	492	596	692	665
Share of quantity (percent)					
Australia	12.8	10.5	5.0	18.4	56.9
Bangladesh	2.6	4.0	5.1	7.1	20.5
Pakistan	2.4	5.7	9.7	6.7	4.3
New Zealand	1.6	1.1	2.6	1.6	3.1
United Arab Emirates	3.0	-	-	-	3.1
Philippines	4.4	3.0	3.4	5.7	2.8
Sri Lanka	1.1	-	0.0	9.1	2.2
Malaysia	2.4	2.1	1.1	2.4	2.3
India	16.6	8.7	6.3	1.2	1.9
Brunei Darussalam	-	-	-	0.9	1.4
All other ¹	53.0	64.9	66.8	47.0	1.4
World	100.0	100.0	100.0	100.0	100.0

¹ Prior to 2012, Iran was the single largest destination for Indonesian exports of wire rod. Exports to Iran dropped to zero in 2012.

Note.--Data for Indonesia are not yet available for calendar year 2013. Data include grade 1080 tire cord and tire bead.

Source: Compiled from *Global Trade Atlas*, as reported by "Statistics Indonesia" to GTIS (HS codes 7213.91, 7213.99, 7227.20, and 7227.90).

Shipments, by type

Table IV-15 presents data on PT Ispat Indos's total shipments, by type, during 2013. As the data indicate, high/medium-high carbon industrial/standard quality wire rod and low/medium-low carbon industrial/standard quality wire rod together accounted for *** percent of all types of PT Ispat Indo's total shipments during 2013.

Table IV-15
Wire rod: PT Ispat Indo's total shipments, by type, 2013

*	*	*	*	*	*	*
---	---	---	---	---	---	---

THE INDUSTRY IN MEXICO

Overview

At the time of the original investigations, it was believed that there were six Mexican producers of wire rod. Two firms, accounting for *** percent of Mexican production of wire rod, provided data in response to the Commission's questionnaire in the original investigations: Hylsa and Siderurgica Lazaro Cardenas Las Truchas ("Sicartsa"). These two firms reported that they collectively accounted for *** percent of exports to the United States during 2001. According to official Commerce statistics, exports by these firms to the United States in 2001 accounted for *** percent of U.S. imports of subject wire rod from Mexico in 2001.

The following seven firms were identified as producers of wire rod in Mexico in the Commission's first five-year reviews: Aceros Nacionales, Aceros San Luis, AHMSA-Altos Hornos de Mexico, Atlax, Deacero, Sicartsa, and Hylsa. Responses to the Commission's questionnaire were received from producers Deacero, Hylsa, and Sicartsa. By their estimation, these three producers accounted for *** percent of production in Mexico during 2007 (***).

In their responses to the Commission's notice of institution in these current second five-year reviews, the interested parties identified the following five producers of wire rod in Mexico: ArcelorMittal LasTruchas (successor to Sicartsa), Aceros San Luis, Altos Hornos de Mexico, Ternium México SA de CV ("Ternium") (successor to Hylsa), and Talleres y Aceros.¹³

¹³ The following seven firms in Mexico were identified by *** as having wire rod rolling capacity during 2013: Aceros Nacionales SA de CV (*** short tons); Altos Hornos de Mexico (*** short tons); Camesa (*** short tons); Deacero (*** short tons); Sicartsa (*** short tons); Siderurgica Tultitlan (*** short tons); and Ternium Mexico (*** short tons).

Mexican wire rod producer Deacero was identified as the largest manufacturer of wire rod in Mexico. Deacero, along with Ternium and ArcelorMittal las Truchas, provided responses to the Commission's foreign producer questionnaire in these reviews. According to ***, production in Mexico during 2013 was *** short tons. Aggregate reported production by the three responding wire rod producers in Mexico was 2.345 million short tons, yielding a theoretical coverage of *** percent of Mexican production during 2013 by the responding firms. *** firm-by-firm capacity data indicate that these three Mexican producers accounted for *** percent of total wire rod rolling capacity in Mexico during 2013. Total wire rod rolling capacity and production data reported by *** include grade 1080 tire cord and tire bead wire rod, which has been excluded by the Department of Commerce from the scope of the orders. In addition, smaller diameter wire rod produced by Deacero (diameter of 4.75 mm to 5.0 mm) is also believed to be included in the data reported by ***.

Table IV-16 presents comparative information available from the original investigations, the first five-year reviews, and these current second five-year reviews. Capacity reported by *** for 2013 for all Mexican producers was *** short tons, and production was *** short tons, yielding a capacity utilization of *** percent.

Table IV-16

Wire rod: Comparison of selected Mexican industry data, 2001, 2007, and 2013

Item	2001	2007	2013
Capacity (<i>short tons</i>)	***	***	2,757,570
Production	***	***	2,344,862
Capacity utilization (<i>percent</i>)	***	***	85.0
Exports/shipments (<i>percent</i>)	***	***	16.0
Inventories/shipments (<i>percent</i>)	***	***	6.7

Note.--Data for 2001 were provided by Hylsa and Sicartsa, accounting for *** percent of production; data for 2007 were provided by Deacero, Hylsa, and Sicartsa, accounting for *** percent of production; data for 2013 were provided by ArcelorMittal Las Truchas (successor to Sicartsa), Deacero, and Ternium (successor to Hylsa), accounting for *** percent of production.

Source: Staff Report, May 15, 2008 (INV-FF-058), table IV-24; and questionnaire responses of ArcelorMittal Las Truchas, Deacero, and Ternium.

Operations on wire rod

Aggregate data provided by ArcelorMittal Las Truchas, Deacero, and Ternium concerning their wire rod operations in Mexico during calendar years 2008-13 are presented in table IV-17.

Table IV-17

Wire rod: Mexico's capacity, production, shipments, and inventories, 2008-13

Item	Actual experience					
	Calendar year					
	2008	2009	2010	2011	2012	2013
	Quantity (<i>short tons</i>)					
Capacity	2,417,205	2,304,946	2,482,603	2,606,163	2,625,106	2,757,570
Production	2,139,484	2,096,645	2,279,689	2,556,411	2,566,149	2,344,862
End-of-period inventories	119,699	156,624	159,165	192,768	194,722	159,917
Shipments:						
Internal consumption/ Transfers	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***
Export shipments to:						
United States	***	***	***	***	***	***
European Union	***	***	***	***	***	***
Asia	***	***	***	***	***	***
All other markets	***	***	***	***	***	***
Total exports	***	193,724	290,724	419,479	379,513	379,963
Total shipments	2,185,456	2,063,393	2,279,900	2,525,125	2,558,539	2,378,082
	Ratios and shares (<i>percent</i>)					
Capacity utilization	88.5	91.0	91.8	98.1	97.8	85.0
Inventories/production	5.6	7.5	7.0	7.5	7.6	6.8
Inventories/total shipments	5.5	7.6	7.0	7.6	7.6	6.7
Share of total shipments:						
Internal consumption/ Transfers	***	***	***	***	***	***
Home market shipments	***	***	***	***	***	***
Export shipments to:						
United States	***	***	***	***	***	***
European Union	***	***	***	***	***	***
Asia	***	***	***	***	***	***
All other markets	***	***	***	***	***	***
Total exports	***	9.4	12.8	16.6	14.8	16.0
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0

Continued on the following page.

Table IV-17--*Continued*

Wire rod: Mexico's capacity, production, shipments, and inventories, 2008-13

Item	Actual experience					
	Calendar year					
	2008	2009	2010	2011	2012	2013
	<i>Value (1,000 dollars)</i>					
Shipments:						
Home market shipments	***	***	***	***	***	***
Export shipments to:						
United States	***	***	***	***	***	***
European Union	***	***	***	***	***	***
Asia	***	***	***	***	***	***
All other markets	***	***	***	***	***	***
Total exports	***	***	***	***	***	***
Total shipments ¹	905,006	509,493	710,507	986,036	965,352	833,112
	<i>Unit value (dollars per short ton)</i>					
Shipments:						
Home market shipments	***	***	***	***	***	***
Export shipments to:						
United States	***	***	***	***	***	***
European Union	***	***	***	***	***	***
Asia	***	***	***	***	***	***
All other markets	***	***	***	***	***	***
Total exports	***	***	***	***	***	***
Total shipments ¹	810	486	545	689	653	583

¹ Excludes internal consumption for which value data were not gathered.

Note.—Principal *** markets include ***. Principal *** markets include ***. *** export markets include ***.

Source: Compiled from data submitted by ArcelorMittal Las Truchas, Deacero (adjusted to remove nonsubject smaller diameter wire rod), and Ternium in response to the Commission's foreign producer questionnaire.

Capacity and production in Mexico

The reported capacity to produce wire rod in Mexico by the three responding producers, which was based on operating *** hours per week and *** weeks per year, fluctuated upward by 14.1 percent from 2.4 million short tons in 2008 to 2.8 million short tons in 2013. The firms' aggregate production increased during 2008-12, but fell thereafter. Aggregate reported production was 9.6 percent higher at 2.4 million short tons in 2013 than reported in 2008. Capacity utilization was 85.0 percent during 2013, the lowest reported for any year during 2008-13.

As previously noted, *** data indicate that ArcelorMittal Las Truchas, Deacero, and Ternium together accounted for *** percent of total wire rod rolling capacity in Mexico during 2013. According to ***, there has been no change in the wire rod rolling capacity in Mexico during 2008-13.

In addition to the production of wire rod, all three responding Mexican producers reported the production of *** using shared equipment and machinery in their wire rod facilities in Mexico. Table IV-18 presents the reported aggregate overall capacity and production of wire rod and other products produced on the same production equipment used to produce wire rod in Mexico.

Table IV-18

Wire rod: Mexico's overall capacity, production, and capacity utilization, 2008-13

Item	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
Overall capacity	***	***	***	***	***	***
Production:						
Subject merchandise	2,139,484	2,096,645	2,279,689	2,556,411	2,566,149	2,344,862
Rebar	***	***	***	***	***	***
Other bar/rod products	***	***	***	***	***	***
Subtotal, nonsubject Production	***	***	***	***	***	***
Total production	***	***	***	***	***	***
Ratio (percent)						
Overall capacity utilization	***	***	***	***	***	***
Share of quantity (percent)						
Share of production:						
Subject merchandise	***	***	***	***	***	***
Rebar	***	***	***	***	***	***
Other bar/rod products	***	***	***	***	***	***
Subtotal, nonsubject Production	***	***	***	***	***	***
Total production	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted by ArcelorMittal Las Truchas, Deacero (adjusted to remove nonsubject smaller diameter wire rod), and Ternium in response to the Commission's foreign producer questionnaire.

ArcelorMittal Las Truchas, Deacero, and Ternium estimated that wire rod accounted for ***, ***, and *** percent of their 2013 total sales, respectively. The overall production data presented indicate that subject wire rod accounted for between *** and *** percent of the firms' aggregate overall production on the same machinery and equipment as wire rod during 2008-13. The capacity to produce wire rod is affected by ***. *** were reported by the firms to be the primary constraints that set the limit on their production capacity. Several factors that constrain the firms' ability to shift production capacity between product lines were reported: ***.

***.

ArcelorMittal Las Truchas and Ternium reported that they experienced ***. Deacero reported ***.¹⁴ All three responding Mexican producers reported that they did not have a business plan or any internal documents that describe, discuss, or analyze expected future market conditions for wire rod.

¹⁴ The domestic interested parties noted in their response to the Commission's notice of institution in these reviews that Deacero completed the construction of a new wire rod mini-mill in Saltillo, Mexico in 2011, with annual rolling capacity of 800,000 to 1 million tons per year. They also noted that Deacero ***. *Response of Domestic Industry*, July 2, 2013, p. 23.

Shipments of wire rod produced in Mexico

The three responding producers' total shipments of wire rod fluctuated during 2008-13, but were 13.4 percent higher in 2013 than reported in 2008. The firm's internal consumption and home market together accounted for the majority of the firm's total shipments of wire rod, but they accounted for an overall declining share of total shipments during most of the years 2008-13. During 2013, internal consumption and home market shipments together accounted for *** percent of the firms' total shipments of wire rod.

The three responding producers' export shipments of wire rod decreased in the aggregate from 2008 to 2009, and increased until 2011 before declining again in 2013. Total exports were *** percent higher in 2013 than reported in 2008. Aggregate exports of subject wire rod to the United States increased from 2008 to 2010, but fluctuated thereafter to a level in 2013 that was *** percent higher than that reported in 2008. The Mexican producers reported that their principal *** markets include ***, its principal *** markets include ***, and *** export markets include ***. Detailed information on the export destinations for Mexican wire rod as published by the *Global Trade Atlas* is presented in table IV-19. These data include grade 1080 tire cord and tire bead, which is not subject to these reviews, and are therefore overstated. In addition, smaller diameter wire rod produced by Deacero (diameter of 4.75 mm to 5.0 mm) is also believed to be included in the data reported by the *Global Trade Atlas*.

Table IV-19

Wire rod: Mexico's exports, by destination, 2008-13

Destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
Colombia	25,688	41,192	53,327	94,777	92,319	192,108
Canada	36,063	7,784	38,791	68,806	77,973	42,446
Ecuador	15,941	15,873	18,051	48,192	34,869	22,868
United States	11,885	28,432	694,233	91,504	36,560	21,251
Guatemala	40,992	46,157	32,123	46,355	30,043	19,005
Argentina	-	-	-	-	-	15,103
Dominican Republic	8,541	4,254	39	-	-	12,153
El Salvador	16,660	23,834	23,723	18,270	26,895	9,609
Peru	11,855	21,621	22,585	45,959	36,219	7,537
Chile	-	5,549	10,832	-	5,056	5,029
All other	84,038	31,461	22,159	69,574	23,896	13,789
World	251,663	226,156	915,863	483,437	363,831	360,899
Value (\$1,000 dollars)						
Colombia	20,606	16,234	28,859	63,164	57,574	113,192
Canada	30,447	4,716	21,495	45,611	45,524	23,940
Ecuador	15,841	6,012	10,975	32,518	22,445	15,147
United States	12,365	15,950	80,068	55,818	23,958	12,468
Guatemala	26,751	20,526	18,263	30,664	19,437	11,399
Argentina	-	-	-	-	-	9,221
Dominican Republic	8,809	1,779	21	-	-	8,183
El Salvador	12,857	10,487	11,188	11,950	17,839	5,936
Peru	13,034	10,545	13,453	33,236	24,186	4,640
Chile	-	3,071	7,102	-	3,409	3,103
All other	64,151	12,863	11,632	45,677	15,484	9,316
World	204,861	102,182	203,055	318,637	229,855	216,544

Table continued on the following page.

Table IV-19--*Continued*

Wire rod: Mexico's exports, by destination, 2008-13

Destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Unit value (per short ton)						
Colombia	802	394	541	666	624	589
Canada	844	606	554	663	584	564
Ecuador	994	379	608	675	644	662
United States	1,040	561	115	610	655	587
Guatemala	653	445	569	661	647	600
Argentina	-	-	-	-	-	611
Dominican Republic	1,031	418	538	-	-	673
El Salvador	772	440	472	654	663	618
Peru	1,099	488	596	723	668	616
Chile	-	553	656	-	674	617
All other	763	409	525	657	648	676
World	814	452	222	659	632	600
Share of quantity (percent)						
Colombia	10.2	18.2	5.8	19.6	25.4	53.2
Canada	14.3	3.4	4.2	14.2	21.4	11.8
Ecuador	6.3	7.0	2.0	10.0	9.6	6.3
United States	4.7	12.6	75.8	18.9	10.0	5.9
Guatemala	16.3	20.4	3.5	9.6	8.3	5.3
Argentina	-	-	-	-	-	4.2
Dominican Republic	3.4	1.9	0.0	-	-	3.4
El Salvador	6.6	10.5	2.6	3.8	7.4	2.7
Peru	4.7	9.6	2.5	9.5	10.0	2.1
Chile	-	2.5	1.2	-	1.4	1.4
All other	33.4	13.9	2.4	14.4	6.6	3.8
World	100.0	100.0	100.0	100.0	100.0	100.0

Note.-Data include grade 1080 tire cord and tire bead wire rod and smaller diameter wire rod produced by Deacero, which are not merchandise subject to the order concerning Mexico.

Source: Compiled from *Global Trade Atlas*, as reported to GTIS by the Instituto Nacional de Estadística y Geografía (INEGI) (HS codes 7213.91, 7213.99, 7227.20, and 7227.90).

Shipments, by type

Table IV-20 presents data on the three responding producers' total shipments, by type, during 2013. As the data indicate, high/medium-high carbon industrial/standard quality wire rod and low/medium-low carbon industrial/standard quality wire rod together accounted for *** percent of all types of the Mexican producers' total shipments during 2013.

Table IV-20

Wire rod: Total shipments of wire rod produced in Mexico, by type, 2013

* * * * *

THE INDUSTRY IN MOLDOVA

Overview

The only firm believed to be producing wire rod in Moldova, Moldova Steel Works, provided data in response to the Commission's questionnaire in the original investigations and first five-year reviews. The structure of the wire rod industry in Moldova has changed little since the imposition of the original order, with Moldova Steel Works accounting for all known production in Moldova.¹⁵ However, the firm did not submit a response to the Commission's foreign producer questionnaire in these second five-year reviews.

Table IV-21 presents comparative information available from the original investigations, the first five-year reviews, and these current second five-year reviews.

Table IV-21

Wire rod: Comparison of selected Moldovan industry data, 2001, 2007, and 2013

* * * * *

¹⁵ Since the last five-year review, the ownership of Moldova Steel Works has changed. The Moldovan producer is currently managed by Metallinvest Holding, Russia's largest iron ore miner. The owner of Metallinvest Holding also owns MetInvest, the parent company of Ukraine wire rod producers Yanakiieve Steel and Makiivka Steel. *Response of Domestic Industry*, July 2, 2013, pp. 25-26.

Operations on wire rod

Moldova Steel Works reportedly produces low-carbon and high-carbon wire rod, as well as welding quality and CHQ wire rod in Moldova.¹⁶ The firm's capacity to produce wire rod in Moldova, as presented in table IV-21, appears to have increased from 2007 to 2013, but series data reported by *** indicate that the capacity to produce wire rod in Moldova has remained unchanged at *** short tons during 2008-13. Other sources estimate the Moldovan plant's overall capacity to produce rolled products at *** short tons.¹⁷ In addition, the domestic interested parties estimated Moldova Steel Works' production of wire rod in 2012 at 174,809 short tons and its 2012 capacity utilization for rolled products at approximately about 37 percent.¹⁸ The domestic interested parties also reported that, although Moldova Steel Works essentially ceased exports of wire rod to the United States following the imposition of the antidumping duty order, the producer remains ***.¹⁹ Detailed information on the export destinations for Moldovan wire rod as published by the *Global Trade Atlas* is presented in table IV-22.

¹⁶ *Response of Domestic Industry*, July 2, 2013, p. 25.

¹⁷ ***, as cited in *Response of Domestic Industry*, July 2, 2013, p. 26.

¹⁸ *Response of Domestic Industry*, July 2, 2013, p. 26.

¹⁹ ***, as cited in *Response of Domestic Industry*, July 2, 2013, p. 26.

Table IV-22

Wire rod: Exports from Moldova, 2008-13

Reporting destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
Romania	99,901	28,948	8,338	35,412	93,979	59,854
Poland	101,312	30,633	25,354	15,025	14,707	34,158
Ukraine	10,882	2,256	5,721	35,084	23,147	5,678
Slovakia	26,199	5,434	3,799	125	368	737
Russia	62,259	35,902	26,860	9,877	2,287	611
Georgia	0	0	0	0	0	405
Czech Republic	1,919	0	588	0	0	140
Azerbaijan	0	0	136	274	1,226	138
Brazil	12,381	29,233	75,620	540	9,296	0
Canada	0	0	5,523	0	0	0
All other countries	62,945	21,552	10,468	3,062	625	0
Total reporting countries	377,798	153,960	162,405	99,399	145,635	101,721
Value (1,000)						
Romania	87,863	13,254	4,368	22,882	51,814	31,821
Poland	77,580	12,747	14,221	10,585	9,535	19,499
Ukraine	10,507	1,145	3,225	25,589	16,621	3,969
Slovakia	23,511	2,475	2,143	88	204	419
Russia	49,811	16,781	15,106	6,888	1,526	373
Georgia	0	0	0	0	0	242
Czech Republic	1,491	0	346	0	0	83
Azerbaijan	0	0	95	211	836	94
Brazil	9,434	15,340	38,847	356	5,733	0
Canada	0	0	3,169	0	0	0
All other countries	50,028	11,587	5,817	2,796	428	0
Total reporting countries	310,225	73,329	87,336	69,395	86,696	56,499

Table continued on next page.

Table IV-22--Continued
Wire rod: Exports from Moldova, 2008-13

Reporting destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Unit value (dollars per short ton)						
Romania	879	458	524	646	551	532
Poland	766	416	561	705	648	571
Ukraine	966	507	564	729	718	699
Slovakia	897	455	564	707	554	568
Russia	800	467	562	697	667	610
Georgia	0	0	0	0	0	599
Czech Republic	777	0	589	0	0	593
Azerbaijan	0	0	698	768	682	679
Brazil	762	525	514	659	617	0
Canada	0	0	574	0	0	0
All other countries	795	538	556	913	684	0
Total reporting countries	821	476	538	698	595	555
Share of quantity (percent)						
Romania	26.4	18.8	5.1	35.6	64.5	58.8
Poland	26.8	19.9	15.6	15.1	10.1	33.6
Ukraine	2.9	1.5	3.5	35.3	15.9	5.6
Slovakia	6.9	3.5	2.3	0.1	0.3	0.7
Russia	16.5	23.3	16.5	9.9	1.6	0.6
Georgia	0.0	0.0	0.0	0.0	0.0	0.4
Czech Republic	0.5	0.0	0.4	0.0	0.0	0.1
Azerbaijan	0.0	0.0	0.1	0.3	0.8	0.1
Brazil	3.3	19.0	46.6	0.5	6.4	0.0
Canada	0.0	0.0	3.4	0.0	0.0	0.0
All other countries	16.7	14.0	6.4	3.1	0.4	0.0
Total reporting countries	100.0	100.0	100.0	100.0	100.0	100.0

Note.--Data may include 1080 tire cord and tire bead.

Source: Compiled from *Global Trade Atlas* based on partner country imports from Moldova using HS codes: 7213.91, 7313.99, 7227.20, and 7227.90. Accessed on March 29, 2014, and not all reporting countries had provided 2013 data as of the date compiled.

THE INDUSTRY IN TRINIDAD & TOBAGO

Overview

One firm, accounting for all Trinidadian production of wire rod, provided data in response to the Commission's questionnaire in the original investigations: Caribbean Ispat. The successor firm to Caribbean Ispat, ArcelorMittal Point Lisas, responded to the Commission's questionnaire in the first sunset reviews. The structure of the wire rod industry in Trinidad & Tobago has changed little since the final investigations and the first five-year reviews, with one producer accounting for all production in the country. ArcelorMittal Point Lisas, which accounted for all known production of wire rod in Trinidad & Tobago, provided a response to the Commission's questionnaire in these current second five-year reviews.

Table IV-23 presents comparative information available from the original investigations, the first five-year reviews, and these current second five-year reviews. Capacity reported by *** for 2013 for ArcelorMittal Point Lisas in Trinidad & Tobago was *** short tons.

Table IV-23

Wire rod: Comparison of selected Trinidad & Tobago industry data, 2001, 2007, and 2013

* * * * *

Operations on wire rod

Data provided by ArcelorMittal Point Lisas concerning its wire rod operations in Trinidad & Tobago during calendar years 2008-13 are presented in table IV-24.

Table IV-24

Wire rod: Trinidad & Tobago's capacity, production, shipments, and inventories, 2008-13

*	*	*	*	*	*	*
---	---	---	---	---	---	---

Table IV-24--*Continued*

Wire rod: Trinidad & Tobago's capacity, production, shipments, and inventories, 2008-13

*	*	*	*	*	*	*
---	---	---	---	---	---	---

Capacity and production in Trinidad & Tobago

The capacity to produce wire rod in Trinidad & Tobago, which was based on operating *** hours per week and *** weeks per year, remained constant at *** short tons during 2008-13. The firm’s production fluctuated during 2008-13, but was *** percent higher at *** short tons in 2013 than reported in 2008. Capacity utilization was *** percent during 2013 and ranged between *** and *** percent during 2008-13.

In addition to the production of wire rod, ArcelorMittal Point Lisas reported ***. Table IV-25 presents ArcelorMittal Point Lisas’ overall production and capacity ***.

Table IV-25
Wire rod: Trinidad & Tobago’s overall capacity, production, and capacity utilization, 2008-13

* * * * *

ArcelorMittal Point Lisas estimated that wire rod accounted for *** percent of its 2013 total sales. The overall production data presented indicate that wire rod accounted for between *** and *** percent of the firm's overall production during 2008-13. In response to a request for information pertaining to the constraints that set the limits on production capacity, ArcelorMittal Point Lisas indicated that "****." The firm added that "****." Concerning the firm's ability to shift production capacity between wire rod and rebar in coil, ArcelorMittal Point Lisas noted "****". In response to a request for information concerning changes experienced in the character of operations, ArcelorMittal Point Lisas reported the following: ****

The Trinidadian producer reported that it does not anticipate any changes in the character of its operations in the future. It also indicated that it does not have a business plan or any internal documents that describe, discuss, or analyze expected future market conditions for wire rod.

Shipments of wire rod produced in Trinidad & Tobago

ArcelorMittal Point Lisas' total shipments of wire rod fluctuated upward, reaching a six-year high during 2011 before declining in 2012 and 2013. The firm's total shipments were *** percent higher in 2013 than in 2008. The firm reported *** internal consumption of wire rod during 2008-13 and home market shipments accounted for *** generally declining share of total shipments (i.e., ranging from *** percent of total shipments of wire rod during 2008-13).

ArcelorMittal Point Lisas' export shipments of wire rod, which accounted for *** of the firm's total wire rod shipments during 2008-13, generally increased from 2008 to 2011, but fell thereafter to a level in 2013 that was *** percent higher than reported in 2008. ArcelorMittal Point Lisas reported that its principal *** market is *** and that *** export markets include ***. The firm noted that, since 2008, it has increased its exports to ***. The firm reported that there were no exports of subject wire rod to the United States during 2009-13. Detailed information on the export destinations for Trinidadian wire rod as published by the *Global Trade Atlas* is presented in table IV-26.

Table IV-26

Wire rod: Exports from Trinidad & Tobago, 2008-13

Destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
El Salvador	17,181	0	9,833	23,817	16,955	21,790
Nicaragua	9,309	1,238	10,189	16,391	14,907	19,370
France	30,600	15,900	24,363	15,364	15,538	18,515
Guatemala	7,783	0	6,796	9,323	9,056	16,009
Peru	0	0	20,470	42,789	32,790	11,595
Ecuador	8,889	8,967	28,898	42,871	37,371	10,487
Brazil	45,037	0	39,435	85,345	15,351	4,865
Chile	0	0	0	0	0	3,142
Honduras	7,859	0	8,734	4,940	264	2,008
Colombia	0	0	14,432	11,363	45,533	1,829
All other countries	72,129	66,990	248,334	14,793	38,748	410
Total reporting countries	198,787	93,095	411,484	266,996	226,513	110,020
Value (1,000)						
El Salvador	13,669	0	6,379	19,230	12,985	14,973
Nicaragua	6,434	1,222	6,427	11,799	11,122	12,716
France	27,969	8,670	15,277	11,218	11,380	12,455
Guatemala	6,275	0	5,973	7,916	6,679	10,744
Peru	0	0	13,691	32,256	24,504	8,082
Ecuador	5,966	5,129	17,751	31,473	27,546	7,078
Brazil	44,088	0	25,516	61,896	11,310	3,091
Chile	0	0	0	0	0	2,259
Honduras	7,573	0	5,849	6,207	5,668	3,357
Colombia	0	0	9,086	8,766	33,003	1,282
All other countries	49,816	36,117	25,531	11,295	27,943	232
Total reporting countries	161,789	51,138	131,480	202,057	172,138	76,270

Table continued on next page.

Table IV-26--Continued
Wire rod: Exports from Trinidad & Tobago, 2008-13

Destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Unit value (dollars per short ton)						
El Salvador	796	0	649	807	766	687
Nicaragua	691	987	631	720	746	656
France	914	545	627	730	732	673
Guatemala	806	0	879	849	738	671
Peru	0	0	669	754	747	697
Ecuador	671	572	614	734	737	675
Brazil	979	0	647	725	737	635
Chile	0	0	0	0	0	719
Honduras	964	0	670	1,257	21,468	1,672
Colombia	0	0	630	771	725	701
All other countries	691	539	103	764	721	566
Total reporting countries	814	549	320	757	760	693
Share of quantity (percent)						
El Salvador	8.6	0.0	2.4	8.9	7.5	19.8
Nicaragua	4.7	1.3	2.5	6.1	6.6	17.6
France	15.4	17.1	5.9	5.8	6.9	16.8
Guatemala	3.9	0.0	1.7	3.5	4.0	14.6
Peru	0.0	0.0	5.0	16.0	14.5	10.5
Ecuador	4.5	9.6	7.0	16.1	16.5	9.5
Brazil	22.7	0.0	9.6	32.0	6.8	4.4
Chile	0.0	0.0	0.0	0.0	0.0	2.9
Honduras	4.0	0.0	2.1	1.9	0.1	1.8
Colombia	0.0	0.0	3.5	4.3	20.1	1.7
All other countries	36.3	72.0	60.4	5.5	17.1	0.4
Total reporting countries	100.0	100.0	100.0	100.0	100.0	100.0

Note.--Data may include 1080 tire cord and tire bead.

Source: Compiled from *Global Trade Atlas* based on partner country imports from Trinidad & Tobago using HS codes 7213.91, 7313.99, 7227.20, and 7227.90. Accessed on March 29, 2014 and not all reporting countries had provided 2013 data as of the date compiled.

Shipments, by type

Table IV-27 presents data on ArcelorMittal Point Lisas' total shipments, by type, during 2013. High/medium-high carbon industrial/standard quality wire rod and low/medium-low carbon industrial/standard quality wire rod together accounted for *** percent of ArcelorMittal Point Lisas' total shipments during 2013. *** of the firm's wire rod shipments during 2013 was accounted for by ***.

Table IV-27
Wire rod: Trinidad & Tobago's total shipments, by type, 2013

* * * * *

THE INDUSTRY IN UKRAINE

Overview

The Commission identified three producers of wire rod in Ukraine during the time of the original investigations. The data presented in the Commission's final report during those original investigations were submitted by Krivorozhstal, which reported that in 2001 it accounted for *** percent of Ukrainian production of subject wire rod and *** percent of subject exports to the United States. Exports by this firm accounted for *** percent of U.S. imports of subject wire rod from Ukraine in 2001, according to official Commerce statistics.

Six firms were identified as wire rod producers in Ukraine during the first five-year reviews: ArcelorMittal Kryviy Rih (successor firm to Krivorozhstal), Makeevka Metallurgical Integrated Plant (or Makiyivka Metallurgical Plant), Yenakiievskiy Metalurhiynyi Zavod VAT (or Yenakievo Metallurgical Plant), PJSC Donetskiiy Steel Mill, PJSC Enakiivskiy Steel Mill, and PJSC Dniprovskiy Steel Mill. In the first five-year reviews, the Commission received a questionnaire response from the largest producer in Ukraine, ArcelorMittal KryviyRih, accounting for an estimated *** percent of 2007 wire rod production in Ukraine. According to ***, there was no listed capacity for wire rod for any producer in Ukraine other than ArcelorMittal KryviyRih at the time of the first five-year reviews. Accordingly, the data presented on Ukrainian production of wire rod for the first five-year reviews were believed to represent at least the majority of (if not all) production of wire rod in Ukraine.

The domestic interested parties indicated in their response to the Commission's notice of institution in these current second five-year reviews that there are three main producers of wire rod in the Ukraine today (Makiyivka Metallurgical Plant, ArcelorMittal KryvyiRih, and the Yenakievo Steel Group (formerly Yenakievo Metallurgical Plant). According to ***, there were four facilities with wire rod rolling capacity in Ukraine during 2013 (plant locations in parentheses): ArcelorMittal (Kriviy Rih), Makeevsky Iron and Steel (Makeeevka), Donetsk Electrometallurgical Mill (Donetsk), and Euro Finance (Byelaya Tserkov). The following two firms in Ukraine responded to the Commission's foreign producer questionnaire in these second five-year reviews: ArcelorMittal Kryvyi Rih and Yenakiieve Iron and Steel Works ("Yenakiieve Steel"). There were no reported exports of the subject merchandise to the United States by either firm during 2008-13. According to ***, wire rod production in Ukraine during 2013 was *** short tons. Reported production by ArcelorMittal Kryvyi Rih and Yenakiieve Steel combined was *** short tons, theoretically yielding full coverage of Ukrainian production during 2013 by the responding firms. *** firm-by-firm capacity data indicate that ArcelorMittal Kryvyi Rih is the largest producer in Ukraine, accounting for *** percent of total wire rod rolling capacity during 2013.

Table IV-28 presents comparative information available from the original investigations, the first five-year reviews, and these current second five-year reviews. Capacity reported by *** for 2013 for all Ukrainian producers was *** short tons, and production was *** short tons, yielding a capacity utilization of *** percent.

Table IV-28
Wire rod: Comparison of selected Ukrainian industry data, 2001, 2007, and 2013

* * * * * *

Operations on wire rod

Data provided by ArcelorMittal Kriviiy Rih and Yenakiieve Steel concerning their wire rod operations in Ukraine during calendar years 2008-13 are presented in table IV-29. According to reported data, ArcelorMittal Kriviiy Rih was the larger of the two producers, accounting for *** percent of reported wire rod production in Ukraine in 2013, whereas Yenakiieve Steel was the smaller of the two responding producers, accounting for *** percent of reported 2013 wire rod production in Ukraine.

Table IV-29

Wire rod: Ukraine's capacity, production, shipments, and inventories, 2008-13

*	*	*	*	*	*	*
---	---	---	---	---	---	---

Table IV-29--*Continued*

Wire rod: Ukraine's capacity, production, shipments, and inventories, 2008-13

*	*	*	*	*	*	*
---	---	---	---	---	---	---

Capacity and production in Ukraine

ArcelorMittal Kriviiy Rih's and Yenakiieve Steel's capacity to produce wire rod in Ukraine was based on operating *** hours per week and *** weeks per year. ArcelorMittal Kriviiy Rih's wire rod capacity fell from 2008 to 2010, increased in 2011, and fell thereafter. Yenakiieve Steel's wire rod capacity remained constant at *** short tons during 2008 and 2009, and was constant at *** short tons in 2011-13. The firm reported no data for 2010, as its mill underwent "decommissioning" during 2010. Aggregate reported capacity for wire rod in Ukraine fell from 2008 to 2010, increased in 2011, and fell thereafter to a level that was *** percent higher than the level reported in 2008. Aggregate reported production fluctuated during 2008-13, but was *** percent higher at *** short tons in 2013 than reported in 2008. Capacity utilization was *** percent during 2013 and ranged between *** and *** percent during 2008-13.

*** data indicate that the two responding producers in Ukraine accounted for *** percent of total wire rod rolling capacity and *** percent of wire rod production in Ukraine during 2013. According to ***, there was an increase in the wire rod rolling capacity in Ukraine in the amount of *** short tons during 2011-12 with the opening of Donetsk Electrometallurgical Mill in Donetsk, Ukraine. Another increase in the aggregate wire rod rolling capacity in the amount of *** short tons was reported for 2013 by *** with the opening of the Euro Finance facility in Byelaya Tserkov, Ukraine.

In addition to the production of wire rod, ArcelorMittal Kriviiy Rih and Yenakiieve Steel reported *** using shared equipment and machinery in its wire rod facilities in Ukraine. Table IV-30 presents aggregate reported overall capacity and production of wire rod and other products produced on the same production equipment used to produce wire rod in Ukraine.

Table IV-30

Wire rod: Ukraine's overall capacity, production, and capacity utilization, 2008-13

* * * * *

ArcelorMittal Kriviiy Rih and Yenakiieve Steel estimated that wire rod accounted for *** and *** percent of their 2013 total sales, respectively. The overall production data presented indicate that wire rod accounted for *** (*** percent) of the firms' overall production on the same equipment as wire rod during 2008-13. *** were reported by the firms to be constraints that set the limits on their production capacities. *** were the constraints that set the limit on Yenakiieve Steel's ability to shift production capacity between products. ArcelorMittal Kriviiy Rih reported that it has ***.

In response to a request for information concerning any changes in the character of its operations, ArcelorMittal Kriviiy Rih indicated ***. Yenakiieve Steel reported ***. Yenakiieve supplemented its response with the following narrative: ***.

***.

Both responding Ukrainian producers indicated ***. The Ukrainian producers also reported that they do not have business plans or any internal documents that describe, discuss, or analyze expected future market conditions for wire rod.

Shipments of wire rod produced in Ukraine

Aggregate total shipments of wire rod produced in Ukraine fluctuated during 2008-13, but were *** percent higher in 2013 than reported in 2008. Exports accounted for the majority of the firms' aggregate total shipments of wire rod, accounting for *** to *** percent of total shipments during 2008-13. During 2013, internal consumption and home market shipments combined accounted for *** percent of total shipments of wire rod.

Aggregate export shipments of wire rod fluctuated during 2008-13, but were higher in 2013 than in 2008. The firms reported that there were no exports of subject wire rod to the United States during 2008-13. Principal *** markets for wire rod produced in Ukraine include ***. Principal *** markets include ***. *** export markets include ***. Detailed information on the export

destinations for wire rod produced in Ukraine as published by the *Global Trade Atlas* is presented in table IV- 31.

Table IV-31
Wire rod: Ukraine's exports, by destination, 2008-13

Destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Quantity (short tons)						
Israel	36,721	40,664	84,494	93,128	133,190	212,862
Nigeria	65,961	72,008	110,488	107,093	121,857	128,201
Turkey	70,179	49,146	80,274	77,241	76,714	122,009
Jordan	275,748	268,923	271,225	282,043	266,120	114,915
Senegal	29,347	82,969	85,662	68,867	96,413	77,702
Bulgaria	90,987	45,865	46,404	56,748	51,419	70,785
Romania	139,808	157,787	201,511	147,538	71,248	61,606
Iran	46,409	4,000	165,346	51,726	52,253	53,704
Iraq	-	1,315	-	343	12,901	43,410
Italy	8,669	22,243	70,560	68,504	19,836	43,176
All other	867,671	902,631	869,184	946,668	786,715	525,795
World	1,631,498	1,647,552	1,985,147	1,899,899	1,688,665	1,454,167
Value (\$1,000 dollars)						
Israel	20,312	13,113	37,637	56,611	74,022	106,827
Nigeria	49,771	26,857	54,194	66,734	71,288	67,178
Turkey	48,569	16,860	35,594	47,379	43,153	62,230
Jordan	178,677	98,716	128,125	173,600	150,013	59,639
Senegal	23,296	31,942	40,587	43,343	56,771	41,178
Bulgaria	68,819	17,721	20,874	34,398	28,197	35,857
Romania	105,682	56,710	97,443	91,061	41,001	32,818
Iran	30,651	1,388	69,076	30,800	27,393	25,456
Iraq	-	447	-	210	6,878	21,602
Italy	5,218	8,215	30,945	39,832	10,808	22,507
All other	571,806	328,489	405,748	584,869	454,141	277,297
World	1,102,802	600,458	920,223	1,168,837	963,666	752,589

Table continued on the following page.

Table IV-31--Continued
Wire rod: Ukraine's exports, by destination, 2008-13

Destination	Calendar year					
	2008	2009	2010	2011	2012	2013
Unit value (per short ton)						
Israel	553	322	445	608	556	502
Nigeria	755	373	490	623	585	524
Turkey	692	343	443	613	563	510
Jordan	648	367	472	616	564	519
Senegal	794	385	474	629	589	530
Bulgaria	756	386	450	606	548	507
Romania	756	359	484	617	575	533
Iran	660	347	418	595	524	474
Iraq		340		612	533	498
Italy	602	369	439	581	545	521
All other	659	364	467	618	577	527
World	676	364	464	615	571	518
Share of quantity (percent)						
Israel	2.3	2.5	4.3	4.9	7.9	14.6
Nigeria	4.0	4.4	5.6	5.6	7.2	8.8
Turkey	4.3	3.0	4.0	4.1	4.5	8.4
Jordan	16.9	16.3	13.7	14.8	15.8	7.9
Senegal	1.8	5.0	4.3	3.6	5.7	5.3
Bulgaria	5.6	2.8	2.3	3.0	3.0	4.9
Romania	8.6	9.6	10.2	7.8	4.2	4.2
Iran	2.8	0.2	8.3	2.7	3.1	3.7
Iraq	-	0.1	-	0.0	0.8	3.0
Italy	0.5	1.4	3.6	3.6	1.2	3.0
All other	53.2	54.8	43.8	49.8	46.6	36.2
World	100.0	100.0	100.0	100.0	100.0	100.0

Note.-Data include grade 1080 tire cord and tire bead.

Source: Compiled from *Global Trade Atlas* reported to GTIS by the State Customs Committee of the Ukraine (HS codes 7213.91, 7213.99, 7227.20, and 7227.90).

Shipments, by type

Table IV-32 presents aggregate data on total wire rod shipments reported by ArcelorMittal Kriviiy Rih and Yenakiieve Steel, by type, during 2013. As the data indicate, high/medium-high carbon industrial/standard quality wire rod and low/medium-low carbon industrial/standard quality wire rod together accounted for *** percent of all types of wire rod shipped by the Ukrainian producers during 2013.

Table IV-32
Wire rod: Total shipments reported by Ukrainian producers, by type, 2013

* * * * *

GLOBAL MARKET

Production

Global production of wire rod has grown considerably in recent years. According to one published source,²⁰ global production increased by *** percent between 2009 and 2012 (table IV-32). In terms of sheer volume, the East and Southeast Asia Region accounted for the greatest production increase in both periods, and is forecast to lead global production in the coming years as well. Data compiled by *** on historical, current, and projected global production of wire rod are presented in tables IV-33 and IV-34.²¹

²⁰ ***.

²¹ Published sources of data for wire rod are believed to consist of carbon and alloy (other than stainless) steel wire rods including grade 1080 tire cord and tire bead wire rod. Data may also include tool steel, high nickel steel, ball bearing steel, and free machining steel products.

Table IV-33

Wire rod: Global and regional production of wire rod, 2009-12

* * * * *

Table IV-34

Wire rod: Forecasts of global and regional production of wire rod, 2013-17

* * * * *

CONSUMPTION

A plurality of firms indicated that demand outside the United States has increased since 2008 (table IV-35). The majority of foreign producers noted that demand for wire rod in their home markets fell during the worldwide financial recession during 2008-09 but has generally recovered and the majority of the foreign producers anticipate that demand for wire rod will increase in their home markets.

Table IV-35

Wire rod: Firms' responses regarding demand outside the United States, by number of responding firms

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand outside the United States since 2008:				
U.S. producers	0	1	3	4
Importers	6	5	1	7
Purchasers	9	1	7	1
Foreign producers	1	1	3	3
Demand in home market since 2008:				
Foreign producers	3	2	1	2
Anticipated demand outside the United States:				
U.S. producers	0	0	2	7
Importers	6	7	0	4
Purchasers	9	3	2	6
Foreign producers	5	2	0	1
Anticipated demand in home market:				
Foreign producers	7	1	0	0

Source: Compiled from data submitted in response to Commission questionnaires.

Data compiled by *** on historical, current, and forecast global consumption of wire rod are presented in tables IV-36 through IV-37. Worldwide consumption of wire rod increased by *** percent between 2009 and 2012. Global consumption of wire rod is forecast to

continue to grow in the coming years, with the growth evenly distributed in all major markets except East and Southeast Asia, which is projected to continue to experience rapid growth.²²

Table IV-36

Wire rod: Global and regional apparent consumption of wire rod, 2009-12

*	*	*	*	*	*	*
---	---	---	---	---	---	---

Table IV-37

Wire rod: Forecasts of global and regional apparent consumption of wire rod, 2013-17

*	*	*	*	*	*	*
---	---	---	---	---	---	---

²² See Part II of this report for the individual perspectives of U.S. producers, importers, and purchasers on demand in the United States and in other markets.

PRICES

The Commission asked producers, importers, and purchasers to compare market prices of wire rod in U.S. and non-U.S. markets. Responding producers and importers indicated prices generally fluctuate with the price of raw materials in the market. As the price of scrap increases, the price of wire rod will increase.²³

Six domestic producers were able to compare U.S. and non-U.S. market prices, and reported that U.S. producer prices are generally higher than foreign producer prices.²⁴ Some producers cited higher prices for attracting increasing imports to the U.S. market rather than foreign markets,²⁵ and another specifically highlighted increasing import volumes from China and Mexico.²⁶ One producer noted that prices in both the U.S. and even Canadian markets were being pushed down by Chinese imports.²⁷ Another producer noted that Chinese prices are the lowest of any major market.²⁸

Twelve importers were able to provide price comparisons between the United States and Canada, China, Japan, Korea, the Netherlands. In a general comparison, two importers reported that prices in the United States are higher, typically 12-percent or \$100 per ton,

²³ ***'s producer questionnaire responses, IV-14; and ***'s importer questionnaire responses, III-19.

²⁴ ***'s producer questionnaire responses, IV-22.

²⁵ ***'s producer questionnaire responses, IV-22.

²⁶ ***'s producer questionnaire response, IV-22.

²⁷ ***'s producer questionnaire response, IV-22.

²⁸ ***'s producer questionnaire response, IV-22.

respectively.²⁹ One importer described how prices are “generally the same” in both Canada and the United States, as these markets are integrated.³⁰ Other importers mentioned that high-quality grade wire rod imported from Japan is higher priced than the corresponding U.S. product,³¹ that Korean wire rod is cheaper by \$200 per metric ton,³² and that wire rod originating from the Netherlands is comparable in price in both the U.S. and other foreign markets.³³ In comparing prices between China and the United States, an importer noted that Chinese prices are lower by \$68-\$80 per ton.³⁴ Another importer reported that wire rod sells for \$550 per metric ton in the Chinese market compared to over \$800 per metric ton in the U.S. market.³⁵

Published price data are available from several reputable sources, although often such data are available by subscription only and cannot be reproduced without consent of their publisher. These data, however, are collected based on different product categories, timing, and commercial considerations, and thereby may not be directly comparable with each other. Moreover, such data are distinct from the pricing data presented in Part V of this report, which are collected directly from U.S. producers and U.S. importers via the Commission’s questionnaires according to precise product definitions.

²⁹ ***’s importer questionnaires responses, III-27.

³⁰ ***’s importer questionnaire response, III-27.

³¹ ***’s importer questionnaire response, III-27.

³² ***’s importer questionnaire response, III-27.

³³ ***’s importer questionnaire response, III-27.

³⁴ ***’s importer questionnaire response, III- 27.

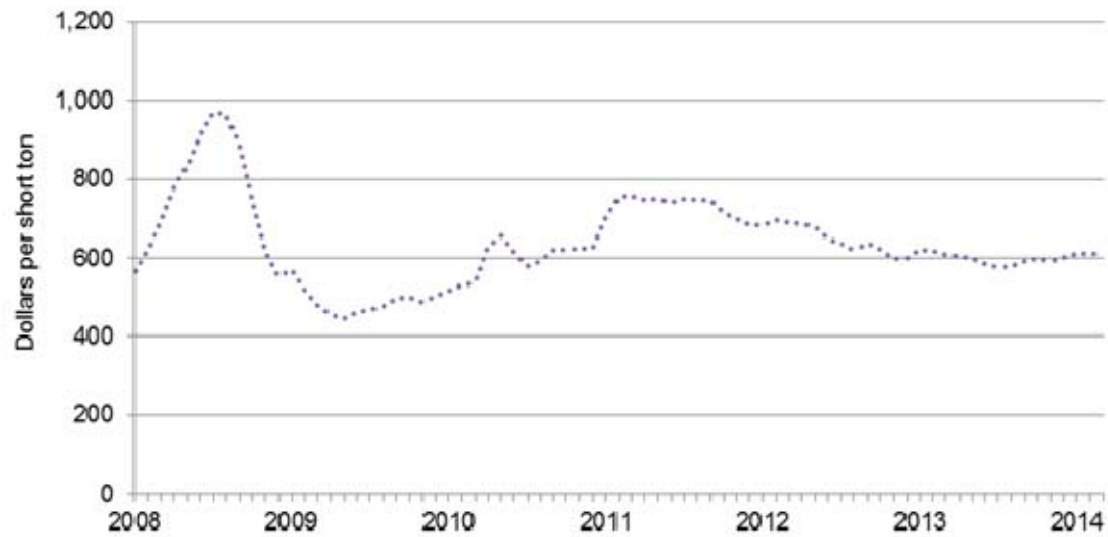
³⁵ ***’s importer questionnaire response, III-27.

As reported by MEPS, world prices for wire rod increased irregularly between January 2008 and March 2014, increasing from \$565 per short ton to \$612 per short ton during that time, but below the peak price of \$970 per short ton in July 2008.³⁶ Figure IV-1 presents the average world price of wire rod between January 2008 and March 2014. Figure IV-2 presents prices of wire rod by regions between January 2008 and March 2014.

³⁶ Original data are published in metric tons, and were converted to short tons using the following conversion factor: 1 metric ton = 1.1023 short tons. MEPS, *World Carbon Steel Product Prices*, found at <http://www.meps.co.uk>, retrieved on March 19-25, 2014. This pricing series is available to the public and its use is unrestricted. Prices are an arithmetic average of the low transaction values identified in the EU, Asia, and North America, converted into U.S. dollars.

Figure IV-1

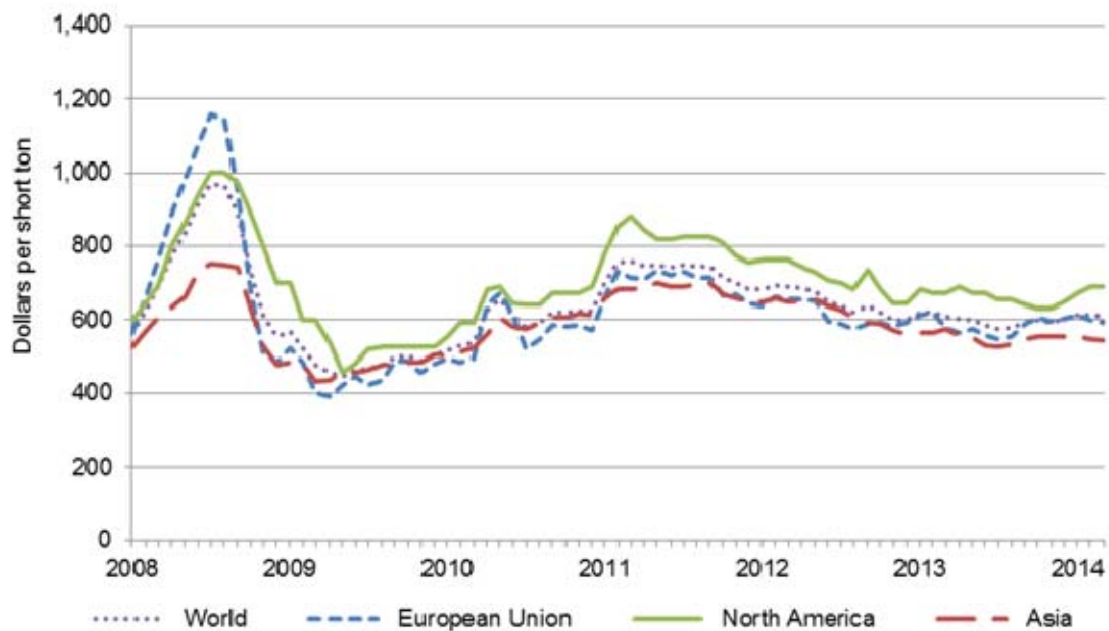
Wire rod: Average world price per short ton for wire rod, January 2008-March 2014



Source: MEPS, *International Steel Review*, "World/Regional Average Transaction Prices," various issues.

Figure IV-2

Wire rod: Prices per short ton by region, January 2008-March 2014



Source: MEPS, *International Steel Review*, "World/Regional Average Transaction Prices," various issues.

As presented in table IV-38, country-specific monthly transaction prices for wire rod are also compiled by MEPS,³⁷ and show monthly price fluctuations across major producing countries. According to data compiled by MEPS, U.S. negotiated transaction prices for U.S.-produced wire rod rose since the beginning of 2008 to a peak in July and August of that year, before bottoming out in May 2009. Wire rod subsequently rose until March 2011, but not as high as the peak back in summer of 2008, and declined through November 2013. . Between December 2013 and March 2014, prices rose to regain the level of December 2010.

Prices in Canada closely followed U.S. prices, with the price differential ranging between \$*** below U.S. prices in November 2008 and \$*** above U.S. prices in December 2012. The gap between U.S. and Canadian prices has continued to widen since the narrowest difference (\$*** below U.S. prices) in November 2013 through March 2014.

In Europe, major steel market price trends for wire rod also followed those in the United States, but with a higher average peak values in July and August 2008 (\$*** above the U.S. price level). In contrast, the subsequent price peaked occurred 2 months later (in May 2011) and at lower average values (\$***) compared to the U.S. price peak back in March 2011. In the first three months of 2014, European average prices were \$*** below those in the United States for wire rod.

³⁷ MEPS, *International Steel Review*, January 2005-March 2014 editions, p. 1.

Table IV-38

**Wire rod: Negotiated transaction prices (ex-mill) for wire rod, by country and by month,
January 2008-March 2014**

* * * * *

Table IV-38--*Continued*

**Wire rod: Negotiated transaction prices (ex-mill) for wire rod, by country and by month,
January 2008-March 2014**

* * * * *

Table IV-38--*Continued*

**Wire rod: Negotiated transaction prices (ex-mill) for wire rod, by country and by month,
January 2008-March 2014**

* * * * *

Table IV-38--Continued

**Wire rod: Negotiated transaction prices (ex-mill) for wire rod, by country and by month,
January 2008-March 2014**

* * * * *

With regard to Asian markets, Chinese market prices were consistently below, by \$*** per short ton, U.S. wire rod prices, throughout January 2008- March 2014. Korean wire rod market prices generally were below those in the United States, with notable exceptions during July-December 2010 (on average, \$*** above U.S. prices) and November 2013-February 2014 (on average, \$*** above U.S. prices). Japanese market prices generally exceeded U.S. prices in mid-2009 through mid-2012, fluctuating from \$*** above U.S. prices to \$*** below U.S. prices. On average, Japanese market prices were \$*** above U.S. prices over the January 2008-March 2014 period.

Additional Global Supply and Demand Factors

Worldwide, the majority of wire-rod rolling mill capacity resides in East and Southeast Asia, with *** percent, by ***'s estimate, compared to *** percent in Europe and *** percent in North America and *** percent in the CIS during 2008-12. Table IV-39 presents regional rolling mill capacities for wire rod and their respective shares of global capacity.

With respect to trade in wire rod, both imports and exports worldwide grew between 2008 and 2012. As shown in table IV-40, between 2008 and 2012, worldwide wire rod imports increased by 2.6 percent.

Exports have similarly grown, as shown in table IV-41; between 2008 and 2012, worldwide wire rod exports increased by 5.8 percent.³⁸

³⁸ Import and export data for 2013 were not yet available for all countries.

Table IV-39

Wire rod: Global and regional rolling mill capacities, 2008-12, and forecasts of global and regional rolling mill capacities, 2013-15

* * * * *

Table IV-40
Wire rod: Global imports, 2008-12

Reporting country	2008	2009	2010	2011	2012
Quantity (short tons)					
United States	1,752,637	892,368	1,596,012	1,322,409	1,588,189
Top import markets:					
Netherlands	1,144,569	1,105,063	1,315,585	1,701,221	1,647,878
Korea	1,208,879	769,324	1,384,308	1,561,034	1,619,327
Germany	1,461,553	1,122,675	1,381,995	1,432,678	1,395,396
Thailand	647,889	501,990	763,034	799,039	1,142,153
Italy	1,275,799	872,395	1,047,085	1,054,944	802,343
Malaysia	312,074	316,573	493,031	428,901	663,697
France	751,851	552,133	681,713	654,588	601,151
Algeria	414,547	526,260	354,765	499,227	557,489
Indonesia	202,352	181,172	246,443	285,424	511,780
Japan	267,153	280,896	347,310	402,952	488,483
Subtotal	7,686,667	6,228,482	8,015,269	8,820,008	9,429,698
All Other	9,306,559	6,849,675	8,276,330	8,863,361	8,481,379
Total	18,745,862	13,970,525	17,887,612	19,005,779	19,499,265
Value (\$1,000)					
United States	1,462,189	595,446	1,141,462	1,156,860	1,263,485
Top import markets:					
Netherlands	827,235	451,207	592,695	773,850	699,589
Korea	958,831	427,038	908,861	1,196,229	1,098,504
Germany	1,283,201	653,956	929,359	1,234,382	1,079,612
Thailand	580,097	324,460	559,359	675,990	844,701
Italy	1,133,275	508,276	693,711	890,683	607,867
Malaysia	254,924	196,589	326,162	343,599	467,648
France	667,067	340,242	472,288	591,637	476,462
Algeria	294,786	245,784	195,703	345,953	353,838
Indonesia	168,767	115,919	172,284	230,461	352,793
Japan	210,618	158,723	220,426	316,248	329,601
Subtotal	6,378,801	3,422,195	5,070,848	6,599,031	6,310,615
All Other	7,781,224	3,794,030	5,404,503	7,130,584	6,270,473
Total	15,622,215	7,811,670	11,616,813	14,886,476	13,844,572

Table continued on next page.

Table IV-40--Continued
Wire rod: Global imports, 2008-12

	2008	2009	2010	2011	2012
Unit value (<i>per short ton</i>)					
United States	\$834	\$667	\$715	\$875	\$796
Top import markets:					
Netherlands	723	408	451	455	425
Korea	793	555	657	766	678
Germany	878	582	672	862	774
Thailand	895	646	733	846	740
Italy	888	583	663	844	758
Malaysia	817	621	662	801	705
France	887	616	693	904	793
Algeria	711	467	552	693	635
Indonesia	834	640	699	807	689
Japan	788	565	635	785	675
Subtotal	830	549	633	748	669
All Other	836	554	653	805	739
Total	833	559	649	783	710

Note--. HS codes included: 7213.91, 7213.99, 7227.20, and 7227.90.

Source: Reported by Global Trade Atlas.

Table IV-41
Wire rod: Global exports, 2008-12

Reporting country	2008	2009	2010	2011	2012
Quantity (short tons)					
United States	145,815	151,913	177,046	191,942	167,925
Top 10 markets:					
China	5,545,712	1,174,400	2,524,968	3,210,167	6,087,504
Germany	2,264,025	1,701,298	2,069,053	2,193,541	2,274,289
Japan	1,190,846	966,694	1,575,939	1,599,688	1,463,040
Ukraine	1,631,483	1,647,537	1,985,129	1,899,882	1,688,650
Czech Republic	621,843	638,757	772,511	871,262	948,862
Spain	694,838	678,691	685,098	721,933	937,992
Turkey	850,952	1,143,459	1,096,805	1,239,062	985,226
United Kingdom	638,388	549,777	746,309	612,855	669,620
Italy	684,873	588,166	610,650	603,394	644,959
Russia	666,361	1,125,203	950,623	944,791	643,779
Subtotal	14,789,321	10,213,982	13,017,085	13,896,574	16,343,922
All other	7,031,738	6,558,231	7,804,725	7,579,264	6,409,904
Total	21,966,873	16,924,127	20,998,855	21,667,779	22,921,751
Value (\$1,000)					
United States	117,814	111,961	143,278	162,572	160,429
Top 10 markets					
China	4,314,943	564,568	1,393,123	2,108,971	3,404,928
Germany	1,939,840	940,555	1,325,841	1,774,878	1,565,412
Japan	1,053,210	712,525	1,345,667	1,640,268	1,403,642
Ukraine	1,102,802	600,458	920,223	1,168,837	963,666
Czech Republic	527,673	337,341	472,244	670,219	627,811
Spain	637,486	384,465	466,207	620,235	658,203
Turkey	576,164	472,738	551,351	774,095	573,829
United Kingdom	529,219	283,599	455,020	482,787	457,221
Italy	612,391	315,212	383,484	488,439	440,574
Russia	395,898	390,885	393,089	557,376	365,642
Subtotal	11,689,626	5,002,346	7,706,247	10,286,105	10,460,927
All other	5,719,692	3,412,651	4,637,274	5,717,991	4,479,019
Total	17,527,133	8,526,958	12,486,799	16,166,668	15,100,375

Table continued on next page.

Table IV-41--Continued
Wire rod: Global exports, 2008-12

Reporting country	2008	2009	2010	2011	2012
Unit value (<i>per short ton</i>)					
United States	\$808	\$737	\$809	\$847	\$955
Top 10 markets					
China	778	481	552	657	559
Germany	857	553	641	809	688
Japan	884	737	854	1,025	959
Ukraine	676	364	464	615	571
Czech Republic	849	528	611	769	662
Spain	917	566	680	859	702
Turkey	677	413	503	625	582
United Kingdom	829	516	610	788	683
Italy	894	536	628	809	683
Russia	594	347	414	590	568
Subtotal	790	490	592	740	640
All other	813	520	594	754	699
Total	798	504	595	746	659
Note--. Data reported by GTA for exports from Mexico to Mexico were removed because it was assumed that these data were in error (46,002 short tons in 2002).					
Note--. HS codes included: 7213.91, 7213.99, 7227.20, and 7227.90.					
Source: Reported by Global Trade Atlas.					

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The primary inputs used in the production of wire rod are billets produced from steel scrap, natural gas, and electricity. Different types of steel scrap are used in different types of wire rod, with busheling scrap used to produce higher-end product and heavy melt used to produce less-specialized wire rod.¹ As discussed in greater detail in *Part III* of this report, raw materials as a share of cost of goods sold (“COGS”) ranged from 60.0 percent to 72.0 percent, with a weighted average of 67.2 percent during 2008-13.

Steel scrap prices fluctuated between January 2008 and December 2013, peaking during the last week of July 2008 and then falling to a period low in the second week of November 2008 (figure V-1). Prices of all three steel scrap materials increased irregularly from the end of 2008 through the end of 2010 and then continued to fluctuate, decreasing slightly from the first week of January 2011 through the last week of December 2013.

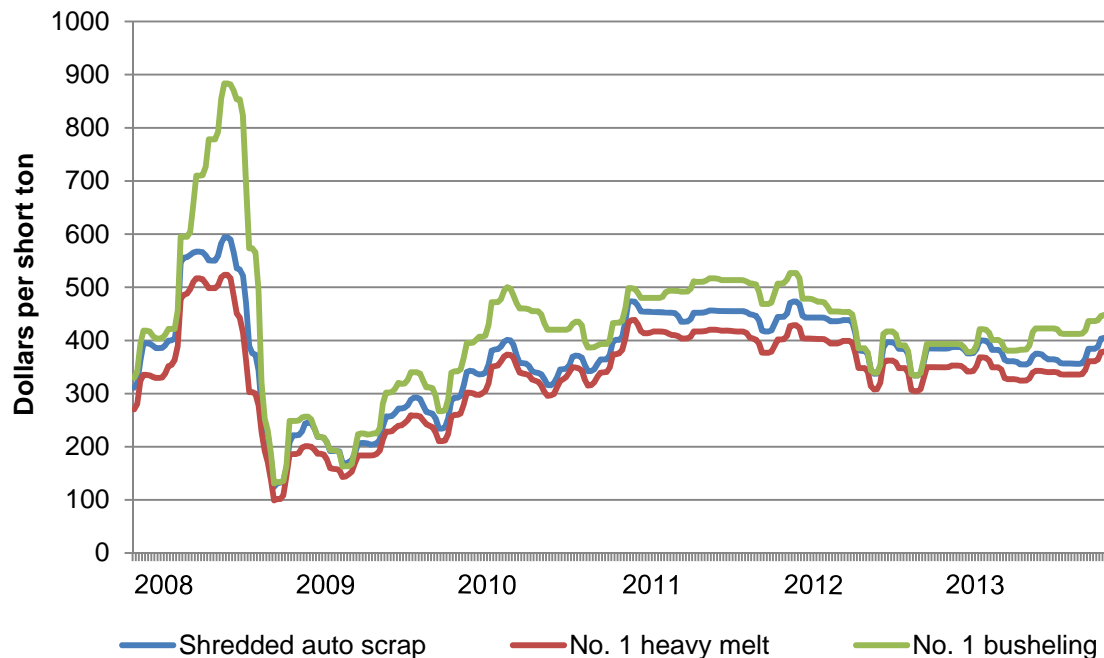
The majority of producers reported that raw material costs are the primary factor in pricing wire rod. However, three producers reported that although raw material costs have been increasing, they have been unable to recover those costs due to low-priced wire rod imports, primarily from China. The majority of producers (8 of 10) reported that they expect

¹ *Carbon and Certain Alloy Steel Wire Rod From Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine: Investigation Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review)*, USITC Publication 4014, June 2008, p. V-1.

steel scrap costs to continue fluctuating monthly; three of these producers expect raw material costs to trend upward.

Figure V-1

U.S. ferrous scrap prices: Weekly scrap prices, January 2008-December 2013



Source: American Metal Market LLC.

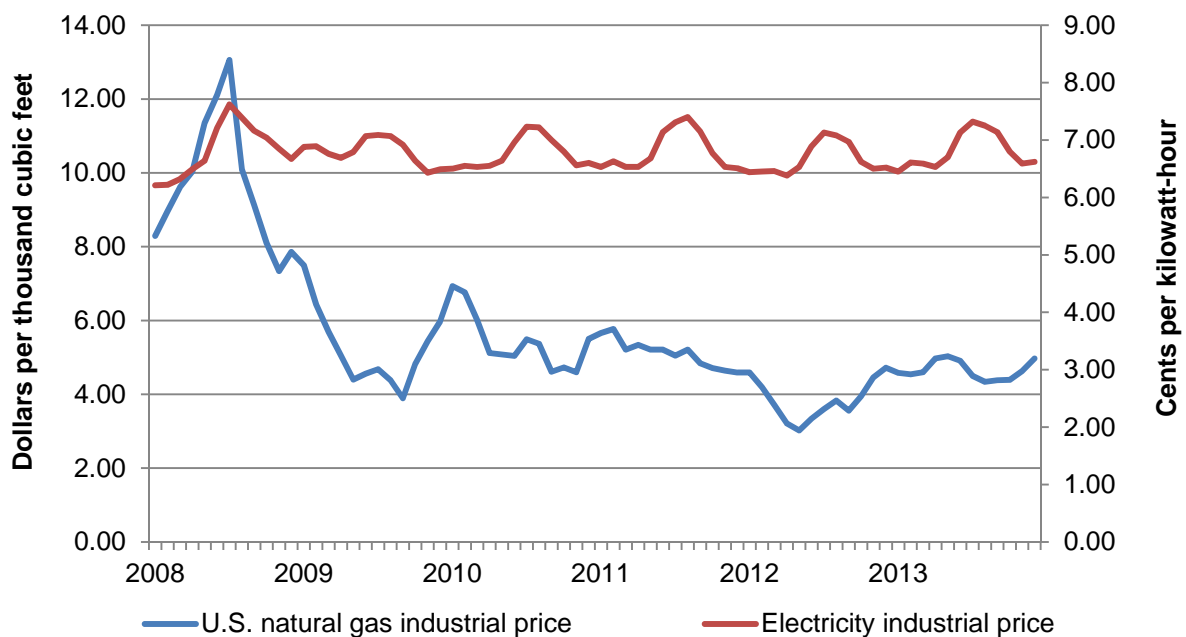
Energy prices have also fluctuated during 2008-13; however, the price fluctuations for natural gas prices were more pronounced than those for electricity (figure V-2). Overall, U.S. natural gas prices decreased during the period.² U.S. natural gas prices peaked in mid-2008 and then fell steeply until October 2009 when prices began to rise. Prices of natural gas decreased

² Annual U.S. natural gas prices for industrial customers fell 51.7 percent from \$9.65 per thousand cubic feet in 2008 to \$4.66 per thousand cubic feet in 2013.

irregularly between January 2010 and May 2012, and then increased irregularly through December 2013. Electricity prices fluctuated seasonally but with no significant net changes.³

Figure V-2

U.S. natural gas and electricity prices for industrial customers, monthly, January 2008-December 2013



Source: U.S. Energy Information Administration, <http://www.eia.doe.gov>, retrieved on March 6, 2014.

³ Average annual electricity prices for industrial customers fell 1/100 cent from 6.83 cents per kilowatt-hour to 6.82 cents per kilowatt-hour between 2008 and 2013.

Transportation costs to the U.S. market

Transportation costs for wire rod shipped from subject countries to the United States averaged 8.8 percent for Brazil, 2.4 percent for Mexico, and 9.2 percent for Trinidad and Tobago during 2008-13.^{4 5} These estimates were derived from official import data and represent the transportation and other charges on imports.⁶

The majority of importers (18 of 24) reported that the exporter arranged international transportation to the customer.⁷ Four foreign producers from Brazil, Indonesia, Mexico, and Trinidad and Tobago reported that the exporter arranged transportation. Two of three Mexican producers and both Ukrainian producers reported that the importer arranged transportation. Three foreign producers reported the cost of shipping wire rod to the United States in 2013; the Brazilian producer reported that transportation cost was \$*** per short ton; the Mexican producer reported that transportation costs was \$*** per short ton; and the Indonesian producer reported that the cost was \$*** per short ton.

U.S. inland transportation costs

All nine responding U.S. producers and 8 of 12 responding importers reported that they typically arrange transportation to their customers. U.S. producers reported that their U.S.

⁴ Trinidad and Tobago data are based on 2008 import data.

⁵ There were no imports of subject product from Indonesia, Moldova, and Ukraine between 2008 and 2013.

⁶ The estimated transportation costs were obtained by comparing the customs and c.i.f. values for all years combined (2008-13) for HTS subheadings 7213.91.3011, 7213.91.3015, 7213.91.3020, 7213.91.3092, 7213.91.3093, 7213.91.4500, 7213.91.6000, 7213.99.0030, 7213.99.0090, 7227.20.0000, 7227.20.0030, 7227.20.0080, 7227.90.6010, 7227.90.6020, 7227.90.6080, and 7227.90.6085.

⁷ Six importers reported that the importer arranged international transportation; however, no importer reported the cost of shipping wire rod to the United States.

inland transportation costs averaged 5 to 8 percent while importers reported costs of 1 to 14 percent.

PRICING PRACTICES

Pricing methods

As presented in table V-1, U.S. producers and importers sell primarily on a transaction-by-transaction negotiations. However, firms also reported using contracts, set price lists, and other methods including indexing prices to scrap and other raw material costs as well as current market conditions. The majority of producers (9 of 12) and importers (17 of 20) reported that they consider the cost of scrap steel when setting prices for wire rod. Three producers and three importers reported that they use a separate surcharge for scrap prices.

Table V-1
Wire rod: U.S. producers' and importers' reported price setting methods, by number of responding firms¹

Method	U.S. producers	Importers
Transaction-by-transaction	8	19
Contract	4	6
Set price list	0	1
Other	4	2

¹ The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

Source: Compiled from data submitted in response to Commission questionnaires.

As shown in table V-2, U.S. producers and importers reported their 2013 U.S. commercial shipments of wire rod by type of sale. U.S. producers reported selling the majority

of their wire rod split between short-term contracts and the spot market while both importers of wire rod from Mexico reported selling *** of their product in ***.⁸

Table V-2

Wire rod: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2013

Type of sale	U.S. producers	Importers of product from Mexico
Long-term contracts	3.5	***
Short-term contracts	51.2	***
Spot sales	45.3	***
Total	100.0	100.0

Note.--Because of rounding, figures may not add to the totals shown.

Source: Compiled from data submitted in response to Commission questionnaires.

The majority of purchasers (27 of 34) reported that they purchase product monthly, 5 purchase weekly, and 5 purchase daily, 4 purchase quarterly, and one purchases annually.⁹ All 34 responding purchasers reported that they did not expect their purchasing patterns to change in the next two years. Most (25 of 33) purchasers contact 1 to 5 suppliers before making a purchase.

Sales terms and discounts

U.S. producers and importers quote prices both on an f.o.b. and a delivered basis. Four of 10 U.S. producers and 20 of 24 importers reported that they sold on a delivered basis. The majority of producers (6 of 10) and importers (21 of 24) do not offer discounts. Two producers and two importers reported that they offer quantity-based discounts and two producers and one importer reported that they offer total volume discounts. Five producers reported sales

⁸ No importers from other subject countries reported their sale types.

⁹ Four purchasers indicated that their purchasing frequency varied throughout the year.

terms of ½ percent 10 net 30, three reported net 30 days, two reported 1 percent 10 net 30 days, and one reported ¾ percent 10 net 30 days. In contrast, 17 importers reported net 30 days, seven reported net 60 days, two reported 2/10 net 30 days, and one reported 1 percent 10 net 30 days.

Price leadership

Purchasers reported that Charter Steel, Keystone Steel & Wire, Nucor, and Gerdau were price leaders.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following wire rod products shipped to unrelated U.S. customers during 2008-13.

Product 1.—Industrial quality wire rod, grade C1006, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grates, and other formed products (in green condition, e.g., NOT cleaned, coated, etc.).

Product 2.—Industrial quality wire rod, grade C1008 through C1010, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grates, and other formed products (in green condition, e.g., NOT cleaned, coated, etc.).

Product 3.—Mesh quality wire rod, grades C1006 through C1015, 5.5 mm (7/32 inch) through 14 mm (9/16 inch) in diameter, for the manufacturing of concrete reinforcement products such as wire for A-82 applications (in green condition, e.g., NOT cleaned, coated, etc.).

Product 4.—Grades C1050 through C1070, 5.5 mm (7/32 inch) through 6.5 mm (1/4 inch) in diameter, for spring applications excluding valve spring (in green condition, e.g., NOT cleaned, coated, etc.).

Nine U.S. producers and two importers of wire rod from Mexico provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.¹⁰ Pricing data reported by these firms accounted for approximately 31.0 percent of U.S. producers' shipments of product and *** percent of U.S. shipments of subject imports from Mexico during 2008-13. Price data for products 1-4 are presented in tables V-3 to V-6 and figures V-3 to V-6.

¹⁰ Importers *** provided price data for sales of the requested products. Price data for Deacero's U.S. imports of smaller diameter wire rod from Mexico are presented separately in appendix E.

Table V-3

Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product ¹ and margins of underselling/(overselling), by quarters, January 2008-December 2013

Period	United States		Mexico		
	Price (per short ton)	Quantity (short tons)	Price (per short ton)	Quantity (short tons)	Margin (percent)
2008:					
Jan.-Mar.	\$629.93	66,223	--	0	--
Apr.-June	832.84	80,992	--	0	--
July-Sept.	968.10	67,422	--	0	--
Oct.-Dec.	765.95	33,674	--	0	--
2009:					
Jan.-Mar.	587.37	31,373	--	0	--
Apr.-June	499.70	30,834	--	0	--
July-Sept.	527.86	70,119	--	0	--
Oct.-Dec.	538.35	77,718	--	0	--
2010:					
Jan.-Mar.	582.31	55,887	--	0	--
Apr.-June	649.32	56,231	\$***	***	***
July-Sept.	621.07	49,317	***	***	***
Oct.-Dec.	598.35	66,348	--	0	--
2011:					
Jan.-Mar.	696.23	52,619	--	0	--
Apr.-June	744.55	52,991	--	0	--
July-Sept.	746.72	55,490	--	0	--
Oct.-Dec.	726.84	57,352	***	***	***
2012:					
Jan.-Mar.	740.49	51,424	***	***	***
Apr.-June	742.20	50,288	***	***	***
July-Sept.	665.61	51,449	***	***	***
Oct.-Dec.	647.02	47,934	--	0	--
2013:					
Jan.-Mar.	661.33	52,525	--	0	--
Apr.-June	661.06	57,184	--	0	--
July-Sept.	647.37	39,538	--	0	--
Oct.-Dec.	623.74	60,619	--	0	--

¹ Product 1: Industrial quality wire rod, grade C1006, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grates, and other formed products (in green condition, e.g., NOT cleaned, coated, etc.).

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-4

Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 2¹ and margins of underselling/(overselling), by quarters, January 2008-December 2013

Period	United States		Mexico		
	Price (per short ton)	Quantity (short tons)	Price (per short ton)	Quantity (short tons)	Margin (percent)
2008:					
Jan.-Mar.	\$608.01	112,341	--	0	--
Apr.-June	803.18	104,554	\$***	***	***
July-Sept.	983.72	96,361	--	0	--
Oct.-Dec.	827.86	24,431	***	***	***
2009:					
Jan.-Mar.	571.40	26,070	***	***	***
Apr.-June	500.46	76,105	***	***	***
July-Sept.	527.13	100,010	***	***	***
Oct.-Dec.	536.43	87,642	***	***	***
2010:					
Jan.-Mar.	545.32	105,556	***	***	***
Apr.-June	592.48	133,320	***	***	***
July-Sept.	593.19	90,253	***	***	***
Oct.-Dec.	596.34	78,875	***	***	***
2011:					
Jan.-Mar.	682.67	124,344	--	0	--
Apr.-June	725.59	147,345	--	0	--
July-Sept.	725.42	124,031	--	0	--
Oct.-Dec.	710.89	136,296	***	***	***
2012:					
Jan.-Mar.	719.16	130,660	***	***	***
Apr.-June	716.01	126,868	***	***	***
July-Sept.	651.67	108,924	***	***	***
Oct.-Dec.	636.10	80,176	--	0	--
2013:					
Jan.-Mar.	644.23	109,879	--	0	--
Apr.-June	661.44	96,010	--	0	--
July-Sept.	630.02	82,624	--	0	--
Oct.-Dec.	623.65	82,123	***	***	***

¹ Product 2: Industrial quality wire rod, grade C1008 through C1010, 5.5 mm (7/32 inch) through 12 mm (15/32 inch) in diameter, for hangers, chain link fencing, collated nails and staples, grates, and other formed products (in green condition, e.g., NOT cleaned, coated, etc.).

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-5

Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 3¹ and margins of underselling/(overselling), by quarters, January 2008-December 2013

Period	United States		Mexico		
	Price (per short ton)	Quantity (short tons)	Price (per short ton)	Quantity (short tons)	Margin (percent)
2008:					
Jan.-Mar.	\$600.10	157,970	--	0	--
Apr.-June	793.82	145,963	--	0	--
July-Sept.	999.38	123,287	--	0	--
Oct.-Dec.	807.31	55,134	--	0	--
2009:					
Jan.-Mar.	603.57	38,034	--	0	--
Apr.-June	505.46	74,545	--	0	--
July-Sept.	522.94	99,487	\$***	***	***
Oct.-Dec.	540.38	67,544	--	0	--
2010:					
Jan.-Mar.	573.33	97,267	--	0	--
Apr.-June	646.31	91,568	***	***	***
July-Sept.	627.89	91,037	--	0	--
Oct.-Dec.	612.42	74,798	***	***	***
2011:					
Jan.-Mar.	681.09	108,039	--	0	--
Apr.-June	731.76	102,588	--	0	--
July-Sept.	737.61	101,646	--	0	--
Oct.-Dec.	712.69	117,620	***	***	***
2012:					
Jan.-Mar.	723.55	142,543	***	***	***
Apr.-June	717.04	128,694	***	***	***
July-Sept.	656.06	132,341	***	***	***
Oct.-Dec.	629.73	103,770	--	0	--
2013:					
Jan.-Mar.	641.09	122,648	--	0	--
Apr.-June	657.91	125,272	--	0	--
July-Sept.	630.92	109,866	--	0	--
Oct.-Dec.	621.26	96,799	***	***	***

¹ Product 3: Mesh quality wire rod, grades C1006 through C1015, 5.5 mm (7/32 inch) through 14 mm (9/16 inch) in diameter, for the manufacturing of concrete reinforcement products such as wire for A-82 applications (in green condition, e.g., NOT cleaned, coated, etc.).

Source: Compiled from data submitted in response to Commission questionnaires.

Table V-6

Wire rod: Weighted-average f.o.b. prices and quantities of domestic and imported product 4¹ and margins of underselling/(overselling), by quarters, January 2008-December 2013

Period	United States		Mexico		
	Price (per short ton)	Quantity (short tons)	Price (per short ton)	Quantity (short tons)	Margin (percent)
2008:					
Jan.-Mar.	\$627.11	17,631	--	0	--
Apr.-June	887.76	22,243	--	0	--
July-Sept.	1,104.35	19,659	--	0	--
Oct.-Dec.	923.51	12,244	--	0	--
2009:					
Jan.-Mar.	643.94	9,758	--	0	--
Apr.-June	559.51	12,149	--	0	--
July-Sept.	577.72	15,681	--	0	--
Oct.-Dec.	589.57	16,120	--	0	--
2010:					
Jan.-Mar.	638.25	21,382	--	0	--
Apr.-June	698.52	25,649	\$***	***	***
July-Sept.	709.34	11,310	***	***	***
Oct.-Dec.	681.55	13,490	--	0	--
2011:					
Jan.-Mar.	745.64	22,551	--	0	--
Apr.-June	791.11	28,115	--	0	--
July-Sept.	794.67	19,343	--	0	--
Oct.-Dec.	767.57	19,378	***	***	***
2012:					
Jan.-Mar.	758.35	27,350	***	***	***
Apr.-June	766.40	30,372	***	***	***
July-Sept.	716.99	15,614	***	***	***
Oct.-Dec.	699.44	16,814	--	0	--
2013:					
Jan.-Mar.	715.71	19,751	--	0	--
Apr.-June	710.42	22,564	--	0	--
July-Sept.	687.67	18,132	***	***	***
Oct.-Dec.	701.67	14,469	***	***	***

¹ Product 4: Grades C1050 through C1070, 5.5 mm (7/32 inch) through 6.5 mm (1/4 inch) in diameter, for spring applications excluding valve spring (in green condition, e.g., NOT cleaned, coated, etc.).

Source: Compiled from data submitted in response to Commission questionnaires.

Figure V-3

**Wire rod: Weighted-average prices and quantities of domestic and imported product, by quarters,
January 2008-December 2013**

* * * * *

Figure V-4

**Wire rod: Weighted-average prices and quantities of domestic and imported product, by quarters,
January 2008-December 2013**

* * * * *

Figure V-5

**Wire rod: Weighted-average prices and quantities of domestic and imported product, by quarters,
January 2008-December 2013**

* * * * *

Figure V-6

**Wire rod: Weighted-average prices and quantities of domestic and imported product, by quarters,
January 2008-December 2013**

* * * * *

Price trends

Prices for wire rod generally increased during 2008-13. Table V-7 summarizes the price trends, by country and by product. As shown in the table, domestic price increases ranged from 2.6 percent to 11.9 percent during 2008-13 while import price increases ranged from 5.1 percent to 23.8 percent. Domestic prices for all four products steadily increased from first quarter of 2008 and then peaked during the third quarter of 2011; domestic prices generally declined over the following nine quarters. Available price data of wire rod imported from Mexico is sporadic but shows similar price trends to domestic prices, with prices peaking in the third quarter of 2011 before falling through the end of the period.

Table V-7

Wire rod: Summary of weighted-average f.o.b. prices for products 1-4 from the United States and Mexico

Item	Number of quarters	Low price (per unit)	High price (per unit)	Change in price ¹ (percent)
Product 1				
United States	24	499.70	968.10	(1.0)
Mexico	6	***	***	19.6
Product 2				
United States	24	500.46	983.72	2.6
Mexico	15	***	***	(29.0)
Product 3				
United States	24	505.46	999.38	3.5
Mexico	8	***	***	23.8
Product 4				
United States	24	559.51	1104.35	11.9
Mexico	8	***	***	5.1

¹ Percentage change from the first quarter in which data were available to the last quarter in which price data were available, based on rounded data.

Source: Compiled from data submitted in response to Commission questionnaires.

Price comparisons

As shown in table V-8, prices for wire rod imported from Mexico were below those for U.S.-produced product in 30 of 37 instances; margins of underselling ranged from *** to *** percent. In the remaining 7 instances, prices for wire rod imported from Mexico were higher than domestic prices, with margins of overselling ranging from *** to ***.¹¹

¹¹ In the original investigations, Brazilian product undersold domestic product in 38 of 47 possible price comparisons, with an average margin of *** percent; Indonesian product undersold domestic product in all 3 possible price comparisons, with an average margin of *** percent; product imported from Mexico undersold domestic product in 37 of 46 possible comparisons, with an average margin of *** percent; product imported from Moldova undersold domestic product in 19 of 22 possible price comparisons, with an average margin of *** percent; product imported from Trinidad and Tobago undersold domestic product in 36 of 52 possible price comparisons, with an average margin of *** percent; product imported from Ukraine undersold domestic product in 21 of 22 possible price comparisons, with an average margin of *** percent. In the first reviews, product imported from Brazil undersold domestic product in all 3 possible price comparisons, with an average margin of *** percent; Indonesian product undersold domestic product in all 3 possible price comparisons, with an average margin of *** percent; product imported from Mexico undersold domestic product in 26 of 54 possible comparisons, with margins of underselling ranging from *** to *** percent; product imported from Moldova undersold domestic product in all 5 possible price comparisons, with an average margin of *** percent; product imported from Trinidad and Tobago undersold domestic product in 8 of 14 possible price comparisons, with margins of underselling ranging from *** to *** percent; product imported from Ukraine undersold domestic product in all 6 possible price comparisons, with an average margin of *** percent. *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Germany, Indonesia, Mexico, Moldova, Trinidad and Tobago, Turkey, and Ukraine*, Inv. Nos. 701-TA-417-421 and 731-TA-953, 954, 956-959, 961, and 962 (Final), USITC Staff Report, pp. V-15-V-29; and *Carbon and Certain Alloy Steel Wire Rod from Brazil, Canada, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine*, Inv. Nos. 701-TA-417 and 731-TA-953, 954, 957-959, 961, and 962 (Review), USITC Staff Report, p. V-26.

Table V-8

Wire rod: Instances of underselling/overselling and the range and average of margins, by product from Mexico, January 2008-December 2013

Product	Underselling			Overselling		
	Number of instances	Range (percent)	Average margin (percent)	Number of instances	Range (percent)	Average margin (percent)
Product 1	4	***	***	2	***	***
Product 2	12	***	***	3	***	***
Product 3	6	***	***	2	***	***
Product 4	8	***	***	0	--	--
Total	30	***	9.6	7	***	(1.8)

Source: Compiled from data submitted in response to Commission questionnaires.

APPENDIX A

***FEDERAL REGISTER* NOTICES**

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
78 FR 33063 June 3, 2013	<i>Initiation of Five-Year ("Sunset") Review</i>	http://www.usitc.gov/trade_remedy/731_ad_701_cvd/investigations/2013/wire_rod/PDF/Commerce%20initiation.pdf
78 FR 33103 June 3, 2013	<i>Carbon and Certain Alloy Steel Wire Rod From Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine: Institution of five-year reviews</i>	http://www.usitc.gov/trade_remedy/731_ad_701_cvd/investigations/2013/wire_rod/PDF/Institution.pdf
78 FR 60316 October 1, 2013	<i>Carbon and Certain Alloy Steel Wire Rod From Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine: Notice of Commission Determination To Conduct Full Five-Year Reviews</i>	http://www.usitc.gov/trade_remedy/731_ad_701_cvd/investigations/2013/wire_rod/PDF/Notice%20to%20conduct%20full%20review.pdf
78 FR 60850 October 2, 2013	<i>Carbon and Certain Alloy Steel Wire Rod From Brazil: Final Results of the Expedited Second Sunset Review of the Countervailing Duty Order</i>	http://www.usitc.gov/trade_remedy/731_ad_701_cvd/investigations/2013/wire_rod/PDF/Commerce%20final%20results%20CVD.pdf
78 FR 63450 October 24, 2013	<i>Carbon and Certain Alloy Steel Wire Rod From Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine: Final Results of the Expedited Second Sunset Reviews of the Antidumping Duty Orders</i>	http://www.usitc.gov/trade_remedy/731_ad_701_cvd/investigations/2013/wire_rod/PDF/Commerce%20final%20results%20AD.pdf
78 FR 76653 December 18, 2013	<i>Carbon and Certain Alloy Steel Wire Rod From Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine Scheduling of full five-year reviews concerning the countervailing duty order on carbon and certain alloy steel wire rod from Brazil and the antidumping duty orders on carbon and certain alloy steel wire rod from Brazil, Indonesia, Mexico, Moldova, Trinidad and Tobago, and Ukraine</i>	http://www.usitc.gov/trade_remedy/731_ad_701_cvd/investigations/2013/wire_rod/PDF/Scheduling.pdf
<p>Note.—The press release announcing the Commission's determinations concerning adequacy and the conduct of a full or expedited review can be found at http://usitc.gov/press_room/news_release/2013/er0906ll1.htm. A summary of the Commission's votes concerning adequacy and the conduct of a full or expedited review can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11596. The Commission's explanation of its determinations can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11597.</p>		

APPENDIX B

LIST OF HEARING WITNESSES {(RESERVED)}

APPENDIX C
SUMMARY DATA

Table C-1

Wire rod: Summary data concerning the U.S. market, 2008-13

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data						Period changes					
	Calendar year						Comparison periods					
	2008	2009	2010	2011	2012	2013	2008-13	2008-09	2009-10	2010-11	2011-12	2012-13
U.S. consumption quantity:												
Amount.....	***	***	***	***	***	5,300,149	***	***	***	***	***	***
Producers' share (1).....	***	***	***	***	***	67.9	***	***	***	***	***	***
Importers' share (1):												
Brazil.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico.....	***	***	***	***	***	0.2	***	***	***	***	***	***
Moldova.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad & Tobago.....	***	0.0	0.0	0.0	0.0	0.0	***	***	0.0	0.0	0.0	0.0
Ukraine.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject sources.....	***	***	***	***	***	0.2	***	***	***	***	***	***
1080 tire cord/tire bead.....	***	***	***	***	***	1.8	***	***	***	***	***	***
All others sources.....	***	***	***	***	***	30.1	***	***	***	***	***	***
Subtotal, nonsubject sources.....	***	***	***	***	***	31.9	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	32.1	***	***	***	***	***	***
U.S. consumption value:												
Amount.....	***	***	***	***	***	3,756,412	***	***	***	***	***	***
Producers' share (1).....	***	***	***	***	***	67.3	***	***	***	***	***	***
Importers' share (1):												
Brazil.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico.....	***	***	***	***	***	0.2	***	***	***	***	***	***
Moldova.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trinidad & Tobago.....	***	0.0	0.0	0.0	0.0	0.0	***	***	0.0	0.0	0.0	0.0
Ukraine.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal, subject sources.....	***	***	***	***	***	0.2	***	***	***	***	***	***
1080 tire cord/tire bead.....	***	***	***	***	***	1.7	***	***	***	***	***	***
All others sources.....	***	***	***	***	***	30.8	***	***	***	***	***	***
Subtotal, nonsubject sources.....	***	***	***	***	***	32.5	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	32.7	***	***	***	***	***	***
U.S. imports from:												
Brazil:												
Quantity.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Value.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Unit value.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Ending inventory quantity.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Indonesia:												
Quantity.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Value.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Unit value.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Ending inventory quantity.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Mexico:												
Quantity.....	***	***	***	***	***	10,333	***	***	***	***	***	***
Value.....	***	***	***	***	***	6,128	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	\$593	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	0	***	***	***	***	***	***
Moldova:												
Quantity.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Value.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Unit value.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Ending inventory quantity.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Trinidad & Tobago:												
Quantity.....	21,794	0	0	0	0	0	(100.0)	(100.0)	(²)	(²)	(²)	(²)
Value.....	14,298	0	0	0	0	0	(100.0)	(100.0)	(²)	(²)	(²)	(²)
Unit value.....	\$656	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Ending inventory quantity.....	***	0	0	0	0	0	***	***	(²)	(²)	(²)	(²)
Ukraine:												
Quantity.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Value.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Unit value.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Ending inventory quantity.....	0	0	0	0	0	0	(²)	(²)	(²)	(²)	(²)	(²)
Subtotal, subject sources:												
Quantity.....	***	***	***	***	***	10,333	***	***	***	***	***	***
Value.....	***	***	***	***	***	6,128	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	\$593	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	0	***	***	***	***	***	***

Table continued on next page.....

Table C-1
Wire rod: Summary data concerning the U.S. market, 2008-13
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data						Period changes					
	Calendar year						Comparison periods					
	2008	2009	2010	2011	2012	2013	2008-13	2008-09	2009-10	2010-11	2011-12	2012-13
U.S. imports from:												
1080 tire cord/tire bead.....												
Quantity.....	139,459	71,759	129,184	116,513	102,517	96,639	(30.7)	(48.5)	80.0	(9.8)	(12.0)	(5.7)
Value.....	126,654	50,808	91,621	103,073	84,521	64,506	(49.1)	(59.9)	80.3	12.5	(18.0)	(23.7)
Unit value.....	\$908	\$708	\$709	\$885	\$824	\$667	(26.5)	(22.0)	0.2	24.7	(6.8)	(19.0)
Ending inventory quantity.....	0	0	0	0	0	0	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
All other sources:												
Quantity.....	1,536,768	777,083	1,284,771	1,059,512	1,391,895	1,593,718	3.7	(49.4)	65.3	(17.5)	31.4	14.5
Value.....	1,360,431	550,614	988,457	992,791	1,159,903	1,156,290	(15.0)	(59.5)	79.5	0.4	16.8	(0.3)
Unit value.....	\$885	\$709	\$769	\$937	\$833	\$726	(18.0)	(20.0)	8.6	21.8	(11.1)	(12.9)
Ending inventory quantity.....	100,972	54,991	66,339	61,711	88,238	105,967	4.9	(45.5)	20.6	(7.0)	43.0	20.1
Subtotal, nonsubject sources:												
Quantity.....	1,676,227	848,842	1,413,955	1,176,024	1,494,413	1,690,357	0.8	(49.4)	66.6	(16.8)	27.1	13.1
Value.....	1,487,085	601,423	1,080,078	1,095,863	1,244,424	1,220,797	(17.9)	(59.6)	79.6	1.5	13.6	(1.9)
Unit value.....	\$887	\$709	\$764	\$932	\$833	\$722	(18.6)	(20.1)	7.8	22.0	(10.6)	(13.3)
Ending inventory quantity.....	100,972	54,991	66,339	61,711	88,238	105,967	4.9	(45.5)	20.6	(7.0)	43.0	20.1
Total imports:												
Quantity.....	***	***	***	***	***	1,700,690	***	***	***	***	***	***
Value.....	***	***	***	***	***	1,226,925	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	\$721	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	105,967	***	***	***	***	***	***
U.S. producers:												
Average capacity quantity.....	5,546,751	5,295,752	4,965,095	5,173,168	5,131,954	5,073,815	(8.5)	(4.5)	(6.2)	4.2	(0.8)	(1.1)
Production quantity.....	4,055,641	2,837,165	3,384,322	3,907,416	3,879,060	3,655,088	(9.9)	(30.0)	19.3	15.5	(0.7)	(5.8)
Capacity utilization (1).....	73.1	53.6	68.2	75.5	75.6	72.0	(1.1)	(19.5)	14.6	7.4	0.1	(3.5)
U.S. shipments:												
Quantity.....	4,050,961	2,833,426	3,340,954	3,876,145	3,809,728	3,599,459	(11.1)	(30.1)	17.9	16.0	(1.7)	(5.5)
Value.....	3,485,005	1,651,451	2,246,759	3,012,054	2,826,974	2,529,487	(27.4)	(52.6)	36.0	34.1	(6.1)	(10.5)
Unit value.....	\$860	\$583	\$672	\$777	\$742	\$703	(18.3)	(32.3)	15.4	15.6	(4.5)	(5.3)
Export shipments:												
Quantity.....	39,707	39,301	42,049	34,687	26,748	24,319	(38.8)	(1.0)	7.0	(17.5)	(22.9)	(9.1)
Value.....	31,925	22,886	26,912	28,888	31,597	22,566	(29.3)	(28.3)	17.6	7.3	9.4	(28.6)
Unit value.....	\$804	\$582	\$640	\$833	\$1,181	\$928	15.4	(27.6)	9.9	30.1	41.8	(21.4)
Ending inventory quantity.....	231,279	195,717	196,677	193,261	235,848	266,868	15.4	(15.4)	0.5	(1.7)	22.0	13.2
Inventories/total shipments (In1).....	5.7	6.8	5.8	4.9	6.1	7.4	1.7	1.2	(1.0)	(0.9)	1.2	1.2
Production workers.....	2,339	2,083	2,173	2,239	2,269	2,192	(6.3)	(10.9)	4.3	3.0	1.3	(3.4)
Hours worked (1,000s).....	4,741	3,825	4,220	4,552	4,587	4,258	(10.2)	(19.3)	10.3	7.9	0.8	(7.2)
Wages paid (\$1,000).....	170,467	128,170	145,939	166,385	174,648	156,838	(8.0)	(24.8)	13.9	14.0	5.0	(10.2)
Hourly wages.....	\$35.96	\$33.51	\$34.58	\$36.55	\$38.07	\$36.83	2.4	(6.8)	3.2	5.7	4.2	(3.3)
Productivity (short tons per 1,000 hours).....	855.4	741.7	802.0	858.4	845.7	858.4	0.3	(13.3)	8.1	7.0	(1.5)	1.5
Unit labor costs.....	\$42.03	\$45.18	\$43.12	\$42.58	\$45.02	\$42.91	2.1	7.5	(4.5)	(1.3)	5.7	(4.7)
Net sales:												
Quantity.....	4,126,388	2,881,432	3,384,018	3,920,918	3,836,475	3,623,777	(12.2)	(30.2)	17.4	15.9	(2.2)	(5.5)
Value.....	3,547,031	1,679,395	2,274,325	3,048,561	2,858,572	2,552,054	(28.1)	(52.7)	35.4	34.0	(6.2)	(10.7)
Unit value.....	\$860	\$583	\$672	\$778	\$745	\$704	(18.1)	(32.2)	15.3	15.7	(4.2)	(5.5)
Cost of goods sold (COGS).....	3,116,677	1,652,958	2,083,987	2,743,626	2,622,588	2,358,335	(24.3)	(47.0)	26.1	31.7	(4.4)	(10.1)
Gross profit of (loss).....	430,354	26,437	190,338	304,735	235,984	193,719	(55.0)	(33.9)	620.0	60.1	(22.6)	(17.9)
SG&A expenses.....	83,259	69,352	91,584	86,722	87,633	86,025	3.3	(16.7)	32.1	(5.3)	1.1	(1.8)
Operating income or (loss).....	347,095	(42,915)	98,754	218,013	148,351	107,694	(69.0)	(¹)	(¹)	120.8	(32.0)	(27.4)
Capital expenditures.....	54,283	35,731	48,287	54,987	95,351	163,405	201.0	(34.2)	35.1	13.9	73.4	71.4
Unit COGS.....	\$755	\$574	\$616	\$700	\$684	\$651	(13.8)	(24.0)	7.4	13.6	(2.3)	(4.8)
Unit SG&A expenses.....	\$20	\$24	\$27	\$22	\$23	\$24	17.7	19.3	12.4	(18.3)	3.3	3.9
Unit operating income or (loss).....	\$84	\$(15)	\$29	\$56	\$39	\$30	(64.7)	(¹)	(¹)	90.5	(30.5)	(23.1)
COGS/sales (1).....	87.9	98.4	91.6	90.0	91.7	92.4	4.5	10.6	(6.8)	(1.6)	1.7	0.7
Operating income or (loss)/sales (1).....	9.8	(2.6)	4.3	7.2	5.2	4.2	(5.6)	(12.3)	6.9	2.8	(2.0)	(1.0)

Notes:
(1)--Report data are in percent and period changes are in percentage points.
(2)--Undefined.
Source: Compiled from data submitted in response to Commission questionnaires and from official statistics of the U.S. Department of Commerce as adjusted.

The pages that follow are a direct duplication of the historical data presented in table I-1 of the Commission's staff report in the first five-year review of the orders.

Table I-1

Wire rod: Summary data from the original investigations and the current full five-year reviews, 1999-2007

(Quantity=short tons; value=1,000 dollars; unit values, unit labor costs, and unit financial data are *per short ton*)

Item	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S. consumption quantity: Amount	***	***	***	7,753,874	6,590,919	8,135,080	6,505,628	7,109,045	5,858,981
Producers' share ¹	***	***	***	51.4	62.8	50.3	57.4	53.7	69.6
Importer's share: Brazil ^{1 2}	***	***	***	***	0.0	0.0	0.0	0.0	0.0
Canada ¹	***	***	***	***	***	***	***	***	***
Indonesia ¹	***	***	***	0.5	0.0	0.4	0.0	0.0	0.0
Mexico ¹	***	***	***	1.6	0.3	0.8	0.2	0.1	0.1
Moldova ¹	***	***	***	0.2	0.0	0.0	0.0	0.0	0.0
Ukraine ¹	***	***	***	0.1	0.0	0.0	0.0	0.0	0.0
Subtotal ¹	***	***	***	***	***	***	***	***	***
Trinidad & Tobago ¹	***	***	***	5.0	2.2	3.2	1.6	1.9	1.6
Subject subtotal ¹	***	***	***	***	***	***	***	***	***
Stelco ¹	***	***	***	***	***	***	***	***	***
Grade 1080 tire cord/tire bead ^{1 2}	(?)	(?)	(?)	***	***	***	***	***	***
Other countries ^{1 2}	***	***	***	29.2	22.8	35.2	30.7	35.9	16.9
Total imports ¹	***	***	***	48.6	37.2	49.7	42.6	46.3	30.4
U.S. consumption value: Amount	***	***	***	2,411,891	2,138,988	4,109,959	3,592,264	3,838,199	3,403,602
Producers' share ¹	***	***	***	53.5	63.3	53.1	58.1	56.0	68.8
Importer's share: Brazil ^{1 2}	***	***	***	***	0.0	0.0	0.0	0.0	0.0
Canada ^{1 2}	***	***	***	***	***	***	***	***	***
Indonesia ¹	***	***	***	0.4	0.0	0.4	0.0	0.0	0.0
Mexico ¹	***	***	***	1.4	0.3	0.8	0.2	0.1	0.1
Moldova ¹	***	***	***	0.2	0.0	0.0	0.0	0.0	0.0
Ukraine ¹	***	***	***	0.1	0.0	0.0	0.0	0.0	0.0
Subtotal ¹	***	***	***	***	***	***	***	***	***
Trinidad & Tobago ¹	***	***	***	4.5	1.8	3.0	1.4	1.7	1.4
Subject subtotal ¹	***	***	***	***	***	***	***	***	***
Stelco ¹	***	***	***	***	***	***	***	***	***
Grade 1080 tire cord/tire bead ^{1 2}	(?)	(?)	(?)	***	***	***	***	***	***
Other countries ^{1 2}	***	***	***	25.8	21.6	31.8	28.5	32.4	16.9
Total imports ¹	***	***	***	46.5	36.7	46.9	41.9	44.0	31.2

Table continued on following page.

Table I-1--Continued

Wire rod: Summary data from the original investigations and the current full five-year reviews, 1999-2007

(Quantity=short tons; value=1,000 dollars; unit values, unit labor costs, and unit financial data are *per short ton*)

Item	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S. imports from--									
Brazil:									
Quantity	***	***	***	***	0	0	0	0	0
Value	***	***	***	***	0	0	0	0	0
Unit value	\$***	\$***	\$***	\$***	--	--	--	--	--
Canada:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Indonesia:									
Quantity	69,805	86,940	60,065	40,863	0	29,937	333	0	0
Value	14,884	19,669	13,116	10,494	0	17,247	262	0	0
Unit value	\$213	\$226	\$216	\$257	--	\$576	\$785	--	--
Mexico:									
Quantity	122,038	159,818	266,925	123,380	19,986	68,498	11,480	4,256	8,244
Value	29,449	39,337	64,309	34,548	6,296	33,332	6,283	2,032	4,263
Unit value	\$241	\$246	\$241	\$280	\$315	\$487	\$547	\$477	\$517
Moldova:									
Quantity	190,239	191,074	187,370	18,826	0	0	0	0	0
Value	38,888	41,667	39,439	3,708	0	0	0	0	0
Unit value	\$204	\$216	\$210	\$197	--	--	--	--	--
Ukraine:									
Quantity	193,003	367,712	258,526	11,159	0	0	738	0	0
Value	35,568	75,568	49,770	2,446	0	0	501	0	0
Unit value	\$184	\$206	\$193	\$219	--	--	\$680	--	--
Subtotal:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Trinidad & Tobago:									
Quantity	341,815	287,507	355,089	386,419	146,783	260,618	104,804	133,326	95,325
Value	87,289	75,511	91,335	107,445	39,267	124,194	50,039	64,253	46,228
Unit value	\$255	\$263	\$257	\$278	\$268	\$477	\$477	\$482	\$485
Subject subtotal:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***

Table continued on following page.

Table I-1--Continued

Wire rod: Summary data from the original investigations and the current full five-year reviews, 1999-2007

(Quantity=short tons; value=1,000 dollars; unit values, unit labor costs, and unit financial data are *per short ton*)

Item	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S. imports from-- Stelco: Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Grade 1080 tire cord/tire bead: Quantity	(?)	(?)	(?)	***	***	***	***	***	***
Value	(?)	(?)	(?)	***	***	***	***	***	***
Unit value	(?)	(?)	(?)	\$***	\$***	\$***	\$***	\$***	\$***
All other countries: ² Quantity	***	***	***	2,262,306	1,505,183	2,859,490	1,997,826	2,554,966	992,163
Value	***	***	***	622,360	462,923	1,308,240	1,024,997	1,244,511	574,316
Unit value	\$***	\$***	\$***	\$275	\$308	\$458	\$513	\$487	\$579
All countries: Quantity	2,787,291	2,987,084	3,066,218	3,765,047	2,453,575	4,039,783	2,773,119	3,294,798	1,782,699
Value	807,586	899,451	875,963	1,121,780	784,088	1,927,796	1,505,063	1,690,689	1,063,201
Unit value	\$290	\$301	\$286	\$298	\$320	\$477	\$543	\$513	\$596
U.S. producers'-- Capacity quantity	***	***	***	4,771,377	5,040,727	4,920,229	5,392,176	5,371,016	5,429,678
Production quantity	***	***	***	4,035,005	4,052,215	4,089,091	3,741,120	3,877,367	4,067,549
Capacity utilization	***	***	***	84.6	80.4	83.1	69.4	72.2	74.9
U.S. shipments: Quantity	***	***	***	3,988,827	4,137,344	4,095,297	3,732,509	3,814,247	4,076,282
Value	***	***	***	1,290,111	1,354,900	2,182,163	2,087,201	2,147,510	2,340,401
Unit value	\$***	\$***	\$***	\$323	\$327	\$533	\$559	\$563	\$574
Export shipments: Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***

Table continued on following page.

Table I-1--Continued**Wire rod: Summary data from the original investigations and the current full five-year reviews, 1999-2007**(Quantity=short tons; value=1,000 dollars; unit values, unit labor costs, and unit financial data are *per short ton*)

Item	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S. producers'-- Ending inventory quantity	***	***	***	250,935	136,816	140,019	164,647	174,288	152,512
Inventories/total shipments ¹	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	2,461	2,513	2,543	2,407	2,395	2,397
Hours worked (1,000 hours)	***	***	***	5,545	5,378	5,474	4,919	5,296	5,174
Wages paid (1,000 dollars)	***	***	***	140,328	139,194	145,620	143,664	161,223	161,821
Hourly wages	\$***	\$***	\$***	\$25.31	\$25.88	\$26.60	\$29.21	\$30.45	\$31.28
Productivity (tons/1,000 hours)	***	***	***	728	754	747	761	732	786
Unit labor costs	\$***	\$***	\$***	\$34.78	\$34.35	\$35.61	\$38.40	\$41.58	\$39.78
Net sales: Quantity	***	***	***	3,996,011	4,151,601	4,103,563	3,749,761	3,844,808	4,087,541
Value	***	***	***	1,291,920	1,358,707	2,182,872	2,100,194	2,165,513	2,347,208
Unit value	\$***	\$***	\$***	\$323	\$327	\$532	\$560	\$563	\$574
Cost of goods sold ("COGS")	***	***	***	1,188,586	1,361,436	1,819,855	1,887,745	2,024,653	2,219,518
Gross profit or (loss)	***	***	***	103,334	(2,729)	363,017	212,449	140,860	127,690
Operating income or (loss)	***	***	***	59,982	(45,952)	305,241	158,656	85,506	74,869
U.S. producers'-- Unit COGS	\$***	\$***	\$***	\$296	\$328	\$443	\$503	\$527	\$543
Unit operating income or (loss)	\$***	\$***	\$***	\$16	(\$11)	\$74	\$42	\$22	\$18
COGS/sales ¹	***	***	***	92.0	100.2	83.4	89.9	93.5	94.6
Operating income or (loss)/sales ¹	***	***	***	4.6	(3.4)	14.0	7.6	3.9	3.2
Capital expenditures	***	***	***	30,524	44,338	49,807	83,826	68,513	49,632

¹ In percent.² Imports of Grade 1080 wire rod have been subtracted from U.S. imports of wire rod ***. Grade 1080 is included in imports from "all other sources." See data files in the original investigations.

Note.--Because of the pending negative determination on remand regarding Trinidad & Tobago, throughout this report, data concerning Trinidad & Tobago are presented as subject merchandise but appear separately from the subtotals of data concerning the other six subject countries.

Source: INV-Z-162, table C-2a, for 1999-2001. Data for 2002-07 were compiled in response to Commission questionnaires and from official Commerce statistics.

APPENDIX D

COMMENTS BY U.S. PRODUCERS, IMPORTERS, PURCHASERS, AND FOREIGN PRODUCERS REGARDING THE EFFECTS OF THE ORDERS AND THE LIKELY EFFECTS OF REVOCATION

This appendix is confidential in its entirety

*

*

*

*

*

*

*

APPENDIX E

SMALLER DIAMETER WIRE ROD FROM DEACERO

This appendix is confidential in its entirety

*

*

*

*

*

*

*