

# CHAPTER 1

## INTRODUCTION

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### Scope of the Study

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This study investigates the current competitive conditions facing the steel-consuming industries in the United States, with respect to the safeguard measures announced by the President on March 5, 2002, and with respect to foreign steel-consuming competitors not covered by such measures. As requested by the U.S. House of Representatives, Committee on Ways and Means (Committee) on March 18, 2003,<sup>1</sup> the analysis was conducted along sectoral lines, in order to assess the impact on differing segments of the U.S. manufacturing sector; and focused on steel products covered by the President's safeguard measures.<sup>2</sup> The report addresses the effects of the safeguard measures on steel-consuming industries and on ports and their related services including the following competitive conditions:<sup>3</sup>

- changes in employment, wages, profitability, sales, productivity, and capital investment of steel-consuming industries;
- an examination of the reported effects of the safeguard measures on factors such as prices for steel paid by consuming industries, steel shortages and availability, the ability of steel consumers to obtain required products or quality specifications, lead and delivery times, contract abrogation, sourcing of finished parts from overseas by customers of steel-consuming industries, and the relocation or shift of U.S. downstream production to foreign plants or facilities;
- the impact of international competitive factors, such as relative differences in steel costs to foreign steel-consuming industries not covered by the safeguard measures, and on steel consumers' exports and imports of steel-containing products;
- an examination of shifts in sourcing patterns in the United States, i.e., how much steel was purchased from domestic steel producers by domestic steel-consuming industries before the safeguard action, and how this sourcing has changed following the implementation of the safeguard measures; and
- a discussion of the likely impact on employment, profitability, capital investment, and international competitiveness of steel-consuming industries of (i) continuation of the safeguard measures for the period September 2003 to March 2005, and (ii) termination of the safeguard measures effective September 20, 2003.

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<sup>1</sup> A copy of the request letter from the Committee is in appendix A. The Commission's *Federal Register* notice of institution of this investigation is also in appendix A.

<sup>2</sup> Throughout this report, "steel" will refer to steel products covered by the safeguard measures announced by the President on Mar. 6, 2002.

<sup>3</sup> Much of the data collected for this report was done so for 3 constructed years: (1) April 2000-March 2001, (2) April 2001-March 2002, and (3) April 2002-March 2003. Throughout this report, references to these constructed years will be made as 2000/01, 2001/02, and 2002/03. For example, if data in the report are reported for 2000/01, the actual data period being referred to is April 2000-March 2001.

In addition, as requested, the U.S. International Trade Commission (USITC or Commission) provides an analysis of the economy-wide effects of these safeguard measures (e.g., on costs borne by steel consumers, tariff revenues entering the U.S. Treasury, income to steel producers, and the net effect on the U.S. economy) using a simulation model.

Following receipt of the Commission's report,<sup>4</sup> the President, pursuant to section 203 of the Act,<sup>5</sup> imposed import relief in the form of tariffs and tariff-rate quotas on imports of certain steel products for a period of 3 years and 1 day effective March 20, 2002. A compilation of *Federal Register* notice citations concerning the section 203 safeguard measures is presented in appendix A. The steel products covered by these section 203 safeguard measures are listed in table 1-1, along with the short forms for referring to these products in this report. These products are described in more detail in Appendix B. In addition, information on the specific steel products covered by the safeguard measures and corresponding tariff and tariff-rate quota remedies is presented in tabulation following table 1-1.

**Table 1-1**  
**Summary of steel products covered by section 203 safeguard measures**

<b>Product group and product description</b>	<b>Short form for this report</b>
<b>A. Carbon and alloy steel:</b>	
1. Flat-rolled steel	
a. Slab	Slab
b. Plate, including cut-to-length plate and clad plate	Plate
c. Hot-rolled sheet and strip, including plate in coils	Hot-rolled
d. Cold-rolled sheet and strip, other than grain-oriented electrical steel	Cold-rolled
e. Corrosion-resistant and other coated sheet and strip	Corrosion resistant
2. Tin-mill products	Tin mill
<b>B. Carbon and alloy long products:</b>	
7. Hot-rolled bar and light shapes	Hot bar
8. Cold-finished bar	Cold bar
9. Rebar	Rebar
<b>C. Carbon and alloy tubular products and fittings:</b>	
10. Welded tubular products other than oil country tubular goods	Welded pipe
11. Flanges and fittings	Fittings
<b>D. Stainless steel products:</b>	
12. Bar and light shapes	Stainless bar
13. Rod	Stainless rod
14. Wire	Stainless wire

<sup>1</sup> Flat-rolled steel is one product composed of five different forms.

Source: USITC compilation.

<sup>4</sup> See *Steel*, Inv. No. TA-201-73, USITC Pub. 3479, December 2001. For additional information on the Commission's section 201 investigation, report, and remedy recommendations, see also, <http://www.usitc.gov/steel/>.

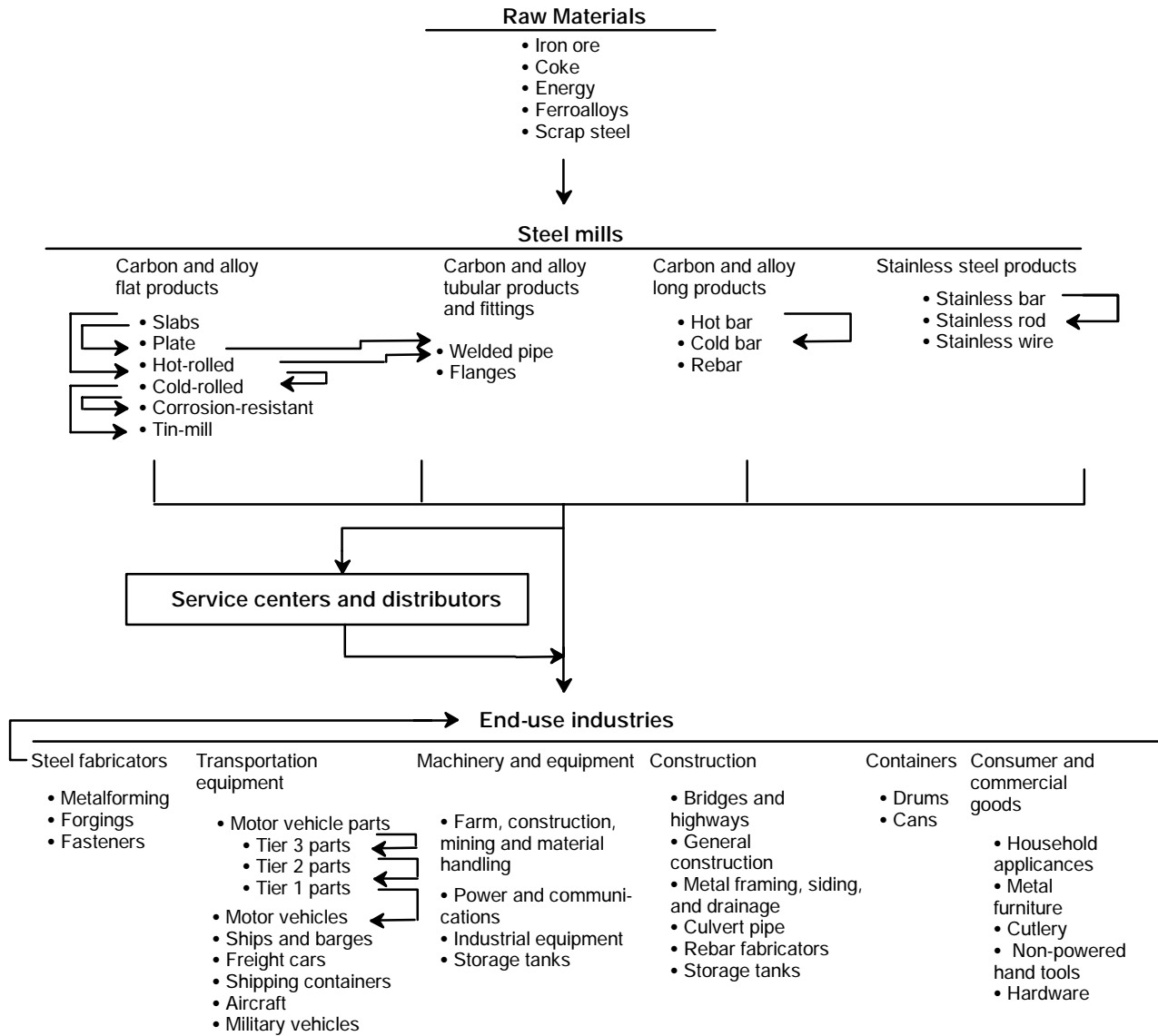
<sup>5</sup> 19 U.S.C. § 2253.

Item	Type of measure	First year of relief	Second year of relief	Third year of relief
		<b>Percent <i>ad valorem</i>, unless otherwise noted</b>		
Certain carbon and alloy flat-rolled steel:				
Slab	Tariff-rate quota (TRQ)	TRQ of 4.90 million metric tons with no increase in duties for imports below the within-quota level and an increase in duties of 30 percent <i>ad valorem</i> for imports above the within-quota level	TRQ of 5.35 million metric tons with no increase in duties for imports below the within-quota level and an increase in duties of 24 percent <i>ad valorem</i> for imports above the within-quota level	TRQ of 5.81 million metric tons with no increase in duties for imports below the within-quota level and an increase in duties of 18 percent <i>ad valorem</i> for imports above the within-quota level
Plate <sup>2</sup>	Increase in duties	30	24	18
Hot-rolled	Increase in duties	30	24	18
Cold-rolled <sup>3</sup>	Increase in duties	30	24	18
Coated	Increase in duties	30	24	18
Tin	Increase in duties	30	24	18
Hot bar	Increase in duties	30	24	18
Cold bar	Increase in duties	30	24	18
Rebar	Increase in duties	15	12	9
Welded products <sup>4</sup>	Increase in duties	15	12	9
Fittings	Increase in duties	13	10	7
Stainless bar	Increase in duties	15	12	9
Stainless rod	Increase in duties	15	12	9
Stainless wire	Increase in duties	8	7	6
<sup>1</sup> The remedy is currently in its second year. See 68 FR 15494, March 31, 2003. <sup>2</sup> Cut-to-length (CTL) and clad plate. <sup>3</sup> Other than grain-oriented electrical steel (GOES). <sup>4</sup> Other than oil country tubular goods (OCTG).				
Source: 67 FR 10553, March 7, 2002.				

Finally, figure 1-1 provides an illustration of the relationship between steel producers and steel-consuming industries. Firms in steel-consuming industries purchase steel both directly from steel mills and from steel service centers and distributors. In addition, some firms in steel-consuming industries also purchase steel containing products.

Figure 1-1

Flow diagram of steel products subject to safeguard measures and links among steel-consuming industries



Source: Compiled by USITC staff from public sources.

## **Approach of the Study**

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The Commission sought information for both the quantitative and qualitative analysis of the steel safeguard measures on steel-consuming industries from several sources, including U.S. industry data, current industry literature, questionnaire responses, and other materials developed by the Commission. Written public submissions in response to the Federal Register notice and interviews with industry officials, trade associations, government officials, and other interested parties provided additional information. The Commission also held public hearings on June 19 and 20, 2003, at which interested parties testified regarding the effect of the safeguards.<sup>6</sup>

In part because the steel safeguard measures were implemented only recently, it is difficult to isolate the effect of the steel safeguard measures on steel-consuming firms. Further, many adjustments to the safeguard measures that steel-consuming firms could take require time and may not be cost effective given the temporary nature of the measure. Therefore, in the 18 months since implementation, changes may not yet have occurred. Finally, the impact of the safeguard measures will have different effects on different industries; one of the most important distinctions may be between steel-consuming firms that produce products using steel largely covered by the safeguard measures and those that produce products that rely on steel not covered by the measures.

### ***Questionnaire Responses***

The Commission sent questionnaires to more than 1,800 purchasers of steel products, and to 128 ports and providers of related services. The questionnaires were sent to purchasers of the covered products in the major consuming industries, which together account for more than 90 percent of steel shipments to manufacturing industries. The mailing list was mainly compiled from publicly available information on firms in 22 manufacturing industries, specified by North American Industry Classification System (NAICS) 4-digit categories, that were the largest consumers of steel products in 1997 (latest year available). Together these firms (specified by NAICS) consumed steel products valued at \$71.3 billion, or about 92 percent<sup>7</sup> of the total \$77.6 billion consumed by all manufacturing industries (table 1-2) during 1997. From lists of the top-75 firms in the largest steel-consuming industries among the corresponding 121 individual 6-digit NAICS categories, staff sent questionnaires to firms of various sizes (in terms of sales/employment). The total number of firms selected from a particular 6-digit NAICS category was based on the relative shares of steel consumed by the industry. This list was supplemented with firms identified by major trade associations and firms voluntarily identified by steel producers and importers in the Section 204 investigation as principal purchasers of steel for which import relief was granted. In addition, the questionnaires were also available on the Commission's website.<sup>8</sup>

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<sup>6</sup> See appendix C for listing of hearing participants.

<sup>7</sup> Based on unrounded data.

<sup>8</sup> The Commission instituted Investigation No. TA-204-9, *Steel: Monitoring Developments in the Domestic Industry* to report results of domestic steel industry developments since the President imposed tariffs and tariff-rate quotas on imports of certain steel products, effective Mar. 20, 2002. Copies of the questionnaire are available at [http://www.usitc.gov/investigation/332\\_452](http://www.usitc.gov/investigation/332_452).

**Table 1-2**  
**Steel consumption by manufacturing industries, 1997**

NAICS code	Industry description	Delivered cost of steel products consumed	Share of delivered cost of steel products consumed by all industries <sup>1</sup>
		-- Million Dollars --	----- Percent -----
3363	Motor vehicle parts manufacturing . . . . .	13836	17.8
3323	Architectural and structural metals manufacturing . . . . .	9427	12.1
3312	Steel product manufacturing from purchased steel . . . . .	7844	10.1
	Agriculture, construction, and mining machinery manufacturing . . . . .	4097	5.3
3321	Forging and stamping . . . . .	4024	5.2
3311	Iron and steel mills and ferroalloy manufacturing . . . . .	3655	4.7
3339	Other general purpose machinery manufacturing . . . . .	3612	4.7
3324	Boiler, tank, and shipping container manufacturing . . . . .	3305	4.3
3329	Other fabricated metal product manufacturing . . . . .	2911	3.8
	Machine shops; turned product; and screw, nut, and bolt manufacturing . . . . .	2663	3.4
3326	Spring and wire product manufacturing . . . . .	2042	2.6
3353	Electrical equipment manufacturing . . . . .	1753	2.3
	Ventilation, heating, air conditioning, and commercial refrigeration equipment manufacturing . . . . .	1706	2.2
3334	Coating, engraving, heat treating, and allied activities . . . . .	1664	2.1
3335	Metalworking machinery manufacturing . . . . .	1326	1.7
3372	Office furniture, including fixtures, manufacturing . . . . .	1320	1.7
3352	Household appliance manufacturing . . . . .	1259	1.6
3332	Industrial machinery manufacturing . . . . .	1122	1.5
	Other electrical equipment and component manufacturing . . . . .	990	1.3
3359	Hardware manufacturing . . . . .	927	1.2
3362	Motor vehicle body and trailer manufacturing . . . . .	918314	1.2
3322	Cutlery and hand tool manufacturing . . . . .	884	1.1
	All other . . . . .	6345	8.2
	<b>Total . . . . .</b>	<b>77629</b>	<b>100</b>

<sup>1</sup> Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce, Census Bureau, *Material Summary, 1997 Economic Census, Manufacturing*.

These questionnaires requested detailed information about domestic and international competitive factors regarding purchases of steel products covered by the safeguard measures. Purchasers' questionnaire responses were received from 644 firms (or about one-third of those sent), with 159 of these firms reporting no purchases of steel products covered by the safeguard measures.<sup>9</sup>

Among the 128 port and port-related-service providers surveyed, questionnaire responses were received from 21 firms for about a 16-percent response rate, accounting for about 27 percent of total steel

<sup>9</sup> Of these responses, 419 steel-consuming firms provided both quantity and value data for their purchases of covered steel products. These purchases totaled \$18.8 billion for the year after the safeguards were implemented. Purchases by distributors totaling \$4.6 billion were excluded from this total to avoid double counting. This accounts for 22 percent of the estimated \$87.2 billion of steel purchased in 2002/03, \$62.8 billion from the domestic industry and \$14.6 of imported of steel. Domestic shipments were compiled by the USITC from official statistics of the U.S. Census Bureau, *Manufacturers' Shipments, Orders, and Inventories*. M3 Series A31AVS, not seasonally adjusted monthly data. Import data are official statistics of the USDOC. In addition, 11 steel-consuming firms submitted questionnaire responses which were received too late to be processed and analyzed.

imports covered by the safeguards in 2002/03. Although many of these questionnaires were returned with incomplete data, the Commission was able to assemble usable data for most of the questions posed.<sup>10</sup>

During the course of this investigation, the Commission learned that a document entitled “ITC Questionnaire Tip Sheet” (Tip Sheet) had been distributed to some of the companies that may have received the questionnaire or had been in a position to complete the questionnaire in this investigation. Because the Tip Sheet urged recipients to reply to the questionnaire in a misleading way or to exaggerate estimates in their responses, the Commission decided to investigate thoroughly the impact of this incident on the Commission’s fact-finding process. The scope and results of that investigation are detailed in Appendix H to this report. As detailed therein, the Commission found that the inclusion of the responses from those companies receiving the Tip Sheet did not significantly change the overall results of the study. Accordingly, the Commission has used questionnaire responses from all responding firms, including those that received the Tip Sheet, in the data contained in this report.<sup>11</sup>

### *Economy-wide Analysis*

To provide advice on the economy-wide effects of the safeguard measures, the Commission simulated the imposition of the safeguard measures using a simulation model that captures the interrelationships between the steel products and the rest of the U.S. economy. The simulation model is an updated version of the USITC's Computable General Equilibrium (CGE) Model of the United States. The database underlying the model incorporates the most recent, 1997, benchmark table of the U.S. production technology from the Bureau of Economic Analysis (BEA) input-output accounts. The database also includes 2002 trade flows and National Income and Product Accounts (NIPA) data based on BEA input-output accounts. The entire database is projected forward to account for current economic conditions. The analytical exercise considers the economic implications of the imposition of section 203 safeguard measures on the modeled economy.

## **Organization of the Report**

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Chapter 2 presents information regarding recent changes in competitive conditions and the impact of the safeguard measures on steel-consuming industries from questionnaire responses, interviews with industry representatives, and publicly available sources.

Chapter 3 presents the market structure of ports and related-service providers with respect to steel they handle, and information regarding recent changes in competitive conditions and the impact of the safeguard measures on these industries from questionnaire responses, interviews with industry representatives, and publicly available sources.

Chapter 4 provides quantitative analysis of the economy-wide effects of the safeguard remedies. Specifically addressed are the costs borne by steel consumers, tariff revenues entering the U.S. Treasury, income to steel producers, and the net effect on the U.S. economy.

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<sup>10</sup> As detailed in chapter 4, incomplete responses by firms were omitted from the analysis in many cases.

<sup>11</sup> The Commission considers the question of whether the conduct by those participating in an investigation could compromise the objectivity of the information received in response to questionnaires to be a serious matter. Accordingly, the Commission will address separately the conduct during the Commission’s investigation of those responsible for the creation and distribution of the Tip Sheet.

Chapter 5 discusses the likely impact on the relevant factors identified for steel-consuming industries and the U.S. ports and related-service providers of continuing safeguard measures from September 2003 through March 2005, or alternatively, terminating safeguard measures effective September 20, 2003. It includes narrative responses from questionnaires and views of interested parties.