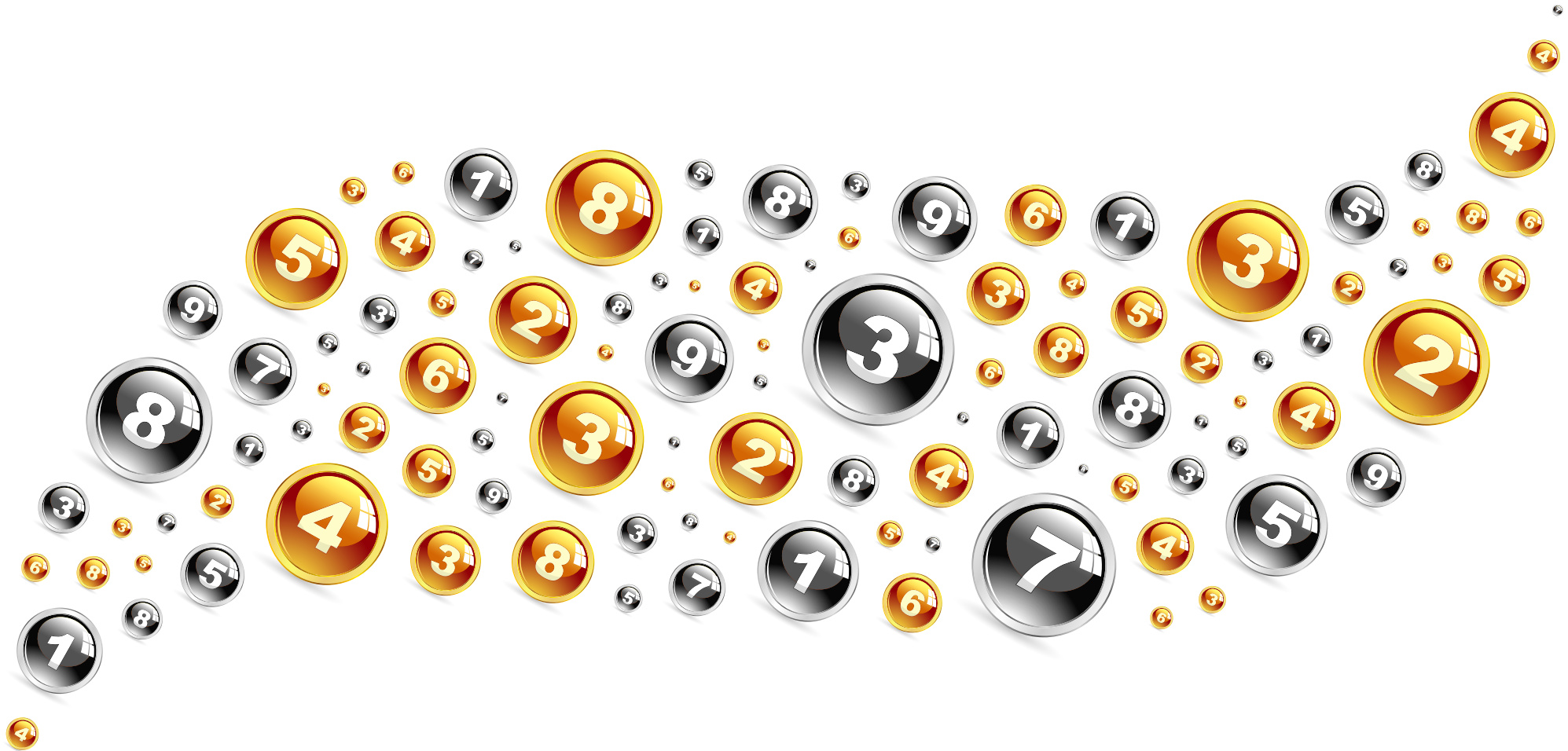


# Stainless Steel in Figures 2020





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Figure 1 *Compound annual growth rate of world stainless melt shop production (slab/ingot equivalent)*

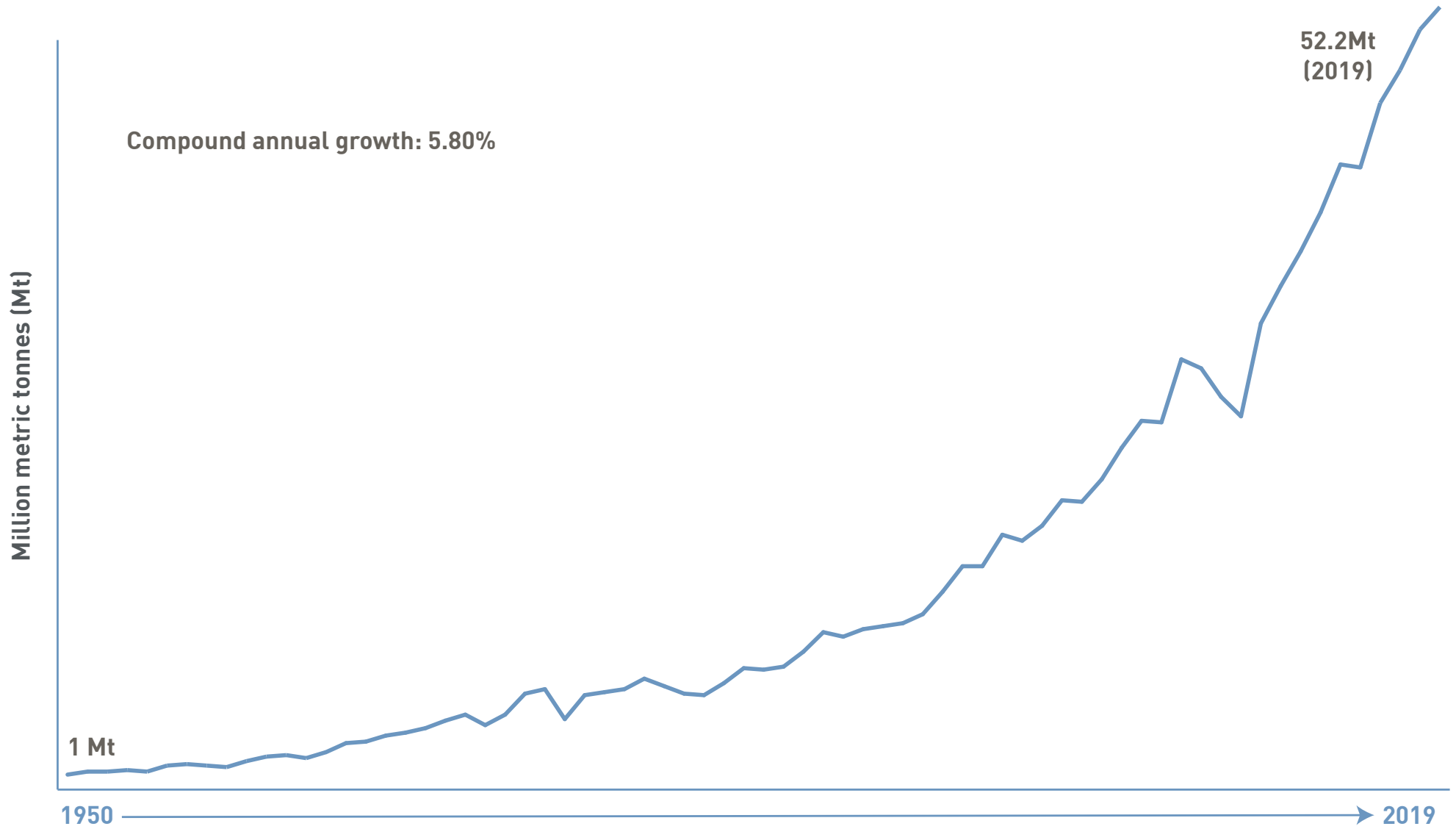




Figure 2 *Regional share of stainless steel production*  
*Others: Brazil, Russia, S. Africa, S. Korea, Indonesia*

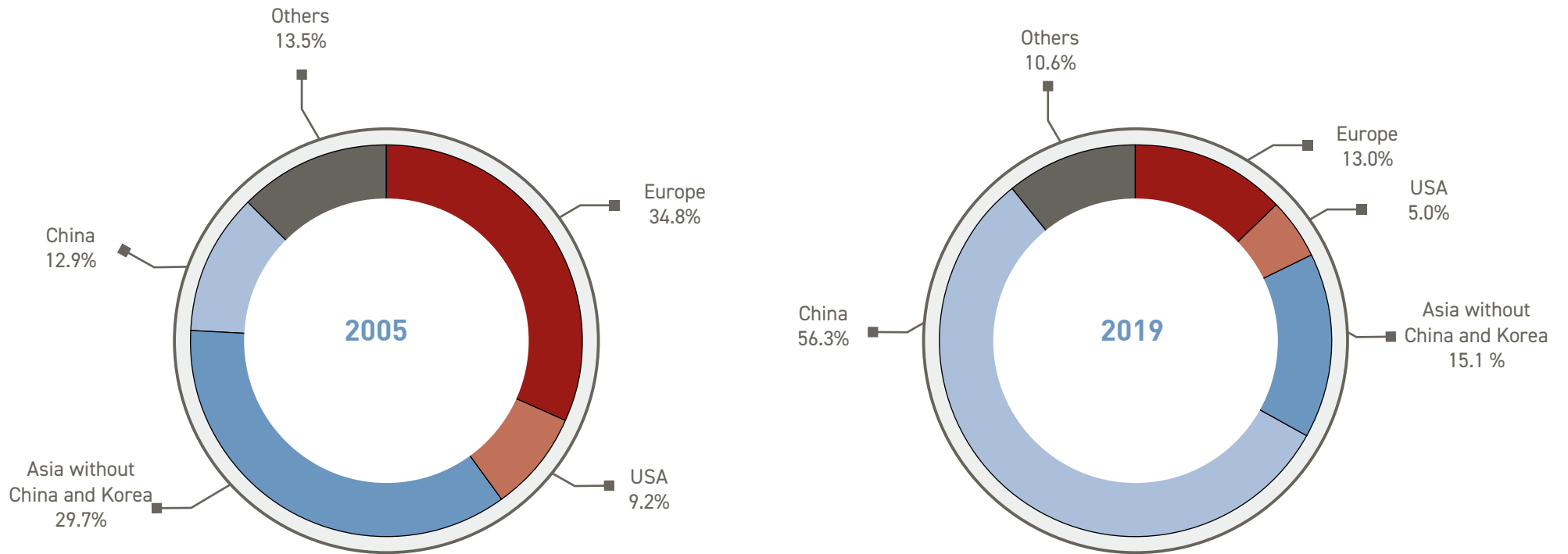




Figure 3 *Stainless steel production versus plastics production.*

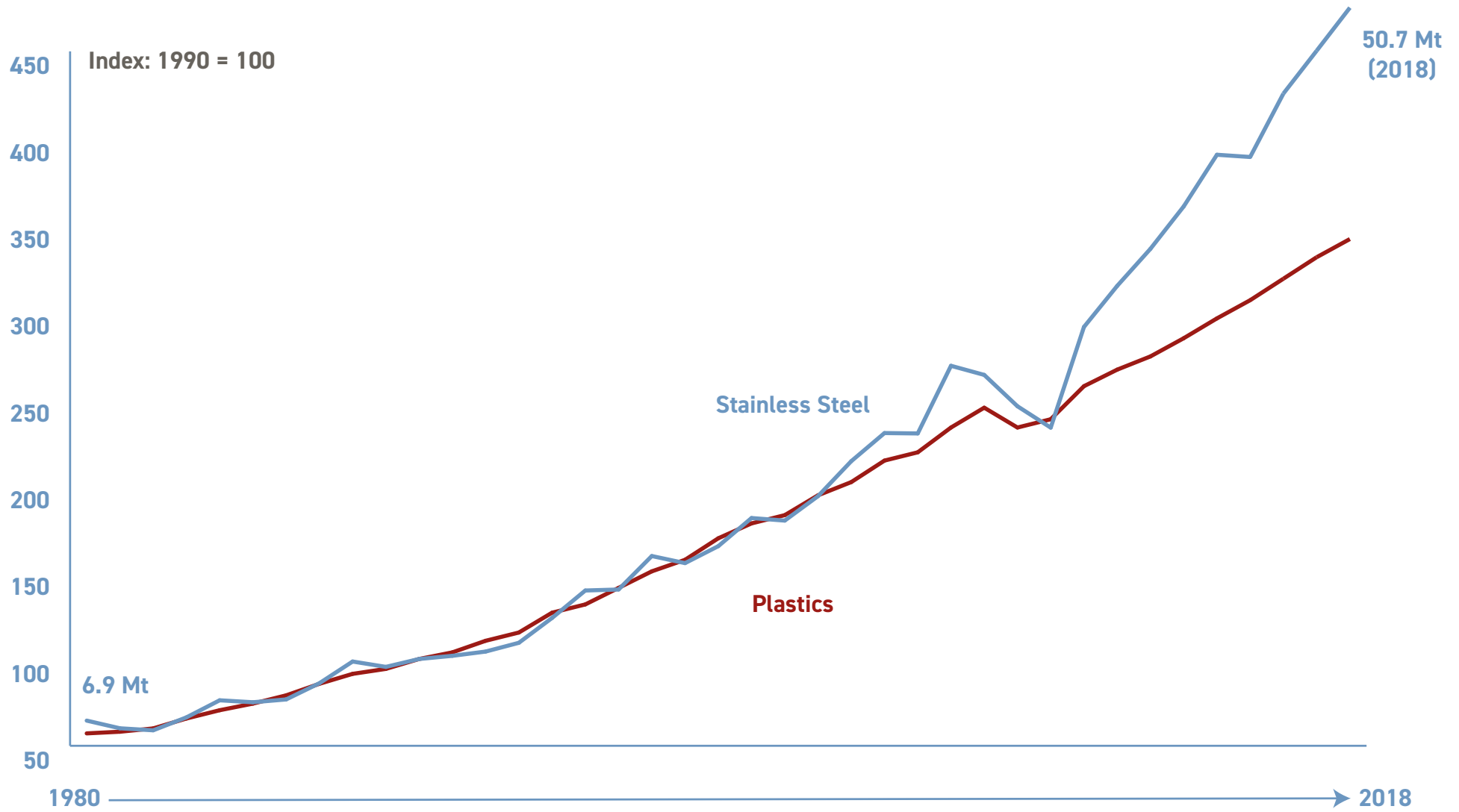




Figure 4 Compound annual growth rate of major metals (%/year): 1980 - 2019

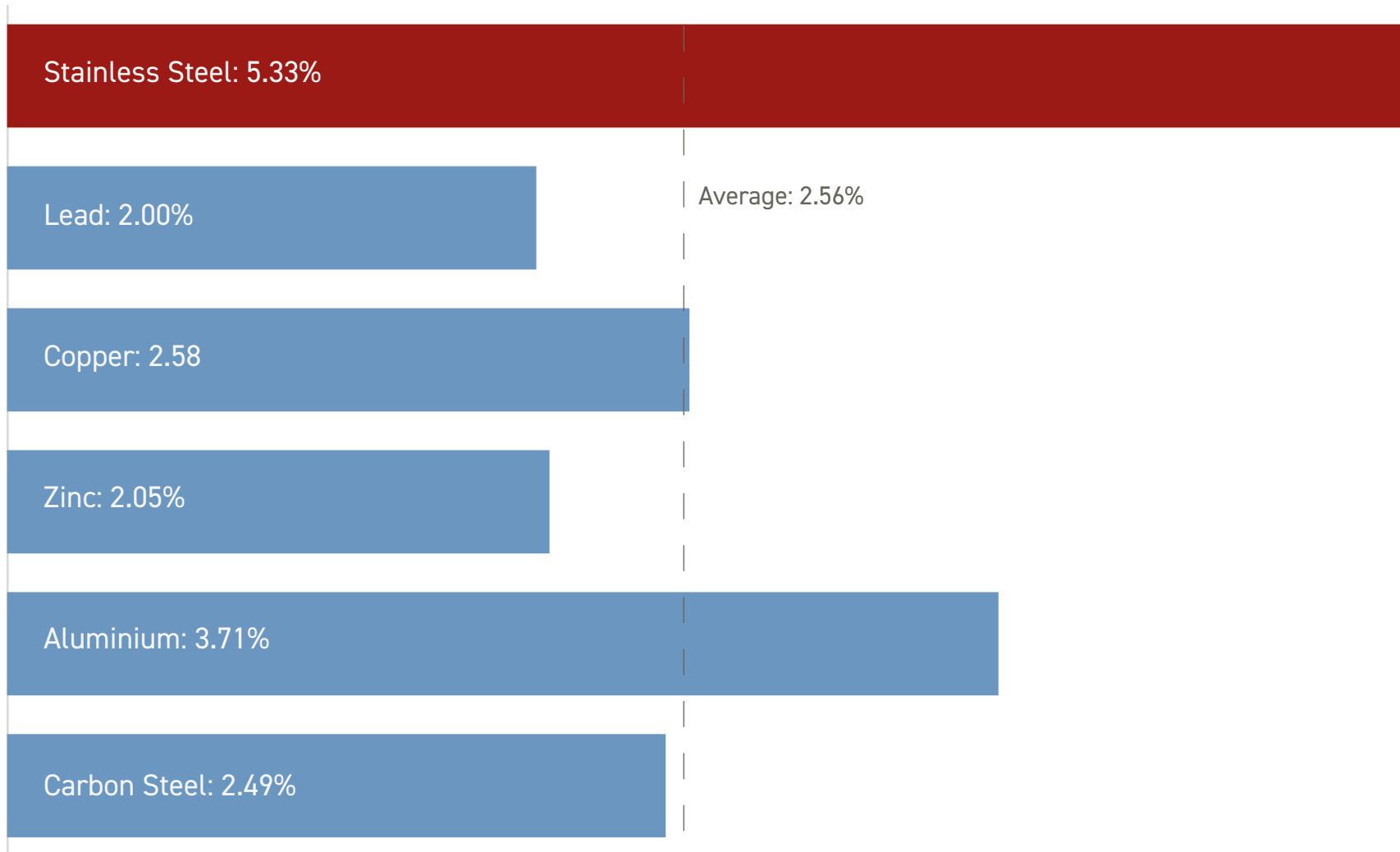




Table 1 Stainless melt shop production (ingot/slab equivalent) in 1,000 metric tonnes.

Country/region	2013	2014	2015	2016	2017	2018	2019
Belgium	1,298	1,388					
Belgium/Austria			1,607	1,672	1,698	1,754	1,481
	1,080	1,216					
Finland/Sweden/UK			2,215	2,327	2,322	2,285	2,145
France	300	323	291	287	293	310	281
Germany	1,091	864	459	414	436	433	401
Italy	1,556	1,457	1,452	1,421	1,469	1,484	1,441
Spain	855	945	979	1,002	1,003	969	898
Sweden	501	541					
United Kingdom	257	295					
Other EU	211	223	165	157	156	151	159
European Union	7,147	7,252	7,169	7,280	7,377	7,385	6,805
USA	2,030	2,389	2,346	2,481	2,754	2,808	2,593
Brazil	425	424	401	450	400	386	in others
Americas	2,454	2,813	2,747	2,931	3,154	3,194	2,593
Japan	3,175	3,328	3,061	3,093	3,168	3,283	2,963
South Korea	2,143	2,038	2,231	2,276	2,383	2,407	in others
Taiwan, China	1,067	1,108	1,109	1,263	1,376	1,172	997
China	18,984	21,692	21,562	24,938	25,774	26,706	29,400
Indonesia					680	2,195	in others
India	2,891	2,858	3,060	3,324	3,486	3,740	3,933
Asia	28,260	31,025	31,024	34,894	36,867	39,505	37,294
South Africa	492	472	514	582	591	550	in others
Russia	152	123	95	90	92	96	in others
Others						5,635	5,525
World	38,506	41,686	41,548	45,778	48,081	50,730	52,218

Others: Brazil, Russia, S. Africa, S. Korea, Indonesia



Table 2 *Stainless melt shop production (slab/ingot equivalent) by quarter in 1,000 metric tonnes: 2018 compared to 2019*  
*Others: Brazil, Russia, S. Africa, S. Korea, Indonesia*

	Europe	USA	China	Asia w/o China and S. Korea	Others	Grand Total	
Quarter 1	2018	2,014	718	6,533	2,079	1,439	12,783
	2019	1,899	704	6,684	1,961	1,464	12,711
	% change	-5.7	-2.0	2.3	-5.7	1.8	-0.6
Quarter 2	2018	1,921	725	6,695	2,090	1,429	12,860
	2019	1,842	647	7,670	1,938	1,306	13,404
	% change	-4.1	-10.7	14.6	-7.2	-8.6	4.2
First half	2018	3,935	1,443	13,228	4,169	2,867	25,643
	2019	3,742	1,350	14,354	3,899	2,770	26,115
	% change	-4.9	-6.4	8.5	-6.5	-3.4	1.8
Quarter 3	2018	1,702	741	6,901	2,043	1,456	12,843
	2019	1,492	669	8,135	1,973	1,416	13,684
	% change	-12.4	-9.7	17.9	-3.5	-2.8	6.5
Quarter 4	2018	1,748	624	6,578	1,983	1,311	12,244
	2019	1,572	574	6,910	2,023	1,339	12,418
	% change	-10.0	-8.0	5.1	2.0	2.1	1.4
Second half	2018	3,450	1,365	13,479	4,026	2,767	25,088
	2019	3,064	1,243	15,045	3,996	2,754	26,103
	% change	-11.2	-8.9	11.6	-0.8	-0.5	4.0
Full year	2018	7,385	2,808	26,707	8,195	5,635	50,730
	2019	6,805	2,593	29,400	7,894	5,525	52,218
	% change	-7.9	-7.6	10.1	-3.7	-2.0	2.9





Figure 5 Stainless steel foreign trade

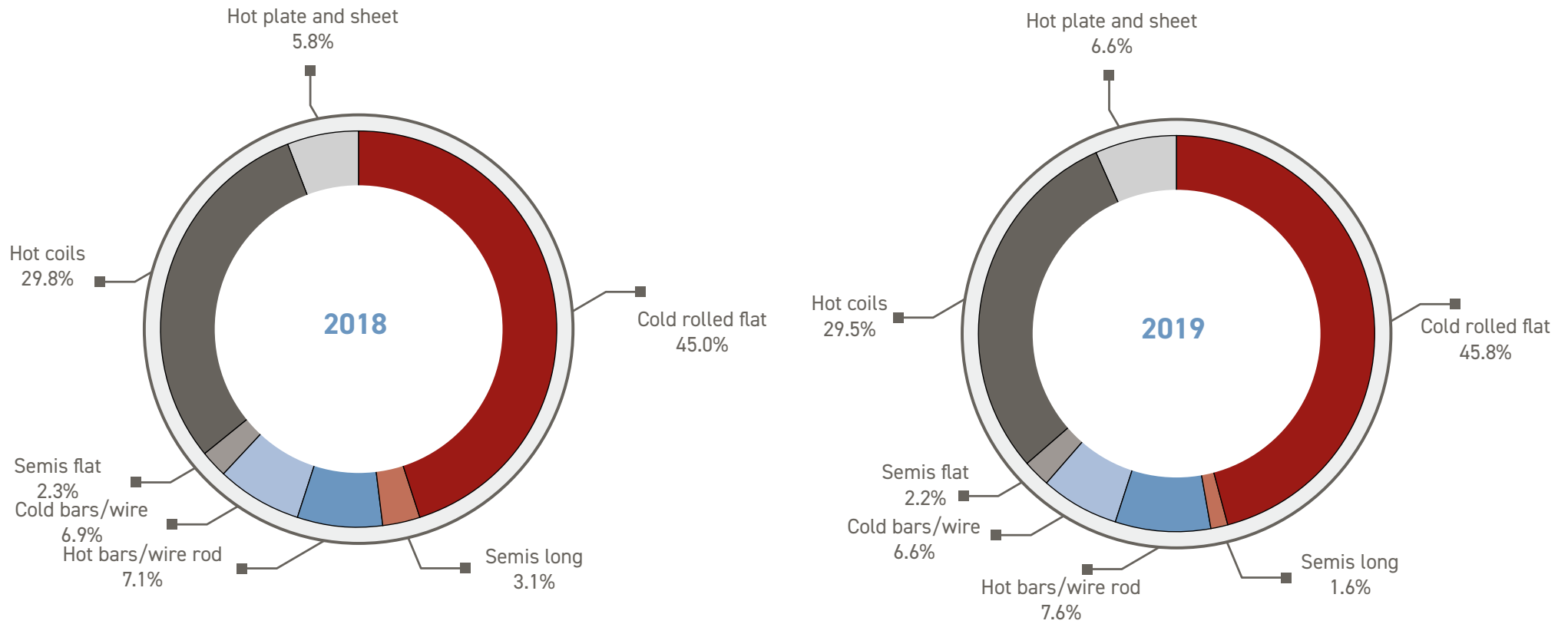




Table 3 Foreign trade exports of stainless steel in 1,000 metric tonnes. Includes feedstock material for further processing.

		Destination								Total
		Africa	Asia	Eastern Europe	Latin America	Middle East	NAFTA	Australia/Oceania	Western Europe	
Origin	Africa	14.2	117.3	12.1	34.1	7.3	29.2	1.3	138.1	<b>353.6</b>
	Asia	133.8	6,950.8	271.7	193.9	238.6	553.8	83.5	1,930.2	<b>10,356.2</b>
	Eastern Europe	0.0	6.2	25.0	0.0	0.1	4.2	0.0	18.0	<b>53.5</b>
	Latin America	0.4	19.9	2.9	33.5	0.2	15.5	0.2	20.1	<b>92.7</b>
	Middle East	88.3	38.0	0.2	0.0	47.3	0.5	0.0	1.0	<b>175.3</b>
	NAFTA	2.1	60.4	0.2	41.8	1.8	569.5	0.9	105.0	<b>781.7</b>
	Australia/Oceania	0.2	3.0	0.0	0.0	0.0	0.4	1.8	0.1	<b>5.5</b>
	Western Europe	84.2	443.5	104.4	37.7	45.7	431.5	18.6	7,734.5	<b>8,900.2</b>
	<b>Total</b>	<b>323.2</b>	<b>7,639.1</b>	<b>416.6</b>	<b>341.0</b>	<b>340.9</b>	<b>1,604.7</b>	<b>106.3</b>	<b>9,946.9</b>	<b>20,718.6</b>
		Destination								
		Africa	Asia	Eastern Europe	Latin America	Middle East	NAFTA	Australia/Oceania	Western Europe	Total
Origin	Africa	13.3	69.7	6.9	21.9	5.2	16.9	0.9	146.0	<b>280.7</b>
	Asia	143.9	6,514.1	296.8	210.7	221.0	445.5	75.1	2,073.6	<b>9980.7</b>
	Eastern Europe	0.0	7.5	27.4	0.0	0.1	5.4	0.0	13.9	<b>54.4</b>
	Latin America	0.4	5.9	1.2	27.0	0.5	15.0	0.1	12.0	<b>62.1</b>
	Middle East	82.2	35.4	0.2	0.0	44.1	0.5	0.0	0.9	<b>163.3</b>
	NAFTA	1.2	49.5	0.1	27.3	3.5	386.7	1.2	34.3	<b>503.7</b>
	Australia/Oceania	0.0	1.1	0.0	0.0	0.0	0.4	1.7	0.2	<b>3.4</b>
	Western Europe	66.0	387.9	94.8	35.8	40.5	340.7	15.9	7,270.9	<b>8,252.5</b>
	<b>Total</b>	<b>307.0</b>	<b>7,071.1</b>	<b>427.4</b>	<b>322.7</b>	<b>314.8</b>	<b>1,211.1</b>	<b>95.0</b>	<b>9,551.8</b>	<b>19,300.8</b>



Table 4 Foreign trade exports of stainless steel scrap in 1,000 metric tonnes. Includes feedstock material for further processing.  
Note: \*Indicated imports from that region

		Destination								Total
		Africa	Asia	Eastern Europe	Latin America	Middle East	NAFTA	Australia/Oceania	Western Europe	
Origin	Africa	0.9	4.6	0.0	0.0	0.0	0.0	0.0	5.9	11.4
	Asia	17.4	810.7	0.4	0.2	2.7	1.4	0.0	17.9	850.7
	Eastern Europe	0.0	2.5	3.4	0.2	0.1	3.9	0.0	118.2	128.2
	Latin America	3.4	31.5	0.0	0.0	0.6	2.2	0.0	31.9	69.5
	Middle East*	0.0	141.5	0.0	0.0	0.0	0.1	0.0	13.6	155.3
	NAFTA	0.2	379.4	0.1	7.7	0.9	672.2	0.1	40.8	1,101.4
	Australia/Oceania	0.1	65.9	0.0	0.0	3.2	0.0	3.8	2.0	75.1
	Western Europe	0.1	485.0	16.9	0.1	2.4	34.2	2.7	3,193.0	3,734.4
	<b>Total</b>	<b>22.0</b>	<b>1,921.1</b>	<b>20.8</b>	<b>8.2</b>	<b>9.7</b>	<b>713.9</b>	<b>6.7</b>	<b>3,423.3</b>	<b>6,125.8</b>
		Destination								Total
		Africa	Asia	Eastern Europe	Latin America	Middle East	NAFTA	Australia/Oceania	Western Europe	
Origin	Africa	0.0	4.2	0.0	0.0	0.0	0.0	0.0	197.9	202.1
	Asia	14.3	760.4	0.0	0.5	9.2	0.8	0.0	20.9	806.2
	Eastern Europe	0.0	4.7	2.5	0.0	0.0	0.6	0.0	116.1	123.9
	Latin America	17.2	28.2	0.0	0.0	2.1	1.0	0.0	12.8	61.4
	Middle East*	0.0	177.3	0.0	0.0	0.0	0.0	0.0	11.1	188.4
	NAFTA	0.0	404.0	0.2	1.6	1.4	317.3	0.1	27.4	752.0
	Australia/Oceania	0.1	113.5	0.0	0.0	0.3	0.0	0.1	1.7	115.6
	Western Europe	8.1	668.1	16.2	0.5	2.0	1.7	1.1	2,993.6	3,691.3
	<b>Total</b>	<b>39.8</b>	<b>2,160.3</b>	<b>18.8</b>	<b>2.6</b>	<b>15.1</b>	<b>321.4</b>	<b>1.2</b>	<b>3,381.6</b>	<b>5,940.8</b>



Figure 6 *Apparent stainless steel use by region.*

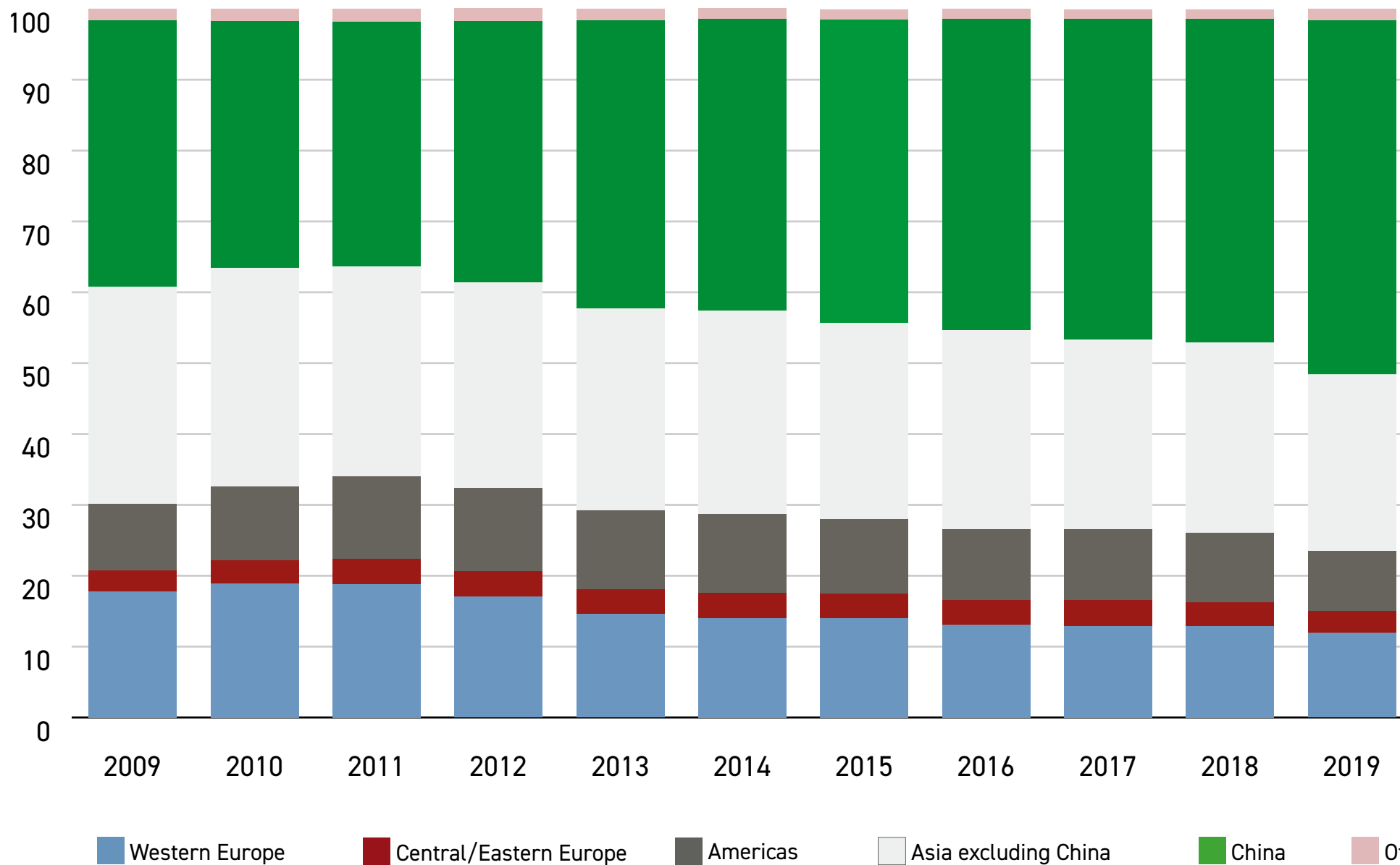




Figure 7 Stainless melt shop production (slab/ingot equivalent) by region in 1,000 metric tonnes  
 Others: Brazil, Russia, S. Africa, S. Korea, Indonesia

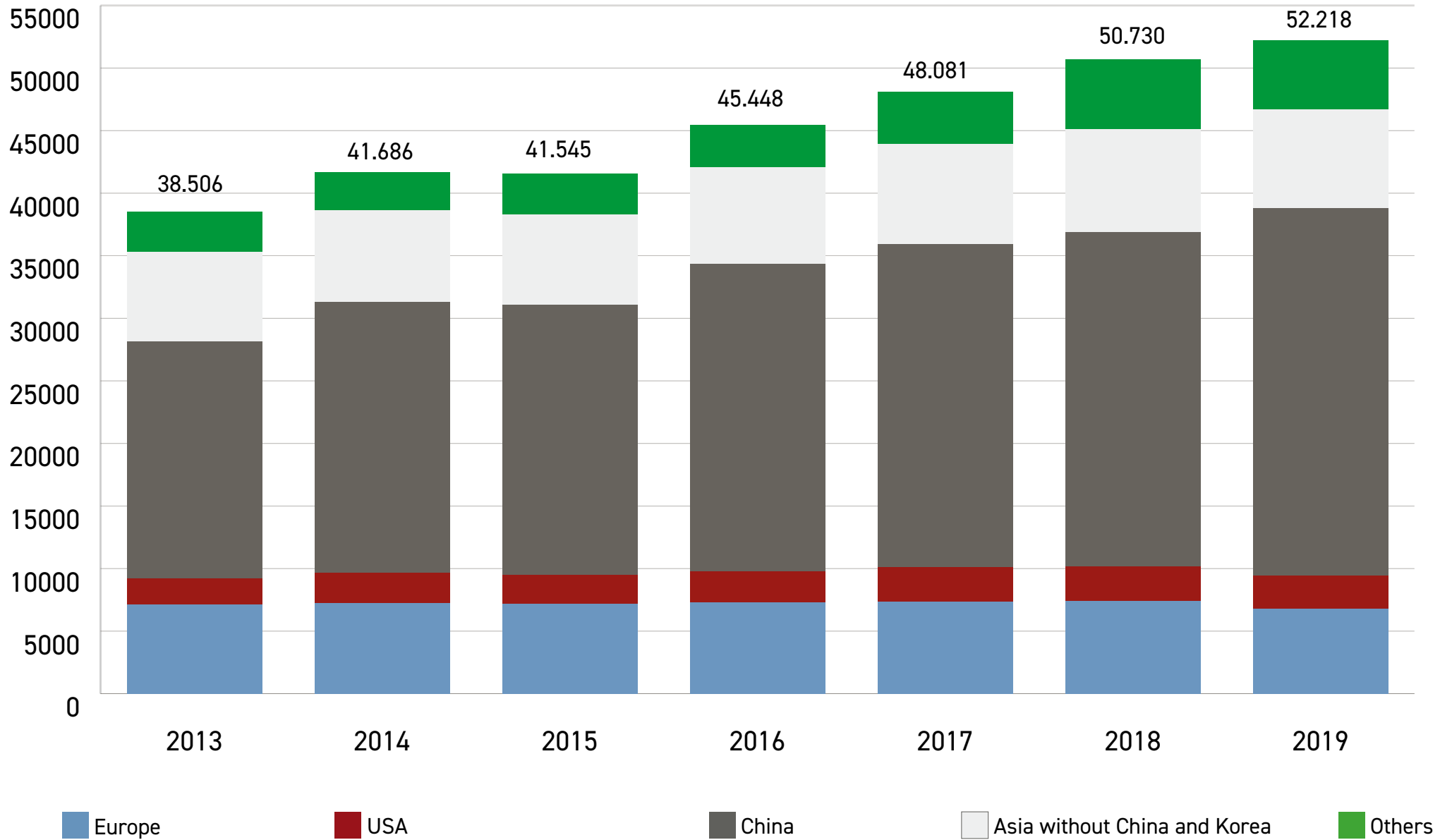




Figure 8 Stainless meltshop production (slab/ingot equivalent) by grade.

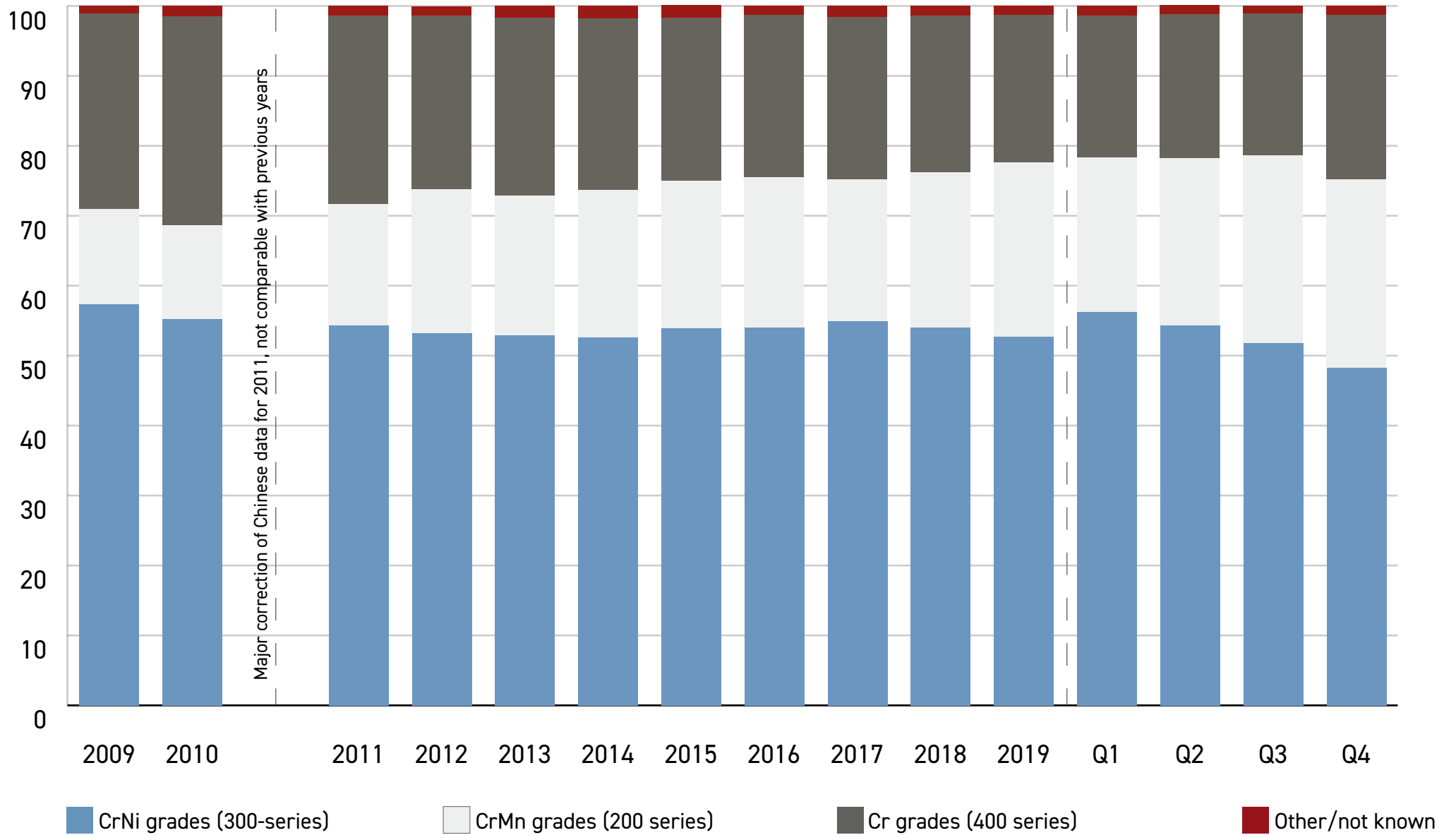




Figure 9 Stainless meltshop production (slab/ingot equivalent) by quarter in 1,000 metric tonnes

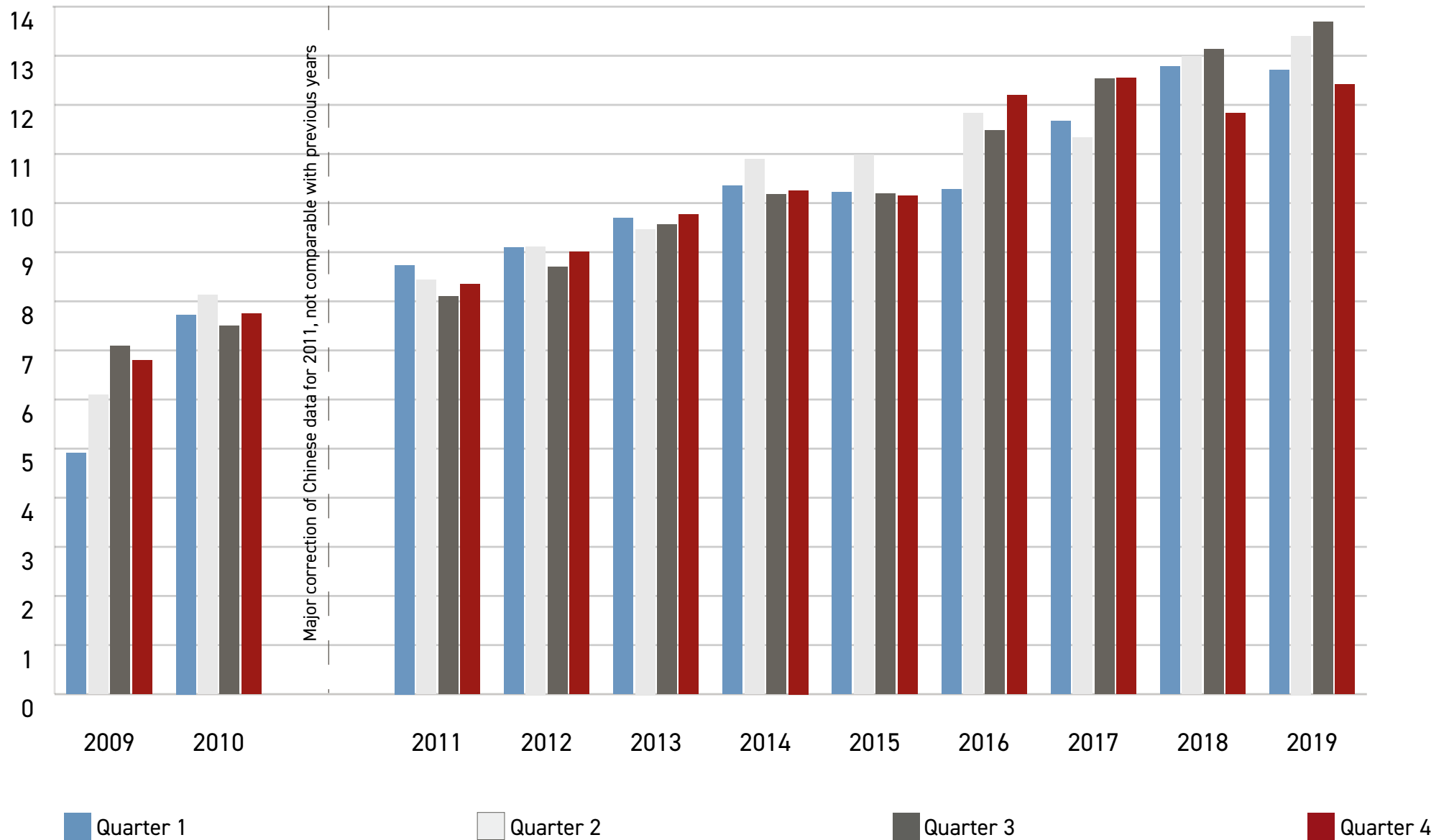




Figure 10 *Stainless steel demand versus stainless steel consumption*

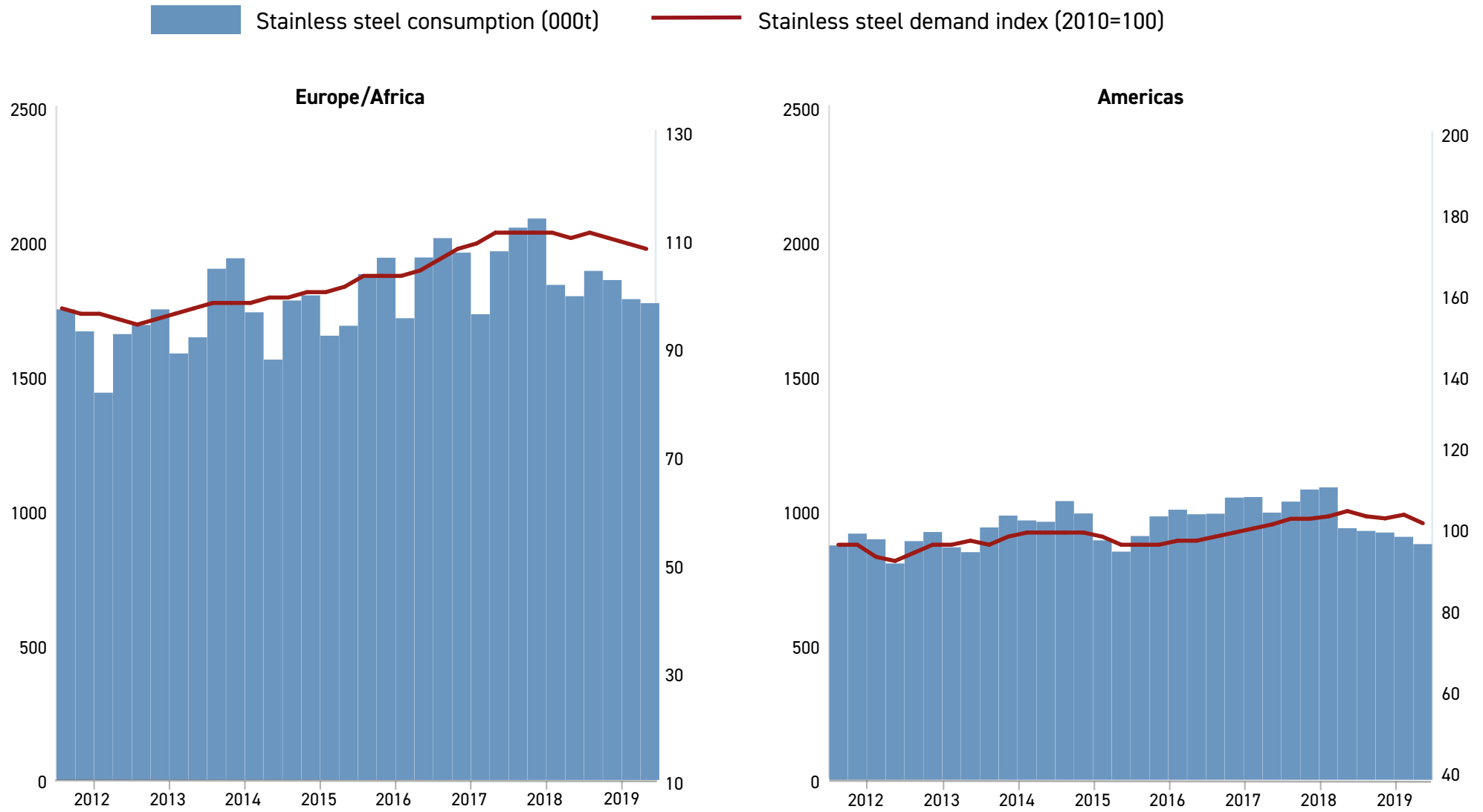






Figure 11 *Stainless steel demand versus stainless steel consumption*

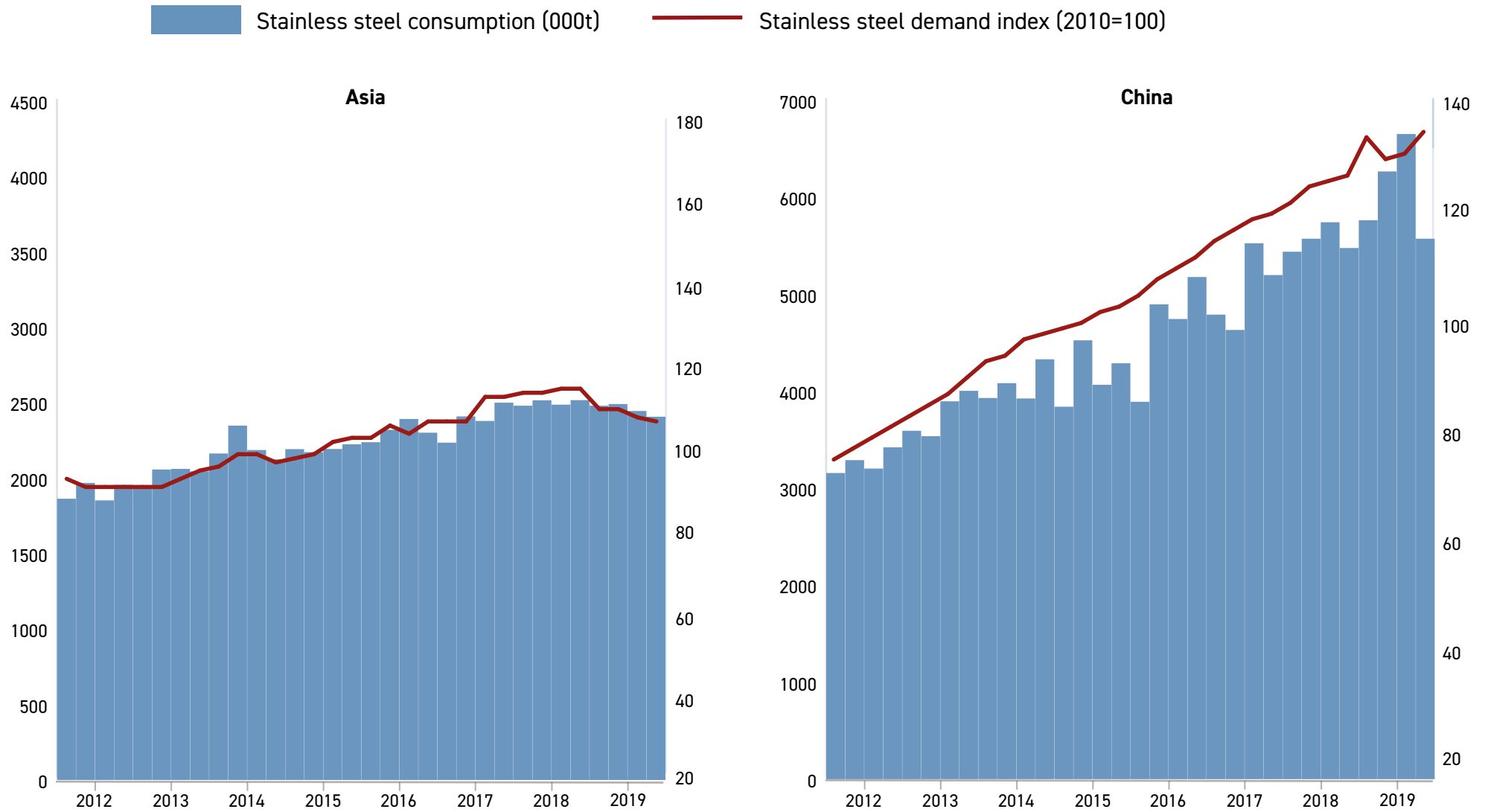




Figure 12 *Stainless steel demand versus stainless steel consumption*

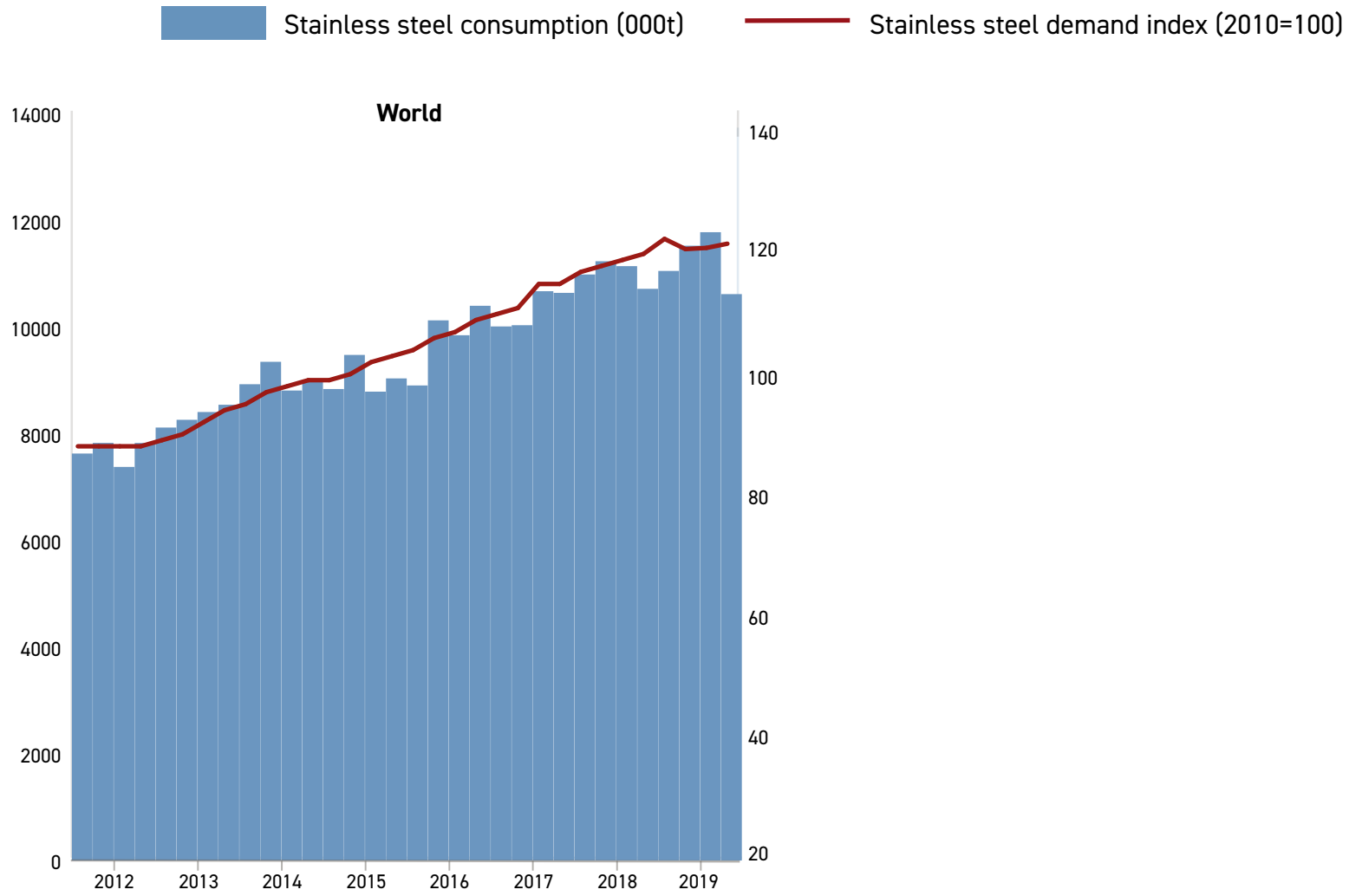
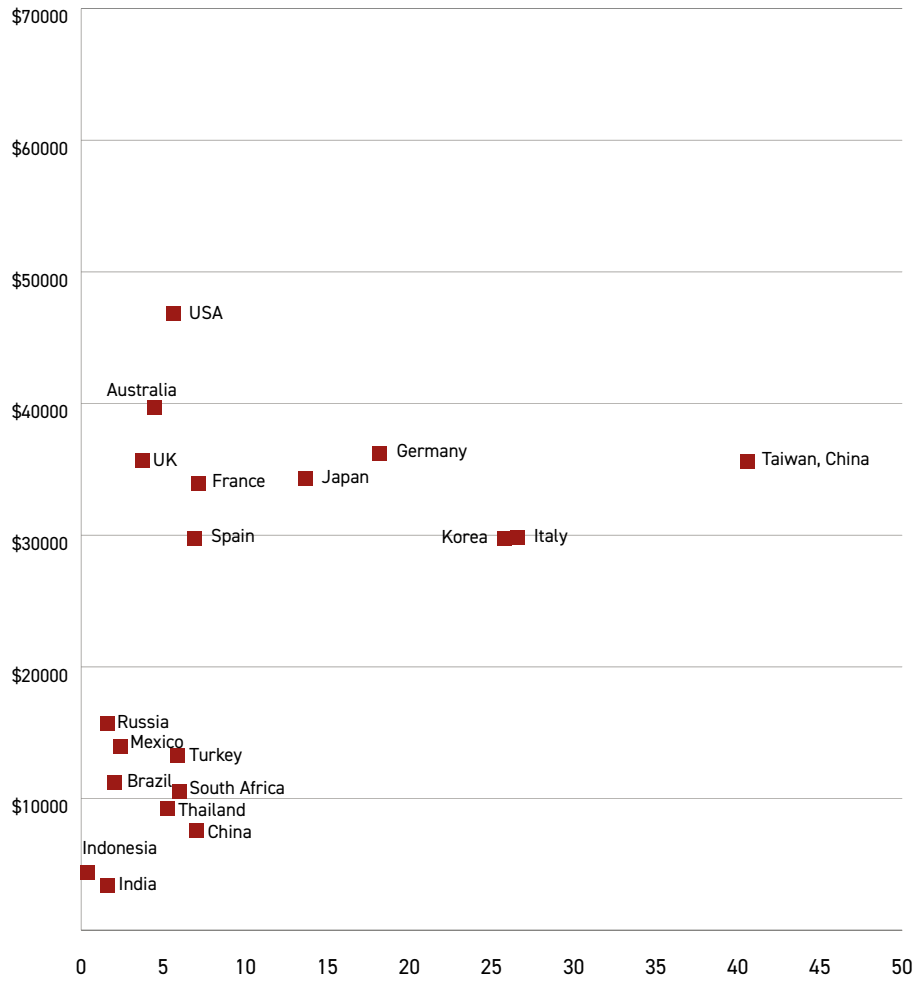




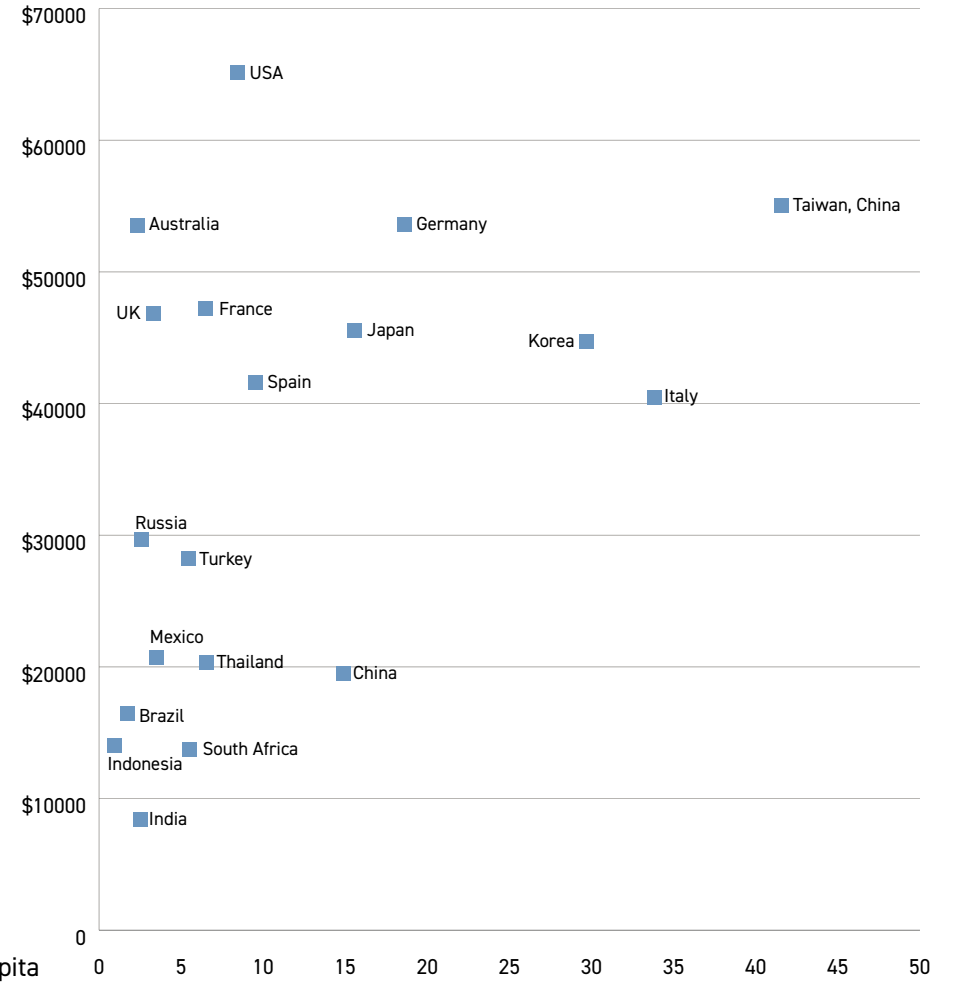
Figure 13 GDP PPP per capita versus stainless steel use per capita. Source: IMF, ISSF, Worldbank, CRU, SMR

GDP PPP per capita



2010

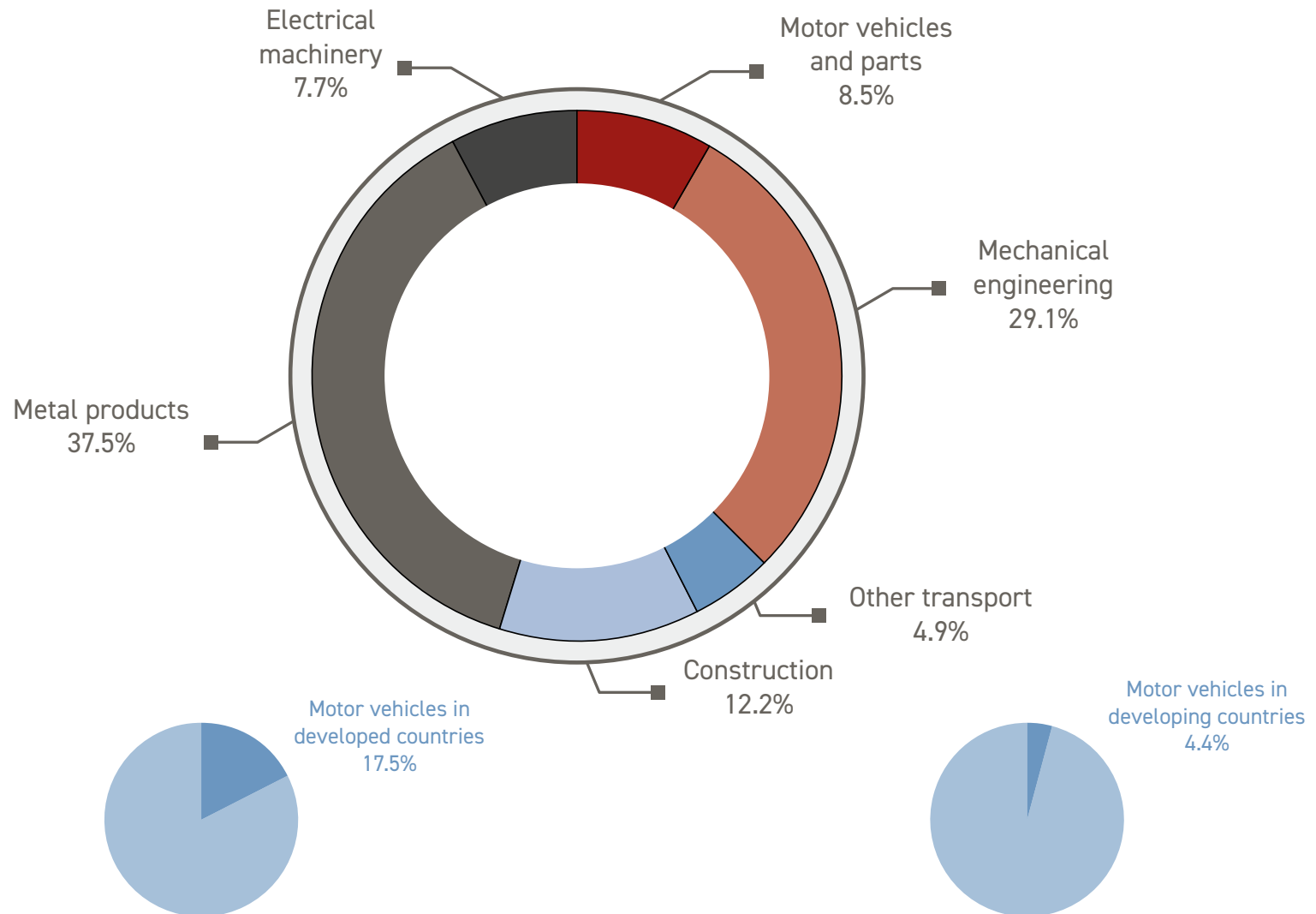
GDP PPP per capita



2019



Figure 14 *Stainless steel use per sector - 2019*





## Data sources

Unless otherwise indicated, all data in this booklet has been provided by the International Stainless Steel Forum (ISSF).

Data has also been provided by:

1. International Monetary Fund (IMF)
2. Vale Inco
3. Yale University: School of Forestry and Environmental Studies (Reck et al.)



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## About ISSF

The International Stainless Steel Forum (ISSF) is a not-for-profit research and development organisation which was founded in 1996 and serves as the focal point for the global stainless steel industry.

### Vision

Sustain our future with stainless steels

### Membership of the ISSF

ISSF has two categories of membership namely:

- a. **company members** who are producers of stainless steels (integrated mills and re-rollers)
- b. **affiliated members** who are national or regional stainless steels industry associations.

The ISSF now has 57 members in 26 countries. Collectively they represent approximately 90% of the total production of stainless steels.

### More information

For more information about ISSF, please consult our website [worldstainless.org](http://worldstainless.org).

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