

# **WORLD STEEL IN FIGURES 2011**



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Welcome to the 2011 edition of World Steel in Figures. 2010 was the year of recovery for the steel industry, coming back from the global economic crisis. The upturn came earlier and stronger than expected.

The centre of gravity for the steel industry has shifted from the developed economies towards the developing and emerging economies. Overall, the developing and emerging world will account for 72% of the global steel demand in 2011.

Once again, our top priority has been safety. For the fourth year running worldsteel will recognise good safety practices through the Safety Excellence Recognition programme. Four companies will receive recognitions at the Board meeting and annual conference which take place in Paris in October.

The quality of the submissions for the Safety Excellence Recognition programme serves to remind us all of the importance that steelmakers attach to the health and well-being of contractors and employees. We will continue to highlight the worldsteel safety principles (see page 4) and to encourage and support steel companies in applying these principles.

Our sustainability, climate change and life cycle assessment work have also grown from strength to strength over the last year. Data collection, analysis and reporting continue to provide a sound basis for understanding the progress of the steel industry as it tackles the challenges of sustainable development.

Earlier this year, worldsteel published the first ever report on water management in the steel industry. The report is the result of a survey that covered integrated steelworks and electric arc furnace steelworks. The publication is available in the bookshop of worldsteel.org.

As most of the membership will be aware, I step down from the position of Director General of worldsteel this year. The Board of Directors has appointed Dr Edwin Basson as my successor. I am confident that worldsteel will be in safe hands and will continue to grow in value and relevance for its members all around the world.

la Q. Chrotines

lan Christmas Director General

#### SAFETY AND HEALTH

#### **CLIMATE CHANGE**

Nothing is more important than the safety and health of the people who work in the steel industry.

In 2010, the world steel industry produced

1.4 billion tonnes of crude steel.

The safety and health commitment, made by the worldsteel Board in 2006, is accompanied by a set of six principles:

- · All injuries and work-related illnesses can and must be prevented.
- Management is responsible and accountable for safety and health performance.
- · Employee engagement and training is essential.
- · Working safely is a condition of employment.
- Excellence in safety and health supports excellent business results.
- Safety and health must be integrated into all business management processes.

worldsteel publishes the Safety and Health Principles Guidance Book, available in 10 languages, and a safety poster to help its members to adopt and apply these principles.

Perhaps the most important work in safety and health is the collaborative effort of worldsteel member companies to identify best practices in key risk areas. Enabling serious incident investigations and associated key learnings to be shared avoids repeat events. Using annual metrics submitted by members, worldsteel reports on safety and health trends. This information helps companies to prioritise implementation of best practices. The aim is to prevent all injuries and illnesses.

Safety metrics is only one aspect of achieving good safety and health standards. worldsteel encourages all member companies to participate in the safety and health taskforces to create guidelines for safe work performance.

To encourage greater participation worldsteel has a Safety and Health Excellence Recognition programme. This showcases improvements in safety and health initiatives by our member companies and shares the information across the worldsteel membership. In 2010, four member companies received recognition for their programmes at the annual conference in Tokyo, Japan.

Steel is essential for a low-carbon world in transport, construction, housing and power generation. Demand for steel will significantly increase in the period up to 2050, to support ongoing global development.

The steel industry is committed to making a positive contribution to the climate change issue. We provide intelligent steel products that help to reduce greenhouse gas emissions and limit our impact on the environment.

worldsteel has established four building blocks for its climate change policy. Each involves actions by the world steel industry and also has policy implications for governments:

- actions to reduce CO<sub>2</sub>/tonne of steel produced
- transfer of best practice and technology
- support for breakthrough technology programmes
- development of steel products that save energy in transport, power generation, buildings, machinery and appliances.

#### The Climate Action programme

worldsteel has an ambitious programme for every steel company in the world to measure its  $\mathrm{CO}_2$  emissions/tonne of steel produced on a common basis. Every steel company needs to measure its impact on the environment so that it can manage improvements. We have put in place a common methodology, definitions and agreed boundaries which have become internationally recognised.

## Life cycle assessment (LCA)

worldsteel collects life cycle inventory data from steel plants all around the world. In 2010 the new datasets were made available to our members, customers and researchers to encourage a life cycle approach for product design and material selection.

# THE SUSTAINABILITY INDICATORS 2007 TO 2009

## WORLD CRUDE STEEL PRODUCTION 1950 TO 2010

The worldsteel sustainability indicators measure progress in fulfilling the commitments outlined in worldsteel's sustainable development policy. Companies' participation in the sustainability indicators varies by indicator. Overall, about 80 members and non-member companies and organisations provided data, representing up to 40% of global crude steel production tonnage in 2009.

Indi	cator	Unit	2007	2008	2009			
Env	Environmental sustainability							
1	Greenhouse gas emissions	Tonnes CO <sub>2</sub> /tonne steel cast	1.8	1.8	1.8 (e)			
2	Energy intensity	GJ/tonne steel cast	20.8	20.8	20.8 (e)			
3	Material efficiency	% of by-products re-used	97.9	98.0	98.0			
4	Environmental management systems (EMS)	% of employees and contractors in EMS- registered production facilities	85.1	86.6	88.8			
Soc	ial sustainability							
5	Lost time injury frequency rate	Injuries/million hours worked	4.5	3.7	2.6			
6	Employee training	Training days/employee and year	11.1	8.0	8.6			
Eco	nomic sustainabilit	y						
7	Investment in new processes and products	% of revenue	7.9	8.3	9.0			
8	Economic value	Billion US\$	323.8	308.3	418.1			
	distributed	% of revenue	83.0	68.2	92.2			

(e): estimate, data will be available in August 2011.

#### Notes:

Indicator 1: Includes  $CO_2$  emissions only as these make up 99% of all steel industry greenhouse gas emissions.

Indicator 5: From 2007 this includes contractors.

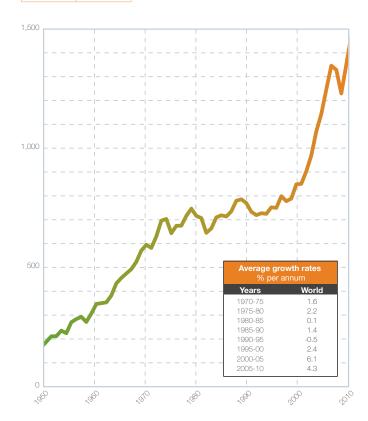
For more information see the methodology documents on

#### worldsteel.org.

#### million metric tons

Years	World
1970	595
1975	644
1980	717
1985	719
1990	770
1995	752
1996	750
1997	799
1998	778
1999	789
2000	849

Years	World
2001	851
2002	904
2003	970
2004	1,071
2005	1,144
2006	1,247
2007	1,347
2008	1,329
2009	1,231
2010	1,414



# **WORLDSTEEL MEMBER COMPANIES** 2010 CRUDE STEEL PRODUCTION **OVER 3 MILLION TONNES**

## MAJOR STEEL-PRODUCING COUNTRIES 2009 AND 2010

#### million metric tons crude steel production

Rank	Member company (1)	mmt	Rank	Member company (1)	mmt
1	ArcelorMittal	98.2	24	IMIDRO	11.4
2	Baosteel	37.0	25	Techint	8.8
3	POSCO	35.4	26	Metinvest	8.7
4	Nippon Steel (2)	35.0	27	Kobe	7.6
5	JFE	31.1	28	CELSA	7.4
6	Jiangsu Shagang	23.2	29	voestalpine (8)	7.3
7	Tata Steel (3)	23.2	30	USIMINAS	7.3
8	U. S. Steel	22.3	31	Erdemir	7.1
9	Ansteel (4)	22.1	32	BlueScope	6.8
10	Gerdau	18.7	33	JSW	6.4
11	Nucor	18.3	34	Metalloinvest	6.1
12	Severstal	18.2	35	Essar	6.0
13	Wuhan (5)	16.6	36	SSAB	5.8
14	ThyssenKrupp (6)	16.4	37	CSN	5.5
15	Evraz	16.3	38	Salzgitter	5.2
16	Shougang (7)	14.9	39	HKM	5.2
17	Riva	14.0	40	Hadeed	5.0
18	SAIL	13.6	41	Ezz	4.5
19	Sumitomo	13.3	42	Duferco	4.1
20	Hyundai	12.9	43	Nisshin	3.8
21	China Steel	12.7	44	AHMSA	3.7
22	NLMK	11.9	45	CMC	3.5
23	Magnitogorsk	11.4	46	Vizag	3.2

Note: Handan Iron and Steel Group (12.9 mmt) consolidated with Hebei Steel Group in 2010.

- (1) does not include member companies that are part of consolidations with non-members
- (2) includes Osaka Steel and Nippon Steel & Sumikin Stainless Steel Corporation, but does not include Usiminas
- (3) includes NatSteel
- (4) does not include Panzhihua
- (5) does not include Kunming and Echeng
- (6) includes share of HKM
- (7) does not include Caofeidian and Changzi
- (8) includes Böhler Uddelholm

#### million metric tons crude steel production

Country	2009		2010	
	Rank	Tonnage	Rank	Tonnage
China	1	573.6	1	626.7
Japan	2	87.5	2	109.6
United States	5	58.2	3	80.5
India	3	63.5	4	68.3
Russia	4	60.0	5	66.9
South Korea	6	48.6	6	58.4
Germany	7	32.7	7	43.8
Ukraine	8	29.9	8	33.4
Brazil	9	26.5	9	32.9
Turkey	10	25.3	10	29.1
Italy	11	19.8	11	25.8
Taiwan, China	12	15.9	12	19.8
Mexico	14	14.1	13	16.7
Spain	13	14.4	14	16.3
France	15	12.8	15	15.4
Canada	18	9.3	16	13.0
Iran	16	10.9	17	12.0
United Kingdom	17	10.1	18	9.7
Poland	20	7.1	19	8.0
Belgium	22	5.6	20	8.0
South Africa	19	7.5	21	7.6
Australia	24	5.2	22	7.3
Austria	21	5.7	23	7.2
Egypt	23	5.5	24	6.7
Netherlands	25	5.2	25	6.7
Czech Republic	27	4.6	26	5.2
Argentina	29	4.0	27	5.1
Saudi Arabia	26	4.7	28	5.0
Sweden	36	2.8	29	4.8
Slovak Republic	32	3.7	30	4.6
Kazakhstan	28	4.1	31	4.2
Malaysia (e)	30	4.0	32	4.1
Finland	35	3.1	33	4.0
Romania	37	2.8	34	3.7
Thailand (e)	33	3.6	35	3.7
Indonesia (e)	34	3.5	36	3.6
Viet Nam (e)	38	2.7	37	2.7
Luxembourg	40	2.1	38	2.5
Byelorussia	39	2.4	39	2.5
Venezuela	31	3.8	40	2.2
Qatar	43	1.4	41	2.0
Greece	41	2.0	42	1.8
Hungary	44	1.4	43	1.7
Portugal (e)	42	1.6	44	1.4
Switzerland (e)	48	0.9	45	1.3
Serbia	46	1.1	46	1.3
Colombia	47	1.1	47	1.2
Chile	47	1.3	48	1.0
Peru	54	0.7	49	0.9
New Zealand (e)	52	0.7	50	0.9
Other	52	11.6	50	12.3
World		1,230.9		1,413.5
		1,230.9		1,415.5
(e): estimate				

# CRUDE STEEL PRODUCTION BY PROCESS, 2010

# CONTINUOUSLY-CAST STEEL OUTPUT 2008 TO 2010

					•	
	Production	Oxygen	Electric	Open	Other	Total
	milion			hearth		
	metric tons	%	%	%	%	<u>%</u>
Austria	7.2	91.2	8.8	-	-	100.0
Belgium	8.0	64.9	35.1	-	-	100.0
Bulgaria	0.7	01.0	100.0	-	-	100.0
Czech Republic	5.2	91.9	8.1	-		100.0
Finland France	4.0 15.4	31.4 63.7	68.6 36.3	-	-	100.0
Germany	43.8	69.8	30.3	-	-	100.0
Greece	1.8	09.6	100.0	-	-	100.0
Hungary	1.7	94.6	5.4	-	-	100.0
Italy	25.8	33.3	66.7	-	-	100.0
Latvia (e)	0.7	33.3	00.7	100.0	_	100.0
Luxembourg	2.5	_	100.0	100.0	_	100.0
Netherlands	6.7	98.1	1.9	_	-	100.0
Poland	8.0	50.0	50.0	_	-	100.0
Portugal (e)	1.4	-	100.0	-	-	100.0
Romania	3.7	53.5	46.5	-	_	100.0
Slovak Republic	4.6	92.7	7.3	-	-	100.0
Slovenia	0.6	-	100.0	-	-	100.0
Spain	16.3	23.5	76.5	-	-	100.0
Sweden	4.8	68.7	31.3	-	-	100.0
United Kingdom	9.7	75.4	24.6	-	-	100.0
European Union (27)	172.6	57.7	41.9	0.4	-	100.0
Turkey	29.1	28.3	71.7	-	-	100.0
Others	3.5	35.9	64.1	-	-	100.0
Other Europe	32.6	29.1	70.9	-	-	100.0
Russia	66.9	63.4	26.9	9.8	-	100.0
Ukraine	33.4	69.3	4.5	26.2	-	100.0
Other CIS	8.5	49.6	41.2	9.3	-	100.0
CIS	108.9	64.1	21.1	14.8	-	100.0
Canada	13.0	57.7	42.3	-	-	100.0
Mexico	16.7	30.8	69.2	-	-	100.0
United States	80.5	38.7	61.3	-	-	100.0
NAFTA	110.2	39.8	60.2	-	-	100.0
Argentina	5.1	50.7	49.3	-	-	100.0
Brazil	32.9	76.2	23.8	-	-	100.0
Chile	1.0	64.0	36.0	-	-	100.0
Venezuela	2.2	-	100.0	-	-	100.0
Others	3.5	11.2	88.8	-	-	100.0
Central and South America	44.8	64.1	35.9	-	-	100.0
Egypt (e)	6.7	9.0	91.0	-	-	100.0
South Africa	7.6	57.3	42.7	-	-	100.0
Other Africa	2.2	25.7	74.3	-	-	100.0
Africa	16.5	33.5	66.5	-	-	100.0
Iran (e)	12.0	20.0	80.0	-	-	100.0
Saudi Arabia	5.0	-	100.0	-	-	100.0
Other Middle East	2.3	10.4	100.0	-	-	100.0
Middle East	19.3	12.4	87.6	-	-	100.0
China	626.7 68.3	90.2	9.8	1.5		100.0
India (e) Japan	109.6	78.2	21.8	1.5	-	100.0
South Korea	58.4	78.2 58.4	41.6			100.0
Taiwan, China	19.8	52.6	47.4	-	-	100.0
Other Asia	15.9	52.0	100.0	-	-	100.0
Asia	898.5	80.3	19.6	0.1	-	100.0
Asia Australia	7.3	83.1	16.9	0.1	-	100.0
New Zealand (e)	0.9	72.7	27.3	-	-	100.0
Total of above countries	1,411.6	70.0	28.8	1.3		100.0
Total of above coulities	1,411.0	70.0	20.0	1.3		100.0

				200	0 10	2010
	millio	on metric t	ons	% cru	ude steel o	ıtput
	2008	2009	2010	2008	2009	2010
Austria	7.3	5.5	6.9	95.5	96.6	96.2
Belgium	10.7	5.6	8.0	100.0	100.0	100.0
Bulgaria	1.3	0.7	0.7	97.8	98.2	100.0
Czech Republic	5.6	4.2	4.7	88.2	91.3	89.9
Finland	4.4	3.1	4.0	99.5	99.6	99.6
France	17.0	12.4	14.8	94.9	96.4	95.9
Germany	44.0	31.6	42.4	95.9	96.7	96.7
Greece	2.5	2.0	1.8	100.0	100.0	100.0
Hungary	2.1	1.4	1.7	98.9	100.0	100.0
Italy	29.2	18.9	24.6	95.3	95.2	95.7
Latvia (e)	0.6	0.7	0.7	100.0	100.0	100.0
Luxembourg	2.6	2.1	2.5	100.0	100.0	100.0
Netherlands	6.7	5.1	6.5	97.8	98.8	98.1
Poland	9.4	6.9	7.8	96.5	97.1	97.4
Portugal (e)	1.6	1.6	1.3	98.8	98.7	98.5
Romania Clavals Papublia	4.9	2.7	3.6	96.7	96.9	97.1
Slovak Republic	4.5	3.7	4.6	99.7	99.6	99.7
Slovenia	0.5 18.3	0.4 14.2	0.5 16.1	82.8 98.4	82.0	82.2
Spain	4.5	2.5	4.3	87.9	98.6	98.6
Sweden United Kingdom		9.9	9.6	98.3	87.6	88.5
United Kingdom European Union (27)	13.3	135.1	167.1	96.3	98.6 96.9	98.4 96.8
Turkey	26.8	25.3	29.1	100.0	100.0	100.0
Others	2.6	2.1	2.5	99.4	99.6	99.2
Other Europe	29.4	27.4	31.7	100.0	100.0	99.9
Russia	48.8	48.4	54.0	71.2	80.6	80.7
Ukraine	14.6	14.3	18.0	39.1	47.9	53.8
Other CIS	8.5	7.7	7.8	98.8	99.3	99.4
CIS	71.8	70.4	79.8	62.8	72.1	73.7
Canada	14.7	9.0	12.9	99.0	97.3	98.8
Mexico	17.2	14.1	16.7	99.8	99.8	99.9
United States	88.6	56.7	78.4	96.9	97.5	97.4
NAFTA	120.4	79.9	107.9	97.6	97.9	97.9
Argentina	5.5	4.0	5.1	98.6	98.5	99.7
Brazil	31.8	25.7	31.8	94.2	97.1	96.6
Venezuela	4.2	3.8	2.2	100.0	100.0	100.0
Other Latin America	4.3	3.8	4.1	91.2	91.2	90.5
Central and South America	45.7	37.3	43.2	94.9	96.9	96.5
Egypt (e)	6.1	5.5	6.7	98.4	100.0	100.0
South Africa	8.1	7.5	7.6	98.4	99.6	99.5
Other Africa	2.4	2.1	2.2	98.1	102.6	99.8
Africa	16.6	15.1	16.5	98.4	100.2	99.7
Iran Saudi Arabia	10.0 4.7	10.9 4.7	12.0 5.0	100.0	100.0	100.0
Other Middle East	1.7	1.7	2.3	100.0	100.0	100.0
Middle East	16.3	17.3	19.3	100.0	100.0	100.0
China	483.7	568.5	613.7	96.7	99.1	97.9
India (e)	41.3	43.2	47.5	71.4	68.0	69.5
Japan	116.2	86.1	107.7	97.9	98.4	98.2
South Korea	52.3	47.4	57.2	97.5	97.7	98.0
Taiwan, China	19.8	15.9	19.8	99.6	100.0	100.0
Other Asia	17.0	12.6	12.9	100.0	100.0	100.0
Asia	730.3	773.8	858.7	95.2	96.5	95.9
Australia	7.6	5.2	7.2	99.1	98.9	99.3
New Zealand (e)	0.8	0.8	0.9	100.0	100.0	100.0
Total of above countries	1,229.8	1,162.3	1,332.2	93.0	94.9	94.7
a) antiquate The assertion in th			- th 000/ -			i- 0000

(e): estimate The countries in this table accounted for more than 99% of world crude steel production in 2010.

(e): estimate The countries in this table accounted for more than 99% of world crude steel production in 2009.

## MONTHLY CRUDE STEEL PRODUCTION 2007 TO 2010

#### million metric tons

#### Total 65 reporting countries



#### European Union (27)



# CIS (6) 12 9 6 — actual data — deseasonalised data 2007 2008 2009 2010

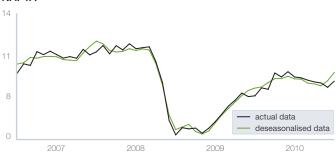
#### The 65 reporting countries

Algeria, Argentina, Australia, Austria, Belgium, Bosnia-Herzegovina, Brazil, Bulgaria, Byelorussia, Canada, Chile, China, Colombia, Croatia, Cuba, Czech Republic, Ecuador, Egypt, El Salvador, Finland, France, Germany, Greece, Guatemala, Hungary, India, Iran, Italy, Japan, Kazakhstan, Libya, Luxembourg, Macedonia, Mexico, Moldova, Morocco, Montenegro, Netherlands, New Zealand, Norway, Paraguay, Peru, Poland, Portugal, Qatar, Romania, Russia, Saudi Arabia, Serbia, Slovak Republic, Slovenia, South Africa, South Korea, Spain, Sweden, Taiwan, China, Trinidad and Tobago, Turkey, Ukraine, United Kingdom, United States, Uruguay, Uzbekistan, Venezuela and Zimbabwe.

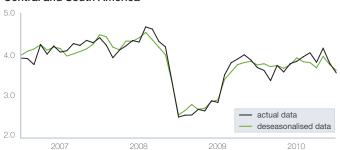
In 2010 these 65 countries accounted for more than 98% of world crude steel production.

#### million metric tons

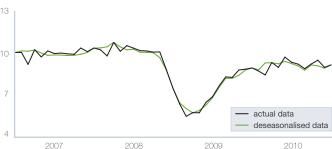
#### NAFTA



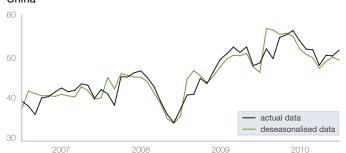
#### Central and South America



#### Japan



#### China

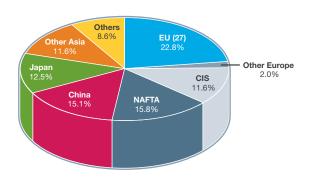


# STEEL PRODUCTION AND USE: GEOGRAPHICAL DISTRIBUTION 2000

# STEEL PRODUCTION AND USE: GEOGRAPHICAL DISTRIBUTION 2010

#### **Production**

World total: 849 million metric tons crude steel

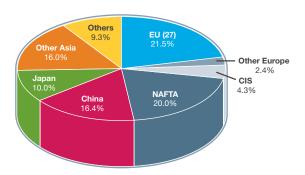


#### Others comprise:

Africa	1.6%	Central and South America	4.8%
Middle Fast	1.3%	Australia and New Zealand	0.9%

#### Use (finished steel products)

World total: 758 million metric tons

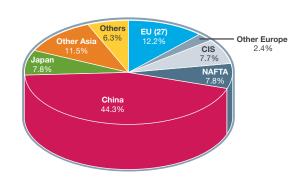


#### Others comprise:

Africa	2.1%	Central and South America	3.7%
Middle East	2.6%	Australia and New Zealand	0.9%

#### **Production**

World total: 1,414 million metric tons crude steel

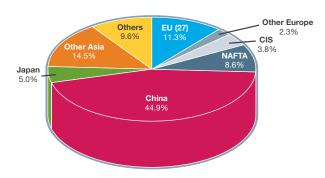


#### Others comprise:

Africa	1.2%	Central and South America	3.2%
Middle East	1.4%	Australia and New Zealand	0.6%

## **Use (finished steel products)**

World total: 1,282 million metric tons



#### Others comprise:

Africa	2.0%	Central and South America	3.6%
Middle East	3.4%	Australia and New Zealand	0.6%

# APPARENT STEEL USE 2004 TO 2010

# APPARENT STEEL USE PER CAPITA 2004 TO 2010

## million metric tons finished steel products

	2004	2005	2006	2007	2008	2009	2010
Austria	3.3	3.5	4.1	4.1	4.0	3.2	3.7
Belgium-Luxembourg	4.8	4.6	5.5	5.6	5.4	3.8	4.5
Czech Republic	5.2	5.2	6.0	6.6	6.5	4.5	5.5
France	16.7	14.8	16.2	16.6	15.3	10.9	12.8
Germany	36.3	35.3	39.2	42.7	42.4	28.2	36.3
Italy	33.2	31.6	36.4	35.9	33.3	20.1	25.5
Netherlands	3.5	3.6	3.5	4.1	4.3	2.9	3.3
Poland	8.5	8.4	10.7	12.1	11.5	8.2	9.7
Romania	3.3	3.5	4.2	5.1	4.8	2.8	2.9
Spain	21.1	20.9	23.6	24.5	18.0	11.9	13.1
Sweden	4.0	4.1	4.5	4.9	4.3	2.9	4.1
United Kingdom	13.2	11.4	12.9	12.8	11.8	7.0	8.8
Other EU (27)	19.5	18.6	21.7	23.0	20.9	13.1	14.6
European Union (27)	172.4	165.5	188.4	198.0	182.6	119.5	144.8
Turkey	15.2	18.4	21.2	23.8	21.5	18.0	23.6
Others	6.2	6.4	7.5	7.9	7.4	5.9	6.0
Other Europe	21.4	24.8	28.7	31.6	28.9	23.9	29.6
Russia	26.3	29.3	34.9	40.4	35.4	24.9	35.7
Ukraine	5.8	5.6	6.6	8.1	6.9	4.0	5.5
Other CIS	6.1	6.7	7.3	7.9	7.8	7.2	7.3
CIS	38.1	41.5	48.9	56.3	50.0	36.1	48.5
Canada	17.4	16.8	18.1	15.5	14.7	9.5	14.1
Mexico	16.0	15.3	17.1	17.1	16.4	14.2	16.1
United States	117.4	105.4	119.6	108.0	98.4	59.2	80.1
NAFTA	150.8	137.5	154.9	140.6	129.5	82.9	110.3
Argentina	3.6	3.7	4.5	4.6	4.8	3.2	4.6
Brazil	18.3	16.8	18.5	22.1	24.0	18.6	26.6
Venezuela	2.4	2.4	3.2	3.6	3.4	2.7	2.3
Others	9.0	9.3	10.9	11.0	11.9	9.1	12.3
Central and South America	33.3	32.3	37.2	41.3	44.2	33.6	45.8
Egypt	3.8	5.0	4.6	5.5	6.5	9.4	8.6
South Africa	4.9	4.7	6.0	6.0	6.1	4.5	5.0
Other Africa	8.9	10.0	10.0	10.5	11.6	13.0	12.3
Africa	17.7	19.6	20.6	22.0	24.3	26.8	25.9
Iran	14.5	15.6	14.6	19.1	14.9	17.2	17.1
Other Middle East	17.6	20.3	23.0	25.1	30.8	25.1	28.1
Middle East	32.1	35.9	37.7	44.2	45.7	42.2	45.3
China	275.8	347.5	377.7	422.5	434.7	548.1	576.0
India	35.3	39.9	45.6	51.5	51.4	55.3	60.6
Japan	76.8	76.7	79.0	81.2	77.9	52.8	63.8
South Korea	47.2	47.1	50.2	55.2	58.6	45.4	52.4
Taiwan, China	22.1	19.9	19.8	18.1	16.9	11.3	17.8
Other Asia	45.8	48.4	45.4	52.8	52.7	50.3	55.6
Asia	503.0	579.6	617.6	681.3	692.2	763.2	826.1
Australia and New Zealand	8.0	7.9	7.9	8.4	8.5	6.1	7.5
World	976.7	1.044.7	1.141.9	1.223.7	1.205.9	1.134.2	1.283.6

## kilograms finished steel products

	2004	2005	2006	2007	2008	2009	2010
Austria	403.3	424.8	501.0	505.2	487.2	395.6	448.8
Belgium-Luxembourg	440.3	424.6	506.8	515.1	491.3	343.8	407.5
Czech Republic	505.4	511.2	583.3	642.1	639.5	441.2	540.2
France	267.1	235.9	255.3	261.0	239.3	168.6	197.2
Germany	439.9	427.7	475.6	518.4	514.3	342.7	440.8
Italy	571.9	544.4	626.9	617.9	573.2	345.7	439.7
Netherlands	215.9	220.9	213.6	248.9	258.7	171.6	196.0
Poland	219.5	217.2	276.7	312.9	299.2	212.9	252.7
Romania	145.4	156.7	188.3	226.7	215.3	123.8	132.5
Spain	524.1	518.0	585.2	605.7	444.5	293.6	323.1
Sweden	445.0	455.7	495.6	537.7	479.7	322.7	450.0
United Kingdom	218.6	188.8	212.0	211.1	193.9	114.8	143.5
Other EU (27)	280.8	267.5	312.8	331.1	301.0	188.8	209.9
European Union (27)	353.0	338.3	384.6	403.6	371.7	242.9	294.0
Turkey	212.5	253.7	287.8	317.9	283.0	234.7	303.0
Others	165.4	171.0	199.5	211.9	200.0	157.6	161.0
Other Europe	196.4	225.6	258.1	282.8	255.7	209.5	257.0
Russia	183.2	204.9	245.8	285.6	251.7	178.1	256.2
Ukraine	121.8	118.4	142.5	173.9	149.5	86.6	121.0
Other CIS	89.1	30.5	37.9	47.9	48.4	55.4	46.6
CIS	147.2	160.8	189.7	219.3	195.3	141.2	190.1
Canada	540.9	520.1	554.8	470.9	441.9	284.6	418.1
Mexico	152.6	143.9	159.5	157.4	149.3	127.3	142.8
United States	400.7	356.5	400.9	358.5	323.6	192.7	258.2
NAFTA	350.6	316.7	353.2	317.5	289.6	183.4	241.6
Argentina	92.4	94.4	113.4	115.3	118.2	78.3	111.7
Brazil	98.2	89.0	96.8	113.8	122.5	93.5	132.2
Venezuela	96.3	96.1	126.2	140.1	128.7	100.1	83.0
Others	52.5	54.0	62.4	61.9	66.5	50.0	66.8
Central and South America	78.1	74.8	84.9	93.1	98.3	73.7	99.3
Egypt	54.1	68.5	62.2	72.2	84.7	118.7	107.1
South Africa	105.1	98.5	126.0	123.9	125.6	90.8	101.2
Other Africa	19.9	21.8	21.3	22.0	23.8	26.1	24.1
Africa	31.3	34.0	35.0	36.5	39.5	42.8	40.5
Iran	225.8	241.7	225.3	291.6	225.7	258.7	255.7
Other Middle East	188.7	210.2	233.1	245.7	293.3	222.0	245.4
Middle East	178.8	196.6	201.8	231.1	234.2	212.6	223.9
China	212.4	266.0	287.4	319.6	326.9	409.4	427.4
India	32.9	36.6	41.2	45.8	45.1	47.8	51.7
Japan	602.4	601.6	619.5	637.0	612.1	415.6	502.9
South Korea	986.7	981.6	1,042.6	1,144.1	1,210.7	936.1	1,077.2
Taiwan, China	974.8	877.1	870.0	790.9	737.8	491.0	771.8
Other Asia	51.4	53.6	49.5	56.8	56.0	52.7	57.6
Asia	145.3	165.6	174.6	190.6	191.7	209.3	224.2
Australia and New Zealand	328.7	322.9	316.9	332.2	330.7	231.6	285.3
World	164.3	173.9	188.0	199.4	194.4	181.0	202.7

# PIG IRON 2009 AND 2010

# DIRECT REDUCED IRON PRODUCTION 2003 TO 2010

#### million metric tons

	Production	Production	- Exports	+ Imports	Apparent
	2009	2010	2010	2010	= Consumption 2010
Austria	4.4	5.6	0.0	0.0	5.6
Belgium-Luxembourg	3.1	4.7	0.3	0.4	4.8
Czech Republic	3.5	4.0	0.1	0.1	4.0
Finland	2.0	2.6	0.0	0.0	2.6
France	8.1	10.1	0.1	0.1	10.2
Germany	20.1	28.6	0.2	0.5	28.9
Hungary	1.0	1.3	-	0.0	1.3
Italy	5.7	8.6	0.0	1.0	9.5
Netherlands	4.6	5.8	0.2	0.2	5.9
Poland	3.0	3.6	0.0	0.2	3.8
Romania	1.6	1.7	0.0	0.1	1.8
Slovak Republic	3.0	3.6	0.1	0.1	3.6
Spain	2.9	3.6	0.0	0.4	4.0
Sweden	2.0	3.4	0.1	0.1	3.4
United Kingdom	7.7	7.2	0.0	0.0	7.3
Other EU	-	-	0.0	0.1	0.1
European Union (27)	72.7	94.5	1.0	3.5	97.0
Turkey	7.0	7.7	0.0	0.6	8.2
Others	2.6	3.2	0.1	0.1	3.2
Other Europe	9.6	10.9	0.1	0.7	11.4
Kazakhstan	2.4	2.6	-	0.0	2.6
Russia	43.9	47.9	3.7	2.5	46.8
Ukraine	25.7	27.3	1.5	1.2	27.1
Other CIS	-	-	0.0	0.2	0.1
CIS	72.0	77.9	5.2	3.9	76.6
Canada	5.3	7.7	0.1	0.0	7.5
Mexico	3.9	4.6	0.0	0.2	4.7
United States	19.0	26.8	2.2	3.8	28.4
NAFTA	28.2	39.1	2.4	4.0	40.7
Argentina	2.0	2.5	0.0	0.0	2.5
Brazil	25.3	31.0	-	-	31.0
Chile	0.9	0.6	_	0.0	0.6
Venezuela	-	-	-	0.0	0.0
Other Latin America	0.4	0.4	0.0	0.0	0.4
Central and South America	28.6	34.5	0.0	0.0	34.5
Egypt	0.8	0.6	0.0	0.0	0.6
South Africa	4.4	5.3	0.6	0.5	5.1
Other Africa	0.6	0.7	0.0	0.0	0.7
Africa	5.8	6.6	0.7	0.5	6.4
Iran	2.4	2.5	0.0	0.0	2.5
Other Middle East	-	-	0.0	0.0	0.0
Middle East	2.4	2.5	0.1	0.0	2.5
China	549.4	590.2	0.8	1.0	590.4
India	38.2	38.7	0.5	0.3	38.4
Japan	66.9	82.3	0.0	0.4	82.6
South Korea	27.3	35.1	0.0	1.0	36.1
Taiwan, China	7.9	9.4	0.0	0.6	9.9
Other Asia	1.3	1.3	0.3	0.2	1.1
Asia	691.1	756.9	1.7	3.4	758.6
Australia	4.4	6.0	0.0	0.0	6.0
New Zealand	0.6	0.7	-	0.0	0.7
Other Oceania	_	-	0.0	0.0	0.0
	5.0	6.7	0.0	0.0	6.7
Oceania	5.0	0.7	0.0	0.0	0.7

#### million metric tons

	2003	2004	2005	2006	2007	2008	2009	2010
Germany	0.6	0.6	0.4	0.6	0.6	0.5	0.4	0.4
Sweden	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
European Union (27)	0.7	0.7	0.6	0.7	0.7	0.6	0.5	0.5
Russia	2.9	3.1	3.3	3.3	3.4	4.6	4.7	4.5
Canada	0.5	1.1	0.6	0.4	0.9	0.7	0.3	0.6
Mexico	5.5	6.3	6.1	6.2	6.3	6.0	4.1	5.4
United States	0.2	0.2	0.2	0.2	0.3	0.3	-	-
NAFTA	6.2	7.6	6.9	6.9	7.4	7.0	4.5	6.0
Argentina	1.7	1.8	1.8	1.9	1.8	1.8	0.8	1.6
Brazil	0.4	0.4	0.4	0.4	0.4	0.3	0.0	-
Peru	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Trinidad and Tobago	2.2	2.2	2.1	2.1	2.1	1.6	1.2	1.8
Venezuela	6.6	7.8	8.9	8.4	7.8	6.8	5.5	3.8
Central and South America	11.0	12.3	13.3	12.9	12.1	10.7	7.6	7.2
Egypt	2.9	3.0	2.9	-	2.8	2.6	3.1	3.0
Libya	1.3	1.6	1.7	1.6	1.7	1.6	1.1	1.3
Nigeria	-	-	-	0.2	0.2	-	-	-
South Africa	1.5	1.6	1.8	1.8	1.7	1.2	1.3	1.1
Africa	5.7	6.2	6.4	3.5	6.4	5.4	5.5	5.4
Iran	5.0	6.4	6.9	6.9	7.5	7.4	8.1	9.4
Qatar	0.8	0.8	0.8	0.9	1.2	1.7	2.1	2.2
Saudi Arabia	3.3	3.4	3.6	3.6	4.1	4.5	4.6	4.9
United Arab Emirates	-	-	-	-	-	-	-	1.2
Middle East	9.1	10.7	11.3	11.4	12.8	13.6	14.8	17.6
China	0.3	0.4	0.3	0.2	0.6	0.2	0.0	0.1 (e)
India	7.1	9.1	12.1	15.0	20.1	20.9	23.4	26.3
Indonesia	1.2	1.4	1.3	1.2	1.3	1.2	1.1	1.4
Malaysia	1.6	1.7	1.3	1.3	1.9	2.0	2.4	2.4
Myanmar	0.0	0.0	0.0	-	-	-	-	-
Asia	10.2	12.7	15.0	17.7	23.9	24.3	27.0	30.1
Australia	2.0	0.7	-	-	-	-	-	-
World	47.8	54.1	56.7	56.4	66.8	66.1	64.5	

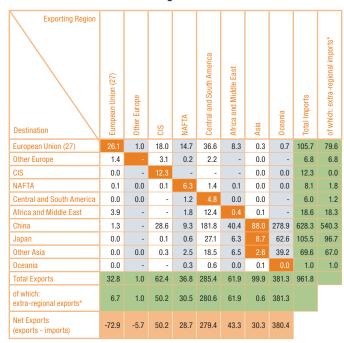
(e): estimate

#### million metric tons actual weight

	Fe Content <sup>(1)</sup>	Production	- Exports	+ Imports	= Apparent Consumption
Austria	(32)	1.4	0.0	3.5	4.9
Belgium-Luxembourg	,	-	0.2	3.3	3.1
Bulgaria		-	-	0.1	0.1
Czech Republic		-	-	4.8	4.8
France		-	0.1	10.0	9.9
Germany		0.4	0.0	28.8	29.2
Italy		-	0.0	8.2	8.2
Netherlands		-	16.3	21.6	5.3
Poland		-	0.0	3.8	3.7
Romania		-	-	0.8	0.8
Slovakia		-	-	4.2	4.2
Spain		-	0.0	4.0	4.0
Sweden	(63)	17.7	16.1	0.0	1.0
United Kingdom		-	0.0	9.2	9.1
Other EU		-	0.0	3.8	3.8
European Union (27)		19.5	32.8	106.0	92.
Bosnia-Herzegovina		1.1	0.3	-	0.
Norway	(65)	0.9	0.8	0.1	0.:
Turkey		5.5	-	5.7	11.3
Other Europe		-	-	3.1	3.
Europe		27.0	33.9	114.9	108.
CIS	(60)	175.7	63.8	12.2	124.
Canada	(63)	33.0	31.1	3.1	5.
Mexico	(65)	10.3	3.8	0.6	7.
United States	(60)	26.5	3.9	3.9	26.
NAFTA		69.8	38.8	7.5	38.
Brazil	(66)	305.0	266.0	0.2	39.
Chile	(61)	8.7	8.8	0.0	0.
Peru	(60)	7.2	7.1	0.0	0.
Venezuela	(64)	14.9	3.5	-	11.
Other America		0.5	-	5.7	6.
Central and South America		336.3	285.4	5.9	56.
Mauritania	(65)	10.3	10.3	-	0.
South Africa	(65)	55.4	44.6	0.4	11.3
Other Africa		2.5	-	5.9	8.
Africa		68.2	54.9	6.2	19.
Middle East		24.0	7.1	12.3	29.
China	(28)	881.2	0.0	628.2	1,509.
India	(61)	257.4	90.7	0.6	167.
Japan	(57)	-	0.0	105.5	105.
South Korea		0.1	0.1	42.1	42.
Other Asia		5.4	3.5	22.8	24.
Asia		1,144.1	94.3	799.1	1,849.
Australia	(65)	393.9	380.5	3.9	17.
New Zealand and Other Oceania		2.1	0.8	0.0	1.
World		2,241.1	959.5	962.1	2,243.

<sup>(1)</sup> of domestic production: percentage Fe of total weight.

#### million metric tons actual weight

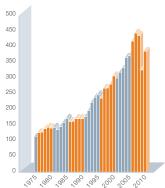


<sup>\*</sup> excluding intra-regional trade marked

## WORLD TRADE IN STEEL PRODUCTS 1975 TO 2010

# WORLD STEEL EXPORTS, ANALYSIS BY PRODUCT 2005 TO 2009

#### million metric tons finished steel

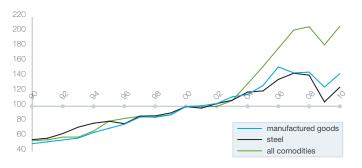


Exports are of finished and semi-finished steel products. Production of finished steel, where not available from national sources, is calculated from crude steel production, taking into account the continuous casting ratio.

	Year	Exports	Production	Exports %
	1975	114.7	506.9	22.6
	1980	140.6	578.7	24.3
	1985	171.0	599.0	28.5
	1990	171.0	654.0	26.2
	1991	177.1	660.1	26.8
	1992	196.1	658.2	29.8
	1993	222.5	665.0	33.5
	1994	238.6	656.3	36.3
	1995	246.6	685.0	36.0
	1996	236.4	686.5	34.4
	1997	267.9	729.6	36.7
-	1998	268.7	713.4	37.7
	1999	280.8	725.1	38.7
	2000	307.1	782.5	39.2
	2001	300.4	784.9	38.3
	2002	313.1	836.2	37.4
	2003	332.9	898.1	37.1
	2004	366.2	992.5	36.9
	2005	371.3	1,062.2	35.0
	2006	418.3	1,158.6	36.1
	2007	443.8	1,251.4	35.5
	2008	436.2	1,234.6	35.3
	2009	326.3	1,147.0	28.4
	2010	386.6	1,316.6	29.4

## WORLD VOLUME OF TRADE 1990 TO 2010

#### Quantum indices 2000 = 100



#### million metric tons crude steel production

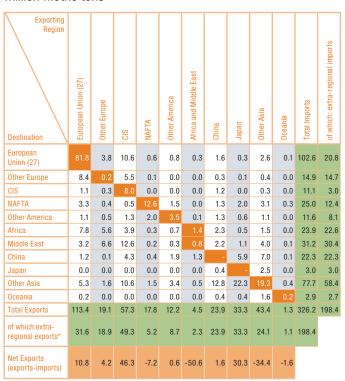
	2005	2006	2007	2008	2009
Ingots and semi-finished material	59.5	62.5	62.4	62.6	51.2
Railway track material	2.4	2.6	3.1	3.3	2.8
Angles, shapes and sections	18.5	21.0	26.3	24.1	16.5
Concrete re-inforcing bars	17.9	18.0	21.1	26.1	21.8
Bars and rods, hot-rolled	10.2	11.8	15.1	16.8	7.6
Wire rod	19.8	23.0	22.8	21.9	16.6
Drawn wire	5.4	6.1	6.8	7.0	5.3
Other bars and rods	4.9	5.7	6.5	6.0	3.1
Hot-rolled strip	3.3	4.1	4.6	3.6	2.2
Cold-rolled strip	4.5	4.9	5.1	3.9	3.0
Hot-rolled sheets and coils	53.3	62.9	62.0	60.8	50.0
Plates	26.2	31.7	37.8	38.1	24.0
Cold-rolled sheets and coils	30.2	32.9	29.9	29.5	24.9
Electrical sheet and strip	3.7	3.8	4.1	4.2	3.0
Tinmill products	6.0	6.0	6.3	6.1	5.2
Galvanised sheet	25.6	30.4	32.1	29.8	23.1
Other coated sheet	7.3	8.6	9.7	10.9	8.1
Steel tubes and fittings	31.0	36.7	33.9	35.4	29.4
Wheels (forged and rolled) and axles	0.4	0.5	0.2	0.5	0.7
Castings	0.9	0.9	1.1	0.9	0.6
Forgings	1.0	1.1	1.3	1.2	0.5
Other	0.0	0.0	0.0	0.0	0.1
Total	332.2	375.4	392.1	392.5	299.8

Exports in World Steel in Figures include intra-EU trade, trade between countries of the CIS, and trade between NAFTA countries. The figures are based on a broad definition of the steel industry and its products, including ingots, semi-finished products, hot-rolled and cold-finished products, tubes, wire, and unworked castings and forgings. The above table comprises the exports of 37 countries, which represents aproximately 90% of total world trade in 2009.

# WORLD STEEL TRADE BY AREA 2009

# MAJOR IMPORTERS AND EXPORTERS OF STEEL 2009

#### million metric tons



<sup>\*</sup> excluding intra-regional trade marked

#### million metric tons

Rank	Total Exports	mmt
1	Japan	33.3
2	European Union (27) (1)	31.6
3	Russia	27.6
4	Ukraine	24.0
5	China	24.0
6	Germany (2)	20.8
7	South Korea	20.2
8	Turkey	17.4
9	Belgium-Luxembourg (2)	15.4
10	Italy (2)	12.7
11	France (2)	12.0
12	Taiwan, China	10.0
13	United States	9.2
14	Brazil	8.6
15	Spain (2)	8.2
16	Netherlands (2)	7.7
17	United Kingdom (2)	6.3
18	India	5.6
19	Austria (2)	5.4
20	Canada	4.9

Rank	Total Imports	mmt
1	China	22.4
2	European Union (27) (1)	20.8
3	South Korea	20.3
4	Germany (2)	17.7
5	United States	15.3
6	Italy (2)	12.6
7	France (2)	11.4
8	Belgium-Luxembourg (2)	10.8
9	Turkey	10.2
10	Viet Nam	9.1
11	Thailand	9.0
12	India	8.3
13	Iran	8.0
14	Spain (2)	7.0
15	Taiwan, China	6.5
16	Netherlands (2)	6.3
17	Canada	6.2
18	United Arab Emirates	5.8
19	Indonesia	5.7
20	Egypt	5.5

Rank	Net Exports	mmt
	(exports - imports)	
1	Japan	30.3
2	Russia	24.0
3	Ukraine	23.0
4	European Union (27) (1)	10.8
5	Turkey	7.2
6	Brazil	6.3
7	Belgium-Luxembourg (2)	4.6
8	Taiwan, China	3.4
9	Germany (2)	3.1
10	Austria (2)	2.4
11	South Africa	2.2
12	Slovakia (2)	2.0
13	United Kingdom (2)	1.9
14	China	1.6
15	Netherlands (2)	1.4

Rank	Net Imports (imports - exports)	mmt
1	Vietnam	9.0
2	Iran	7.9
3	Thailand	7.4
4	United States	6.1
5	United Arab Emirates	5.7
6	Algeria	5.3
7	Egypt	5.2
8	Indonesia	4.6
9	Saudi Arabia	3.2
10	Philippines	2.9
11	India	2.7
12	Hong Kong	2.7
13	Lebanon	2.5
14	Syria	2.2
15	Singapore	2.2

<sup>(1)</sup> Excluding intra-regional trade

<sup>(2)</sup> Data for individual European Union (27) countries include intra-European trade

#### million metric tons

	Expo	rts	Imports		
	2009	2010	2009	2010	
Austria	1.7	1.0	1.7	1.0	
Belgium - Luxembourg	3.4	3.8	5.5	7.0	
Bulgaria	0.5	0.9	0.2	0.7	
Czech Republic	1.4	1.8	0.4	0.6	
Germany	7.3	9.2	3.9	5.6	
Finland	0.3	0.2	0.5	0.8	
France	5.1	6.7	2.4	2.8	
Greece	0.0	0.1	1.2	1.0	
Italy	0.3	0.4	3.3	4.8	
Netherlands	4.3	5.1	1.9	2.1	
Poland	0.9	1.3	0.6	0.5	
Slovak Republic	0.3	0.5	0.2	0.3	
Spain	0.3	0.3	4.6	5.7	
Sweden	1.4	1.3	0.2	0.5	
United Kingdom	6.0	7.5	0.2	2.0	
Other EU	6.3	7.9	1.3	4.8	
European Union (27)	39.6	47.9	28.0	40.3	
Turkey	0.1	0.1	15.7	19.2	
Others	1.4	2.4	0.8	1.7	
Other Europe	1.5	2.5	16.4	20.9	
Byelorussia	0.0	0.0	1.3	1.6	
Kazakhstan	0.9	0.8	0.0	0.2	
Russia	1.2	2.4	0.0	1.1	
Ukraine	0.9	0.7	0.0	0.3	
Other CIS	0.4	0.6	0.5	0.4	
CIS	0.4	0.6	0.5	0.4	
Canada	4.8	5.2	1.4	4.0	
Mexico	0.7	1.0	0.9	1.1	
United States	22.4	20.6	3.0	10.5	
NAFTA	27.9	26.7	5.3	15.6	
Brazil	0.1	0.1	0.0	0.2	
Other Central and South America	0.3	0.5	0.2	0.5	
Central and South America	0.4	0.6	0.2	0.7	
South Africa	1.1	1.2	0.0	0.9	
Other Africa	2.0	2.7	1.6	3.8	
Africa	3.2	3.9	1.6	4.7	
Middle East	0.3	0.4	0.0	0.0	
China	0.0	0.4	13.7	5.9	
Japan	9.4	6.5	0.2	0.5	
South Korea	0.5	0.5	7.8	8.1	
Taiwan, China	0.2	0.1	3.9	5.4	
Other Asia	1.4	1.8	4.7	4.1	
Asia	11.5	9.2	30.3	24.0	
Australia and New Zealand	2.2	2.0	0.0	1.3	
World	87.8	94.8	82.5	107.9	

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