



International Manganese Institute

Mn Ore: China the Dominant Factor

锰矿：中国是决定性因素

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IMnI's 7th EPD China Conference 锰协第七次电解产品中国会议

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Presentation Overview:

- **Effects of Global Crisis** 全球金融危机的影响
 - Steel Production 对钢铁生产的影响
 - Mn Alloy Production 对锰合金生产的影响
 - Mn Ore Production & IMnI Members' Inventories 对锰矿生产以及锰协成员库存的影响
- **Mn Ore Supply & Demand** 锰矿的供应和需求
 - Ore Production Capacity by Region 不同地区的锰矿产能
 - Global Imports 2009 2009全球锰矿进口状况
 - China Imports & Port Inventories 中国进口锰矿状况以及港口库存量
- **Summary** 总结
- **IMnI Market Research Service** 锰协市场研究服务



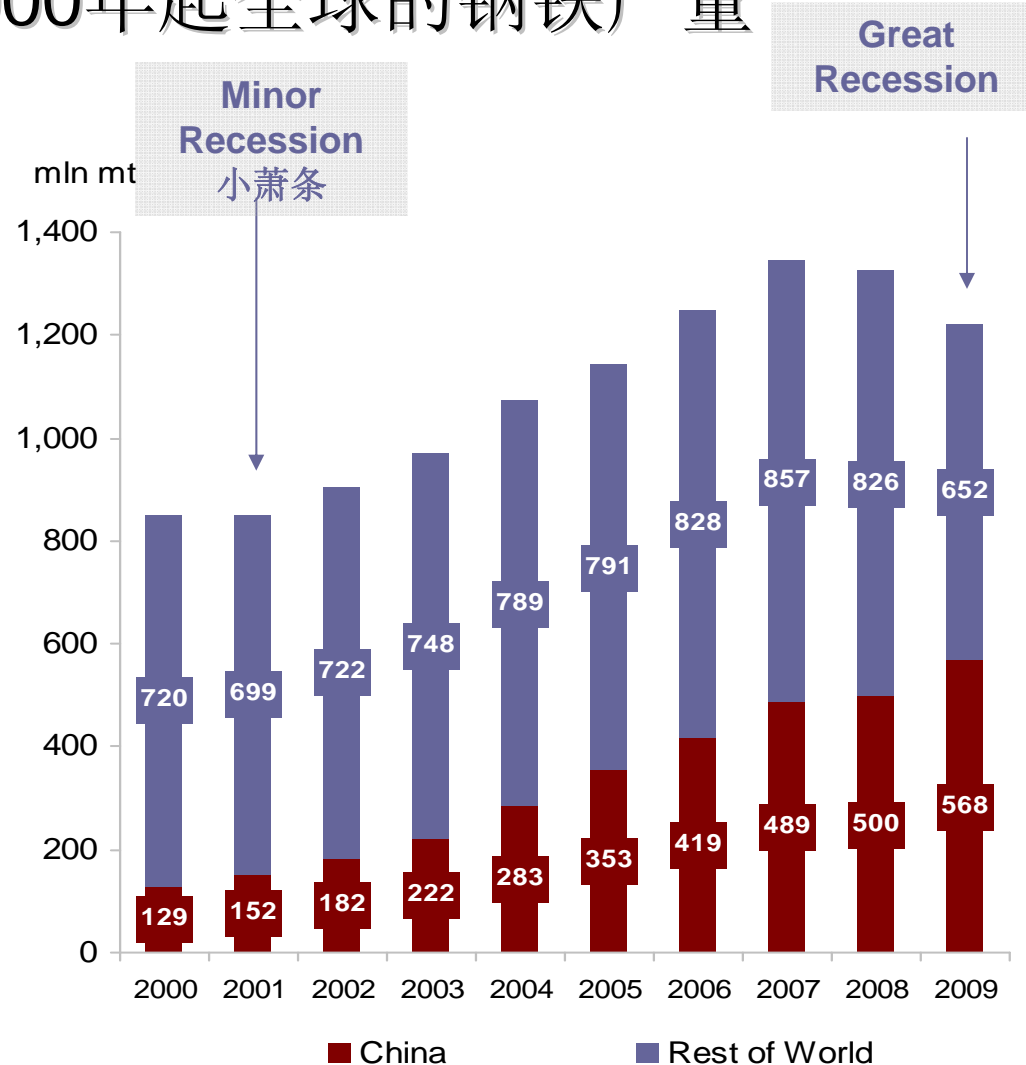
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 - Regional Ore Production Capacity
 - Global Imports 2009
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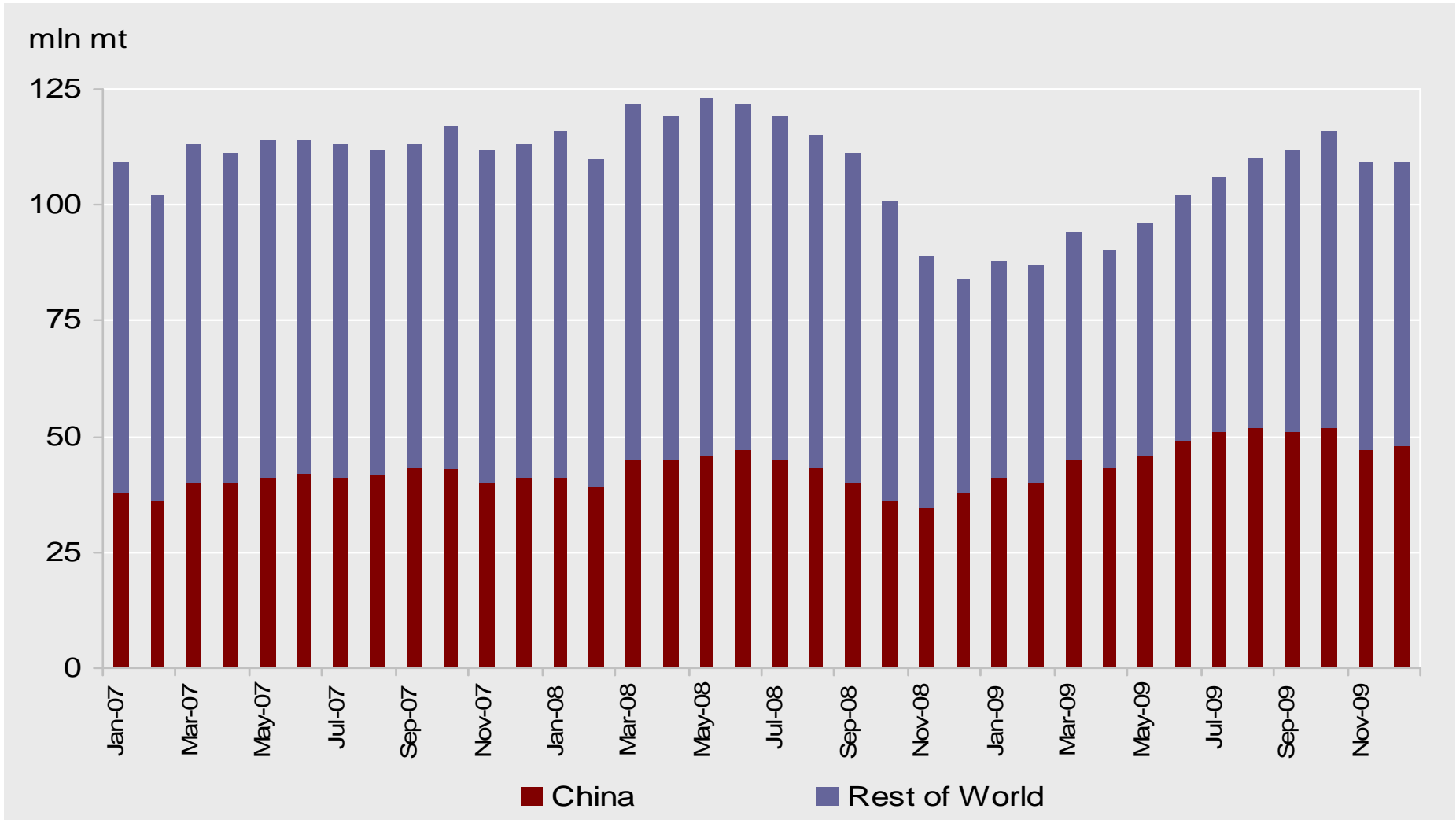
Global Steel from 2000 2000年起全球的钢铁产量

- 90% of Mn is consumed as alloys in the steel production process – steel is directly effected by the macro economy
90%的锰是以锰合金的形式在钢材生产过程中所消耗的，而钢铁的产量则受宏观经济的直接影响
- Global crude output declined 8% year on year in 2009 to 1.22 billion mt (global GDP fell by 2.2%)
全球的钢铁产量2009年同比下降8%，为12.2亿公吨，同期全球GDP下降2.2%
- **China softens the steel freefall in 2009!!** 但在09年中国则有效地阻止了钢铁产量的大幅跳水。
- China Production up 13% in 2009 to a record high 568 million mt (in 2001 it's output grew by 18%) 中国的钢铁产量在09年再创历史新高达到了5.68亿公吨（无独有偶，在2001年全球经济出现小萧条期间，中国的钢铁产量比00年增长了18%）
- Rest of World (ROW) declined a staggering 21% in 2009 (in 2001 output declined by 3%) 世界其他国家和地区在09年产量惊人地下跌了21%，而2001年萧条期间仅下跌了3%





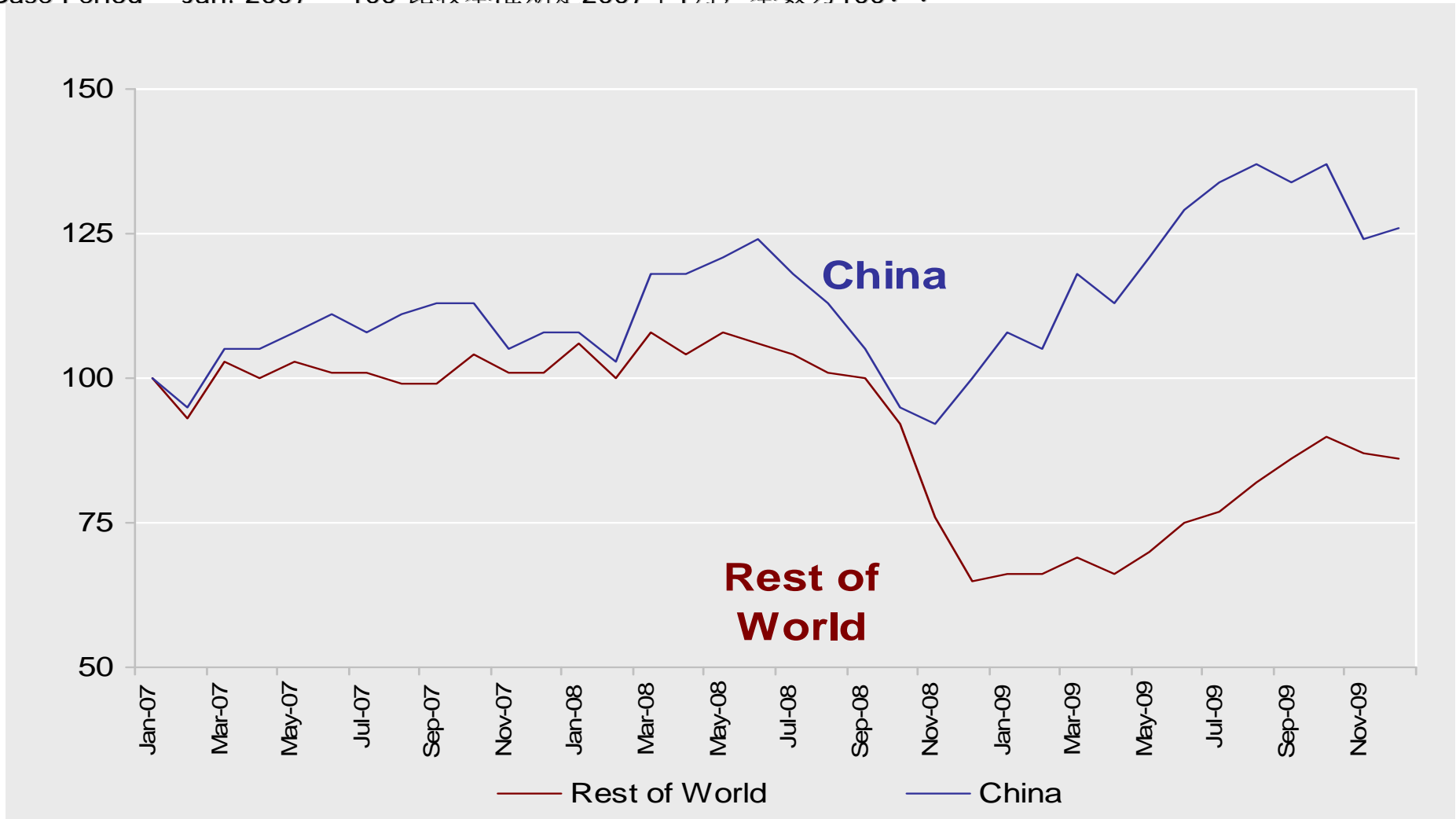
Steel in 2009 – Production rates in ROW slowly increasing...09年中国以外世界其他国家的钢铁生产呈缓慢增长态势





Steel Output Monthly Changes 钢铁月产量的变化

Base Period = Jan. 2007 = 100 比较基准期是2007年1月，基数为100??





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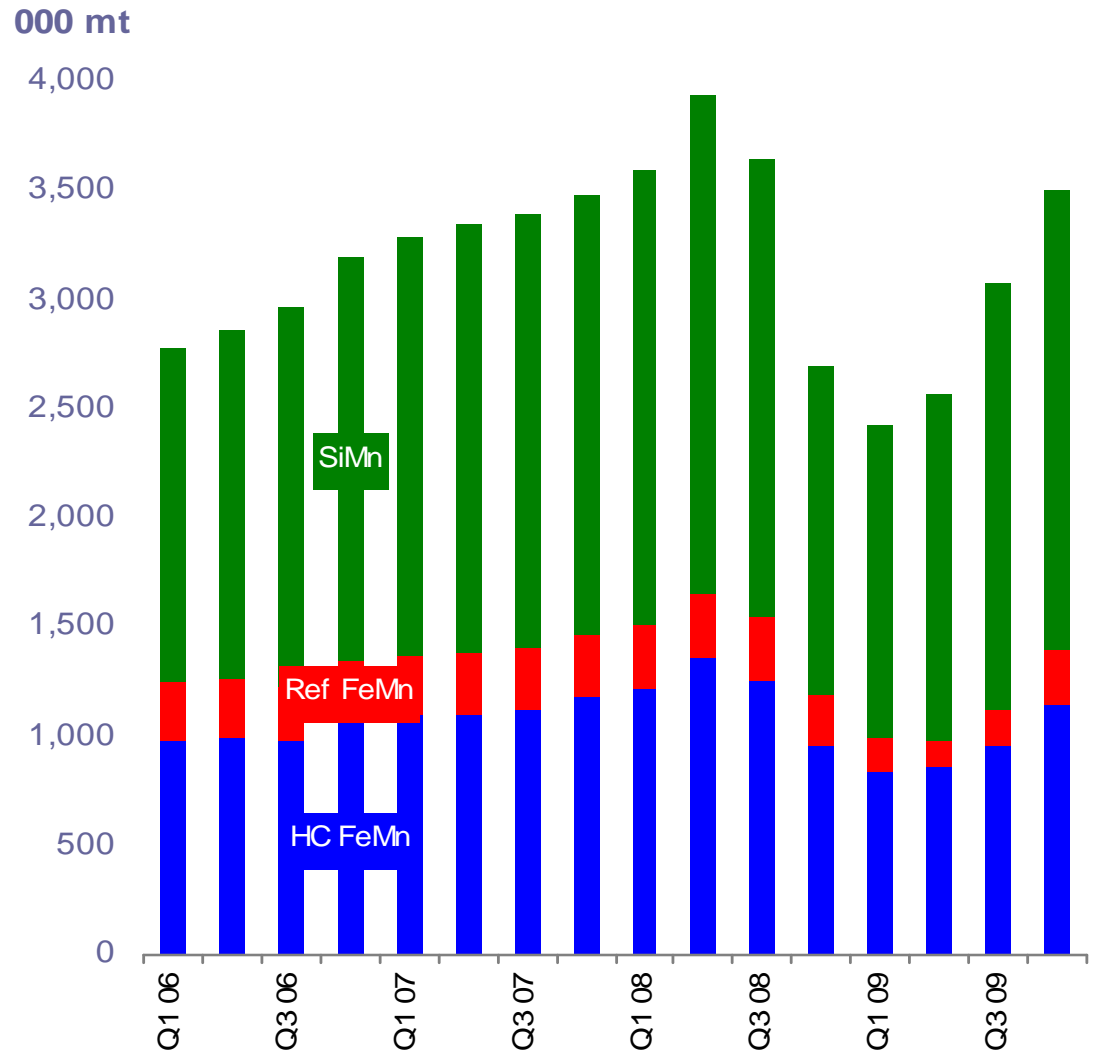
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Mn Alloy Production对锰合金生产的影响

- Mn alloy production declined by 17% in 2009 to 11.6 million mt
锰合金的产量在09年下跌了17%，为1160万公吨
- Mn alloy production declined in all quarters except Q4 09, which was up 30% - mostly due to the steep decline in Q4 08 as the global crisis hit the steel sector
- 09年前三季度锰合金的产量与08年同期相比持续下跌，而第四季度产量则同比增长了30%，主要是由于08年第四季度全球金融危机对钢铁产业的大幅冲击导致该季度的锰合金产量大幅下跌。
- Producer discipline and destocking by traders and end-users has led to tight supplies of Mn alloys

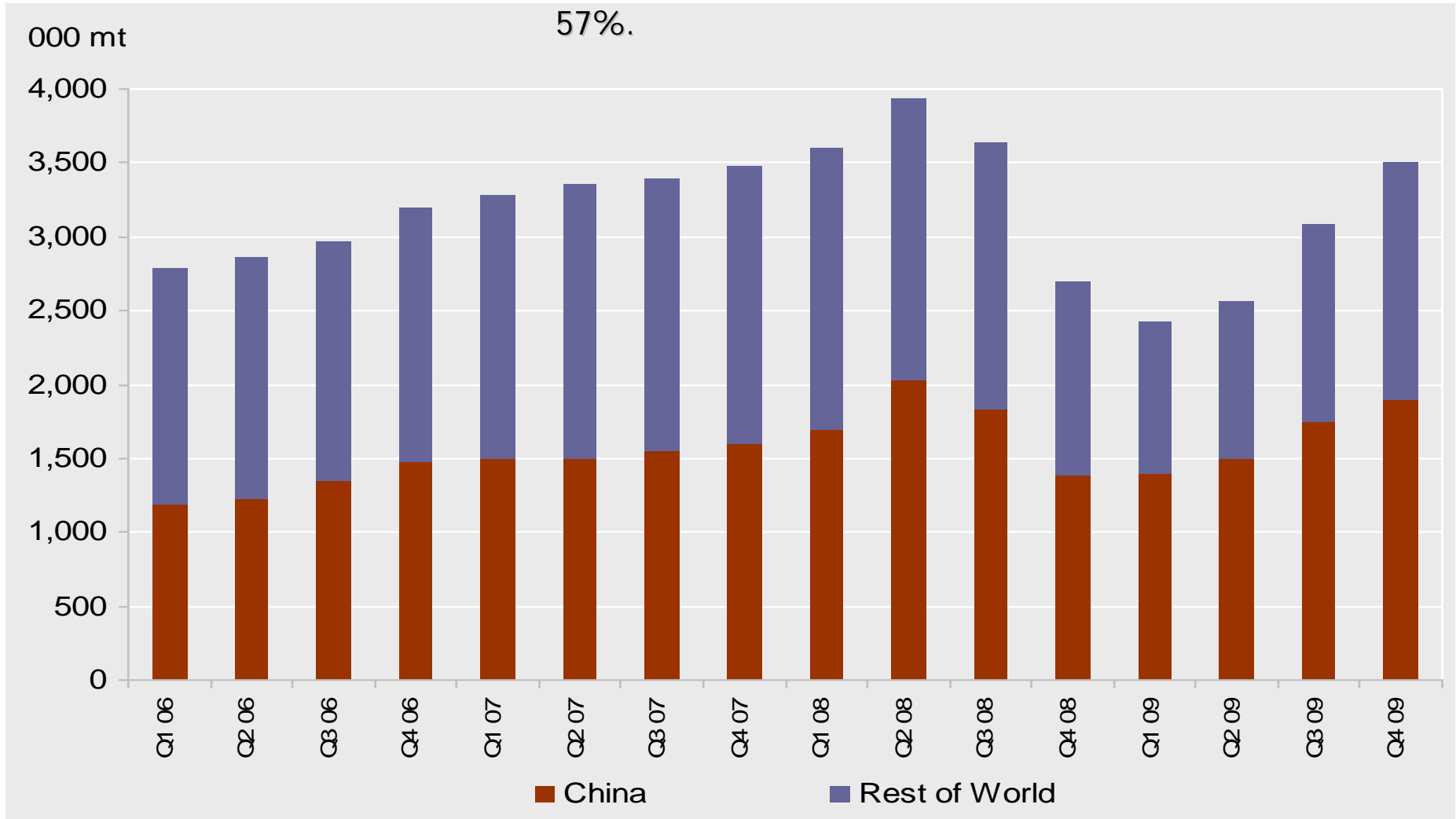
而生产商控制生产规模、加上贸易商以及终端使用者去库存化，导致锰合金的市场供给吃紧。





Mn Alloy Production:

China's production growing to meet its own demand – accounted for 57% of Mn alloy production in 2009 中国的锰合金产量09年持续增长以满足自己的需求，占全球总产量的57%.



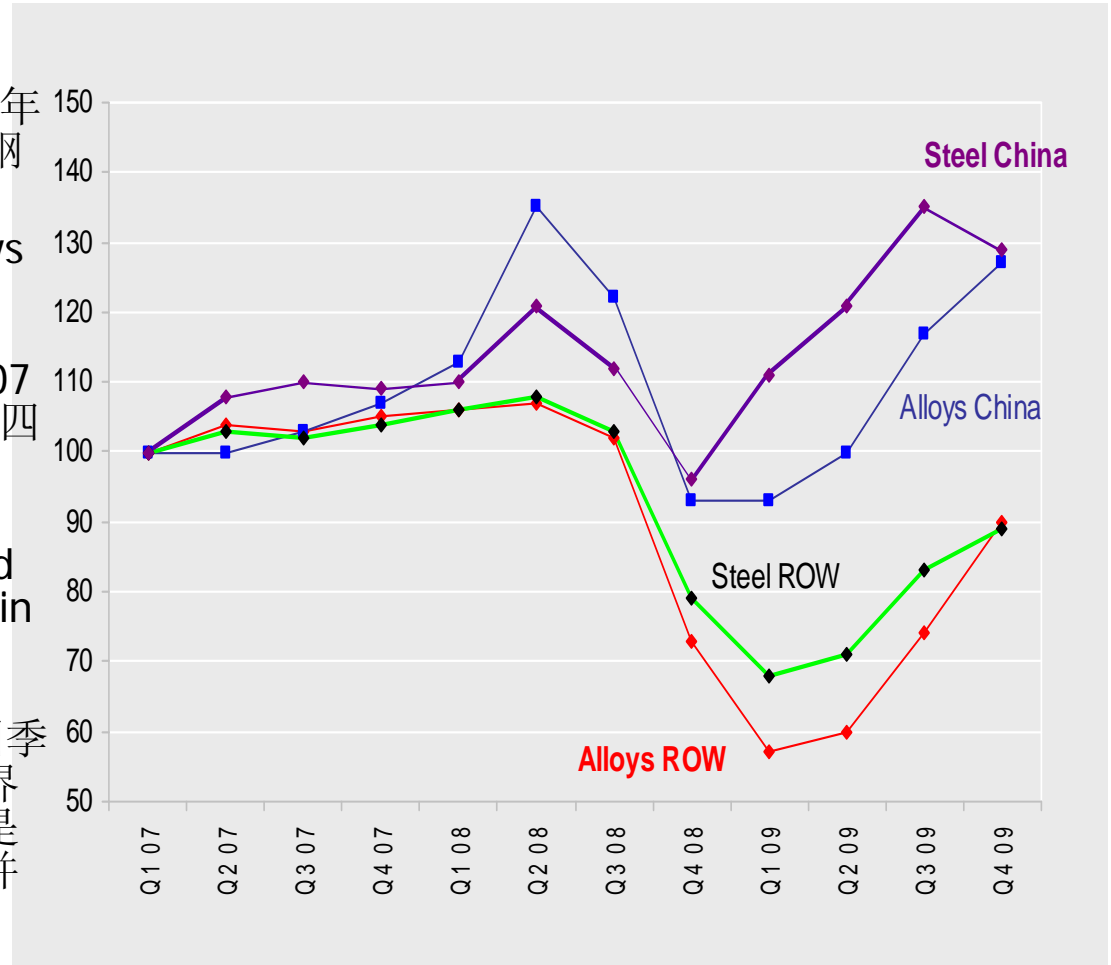


Mn Alloy Output & Steel Changes

Base Period = Q1 2007 = 100

锰合金产量和钢铁产量的变化 基准日期: 07Q1, 基数为100. 两组数据放在一起看他们的变化

- In Q4 09 both China's Steel and Alloy production increased by over 25% compared with output in Q1 07. 与07年第一季度相比, 09年第四季度中国的钢铁和合金产量都有超过25%的增长
- Production of both Steel and Mn Alloys in the Rest of the World (ROW) increased in each subsequent qtr in 2009 – reaching roughly 90% of Q1 07 levels by Q4 09. 而世界其他地区09年四个季度钢铁和锰合金的产量持续增长, 在Q4达到07年Q1产量90%的水平
- Mn Alloy production in both China and ROW fell lower than steel production in each qtr as of Q4 08 - as suppliers pinned output to real demand and reduced their inventories. 从08年第四季度开始, 锰合金的产量在中国以及世界其他地区都低于钢铁的产量, 这主要是由于供应商们把产量与实际需求挂钩并开始降低库存。





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- Mn Alloy Production
- **Mn Ore Production & IMnI Members' Inventories**
对锰矿生产以及锰协成员库存的影响

- **Mn Ore Supply & Demand**

- Ore Production Capacity by Region
- Global Imports 2009
- China Imports & Port Inventories

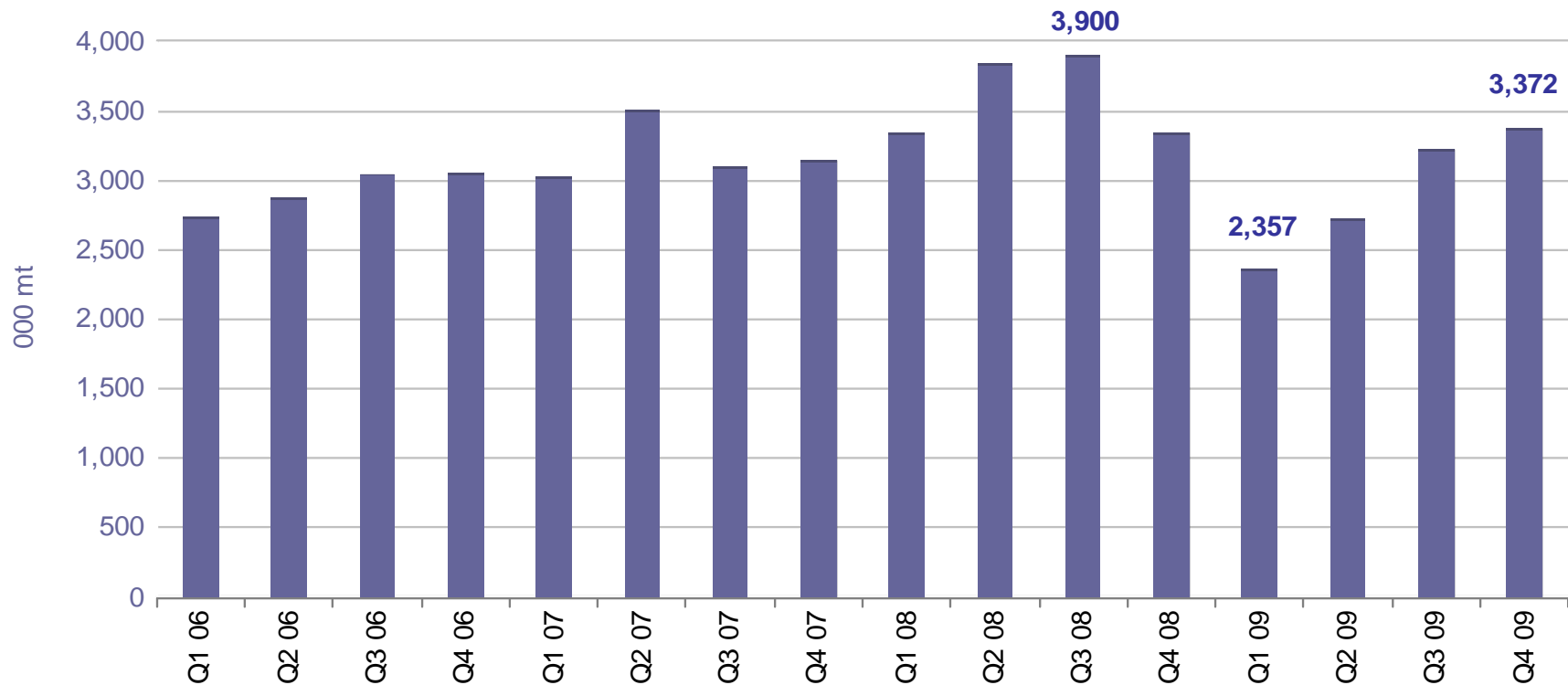
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Mn Ore Supply 锰矿的供应(Mn content 锰含量)

- Mn ore production peaked in Q3 08 and was down 40% as it bottomed out in Q1 09
锰矿的产量在08 Q3达到历史新高，而在09Q1则降到了低谷，降幅达40%
- Prices went from high of \$18/dmtu in early H2 08 to \$3.50 in H1 09
而锰矿的价格也从下半年18美金每干公吨的价格高位下跌到了09年上半年3.05美金每干公吨。
Dmtu = dry metric ton unit 每干公吨/每干吨度 70%的跌幅

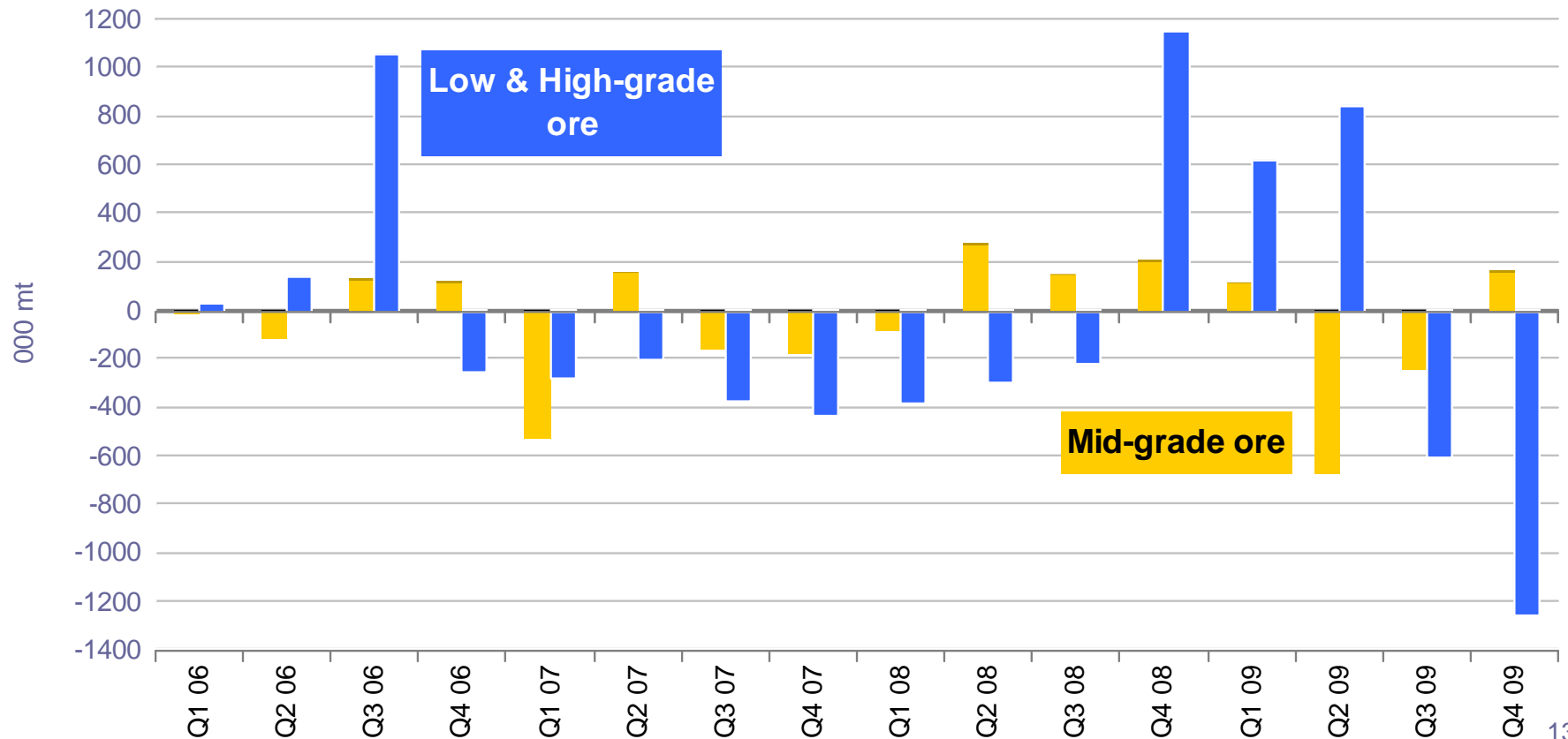




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IMnI Members' Ore Inventory Change (Wet mt) 锰协成员锰矿库存的变化, 以含水公吨数/湿吨计

- High and low grade ore inventories continued to rise from Q4 08 through Q2 09, but have been reduced by almost 2 million mt in H2 09. They were down 391K mt for full year 2009. 高、低品位锰矿的库存从08Q4到09年上半年持续增加, 但在09年下半年库存量减少了差不多2百万公吨, 这样一来, 09年全年锰矿库存减少了39.1万公吨。
- Mid grade ore inventories declined by 641K mt in 2009. 09年中品位锰矿石库存减少了64.1万公吨





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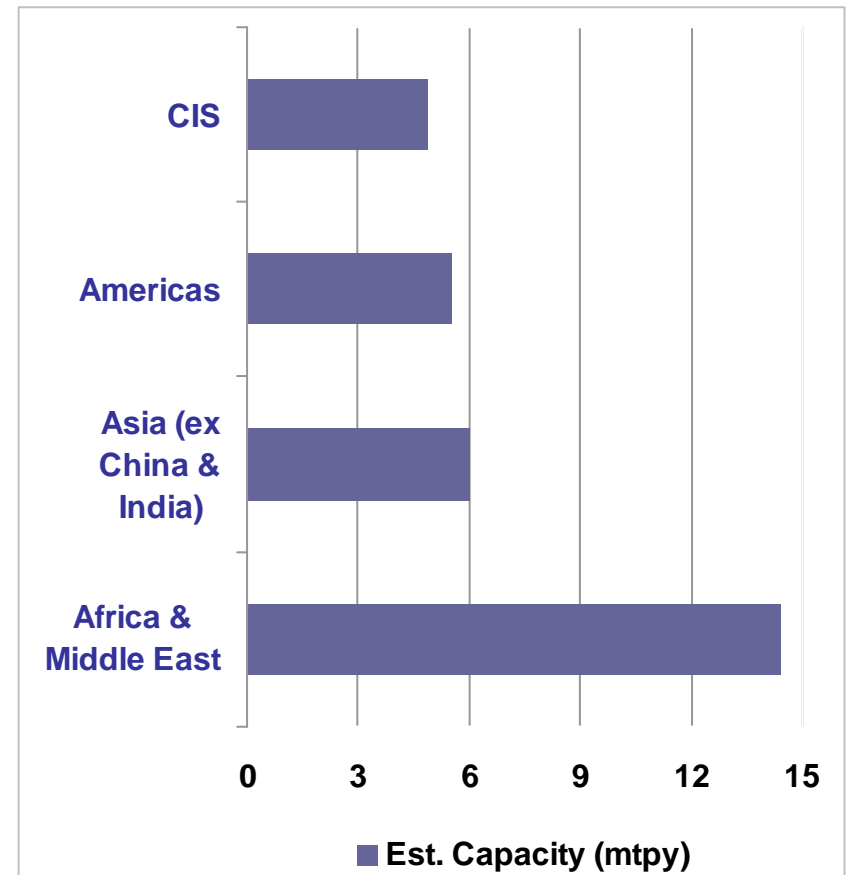
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Mn Ore Estimated Capacity (Wet million mt) – 2009 锰矿的估计总产能（以百万湿公吨计）

- Estimated total capacity of the four regions: nearly 31 million mt per year (mtpy) 四个地区的总产能预计每年可达3100万吨
- Africa & Middle East total combined capacities: almost 14.5 million mtpy – comprised in most part by South Africa, Gabon and Ghana 第一大产区是非洲和中东，其总产能每年可达1450万吨，主要出产国是南非、加纳和加蓬这三个国家。
- Asia excluding China & India (as their ore caters mostly to their domestic markets) was 6 million mtpy – mostly Australian capacity 第二大产区是亚洲地区，但中国和印度除外，其总产能每年可达600万，主要贡献者是澳大利亚。（之所以把印度和中国除外是因为两国所产的锰矿主要用于满足内需）
- The Americas, which is dominated by Brazil and Mexico, were nearly 6 million mtpy 第三大产区是美洲地区，主要是由巴西和墨西哥这两个国家主导，总产能每年将近600万
- A good majority of CIS capacity is within the Ukraine and not for export. Kazakhstan falls under CIS as well. 第四大产区是独联体国家，其中乌克兰主导了绝大部分的产能。独联体国家的锰矿主要是用于满足内需。哈萨克斯坦的产能也归类到这一地区。



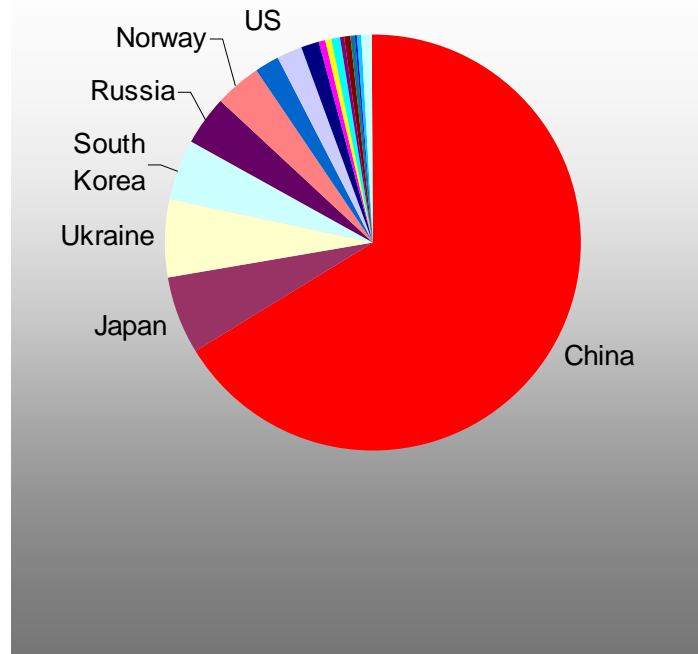
Capacity in Europe (including Turkey) has been excluded, roughly 300K mtpy 欧洲包括土耳其的产能除外，每年大约为30万公吨



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Global Importers of Mn Ore – 2009 09全球锰矿进口国 总进口量：1455.7501万吨；中国-961.5万吨，占66%

	mt	% of total
Total	14,557,501	100.0%
China	9,614,999	66.0%
Japan	900,243	6.2%
Ukraine	885,847	6.1%
South Korea	682,526	4.7%
Russia	569,257	3.9%
Norway	525,674	3.6%
India (Data thru Aug 09)	306,022	2.1%
US	268,853	1.8%
France	193,688	1.3%
Venezuela (Data thru Nov 09)	92,684	0.6%
Italy (Data thru Nov 09)	76,556	0.5%
Slovakia (Data thru Nov 09)	69,105	0.5%
Mexico (Data thru Nov 09)	61,571	0.4%
Belgium (Data thru Nov 09)	59,086	0.4%
Spain (Data thru Nov 09)	53,964	0.4%
Greece (Data thru Nov 09)	31,508	0.2%
Taiwan (Data thru Nov 09)	26,991	0.2%
Other	138,927	1.0%





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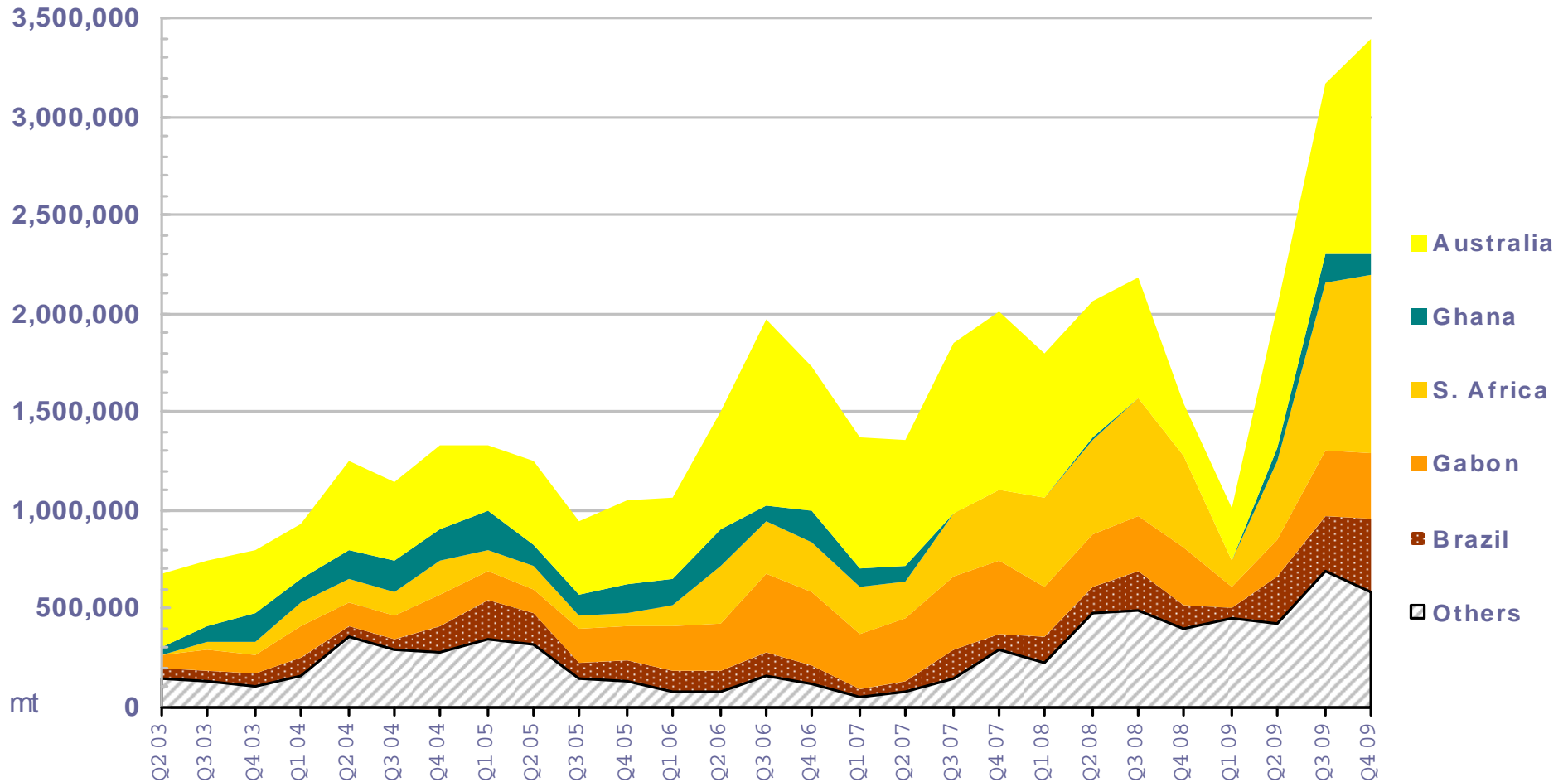
Mn Ore – China Imports from Majors 中国从主要锰矿出产国的进口量

- China imported 3.4 million mt in Q4 09 and 9.6 million mt in 2009

中国在09年第四季度进口了340万吨锰矿石，09年全年进口量达到了960万吨

- Market Share: Australia 31%; S. Africa 24%; Gabon 10%; Brazil 10%; Ghana 3%; Others 22%

中国锰矿进口来源：澳大利亚为第一大来源，占31%，其次为.....



Source: GTIS

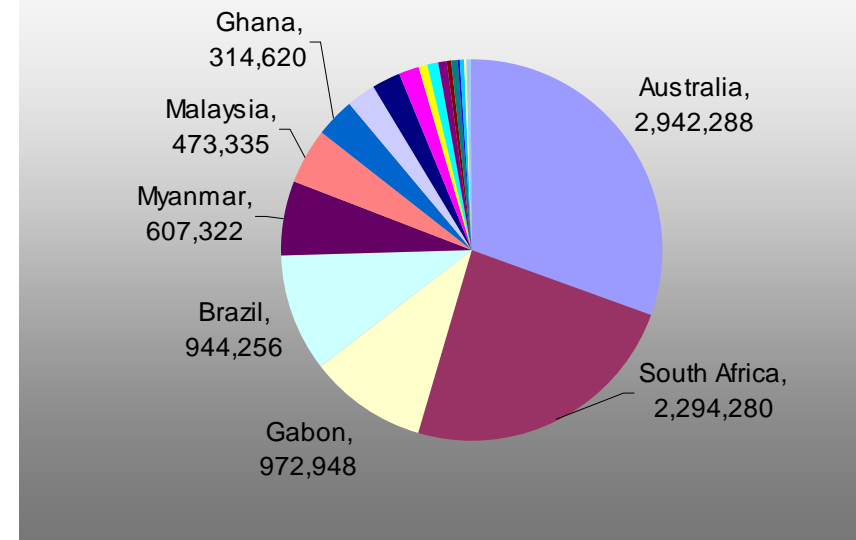


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Exporters of Mn Ore to China -2009 2009年中国锰矿进口来源；对中国来说，最大的锰矿出口国是澳大利亚。科特迪瓦

	mt	% of total
Total	9,614,999	100.0%
Australia	2,942,288	30.6%
South Africa	2,294,280	23.9%
Gabon	972,948	10.1%
Brazil	944,256	9.8%
Myanmar	607,322	6.3%
Malaysia	473,335	4.9%
Ghana	314,620	3.3%
Indonesia	249,555	2.6%
India	236,275	2.5%
Kazakhstan	143,028	1.5%
Vietnam	90,724	0.9%
Cote d Ivoire	86,500	0.9%
Namibia	62,082	0.6%
Morocco	45,514	0.5%
Turkey	41,304	0.4%
Zambia	26,053	0.3%
Thailand	18,933	0.2%
Mexico	15,402	0.2%
Bulgaria	8,663	0.1%
Philippines	7,552	0.1%
Other	34,365	0.4%

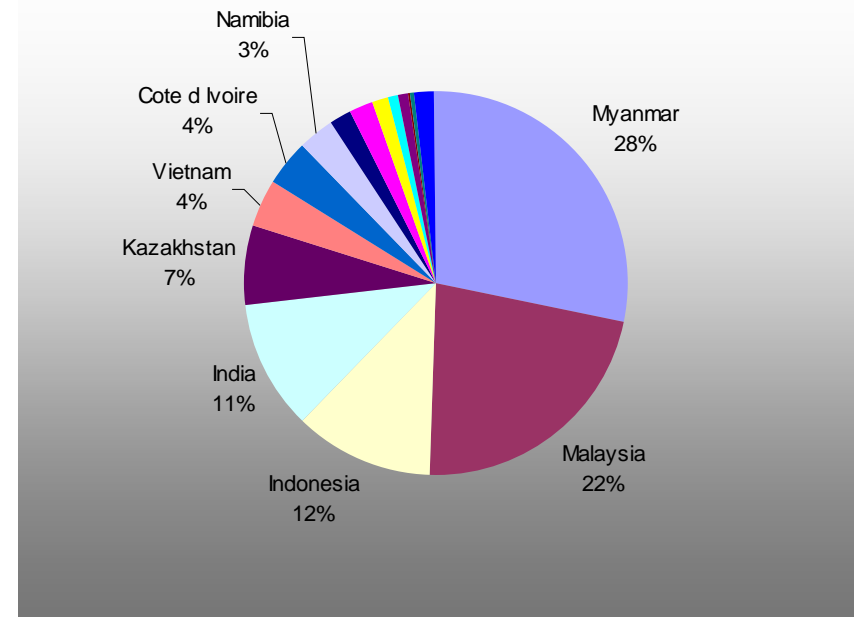
Source: GTIS





Marginal Suppliers* to China -2009 2009年中国锰矿的非主流供应国排名 科特迪瓦

	mt	% of total
Total	2,146,607	100.0%
Myanmar	607,322	28.3%
Malaysia	473,335	22.1%
Indonesia	249,555	11.6%
India	236,275	11.0%
Kazakhstan	143,028	6.7%
Vietnam	90,724	4.2%
Cote d Ivoire	86,500	4.0%
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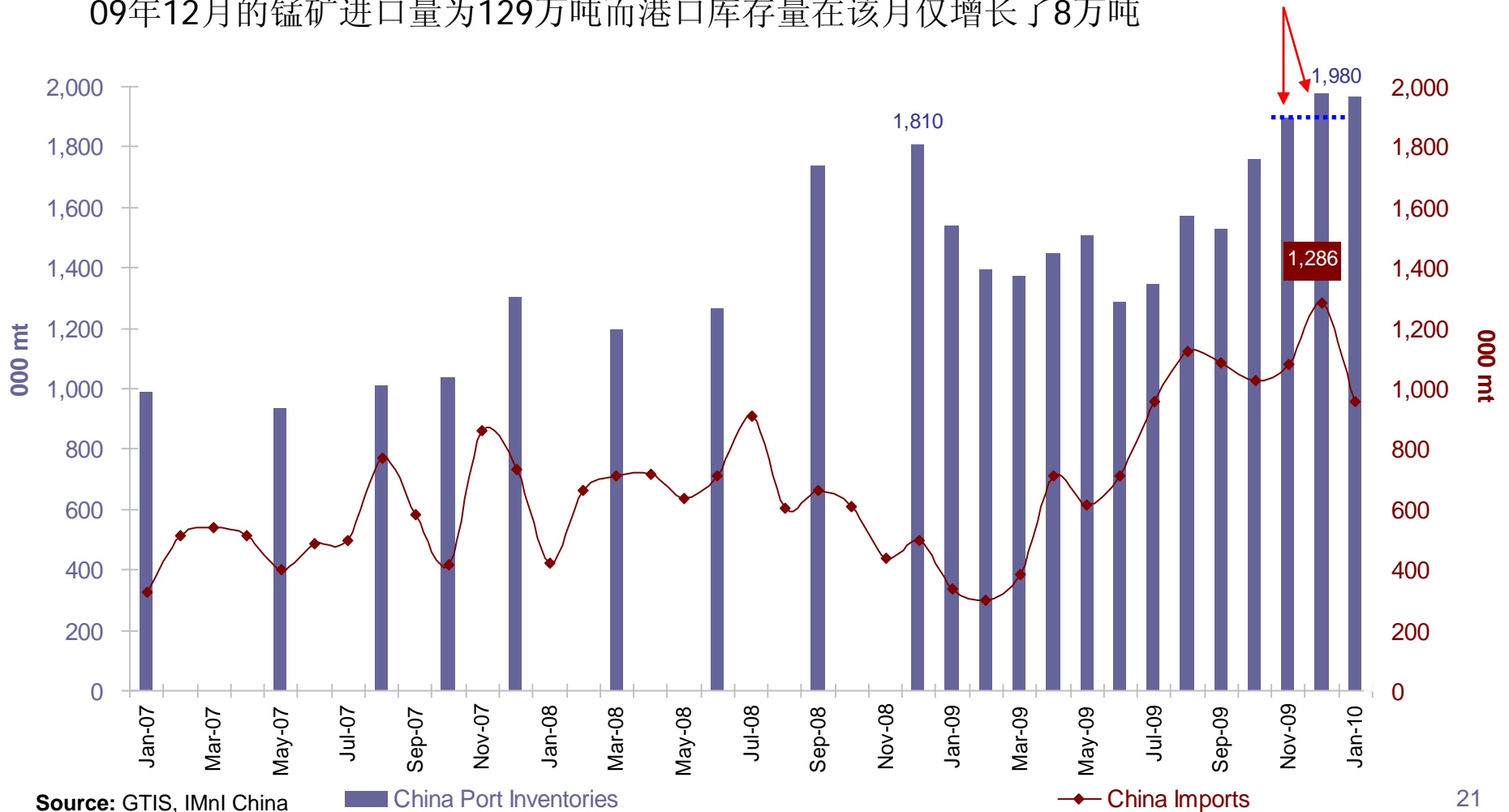
Source: GTIS

*countries of origin excluding Australia, Brazil, Gabon, Ghana and South Africa 五个国家除外



Mn Ore – China Imports & Port Inventories 中国锰矿进口量和港口库存量

- Port inventories peaked in December 2009 at 2 million mt – up 9% year on year 中国锰矿的港口库存量在09年12月达到峰值，总量将近200万公吨，同比增加9%
- Imports in Dec 09 were 1.29 million mt yet port inventories increase by only 80K that month 09年12月的锰矿进口量为129万吨而港口库存量在该月仅增长了8万吨



Source: GTIS, IMnI China

■ China Port Inventories

◆ China Imports



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Summary of Key Points 关键点总结

- After **deep crisis-related production cuts** in the production of Mn ore and alloys, there was growth in Q4 09 – linked to increases in steel production.

在金融危机导致锰矿和锰合金产量大幅缩水之后，在09Q4,由于钢铁生产的增长，锰矿和锰合金的产量也有所增长。

- While the Rest of the World is gradually increasing production rates in steel and Mn alloys, China mimics its new line of **high speed trains** and is rushing ahead at record levels. 当世界其他地区正在慢慢提高钢铁和锰合金的生产率的时候，中国则像它的新高速铁路干线一样，正以创历史新高的速度全速迈进。
- China's appetite for Mn Ore imports has **NEVER been greater!!**
中国对锰矿进口的需求比任何时候都要大。

China imported nearly **1/3 of the world's ore production capacity** in 2009 (excluding it's own and that of India and Europe). And accounted for **2/3 of worldwide declared imports**. 中国在09年的锰矿进口量占据了世界**1/3**的锰矿产能（中国、印度和欧洲的产能除外），占全球总申报进口量的**2/3**。

- Global inventories have run down. The **return of demand outside China**, coupled with **continued strength** from China, has tightened the Mn Ore & alloy markets. 全球的锰矿库存已经差不多消耗完，而中国以外其他国家的需求正在复苏，再加上中国持续增长的需求，这些都会让锰矿和合金市场变得紧张。



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IMnI's Market Research & Statistics – Reports 锰协的市场研究和统计数据 – 为会员提供报告

Market Research Reports for Mn Ore and Mn Alloys 锰矿和锰合金的市场研究报告

- 4 Quarterly reports 4份季度报告
- 1 Annual report 1份年度报告

Trade Reports for Mn Ore, Mn Alloys, Mn Metal and Mn Dioxide 锰矿、锰合金、金属锰和二氧化锰的贸易报告

- Monthly reports covering both imports and exports (country by country)
- 涵盖进口和出口的月度报告（依不同国家而定）

Online Data Query & Database – Easy access to data online

在线数据查询和数据库 – 简便地从网上获取数据

Various Special Reports – Offering deeper insight into developments

各种专题报告-为行业发展提供更深刻的见解

China Weekly Report – Coverage of all Mn Commodities

中国每周报告 – 涵盖所有的锰金属交易



IMnI's Market Research & Statistics – Strengths 优势

Data directly from members 数据直接来源于各个会员

- Major ore and alloy producers submit production, inventory and sales data directly to IMnI Market Analyst

主要的锰矿和合金生产商直接向锰协的市场分析师提供生产、库存和销售的数据

Access to top data providers 一流的数据供应商

- Best available trade data – GTIS 从GTIS获取最好的贸易数据
- Journals and services covering regions under-represented
刊物及其他服务覆盖了代表人数不足的地区
- IMnI China representative has access to the best available China statistics 锰协中国的代表们能够获取最好的中国市场数据



IMnI's Market Research & Statistics

Adheres to 'Kaizen' = never-ending efforts for improvement...

坚持不懈地改进

Active Statistics Committee in frequent communication with IMnI Market Analyst
活跃的数据委员会，与锰协市场分析师进行频繁的沟通

- Comprised of market analysts from major IMnI members
- 由来自主要锰协成员国的市场分析师组成
- 3 – 4 Committee meetings annually
- 每年举办3-4次委员会议
- Providing guidance and feedback
- 提供指导和反馈
- Making suggestions for improvement of tools
- 为工具的改进提出建议

For more information or sample market research, please contact: Mark Camaj stats@manganese.org

如需获得更多的信息及市场研究样本，可联系 Mark



Thank You!
Questions?

