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Global Steel Industry Overview And a Brief Introduction to Feng Hsin Steel Co., Ltd.

2017/09/05

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Company Profile

(1) Company Founded:	January, 1969
(2) Capital:	NTD5.8 Billion
(3) Number of Employees:	About 800
(4) Location:	Houli, Taichung Taiwan
(5) Facilities:	85 MT DC Arc Furnace x 1
	100 MT AC Arc Furance x 1
	Rolling Line x 3
(6) 2016 Annual Production:	Semi-Finished Proudct: Billet 1,498,306 MT
	Finished Product ： Merchart Bar 441,818 MT
	Round Bar 430,097 MT
	Rebar 588,752 MT
	Total 1,460,667 MT
(7) 2016 Net Sales:	NTD 20,932,650 Thousand

1. 2002-2016 World Major Crude Steel Producers by Country (MT)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Mainland China	182	222	273	356	421	490	512	577	639	702	731	822	823	804	808
Japan	108	111	113	112	116	120	119	88	110	108	107	111	111	105	105
U.S.A	92	94	100	95	98	98	92	59	80	86	89	87	88	79	79
India	29	32	33	46	49	53	58	64	69	73	77	81	87	89	96
S.Korea	45	46	48	48	48	52	54	49	59	69	69	66	72	70	69
Russia	60	61	66	66	71	72	69	60	67	69	70	69	71	71	71
Germany	45	45	46	45	47	49	46	33	44	44	43	43	43	43	42
Others	345	360	385	380	399	414	395	310	365	386	373	371	346	337	335
Global	906	971	1,064	1,148	1,249	1,348	1,345	1,240	1,433	1,537	1,559	1,650	1,641	1,598	1,604

World crude steel production in 2016 was 1.604 billion mt, a 0.4% increase from 2015's 1.598 billion mt. According to World Steel Association's forecast, global steel demand will increase 0.5% to 1.612 billion mt in 2017, which shows an average of 1.6 billion mt of crude steel demand in recent 5 years.

Data Source: World Steel Association

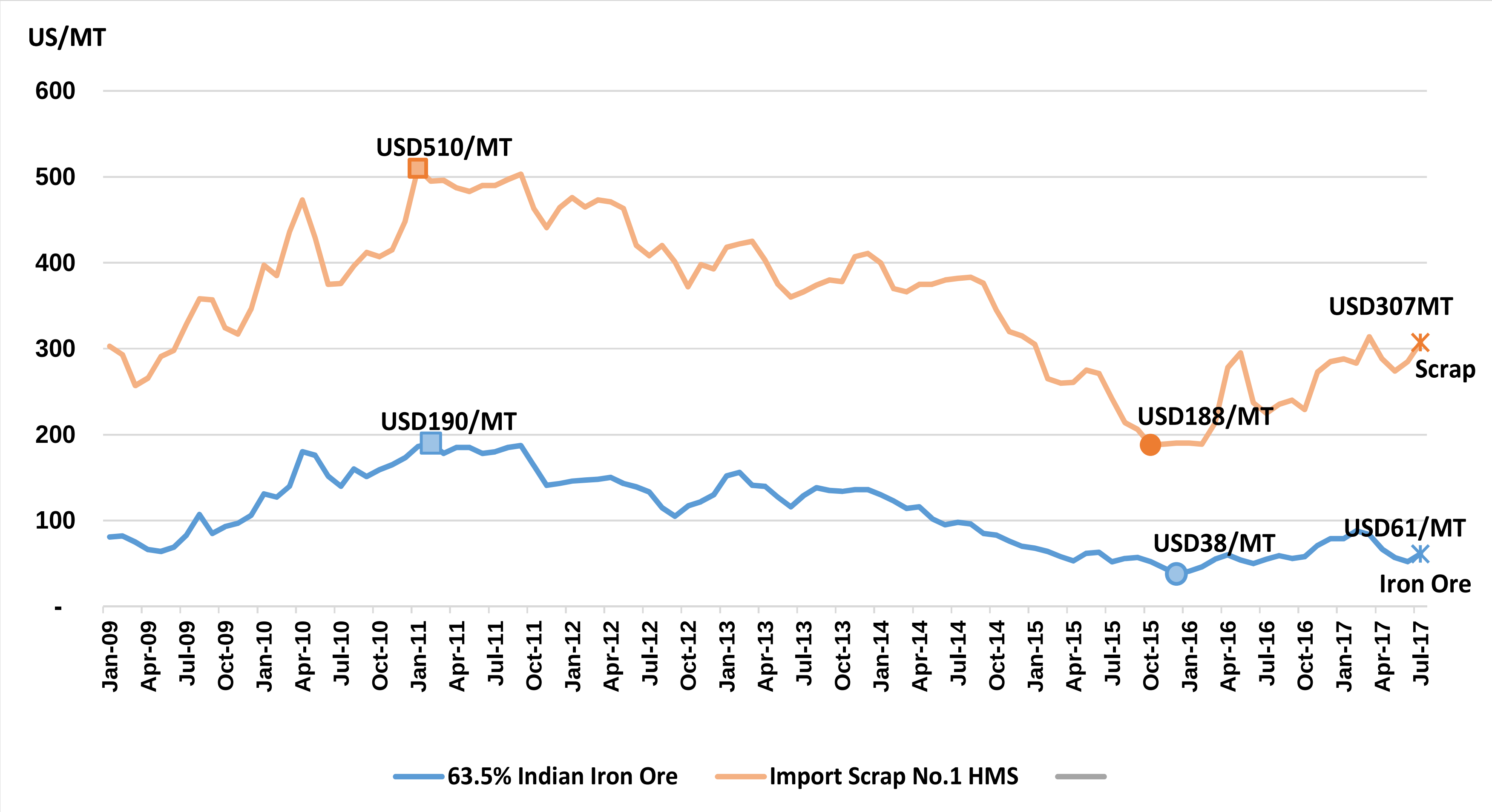
2. 2002-2016 World Major Crude Steel Producers by Country (%)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Mainland China	20%	23%	26%	31%	34%	36%	38%	47%	45%	46%	47%	50%	50%	50%	50%
Japan	12%	11%	11%	10%	9%	9%	9%	7%	8%	7%	7%	7%	7%	7%	7%
U.S.A	10%	10%	9%	8%	8%	7%	7%	5%	6%	6%	6%	5%	5%	5%	5%
India	3%	3%	3%	4%	4%	4%	4%	5%	5%	5%	5%	5%	5%	6%	6%
S.Korea	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Russia	7%	6%	6%	6%	6%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Germany	5%	5%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Others	38%	37%	36%	33%	32%	31%	29%	25%	25%	25%	24%	22%	21%	21%	21%
Global	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

World major crude steel producers: 1. China accounts for 50% of world crude steel production, up from 20% in 2002. 2. India's crude steel production has grown from 3% in 2002 to 6% in 2016, which is a country to be considered with great potential

Data Source: World Steel Association

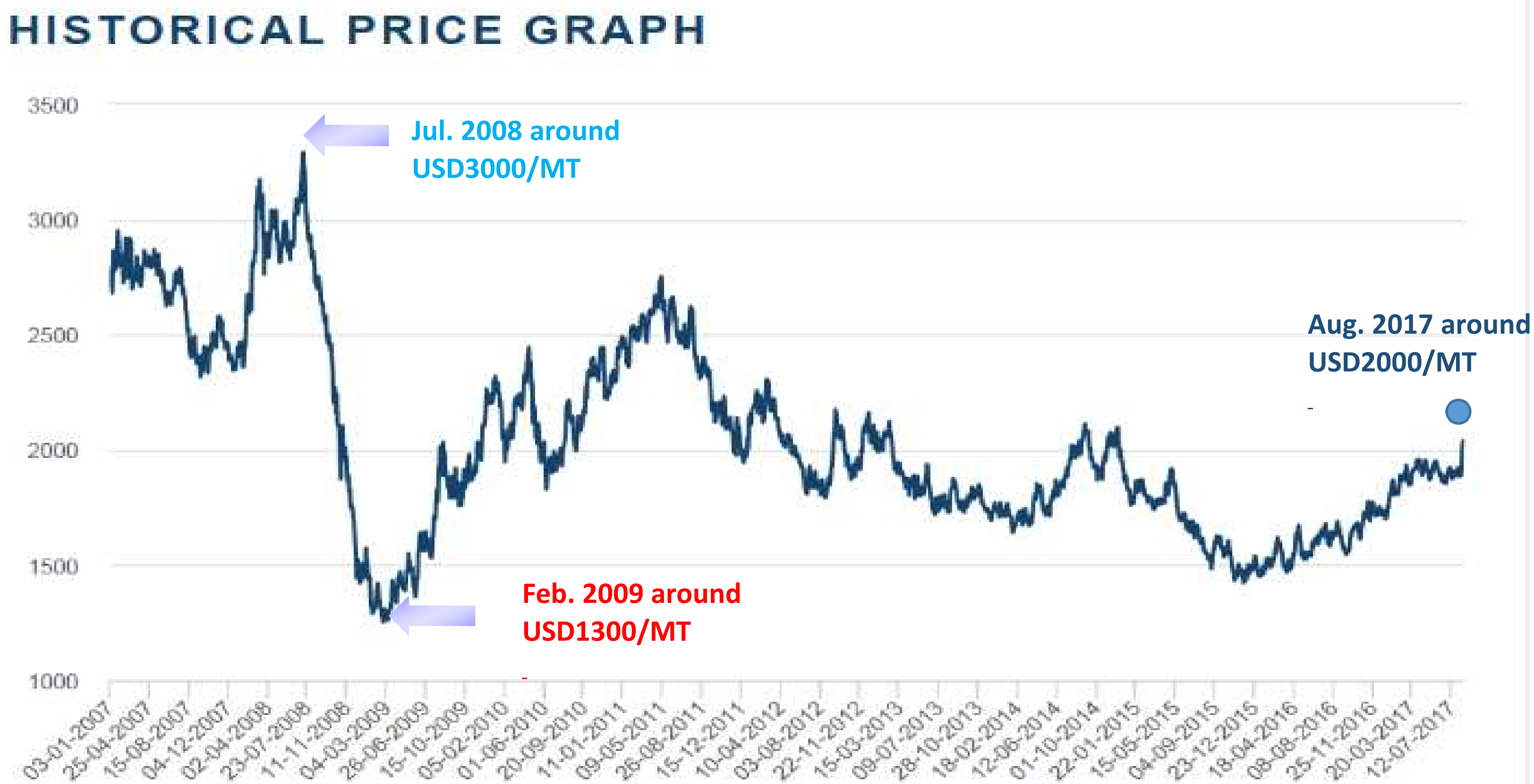
3. 2009 - 2017 International Scrap & Iron Ore Price Trend



Data Source: Xiben New Line、Feng Hsin

4. 2007~2017 Non-Ferrous Metal Price Trend

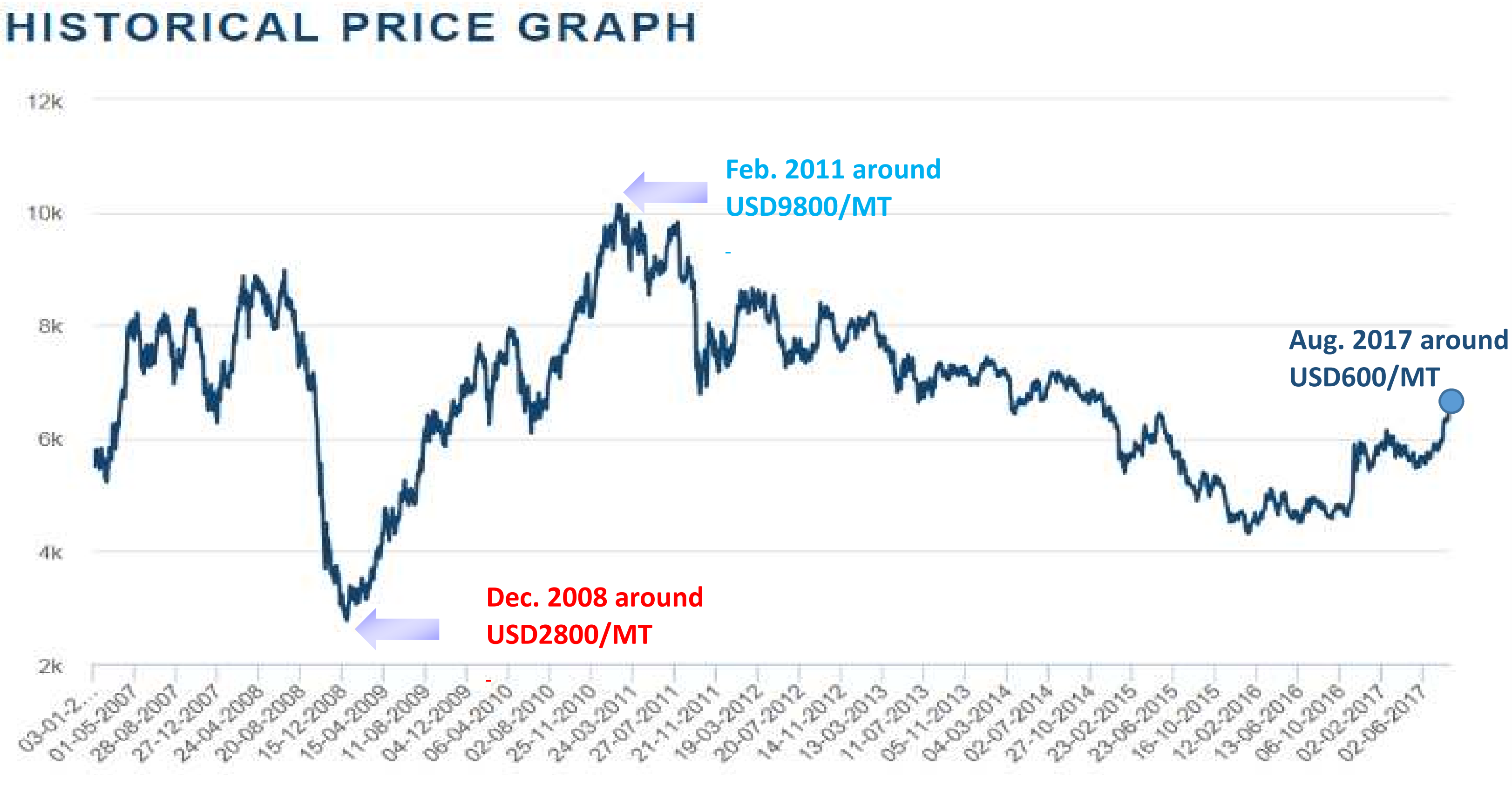
- Aluminum



Data Source: London Metal Exchange

4. 2007~2017 Non- Ferrous Metal Price Trend

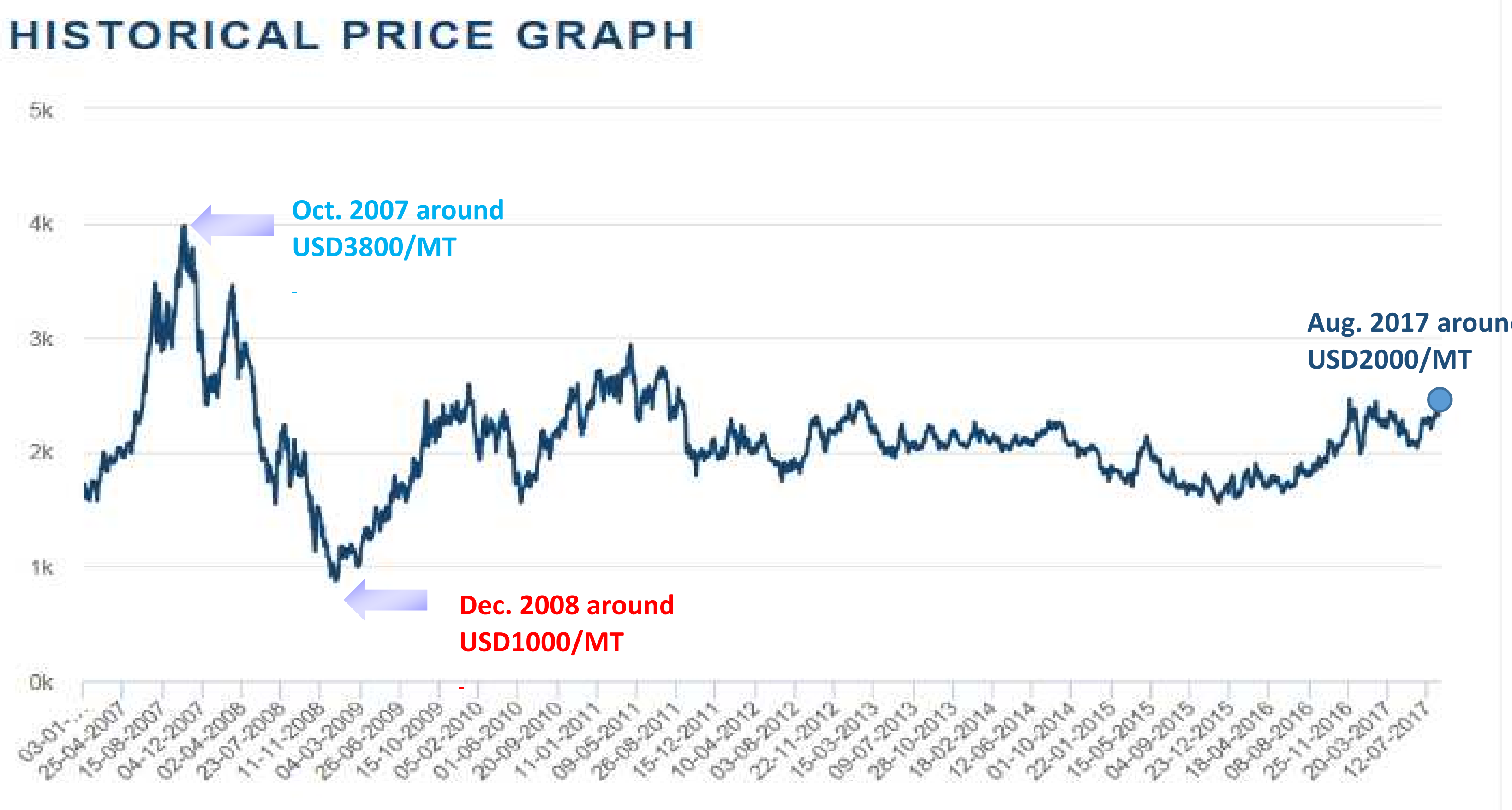
- Copper



Data Source: London Metal Exchange

4. 2007~2017 Non- Ferrous Metal Price Trend

- Lead



Data Source: London Metal Exchange.

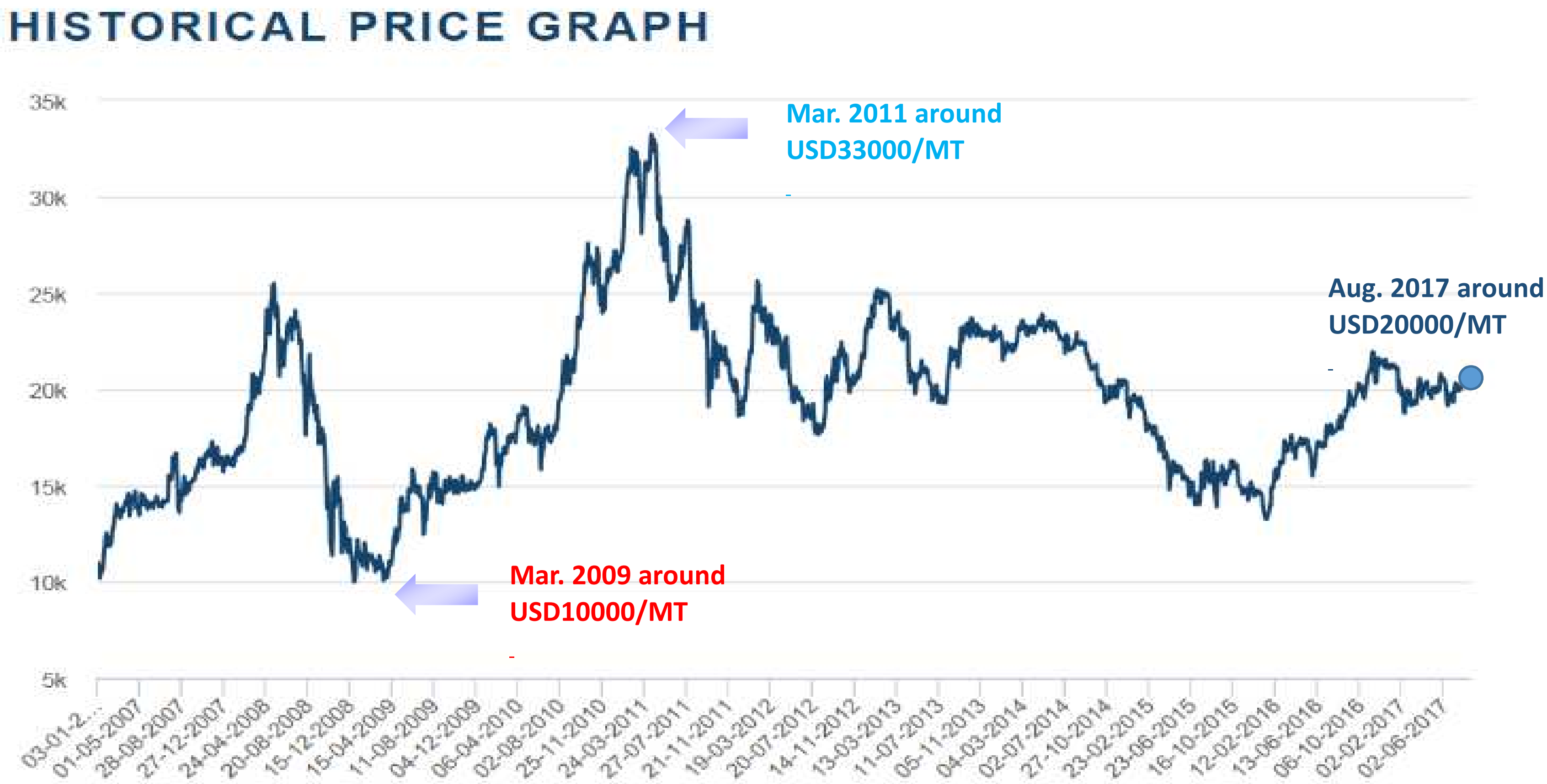
4. 2007~2017 Non- Ferrous Metal Price Trend

- Nickel

Data Source: London Metal Exchange

4. 2007~2017 Non- Ferrous Metal Price Trend

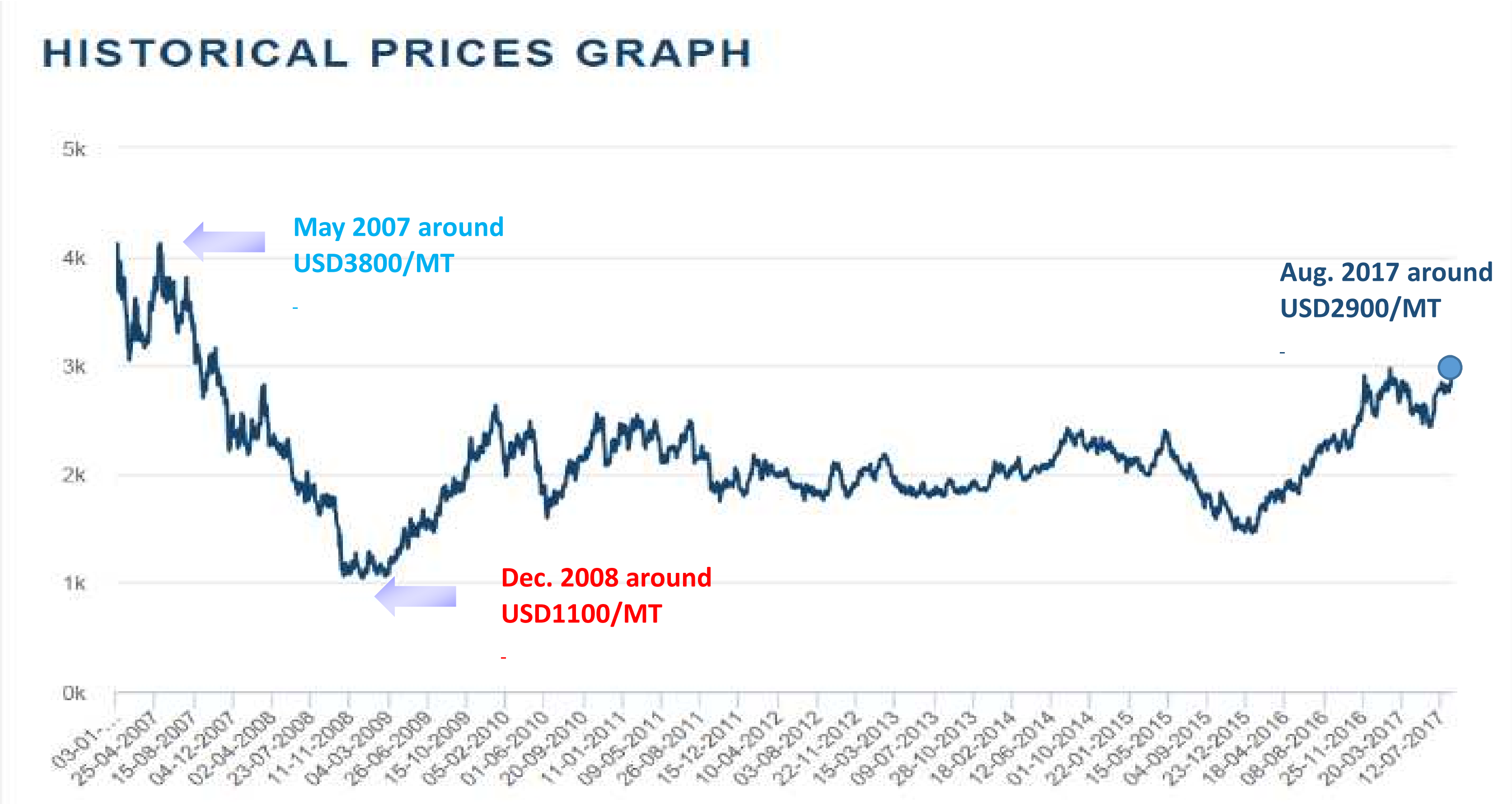
- Tin



Data Source: London Metal Exchange

4. 2007~2017 Non- Ferrous Metal Price Trend

- Zn



Data Source: London Metal Exchange

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5. Conclusion

- China's crude steel production has remained around 800 million mt for 4 continuous years, steel consumption per capita is around 600kg (compare to 500kg for most of the developed countries), the main reason for this is because China has graduallyincreasing their domestic demand while shifting away from "World Factory" and heading the direction of precision industries

- India has become a new driving force for the world crude steel production, with itstremendous growth of crude steel production in 2016,India is expected to take Japan in 2018 to become the second largest crude steel production.

- Coking coal's price surge pull up raw materials globally
  Coking coal's price surged 229% in 2016. Although iron ore's basic foundation has not change much, but all because of the bull market of all metal/raw materials, the price of iron ore has raised from 2015's low point of USD 38/mt to 2017 Aug. 17's USD 76.5/mt. What's more, the price level of No. 1 HMS has also shoot up from USD 188/mt to USD 353/mt (as of Aug. 14th 2017)

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China's affect on Global Steel Industry

1. 2009~2017 Mainland China Steel Product Export Statistic

Unit: million ton

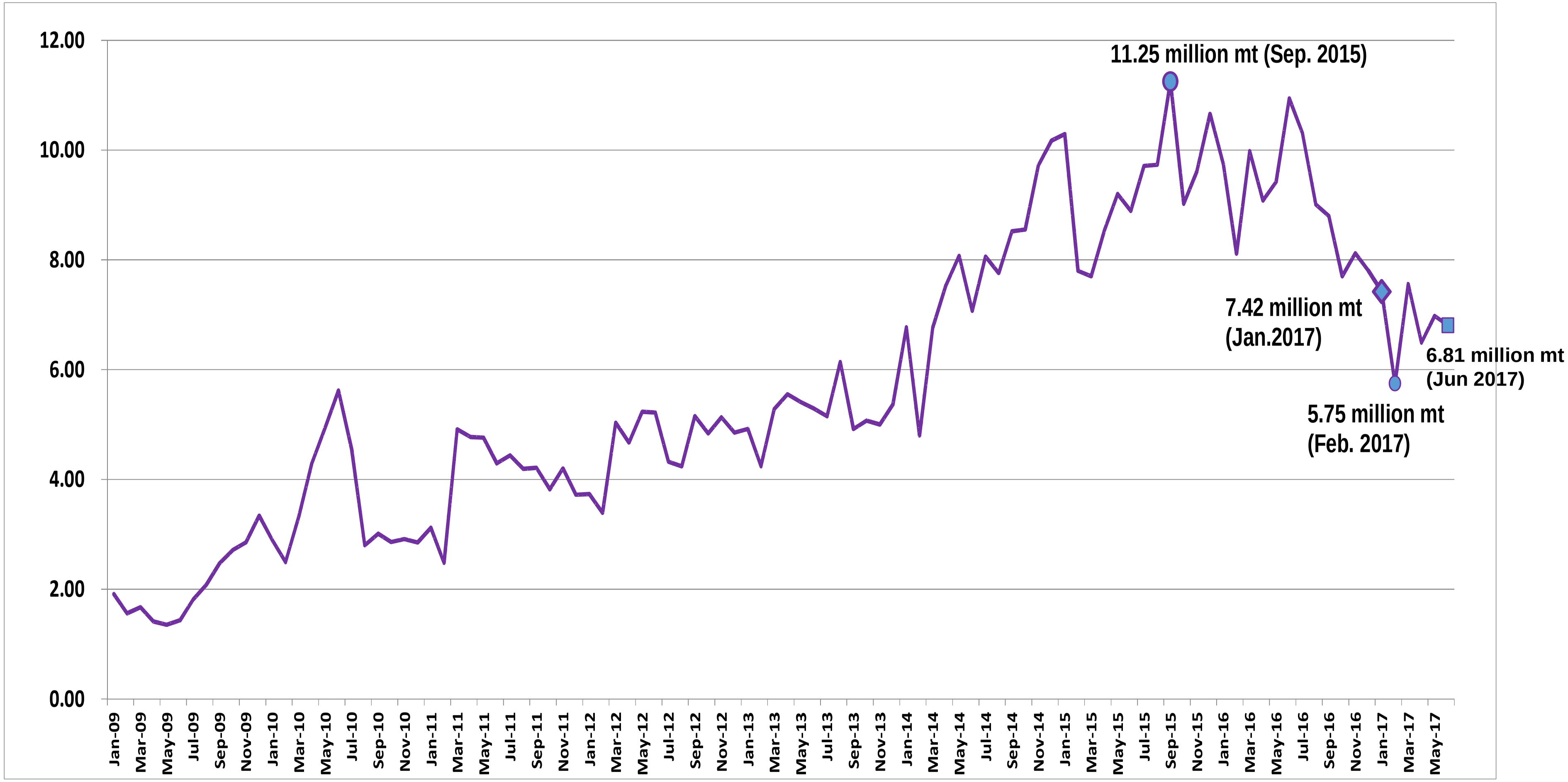
	Jan	Feb.	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Monthly AVG	Compare to 2009
2009	191	156	167	141	135	143	181	208	247	271	285	334	205	100%
2010	289	249	333	430	494	562	455	280	301	286	291	285	355	173%
2011	312	248	491	477	476	429	444	419	421	382	420	372	408	199%
2012	373	339	503	467	523	522	432	424	515	484	513	485	465	227%
2013	492	424	528	555	541	529	515	614	492	507	500	537	520	254%
2014	677	480	676	754	807	707	806	776	852	855	972	1,017	782	381%
2015	1,029	780	770	854	920	889	971	973	1,125	902	961	1,066	937	457%
2016	974	811	998	908	942	1,094	1,030	901	880	770	812	780	908	443%
2017	742	575	756	649	698	681							684	334%

After the financial depression in 2008, China starts dumping their steel products all over to the world at low price to deal with its steel production surplus, this action made many countries unhappy and filed anti-dumping cases against China. Moreover, due to continuous air pollution problem China has been facing, the government forced many "Open Hearth Furnace" to shut down, and that is way we can see the export volume dropped in recent month from China.

Data Source: Xiben New Line

2. 2009~2017 Mainland China Steel Product Export Trend

Unit: million ton



Data Source: Xiben New Line

3. China’s Scrap Export in 2017

Import Country	Import Quantity (MT)
Hong Kong	20,274
Taiwan	19,065
Indonesia	18,675
India	10,661
Vietnam	5,600
S. Korea	2,142
Malaysia	1,397
Bangladesh	1,080
Pakistan	1,043
Singapore	348
U.S.A	35
Thailand	23

China's Scarp Export (MT)		
Month	2016	2017
May	84	80,345
April	55	15,360
March	142	653
January	71	68
February	0	0
Total	353	96,426

The biggest Chinese scrap importers at this stage are HK (transshipment)/ Taiwan/ Indonesia and India, all above 10k mt. Export to HK is at 20k mt, which accounts for about 25.2%. Taiwan comes in second at 19k mt, which is 23.7%. Indonesia is at third with 11k mt at 13.3%. The majority of the scrap exported from China are either Shredded or thin scrap.

China’s scrap export tax is at 40%, exporters will have to pay another 17% of VAT on top of the export tax. Therefore, higher grade scraps are often hard to export. Although scrap price has surged, but the majority of scraps export from China are still lower end thin scraps.

4. China's EAF Development

- EAF accounts for 25.1% of world steel production is 2015. China's EAF steel production is at 6.1% compare to USA's 62.7%/ Europe's 39.4%/ Korea's 30.4%/ and Japan's 22.9%, China clearly trails behind other developed countries in EAF steel production percentages.

- Due to high industrial electricity cost in China, mills favors iron ore's low price (compare to scrap) and add up to 55% of hot steel from blast furnace to increase productivity and to reduce impurities. Although this method can be efficient, but when comparing with other developed countries in EAFs' carbon emission, regional advantages (to save on transportation cost), and the way EAF and Blast Furnace work together (EAF long product/Blast Furnace Plates), China is far from other developed countries.

- Developed countries have emphasize and value the development of EAFs, reasons being with every mt of scrap used can reduce the usage of concentrate by 1.7 mt, which can reduce exhaust emission by 86%, waste water by 76%, slag by 72%, other wastes (including waste/end ore at the mine) by 97%.

5. Conclusion - 1

- China’s strong demand pushed iron ore’s market price to a historical high in 2011 at USD 190/mt. However, with steel market became bearish, iron ore’s price slide to the lowest point in 10 years at USD 38/MT in December 2015. Since then, the price of iron ore has bounced back up to USD 89/mt level.

- China’s steel product export volume recorded at 108.43 million mt in 2016, surpassing Japan’s crude steel production of 105 million mt. Due to China’s export price far lower than market price around the world, this results in 48 anti-dumping cases in 20 countries around the world, making exporting from China a great difficulty.

- In 2016, most of the mills were in deficit due to smog and over production issue. To turn this around, the government completed their goal of eliminating 45 million mt of steel production by cutting down capacity and eliminating mills, which results in steel price bouncing back and mills making profit.

5. Conclusion - 2

- In 2017, Chinese government has ordered to completely eliminate “land steel” and “open hearth furnace” by June 30th, 2017, which accounts for about 100 million mtout of China’s total production. In 2016, the actual production volume was around 50 million mt, this caused great pressure on domestic rolling mill’s billet supply, also greatly reduced available billets to export.

- On Feb. 10th, 2017, the Ministry of Industry and Technology of Republic of China announced to remove 35 companies from the “Steel industry Specification”, the list includes a few well known mills like: Heibei Steel Group Long Hai Steel company Ltd. Co, Haixin Steel Group Ltd. Co, HunZo Steel Group., AnGan Group MinYuan Special Steel Ltd. Co, Bao Steel Group NanTongBao Steel Ltd. Co, and etc.

- With China’s attempt to reduce steel production capacity, and the price surge of coking coal and iron ore, the cost for steel making has increased. Chinese steel export in 2017 Jan-June is average at 6.84 million mt compare to 2016’s 9.08 million mt, a 25% decrease. The reductionleads to the revival of global steel market, resulting in profit making for most of the steel companies.

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5. Conclusion - 3

- August 11th, 2017 marks the craziest day for Rebar futures market. On this date, total trade was 10.73 million trades with 417.4 billion RMB. If 1 trade is accounted for 10 mt of rebars, this means a total trade of 100 million mt, which is more than China's total rebar production in the first half of the year. (9959 million ton)

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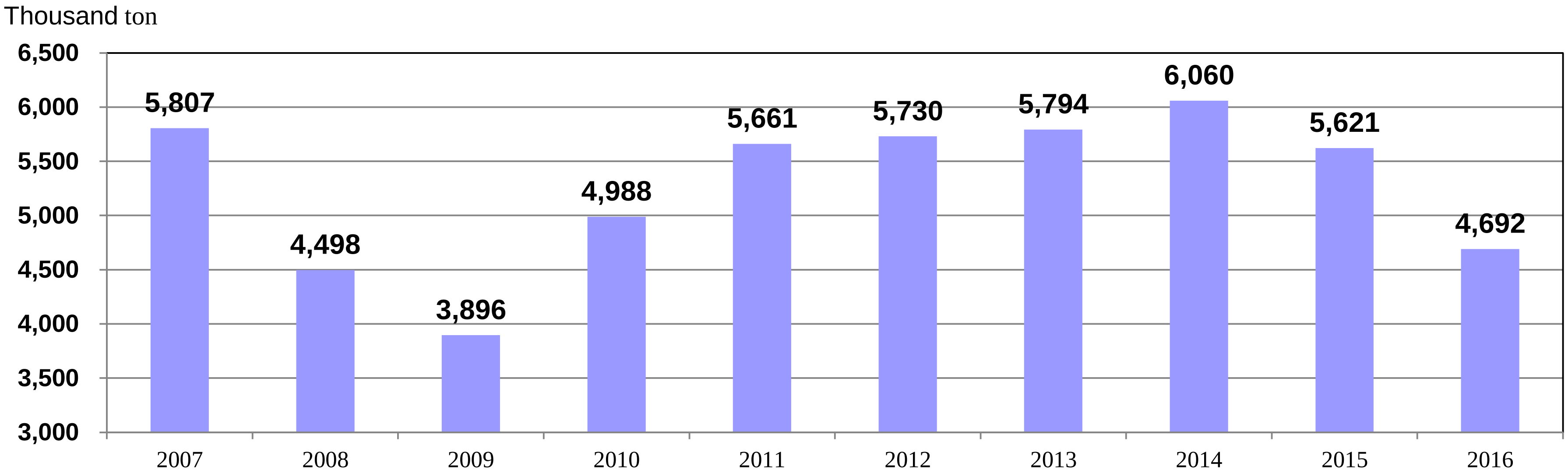
Taiwan Domestic Rebar Market Overview

1. Rebar Apparent Consumption Over the Past 10 Years

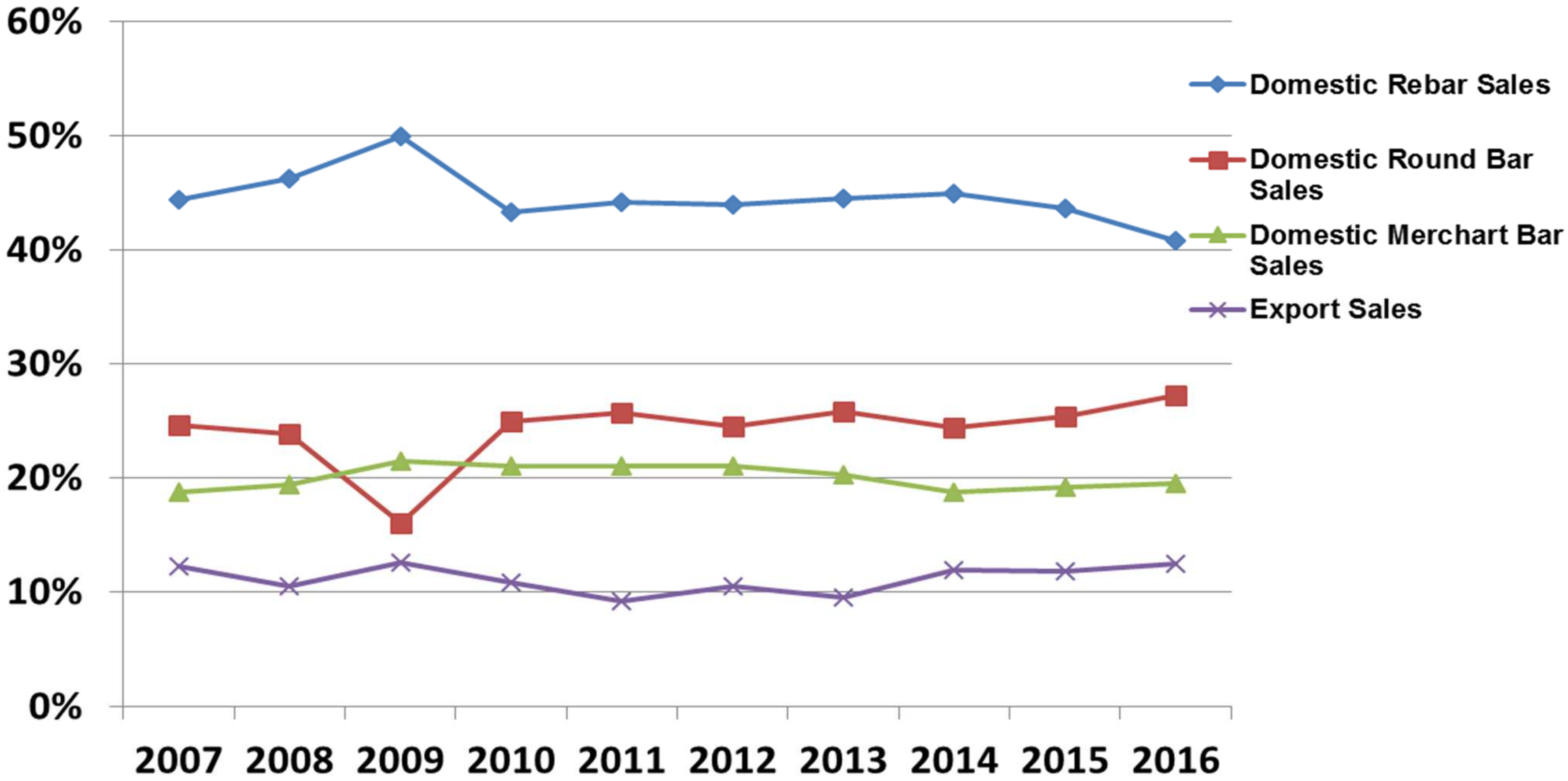


Unit: Thousand ton

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Production (A)	6,144	4,865	4,312	5,126	5,843	5,779	5,870	6,162	5,772	4,960
Import (B)	52	8	2	4	3	3	2	5	1	1
Export ©	389	375	418	142	185	53	78	107	151	269
Apparent Consumption (D=A+B-C)	5,807	4,498	3,896	4,988	5,661	5,730	5,794	6,060	5,621	4,692
Growth of Apparent Consumption%	BASE	77	67	86	97	99	100	104	97	81
Production Capacity(E)	7,888	7,542	8,260	8,600	9,066	9,066	9,066	9,066	9,066	9,066
(A)/(E)	78	65	52	60	64	64	65	68	64	55
Self-Sufficiency % (A)/(D)	106	108	111	103	103	101	101	102	103	106

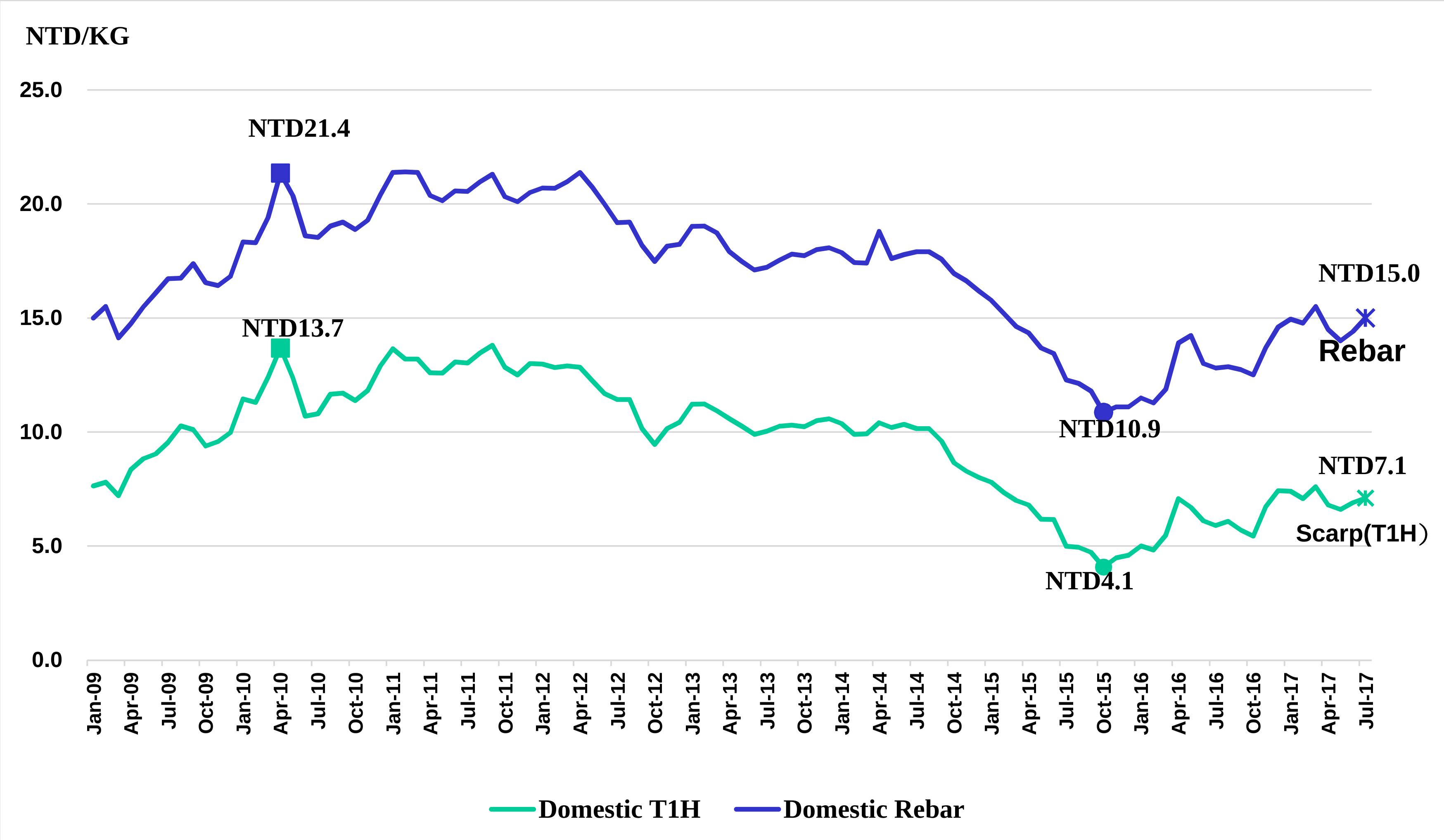
1.Data Source: TSIIA Website(Production 、 Delivey, Inventroy,Product tpye Import/Export date search)
2.Apperant Consumption is calculated by using 2006 figures as base.

2. Feng Hsin 2007 - 2016 Product Sales Percentage



Data Source: Feng Hsin

3. 2009~2017 Domestic Scrap (T1H) & Rebar Price Trend



Data Source: Feng Hsin

4. Conclusion

- Taiwan's domestic apparent consumption for rebar was at 7-8 million mt at its peak. For the past 10 years, the aparent consumption for rebar has come down to around 6 million mt. Last year (2016), has reduced further to 4.69 million mt, which is resulting from governmentsuppressing real estate and reduction in public projects/constructions.

- Taiwan's domestic EAFs are currently running at about 60%, there are estimate only 4 mills that are working 3 shifts/24hrs (aside from summer time), remaining mills are only melting 1 or 2 shifts during off peak hours (Japan EAFs have been only melting during off peak hrs for years)

- Taiwan's rolling mills have greatly reduced their purchase of import billets since Nov. 2016 due to the price surge of Chinese and Russian billets. Since China government's orderedthe elimination of "Land Steel" and "Open Hearth Furnace", rolling mills in China has hinted the supply reduction of billets and rebar since these two products are the major product of "Land Steel" and "Open Hearth Furnace", about 50 million mt of steel product will be effected.

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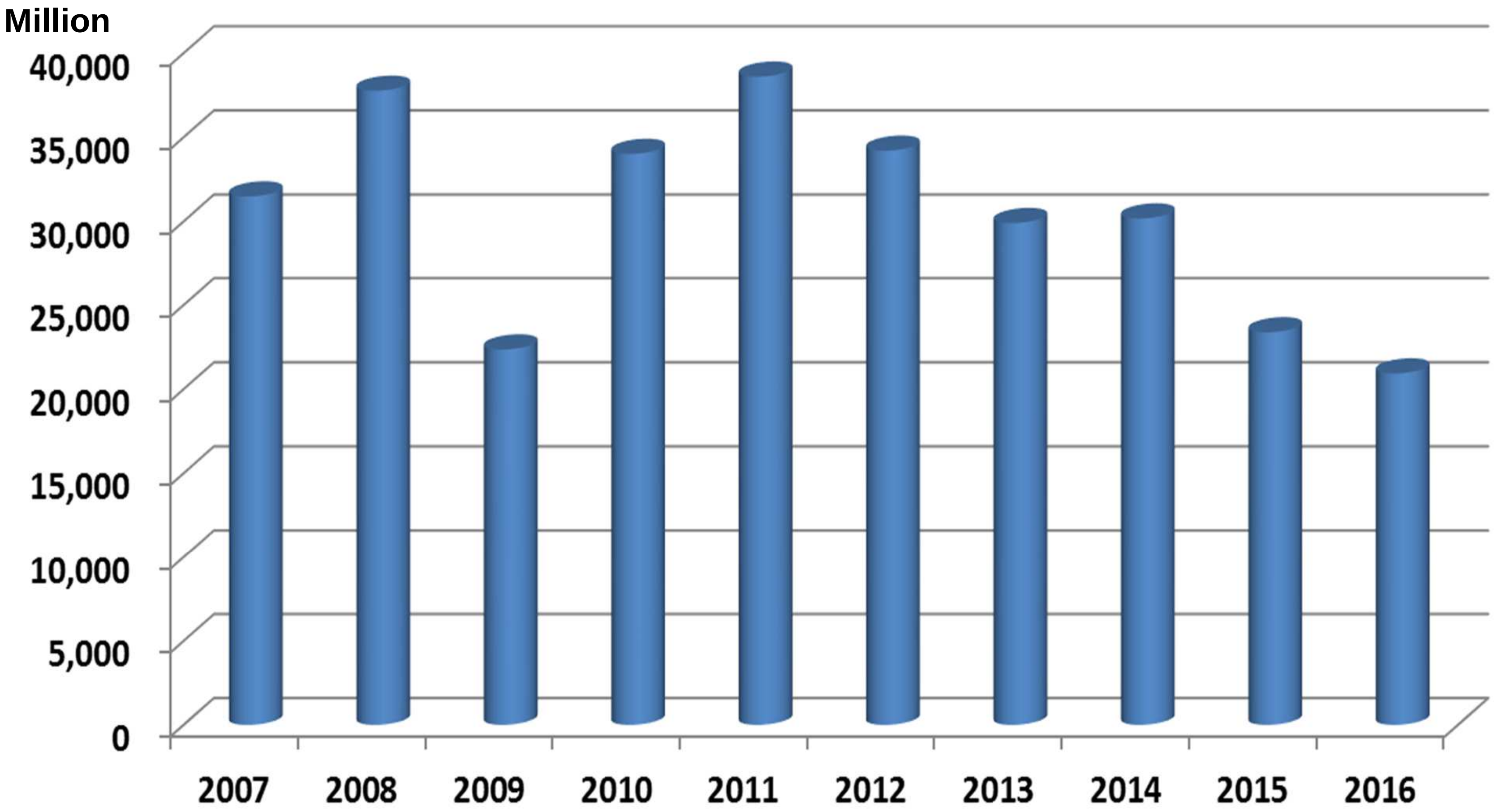
Feng Hsin Financial Analysis

1. Feng Hsin 2007 - 2016 Operating Profit



Data Source: Feng Hsin

2. 2017/2016 First Half Operating Income & Pretax Profit Comparison

	2017 First Half	2016 First Half	Growth%
Net Sales	12,392,463	9,923,870	24.88%
Cost of Sales	10,519,763	8,361,356	25.81%
Gross Profit	1,872,700	1,562,514	19.85%
Operating Expense	378,323	388,377	-2.59%
Operating Income	1,494,377	1,174,137	27.27%
Non-Operating Income	55,765	11,843	370.87%
Income from Continuing Operation before Income Tax	1,550,142	1,185,980	30.71%

Data Source: Feng Hsin

3. Consolidated Income Statement

Unit: NTD Thousand

Item \ Year	2011	2012	2013	2014	2015	2016
Gross Sales	38,602,616	34,199,656	29,899,588	30,171,468	23,380,189	20,932,650
Gross Profit	4,508,917	2,917,614	2,311,087	2,563,544	3,016,191	3,162,911
Operation Income	2,868,378	1,420,978	1,620,357	1,806,193	2,255,473	2,342,327
Non-operating Income & Expense	324,631	483,882	108,526	174,041	144,070	(145,347)
Income Before Income Tax	3,108,598	1,876,787	1,728,883	1,980,234	2,399,543	2,196,980
Net Income	2,670,039	1,619,486	1,446,331	1,668,131	2,003,635	1,815,794
Other Comprehensive Gains and Losses	-	-	13,108	(18,367)	(32,636)	(69,503)
Gains and Losses for the Period	2,670,039	1,619,486	1,459,440	1,649,764	1,970,999	1,746,291
Earnings per Share (NTD) after tax	4.59	2.78	2.49	2.87	3.45	3.12

Data Source: Feng Hsin

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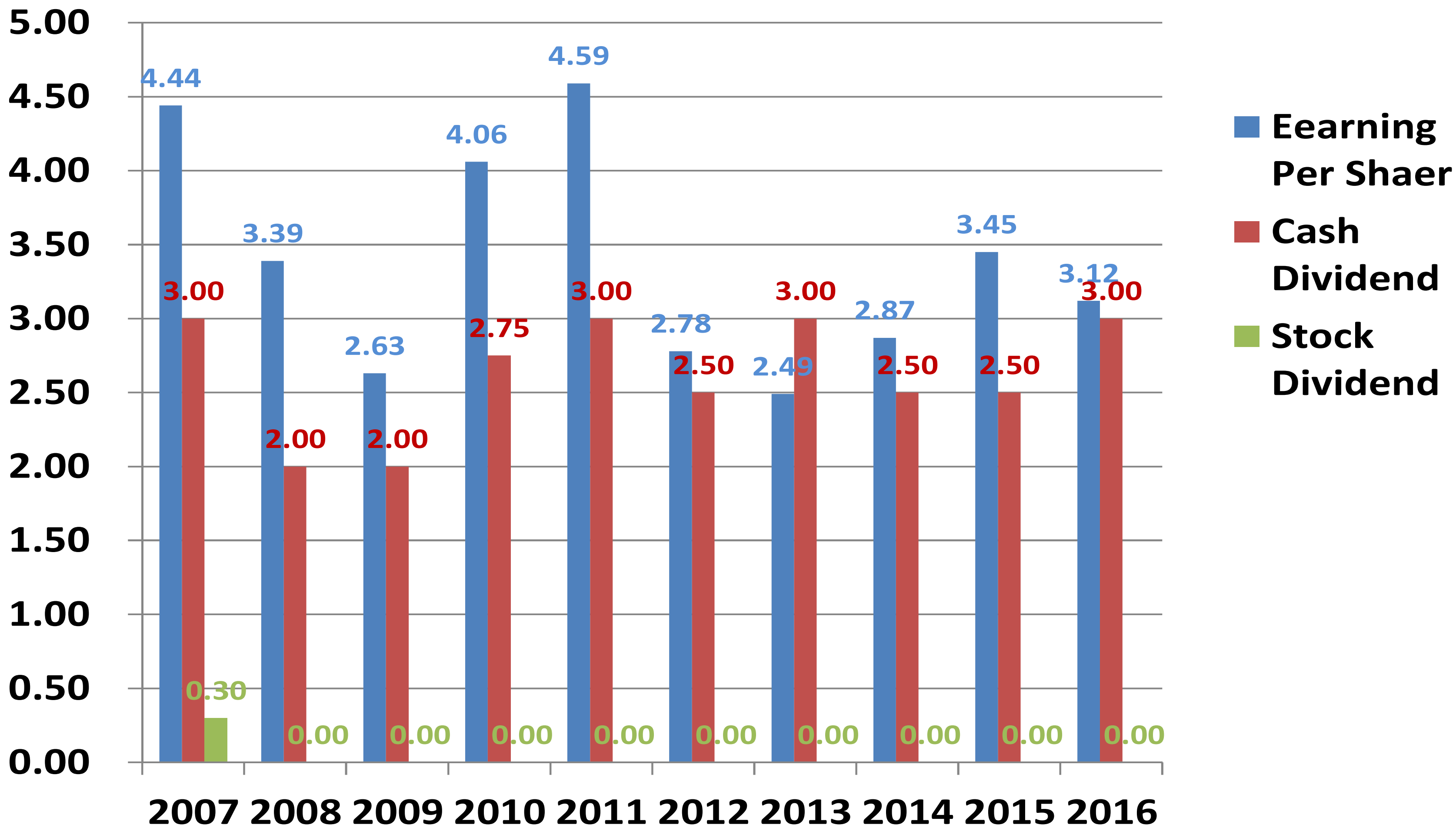
4. Consolidated Balance Sheet

Unit: NTD Thousand

Date / Item	2017/6/30		2016/12/31		2015/12/31	
	Amount	%	Amount	%	Amount	%
Current Assets	8,779,555	42.33%	9,630,784	49.04%	8,268,197	43.42%
Non-current Assets	2,572,249	12.40%	2,107,790	10.73%	2,569,010	13.49%
Property, Plant and Equipment	8,057,383	38.85%	7,407,102	37.72%	7,881,155	41.38%
Other Non-current Assets	1,332,248	6.42%	491,508	2.50%	325,158	1.71%
Total Assets	20,741,435	100.00%	19,637,184	100.00%	19,043,520	100.00%
Current Liabilites	4,361,216	21.03%	2,866,499	14.60%	2,504,534	13.15%
Long-term Liabilities		0.00%		0.00%		0.00%
Non-current Liabilities	197,359	0.95%	187,062	0.95%	247,656	1.30%
Total Liabilities	4,558,575	21.98%	3,053,561	15.55%	2,752,190	14.45%
Capital Stock	5,815,994	28.04%	5,815,994	29.62%	5,815,994	30.54%
Additional Paid-in Capita	447,280	2.16%	447,280	2.28%	447,280	2.35%
Legal Reserve	3,591,351	17.31%	3,409,772	17.36%	3,209,408	16.85%
Special Reserve	98,711	0.48%	56,150	0.29%	37,145	0.20%
Retained Earnings, Una	6,280,323	30.28%	6,953,138	35.41%	6,837,652	35.91%
Retained Earnings	9,970,385	48.07%	10,419,060	53.06%	10,084,205	52.95%
Other Equities	(50,799)	-0.24%	(98,711)	-0.50%	(56,149)	-0.29%
Total Equities	16,182,860	78.02%	16,583,623	84.45%	16,291,330	85.55%
PE	27.82		28.51		28.01	

Data Source: Feng Hsin

5. Feng Hsin 2007 – 2016 E.P.S. And Dividend Trend



Data Source: Feng Hsin

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6. 2015-2018 Completed and To be complete Investment/Upgrades-1

Unit: 100 Million NTD

No.	Investment/Upgrade	Estimate/Actual Amount	Investment/Upgrade Reasons	Estimate/Actual Completion Date	Estimate/Actual Beneficial Amount or Notes
1	No. 2 Melting Shop: 1. LF (Laddle Furnace) relocation 2. VD (Vacuum Degassing) addition	**4.80**	1. New product development; Can produce entry level spring steel 2. Expand SBQ product end application. Current steel grades via VD can be used in: a. Automobile parts (after market) b. High grade fasteners c. high grade hand tools 3. Improve product quality, increase competitiveness internationally and domestically	LF Relocation-2015/08 VD addition-2015/12	VD production has reached 20k mt until 2016/04. Expanding current SBQ market and improve on quality to increase competitiveness.
2	Tai Sugar Scrap Yard rental	**2.35**	Benefits of renting Tai Sugar scrap yard: 1. To replace Taichung port scrap yard & Northern scrap yard, with a total saving on renting cost of 16.32 million ntd. 2. Utilize the space in Tai Sugar scrap yard to separate impurities from scrap to save on trash processing material and electricity, yearly combine of saving 8.09 million ntd.	2015/12	244 million ntd/ year
3	Billet Magnetic Partical Inspection (MPI) Equipment	**0.64**	1. To solve billet's surface impurities that can't be inspected and improve on polish technique 2. After MPI and surface polishing, greatly reduce product defective and claims, increase on product competitiveness.	2016/03	Improve product quality and customer's confident in our material, expand FH's SBQ market share

6. 2015-2018 Completed and To be Complete Investment/Upgrades-2

No.	Investment/Upgrade	Estimate/Actual Amount	Investment/Upgrade Reasons	Estimate/Actual Completion Date	Estimate/Actual Beneficial Amount or Notes
4	Merchant Bar Mill's Rough and Medium Mill AC Motor	**1.50**	1. Rough and Medium Mill have a total of 12 AC motors, all have been in service for 19 years. All back up motors have had maintenance record, and the mill currently does not have any new back up motors. 2. To reduce both motor maintenance interval and cost.	2016/09	Reduce motor maintenance interval and to reduce on motor maintenance costs
5	SBQ Mill's RSB addition and New Coil Machine	**7.90**	To replace current equipment with new to increase competitiveness by improving surface and internal quality.	106/9	Quality improvement and market share
6	New Rebar Mill	**27.60**	1. To expand on small size rebar market share 2. Direct rolling to save on gasoline usage 3. Low-temp rolling to reduce cost of alloy in high tensile rebar	2018/01	317 Million NTD/year
7	New Administration Office Building	**4.24**	To cooperate with building the new rebar mill, the old office building has been demolished	2019/12	Intangible benefits
8	Merchant Bar Mill & SBQ Mill replacing Heavy Oil with Natural Gas as heating source	**1.95**	1. Reduce exhaust emission 2. Save on energy	2017/12	Merchant bar mill still have space to add continuous heating equipment, benefits of 10.4 million ntd/year
	Total:	**50.98**			

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五、Company Production, Marketing and Future Development Strategies

1.Production

A. New product development to expand product offering, production flexibility to maximize customer needs.

B. Addition of "Vacuum Degassing" equipment will increase product competitiveness to to expand product application.

C. SBQ rolling mill equipment upgrade to add RSB (Reduce Sizing Block) and a new coil machine to increase product quality.

D. New rebar mill with advanced low temp production technique can not only improve rebar quality but also reduce on carbon emission.

2.Sales

A. Actively participating in public construction tender with a 12% rebar market share target.

B. Keeping long term relationship and contracts with scrap suppliers to have stable supply and quality.

C. Maintaining well-established relationship with distributors to provide better customer service to support steady sales and market share.

D. To push SBQ product into higher application with newly upgraded melting equipment.

3.Future Development and Strategy

FH is not only aiming to finish all equipment upgrades this year, but also to continue expand our product category and to increase our product added value to maximize company profit .

Thank You
for
Your Attention