



Rating  
**Buy**

Asia  
China

Resources  
Metals & Mining

Company  
**Xiamen Tungsten**

Reuters 600549.SS Bloomberg 600549 CG Exchange SHH Ticker 600549

Date  
31 July 2017

Recommendation  
**Change**

Price at 28 Jul 2017 (CNY)	27.72
Price target - 12mth (CNY)	35.00
52-week range (CNY)	29.17 - 19.04
HANG SENG INDEX	26,979

## A full recovery in all segments; upgrading to Buy from Sell

### Price recovery in all segments; upgrading Xiamen Tungsten to Buy from Sell

We envision a comprehensive recovery in Xiamen Tungsten's major segments, including rare earth, battery materials, tungsten and cemented carbide. We expect major rare earth elements such as Pr and Nd to see a sustainable price recovery on tightened supply control and decent EV growth (thus magnet demand). Battery materials' margin should continue to improve as well once the company ramps up its high nickel ternary material plants in 2018 and 2019. Moreover, APT (Ammonium Paratungstate) and cemented carbide prices continue to recover thanks to strong cutting tools and mining machines output. We thus upgrade our rating from Sell to Buy, with a target price of RMB35.

### Rare earth - positive on Nd and Pr thanks to supply control and decent demand

With the government's supply control (quota, SRB buying and crackdown on illegal mining), and decent demand from magnets/EV growth, we expect deficits in rare earth elements such as Pr and Nd. Tb, although in surplus, entered easily into deficit territory upon SRB buying given its smaller market size of only 400tpa +. Xiamen Tungsten, one of the six major rare earth companies with c.2000t heavy rare earth quota (c.11% of China's total heavy rare earth mining quota), is a direct beneficiary, in our view. Moreover, although we are neutral on magnets' profitability given its nature as a processor, we expect Xiamen Tungsten's magnet margin to improve on the higher utilization rate.

### Ternary materials - an emerging leader

We view Xiamen Tungsten as an emerging leader in cathode materials with its new plants of 10K/6K/20K ternary materials capacity in 2H18 and 2019, respectively. We expect its margin to see a meaningful improvement in the upcoming years because ternary materials, as the mainstream cathode materials adopted in EV currently, enjoys a better margin compared to the single-digit margin for LCO used in portable devices.

### Tungsten and cemented carbide - still the most profitable segment

In addition to the good momentum in rare earth and ternary materials, the tungsten segment so far continues to be the major contributor to Xiamen Tungsten's bottom line, thanks to APT and the cemented carbide price recovery on decent demand. China's cutting tools machine output, one of cemented carbide's downstream channels, experienced c.9% YoY growth in June 2017 YTD. Mining machines like excavators saw 100% YoY growth in the first half-year.

### Valuation & Risks

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#### Key changes

Price target	12.00 to 35.00	↑	191.7%
Rating	Sell to Buy	↑	
Sales (FYE)	11,751 to 11,718	↓	-0.3%
Op prof margin (FYE)	9.4 to 16.2	↑	72.4%
Net profit (FYE)	383.4 to 932.3	↑	143.2%

Source: Deutsche Bank

#### Price/price relative



Performance (%)	1m	3m	12m
Absolute	27.7	36.4	-1.2
HANG SENG INDEX	5.0	9.6	21.7

Source: Deutsche Bank

#### Key indicators (FY1)

ROE (%)	13.6
Net debt/equity (%)	-2.1
Book value/share (CNY)	6.66
Price/book (x)	4.2
Net interest cover (x)	7.9
Operating profit margin (%)	16.2

Source: Deutsche Bank



Moreover, China's tungsten and tungsten product exports increased by 50%+YoY in May 2017 YTD.

#### Upgrading to Buy with target price of RMB35 via DCF valuation; risks

During 1H17, Xiamen Tungsten achieved RMB453m in profits, representing 560% + YoY growth. To reflect the better price outlook in rare earth and tungsten, as well as the growing capacity of ternary materials, we raised our 2017/18 earnings by 140% and 90%, respectively. Our target price of RMB35 is based on a DCF valuation, with a WACC of 7.6% (previously 7.2%) and terminal growth of 2% (previously 1%). With 26% upside, we upgrade Xiamen Tungsten from Sell to Buy. The company is currently trading at 4.2x/3.7x 2017/18DBE BVPS and 32x/28x 2017/18DBE EPS, which is well below its own historical average P/B of 5x, as well as major magnets and battery players' 40x 2017 P/E, not to mention the hundreds-level P/Es of rare earth and tungsten names, respectively. We believe the valuation is undemanding given a c.100%+ earnings CAGR during 2016-19E (vs. previous DBE 40%+CAGR, please see details in valuation section).

#### Forecasts and ratios

Year End Dec 31	2015A	2016A	2017E	2018E
Sales (CNYm)	7,754.8	8,528.4	11,718.4	13,136.2
EBITDA (CNYm)	614.7	1,100.0	2,538.7	2,778.5
EBIT(CNYm)	46	501	1,902	2,112
Reported EPS FD(CNY)	-0.69	0.14	0.86	0.97
Reported NPAT (CNYm)	-662.5	147.0	932.3	1,054.4
DB EPS growth (%)	–	–	534.2	13.1
DB EPS FD(CNY)	-0.69	0.14	0.86	0.97
OLD DB EPS FD(CNY)	-0.69	0.21	0.35	0.52
% Change	-0.0%	-34.7%	143.2%	89.2%
PER (x)	–	175.5	32.2	28.4
EV/EBITDA (x)	46.6	25.7	9.5	8.3
DPS (net) (CNY)	0.20	0.20	0.20	0.20
Yield (net) (%)	0.8	0.8	0.7	0.7

Source: Deutsche Bank estimates, company data

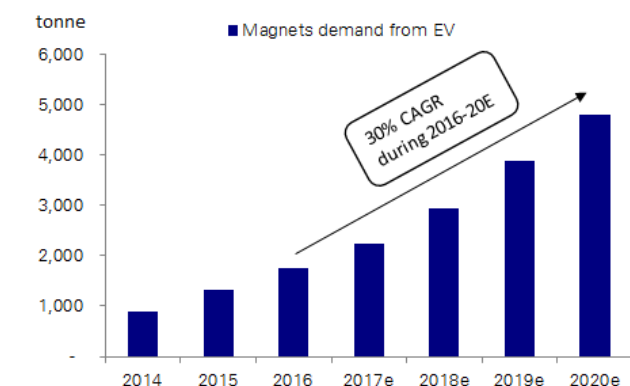


## Rare earth - improving balance on tightened supply and secular EV growth

Rare earth prices, in particular Pr oxide (Praseodymium) and Nd oxide (Neodymium), had increased 17% and 9% yoy by July 2017 YTD, respectively. We expect strong momentum to continue in the upcoming years, thanks to the crackdowns on illegal mining (see Figure 3), and more importantly, robust magnets (NdFeB, neodymium iron boron) demand driven by EV.

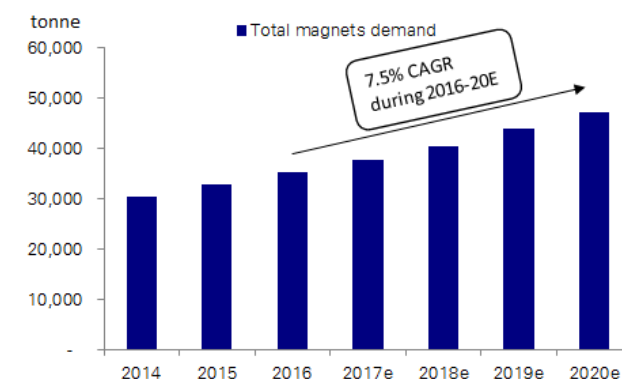
Generally, the downstream market for rare earths is small and diverse, of which NdFeB permanent magnets are set to grow strongly with secular EV growth across the world. As shown in Figures 1 and 2, we expect magnet demand from EV to register a c.30% CAGR and total magnets to post a 7.5% CAGR during 2016-20E, respectively.

Figure 1: Magnet demand from EV (2014-20E)



Source: Deutsche Bank, IHS, IDC

Figure 2: Total magnet demand (2014-20E)



Source: Deutsche Bank, IHS, IDC

Downstream demand is returning for lower-price light rare earth elements such as Ce and La for use in glass polishing powders, fluid catalytic cracking and emissions catalysts, NiMH batteries and metallurgy, although we expect only moderate growth going forward following the recent price hike.

Despite sluggish demand from phosphor powders (as LED lamps are taking over the market), the price of the heavy rare earth element Tb has experienced a solid recovery thanks to government support. An SRB buying of hundreds of tonnes could change the supply-demand situation for Tb with total output of 400+ tonnes per year.



Figure 3: Government illegal crackdown and SRB buying summary

Action	Date	Comment
Illegal mining crackdown	Dec, 2016 - May, 2017	Covered <b>415 rare earth related companies</b> (including mining, refining and separation, trade, and etc.) in <b>23 provinces</b>
	May, 2017	MIIT inspection group investigated 7 companies in Jiangsu
	June, 2017	Jiangxi <b>re-inspected</b> illegal production and laid out special target list Inspected companies in Shanxi
		MIIT established special task force consisting of technical, financial, and law experts, to support the <b>normalized illegal crackdown</b>
	July, 2017	MIIT and Tax Bureau investigated rare earth companies in Hunan
SRB buying	Dec, 2016	1,406t in total
	Jan, 2017	About 2,000t in total
	Mar, 2017	About 1,000t in total
	May, 2017	About 1,665t in total
		15kt purchase quota for 2017; <b>remaining quota c.10kt</b>

Source: Deutsche Bank, SMM, Asian Metal

Our supply-demand model shows a deficit for Pr and Nd in the figures below. Although Tb and Dy are in surplus, the government tightened them through SRB buying of 670 tonnes and 1500 tonnes in the first half of 2017, respectively, according to the China Rare Earth Association.

Figure 4: Praseodymium supply and demand model

Praseodymium	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e
Supply (t)	9,442	10,184	10,287	9,829	9,839	9,896	10,485	10,560
% growth		8%	1%	-4%	0%	1%	6%	1%
Demand (t)	9,266	9,946	10,436	10,818	10,918	11,094	11,421	11,442
% growth		7%	5%	4%	1%	2%	3%	0%
Surplus/(deficit) (t)	176	238	(148)	(989)	(1,079)	(1,198)	(936)	(883)
% growth		35%	-162%	567%	9%	11%	-22%	-6%
% of demand	2%	2%	-1%	-9%	-10%	-11%	-8%	-8%
REO price (RMB/t)	454,010	500,272	353,280	311,082	373,298	410,828	451,690	496,860
% growth		10%	-29%	-12%	20%	10%	10%	10%

Source: Deutsche Bank, WIND, IHS, IDC

Figure 5: Praseodymium oxide price



Source: Deutsche Bank, WIND



Figure 6: Neodymium supply and demand model

Neodymium	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e
Supply (t)	28,532	30,722	31,477	30,064	29,989	30,011	31,650	31,700
% growth		8%	2%	-4%	0%	0%	5%	0%
Demand (t)	25,316	27,233	28,772	30,034	30,616	31,457	32,724	33,303
% growth		8%	6%	4%	2%	3%	4%	2%
Surplus/(deficit) (t)	3,216	3,489	2,705	30	(628)	(1,446)	(1,074)	(1,603)
% growth		8%	-22%	-99%	-2179%	130%	-26%	49%
% of demand	13%	13%	9%	0%	-2%	-5%	-3%	-5%
REO price (RMB/t)	328,353	288,983	267,781	257,337	283,071	311,378	342,515	376,767
% growth		-12%	-7%	-4%	10%	10%	10%	10%

Source: Deutsche Bank, WIND, IHS, IDC

Figure 7: Neodymium oxide price



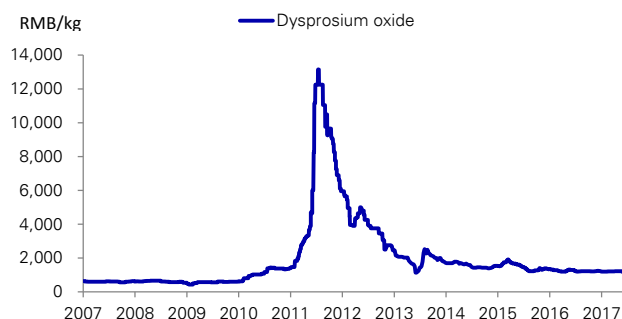
Source: Deutsche Bank, WIND

Figure 8: Dysprosium supply and demand table

Dysprosium	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e
Supply (t)	2,027	1,984	2,135	2,024	1,980	1,918	1,934	1,890
% growth		-2%	8%	-5%	-2%	-3%	1%	-2%
Demand (t)	901	838	819	835	844	863	888	910
% growth		-7%	-2%	2%	1%	2%	3%	2%
Surplus/(deficit)	1,126	1,146	1,316	1,189	1,136	1,056	1,047	980
% growth		2%	15%	-10%	-4%	-7%	-1%	-6%
% of demand	125%	137%	161%	142%	135%	122%	118%	108%
DBe price (R)	1,915,719	1,547,815	1,479,855	1,239,059	1,301,012	1,301,012	1,301,012	1,301,012
% growth		-19%	-4%	-16%	5%	0%	0%	0%

Source: Deutsche Bank, WIND, IHS, IDC

Figure 9: Dysprosium oxide price



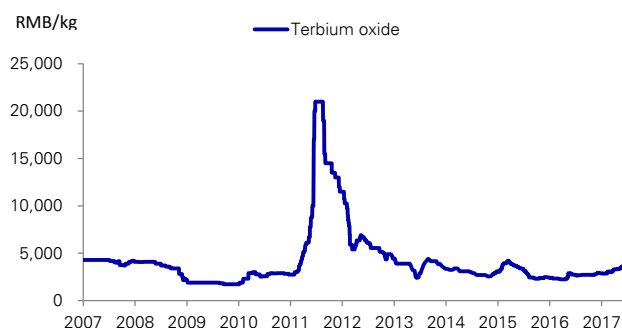
Source: Deutsche Bank, WIND

Figure 10: Terbium supply and demand table

Terbium	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e
Supply (t)	451	451	480	458	447	434	437	427
% growth		0%	6%	-5%	-2%	-3%	1%	-2%
Demand (t)	386	345	320	295	269	242	212	179
% growth		-11%	-7%	-8%	-9%	-10%	-12%	-15%
Surplus/(deficit)	65	107	160	162	178	192	226	248
% growth		64%	49%	2%	9%	8%	17%	10%
% of demand	17%	31%	50%	55%	66%	80%	107%	138%
DBe price (R)	3,711,046	2,956,735	3,070,971	2,611,611	3,525,675	3,701,958	3,887,056	4,081,409
% growth		-20%	4%	-15%	35%	5%	5%	5%

Source: Deutsche Bank, WIND, IHS, IDC

Figure 11: Terbium oxide price



Source: Deutsche Bank, WIND

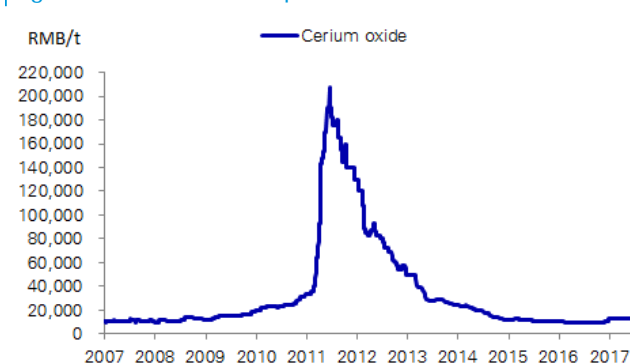


Figure 12: Cerium supply and demand model

Cerium	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e
Supply (t)	63,407	70,413	69,434	66,105	67,356	68,988	74,816	76,566
% growth		11%	-1%	-5%	2%	2%	8%	2%
Demand (t)	41,438	42,550	43,152	44,141	46,129	48,461	50,535	53,943
% growth		3%	1%	2%	5%	5%	4%	7%
Surplus/(deficit) (t)	21,968	27,863	26,282	21,964	21,227	20,527	24,281	22,622
% growth		27%	-6%	-16%	-3%	-3%	18%	-7%
% of demand	53%	65%	61%	50%	46%	42%	48%	42%
DBe price (RMB/t)	32,578	18,251	11,191	9,885	13,075	13,075	13,075	13,075
% growth		-50%	-31%	-13%	35%	0%	0%	0%

Source: Deutsche Bank, WIND, IHS, IDC

Figure 13: Cerium oxide price



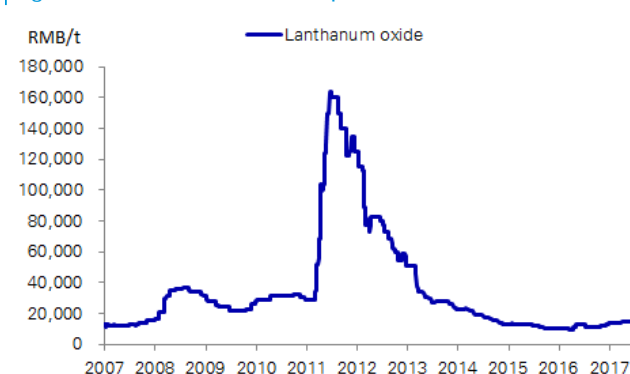
Source: Deutsche Bank, WIND

Figure 14: Lanthanum supply and demand model

Lanthanum	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e
Supply (t)	45,092	48,051	49,020	46,069	45,859	46,282	49,700	50,333
% growth		7%	2%	-6%	0%	1%	7%	1%
Demand (t)	34,665	35,154	35,318	35,334	35,522	35,892	36,070	36,381
% growth		1%	0%	0%	1%	1%	0%	1%
Surplus/(deficit) (t)	10,427	12,898	13,702	10,736	10,337	10,390	13,629	13,952
% growth		24%	6%	-22%	-4%	1%	31%	2%
% of demand	30%	37%	39%	30%	29%	29%	38%	38%
DBe price (RMB/t)	32,057	18,353	11,895	11,518	14,398	14,398	14,398	14,398
% growth		-49%	-27%	-3%	25%	0%	0%	0%

Source: Deutsche Bank, WIND, IHS, IDC

Figure 15: Lanthanum oxide price



Source: Deutsche Bank, WIND

Figure 16: Rare earth and magnets gross margin (2011-2019E)



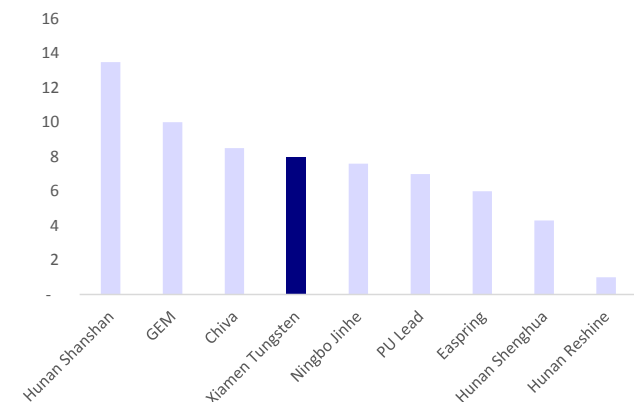
Source: Deutsche Bank estimate, company info



## Ternary materials - an emerging leading player

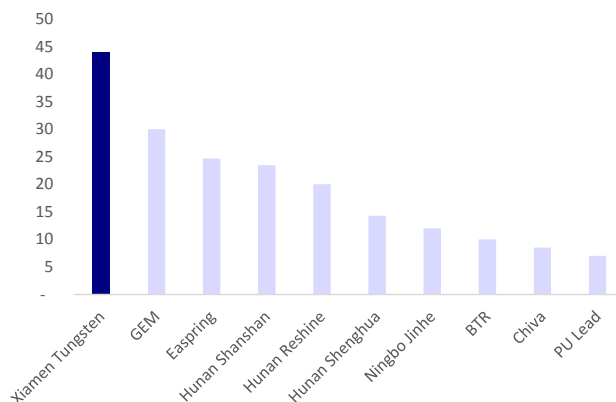
Xiamen Tungsten, with its three new plants of 10K/6K/20K ternary materials capacity ramping up in 2H18, 2H18, and 2019, will have more than 40kt ternary materials capacity by 2019 and should at that point become one of the top players (as shown in the tables below). Our analysis of the major battery companies' expansion shows Xiamen Tungsten could even be number one by then, and the company expects to be in the top 2 or 3.

Figure 17: Ternary capacity at major Chinese producers (2016, ktpa)



Source: Deutsche Bank, company info

Figure 18: Ternary capacity at major Chinese producers (2019E, ktpa)



Source: Deutsche Bank, company info

Currently, Xiamen Tungsten has 45% NMC, 45% LCO and 10% others, including LFP and lithium manganate output. According to our battery analyst James Kan, newly developed Ni intensive ternary materials usually have a higher margin compared to LCO. More specifically, he expects a single-digit gross margin for LCO, high teens for NMC532 and 20%+ for NMC622, and likely similar figures for the upcoming high nickel NMC 811 and NCA. With an improving product mix, we expect the company's battery segment margin to reach 18% in 2019 from 9% in 2016.

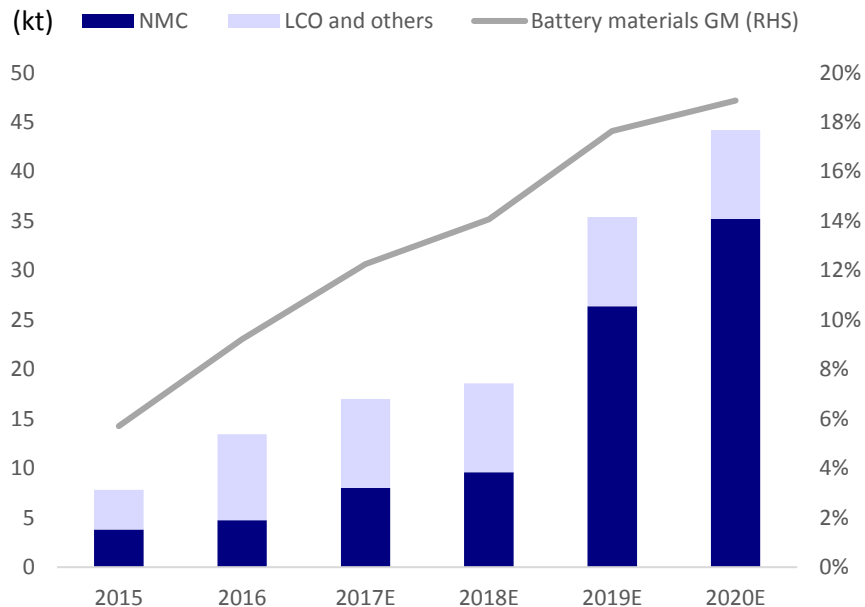
Figure 19: Battery materials' gross margin and output breakdown

Battery materials breakdown	Current	By 2019	GM - industry avr.
NMC	45%	80%+	High teens for majorstream NMC532 and c.20% for NMC622
LCO	45%	10%+	Single digit
LFP and lithium manganate	10%		

Source: Deutsche Bank, company info



Figure 20: Battery materials' sales mix and gross margin



Source: Deutsche Bank, company info

## Tungsten segment - still the most important cash-generating segment

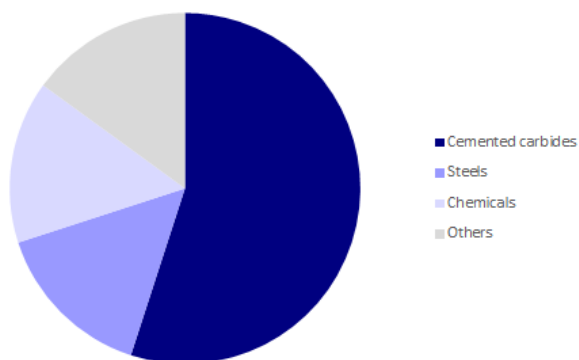
Despite management's efforts in the ternary materials and rare earth segments, the tungsten segment is still by far the most profitable business within Xiamen Tungsten, thanks to its strong leading position in cemented carbide and the cost advantage of self-produced tungsten concentrate. By 2016, Xiamen Tungsten's tungsten concentrate self-sufficiency rate had reached 52%.

In addition, management mentioned that the utilization rate momentum is indeed picking up in cemented carbide. Major downstream sectors including cemented carbide and steel are posting decent growth momentum. As is shown in the figures below, cemented carbide accounts for over 50% of tungsten consumption in China, and is widely used in cutting tools, mining machines, etc. In June YTD, production of China metal-cutting machine tools had increased 8.7% YoY, not to mention 100%+ growth in mining machines like excavators. Moreover, tungsten and tungsten product exports had increased 55% YoY in May 2017 YTD.



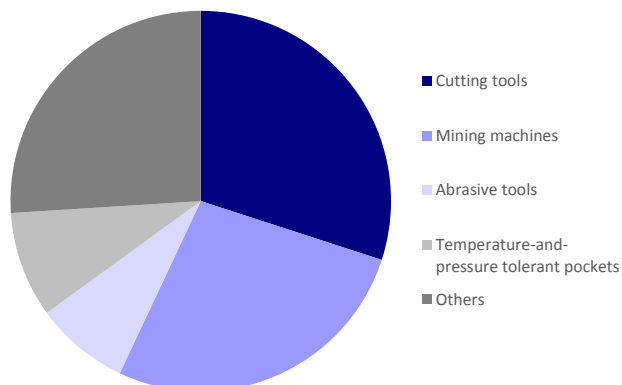


Figure 21: China tungsten consumption by product



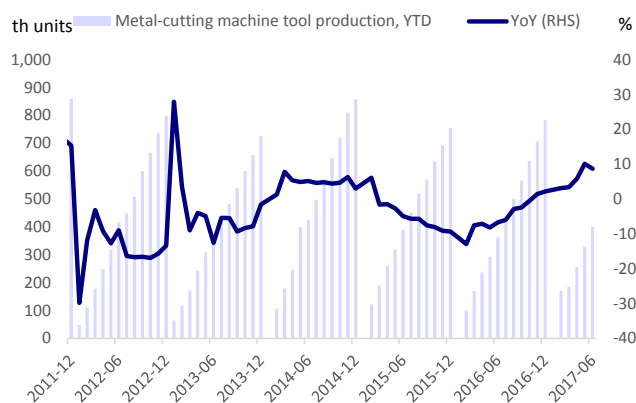
Source: Deutsche Bank, SMM, Asian Metal

Figure 22: China cemented carbide downstream applications



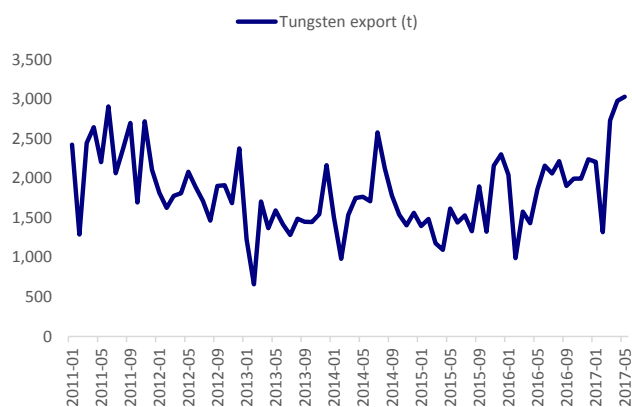
Source: SEIR

Figure 23: China metal-cutting machine tool production (2011-2017)



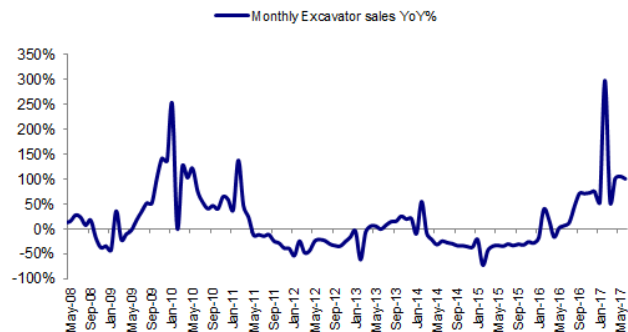
Source: Deutsche Bank, NBS

Figure 24: China tungsten export (2011-2017)



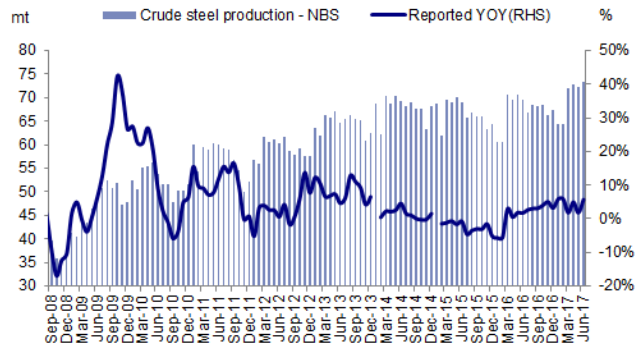
Source: Deutsche Bank, WIND

Figure 25: Excavator sales growth



Source: CEIC, Wind, CMBOL (China Construction Machinery)

Figure 26: China monthly crude steel production



Source: CEIC



Besides, the tungsten market has been supported by the SRB purchase of a c.20kt stockpile in 2016, which helped the tungsten price recover from RMB60,000/t in late 2015 to RMB84,000/t by July 2017.

Figure 27: Summary of SRB tungsten stockpile purchase

Date	Stock purchased (kt)	Purchase price (RMB/t)	Comment
Feb, 2016			Planned to buy 8.5kt, but the bid failed
Apr, 2016	9.0	75,000	Planned to buy 11kt
Oct, 2016	6.0	78,500 (black); 76,500 (white)	Planned to buy 9kt
Dec, 2016	4.5	82,500	

Source: Deutsche Bank, SMM, Asian Metal

## Upgrading from Sell to Buy; target price RMB35

During 1H17, Xiamen Tungsten's bottom line reached RMB453m, representing 560%+ yoy growth, thanks to the better price performance in each of its major segments as well as the lower inventory cost. To reflect its better performance in 1H17, our constructive outlook on rare earth, ternary materials and cemented carbides, as well as its growing capacity, we raise our 2017 and 2018 earnings by 140% and 90% respectively. Our number is 100%+ above Bloomberg consensus in 2017 and 2018, respectively, as shown in the table below.

Figure 28: Xiamen Tungsten forecast change

Xiamen Tungsten's forecast change table							
RMB m	2017E			2018E			
	New	Old	Change %	New	Old	Change %	
Revenue	11,718	11,751	0%	13,136	13,089	0%	
EBIT	1,902	1,106	72%	2,112	1,610	31%	
NPAT	932	383	143%	1,054	557	89%	

Source: Deutsche Bank, company info

Figure 29: Xiamen Tungsten DBe vs. consensus

Xiamen Tungsten DBe vs. cons							
RMB m	2017E			2018E			
	DB estimate	Consensus	DBe/Cons.	DB estimate	Consensus	DBe/Cons.	
Revenue	11,718	10,509	112%	13,136	12,220	107%	
EBIT	1,902	881	216%	2,112	1,225	172%	
NPAT	932	387	241%	1,054	525	201%	

Source: Deutsche Bank, Bloomberg Finance LP

Figure 30: Gross margin changes

Gross margin changes							
	2017E			2018E			
	New	Old	Change (ppt)	New	Old	Change (ppt)	
Overall GM	27%	15%	11.8	27%	18%	8.3	
Tungsten	32%	14%	18.0	33%	22%	11.0	
Rare earth	18%	-7%	25.5	21%	-7%	27.7	
Battery	18%	15%	3.4	14%	15%	(0.9)	
Property	50%	50%	-	50%	45%	5.0	

Source: Deutsche Bank



Our target price of RMB35 is based on DCF methodology, with a WACC of 7.6% (previously 7.2%), terminal growth of 2% (previously 1%), Rf 3.9%, MRP 5.6% and beta of 1.2 (previously 1.1). We raise terminal growth to 2% to reflect growing ternary materials capacity, which is showing secular growth. We also refresh beta to 1.2 from the previous 1.1. As shown in the table below, our target price upgrade is mainly a result of our earnings revisions, together with stronger ternary materials capacity expansion in 2019 and onwards.

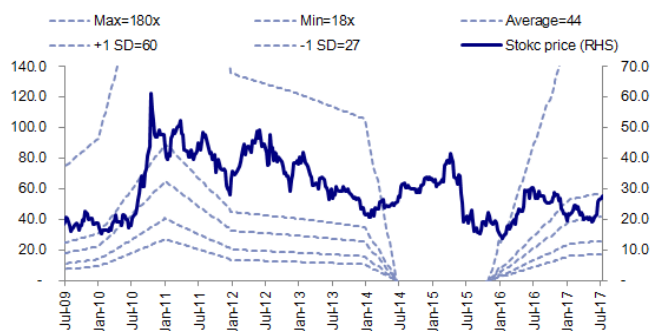
Figure 31: TP change compositions

TP change composition (in RMB per share)		
Previous TP	12	
Changes from terminal growth	2	revise up to 2% from 1%
Changes from beta	(2)	revise up to 1.2 from 1.1
Changes from earnings revision	23	
<b>Current TP</b>	<b>35</b>	

Source: Deutsche Bank, Bloomberg Finance LP

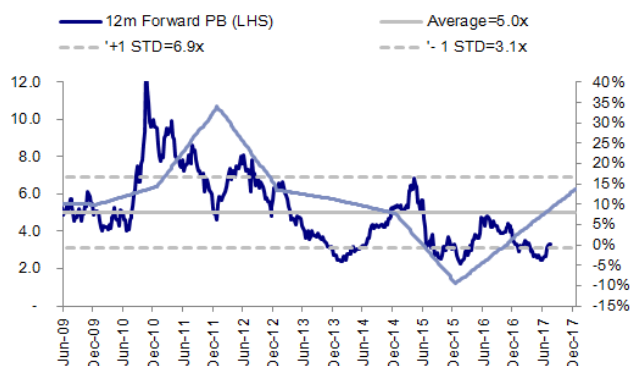
The stock is currently trading at 32x/28x 2017/18 DBE EPS and 4.2x/3.7x 2017/18 DBE BVPS. We believe the current valuation is undemanding compared to the 40x 2017 P/E of magnets and battery producers, not to mention the rare earth and tungsten players at hundreds-level P/E multiples, as shown in the table below. Xiamen Tungsten's historical average P/B is around 5x with a c.10% ROE. We believe its current P/B of 4x is also undemanding, with our estimated ROE at 14% in 2017 and 2018, as well as c.100%+ earnings CAGR during 2016-19E (vs. previous DBE 40%+CAGR). We thus upgrade Xiamen Tungsten from Sell to Buy, with 26% upside. Risks include lower rare earth and tungsten prices, and a lower margin in NMC products.

Figure 32: Xiamen Tungsten 12-month forward P/E band



Source: Deutsche Bank, company info, Bloomberg Finance LP

Figure 33: Xiamen Tungsten 12-month forward P/B vs. ROE



Source: Deutsche Bank, company info



Figure 34: Xiamen tungsten comps table

Company	Ticker	Fiscal Year	Rating	Listing Curr	Current price 7/28/17	Target Price	M. cap (mRMB) 7/28/17	PE (x) 2017		PB (x)		ROE %		EPS Growth %		CAGR 17-19 CA
<b>Xiamen Tungsten</b>	<b>300549.SS</b>	<b>Dec-31</b>	<b>Buy</b>	<b>CNY</b>	<b>27.7</b>	<b>35.0</b>	<b>29,992</b>	<b>32</b>	<b>28</b>	<b>4.2</b>	<b>3.7</b>	<b>14</b>	<b>14</b>	<b>534</b>	<b>13</b>	<b>29</b>
<b>Tungsten</b>																
Zhangyuan Tungsten	002378.SZ	Dec-31	NR	CNY	10.6		9,815	354	266	5.1	4.9	1	2	-	40	33
<b>REO mining&amp;smelting</b>																
Northern Rare Earth	600111.SS	Dec-31	NR	CNY	16.9		61,471	282	232	7.3	7.1	3	3	140	22	24
China Nonferrous Metal	000758.SZ	Dec-31	NR	CNY	8.1		16,031	25	19	1.8	1.6	12	13	118	34	18
<b>Magnetic materials-China</b>																
Zhongke Sanhuan	000970.SZ	Dec-31	Hold	CNY	17.4	14.7	18,503	46	35	4.2	3.9	9	12	26	32	28
Ningbo Yunsheng	600366.SS	Dec-31	NR	CNY	19.5		10,852	27	22	2.3	2.1	6	8	-	50	20
Yantai Zhenghai	300224.SZ	Dec-31	NR	CNY	11.6		9,679	36	28	3.3	3.1	8	10	28	26	23
Chengdu Galaxy Magnets	300127.SZ	Dec-31	NR	CNY	20.5		6,637	46	38	5.4	4.9	12	13	20	21	27
Innuovo Technology Co Ltd	000795.SZ	Dec-31	NR	CNY	7.8		8,865	157	89	4.4	4.2	5	5	66	77	-
<b>Average</b>								<b>39</b>	<b>42</b>	<b>3.9</b>	<b>3.6</b>	<b>8</b>	<b>10</b>	<b>18</b>	<b>35</b>	<b>21</b>
<b>Cathode</b>																
Easpring	300073.SZ	Dec-31	Buy	CNY	26.7	21	9,774	49	32	6.5	5.6	14	19	0	53	35
Shanshan	600884.SS	Dec-31	NR	CNY	21.0		23,544	31	26	2.7	2.5	9	10	66	22	25
<b>Average</b>								<b>40</b>	<b>29</b>	<b>4.6</b>	<b>4.0</b>	<b>11</b>	<b>15</b>	<b>33</b>	<b>38</b>	<b>30</b>

Source: Deutsche Bank, Bloomberg Finance LP



Model updated: 30 July 2017

### Running the numbers

Asia

China

Metals & Mining

## Xiamen Tungsten

Reuters: 600549.SS Bloomberg: 600549 CG

### Buy

Price (28 Jul 17) CNY 27.72

Target Price CNY 35.00

52 Week range CNY 19.04 - 29.17

Market cap (m) CNYm 23,062  
USDm 3,420.7

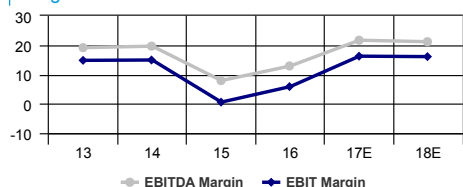
### Company Profile

Xiamen Tungsten, a leader in cemented carbide industry in China, principally engages in mining, smelting and processing tungsten, molybdenum and rare earth products. Xiamen Tungsten produces battery and operates in real estate development and management as well.

### Price Performance



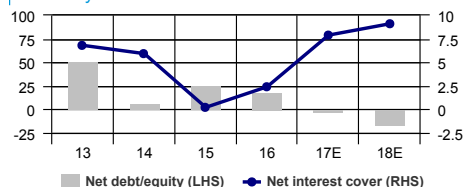
### Margin Trends



### Growth & Profitability



### Solvency



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Fiscal year end 31-Dec

### Financial Summary

	2013	2014	2015	2016	2017E	2018E
DB EPS (CNY)	0.67	0.58	-0.69	0.14	0.86	0.97
Reported EPS (CNY)	0.67	0.58	-0.69	0.14	0.86	0.97
DPS (CNY)	0.25	0.20	0.20	0.20	0.20	0.20
BVPS (CNY)	6.1	8.9	6.1	6.0	6.7	7.4
Weighted average shares (m)	682	757	1,082	1,082	1,082	1,082
Average market cap (CNYm)	16,108	15,741	25,567	25,804	23,062	23,062
Enterprise value (CNYm)	20,588	17,398	28,632	28,302	24,226	23,074

### Valuation Metrics

P/E (DB) (x)	35.1	35.7	nm	175.5	32.2	28.4
P/E (Reported) (x)	35.1	35.7	nm	175.5	32.2	28.4
P/BV (x)	2.99	2.82	3.07	3.67	4.16	3.73
FCF Yield (%)	9.4	nm	nm	3.6	7.3	6.8
Dividend Yield (%)	1.1	1.0	0.8	0.8	0.7	0.7
EV/Sales (x)	2.1	1.7	3.7	3.3	2.1	1.8
EV/EBITDA (x)	10.9	8.7	46.6	25.7	9.5	8.3
EV/EBIT (x)	14.1	11.5	629.3	56.5	12.7	10.9

### Income Statement (CNYm)

Sales revenue	9,875	10,143	7,755	8,528	11,718	13,136
Gross profit	2,781	2,962	1,581	2,094	3,710	4,026
EBITDA	1,890	1,992	615	1,100	2,539	2,778
Depreciation	428	478	569	599	637	667
Amortisation	0	0	0	0	0	0
EBIT	1,462	1,514	46	501	1,902	2,112
Net interest income(expense)	-215	-255	-209	-208	-241	-232
Associates/affiliates	0	-18	-32	-34	0	0
Exceptionals/extraordinary	0	0	0	0	0	0
Other pre-tax income/(expense)	89	91	-343	166	115	128
Profit before tax	1,337	1,331	-538	425	1,776	2,008
Income tax expense	388	398	39	125	444	502
Minorities	489	492	85	152	400	452
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	460	441	-662	147	932	1,054
DB adjustments (including dilution)	0	0	0	0	0	0
DB Net profit	460	441	-662	147	932	1,054

### Cash Flow (CNYm)

Cash flow from operations	2,798	-44	-1,263	1,206	2,391	2,552
Net Capex	-1,285	-729	-586	-265	-200	-500
Free cash flow	1,513	-773	-1,849	941	2,191	2,052
Equity raised/(bought back)	0	2,795	0	0	0	0
Dividends paid	-831	-817	-621	-582	-457	-448
Net inc/(dec) in borrowings	1,483	-1,886	2,674	2,224	0	0
Other investing/financing cash flows	-2,246	1,024	-831	-1,995	0	0
Net cash flow	-81	342	-626	588	1,734	1,604
Change in working capital	0	0	0	0	0	0

### Balance Sheet (CNYm)

Cash and other liquid assets	706	1,085	431	1,041	2,775	4,379
Tangible fixed assets	4,416	5,096	5,596	5,838	5,445	5,318
Goodwill/intangible assets	805	785	767	726	683	643
Associates/investments	573	555	723	670	670	670
Other assets	8,949	9,797	8,471	7,224	7,223	7,205
Total assets	15,450	17,318	15,987	15,500	16,796	18,214
Interest bearing debt	3,856	1,642	2,618	2,580	2,580	2,580
Other liabilities	5,530	6,585	5,134	4,802	4,983	5,111
Total liabilities	9,386	8,227	7,752	7,382	7,563	7,691
Shareholders' equity	4,160	7,437	6,636	6,489	7,205	8,043
Minorities	1,904	1,655	1,599	1,628	2,028	2,480
Total shareholders' equity	6,064	9,091	8,235	8,117	9,233	10,523
Net debt	3,150	558	2,188	1,539	-195	-1,798

### Key Company Metrics

Sales growth (%)	11.3	2.7	-23.5	10.0	37.4	12.1
DB EPS growth (%)	-10.1	-13.5	na	na	534.2	13.1
EBITDA Margin (%)	19.1	19.6	7.9	12.9	21.7	21.2
EBIT Margin (%)	14.8	14.9	0.6	5.9	16.2	16.1
Payout ratio (%)	37.1	34.3	nm	147.1	23.2	20.5
ROE (%)	11.1	7.6	-9.4	2.2	13.6	13.8
Capex/sales (%)	14.6	7.2	7.6	3.8	1.7	3.8
Capex/depreciation (x)	3.4	1.5	1.0	0.5	0.3	0.7
Net debt/equity (%)	52.0	6.1	26.6	19.0	-2.1	-17.1
Net interest cover (x)	6.8	5.9	0.2	2.4	7.9	9.1

Source: Company data, Deutsche Securities estimates



# Appendix 1

## Important Disclosures

\*Other information available upon request

### Disclosure checklist

Company	Ticker	Recent price*	Disclosure
Xiamen Tungsten	600549.SS	27.72 (CNY) 28 Jul 2017	NA

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### Historical recommendations and target price. Xiamen Tungsten (600549.SS)

(as of 07/28/2017)



#### Current Recommendations

Buy  
Hold  
Sell  
Not Rated  
Suspended Rating

\*\* Analyst is no longer at Deutsche Bank

1. 08/27/2015 Sell, Target Price Change CNY 12,00 James Kan



## Equity Rating Key

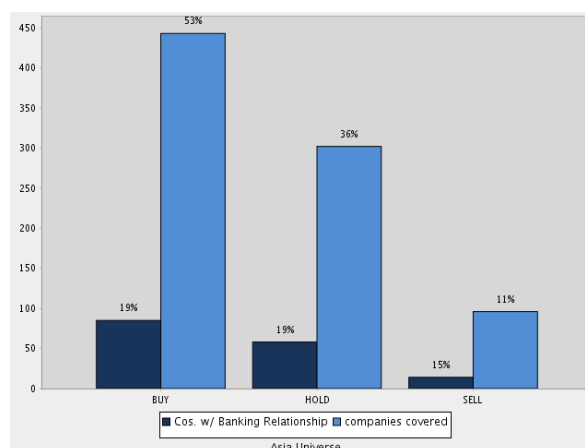
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**Sell:** Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock.

**Hold:** We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

Newly issued research recommendations and target prices supersede previously published research.

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