

ATTORNEYS AT LAW

Robert B. Bernstein TELEPHONE: 212-763-6804 rbernstein@vanfeliu.com

August 24, 2012

VIA EMAIL Elizabeth M. Murphy, Secretary Securities and Exchange Commission 100 F. Street N.E. Washington, D.C. 20549-1090

#### Re: File Number SR-NYSEArca-2012-28

Dear Ms. Murphy:

This firm represents RK Capital LLC, an international copper merchant, and four U.S. end-users of copper: Southwire Company, Encore Wire Corporation, Luvata, and AmRod. We write in further opposition to the proposed rule change allowing the listing and trading of J.P. Morgan's proposed copper backed ETF and, in particular, we respond to the specific questions posed by the SEC's July 19, 2012 Order in the above-referenced proceeding. We also request, pursuant to Section 19(b)(2) of the Securities Exchange Act of 1934, as amended by the Securiteis Act Amendments of 1975, (15 U.S.C. 78s(b)(2)(B)), an opportunity to make an oral presentation.

Enclosed herewith are our responses to the specific questions raised:

#### **SEC Request No. 1:**

In light of the comments received, the Commission is soliciting further comments regarding copper usage and supply trends. For example:

- What was the world mine production capacity in each of the past 10 years? What data is available regarding projected world mine production over the next 3 to 5 years? What factors impact the ability to increase or decrease mine production?
- What was the refined production in each of the past 10 years? How much of the refined production was from primary and secondary sources? What was the world refinery capacity in each of the past 10 years? What data is available regarding projected refined production over the next 3 to 5 years? What factors impact the ability to increase or decrease refinery production?
- What was the world refined usage in each of the past 10 years? What data is available regarding projected usage over the next 3 to 5 years?
- How much copper has been held for investment purposes over the past 10 years? How much of this copper was taken off LME warrant? How much of this copper has been eligible to be placed on LME warrant?

# **Response to SEC Request No. 1**

The following tables (from multiple sources) show mine production, refined production and refined usage for each of the past ten years, as well as projected production and consumption (usage) over the next three to five years. We know of no copper that has ever been "held for investment purposes over the past ten years."

	Mine Prod.	% YoY	Ref. Production	% YoY	Ref. Usage	% YoY
2001	13,633		15,638		15,009	
2002	13,577	-0.41%	15,354	-1.82%	15,210	1.34%
2003	13,757	1.33%	15,272	-0.53%	15,717	3.33%
2004	14,594	6.08%	15,918	4.23%	16,838	7.13%
2005	14,922	2.25%	16,572	4.11%	16,674	-0.97%
2006	14,990	0.46%	17,291	4.34%	17,034	2.16%
2007	15,483	3.29%	17,933	3.71%	18,196	6.82%
2008	15,524	0.26%	18,239	1.71%	18,054	-0.78%
2009	15,903	2.44%	18,270	0.17%	18,088	0.19%
2010	16,036	0.84%	19,006	4.03%	19,364	7.05%
2011p	16,035	-0.01%	19,650	3.39%	19,885	2.69%

# **International Copper Study Group (ICSG)**

# Wood MacKenzie Research and Consulting (WoodMac)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Global copper mine production	13319	13726	13528	13628	14637	14962	15169	15624	15705	15959	16175	16242	17477	19404	20220	20986	20595
Global Primary copper production	10118	10864	10478	10466	10664	11281	11586	11640	11745	11722	11747	12022	12229	13331	14166	14914	15258
Global SxEw Production	2291	2538	2619	2676	2658	2644	2755	2990	3071	3289	3332	3475	3585	3894	4077	4214	4094
Secondary in refined	2434	2253	2255	2136	2612	2670	2954	3394	3445	3295	3896	4189	4391	4583	4760	4966	5117
Global Refined Cu Production	14844	15656	15351	15277	15935	16595	17296	18025	18260	18306	18975	19686	20205	21808	23003	24094	24469
Global refined copper consumption	15160	14783	14894	15575	17021	16957	17484	17981	17929	17323	19324	19797	20337	21302	22494	23506	24345

# Woodmac

	2008	2009	2010	2011	2012	2013	2014
TOTAL WORLD	18,260.10	18,306.00	18,975.50	19,703.60	21,119.90	23,392.50	25,137.90

# BME

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Refinery Output	14590	15052	15277	15217	15916	16606	17245	17913	18554	19677
Refinery Capacity	17687	17917	18518	19185	19472	20252	21222	22228	22792	23807
% Capacity Utilization	82	84	82	79	82	82	81	81	81	83

# Woodmac

	201	201	201	201	201	201	201	201	201	202	202
	1	2	3	4	5	6	7	8	9	0	5
Consumption	197	203	213	224	235	243	250	257	264	272	319
	97	37	02	94	06	45	31	32	52	67	73
Less Refinery Scrap	133	141	148	155	162	167	173	179	185	192	227
	8	3	3	5	1	7	4	4	7	0	0
Less Smelter Scrap etc	285	297	309	320	334	344	353	363	373	383	441
	1	8	9	5	5	0	3	3	6	9	1
Add Blister Adjustment	610	616	633	640	690	695	695	695	695	695	695
Add Disruption Allowance (5%)	0	587	956	100 4	105 3	107 2	110 2	111 1	114 0	117 9	137 2
Demand for Mine Output	162	171	183	193	202	209	215	221	226	233	273
	17	49	08	78	83	95	60	11	95	81	60
Base Case Mine Output	157	170	189	197	204	200	196	190	187	182	145
	87	27	20	14	59	79	71	57	01	77	66
Imbalance	431	122	-612	-335	-177	916	188 9	305 4	399 4	510 5	127 94
Met By Highly Probable Projects (100%)	0	6	68	187	298	502	729	712	677	671	871

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Imbalance	431	117	-681	-522	-474	415	116 1	234 2	331 7	443 4	119 23
Met by Probable Projects	0	7	56	225	448	812	173 7	261 6	301 8	334 3	416 4
Imbalance	431	110	-737	-747	-922	-397	-577	-274	298	109 1	775 9
Available from other Probable & Possible Projects	0	0	92	438	162 1	318 3	461 7	655 1	779 0	985 3	139 87

BME: Global Copper consumption incl. Scrap	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Asia	10324	11159	12580	13106	13902	14721	15537	16278	16997	17799	18643	19531	20446	21389	22359	23382	24461	25600
China	6185	7388	8348	9108	9836	10515	11146	11731	12347	13038	13755	14512	15296	16099	16920	17783	18690	19643
India	887	845	896	946	980	1027	1096	1195	1314	1440	1570	1712	1866	2035	2218	2418	2636	2874
Japan	1544	1146	1390	1356	1380	1417	1457	1480	1478	1468	1466	1462	1448	1433	1418	1402	1385	1367
S. Korea	1068	1180	1236	1083	1088	1128	1174	1204	1193	1188	1187	1183	1175	1165	1152	1135	1115	1092
Taiwan	640	600	710	612	617	634	665	668	664	664	665	664	661	657	651	644	635	624
Europe (western)	4408	3546	3931	3767	3714	3767	3893	3980	4012	4007	3995	3983	3961	3933	3896	3858	3818	3776
France	518	384	321	249	241	241	252	257	260	258	257	256	254	251	249	246	243	240
Germany	1577	1210	1448	1401	1393	1412	1468	1503	1514	1511	1505	1497	1483	1465	1446	1426	1405	1384
Italy	1113	877	1029	976	961	964	990	1010	1025	1023	1022	1020	1016	1009	1003	996	989	981
Spain	325	317	332	333	331	336	345	350	349	348	348	348	347	345	344	342	340	338
United Kingdom	74	67	70	70	69	69	71	72	71	70	70	69	68	68	67	66	66	65
Other western Europe	801	692	733	738	719	744	768	787	794	796	793	792	794	794	788	782	775	769
Latin America	508	475	491	512	525	535	553	569	585	601	620	639	659	679	700	722	744	764
Mexico	508	475	491	512	525	535	553	569	585	601	620	639	659	679	700	722	744	764
North America	3027	2547	2662	2792	2834	2903	2992	3046	3065	3043	3016	2983	2937	2887	2829	2767	2702	2634
Canada	199	162	188	209	212	218	224	227	226	224	222	219	216	213	210	206	201	197
United States	2829	2385	2474	2584	2622	2686	2768	2819	2839	2819	2794	2764	2721	2674	2619	2562	2501	2437
Ro WW	2884	2735	3152	3107	3205	3345	3521	3694	3850	4013	4178	4345	4514	4706	4891	5073	5252	5435
Other E Bloc	1335	1008	1109	1319	1339	1386	1450	1506	1559	1606	1654	1704	1755	1802	1847	1891	1938	1983
Rest of World	4219	3743	4261	4426	4544	4731	4971	5201	5409	5619	5832	6049	6269	6508	6738	6963	7189	7417
Total	22486	21469	23925	24603	25518	26657	27945	29074	30068	31068	32106	33185	34273	35397	36523	37693	38915	40192
Annual % change	-2.40%	-4.50%	11.40%	2.80%	3.70%	4.50%	4.80%	4.00%	3.40%	3.30%	3.30%	3.40%	3.30%	3.30%	3.20%	3.20%	3.20%	3.30%

Mine production itself is affected by many factors including:

- exploration risks
- geological risks
- political risk
- labor relations and availability
- environmental constraints
- expertise constraints
- financing requirements

All these factors together mean an average for US copper mines developed since the 1870s of approximately 19 years (see attached Excel spreadsheet).

Refinery production affected by:

- environmental constraints
- financing requirements
- prevalence of nationalized industries distorting price signals
- labor relations and availability

The lack of geologic constraints makes flexibility in the refining industry higher. Lead times are estimated to be 2 to 5 years depending on jurisdiction.

### **SEC Request No. 2**

According to the International Copper Study Group ("ICSG"), world refined usage of copper exceeded world refined production by approximately 417,000 tons in 2010 and 231,000 tons in 2011, and world refined stocks decreased by 161,000 tons in 2010 and increased by 13,000 tons in 2011. What factors account for refined stocks decreasing less than the deficit amount (or even increasing) in 2010 and 2011? Are there any factors with respect to the supply of copper available for immediate delivery that the Commission should consider in evaluating the market's ability to meet demand for copper? When a deficit occurs, are copper fabricators and other end users able to access copper to meet excess demand? If so, what are the sources of that copper? How much copper is available for immediate delivery that is not on LME warrant?

### **Response to SEC Request No. 2**

Estimating amounts of refined stocks other than in official exchanges is extremely hard, subject to error and sensitive to assumption.

There will always be inventory required in any industrial process and copper is not unusual in this respect. Where deficits are bigger than official exchange stock the most likely

explanation for the shortfall is that there has been a shortfall in industry inventory. For example a factory that may plan to hold two weeks of stock to cover production is only able to hold one week due to availability. This causes risk and potential damage to industrial users, but they may have no option.

There is also a price interaction since deficits unmet by free inventory cause price rises. This has caused industrial users to close down which both reduces consumption and releases any stock that consumers may be holding. For example the copper plumbing tube industry has substantially been priced out of the market in recent years as the copper price has risen; this has released this industry's inventory.

Scrap recovery may increase at times of high prices, but this is largely captured in the data.

There are no other sources of copper available for immediate delivery that are not captured in the data (see Response to Request No. 5)

# **SEC Request No. 3**

The Commenters state that a material reduction in the supply of copper available for immediate delivery will increase the price of copper and volatility in the copper market, and, in turn, would harm the U.S. economy.122 The Commission requests comment on whether commenters agree or disagree with these concerns, and why or why not. For example:

- Do commenters believe creation of the Trust will have an impact on the supply of copper? If so, what will that impact be? If not, why not?
- How does a change in the supply of copper impact the price of copper? To what extent do copper stocks need to be reduced or increased to impact the price of copper?
- To what extent is the LME Settlement Price affected by the amount of copper on LME warrant? To what extent must copper on LME warrant be reduced to impact the LME Settlement Price? To what extent, if at all, is the LME Settlement Price affected by the supply of copper ineligible to be placed on LME warrant?
- How does a change in the supply of copper impact volatility in the physical copper and copper derivatives markets?
- Is there empirical evidence that creation of the Trust will impact copper prices and volatility? What impact, if any, will creation of the Trust have on the US economy?

### **Response to SEC Request No. 3**

The Trust will definitionally reduce the supply of copper to industrial users because supply is largely fixed in the short and medium term and there are historically low inventories. Therefore any increase in investors holding physical metal reduces availability to industrial users.

The LME settlement price is axiomatically affected by the quantity of copper on warrant. This is because the quantity on warrant defines how much copper is eligible to be delivered against a cash contract, i.e. it is the total supply that is available when setting the settlement price.

Copper not on warrant may not be delivered and as such will have no direct effect on the settlement price. There may be indirect effects as market participants are aware that future deliveries may be made and therefore futures prices may be reduced and there is often some relation between futures and cash prices. However, the disconnect may be expressed in large backwardations which mean cash and futures prices vary significantly.

Tight supply of any commodity increases volatility. If we hypothesise a stock of two tons and one consumer, then, if that consumer wants just one ton, there is an oversupply and no one to buy it, and if that consumer wants three tons there is a demand, and no material to satisfy it. The oscillations between these two extreme states will be faster and more volatile the lower the inventory levels are.

### **SEC Request No. 4**

V&F and Senator Levin state that the Trust and the proposed iShares Copper Trust, collectively, will remove from the market a substantial percentage of the copper available for immediate delivery, with Senator Levin stating that the Copper Trusts would hold approximately 34% of the copper stocks available for immediate delivery and would remove from the U.S. market over 55% of the available copper. V&F further states that the collective effect of the Trust and the iShares Copper Trust would be "far-reaching and potentially devastating to the U.S. and world economies," including "shortages of copper, higher prices to consumers, and increased volatility." Do commenters agree or disagree with these statements? If so, why or why not?

### **Response to SEC Request No. 4:**

We agree for all of the reasons previously provided

### SEC Request No. 5:

V&F states that the only "visible" copper available to satisfy the Trust's requirements is copper stored in LME warehouses. NYSE Area represents that it has been informed by the Sponsor that overall physical copper stocks, including stocks that are immediately available for sale, are substantially larger than V&F would suggest. V&F responded, arguing that the copper stocks identified in Area's Response mainly consist of metal in the supply chain, which would not be generally available for creation of Shares. The Commission is soliciting further comments regarding physical copper stocks. For example:

- How much copper is currently held in LME warehouses? How much of the copper currently held in LME warehouses is on warrant? How much copper in LME warehouses is available for investment purposes?
- How much copper is held in COMEX, Shanghai Futures Exchange ("SHFE"), and Multi Commodity Exchange of India ("MCX") warehouses? How much

copper held in COMEX, SHFE, and MCX warehouses is eligible to be placed on LME warrant (i.e., is of a brand registered with the LME)? How much of this LME warrant-eligible copper is available for investment purposes? Where is this copper located?

- What quantity of copper stock, if any, is held in other locations that would be eligible to be placed on LME warrant (if it were located at an LME warehouse)?
- How accessible are stocks of copper eligible to be placed on warrant that are not held in LME warehouses?
- Are commenters aware of any activities involving the stockpiling of copper? If so, how much copper has been stockpiled? Where is such copper located? How accessible is such copper? How much of this stock was taken off LME warrant? How much of this copper is eligible to be placed on LME warrant?

### **Response to SEC Request No. 5**

Inventory on warrant as of August 9, 2012:

08/09/12	LME (on warrant)	COMEX	SHFE	MCX
MT	203675	44136	164111	NA*

\*Multi Commodity Exchange of India (MCX) is an electronic commodity future exchange that does not provide physical warehouses for any product.

How much of the Comex stock can be delivered to the LME depends on how much of the Comex stock consists of LME "Acceptable Brands." Without actually being the holder (owner) of the Comex warrants, you really cannot see anything except the amount of stock in each Comex location. You can, however, sort of back into the answer based on the location. For instance, Salt Lake City only has KUC (Kennecott) brand as it is near the refinery.. KUC t is LME deliverable. There are about 1937 short tons (or 1757 metric tons currently on warrant). Amarillo has 990 short tons (898 metric tons) of stock. Most likely all of it is ATR brand, which is likewise LME deliverable. El Paso has about 1564 short tons (1419 metric tons). We believe only about 50% of El Paso consists are brands deliverable on LME, or 710 metric tons. Tucson has 37,000 short tons (33,566 metric tons). We believe most, or about 80% of Tuscon is RAY brand which is on the LME list, but not for good delivery of new material, only removable from LME, so that leaves about 6,715 tons of LME registered. Toledo has 469 short tons (425 metric tons) which is most likely KUC brand and deliverable on LME. Panama City Fl has 138 short tons (125 metric tons, all of which is most likely deliverable.

So, based on a total Comex inventory of 38,156 metric tons, we believe the total shippable to the LME at this time would be 10,630 metric tons, deliverable as follows:

> Salt Lake City – 1757 mt Amarillo – 898 mt El Paso – 710 mt Tucson – 6715 mt Toledo – 425 mt Panama City – 125 mt

How much of this Comex copper is available for investment purposes in the Trust? An Authorized Participant would have to go long Comex and take delivery of warrants in order to sort through to find the particular lots in each location that satisfy the Trust's LME "Acceptable Brand" requirements.

It is hard to know how much, if any, material at LME warehouses is not on warrant. We believe the answer is virtually none. If anything, this would be material that has just arrived at warehouses with the intent to warrant as soon as possible, and still would be little if any.

We also know of no off warrant stocks in the United States at this moment. Producers are very tight and shipping all stock to existing clients against long term commitments. Stocks of imported metal on the piers is minimal if any at all.

With respect to stocks on the Shanghai Exchange, we do not know for sure how much is deliverable against the LME. However, there are only a small number of brands – all Chinese – which are deliverable against SHFE but not LME. We therefore estimate that a minimum of 80pct of stock held against SHFE is also LME deliverable (i.e. of the 160,000 metric tons on warrant in Shanghai currently, ~140,000 metric tons would be LME deliverable). The attached file indicates those brands which are both LME and SHFE deliverable.

Furthermore, we are aware of no significant inventory of copper that is surplus and available to the market outside of official warehouse stocks. The most often cited inventory of bonded material in Shanghai and Guangzhou warehouses (outside of official warehouse stocks) is estimated at between 500,000 and 600,000 metric tons but for several reasons we do not believe this inventory can reasonably be considered available for immediate delivery, particularly to consumers in the United States.

First, we know a substantial percentage of the inventory in bonded warehouses in China is being held in financing structures and hence held away from the market for an extended period. How much is restricted in this fashion and for how long we do not know.

Second, there would be considerable logistical expense involved in shipping this material out of China to other locations.

Third, we believe much of the bonded storage capacity in China is not undercover and therefore, we estimate up to 10 percent of this stock is likely not deliverable at all without being restrapped, cleaned and reclipped.

Finally, the bonded warehouse inventory in China is supporting a fast growing consuming market of circa 8 million metric tons annually. This material has in the past years been drawn down to close to absolute minimums and increased to levels normally required in inventory to support a large market with the largest import requirement in the world.

JP Morgan report (Daily Metals Note Jul 25, 2012) shows 56.4 days of inventory in Shanghai. This is a level of inventory which since the start of 2005 has only been lower in the periods Q2 06 - Q4 06 and Q4 10 to Q4 11. It may also be observed from JP Morgan's below chart that the Chinese physical market has required an average of 60 to 65 days stock over a multi-year period. Because this is the usual clearing stock required by this market, there is no significant surplus.



Source: CNIA, NBS, CGA, Exchanges, J.P. Morgan Commodity Research. \*Inventory estimates include SHFE, stocks at bonded warehouses, and unreported inventories at producers, merchants, and consumers.

In summary we would quote JP Morgan's Commodity Market Outlook and Strategy for 2012 (Dec 5 2011):

As a result, even with significant Chinese destocking (about 500kmt in 2011), a declining trend in LME copper inventories, and a collapse in expected production for 2012 given the ongoing problems plaguing mine supply (strikes, declining grades, project delays, environmental constraints), the LME copper price has dropped by 17% this year.

In 2012, the global copper market is set to register another deficit. This time, it enters a deficit year with even less of a stock buffer than before—global exchange stocks are at about the lowest point in the past two years. However, decelerating demand, led by a

downshift in China, seems likely to exert downward pressure on copper prices in 1H2012 before a rebound in market fundamentals engineers a strong rally into 2H2012.

China remains the global hub for copper demand, in terms of both levels and growth. We estimate China's domestic copper stock has dropped toward 50-to-55 days of domestic coverage, and underlying consumption trends remain relatively robust even through growth is slowing (Exhibit 8).

### **SEC Request No. 6**

The Trust will store copper in warehouses that are maintained by the Warehousekeeper. Initially, the permitted warehouse locations are in the Netherlands (Rotterdam), Singapore (Singapore), South Korea (Busan and Gwangyang), China (Shanghai), and the United States (Baltimore, Chicago, and New Orleans) (each an "Approved Warehouse" and, collectively, the "Approved Warehouses"). What is the locational premium at each of the Approved Warehouses? What impact would changes in locational premia have on supply and demand for copper at each of the Approved Warehouses? How much copper is held at each of the Approved Warehouses? How much of the copper held at each of the Approved Warehouses is on LME warrant? How much is eligible to be placed on LME warrant? How much copper eligible for LME warrant is available for investment purposes? How much is not eligible to be placed on LME warrant?

### **Response to SEC Request No. 6**

We think only JPM can answer if they themselves have off warrant material; we know of none other than the minuscule amounts (and corresponding location premiums) identified as follows on the Trust's website.

Location	Location Premium <del>-</del>	Location Price	Location Net Tons=	Location Gross Asset Value
Baltimore	\$10.000	\$7,596.000	99.322	\$754,449.912
Busan	\$80.000	\$7,666.000	N/A	N/A
Chicago	\$10.000	\$7,596.000	50.803	\$385,899.588
Gwangyang	\$80.000	\$7,666.000	N/A	N/A
New Orleans	\$10.000	\$7,596.000	6.647	\$50,490.612
Rotterdam	\$58.130	\$7,644.130	N/A	N/A

### **ETF Fund's Location**

Location	Location Premium <del>-</del>	Location Price=	Location Net Tons-	Location Gross Asset Value
Shanghai	\$135.000	\$7,721.000	N/A	N/A
Singapore	\$80.000	\$7,666.000	20.274	\$153,068.700

#### See <u>http://www.jpmxf.com/cm/Satellite?UserFriendlyURL=etfholdings&pagename=etfWrapper</u>

LME published stocks are as follows in each of the Approved Warehouse location (as of July 31, 2012). We have also obtained quoted premiums for warrants at each such location (as of August 2, 2012).

07/31/2012	Cu on warrant (Bloomberg)	Premium (fastmarkets 08/02/12)
Rotterdam	2525	90-100
Singapore	15850	5-20
Busan	35600	0-10
Gwanyang	18025	0-10
Baltimore	0	0-15
Chicago	11675	0-15
New Orleans	36378	0-15

The premiums reported by JPM and fastrack are essentially the same in all material respects and, as should be clear, the premiums are the lowest in the United States. The only differences are the premiums quoted for Busan and Gwanyang. We believe the higher premiums quoted by the Sponsor for busan and Gwanyang would have been the "delivered works" costs to the Sponsor's warehouse location there. The premiums we have quoted from fastmarkets are the premiums charged for warrants at the LME warehouse itself where the copper is stored.

#### **SEC Request No. 7**

V&F states that Shares will be created by acquiring LME-warranted copper and taking it off warrant to be deposited in the Trust. NYSE Area represents that it has been informed by the Sponsor that the economics do not support this suggestion, given the large supply of non-

warranted physical copper and the cost and time that would be required in order to take LME warranted copper off warrant solely for the purposes of creating Shares. V&F responded, arguing that taking copper off LME warrant would involve little or no cost if LME warrants are purchased for copper that is already stored at the Approved Warehouses. The Commission requests comment on these opposing views. Specifically:

- What costs are involved in taking copper off LME warrant? What costs are involved in putting copper on LME warrant?
- How long does it take to take copper off LME warrant? How long does it take to put copper on LME warrant?
- How does the cost and time required to take copper off warrant compare to the cost and time to ship copper to an Approved Warehouse?

### **Response to SEC Request No. 7:**

The sponsor must provide some evidence of the large supply of off warrant copper. We are aware of no such large supply. Therefore material will have to be sourced from the LME for lack of alternative. The only other way to source the material would be out bid an industrial user and leave manufacturing industry without a raw material.

### What costs are involved in taking copper off LME warrant?

Assuming copper being taken off LME warrant is being shipped elsewhere (which would not be the case if the material is remaining in a Sponsor-owned LME warehouse), the full LME schedule of costs to FOT (loaded onto truck) is as per attached, shown in local currencies. Converted at current foreign exchange rates gives approximate costs for current main storage locations as per below:

Country	Cost USD/pmt (per metric ton)
Italy	35
Netherlands	32
Malaysia	39
Singapore	43.5
S. Korea	37
USA	36.5

Additional costs will be incurred for loading onto other conveyances (containers, barge, rail, break bulk vessel) and also for actual movement of the cargo, which is dependent on where it is required to be transported to and from, and on the method.

We would estimate that this ranges depending on loading location and final destination with anything from USD 20 - 200 per metric ton.

### What costs are involved in putting copper on LME warrant?

Costs from incoming conveyance to onto warrant are usually absorbed by the LME warehouse as an incentive to use their facility, transport costs to the facility, assuming transit from producing plant to nearest LME warehouse could range from USD 20 - 100 pmt.

### How long does it take to take copper off LME warrant?

If the Sponsor (or one of its affiliates) owns the specific warehouse where the copper is being taken off LME warrant (and where the copper will thereafter continue to be stored), taking copper off warrant may not take any time at all. Otherwise, the answer will depend on the length of the loading out queue at the given location.

LME warehousing companies have to deliver out a minimum of 1,500 to maximum of 3,000 metric tons per working day per location, depending on the size of their warehouse (s) at each location. Warrants are delivered out on in order of cancellation date and irrespective of metal.

Queues are currently ranging from 275 working days (more than one year) in Vlissingen, Netherlands, 91 working days (4.5 months) in New Orleans, 51 working days (2.5 months) in Johor, Malaysia to under one month in Korea and Rotterdam, Netherlands.

Once loading dates have been agreed, volumes that warrant owners can actually load out are also affected by mode of transport required and its availability.

# How does the cost and time required to take copper off warrant compare, to the cost and time to ship copper to an Approved Warehouse?

As it is in the interest of the warehouse to store parcels on arrival as quickly as possible in order to start earning rent, there is no required "Minimum loading in rate," and generally goods are stored in more rapidly than they are moved out. However if the same warehouse location is required to load out other parcels at the same time as they are storing, then intake of parcels once arrived at their facility can be delayed, and both are subject to port delays due to factors such as weather and congestion, as well as transit distance and mode of transport.

### **SEC Request No. 8**

The Commission understands that ETFS Physical Copper securities currently trade on the London Stock Exchange. How much copper did ETFS Physical Copper hold following the initial creation? How much copper does ETFS Physical Copper currently hold? What change, if any, was there in the price of copper following creation of ETFS Physical Copper? Did the creation of ETFS Physical Copper result in an observable impact on the copper market? Has ETFS

Physical Copper engaged in the lending of copper?

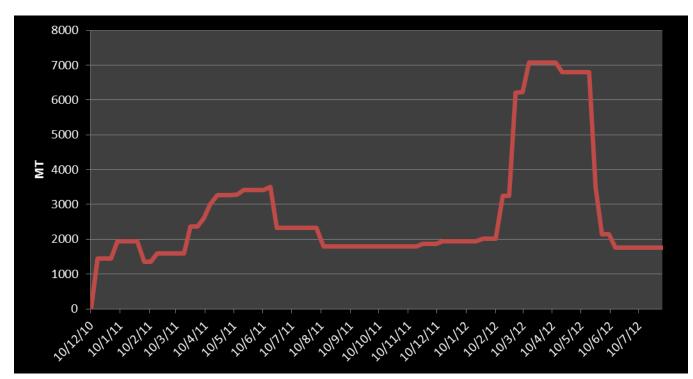
# **Response to SEC Request No. 8:**

Total copper in metric tons held by ETFS Physical Copper securities from inception to date:

10/12/10	25	29/4/11	3263.4	16/9/11	1791.2	3/2/12	2019.7	22/6/12	1763.7
17/12/10	1445.4	6/5/11	3263.4	23/9/11	1791.2	10/2/12	2019.7	29/6/12	1763.7
24/12/10	1446.1	13/5/11	3288.6	30/9/11	1791.2	17/2/12	3244.7	6/7/12	1763.7
31/12/10	1446.1	20/5/11	3412.3	7/10/11	1791.2	24/2/12	3244.7	13/7/12	1763.7
7/1/11	1946.1	27/5/11	3412.3	14/10/11	1791.2	2/3/12	6216.6	20/7/12	1763.7
14/1/11	1946.1	3/6/11	3412.3	21/10/11	1791.2	9/3/12	6221.6	27/7/12	1763.7
21/1/11	1946.1	10/6/11	3412.3	28/10/11	1791.2	16/3/12	7072.9	3/8/12	1763.7
28/1/11	1946.1	17/6/11	3512.3	4/11/11	1791.2	23/3/12	7072.9		
4/2/11	1349.3	24/6/11	2323.1	11/11/11	1791.2	30/3/12	7072.9		
11/2/11	1349.3	1/7/11	2323.1	18/11/11	1791.2	6/4/12	7072.9		
18/2/11	1599.3	8/7/11	2323.1	25/11/11	1867.5	13/4/12	7072.9		
25/2/11	1600.4	15/7/11	2323.1	2/12/11	1867.5	20/4/12	6788.4		
4/3/11	1600.4	22/7/11	2323.1	9/12/11	1867.5	27/4/12	6788.4		
11/3/11	1600.4	29/7/11	2323.1	16/12/11	1942.5	4/5/12	6788.4		
18/3/11	1600.4	5/8/11	2323.1	23/12/11	1943	11/5/12	6788.4		
25/3/11	2359.1	12/8/11	1791.2	30/12/11	1943	18/5/12	6788.4		
1/4/11	2359.1	19/8/11	1791.2	6/1/12	1943	25/5/12	3496.6		
8/4/11	2611.2	26/8/11	1791.2	13/1/12	1943	1/6/12	2149.5		
15/4/11	3011.2	2/9/11	1791.2	20/1/12	1943	8/6/12	2149.5		
22/4/11	3263.4	9/9/11	1791.2	27/1/12	2018	15/6/12	1763.7		
L	1			1	1		l		l l

ETF MT

August 24, 2012 Page 16



The announcement (Oct 2010) and launch (Dec 2010) of the UK Listed ETFS Physical Copper security coincided with a price run up from \$8000 per metric ton at the end of September 2010 to an all-time high of \$10,161 on February 14, 2011. We would assert the ETFS launch, along with the announcements in October 2010 that J.P. Morgan and BlackRock had filed SEC registration statements intending to launch their own respective copper backed ETFs were part of the cause of this rally. The Sponsor should explain why this was not a significant factor. We are not aware of any lending of copper by the ETFS copper ETF.

### **SEC Request No. 9**

The Commission has previously approved listing on the Exchange under NYSE Arca Equities Rule 8.201 of other issues of CB-ETPs backed by gold, silver, platinum, and palladium (collectively "precious metals"). While these precious metals are often held for investment purposes, the Commission understands they are also used for various industrial purposes. V&F asserts that copper is used exclusively for industrial purposes and is not generally held for investment. The Commission requests information regarding the production and use of precious metals. How much gold, silver, platinum, and palladium has been produced in each of the last 10 years? How much gold, silver, platinum, and palladium has been used for investment purposes in each of the last 10 years? How much gold, silver, platinum, and palladium has been used for industrial purposes in each of the last 10 years? Are there any other uses of gold, silver, platinum, and palladium relevant to understanding utilization of these precious metals? What are the current and historic stocks of gold, silver, platinum, and palladium? Is there any empirical evidence that the listing of CB-ETPs backed by gold, silver, platinum, or palladium impacted prices in these markets?

### **Response to SEC Request No. 9:**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
PD (000 ozs)	5788	6026	6413	6624	7024	6584	6156	6049	6186	6401
PA (000 ozs)	5952	6172	6630	6593	7355	7050	6381	6322	6612	6837
AU (Tonnes)	2625	2630.6	2054	2561.1	2494.7	2496.8	2428.8	2610.5	2740.5	2818.4
AG (mm ozs)	594.5	597.2	613.6	636.6	641.1	665.9	683.6	716.1	751.4	761.6

# Palladium, Platinum, Silver and Gold Produced in each of last ten years

# Gold Used for Investment in Each of Last ten years

Gold World Investment (Tonnes)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Implied Net Investment	291	772	31	478	368	210	9	1,131	608	62
Bar Hoarding	232	177	215	251	233	240	621	498	882	1,209
Official Coins	97	107	116	112	130	136	192	234	213	246
Medals & Imitation Coins	26	26	29	37	59	68	70	59	88	88
Total	647	1,082	391	878	791	654	892	1,922	1,792	1,605
US\$/oz	309.68	363.32	409.17	444.45	603.77	695.39	871.96	972.35	1,224.52	1,571.52
Value, US\$bn	6	13	5	13	15	15	25	60	71	81

# Silver Used for Investment in Each of Last Ten years

Silver World Investment (Million OZ)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Implied Net Investment	-17.4	0.9	31.8	58.1	55.1	16.6	31.2	132.2	184.6	164
Coins & Medals	31.6	35.7	42.4	40	39.8	39.7	65.3	78.8	99.4	118.2
Total	14.2	36.6	74.2	98.1	94.9	56.3	96.4	211	284	282.2
US\$/oz	14.2	36.6	74.2	98.1	94.9	56.3	96.4	211	284	282.2
Value, US\$bn	0.1	0.2	0.5	0.7	1.1	0.8	1.4	3.1	5.7	9.9

# Platinum and Palladium Used for Investment in Each of Last Ten years

Platinum World Investment (Thousand OZ)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Retail Investment	79	19	49	22	-22	23	452	305	85	300
ETFs	0	0	0	0	0	194	102	384	574	139

Residual Surplus (Deficit)	-555	-407	-210	131	528	-173	282	1,210	265	596
Total	-477	-388	-161	152	506	44	837	1,900	925	1,036
US\$/oz	539	689	846	897	1,143	1,303	1,579	1,206	1,611	1,720
Value, US\$bn	-0.3	-0.3	-0.1	0.1	0.6	0.1	1.3	2.3	1.5	1.8
Palladium World Investment (Thousand OZ)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Retail Investment	21	57	127	255	135	45	94	170	80	56
ETFs	0	0	0	0	0	280	381	507	1,089	-627
Residual Surplus (Deficit)	911	931	932	1,805	1,800	303	343	517	-876	1,114
Total	932	988	1,059	2,060	1,935	629	818	1,194	293	543
US\$/oz	338	201	230	201	320	355	353	264	527	733
Value, US\$bn	0.3	0.2	0.2	0.4	0.6	0.2	0.3	0.3	0.2	0.4

# Platinum Used For Industrial Purposes and Total Stocks in Each of Last Ten Years

	200	200	200	200	200	200	200	200	201	201
PLAT (000 oz)	2	3	4	5	6	7	8	9	0	1
Gross Surplus / (Defecit)	-989	-673	-375	118	528	221	684	929	840	735
Identifiable stock movements										
Russia	165	166	165	0	0	0	0	0	0	0
US NDS	88	0	0	13	0	0	0	0	0	0
Industry Stocks	180	100	0	0	0	-200	-300	665	0	0
ETF	0	0	0	0	0	-194	-102	-384	-574	-139
Sub Total - Stock Movements	434	266	165	13	0	-394	-402	281	-574	-139
Residual Surplus	-555	-407	-210	131	528	-173	282	121 0	265	596

# Palladium Used For Industrial Purposes and Total Stocks in Each of Last Ten Years

PALL (000 oz)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Gross Surplus / (Defecit)	-256	-85	-132	-53	187	-317	-556	-76	-587	-313
Identifiable stock movements										
Russia	-603	75	500	1400	1550	900	1280	1100	800	800
Stillwater	0	0	375	439	63	0	0	0	0	0
US NDS	324	141	38	19	0	0	0	0	0	0
Industry Stocks	1445	800	150	0	0	0	0	0	0	0
ETF	0	0	0	0	0	-280	-381	-507	-1089	627
Sub Total - Stock Movements	1167	1016	1064	1858	1613	620	899	593	-289	1427
Residual Surplus	911	931	932	1805	1800	303	343	517	-876	1114

Estimat	Estimate based on stock number from GFMS and workback (Tonnes)									
GOLD	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Supply	4045	4241	3864	4127	3993	3985	4014	4379	4459	4486
Demand	4045	4241	3864	4127	3993	3985	4014	4379	4459	4486
Stocks	133,752	137,993	141,857	145,984	149,977	153,962	157,976	162,355	166,814	171,300

### SEC Request No. 10:

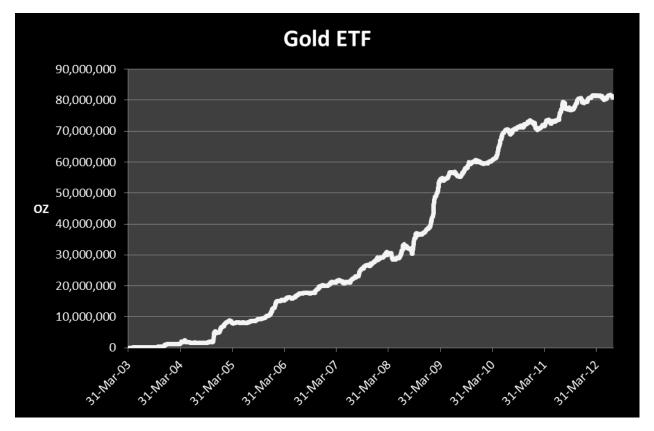
V&F estimates that creation of the Trust could result in the immediate removal of up to 61,800 metric tons of copper from LME warehouses. NYSE Arca states its understanding that the Sponsor currently expects that the value of the initial creation units to be issued by the Trust would not exceed 10,185 metric tons. Further, while the Trust is seeking to register 6,180,000 Shares, the Exchange states that like the other CB-ETPs, the Trust is seeking to register significantly more Shares than it intends to sell initially. What is the likelihood that the Trust will sell all registered Shares initially? What is the likelihood that the Trust will sell all registered Shares in the three months after the registration goes effective? How quickly did the CB-ETPs backed by gold, silver, platinum, and palladium sell the shares registered in the first registration statement?

#### **Response to SEC Request No. 10:**

Set forth below are tables showing the specific quantity of precious metals that we have been able to track as having been transferred to various ETFs from ETF inception to date. As is apparent, the quantity of such metals, particularly with respect to gold, silver, and platinum has

grown exponentially. Also set forth below, based on SEC filings, are summaries of the amount of registered shares for the ETFs and the extent to which those shares were sold and the extent to which additional shares were then registered and sold, from inception to date. We were not able to determine from these records how quickly all of the shares registered in the first registration statements were sold, but it is clear that, because additional shelf registrations have had to be filed for gold, silver and platinum within a year or two, that all such shares registered in the first registration statements were in fact sold within that time frame. This suggests that it that the Trust will likely sell all Shares initially registered for a copper backed ETF within that time frame as well. However, we cannot determine from the data for precious metals how quickly such shares will be sold.

Nevertheless, we believe that (i) given the stated desire to have the Trust remove enough copper from the market each month to move prices upward to cover the costs of storage, (ii) the very limited quantity of copper actually available for immediate delivery to accomplish that objective, and (iii), the huge run-up in copper prices between October 2010, when the JPM, BlackRock and ETFS copper backed ETFs were announced, and three months later, i.e., by early 2011, when copper hit its all time high price in excess of \$10,000 per metric ton, it is reasonable to expect that all of the Trust's shares here would in fact be sold in the three months after the registration becomes effective.



# Amount of Gold Transferred to ETFs

Registered and sold shares of SPDR Gold ETF

S-1 Registration Statement finalized at SEC on 11-16-04 for 120,000,000 shares. According to Gold Trust website, and Prospectus, an additional 2,300,000 were also registered for UBS Securities LLC.

Following S-3 shelf registration statements filed as follows:

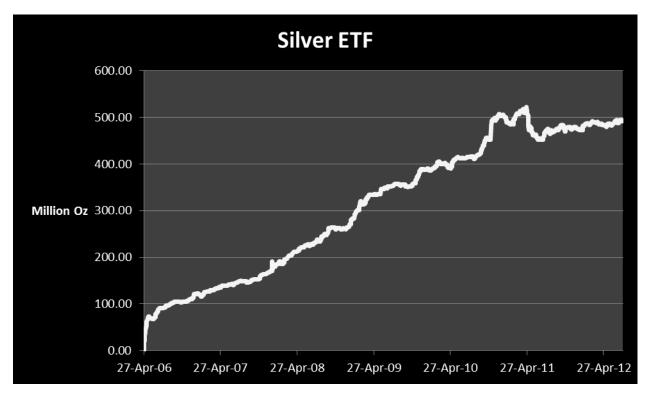
2-04-06	1,100,000
2-06-06	35,000,000
11-30-06	unspecified number of shares to be offered at unspecified prices with registration fees to be paid at a later time (deferred)
7-24-07	21,300,000
5-20-08	50,000,000
8-22-08	200,000,000
3-19-09	100,000,000
5-27-10	200,000,000
4-26-12	200,000,000

929,700,000 total shares registered.

From10K Annual Reports of SPRD Gold Trust:

# of Redeemable	11-12-04	9-30-05	9-30-06	9-30-07	9-30-08	9-30-09	9-30-10	09-30-11
Shares in 000's								
Opening Balance	-	300	66,900	125,100	187,900	246,500	358,900	429,200
Creations	300	74,700	68,400	92,100	147,100	159,000	114,000	115,600
Redemptions	-	(8,100)	(10,200)	(29,300)	(88,500)	(46,600)	(43,700)	(138,000)
Closing Balance	300	66,900	125,100	187,900	246,500	358,900	429,200	406,800

Amount of Silver Transferred to ETFs



Registered and Sold shares of iShares Silver Trust

First registration (S-1) was finalized on 4-26-06 for 13,000,000 shares (333-125-920). Subsequently, six S-3 Shelf registrations were filed; these are the dates and for the number of shares:

7-12-07	12,122,727
3-19-08	3,427,273
12-30-08	173,450,000
11-9-10	92,500,000
4-27-11	50,000,000
10-4-11	75,000,000

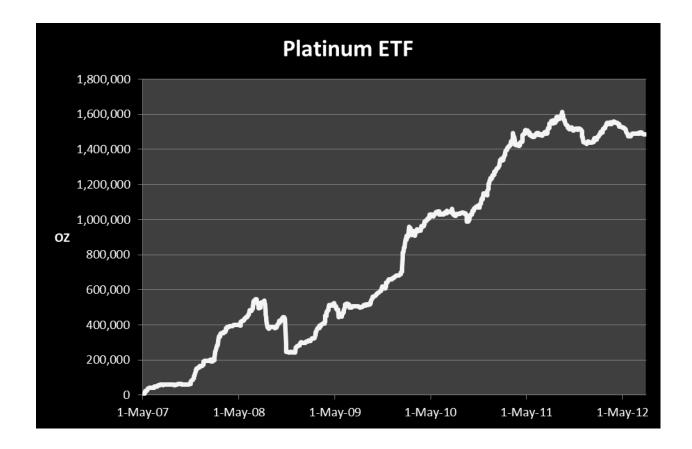
Note that on July 23, 2008, there as a ten for one stock split.

From 10K Annual Reports of iShares Silver Trust:

# Redeemable Shares in 000's	12-31-06	12-31-07	12-31-08	12-31-09	12-31-10	12-31-11
------------------------------	----------	----------	----------	----------	----------	----------

Beginning Balance	1,500	121,500	152,000	221,250	310,700	359,200
Shares issued	130,500	62,500	94,500	110,550	89,600	143,550
Shares redeemed	(10,500)	(32,000)	(25,250)	(21,100)	(41,100)	(185,250)
Ending Balance	121,500	152,000	221,250	310,700	359,200	317,500

### Amount of Platinum transferred to Platinum ETF



Registered and sold shares of ETFS Platinum ETF

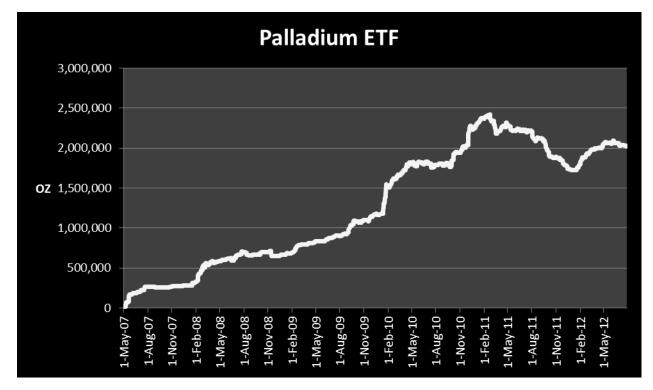
ETFS Platinum Trust is working off of two Registration Statements, number 333-158381, finalized on 12-31-2009, for 4,780,000 shares, and 333-164406, finalized on 3-5-10 for 8,320,000 which includes 1,880,000 unsold shares from 158381 and 6,440,000 new shares under 164406. So total registered shares are 11,220,000 under the two registration statements.

On 4-29-11, an S-3 was filed, registering 4,770,000 which were unsold shares from the 3-5-10 Registration (164406).

# Redeemable Shares	12-31-10	12-31-11	06-30-12
Opening Balance	-	4,450,000	4,450,000
Creations	5,700,000	2,250,000	900,000
Redemptions	(1,250,000)	(2,250,000)	450,000
Closing Balance	4,450,000	4,450,000	4,900,000

From 10K Annual Reports for ETFS Platinum Trust:

# Amopunt of Palladium transferred to ETFS PALL Trust



Registered and sold shares of PALL Trust

Following is a summary of Registration Statements, S-1 and S-3s:

12-31-09	12,880,000
1-19-10	5,920,000
4-20-11	13,500,000

Total registered shares are 32,300,000

From 2011 10K Annual Report and 10Q Quarterly Report for 2012 for PALL:

### CIK 0001459862

# of Redeemable Shares in 000's	12-31-10	12-31-11	3-31-12
Opening Balance	-	11,250	5.950
Creations	13,050	2,100	2,000
Redemptions	(1,800)	(7,400)	-
Closing Balance	11,250	5,950	7,950

### **SEC Request No. 11**

V&F argues that, by decreasing the amount of copper available for immediate delivery, the Trust will make the copper market more susceptible to manipulation. Specifically, V&F states that "the drawing down of stocks in LME and Comex warehouses" resulting from the listing and trading of the Shares "will make it much easier and cheaper for [copper market] speculators to engage in temporary market squeezes and corners." Senator Levin also argues that approval of the proposed rule change would make the copper market more susceptible to squeezes and corners by speculators. The Commission requests comment on these concerns, as well as whether commenters agree or disagree with the comments and why or why not. For example:

Will creation of the Trust impact the ability to manipulate the physical copper or copper derivatives markets? If so, how? If not, why not?

Has there been any increased manipulative behavior due to the reduction of copper available for immediate delivery that resulted from the prior years' deficits in copper production versus copper consumption?

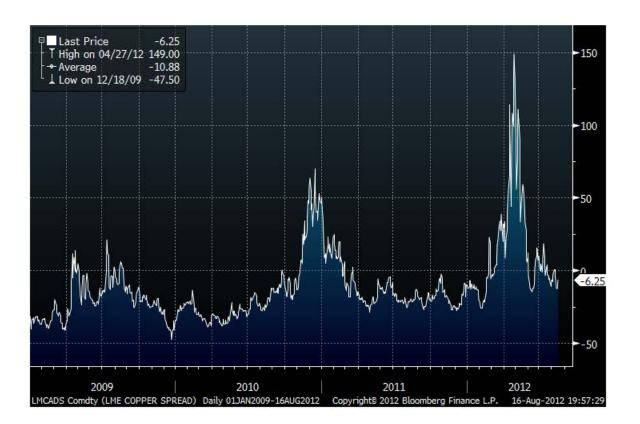
Are there any structural aspects of the copper market that render it more or less susceptible to manipulation?

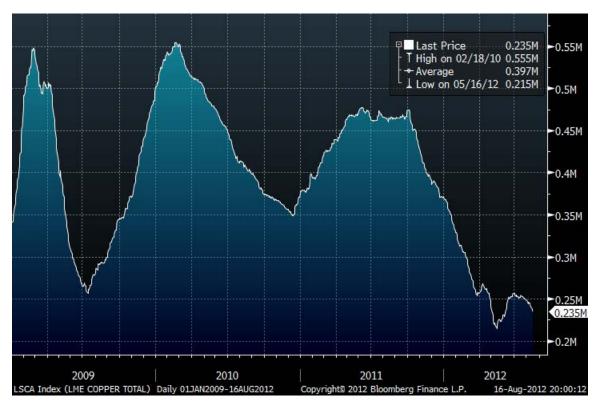
Is there empirical evidence that the creation of CB-ETPs backed by gold, silver, platinum, and palladium has led to manipulation of the physical markets for those precious metals? If so, please describe.

### **Response to SEC Request No. 11:**

Below is the cash to three months spread for copper showing the periods of backwardation since 2009. The large periods have coincided with the announcement and launch of the UK ETF (easing only when sales failed) and the recent incident coincided with LME stocks falling to multi year lows. The LME stocks are in the second chart below and it can be observed that extreme backwardations are usually associated with manipulations have occurred

when stocks have been low. The physical ETF will definitionally reduce free stocks and hence may be expected to increase such manipulations.





### **SEC Request No. 12:**

Both Commenters discuss concerns about the potential impact of the Trust on the copper market, and how that potential impact could, in turn, affect the Shares. V&F states that, with the risk of an ETF removing indefinitely all or substantially all of the copper available for immediate delivery, the risk of price volatility becomes enormous. This is because the greater amount of copper artificially kept off-the-market, the greater the chance that investors will eventually no longer keep propping up the price with further purchases, and the greater the likelihood that the bubble will burst, thus flooding the market with surplus copper, and severely depressing the price. V&F further states that investors in a copper CB-ETP would benefit immediately from any increase in the price of copper because the more copper removed from the market to satisfy the demand for the copper CB-ETP, the higher the price not only of copper, but of the copper CB-ETP itself. V&F notes that, like all bubbles, as investor demand for this product wanes, the bubble will burst, leaving in its wake a glut of physical copper that the Trust will be forced to dump on the market, causing prices to plummet, and leaving in its wake unsuspecting investors who will have lost the value of their investment. Senator Levin also makes statements about the potential effect on the Shares, stating that the "supply disruption is likely to affect the cash and futures market for copper, increasing volatility and driving up...[the Share] price to create a bubble and burst cycle." Do commenters agree or disagree with these comments? If so, why or why not?

### **Response to SEC Request No. 12:**

The creation of a physically backed ETF will create physical demand for copper. This will likely cause a spike in price, increased manipulation and a shortage of raw material for

industry. Due to the inherent lags in the mining industry this extra demand will only slowly be met by supply. This would likely be after a period of destruction in industrial demand which cannot be sustained without regular raw material supplies.

In the longer term mining supply is likely to respond to these price signals and increase production. However, there will have been no increase in the actual use of the metal. If investment fashions change, which they always do in time, this surplus would have no home. Prices would collapse, mines go bust and resources would have been needlessly misallocated.

Creating a vehicle to transmit the rapid and large changes in investor demand into a physical market which is fundamentally unable to respond (except with long lags) can only be expected to cause increases in volatility and boom bust cycles.

Accordingly, for the foregoing reasons, and for the reasons expressed in our prior submissions and those expressed by Senator Levin in his, we respectfully request that the Commission disapprove the proposed rule to allow the Exchange to list and trade shares of JPM's proposed copper backed ETF. And, as indicated earlier, we also respectfully request an opportunity to present our position orally on this matter to the Commission, and answer any questions Commission members may have.

Respectfully,

Robert B. Bernstein

			Mine	
		Discovery	Commissioning	
Project Name	State	Date	Date	Years
Ajo	Arizona	1911	1917	6
Ambler	Alaska	1965	NYIP	46
Battle Mountain	Nevada	1961	1979	18
Contact	Nevada	1989	NYIP	22
Continental	New Mexico	1958	1997	39
Copper Flats	New Mexico	1975	2013	38
Eagle \ Yellow Dog	Michigan	2002	2013	11
Flambeau	Wisconsin	1966	1993	27
Johnson Camp	Arizona	1974	1992	18
Lakeshore	Arizona	1967	1976	9
Lisbon Valley	Utah	1965	2005	40
MacArthur	Arizona	1972	1995	23
Metcalf	Arizona	1952	1975	23
Oracle Ridge	Arizona	1976	1991	15
Pinto Valley	Arizona	1967	1975	8
Sacaton	Arizona	1961	1974	13
Sierrita	Arizona	1960	1970	10
Tyrone	New Mexico	1950	1970	20
Bingham Canyon	Utah	1863	1872	9
Morenci	Arizona	1932	1942	10
Bisbee	Arizona	1877	1877	1

# **U.S.** Copper Projects

# Notes NYIP: Not Yet In Production

There are several deposits that have been mined on and off for more than 100 years. I have left th

Lack of infrastructure and native issues are the

Current owners picked up the historical site in 1989 and have been working it ever since.

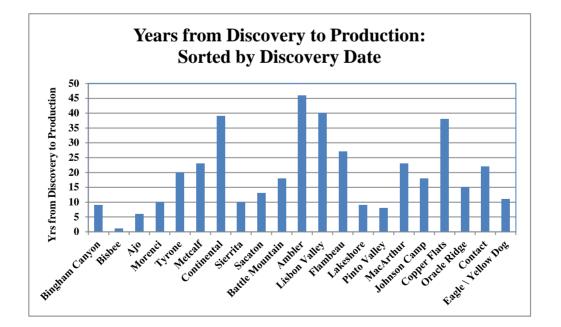
Mine was only opened for several months in 1982 and then closed. Currently trying to restart (2013?)

Discovered in the mid 1960s, so I used 1965 as the date

nem off this list.

			Mine	
		Discovery	Commissioning	
<b>Project Name</b>	State	Date	Date	Years
Bingham Canyon	Utah	1863	1872	9
Bisbee	Arizona	1877	1877	1
Ajo	Arizona	1911	1917	6
Morenci	Arizona	1932	1942	10
Tyrone	New Mexico	1950	1970	20
Metcalf	Arizona	1952	1975	23
Continental	New Mexico	1958	1997	39
Sierrita	Arizona	1960	1970	10
Sacaton	Arizona	1961	1974	13
Battle Mountain	Nevada	1961	1979	18
Ambler	Alaska	1965	NYIP	46
Lisbon Valley	Utah	1965	2005	40
Flambeau	Wisconsin	1966	1993	27
Lakeshore	Arizona	1967	1976	9
Pinto Valley	Arizona	1967	1975	8
MacArthur	Arizona	1972	1995	23
Johnson Camp	Arizona	1974	1992	18
Copper Flats	New Mexico	1975	2013	38
Oracle Ridge	Arizona	1976	1991	15
Contact	Nevada	1989	NYIP	22
Eagle \ Yellow Do	Michigan	2002	2013	11

# Sorted by Discovery Date



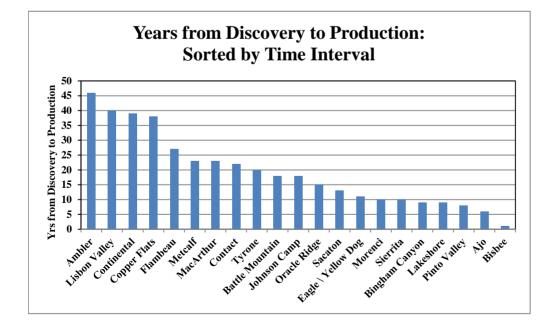
No real trend over time (Bingham is oldest, Eagle is youngest)

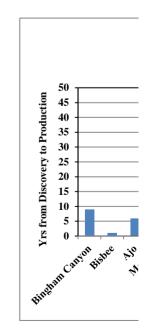
# Sorted by Time Interval

# Sorted by Startuj

			101111C		
		Discovery	mmission	ing	
<b>Project Name</b>	State	Date	Date	Years	Project Name
Ambler	Alaska	1965	NYIP	46	Bingham Canyon
Lisbon Valley	Utah	1965	2005	40	Bisbee
Continental	New Mexico	1958	1997	39	Ajo
Copper Flats	New Mexico	1975	2013	38	Morenci
Flambeau	Wisconsin	1966	1993	27	Tyrone
Metcalf	Arizona	1952	1975	23	Sierrita
MacArthur	Arizona	1972	1995	23	Sacaton
Contact	Nevada	1989	NYIP	22	Metcalf
Tyrone	New Mexico	1950	1970	20	Pinto Valley
Battle Mountain	Nevada	1961	1979	18	Lakeshore
Johnson Camp	Arizona	1974	1992	18	Battle Mountain
Oracle Ridge	Arizona	1976	1991	15	Oracle Ridge
Sacaton	Arizona	1961	1974	13	Johnson Camp
$Eagle \setminus Yellow \ Dog$	Michigan	2002	2013	11	Flambeau
Morenci	Arizona	1932	1942	10	MacArthur
Sierrita	Arizona	1960	1970	10	Continental
Bingham Canyon	Utah	1863	1872	9	Lisbon Valley
Lakeshore	Arizona	1967	1976	9	Copper Flats
Pinto Valley	Arizona	1967	1975	8	Eagle \ Yellow Dog
Ajo	Arizona	1911	1917	6	Ambler
Bisbee	Arizona	1877	1877	1	Contact

Mine





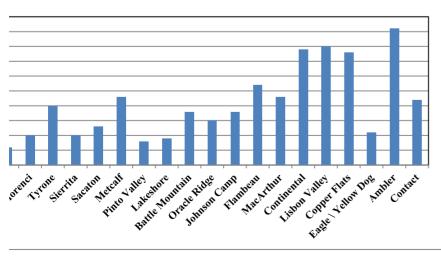
Average time of 18 years

Shows general increase in

# ) Year

	Discovery	Mine mmission	ing
State	Date	Date	Years
Utah	1863	1872	9
Arizona	1877	1877	1
Arizona	1911	1917	6
Arizona	1932	1942	10
New Mexico	1950	1970	20
Arizona	1960	1970	10
Arizona	1961	1974	13
Arizona	1952	1975	23
Arizona	1967	1975	8
Arizona	1967	1976	9
Nevada	1961	1979	18
Arizona	1976	1991	15
Arizona	1974	1992	18
Wisconsin	1966	1993	27
Arizona	1972	1995	23
New Mexico	1958	1997	39
Utah	1965	2005	40
New Mexico	1975	2013	38
Michigan	2002	2013	11
Alaska	1965	NYIP	46
Nevada	1989	NYIP	22

# Years from Discovery to Production: Sorted by Commisioning Date



time interval; due to increased permitting

#### LME WAREHOUSE REPORTED MAXIMUM FOT RATES EFFECTIVE 1 APRIL 2012 AND UNTIL 31 MARCH 2013

Country	Location	Warehouse Company	Currency
Belgium	Antwerp	C. Steinweg NV	€
		CWT Commodities (Rotterdam) BV	€
		Erus Metals Ltd	€
		Henry Bath BV	€
		Metal Terminals International NV	€
		North European Marine Services Ltd	€
		Pacorini Metals Vlissingen BV	€
		Vollers Hamburg GmbH	€
		Zuidnatie NV	€
Germany	Bremen	BLG Cargo Logistics GmbH & Co. KG.	€
	Hamburg	C. Steinweg (Sud-West Terminal) GmbH & Co.	€
		CWT Commodities (Rotterdam) BV	€
		Vollers Hamburg GmbH	€
Italy	Genoa	Genoa Metal Terminal S.r.l.	€
		Pacorini Metals Italia Srl	€
	Leghorn	F. Ili Bartoli	€
		Genoa Metal Terminal S.r.l.	€
		Metro International Trade Services (Italia) S.r.I	€
		Pacorini Metals Italia Srl	€
	Ravenna	Genoa Metal Terminal S.r.I.	€
		Pacorini Metals Italia Srl	€
	Trieste	Genoa Metal Terminal S.r.l.	€
		Henry Bath & Son Ltd	€
		Metro International Trade Services (Italia) S.r.l	€
		Pacorini Metals Italia Srl	€
Japan	All Locations	All Warehouse Companies	Y
Korea (South)	Busan	C. Steinweg Warehousing (FE) Pte Ltd	KW
· · · ·		CWT Commodities (Metals) Pte Ltd	KW
		H&M Metal Warehousing (S) Pte. Ltd.	KW
		Henry Bath Singapore Pte Ltd	KW
		Metro International Trade Services (UK) Ltd	KW
		NEMS (Far East) Pte Ltd	KW
		Pacorini Metals (Asia) Pte Ltd	KW
	Gwanyang	C. Steinweg Warehousing (FE) Pte Ltd	KW
		CWT Commodities (Metals) Pte Ltd	KW
		H&M Metal Warehousing (S) Pte. Ltd.	KW
		Henry Bath Singapore Pte Ltd	KW
		Metro International Trade Services (UK) Ltd	KW
		Pacorini Metals (Asia) Pte Ltd	KW
	Incheon	C. Steinweg Warehousing (FE) Pte Ltd	KW
		CWT Commodities (Metals) Pte Ltd	KW
		H&M Metal Warehousing (S) Pte. Ltd.	KW
		Henry Bath Singapore Pte Ltd	KW
		Metro International Trade Services (UK) Ltd	KW
		NEMS (Far East) Pte Ltd	KW
		Pacorini Metals (Asia) Pte Ltd	KW
Malaysia	Johor	Arrow Terminals Malaysia Sdn Bhd	MR
•		C. Steinweg Warehousing (FE) Pte Ltd	MR
		CWT Commodities (Metals) Pte Ltd	MR
		H&M Metal Warehousing (S) Pte. Ltd.	MR
		Henry Bath Singapore Pte Ltd	MR

#### LME WAREHOUSE REPORTED MAXIMUM FOT RATES EFFECTIVE 1 APRIL 2012 AND UNTIL 31 MARCH 2013

Country	Location	Warehouse Company	Currency
		Metro International Trade Services (UK) Ltd	MR
		NEMS (Far East) Pte Ltd	MR
		Pacorini Metals (Asia) Pte Ltd	MR
		Worldwide Warehouse Solutions Singapore Pte Ltd	MR
	Port Klang	C. Steinweg Warehousing (FE) Pte Ltd	MR
		CWT Commodities (Metals) Pte Ltd	MR
		Edgemere Terminals Ltd	MR
		Metro International Trade Services (UK) Ltd	MR
		NEMS (Far East) Pte Ltd	MR
		Pacorini Metals (Asia) Pte Ltd	MR
Netherlands	Rotterdam	C. Steinweg-Handelsveem BV	€
		CWT Commodities (Rotterdam) BV	€
		Henry Bath BV	€
		Metaal Transport BV	€
		North European Marine Services Ltd	€
		Pacorini Metals Vlissingen BV	€
		Vollers Hamburg GmbH	€
		Worldwide Warehouse Solututions UK Ltd	€
	Vlissingen	Kloosterboer Vlissingen VOF	€
		Pacorini Metals Vlissingen BV	€
		Worldwide Warehouse Solututions UK Ltd	€
Singapore	Singapore	C. Steinweg Warehousing (FE) Pte Ltd	S\$
		CWT Commodities (Metals) Pte Ltd	S\$
		GKE Metal Logistics Pte Ltd	S\$
		H&M Metal Warehousing (S) Pte. Ltd.	S\$
		Henry Bath Singapore Pte Ltd	S\$ S\$ S\$
		NEMS (Far East) Pte Ltd	
		Pacorini Metals (Asia) Pte Ltd	S\$
		Worldwide warehouse Solutions Singapore Pte Ltd	S\$
Spain	Barcelona	C. Steinweg-Handelsveem BV	€
opulli	Barociona	Pacorini Metals Iberica SAU	€
	Bilbao	C. Steinweg-Handelsveem BV	€
	Biibdo	Halley Metals Ibercia SA	€
		Henry Bath & Son Ltd	€
		Pacorini Metals Iberica SAU	€
Sweden	Helsingborg	C. Steinweg (Scandinavia) AB	SKr
Turkey	Kocaeli	Metro Uluslararasi Ticaret Hizmetleri Ltd Sirketi	TL
Turkey		NEMS Depolama ve Lojistik Hizmetleri Ltd Sirketi	TL
	Tekirdag	Henry Bath Ardiye Hizmetleri Ltd Sirketi	TL
	Tennuag	Metro Uluslararasi Ticaret Hizmetleri Ltd Sirketi	TL
		NEMS Depolama ve Lojistik Hizmetleri Ltd Sirketi	TL
		Pacorini Depolama Lojistik Limited Sirketi	TL
U.A.E	Dubai	C. Steinweg-Handelsveem BV	Dir
U.A.E		CWT Commodities (Metals) Pte Ltd	Dir
		Henry Bath & Son Ltd	Dir
		Pacorini Metals Italia Srl	Dir
		North European Marine Services Ltd	Dir
U.K.	Hull	Edgemere Terminals Ltd	
U.N.		Erus Metals Ltd	£
			£
		Henry Bath & Son Ltd Keystore Ltd	£

#### LME WAREHOUSE REPORTED MAXIMUM FOT RATES EFFECTIVE 1 APRIL 2012 AND UNTIL 31 MARCH 2013

Country	Location	Warehouse Company	Currency
	Liverpool	Henry Bath & Son Ltd	£
		Henry Diaper & Co. Ltd	£
		North European Marine Services Ltd	£
		Scale Distribution Limited	£
	Tyne & Wear	North European Marine Services Ltd	£
USA	Baltimore	C. Steinweg (Baltimore) Inc.	\$
		CWT Commodities (USA) LLC	\$
		Edgemere Metals USA LLC	\$
		Henry Bath LLC	\$
		NEMS (USA) Inc	\$
		Pacorini Metals USA LLC	\$
		SH Bell Company	\$
	Chicago	CWT Commodities (USA) LLC	\$
		Henry Bath LLC	\$
		Metro International Trade Services LLC	\$
		NEMS (USA) Inc	\$
		Pacorini Metals USA LLC	\$
		SH Bell Company	\$
	Detroit	Metro International Trade Services LLC	\$
		Pacorini Metals USA LLC	\$
		Worldwide Warehouse Solutions LLC	\$
	Long Beach	Metro International Trade Services LLC	\$
	Los Angeles	Pacorini Metals USA LLC	\$ \$ \$ \$
	Louisville	Pacorini Metals USA LLC	\$
	Mobile	Metro International Trade Services LLC	\$
		Pacorini Metals USA LLC	\$
	New Orleans	CWT Commodities (USA) LLC	\$
		Henry Bath LLC	\$
		Metro International Trade Services LLC	\$
		NEMS (USA) Inc	\$
		Pacorini Metals USA LLC	\$
		Worldwide Warehouse Solutions LLC	\$
	Owensboro	Owensboro Riverport Authority	\$
	St Louis	Metro International Trade Services LLC	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
		Worldwide Warehouse Solutions LLC	
	Toledo	C. Steinweg (Baltimore) Inc.	\$
		Metro International Trade Services LLC	¢ ¢

FOT rate	Cobalt	RMC	X-RATE
incl. steel			
25.50	34.00	28.00	
25.50	/	/	
23.00	/	/	
23.75	/	/	
25.50	/	/	
25.50	/	/	
25.50	/	/	
25.50	/	/	
25.00	29.00	/	
21.80	/	/	
25.50	/	/	
25.50	/	/	
25.50	/	/	
28.00	/	/	
28.00	/	/	
27.00	/	/	
28.00	/	/	
28.00	/	/	
28.00	/	/	
28.00	/	/	
28.00	/	/	
28.00	/	/	
27.50	/	/	
28.00	/	/	
28.00	/	/	
832.00	/	/	
42,500.00	/	/	
42,700.00	/	/	
42,500.00	/	/	
40,000.00	/	/	
42,500.00	/	/	
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	/	/	
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0.323172 40.073328 0.323172 39.103812		
0.323172 39.103812		
0.323172 38.78064		
	0.3231/2	38.78064

FOT rate	Cobalt	RMC	X-R/
incl. steel			
120.00	/	/	
124.00	/	/	
126.00	/	/	
126.00	/	/	
124.00	/	/	
124.00	/	/	1
121.00	/	/	
120.00	/	/	1
124.00	/	/	1
123.50	/	/	1
26.00	34.00	28.00	
25.50	/	/	1
23.75	/	/	
25.50	32.00	/	
25.50	/	/	
25.50	, 34.00	28.00	
25.50		/	
25.50	/	/	
25.50	/	/	
26.00	/	/	
25.50	/	/	
54.50	65.00	, 57.50	
54.50	65.00	57.50	
	/	/	
54.00	/	/	
53.00	/	1	
54.00	/	1	
54.00	/	/	
54.50	/	/	
54.00	/	/	
25.50	/	1	
25.50	/	1	
25.50	/	1	
24.00	/	/	
24.75	/	/	
25.50	/	/	
255.00	/	/	
60.00	/	/	
60.00	/	/	
55.00	/	/	
60.00	/	/	
60.00	/	/	
60.00	/	/	
115.00	/	/	
115.00	/	/	
105.00	/	/	
115.00	/	/	
112.00	/	/	
18.50	/	/	1
18.50	/	/	1
19.25	/	/	1
19.15	/	/	1
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RATE		USD
		CONVERSION
	0.323172	38.78064
	0.323172	40.073328
	0.323172	40.719672
	0.323172	40.719672
	0.323172	40.073328
	0.323172	40.073328
	0.323172	39.103812
	0.323172	38.78064
	0.323172	40.073328
	0.323172	39.911742
	1.25776	32.70176
	1.25776	32.07288
	1.25776	29.8718
	1.25776	32.07288
	1.25776	32.07288
	1.25776	32.07288
	1.25776	32.07288
	1.25776	32.07288
	1.25776	32.07288
	1.25776	32.70176
	1.25776	32.07288
	0.802693	43.7467685
	0.802693	43.7467685
		43.345422
	0.802693	43.343422 42.542729
	0.802693	
	0.802693	43.345422
	0.802693	43.345422 43.7467685
	0.802693	
	0.802693	43.345422
	1.25776	32.07288
	1.25776	32.07288
	1.25776	32.07288
	1.25776	30.18624
	1.25776	31.12956
	1.25776	32.07288
	1.25776	320.7288
	0.55803	33.4818
	0.55803	33.4818
	0.55803	30.69165
	0.55803	33.4818
	0.55803	33.4818
	0.55803	33.4818
	0.272283	31.31
	0.272283	31.31
	0.272283	28.59
	0.272283	31.31
	0.272283	30.50
	1.58749	29.368565
	1.58749	29.368565
	1.58749	30.5591825
	1.58749	30.4004335

FOT rate	Cobalt	RMC	X-RATE
incl. steel			
19.25	/	/	
18.80	/	/	
19.50	/	/	
18.00	/	/	
19.50	/	/	
37.00	42.00	40.00	
37.00	/	/	
36.50	/	/	
35.00	/	/	
36.50	/	/	
36.50	42.50	/	
36.50	/	/	
37.00	/	/	
35.00	/	/	
35.95	/	/	
36.50	/	/	
36.50	/	/	
36.50	/	/	
35.95	/	/	
36.50	/	/	
36.50	/	/	
35.95	/	/	
36.50	/	/	
36.50	/	/	
35.95	/	/	
36.50	/	/	
37.00	/	/	
35.00	/	/	
35.95	/	/	
36.50	/	/	
37.25	/	/	
36.50	/	/	
36.00	/	/	
35.95	/	/	
36.50	/	/	
37.00	/	/	
35.95	/	/	

	USD
	CONVERSION
1.58749	30.5591825
1.58749	29.844812
1.58749	30.956055
1.58749	28.57482
1.58749	30.956055