



**Statement of Goldman Sachs: Background and Facts
on Financial Intermediation, Certain Investments and
Risk Management in the Commodities Markets**

November 19, 2014

Executive Summary

Metro International and the Aluminum Market

- **There has not been a shortage of aluminum and prices have fallen substantially since 2008.** There has been a consistent surplus of aluminum since 2008, resulting in a large volume that has been placed in storage. Each year approximately 49-50 million tons of aluminum are produced. Since 2008, production has exceeded consumption by one to two million tons a year, resulting in an increasing surplus that has gone into storage and substantially lower prices to the consumer, down as much as 40%.
- **More than 75% of the aluminum held in storage is not subject to any queue.** There are currently approximately 4.4 million tons of LME warranted aluminum and an estimated 8 million tons being stored off-warrant. Of the LME warranted aluminum, 1.6 million tons is held at “non-queue” locations. As a result, of the aluminum currently held in storage, approximately 9.6 million tons is not subject to any queue.
- **Metro has loaded more metal out of its warehouses than any other operator.** Metro voluntarily complied with the LME’s Linked Load-In/Load-Out rule even during the period when the rule was suspended by a UK Court. Metro’s compliance with the terms of the Linked Load-In/Load-Out rule has resulted in it loading out significantly more aluminum from its Detroit facilities than it has loaded in. In the past year, Metro has “net” loaded out over 630,000 tons of aluminum from its Detroit facilities.
- **Queues in LME warehouses (including in Metro’s Detroit Warehouse) do not impact the “all-in price” consumers pay for delivered physical aluminum.** Rather, queues may reduce the LME spot price, since a queue warrant is less valuable if the warrant holder must pay LME rent for an extended period of time while in a queue awaiting delivery of physical metal. All things being equal, a reduction in the LME spot price may be accompanied by an increase in the “premium,” but does not change the “all-in-price” paid by consumers.
- **All-in prices reflect supply and demand fundamentals.** Consistent with textbook economics, all-in aluminum prices have tracked the cost of marginal production. In fact, the persistent surplus in aluminum has resulted in high-cost aluminum producers incurring larger losses in 2012-2013 than in any other period in the past two decades, notwithstanding the fact that producers sell at “all-in” prices that include the so-called premium. In a sign of final capitulation, one-third of U.S. aluminum smelters have shut down, accounting for more than 20% of US production capacity, and resulting in the loss of more than 2000 U.S. jobs since 2011 (over the same period, U.S. production has fallen by 7%).
- **Since LME rules require warrant holders to pay rent whether or not a warrant is canceled, Metro does not benefit from longer queues.** Metro receives rental payments for all metal that remains in its warehouses regardless of whether or not a queue exists.
- **The queue at Metro’s Detroit Warehouse did not impact the ability of end-users or consumers to obtain aluminum.** In surplus market conditions, consumers do not rely on LME stocks to source metal. The metal in Metro’s Detroit Warehouse (and in the

queue to exit Metro's Detroit Warehouse) was owned overwhelmingly by financial entities, such as hedge funds and trading houses that purchased aluminum as part of a "cash and carry" trading strategy. In the summer of 2013, when Goldman Sachs offered to swap metal with any consumer waiting in the Detroit queue, none accepted the offer.

- **Off-warrant transactions complied with LME rules and were entered into based on the economic interests of aluminum owners.** The metal involved in these transactions was loaded by Metro at the owner's instructions onto a truck, the operator of which issued a bill of lading, and then moved to another location at the owner's direction. LME rules not only required that Metro follow the owner's instructions regarding the disposition of its metal, but also provided that metal removed in this fashion counted against daily load-out requirements. The fact that the owner moves the metal between two Metro warehouses in the Detroit area is no different under the LME rules than if the owner moves the metal to an equally close non-Metro warehouse.
- **Metro's incentive payments did not lengthen queues, restrict the availability of metal or impact prices paid by consumers or other end-users of aluminum.** The queues were the result of metal owners' independent, financially-motivated decisions to remove metal that had been placed in Metro's warehouses. Like any other landlord, Metro was merely competing for tenants.
- **The LME Premium is still at historically high levels.** Since the advent of the LME's "Linked Load-in/Load-out" rule in November 2013, virtually no inducements have been paid by Metro and yet the Midwest Premium and other regional premiums have reached all-time high levels.

Uranium

- **The firm has limited its intermediation activities to unenriched uranium; Nufcor's clients are large, reputable utilities and mining companies.** Senator Levin has stated that unenriched uranium "is not a harmfully radioactive substance."
- **No catastrophic risks exist in relation to Nufcor's trading activities.** Beyond the fact that unenriched uranium is not harmfully radioactive, Nufcor has never possessed uranium (let alone transported or processed it) since being acquired by Goldman Sachs. Nufcor's rights in any uranium are limited to non-possessory ownership interests that are simply reflected on the books of one of a handful of highly regulated facilities which act as depositories.
- **No conflict of interest exists between the intermediation that Nufcor provides and the intermediation provided by other parts and entities in Goldman Sachs' Commodities Business.** Nufcor is a separate subsidiary of Goldman Sachs, but its activities form part of the firm's commodities intermediation function. Given the commonality of clients and personnel across our intermediation function, there is no separate client information that is associated with Nufcor's activities that Goldman Sachs uses in other parts of our trading activities.
- **Neither Nufcor nor any other non-bank subsidiary benefits from special access to credit provided by Goldman Sachs' insured depository subsidiaries.** Nufcor received no such loans and any loan or extension of credit from an insured depository subsidiary to Nufcor or any other non-bank affiliate would be subject to the Federal

Reserve Act's Section 23A and 23B that the affiliate provide liquid collateral and the transaction be on arm's-length terms.

- **Goldman Sachs is managing down Nufcor's assets to zero.** Given that it was not a core or strategic part of our commodities business, in 2013 Goldman Sachs decided to limit Nufcor's activities to meeting and managing current supply obligations.

CNR

- **The acquisition of CNR allowed the firm to protect a pre-existing exposure arising from a contract to purchase coal at a fixed price over a period of time, which Goldman Sachs had acquired in connection with a prior deal.** Because it protected the value of that contract and allocated capital to a promising developing economy, we believed that acquiring the Colombian coal assets was a sound investment. We conducted substantial diligence prior to investing, including to confirm that we would have no liability as an investor in CNR.
- **Management of CNR has worked diligently to address operational and logistical issues relating to its business.** The company's experienced management team has worked constructively with counterparties and government agencies to address the challenges that the company has faced.
- **During the period of Goldman Sachs' ownership, CNR has achieved high standards of environmental compliance.** CNR received the ISO 14001 and OHSAS 18001, which are the highest international standards for Environmental and Safety Management. CNR is the only operation in the region (and one of only two in all of Colombia) that has both certifications covering its mining and transport process.

PART I: INTERMEDIATION IN THE COMMODITIES MARKETS; PHYSICAL COMMODITY RISKS

Goldman Sachs and similar financial institutions help producers, consumers, institutional investors and governments manage different types of financial risks, including interest rate risk, credit risk, foreign currency risk and commodities risk.

A close connection has always existed between financial markets and commodities. In global markets, commodities are bought and sold, prices determined, and producers and end-users rely on financial markets to hedge against unexpected movements in those prices. The interplay between the financial and physical commodity markets is crucial to determining the returns that thousands of companies earn for their products, as well as the risks they bear in producing them. Almost 40% of the \$17.8 trillion equity capitalization of the S&P 500 index has meaningful exposure to commodities.¹

A. WHY GOLDMAN SACHS IS IN THE PHYSICAL COMMODITIES BUSINESS

A core function for Goldman Sachs is to act as an intermediary, or market maker, for a range of clients. We perform this role across markets for interest rate, currency, equity, credit and commodity products, each of which we refer to as an “asset class.” Many of these transactions are settled financially, in which the parties make payments based on the terms of the transaction. A certain portion of these transactions are settled physically, where the one party delivers an asset to the other in exchange for a payment. Depending on the asset class, the asset that is delivered may be a bond, a number of shares or a specified volume of a currency or commodity.

We have been an active market maker in commodities and commodity derivatives markets since 1981. Though these activities involve physical commodities, they otherwise mirror our market-making in purely financial instruments. In this role, we serve as a bridge between producers on the one hand and consumers and investors on the other, whose interests and exposures offset each other but do not perfectly match.

Although commodity markets include exchange-traded futures contracts, they also encompass large over-the-counter markets, which commodity producers and consumers rely on for the hedging of specific, longer term risk (grade, location, form). In these types of transactions, companies may expect financial institutions to take title to physical commodities and arrange for the storage and transport of commodities with independently managed service providers to help ensure greater liquidity, price stability and certainty of execution.

¹ Sources: Goldman Sachs Global Investment Research and Standard & Poor's.

Our clients include:

- **Producers**, such as natural gas or oil suppliers, power generators and miners that rely on commodities markets to hedge the risks associated with their long-term investment projects.
- **Consumers**, such as transport companies, utilities and governmental entities that require fuels as well as manufacturers that consume raw materials.²
- **Investors**, such as pension funds and asset managers that buy and sell financial contracts in commodity derivatives markets in order to participate in price movements, act on their market views and obtain diversification.

We enter into transactions to achieve one or more client objectives, including:

Funding and Financing. We provide funding to producers and other sellers by agreeing to pay for the commodities we purchase sooner than other purchasers would. We also enter into financing arrangements that effectively monetize client inventories, increasing the amount of capital that these companies have available to invest in their day-to-day businesses and longer-term capital projects.

We provide financing to commodity consumers by accepting payment for the commodities we sell them later than other sellers would require. We also provide indirect funding to commodity consumers and other purchasers by maintaining inventory positions in anticipation of near-term customer demand, which clients access as a source of supply. As with other forms of market-making and financings, these arrangements help alleviate the funding demands and smooth the expenditures that would otherwise be required of end-user clients. We also extend credit by offering hedging arrangements that allow clients to secure their commitments by means other than posting cash margin; this enables them to deploy liquid assets to other purposes, including investments.

Hedging/Investment. We enter into transactions that assist clients in managing the exposures to commodity prices that are inherent in their business activities. Producers may enter into fixed-price sale agreements to protect against price decreases, while consumers may enter into fixed-price purchase agreements to protect against price increases. Bespoke hedging transactions tailored to their specific requirements allow both producers and consumers to increase the efficiency of their operations and lower their costs, which results in more stable prices for the ultimate consumers, who include airline passengers and consumers heating their homes.

² The same company may be both a producer and a consumer depending on the circumstances. For example, a farm “produces” commodities such as corn and “consumes” commodities such as natural gas.

Liquidity. We also provide liquidity to market participants through our willingness to make prices and transact as a market maker.

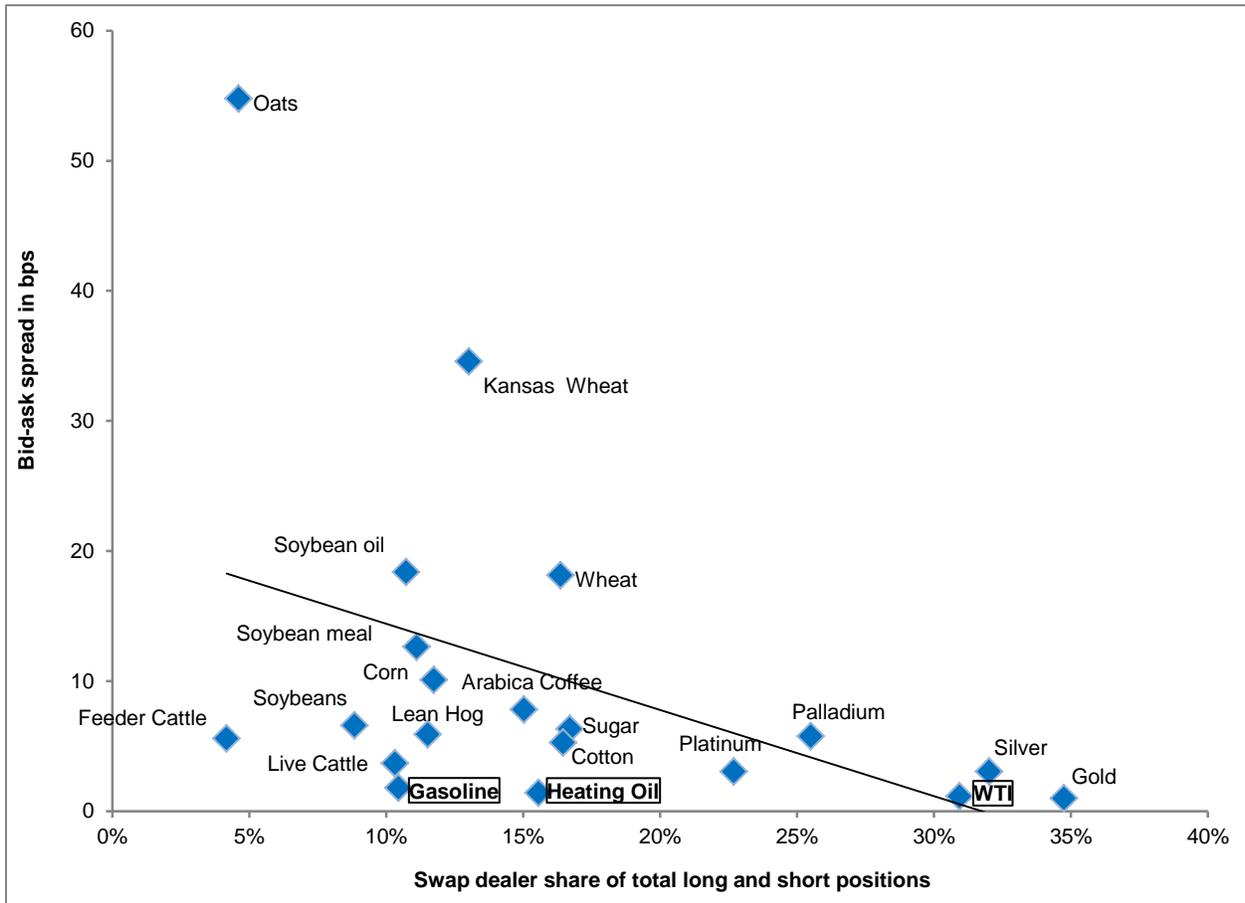
Benefits of Financial Institution Participation. The participation of financial institutions such as Goldman Sachs in commodities markets provide substantial benefits to these markets and thus to the broader economy.

Companies manage their commodities exposure through physical or financial markets, or both, often using financial institutions as intermediaries. For producers and consumers, hedging the risks associated with their day-to-day operations or their long-term investment projects can support higher returns, lower capital costs and stronger growth, particularly if it encourages companies to undertake worthwhile investment projects. In particular, hedging in commodities markets allows companies to adjust the size and timing of the capital they need to borrow or raise. It reduces the size of required equity reserves, allowing more resources to be shifted to profit-making opportunities, and it allows companies to avoid project disruptions and undesirable asset sales, the net economic impact of which can be considerable. In many instances, standardized contracts offered on exchanges are not perfect matches for these risks.³

Some have suggested that financial intermediation increases the prices and volatility of commodities. This is not supported by any empirical evidence. In fact, the evidence points to lower bid-offer spreads and less volatility in markets characterized by greater financial institution participation.

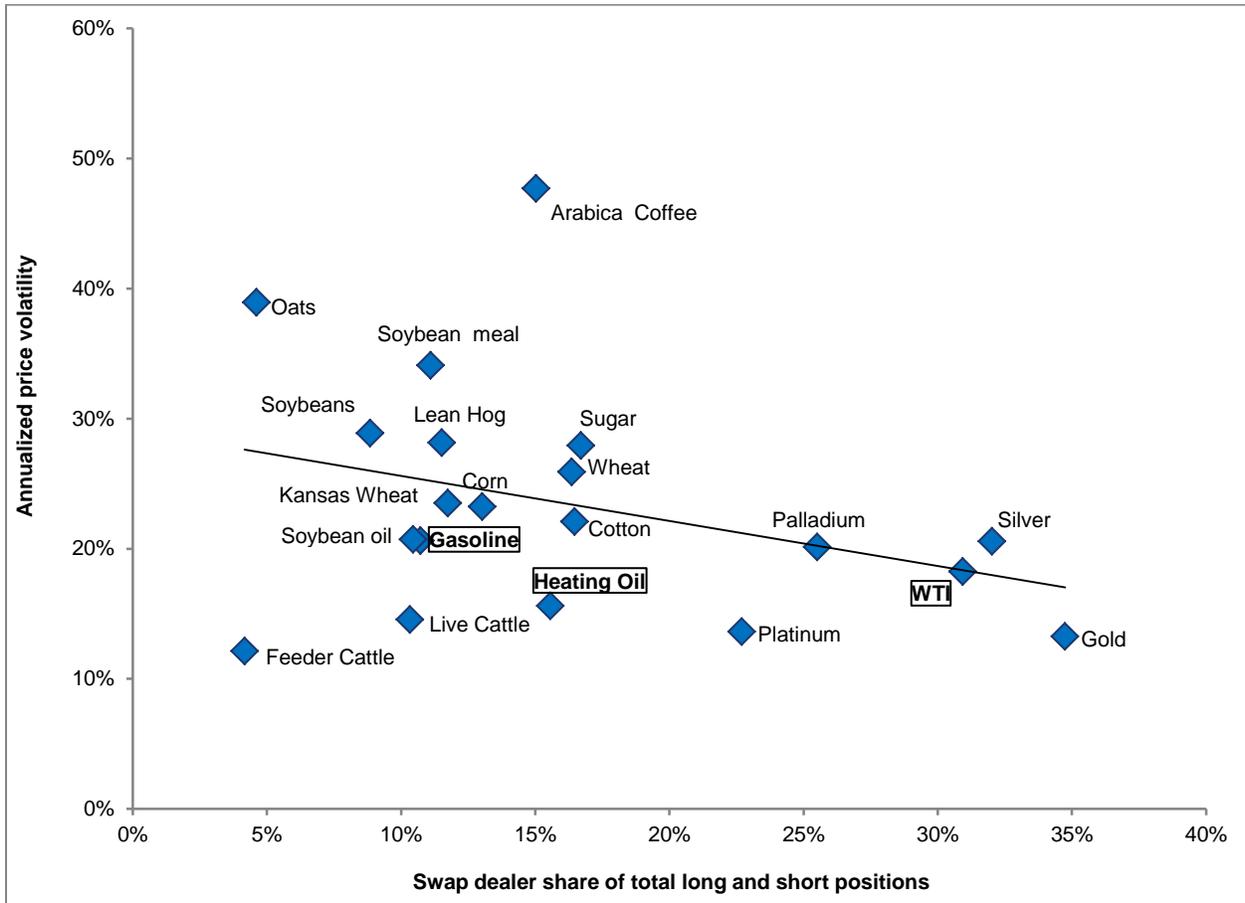
³ See Steve Strongin, Amanda Hindlian & Sandra Lawson, *Effective Regulation: Part 4: Turning Good Ideas Into Good Outcomes*, Goldman Sachs Global Markets Institute (2009), <http://www.goldmansachs.com/our-thinking/archive/effective-regulation-4.html>, which demonstrates how a medium-sized oil company is able to enhance its return on equity from 10.1% to 14.5% through the use of hedging and intermediation services provided by bank holding companies.

Exhibit A: Participation of Financial Institutions in Markets Reduces Bid-Offer Spreads



Source: CFTC, Reuters and Goldman Sachs Global Investment Research

Exhibit B: Participation of Financial Institutions in Markets Reduces Volatility



Source: Reuters, NYMEX, Goldman Sachs Global Investment Research

Financial institutions provide funding and risk management products to the smaller and mid-sized producers that are at the vanguard of unlocking new discoveries and commodity supplies, lowering prices in the long-term. Consider that the United States recently overtook the Saudi Arabia as the largest producer of crude oil.⁴ But unlike Saudi Arabia, in which a single company--Saudi Aramco--is responsible for the country's entire output, over 4,000 distinct enterprises contribute to U.S. production. The mid- and smaller-sized producers in particular need the funding and financial expertise that institutions such as Goldman Sachs are particularly well suited to provide.

Hedge programs that financial institutions offer enable these producers to lock in prices on new projects, which help them to attract new capital. Many of the companies in the so-called

⁴ US Seen as Biggest Oil Producer After Overtaking Saudi Arabia, Bloomberg July 4, 2014.

Shale Revolution, which has completely altered the position of the United States economically and strategically, have been clients of Goldman Sachs and other financial institutions.

Lack of Alternative Providers. Although other market participants may provide intermediation services from time to time, their role is notably different from that of financial institutions. The most obvious alternative is trading houses, which participate in commodities markets by sourcing, storing and delivering physical commodities for other participants. Trading houses typically do not act as market makers on a consistent or ongoing basis; instead they transact in commodities markets to earn a return on their own assets.

Financial institutions differ from trading houses and other non-bank organizations in several other important ways. They are subject to comprehensive regulation and stringent prudential oversight. Because financial institutions have developed an infrastructure and capability to provide multiple financial services, they are able to offer clients more economical terms than providers that offer a more limited set of services.

In response to the Federal Reserve's January 2014 Advanced Notice of Proposed Rulemaking on commodities and merchant banking (the ANPR)⁵, end-users, particularly corporate entities, have been outspoken in their support for continuing financial institution participation in the commodities markets. (Letters of commenters may be found at http://www.federalreserve.gov/apps/foia/ViewAllComments.aspx?doc_id=R-1479&doc_ver=1).

⁵ Advance Notice of Proposed Rulemaking on Complementary Activities, Merchant Banking Activities and other Activities of Financial Holding Companies Related to Physical Commodities (Docket No. R-1479; RIN 7100 AE-10). Goldman Sachs submitted a letter in response to the ANPR which may be accessed at http://www.federalreserve.gov/SECRS/2014/May/20140506/R-1479/R-1479_041614_124563_481901890144_1.pdf

National Association of Corporate Treasurers – signed by 15 companies, including The Boeing Corporation, The Dow Chemical Company, Hess Corporation and Honeywell International Inc:

“FHCs, unlike other counterparties in these markets, are uniquely situated to serve the distinct needs of end-users of physical commodities and likely cannot be replaced by other market participants... Now more than ever end-users need sophisticated and well-run entities to help manage risk. Robust FHC participation in providing risk management products and services is essential to achieving that goal.”

Black Belt Energy Gas District, Clark Mobile Counties Gas District:

“The departure of FHCs from the physical commodity marketplace ... would serve no countervailing public purpose. Our experience is that FHCs are more efficient and operate in a regulated environment that results in them taking a cautious, businesslike approach to their commercial obligations and strict adherence to the requirements of their contracts... We have found them to be customer-oriented with a strong desire to be long-term business partners with us.”

Public Utility Districts - Chelan County, Clark, Cowlitz County, District #2 of Grant County, Eugene Water and Electric Board, Klickitat County, Lewis County, Pend Oreille County, Snohomish County, Tacoma Power:

“Already, there is a shortage of creditworthy counterparties with which to conduct physical and financial energy transactions. Accessing these markets could be more difficult, more expensive and less efficient without the presence of FHCs... If additional limitations on the participation of FHCs in physical energy markets prompt their exit from the marketplace, utilities and their customers will suffer through higher hedging costs and may ultimately be unable to adequately hedge price and volumetric exposures without undue credit concentration risk.”

NRG Energy Inc. (a leading competitive power company):

“As an active participant in the Markets and an end-user of several Products that FHCs provide in this space, we are concerned that, if overall financial regulation drives these entities away from the Markets, then liquidity and critical products and services might evaporate and competition could diminish. Of equal importance is the fact that any such reductions in liquidity and competition are likely to result in higher commodity prices for both commercial and residential consumers.”

Cheniere Energy, Inc. (developer and operator of liquefied natural gas terminals):

“The additional exit of FHCs from the commodities business raises, among others, the following concerns: 1) The absence of sophisticated financial entities customizing physical products; 2) The reduction of A-rated investment counterparties in the physical trading arena; 3) The reduction of counterparties able to provide a bid or an offer on multiple commodities and products; 4) The reduction of counterparties with the financial capability to enter into long-term transactions.”

Novelis Inc. (world’s leading aluminum rolled products producer):

“[Financial institutions] play an important and irreplaceable role in aiding Novelis’ working capital goals by holding metal until it is delivered to us or until we need it and offering Novelis extended payment terms on certain transactions. Without these services from [financial institutions], our results of operations, cash flows and liquidity could be adversely affected.”

B. HOW GOLDMAN SACHS AVOIDS OR MITIGATES PHYSICAL COMMODITY RISKS

Intermediation

Some argue that financial institution involvement in intermediation of physical commodities poses undue risk to the institutions and, by extension, the broader financial system. In fact, given the limited nature of BHC participation, the risks are quite limited and manageable.

Financial intermediary activities involve taking title to commodities and arranging for them to be stored and transported by independently managed service providers. Most of the laws that have been enacted to deter environmental damage and allocate liability are based on the common sense notion that the parties that are in the best position to prevent damages are the parties that will be liable for damages should they arise.

Under these laws it is the **owners and operators of facilities** that will be liable for damages.⁶ Goldman Sachs does not own or operate such facilities as part of its intermediation activities. Rather, it merely owns **commodities**. As such, financial intermediaries do not assume and are not subject to the liability that attaches to owners and operators of facilities unless the institution itself is found to have caused or contributed to the incident.

Accordingly, financial intermediaries avoid most potential liability associated with physical commodities simply by virtue of the limited nature of their involvement. Financial institutions mitigate or otherwise manage residual risks through insurance and the implementation of policies and procedures designed to ensure that the service providers they select to store and transport commodities are qualified to perform these functions. Financial institution personnel do not involve themselves in operational decision-making on storage and transport matters in a way that could expose the institution to the assertion that it assumed operational responsibility.

Investment Activities

It is a bedrock principle of corporate law that stockholders are not liable for the obligations of a corporation, even when the stockholder owns 100% of the shares of the corporation. Investors rely on this principle in allocating capital to companies whose businesses present opportunities but whose activities necessarily entail risk. Under limited circumstances, the protections of corporate structures may be disregarded to impose liability on a shareholder. These exceptions exist in circumstances where, for example, the shareholder exercises complete domination over the company and use the domination to commit fraud or wrongful acts against another party.

⁶ See, e.g., The decision of the US Supreme Court in *United States v. Bestfoods*, 524 U.S. 51, 66–67 (1998) which set the standard for the allocation of liability under US pollution laws: “an operator is simply someone who directs the workings of, manages, or conducts the affairs of a facility.”

As part of its submission in response to the ANPR, the Securities Industry and Financial Markets Association (SIFMA) and other trade associations⁷ submitted a joint memorandum of law from Sullivan & Cromwell, Davis Polk & Wardwell, Covington & Burling and Vinson & Elkins that provides an extensive description of the state of the law both with respect to environmental liability as described above and also with respect to the protections afforded to shareholders. As part of this memorandum, the law firms suggested straight-forward policies that may be adopted by an investor in order to promote the sanctity of corporate structures. Goldman Sachs has a range of policies, procedures and resources dedicated to ensuring that the risk of our investing activity is limited to the capital at risk.

Moreover, before making an investment, Goldman Sachs conducts substantial diligence with respect to the target company and its business, including its approach to risk management and mitigation and the strength of its insurance program.

Issues Raised

Some have suggested that the protections that are afforded to mere title owners to commodities or investors in companies that are described above may be easily compromised or disregarded and cite, for example, BP's liability in the Deepwater Horizon incident. This suggestion is simply not supported by the facts.

For example, some have asserted that BP incurred liability without owning or operating the rig involved in the disaster. In fact, BP controlled and directed the method of operation to the owner of the drill ship and gave specific instructions on how the well was to be drilled, completed, cemented, cased and temporarily closed. In other words, BP controlled all aspects of the drilling operation and thereby assumed the role of an operator, even if it was in the hands of the owner of the rig (Transocean) who ran the equipment. The Oil Pollution Act specifies that the owner or operator or "person in charge" of an offshore facility from which there is an oil spill may be held strictly liable.

Furthermore, BP was the lessee of the offshore lease block in which the Macondo well was being drilled and the "operator" of the lease under federal law. BP was also the owner of the pipe from which the oil spilled into the Gulf of Mexico. The Oil Pollution Act imposes strict liability on the owner of the vessel or facility from which oil is spilled, which in this case was the pipe, and on the "lessee or permittee of the area in which the facility is located or the holder of a right use and easement". Thus, BP was strictly liable because the oil spilled from its pipe and it was the lessee and permittee of the area in which the facility was located.

This is wholly different from the limited nature of interactions that we have with facility operators in our capacity as an intermediary or portfolio company management in our capacity as an investor. We have extensive policies, procedures and resources dedicated to ensuring

⁷ Comment letter on ANPR from SIFMA, the American Bankers Association, the Financial Services Forum, the Financial Services Roundtable and the Institute of International Bankers dated April 16, 2014 , http://www.federalreserve.gov/SECRS/2014/February/20140226/R-1479/R-1479_020714_111976_502830509977_1.pdf

that Goldman Sachs does not face anything approaching this kind of risk in our intermediation or investment activities.

PART II: ALUMINUM MARKETS; METRO INTERNATIONAL

There has been a large focus on various relatively small investments, such as an investment in a metals warehousing company, which are not related to our role as an intermediary in the commodities markets. Goldman Sachs invested in Metro International Services (Metro) in 2010 based on the investment thesis that the aluminum storage business would perform well given the substantial reduction in demand for aluminum resulting from the global recession and the historical propensity of aluminum producers to resist cuts in production as long as possible.

The investment in Metro was never strategic to Goldman Sachs and has not been integrated into our commodities market making activities. In fact, because the investment was made under the Bank Holding Company Act's merchant banking authority, Goldman Sachs is required to sell Metro within ten years from the investment date. We are currently actively involved in a sales process for Metro.

To analyze the aluminum market by focusing on a handful of transactions in which owners of metal sought to maximize their returns and optionality through commercial interactions with warehouse operators such as Metro is to look through the wrong end of the telescope. It is important instead to examine the broader market dynamics that drive market participants to purchase and hold surplus aluminum in storage.

The arrangements between warehouse operators and owners of surplus aluminum in regard to terms pursuant to which metal is stored are a small part of the broader surplus commodity market dynamic and do not affect the price of actual aluminum that is produced and consumed.

Aluminum prices are based on supply/demand fundamentals.

A. BROAD MACRO ECONOMIC DYNAMICS DRIVE SUPPLY, DEMAND AND BEHAVIOR OF ALUMINUM MARKET PARTICIPANTS

In evaluating the role played in aluminum markets by Metro and other LME warehouse operators it is essential to consider certain basic questions such as:

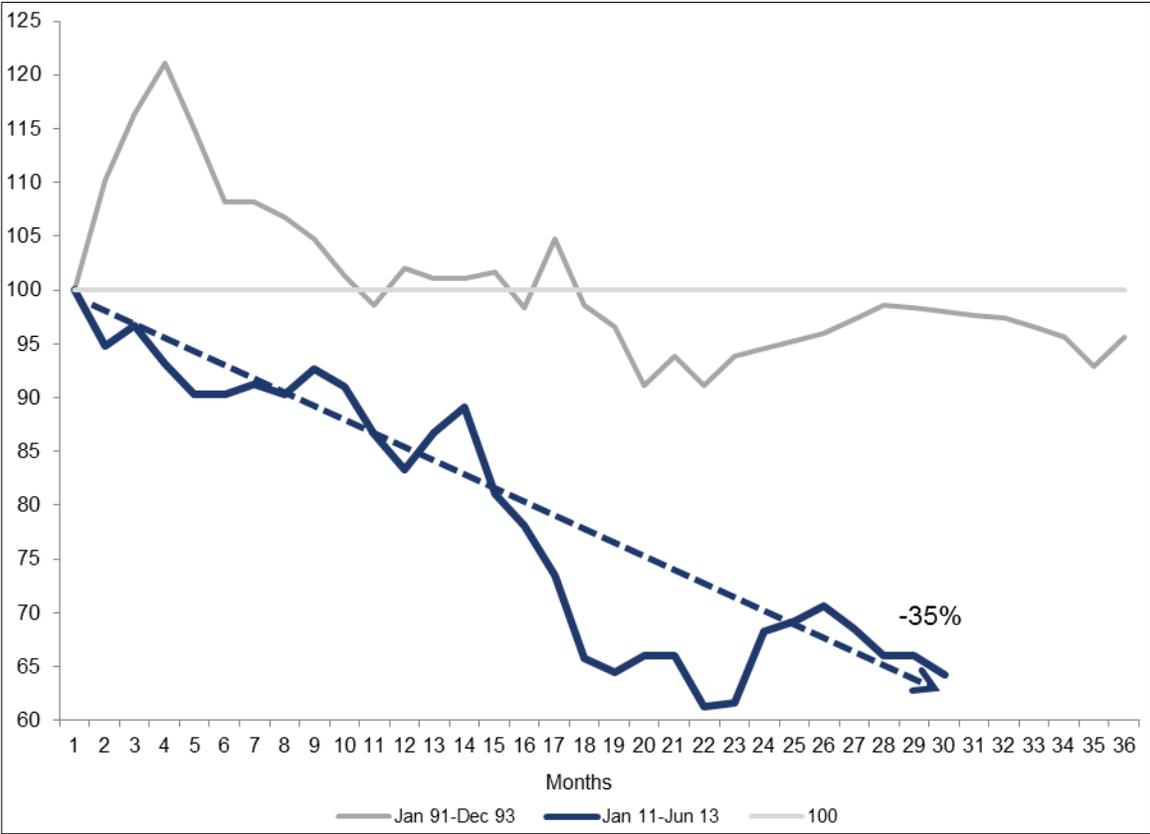
- Why is there a surplus of aluminum in the first place?
- Who is buying this aluminum and why are they motivated to do so?
- Are aluminum prices affected by LME warehouses or do they reflect supply/demand fundamentals?

Economic Factors:

- In 2008, the global recession resulted in substantially reduced demand for aluminum and other industrial inputs
- Although the price of aluminum declined substantially, supply response was more muted than for other commodities

- Because of the nature of the production process (i.e., the expense and time associated with shutting down and restarting smelters), aluminum producers decrease production only as a last resort
- Energy costs, which are the most substantial component in the price of aluminum, have dropped significantly as a result of the “Shale Revolution”⁸

Exhibit C: Thermal Coal Prices Have Fallen Significantly, Reducing Aluminum Production Costs
 Index = 100 in Jan 1991 (grey) and Jan 2011 (blue)

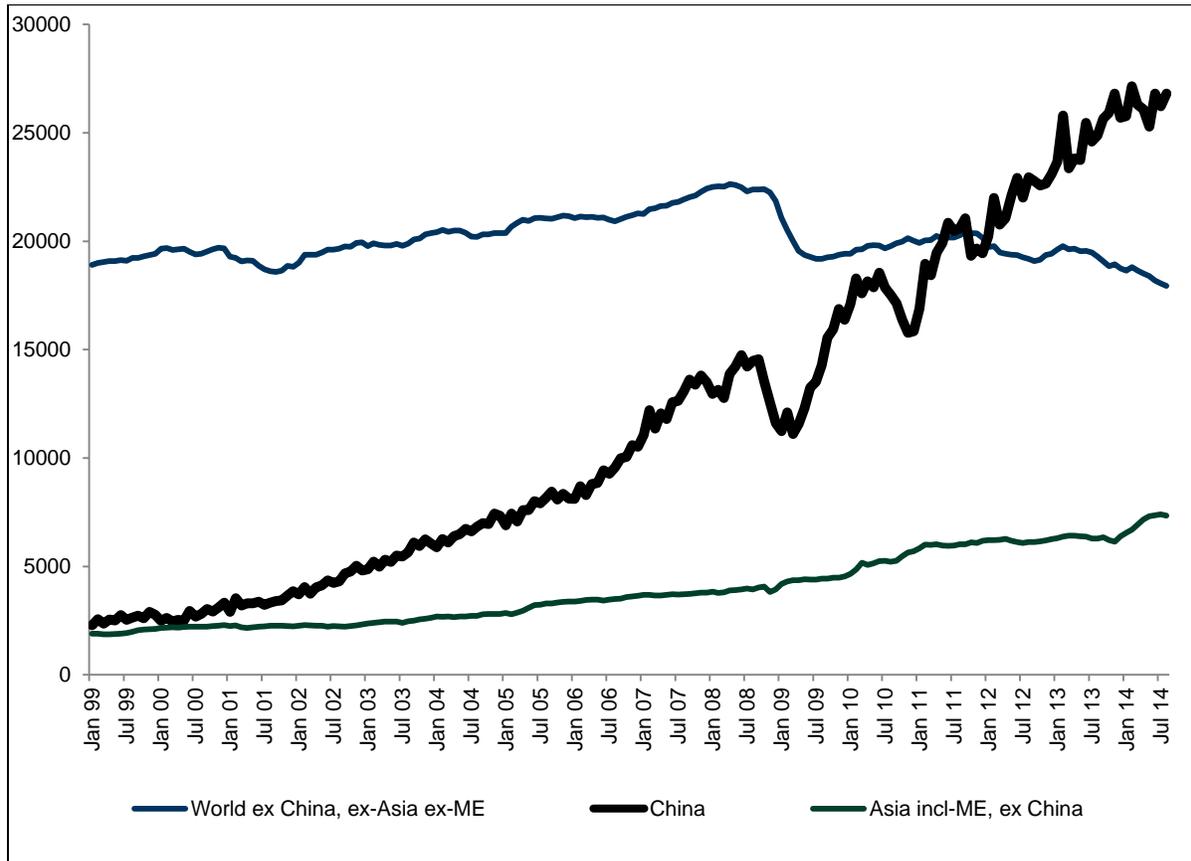


Source: Goldman Sachs Global Investment Research

⁸ See Jeffrey Currie, Max Layton and Roger Yuan, The Economic Role of a Warehouse Exchange, Appendix F: Why the prolonged aluminum surplus, Goldman Sachs Research, October 31, 2013.

- Production of aluminum in China has increased substantially since the last significant period of over-supply which occurred in the early 1990s after the fall of the Soviet Union

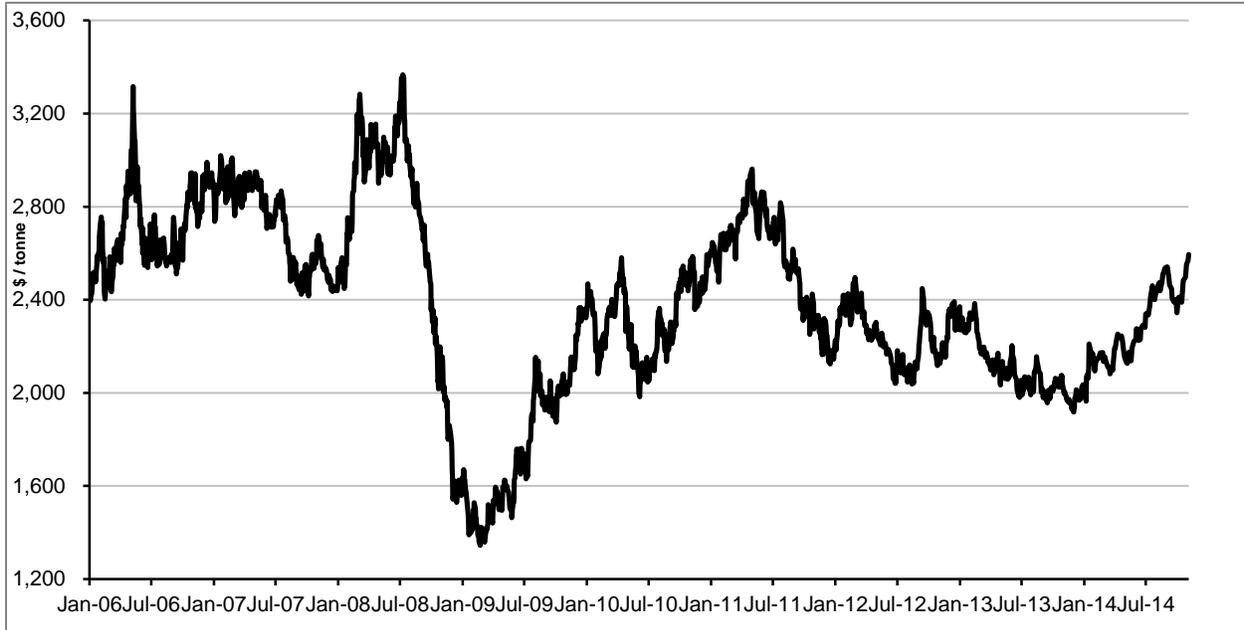
Exhibit D: Chinese supply growth has been strong
 '000's of tons (annualized)



Source: IAI

- The price of aluminum in the Midwest declined substantially from pre-recession levels and has not recovered

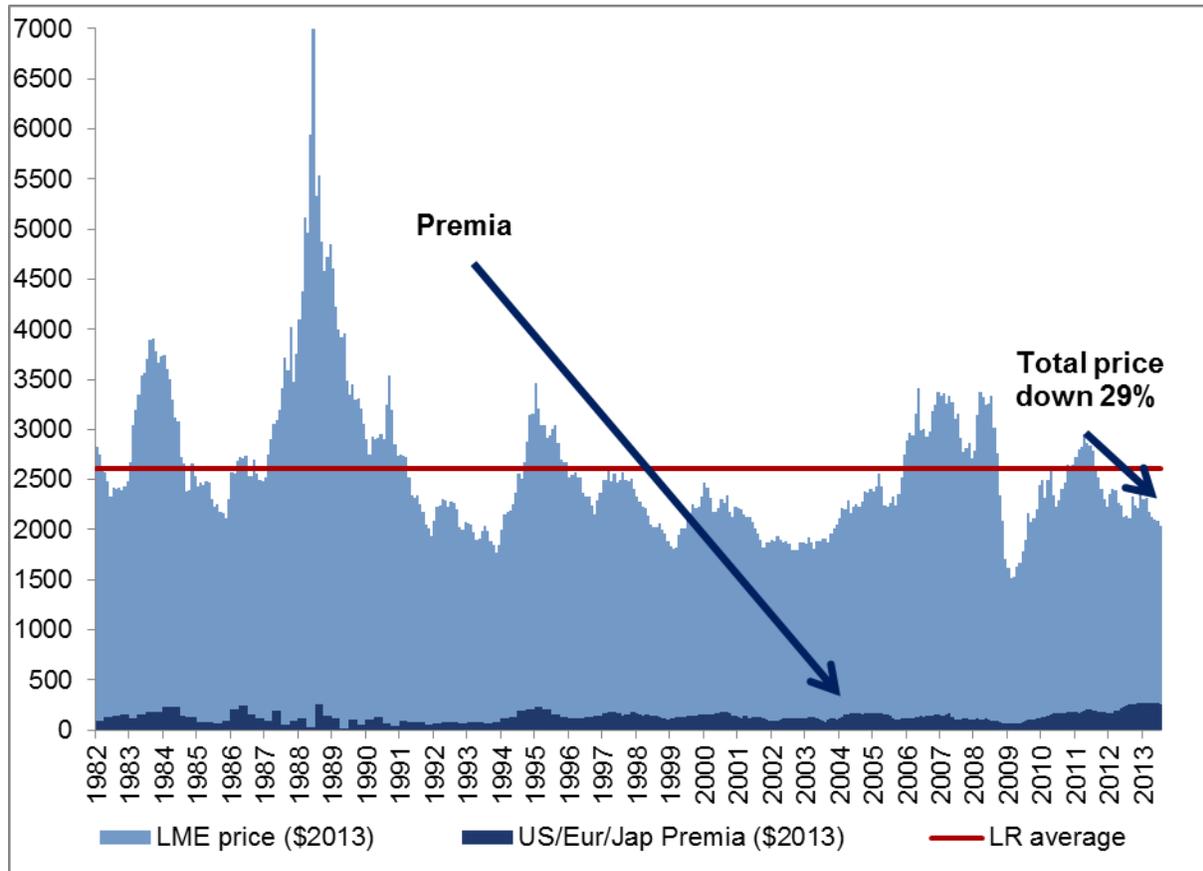
Exhibit E: Midwest Transaction Price Declined Substantially from Pre-Recession Levels



Source: Metal Bulletin

- On a historical basis, physical all-in aluminum prices are below their long-run real average level

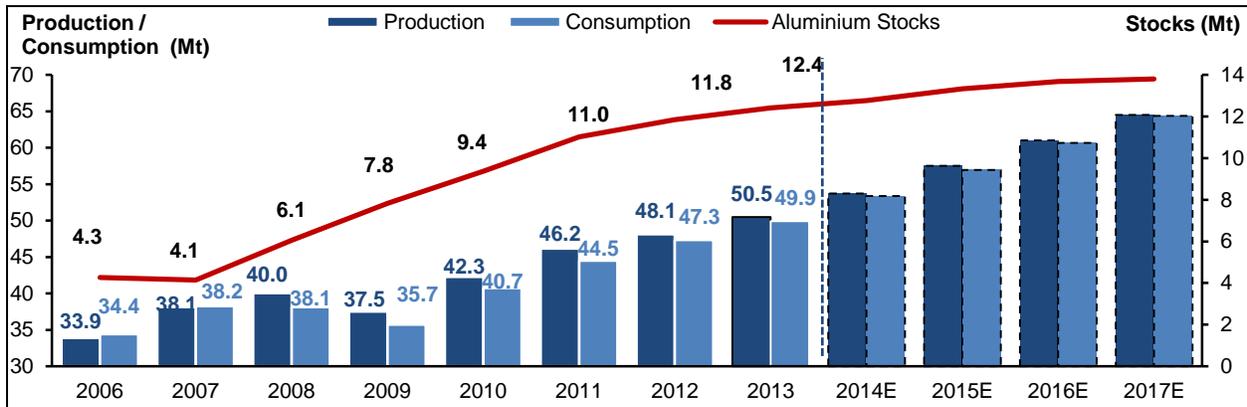
Exhibit F: Historical LME Prices and Premium



Source: Goldman Sachs Global Investment Research, Bloomberg, CRU

- Each year approximately 49-50 million tons of aluminum are produced
- Since the recession of 2008, production has exceeded consumption by approximately one to two million tons a year, resulting in an increasing surplus that has gone into storage

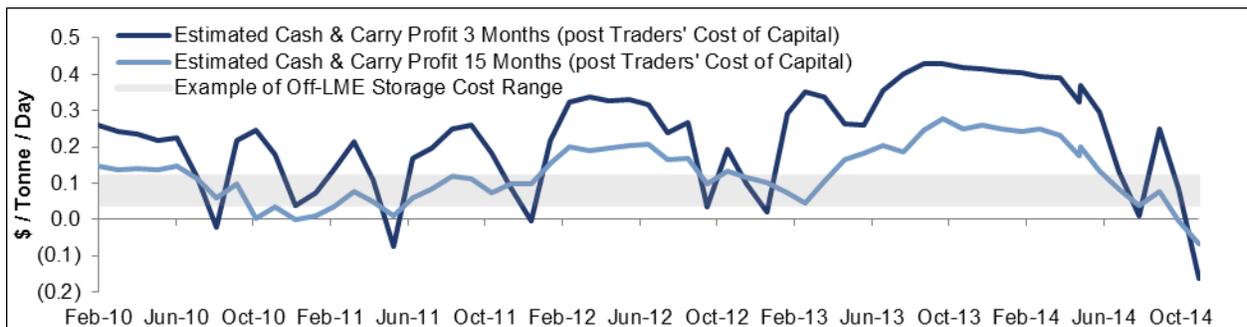
Exhibit G: Aluminum Production & Consumption



Source: Wood Mackenzie 3Q 2014 estimate

- Prices of surplus commodities reflect “carry” dynamics; that is, the price for the commodity delivered on a spot basis (i.e., 2-30 days) is lower than the price for the commodity delivered in the future
- Carry pricing structures induce financial entities such as trading houses and hedge funds to implement “carry trades” whereby they:
 - Buy spot
 - Simultaneously sell forward and
 - Store the commodity between purchase and sale
- Where the difference between the spot purchase price and forward sale price is sufficiently large, financial entities cover the costs of funding a purchase and storing the commodity through the forward sale while still earning a low-risk return
- Aluminum has been in “carry” for most of the period since 2008, resulting in a profitable transaction for market participants
- Often, lenders to carry traders take security for their loan on the underlying warrants or metal
- In times of uncertainty, lenders place greater importance on the most liquid (i.e., readily saleable) form of collateral

Exhibit H: Illustrative Aluminum Cash & Carry Profit

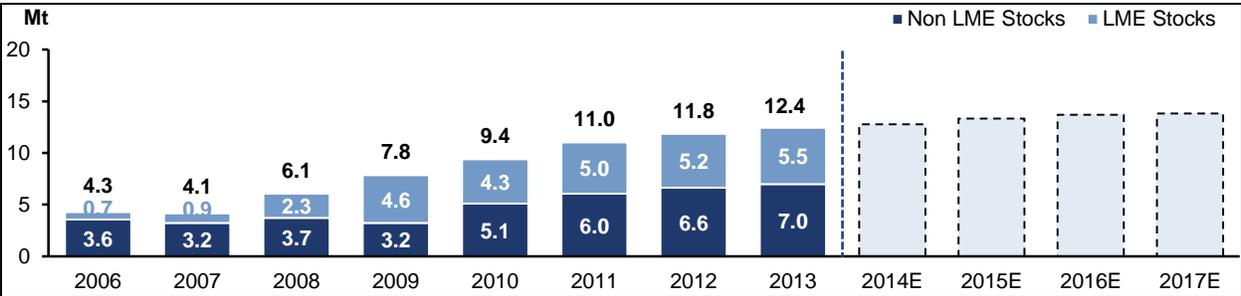


Source: LME, Goldman Sachs Securities Division

- Aluminum may be stored “on-warrant” at LME approved warehouses or “off-warrant”

- In selecting between on-warrant and off-warrant storage, aluminum owners and their lenders weigh the relative value of the liquidity of a warrant against the lower cost of storage off-warrant
- While on-warrant LME stocks have grown since 2008, off-warrant stocks have grown at a higher rate, particularly since 2011 when more warrant holders sought to remove metal from Vlissingen and Detroit
- The implication of this is that as economic confidence improved and credit became more readily available, aluminum owners were able to perpetuate their carry trades but modify them from being “on-warrant” to being “off-warrant” so as to take advantage of lower storage costs, thereby increasing the profitability of the trades
- Notably, these transactions have been more profitable to aluminum owners than selling the surplus aluminum to consumers at spot prices
- Historically, when the cycle reverses (i.e., spot prices go above forward prices), commodity owners unwind carry trades and sell into higher priced spot market
- There are currently approximately 4.4 million tons of LME warranted aluminum, and there is estimated to be almost 8 million tons being stored off-warrant
- Of the LME warranted aluminum, 1.8 million tons are held at “non-queue” locations
- Thus, of the aluminum currently held in storage, approximately 9.6 million tons is not subject to any queue and is therefore available to be delivered in a sale on an immediate basis
- That the owners of this aluminum choose to continue to hold it in storage rather than sell it to into the market reflects the fact that the carry trade is more profitable than selling at available market prices

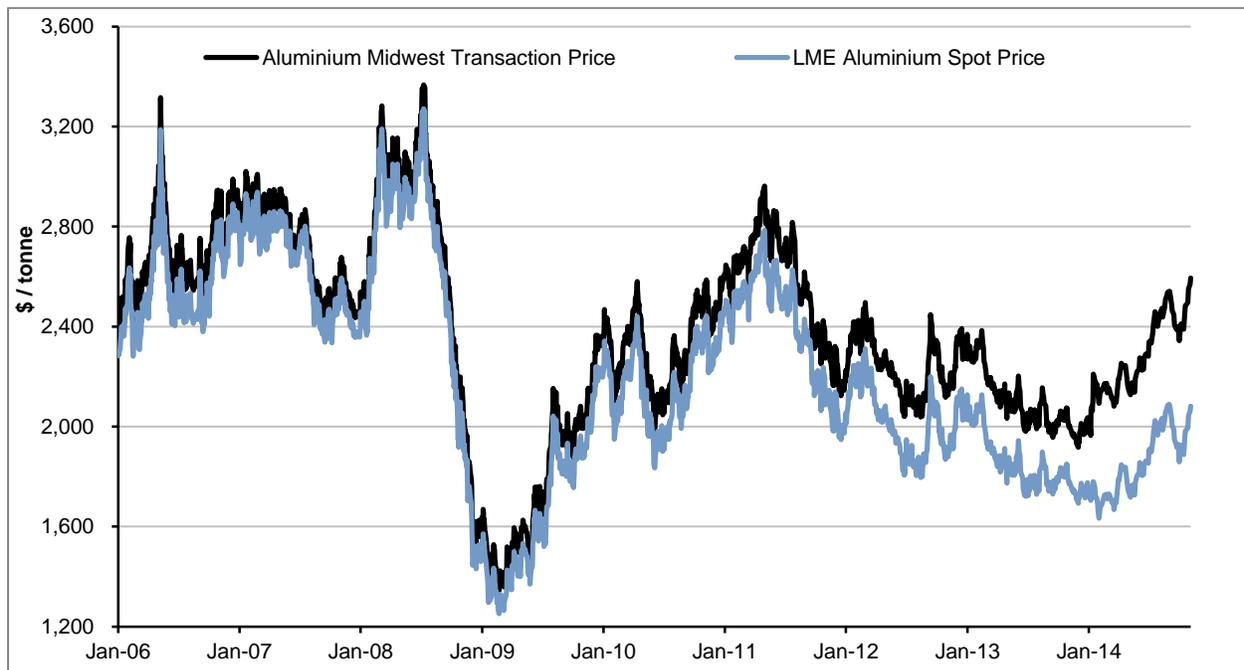
Exhibit I: Global vs. LME Aluminum Stocks



Source: LME, Wood Mackenzie 3Q 2014 estimate

- The price for aluminum is negotiated between sellers and buyers. One of the predominant referenced prices in the United States is the “Midwest Transaction Price,” which predates the creation of the LME futures contract on aluminum in 1978.
- The difference between the Midwest Transaction Price and the price for an LME warrant is referred to as the “Midwest Physical Premium” but is more accurately described as the “LME Discount.”

Exhibit J: Midwest Transaction Price vs. LME Price



Source: LME, Metal Bulletin

B. GOLDMAN SACHS' OWNERSHIP OF METRO WAS NEITHER INTENDED TO IMPACT, NOR DID IT IMPACT, THE LENGTH OF QUEUES TO REMOVE METAL FROM METRO WAREHOUSES

As noted, Goldman Sachs invested in Metro based on a thesis that the aluminum storage businesses would perform well given the substantial reduction in demand for aluminum resulting from the global recession and the historical propensity of aluminum producers to resist cuts in production as long as possible. At the time the deal closed, customers had already deposited over 800,000 tons of aluminum with Metro, due in large part to its proximity to centers of North American production and access to inexpensive industrial real estate in the depressed Detroit market. Goldman Sachs' investment thesis proved correct. From 2010 through 2013, the amount of aluminum stored at Metro and other warehouses continued to grow.

The owners of the aluminum stored in Metro's warehouses are rarely end-user consumers. Given the surplus of aluminum that has persisted since 2008, actual consumers have been able to source their requirements directly from producers. The metal in storage was acquired almost entirely by financial entities, such as trading houses and hedge funds, which held warrants for aluminum that they had sold forward or intended to sell in the future. These financial entities or their lenders found on-warrant storage in the LME warehouse system to be

attractive because of the greater liquidity that it offered in comparison to storing the metal off-warrant.

Beginning in 2011 but in particular after the LME increased its minimum load-out requirements in January 2012, holders of aluminum warrants in Pacorini's Vlissingen facilities and Metro's warehouse located in Detroit began to cancel those warrants and seek to withdraw their metal, typically to store it at lower rates on an off-warrant basis.⁹ The result of these cancellations, combined with the operators holding themselves to minimum load-out requirements of the LME, resulted in "queues" or wait times for metal at Metro's Detroit warehouses and Pacorini's Vlissingen warehouse.

The LME market is transparent. Inventory levels and queues at LME locations are published each day and minimum load-out requirements are well understood. As such, market participants actively take into account the effects of these considerations in making prices for LME warrants and related products.

The trading houses, hedge funds and other entities that own warrants continuously evaluate alternatives to maximize the return and optionality on their investments, including investments in aluminum warrants. As part of that evaluation, warrant owners consider whether they can enhance returns and optionality by cancelling warrants to enter into the queue so that the metal associated with the warrants is loaded out and transformed from an "on-warrant" status to an "off-warrant" status. In conducting this analysis, the warrant owners take into account a number of considerations, including the price that they could obtain for selling their metal into the spot market, the profit that they can lock in by executing a cash and carry trade into the future, the terms that the warehouse operators offer to store the metal off warrant and to place the metal back on to warranted status. The ultimate decision as to what course of action will be taken with particular metal is of course made by the entity that owns the metal.

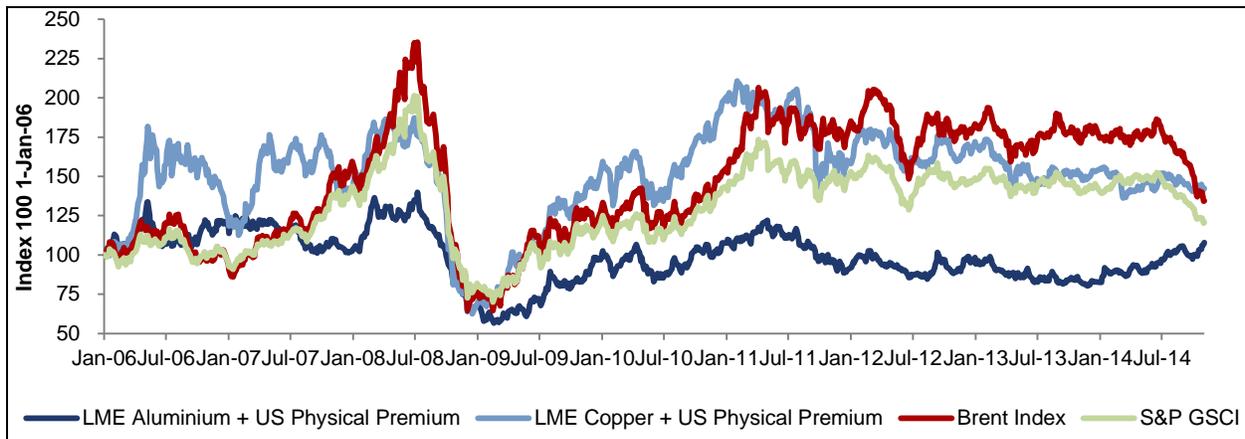
Since LME rules require warrant holders to pay rent whether or not a warrant is canceled, Metro does not benefit from longer queues. Metro receives rental payments for all metal that remains in its warehouses regardless of whether or not a queue exists. That said, since queues may increase premiums, which may reduce an aluminum owner's interest in storing aluminum in the LME system, Metro's economic interest is best served by queues being shorter.

C. THE LENGTH OF QUEUES AT METRO'S DETROIT WAREHOUSE DID NOT IMPACT CONSUMERS

Since the onset of the global recession in 2008 the prices consumers pay for physical aluminum—so-called "all-in prices"—dropped significantly and remained lower than pre-recession levels. Aluminum has substantially under-performed other commodities including copper, oil and a broad based index of commodities.

⁹ Exhibit I reflects the growth of off-warrant storage in comparison to on-warrant storage.

Exhibit K: Physical Aluminum Price vs. Other Commodities



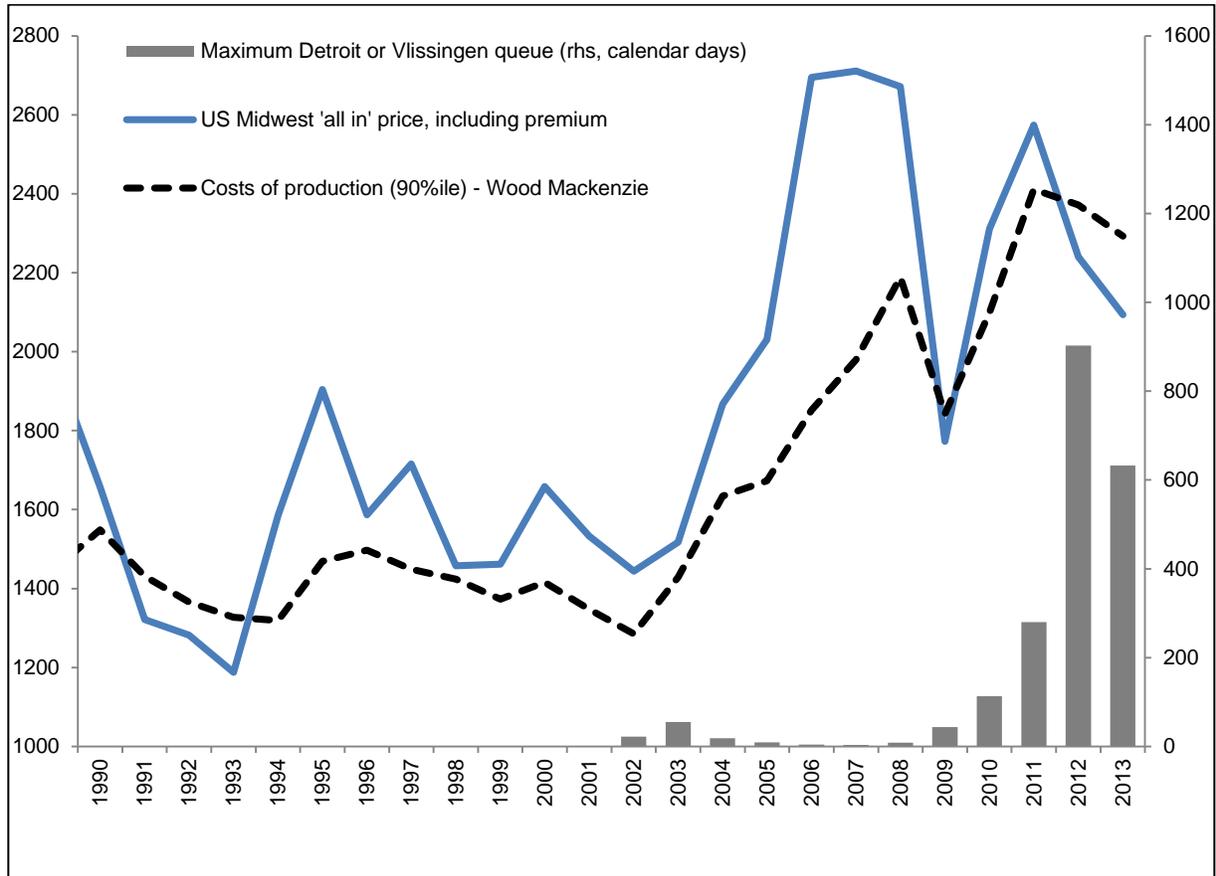
Source: LME, ICE, S&P and Metal Bulletin

The price for delivered physical aluminum is set by what willing buyers are prepared to pay to willing sellers. In the United States, the predominant referenced price is the Midwest Transaction Price. Platt's, a subsidiary of McGraw Hill Inc., surveys the market for transacted prices for aluminum and includes this composite price in its Metals Bulletin publication. The difference between this Midwest Transaction "all-in" price and the LME spot price is known as the Midwest Premium.¹⁰ All things being equal, an increase (or decrease) in the LME spot price necessarily is accompanied by a decrease (or increase) in the "premium"—but changes in LME spot prices do not result in changes in "all-in-prices," which instead are a reflection of global supply and demand factors.

Importantly, supply/demand fundamentals have dictated all-in aluminum prices. A clear demonstration of this is that these prices have been at the marginal cost of production for an extended period of time. It is only in circumstances of a shortage (where price is used to ration a commodity in deficit) or where the prices do not reflect market conditions that commodity prices exceed marginal production costs. This is demonstrated by the chart below which reflects the costs of producers at the 90th percentile of the cost curve. These are the "marginal" producers whose output sets the marginal price of the relevant commodity.

¹⁰ There are prices similar to the transacted Midwest Price in Europe and Asia and the difference between such prices and the prevailing LME spot price is referred to as the premium for those regions. Regional all-in and premium prices have performed consistently.

Exhibit L: All-in Prices vs. Marginal Cost of Production



Source: Metals Bulletin; Wood Mackenzie

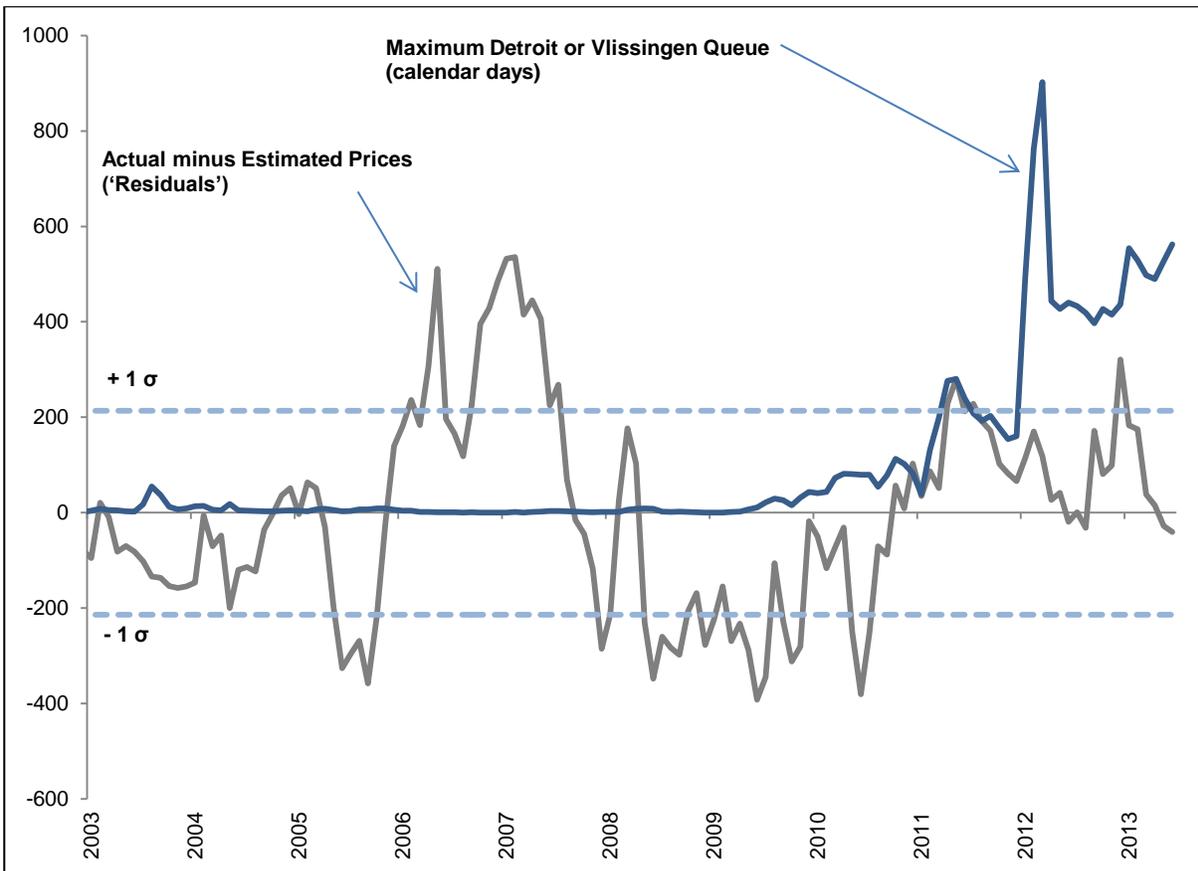
Simply put, queues in LME warehouses (including in Metro’s Detroit Warehouse) do not impact the “all-in price” consumers pay for delivered physical aluminum. The only fundamental driver that the LME warehouse queues could potentially impact is the perceived availability of aluminum inventories in their storage facilities. That said, queues and other manifestations of LME rules may affect the LME prices. A warrant may decline in value due to the obligation of the holder to pay LME rent for an extended period of time while in a queue awaiting delivery of physical metal.¹¹ All things being equal, a reduction in the LME spot price is necessarily

¹¹ The LME futures contract, like many futures contracts, is based on the “seller’s choice” model. In other words, at the expiration of the contract, the seller may satisfy its delivery obligation by tendering any warrant of its choosing. Sellers, acting in their economic interest, typically select the “cheapest to deliver” or least valuable warrant. In recent years it has often but not always been the case that the cheapest to deliver is a warrant associated with metal in a queue location. To the extent that the cheapest to deliver is a queue location, the length of the queue will affect the value of LME contracts.

accompanied by an increase in the “premium,” but does not change the “all-in-price” paid by consumers.

Metro’s “off-warrant” transactions—which are described more fully below— likewise did not impact prices paid by aluminum consumers. These transactions involved customers of Metro seeking to maximize their returns and optionality by taking steps to transform their holdings from and to on-warrant status and off-warrant status. To maintain its competitive position with customers, Metro offered alternatives in relation to the rent for aluminum that was loaded out and maintained with Metro off-warrant and potential incentives that Metro would pay in the event such aluminum was subsequently placed on-warrant. Metro offered the transactions in an effort to compete with storage alternatives that its customers had and to retain warehouse customers they might otherwise have lost. These transactions complied with LME rules relating to the loading out of metal and did not impact the “all-in-price” paid by aluminum consumers.

Exhibit M: Midwest Transaction Price is not correlated with Detroit queue (\$/t)



Source: LME, CRU, Goldman Sachs Global Investment Research

The queue at Metro’s Detroit Warehouse did not impact the ability of end-users or consumers to obtain aluminum. In surplus market conditions, consumers do not rely on LME stocks to source metal. To the contrary, the metal in Metro’s Detroit Warehouse (and in the queue to exit Metro’s Detroit Warehouse) was owned overwhelmingly by financial entities, such

as trading houses and hedge funds. Tellingly, in the summer of 2013, when Goldman Sachs offered to swap metal with any consumer waiting in the Detroit queue, none accepted the offer.

D. GOLDMAN SACHS DID NOT ENGAGE IN IMPROPER “MERRY GO ROUND” TRANSACTIONS

On July 21, 2013, the *New York Times* published an article titled “A Shuffle of Aluminum, but to Banks, Pure Gold.” The article suggested that the practice of aluminum warehouses taking metal that is to be shipped out at the end of a customer’s term and then relocating that metal to another of its warehouses somehow caused aluminum to be less available or more expensive to consumers. This is simply false.

The article described occasions where aluminum from one Metro warehouse in Detroit was moved to another Metro warehouse in Detroit—which a former Metro employee purportedly characterized as a “merry-go-round of metal”—while manufacturers allegedly could not obtain aluminum out of Metro’s warehouses fast enough to make products such as beer cans. To the contrary, Metro always complied with owners’ instructions as to the movement of metal, its activities complied with LME rules and did not impact the cost that Americans pay for cans of beer.

As noted, those storing metal in Metro’s Detroit Warehouse are rarely consumers needing metal for production but rather financial entities such as trading houses and hedge funds that continuously evaluate how to maximize the return on their aluminum investments. That evaluation included consideration of whether to keep the metal at Metro, sell it on the LME, sell it over-the-counter, or move it “off-warrant” for non LME storage. Given the continuing prevalence of a “carry” market in aluminum (i.e., spot prices being lower than forward prices), many metal owners sought to perpetuate a cash and carry transaction while lowering the cost of maintaining such a position by storing the metal outside of the LME warehouse system for some time. As metal owners contemplated removing their metal from Metro’s Detroit Warehouse to place it in storage elsewhere, Metro sought to retain the metal and its associated revenue from rental payments. In other words, Metro competed with other storage providers for the metal that was being removed from its warehouses.

As a result, Metro entered into a handful of so-called “off-warrant” transactions. These involved customers seeking different economic alternatives that would lower their costs and provide greater flexibility to allow them to respond to dynamic market conditions. To facilitate this, Metro worked with its customers to combine components of traditional commercial arrangements. Metro offered customers that were removing or planning to remove metal from its warehouse in Detroit rental terms to store the metal “off-warrant” in a different Metro warehouse. The metal owners retained the option to dispose of this “off-warrant” metal as they saw fit, including by re-warranting the metal in exchange for an incentive payment from Metro and certain metals owners availed themselves of this opportunity. As always, the metal owners had full authority to decide what to do with their metal. At no time did Metro dictate where or when the metal would be delivered; at all times, the customer did.

The effect of these “off-warrant” transactions was that metal was removed from one Metro warehouse in Detroit, loaded “Free On Truck”—whereupon control of and responsibility for the metal passed to the metal owner/transporter—and then moved to another Metro warehouse in Detroit at the metal owner’s direction.

This movement from one Metro warehouse to another is, presumably, the “Merry-Go-Round” that the *New York Times* described. But an owner’s decision to store its metal in another Metro warehouse (as opposed to in a competing warehouse) is a distinction without a difference. Notably, an owner that chooses to place metal that has been loaded-out back on warrant would be subject to going to the back of the line in the prevailing queue in the event it decided to subsequently cancel that warrant.

These off-warrant transactions complied with LME rules. In particular, the LME rules track long-standing principles of commercial law in regard to whether metal is counted as being part of a warehouse operator’s inventory. At the moment the warehouse operator relinquishes control and is discharged of further responsibility (i.e., risk of loss) with respect to metal, the metal is no longer counted as part of the operator’s inventory. It is at this moment that particular metal transitions from “on-warrant” status to “off-warrant” status. Consistent with conditions under which Metro provides warehousing services, this occurs once the metal has been loaded “free on truck” or “free on carrier.”¹² The act of loading the metal on a truck or train results in the warehouse operator’s release of possession and risk of loss which concludes the operator’s right to charge LME rent.

The metal at issue was loaded by Metro at the owner’s instructions onto a truck, the operator of which issued a bill of lading, and was then moved to another location at the owner’s direction. LME rules not only required that Metro follow the owner’s instructions regarding the disposition of its metal, but also provided that metal removed in this fashion counted against daily load-out requirements. LME rules do not distinguish whether the metal removed from a warehouse is moved across the country, across the city, or across the street and there is no reason they should. Any metal that is removed from a warehouse at the owner’s direction becomes subject to an issued bill of lading and is properly deemed to have been loaded-out.¹³ Notably, the LME published a consultation on November 7, 2014 in which it proposes for the first time to include in its rules a new definition of the term load out. The proposed definition includes a new requirement to effectuate the load out of metal, which is that after the metal has been removed from the warehouse and become subject to a bill of lading it be delivered to a destination other than a warehouse of the same operator in the same location.

It is important to note that the off-warrant transactions did not involve Metro favoring one customer relative to another or disregarding the LME’s bedrock principle of first in time, first in right with respect to queue position. In circumstances where the customer that was party to an off-warrant transaction elected to place the metal back on warrant in consideration of an incentive, that customer would return to the back of the queue upon any subsequent cancellation.

¹² These terms are defined by the International Chamber of Commerce, commonly referred to as “Incoterms®.” The current Incoterm for “free on truck” or “free on carrier” is “free carrier (FCA).”

Finally, and most importantly, these “off-warrant” transactions had no impact on the all-in-price of aluminum paid by users and consumers.

E. INCENTIVES PAID BY METRO TO ATTRACT METAL WERE COMPLETELY PROPER; METRO HAS LOADED OUT SIGNIFICANT VOLUMES OF METAL

Under the LME system, accredited warehouses publish their standard rent and FOT charges annually. LME warehouse operators offer incentives and discounts from published rates in order to compete for storage business against other LME and non-LME storage alternatives. Like other warehouse operators, Metro has offered incentives to customers to induce them to store their aluminum in its warehouses.

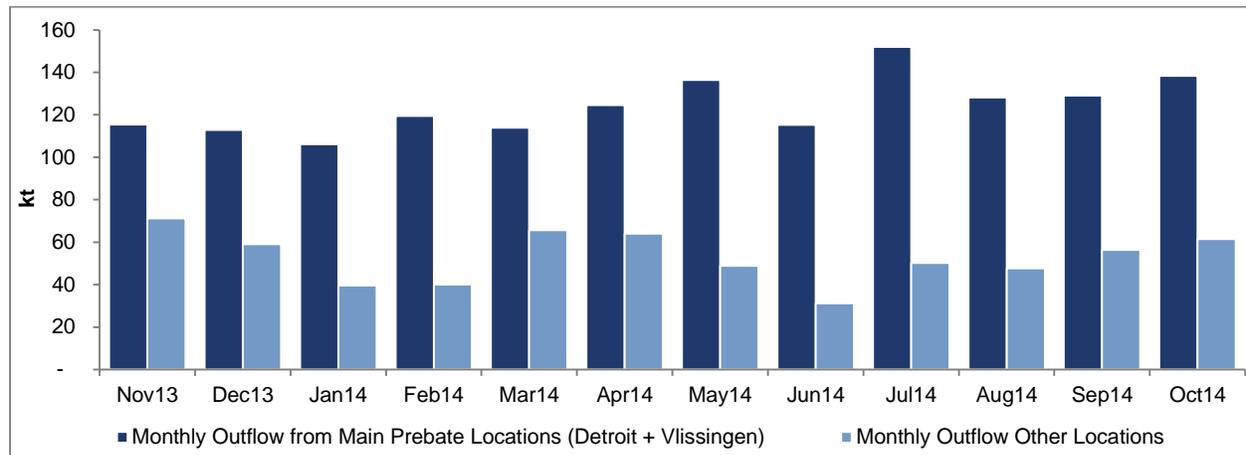
Metal warehousing is a globally competitive business. In order to compete, warehouse operators typically offer one of two types of inducements to potential customers. Operators may offer an up-front payment or “prebate” on future rent collections to customers who place metal on warrant in its warehouses. In other instances, operators offer discounted rent to customers who agreed to store their metal for specific durations. In the event the customer who receives such a discount elects to remove its metal before the agreed term, the customer would pay a “break fee” to compensate the warehouse for the lost revenue relative to its expectation at the time it agreed to the discount. One may analogize these incentives to those offered by landlords, such as offering one-month’s free rent to attract a tenant, or reducing rent for a tenant who signs a long-term lease.

Metro has offered both types of these incentives, consistent with industry practice. In all such instances, the inducements that Metro has offered have been the product of arm’s-length negotiations with the customer. Other warehouse companies provided the same or similar forms of incentives.

The operators that tend to offer the “prebate” form of incentive are those that have a meaningful inventory position. These operators have a greater degree of confidence that they will be able to earn back upfront incentives paid even in circumstances where the metal a customer deposits is withdrawn immediately after the deposit is made. The reason for this is that the operator assumes that the warrants relating to its entire inventory may be cancelled on any given day and regards each ton of inventory (whether newly delivered or otherwise) as being fungible. On the other hand, operators with a lower inventory position tend to offer discounts to LME published rents rather than “prebate” incentives.

Two consequences flow from this: First, the prebate locations are those whose warrants tend to be delivered against LME long positions. Second, the prebate locations are those that tend to load out the most metal. In fact, over the last 12 months, 1.5 million tons of aluminum have been loaded out from Detroit and Vlissingen, while only 600,000 tons aluminum have been loaded out from all other locations combined. A primary reason for this is that the customers who receive discounted rent deals benefit from those deals only to the extent that they maintain their metal with the warehouse operator.

Exhibit N: Load-out in Prebate vs Other Locations (kt)



LME rules permit the inducements such as prebates and discounted rent deals. That said, clause 9.3.1 of the LME Warehouse Agreement states

The proper functioning of the market through the liquidity and elasticity of stocks of metal under Warrant should not be artificially or otherwise constrained by Warehouses giving exceptional inducements or imposing unreasonable charges for depositing or withdrawing metals, nor by Warehouses delaying unreasonably the receipt or dispatch of metal, save where unavoidable due to force majeure.

The LME’s purpose in adopting this clause was to ensure that the flow of material into and out of warehouses is free from exceptional and unreasonable interference. Over the last 12 months, Metro has loaded in 355,000 tons and loaded out 943,000 tons. In November 2013, the LME announced that it was adopting the “Linked-Load-in/Load-out” rule to come into effect from April 2014. The rule was designed to reduce queues by increasing load-out requirements at queue warehouse locations.

The rule was suspended by a UK court in March 2014 based on a procedural challenge brought by Rusal, a large Russian aluminum producer. Notwithstanding that the rule was suspended for a period of time (the UK court’s decision was reversed on appeal on October 8, 2014) Metro voluntarily complied with its requirements. As a result, Metro has loaded out 600,000 more tons of aluminum more than it has loaded in.

Moreover, the rule has affected the willingness of warehouse operators to offer incentives. Metro has offered incentives only with respect to a *de minimis* volume since adhering to the rule’s terms. At the same time, the Midwest Premium has reached record levels, evidencing the fact that the premiums are not being driven by warehouse incentives.

Metro’s incentive payments did not lengthen queues, restrict the availability of metal, or impact prices paid by consumers or other end-users of aluminum. The queues were the result of metal owners’ independent, financially-motivated decisions to remove metal from Metro’s warehouses. Those waiting in the queue at Metro’s Detroit Warehouse were not end-users or consumers of aluminum, and, given surplus market conditions, there has never been a shortage of aluminum. And most importantly, while the length of a queue may impact LME spot prices, it has no impact on the all-in price of aluminum.

F. METRO’S RECEIPT OF “BREAK FEES” WAS APPROPRIATE AND CONSISTENT WITH LME RULES

As noted, Metro offered incentives in the form of discounted rent to metal owners who agreed to store their metal in Metro warehouses for fixed periods of time. As with any such arrangement, Metro negotiated for “break fees” that customers would pay if they broke these agreements, removed their metal prior to conclusion of the agreed-upon storage term, or elected not to roll a lease when otherwise expected to do so. The break fees were a means of compensating Metro for, among other things, rent discounts that Metro provided based on the understanding that the customer would store metal for a period that turned out to be longer than the actual storage period.

The break fees were not typically agreed to in advance, but rather resulted from bilateral, fluid negotiations taking into account various factors. While Metro typically sought to obtain the largest break fees it could, in the end, the metal owner ultimately determined the break fee (if any) it would pay. At times, the calculation of a break fee considered the revenue that a metal owner might obtain from selling its metal on the open market after removing it early from a Metro warehouse. As with the revenue foregone by Metro, the increased revenue obtained by the metal owner as a result of its breach was an appropriate commercial factor to consider in determining a break fee. At times, this additional revenue was described with reference to the “premium,” *i.e.*, a shorthand reference to market prices for metal. At other times, the break fees were calculated on the basis of other factors, such as market conditions, the length of time the metal was stored before being moved out, or the nature of the customer relationship.

Considering a metal owner’s revenue resulting from a breach of a storage agreement or an expectation that the lease will be rolled over does not amount to dealing—directly or indirectly—in LME contracts. On some occasions, customers agreed to pay break fees based roughly on this factor. On other occasions, they did not. In the end, Metro accepted break fees that its customers were willing to pay. It has never brought an action against any customer for terminating a lease early or for not making up for foregone rent as a result of early terminations.

G. METRO AND GOLDMAN SACHS EXCEEDED LME RULES RELATING TO INFORMATION BARRIERS

Consistent with LME rules, Goldman Sachs and Metro are subject to an Information Barrier Policy designed to ensure that commercially sensitive information in Metro’s possession is not shared with Goldman Sachs sales and trading personnel. The policy is comprehensive and exceeds the LME’s requirements. For example, the policy requires that Metro anonymize customer information that it provides to Goldman Sachs’ personnel who sit on Metro’s Board, even though those personnel are not involved in metal sales and trading activities.

Metro and Goldman Sachs employees have complied with the Information Barrier Policy. Regular audits, including by Goldman Sachs’ Compliance Department and third party auditors, have identified no instances in which Metro’s confidential information has been disseminated improperly to Goldman Sachs’ sales or trading personnel.

H. GOLDMAN SACHS' ACQUISITION OF ALUMINUM IN DECEMBER 2012 WAS AN APPROPRIATE MEANS OF BUILDING INVENTORY FOR CLIENTS AND WAS DONE INDEPENDENTLY OF METRO

In December 2012, Goldman Sachs' acquired a substantial position in LME aluminum futures contracts. This position—which was unrelated to Goldman Sachs' ownership and control of Metro—was part of an effort to establish an inventory to meet demand from clients for metal or derivatives based on metal prices.

In 2012, Goldman Sachs sought to enhance its base metals franchise by offering physical aluminum and derivative products based on aluminum prices. In order to achieve this, it was necessary to source inventory. After evaluating potential inventory sources, Goldman Sachs concluded that the most cost-effective means of developing the desired inventory position was through the purchase of LME futures contracts for delivery in December of 2012.¹⁴ Goldman Sachs sized its purchase with a view to purchasing a sufficient number of contracts to yield a certain portion of warrants associated with non-queue locations.

Consequently, in December 2012, Goldman Sachs purchased LME futures contracts, received aluminum warrants in settlement, canceled many of those warrants, and waited for delivery of the metal.

In implementing the transaction, Goldman Sachs sought to obtain a certain portion of the tendered warrants from locations in which the underlying aluminum was immediately deliverable. In the event, it received warrants primarily in warehouses with queues. Goldman Sachs received no preferential treatment from Metro or any other warehouse operator over other warrant holders, but instead waited its turn in the queues for delivery of its aluminum. The aluminum futures contracts that the firm purchased in December 2012 resulted in the delivery of metal during 2014. Goldman Sachs sold the metal directly to various clients and used the metal to hedge financial contracts that it entered into with end-users.

PART III: OTHER ACTIVITIES/INVESTMENTS

A. GOLDMAN SACHS' ACQUISITION OF NUF COR WAS APPROPRIATE

Mining companies and utilities are among the largest clients in Goldman Sachs' commodities intermediation business. In order to provide a broader array of product offerings to these clients, Goldman Sachs expanded its intermediation business in 2009 to include acting as

¹⁴ In order to maintain a balanced position, Goldman Sachs sold an equivalent number of futures contracts for delivery in January 2013. When it received settlement on its December purchase, it used the majority to settle its January sale delivery obligation, entered the queue by cancelling the balance of the warrants and rolled the January sales contracts associated with the balance into the time in the future that corresponded to the expected delivery of aluminum in relation to the cancelled warrants so that it was hedged with respect to the LME component of its price exposure.

a market maker in unenriched uranium and related financial derivatives.¹⁵ The expansion was accomplished through an acquisition of Nufcor International Limited as part of a broader transaction involving the purchase of certain commodity-related businesses from Constellation Energy.

The market for unenriched uranium displays many characteristics that benefit from intermediation. Producers in the mining industry seek to convert production into sales as quickly as possible so as to manage their balance sheet utilization efficiently. Utilities seek to align their consumption with budgeting cycles, which often results in a deferral of purchases. Financial institutions acting as intermediaries bridge this gap by purchasing from producers in anticipation of future demand from consuming utilities.

Prior to acquiring Nufcor, Goldman Sachs conducted extensive due diligence on the entity and the market for unenriched uranium. Since the acquisition, Nufcor's activities have been limited exclusively to buying and selling **unenriched** uranium and entering into related financial derivatives. Of course unenriched uranium does not present the particular concerns identified by Senator Levin in his comment letter on the Federal Reserve's ANPR in regard to enriched uranium in light of the fact that, as the Senator notes, unenriched uranium is not a harmfully radioactive substance.¹⁶

Moreover, the manner in which unenriched uranium is traded further removes entities that have beneficial ownership interests in it from potential liability for damages arising from an unintended release of it, as limited as those damages would be. In the trading market for unenriched uranium ownership interests are manifested solely on the books and records of the relevant depository and not through physical delivery or possession. Transfers of title are effectuated by entries on the books of the depository, similar to how transfers in title are reflected for corporate bonds held at the Depository Trust Company or Euroclear or for unallocated gold held at a bank. Thus, since Goldman's acquisition in 2009 Nufcor has never taken possession of any uranium, let alone transported, delivered it or processed it. In fact, under the terms of the agreements it has with the facilities that act as depositories, Nufcor does not have the right to take possession.

A limited number of entities serve as depositories for uranium. Most are state owned or privatized organizations and each is licensed by and subject to extensive regulatory oversight of the Nuclear Regulatory Commission in the United States or equivalent agencies in Canada and the European Union. These facilities are specifically prohibited from allowing non-licensed entities to take possession of nuclear material.

There are two types of facilities that act as depositories in this market: conversion facilities and enrichment facilities. Conversion facilities convert U308, the natural form of

¹⁵ Nuclear power plants generate approximately 20% of the electricity consumed in the United States. Source: International Atomic Energy Agency.

¹⁶ See Letter to the Board of Governors of the Federal Reserve System dated April 16, 2014, Senator Carl Levin, page 14.

uranium, into UF₆, the form of uranium that is capable of being enriched. Enrichment facilities transform unenriched UF₆ into enriched uranium. Any inadvertent release of unenriched uranium at a conversion or enrichment facility will not present a risk of catastrophic harm. To the extent an enrichment facility is involved in an inadvertent release of enriched uranium (a form of uranium that Nufcor does not own), such a release would constitute a nuclear incident in which case all economic liability is channeled as a matter of law to the facility under the Price Anderson Act or similar laws or conventions in Canada and the European Union. Either way, mere beneficial owners of unenriched uranium such as Nufcor would not face liability.

To be clear, the basis on which Goldman Sachs decided to get comfortable acquiring Nufcor was not based on the notion that the risk of a nuclear incident was remote, and, therefore, the firm's risk of liability would be equally remote. We got comfortable based on the fact that even in the unlikely event of an incident at a facility that held uranium in which Nufcor maintained an ownership interest, Nufcor would have no liability.

Although Nufcor's participation in the market is limited as described above, following Goldman Sachs' acquisition of Nufcor the firm enhanced its insurance program to obtain additional coverage, the cost of which was low in light of the remoteness of any potential risks. The procurement of this policy did not constitute an admission of potential liability, but rather reflects proclivity to protect against risk, no matter how remote, particularly when such protection involves a limited expense.

Nufcor is a distinct legal entity that is one of the subsidiaries through which Goldman Sachs conducts commodity intermediation activities. Given the commonality of clients and Goldman Sachs personnel across our intermediation function, there is no separate client information that is associated with Nufcor's activities that Goldman Sachs uses in other parts of our trading activities. As such, no conflict of interest exists between Nufcor and its clients on the one hand and other parts of Goldman Sachs' Commodities Business on the other.

In particular, any suggestion that Goldman Sachs abuses or takes advantage of client information related to transactions with Nufcor is utterly false. Equally false is the notion that Nufcor somehow benefits from any special access to credit provided by any bank subsidiary of Goldman Sachs. Any loans or extensions of credit by an insured depository subsidiary to Nufcor or any other non-bank affiliate are subject to the requirements of the Federal Reserve Act's Section 23A and 23B with respect to the requirement that the affiliate provide liquid collateral and the transaction be on arm's-length terms.

Although we believe the business is appropriate and the risks associated with the business are limited, Goldman Sachs believes there are fundamental misunderstandings about its uranium-related activities. Consequently, Goldman Sachs has decided to limit Nufcor's activities to meeting and managing current supply obligations, which extend through 2018.

B. GOLDMAN SACHS' ACQUISITION OF CNR WAS A SOUND AND APPROPRIATE INVESTMENT

In 2010 Goldman Sachs invested in a coal mining company called Colombia Natural Resources (CNR). Prior to the acquisition, Goldman Sachs was party to a coal purchase agreement with CNR's predecessor, a Canadian company called Coalcorp Mining. The purchase price of this agreement was fixed in a low coal price environment and when prices subsequently rose the agreement became a liability to Coalcorp. In exchange allowing the

agreement to be assigned to CNR (thereby alleviating Coalcorp of its obligations) and receiving additional consideration, Coalcorp transferred the assets described below to CNR.

Goldman Sachs's investment in CNR provided the opportunity to protect a pre-existing agreement and to allocate capital into a promising emerging economy while benefiting investors in Coalcorp, who approved the transaction.

Goldman Sachs conducted significant due diligence on the investment and its structure to ensure that the investment was a sound and safe one. As part of this, Goldman Sachs confirmed that in the event CNR experienced a loss, for whatever reason, CNR's shareholder would not be at risk for losses exceeding the capital invested. Through our diligence we confirmed that this bedrock principle on which investors rely in allocated capital was robust with respect to CNR.

CNR's primary assets include a concession on an open-pit coal mine called La Francia and an 8% interest in a company that operates a railroad from the mining region to the coast from which coal is exported. In 2012, the owner of the mine adjacent to CNR's operation initiated a process to sell its interest in its mine, an affiliated port company called Rio Cordoba and shares in the aforementioned rail operator. After conducting significant diligence and negotiating terms, Goldman Sachs expanded its investment to include these assets. It is important to emphasize that the mining operations of CNR are limited to open pit mining. Thus, CNR does not face the risks associated with underground/deep shaft mining.

The investment was made in accordance with the merchant banking authority under the Bank Holding Company Act. As is the case with any merchant banking investment, the investment in CNR was non-strategic for Goldman Sachs. The firm made the investment with the knowledge that it would be required to sell it within ten years to comply with merchant banking rules and entered the investment with various exit strategies.

As a merchant banking investment, Goldman Sachs does not conduct routine management of CNR, which has its own management team. Goldman Sachs personnel constitute the board of directors of CNR, which oversees the company and its management in keeping with appropriate standards of corporate governance. Since making the investment, the board of CNR has encouraged management to operate the company in accordance with the highest standards in the industry with regard to the impact of the company on the environment, the local community and the health and safety of the individuals that work in the mining operations. Notable achievements in this regard include:

- CNR received the ISO 14001 and OHSAS 18001, which are the highest international standards for Environmental and Safety Management
- CNR is the **ONLY** operation in the region (and one of only two in all of Colombia) that has both certifications covering mining process
- CNR has better than average loss time incident rate versus US benchmark for mining operations
- CNR has maintained social programs designed to promote sustainability and employment for the local communities and to enhance human rights. Our projects have been recognized for their high quality by the Colombian Government and NGOs alike

CNR has had certain operational challenges. In January 2013 CNR's mining contractor left the mine following a dispute as to whether it had satisfied contractual obligations. The abandonment by the contractor left its employees without work and some of them remained on the mine premises, preventing CNR from resuming mining operations. CNR worked with the Colombian Ministry of Labor and other authorities to resolve the matter. In January 2014, new regulations came into effect prohibiting the use of the Rio Cordoba port without upgrades that would require capital expenditures not supported by prices in the prevailing coal market. CNR is working to implement alternative means of export. CNR's management team has worked to address these and other challenges in a constructive fashion.

Under the terms of its pre-existing purchase agreement, Goldman Sachs in its role as an intermediary has purchased approximately 20% of the output from CNR. In addition, Goldman Sachs also acts as marketing agent for CNR, as it does for other unaffiliated mines and as is common in the mining industry. CNR's management makes the final sales decisions with respect to its sales activities.

CNR's activities represent a *de minimis* amount of global coal production. While Colombia is the third or fourth largest coal producing country, CNR's production capacity represents approximately five percent of Colombia's production and less than one half of one percent of global production.

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