REIMAGINING COMMODITY TRADING

A NEW BREED OF COMMODITY-TRADING TITANS AND DIGITAL CONTENDERS ARE ABOUT TO REORDER THE INDUSTRY

Alexander Franke • Christian Lins • Roland Rechtsteiner • Graham Sharp

Over the past year, the gulf between high-performing commodity traders and weaker players has been widening. Big oil traders such as Trafigura, Glencore, BP, and Shell Trading racked up record trading results. At the same time, smaller oil traders and players in other weaker-performing commodity classes stagnated or declined. Meanwhile, new digital entrants in the power sector signaled sweeping change in the next decade, as legacy commodity traders began to rethink the impact of digitization and a greater degree of electrification on their vaunted trading operations. Apple and Google, for instance, have subsidiaries that are registered energy wholesalers in the United States. The German tech firm United Internet has also launched a new business, aiming to trade and market energy and energy services.

The commodity trading industry is about to be reordered – again. The market is sending a powerful message that the industry will be divided into three divergent camps – a core of sophisticated, competitive, global traders versus smaller traders and new digital contenders. The number of traders will shrink, and survivors will need to proactively rethink traders' roles as digitization radically reshapes the industry.

What has set the consolidation of commodity trading on fast-forward is the fact that the industry's gross margin growth is flat-lining around $44 billion. (See Exhibit 1.) While oil traders stormed ahead, thanks to low, volatile spot prices that created cash-and-carry trading opportunities, traders in other asset classes, such as European power and gas, were hurt as renewable power gained ground and changed the market structure unfavorably.

As a result, as we predicted in last year's report titled "The Industrialization of Commodity Trading," it's the large commodity traders who are thriving in the present lower-margin environment. By streamlining middle- and back-office operations, integrating trading and origination capabilities closely, and taking advantage of analytics provided by artificial intelligence systems, a core set of traders are now world class in speed and flexibility.

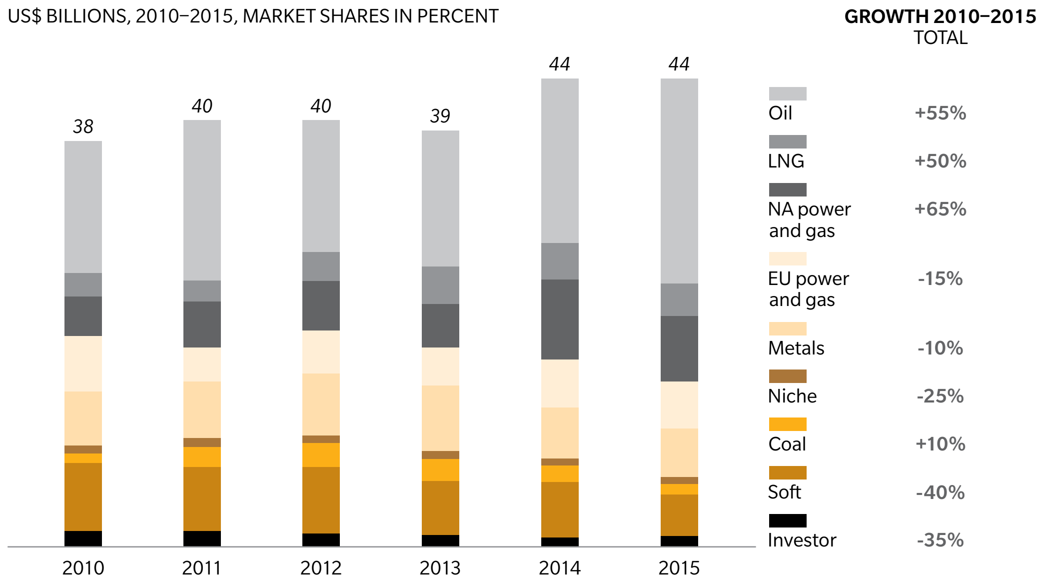
With these gains accelerating, the leaders of the commodity trading pack are raising the bar for the industry. They are setting a new world standard for commodity trading efficiency that will force even the largest players to further expand their trading networks in order to harvest volatility better, while squeezing more efficiency from their operations. At the same time, these trading giants are deepening their relationships with existing customers and rounding out their portfolios by winning over new ones, including the growing number of customers starting to produce electricity. Consider:

$44 billion

The commodity trading industry's total gross margins

EXHIBIT 1: COMMODITY TRADING MARGINS BY THE NUMBERS

THE GROSS MARGINS OF OIL, NATURAL GAS, AND NORTH AMERICAN POWER AND GAS TRADERS ARE IMPROVING, BUT TRADERS IN OTHER ASSET CLASSES ARE STRUGGLING



Notes: Sum of products may not equal to total due to rounding; significance of shift overstated in graphic due to rounding; niche consists of emissions, Asia power and gas and exotics (weather).
Source: Oliver Wyman proprietary data and analysis

QUEST FOR SCALE

The stakes for trading hydrocarbons are rapidly rising. The trading volume of oil and refined products handled by leading independent commodity traders is catching up to the asset-backed majors. Major asset-back traders trade 5 million to 10 million barrels of oil per day. In 2015, independent commodity traders traded more than 4 million barrels per day on average, about 30 percent more than they traded in 2010. Independent traders are also trading much more liquefied natural gas.

Thanks to their current rate of expansion, large independent traders are racking up gross margins comparable to those of large asset-backed majors. To some degree, these greater margins reflect windfall gains, as oil's forward price has been higher than its spot price. But the bigger reason is that large independent traders have built up massive portfolios, which let them take advantage of volatility across interconnected commodity markets and move into new commodities and geographies. (See Exhibit 2.)

The big players will likely only become bigger. In the past, large independent traders had to increase their reach by leasing more tanks and monetizing market volatility with minimal material working constraints. But in 2015, they derived most of their profitability from strategic deals struck with commodity producers that expanded their global reach and diversified their customer base. This development along with new forms of financing – backed by external sponsors, such as private equity or sovereign wealth funds, for both independent traders and their counterparties – gives independent commodity trading leaders the financial might to move into even more new businesses.

COMMERCIAL EFFECTIVENESS

Leading commodity traders are moving toward metamorphosing into leaner, nimbler organizations. Many traders have gone through multiple rounds of workflow streamlining. Now, the industry's leaders want to respond even faster to opportunities and changing market conditions by automating processes and shortening reporting lines. As in banking, commodity traders are exploring using automation to reduce repetitive and time-consuming workloads.

At the same time, retiring senior staff and trading veterans are being replaced by junior staff trained in-house, instead of expensive rainmakers recruited externally. At this point, many junior staff members have gone through in-house graduate and mid-entry level programs for traders and support functions. So commodity traders are increasingly only hiring externally when knowledge of a specific asset class or region is required.

DIGITIZATION

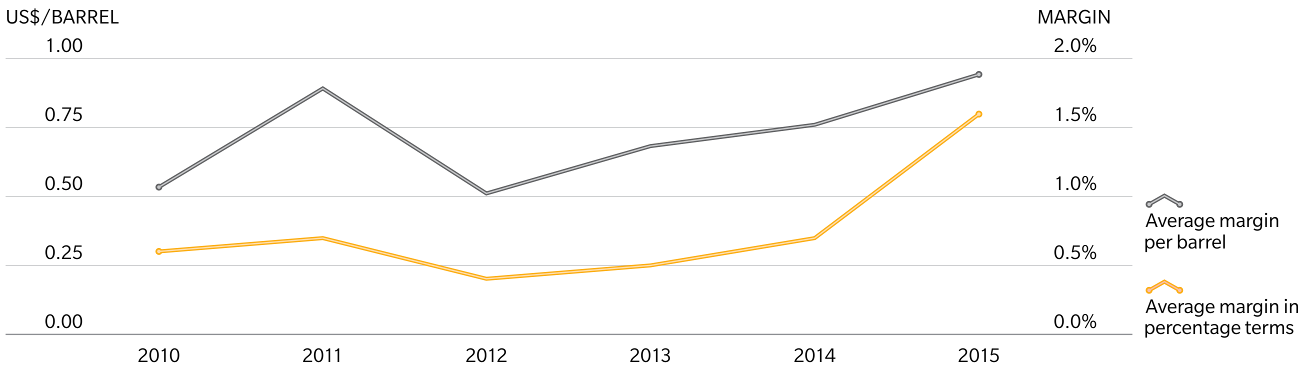
Further down the road, traders foresee a world in which artificially intelligent automation within defined systems will become the norm and make more of the routine decisions. Determining delta-hedging positions, managing fleets of vessels, optimizing credit risk, aggregating internal and external intelligence on cash flows, and even making freight decisions accounting for cargo flows in relation to the market, weather, congestion, and other factors will soon all be assisted by machines as often as by man.

They will also likely experiment with distributed ledger and smart contract technologies to redraw their middle- and back-office operations, following in the footsteps of financial institutions. In spite of the physical nature of commodity trading, a new wave of productivity gains will come from applying intelligent algorithms to tasks such as processing letters of credit, determining warehousing, and chartering vessels.

EXHIBIT 2: DRIVEN BY LOWER OIL PRICES AND FAVORABLE MARKET CONDITIONS OIL PRICES ARE DOWN, BUT TRADING MARGINS ARE UP

GROSS MARGINS PER BARREL OF OIL HAVE TRIPLED OVER THE PAST TWO YEARS, REACHING HIGHER ABSOLUTE LEVELS THAN AT THEIR 2011 PEAK

2010–2015 GROSS MARGIN PER BARREL OF LARGE PHYSICAL OIL AND REFINED PRODUCTS TRADERS



Source: Oliver Wyman analysis based on publicly available data

CUSTOMER CENTRICITY

Major trading houses are refining their approach to customer service so as to capture recurring business from a fragmented base of customers. Commodity traders have focused on offering tailored services such as supplying commodities, managing projects, financing, and operating facilities to companies. In electricity markets, they are beginning to need to figure out new ways to service customers that both produce and consume energy.

To succeed, major traders will have to discover new efficient ways to service a bigger and more fragmented customer base. Traders recognize the need to move beyond arm's-length transactions arranged on Instant Messenger in order to obtain structural positions that will yield stable margins and tradable market intelligence on a regular basis. But offering the same level of service to consumers as they do to companies with larger bulk businesses on a 24/7 basis is very costly. So major traders have begun to deploy new technologies in addition to investing in customer servicing arms.

COMMODITY TRADING BEYOND 2025

As major asset-backed and independent trading houses continue to charge ahead, these global titans will forge a new market structure alongside new digital contenders who will seize electrification and data-driven opportunities to act as catalysts for even more change. (See Exhibit 3.)

The revamping of the industry's incumbents combined with the entrance of these new market participants will force other players to rethink their futures in the commodity trading space. Financial institutions, such as banks, insurance companies, and clearinghouses will need to focus first and foremost on servicing commodity traders. Other traders will also have to specialize and focus on niche segments where they can sustain a competitive advantage or adopt entirely different strategies.

GLOBAL TITANS

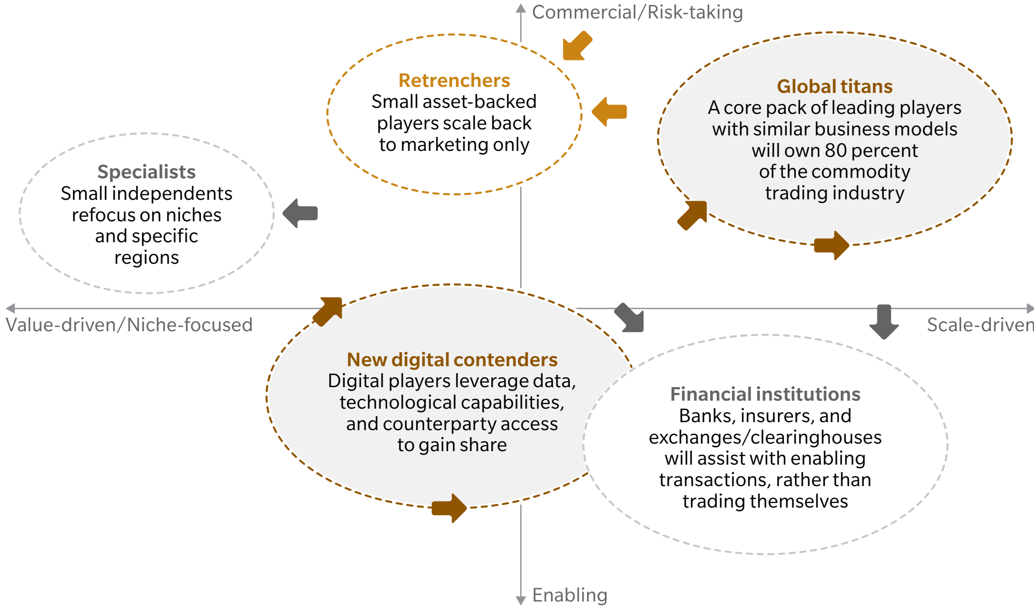
The new breed of a commodity-trading titan will manage both wholly and partly owned assets around the world. And it will deploy digital solutions as much as possible, leading to a bifurcation of human capital in the front office as artificial intelligence assumes a greater role and middle- and back-office operations become much leaner.

Vastly fewer people will be required, compared to today's standards, because artificially intelligent systems will manage the bulk of volume. People will oversee, stress test, and maintain automated risk management systems and physical operations. Even proprietary-trading strategies – both financial and physical – will be semi-automated, with a small team of traders, analysts, and data scientists steering, approving, managing, and programming underlying algorithms. As a result, employees will focus more on structuring non-vanilla deals and managing a multitude of relationships with stakeholders.

Global titans will continue to focus on securing outlets, such as refineries for crude and retail chains for fossil fuels in developing economies such as India and Indonesia. But over time, these giants' asset-backed trading portfolios will expand to become a global energy ecosystem with a multitude of private and public sector stakeholders. Trading and recycling plastics will

EXHIBIT 3: THE COMMODITY TRADING MARKET BEYOND 2025

THE COMMODITY TRADING INDUSTRY WILL FALL INTO THREE DIVERGENT CAMPS: GLOBAL TITANS, NEW DIGITAL CONTENDERS, AND A RANGE OF SMALLER PLAYERS



Source: Oliver Wyman analysis

also play a bigger part of their portfolios as the importance of hydrocarbons in transportation fuels declines in the developed world and more liquid spot and forward markets for olefins and polymers develop.

As they expand into more commodities, these global titans will also begin to look more alike. Services related to renewable generation will contribute materially to revenue. Even players with a non-utility background will sooner or later strike new deals or partnerships to optimize the renewable energy produced by utilities and from rooftops.

They will also begin to manage and originate trades like technology-backed ventures that will involve greater complexity. Bread-and-butter bulk-trading strategies will take a back seat to higher-margin customized businesses. Simpler trading operations and interactions with customers such as fuel-only retail outlets in emerging markets will become a lower priority.

THE NEW NIMBLE DIGITAL CONTENDERS

At the other end of the spectrum, an army of new low-cost digital contenders will own a greater share of the industry's traditional commodity trades. As commodity trading becomes more automated and energy consumption more homogeneous and electric, global online platform providers like Amazon and Alibaba, transportation providers like Uber, information aggregators like Google and Baidu, and even telecom service providers and technology conglomerates will all leverage their own energy consumption.

In an energy-abundant, more electrified world in which market intelligence is at least as important as capital, these players run by a younger generation will outmaneuver many commodity trading veterans unwilling to change. By subsidizing energy with revenue from their many other services and charging subscription fees, these new digital contenders will sell power for much less. They will also monetize valuable proprietary intelligence from customers ranging from households to electric vehicles to companies. By offering reliable power in emerging markets, they will also quickly roll out a large portfolio of digital services, such as advertisement payment services.

SMALLER TRADERS AND BANKS

Other market participants' roles will need to be redefined. Smaller independent traders will need to specialize – and dominate – niche markets such as petrochemicals and renewables.

Meanwhile, banks and other financial institutions will need to refocus on assisting commodity traders. The combination of highly efficient commodity trading goliaths and rising regulatory pressures have raised the stakes to the point that it is close to impossible for banks to return back to physical trading. Instead, they should help existing players by showing the way for them to digitize the financial aspects of their businesses. By pioneering blockchain technologies for commodity finance purposes and smart contracts to facilitate inspections and warehousing, experienced financial institutions can build a partnering platform with existing market participants.

A new wave of productivity gains will come from applying intelligent algorithms to tasks

CONCLUSION

As trading margins in developed markets stagnate, it remains unclear which type of player will determine the energy landscape of the future. Traders that can tailor service offerings to specific markets at vastly different stages of development are the mostly likely to succeed in a new energy ecosystem, especially in new frontier markets. But global titans will have to cope with a greater degree of service complexity than ever before, extending from arranging financing packages from third parties such as private equity, sovereign, and international development funds, to cash-flow-based lending, to waste management services for feedstock for biogas facilities.

It is no longer a question if large commodity traders will have to digitize and transform into players within a greater cross-industry, cross-commodity energy ecosystem, but rather when and who the winners and losers will be. The broad outline for how the commodity trading industry will evolve over the next decade or so is apparent. Now, it's up to commodity trading titans to proactively embrace change and for new digital contenders to discover ways to fit into and profit in an industry with well-established players as it goes through what is likely to be the most profound transition in its history.

Alexander Franke is a Zurich-based partner, **Christian Lins** is a Zurich-based principal, and **Roland Rechtsteiner** is a Zurich-based partner in Oliver Wyman's Energy practice. **Graham Sharp** is a senior advisor to Oliver Wyman. **Ernst Frankl**, a Frankfurt-based partner, and **Adam Perkins**, a London-based engagement manager in Oliver Wyman's Energy practice, contributed to this article.