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IRAS e-Tax Guide

Transfer Pricing Guidelines
Special Topic –
Commodity Marketing and Trading Activities
(First Edition)



Commodity Marketing and Trading Activities

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1 Aim

- 1.1 This e-Tax guide analyses the economic value of taxpayers' commodity marketing and trading activities in Singapore and helps taxpayers to comply with the arm's length principle and transfer pricing documentation requirement when such activities are carried out with their related parties.
- 1.2 This e-Tax guide is relevant to you if you are a business entity incorporated or registered in Singapore and involved in the business of marketing and/or trading in commodities. You will need to read and apply the principles and guidance set out in the IRAS Transfer Pricing Guidelines together with the specific guidance in this e-Tax Guide.
- 1.3 IRAS generally takes guidance from the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations.

2 At a glance

- 2.1 A number of multinational enterprise groups ("MNE groups") set up operations in Singapore to conduct commodity marketing and trading activities. Proximity to key markets and depth of the trading market in Singapore are often cited as the key reasons to base such operations in Singapore.
- 2.2 Commodity marketing and trading activities involve not just buying and selling commodities, but a wide spectrum of activities, such as sourcing, collecting real time market intelligence, managing logistics, optimising physical movement and delivery of cargoes, determining commodity placement strategy, sales and marketing, blending, storage, building and maintaining customer relationships, managing risks and cash flows, financial management, etc.
- 2.3 The precise nature of the activities and their contribution to value can vary widely. Where such activities are conducted between related parties, a thorough examination of the actual functions performed, assets used and risks assumed in each specific related party commodity transaction is important in determining the arm's length transfer price.

3 Glossary

3.1 Commodities

Commodities include natural resources from the extractive industry (usually refer to as hard commodities, such as oil, gas, coal, metals and minerals), agricultural commodities (usually refer to as soft commodities, such as cotton, corn, grains, palm, coffee and sugar), and commodities that are transformed (usually refer to as secondary commodities, such as gasoline and fuel from refining crude oil, liquefied natural gas from cooling natural gas down to liquid form, and aluminium from smelting alumina).

3.2 Commodity marketing/trading entities

Entities (including branches) set up in Singapore to conduct commodity marketing activities or commodity trading activities or both.

3.3 Multinational enterprise group (“MNE group”)

A group of related entities or parties with business establishments in two or more countries.

3.4 Supplier

An entity which owns or produces commodities. It can also be another commodity trading entity.

4 Background

- 4.1 Singapore's history as a trading nation can be traced back to the 14th century. Singapore is a leading hub for international commodity trade as she is at the crossroads of major shipping and communication routes, has one of the world's major oil refining and distribution centres and is in close proximity to producers, suppliers, global trading entities and fast-growing markets. For these reasons, MNE groups (both international and local) choose to base their commodity marketing and trading activities in Singapore.
- 4.2 Entities (including branches) may be set up in Singapore to conduct commodity marketing activities or commodity trading activities or both ("commodity marketing/trading activities"). These entities are referred to as commodity marketing/trading entities in this e-Tax guide. They deal in commodities with their related parties, third parties or both. For example, a commodity marketing/trading entity may buy commodities from related parties and sell them to third or related parties or both; or buy commodities from third parties and sell them to third or related parties or both. Third parties and related parties from whom commodity marketing/trading entities source their commodities, could own or produce commodities or be other commodity trading entities (collectively refer to as "suppliers" in this e-Tax guide).
- 4.3 Commodities include natural resources from the extractive industry (usually refer to as hard commodities, such as oil, gas, coal, metals and minerals), agricultural commodities (usually refer to as soft commodities, such as cotton, corn, grains, palm, coffee and sugar), and commodities that are transformed (usually refer to as secondary commodities, such as gasoline and fuel from refining crude oil, liquefied natural gas from cooling natural gas down to liquid form, and aluminium from smelting alumina).
- 4.4 As commodities are rarely produced and consumed in the same place, at the same time or in the same form, a complex value chain, covering origination, sourcing, refining, processing, storage, shipping, etc., is usually required to get the commodities to the customers. Linking these value chain elements together is commodity marketing and trading which ensure the right commodity turns up in the right place, at the right time and at the most competitive cost.
- 4.5 Commodity marketing/trading entities undertake a wide spectrum of commodity marketing/trading activities with different levels of intensity. They may carry different levels of assets, such as inventory, working capital and intangibles (example, customer relationships and deep market knowledge). They may bear varying types and extent of risks. Their level of functions, assets and risks would depend on the commodity that they deal in and the specific market characteristics for that commodity.

- 4.6 Commodity marketing/trading entities could be organised at varying depths of sophistication. Their operations could be undertaken through different business models. The structures and value chains of MNE groups could also vary according to the commodities the groups deal in and to what makes commercial sense for the groups. Furthermore, the operating principles and techniques for marketing and trading could vary across different commodities and markets.
- 4.7 Examples provided in this e-Tax guide are illustrative and do not capture fully the myriad of arrangements that commodity marketing/trading entities have. This e-Tax guide also does not seek to provide detailed discussion on the operations of the commodity industry. Instead, it recognises the diversity in the commodity marketing/trading activities undertaken by commodity marketing/trading entities operating in Singapore and the wide ranging values they could bring to their businesses and to their MNE groups. The arm's length transfer price should, therefore, take into account such diversities.

5 Commercial objectives of commodity marketing/trading entities¹

Commercial objectives in conducting commodity marketing/trading activities

- 5.1 A commodity marketing/trading entity may act at different levels of the market across a range of customers, suppliers and commodities, or transact with the same party at different times or under different circumstances for various commercial objectives. The following are some examples.
- 5.2 A commodity marketing/trading entity may provide service to a supplier, such as gathering market intelligence through day-to-day contact with customers and public media coverage for a certain commodity in the country, without assuming any risk relating to the commodity. This service, for example, enables the supplier to have an understanding of the local market and to develop that market for its commodity.
- 5.3 A commodity marketing/trading entity may act as an agent on behalf of a supplier in developing and servicing a market by providing detailed market intelligence, building customer contacts, managing customer relationships, having specific but limited authority to act on behalf of the supplier in identifying and negotiating with customers, preparing and reviewing supply contracts, co-ordinating and scheduling delivery, dealing with day-to-day administrative matters necessary to service customers, etc.² It may also perform a marketing role with decision-making capacity similar to a distributor except that it has no obligation to purchase and sell the commodity.² In such instance, its activities may extend beyond those described above to freight and logistics, credit management, demurrage and sale administration, formulation of strategies, etc. The marketing role is particularly important for the highly cyclical nature and capital intensive commodity sector where commitment and certainty of sales is critical to ensure long term production at or close to capacity. The aim of marketing operations is to maximise profit margins on the entire life cycle of the production facility notwithstanding the volatility of market cycles. The commodity marketing/trading entity, whether as an agent or performing marketing role, does not assume risks relating to the commodity, but may be appointed to manage or control those risks. It may assume risks in whole or in part (i.e. shared risks) arising from its functions, such as freight risk.

¹ This section on the commodity industry in Singapore is developed with the support of the Enterprise Singapore (“ESG”).

² Depending on the extent of the entity’s involvement in identifying and negotiating sales opportunities for the supplier, its activities may create a permanent establishment in Singapore for the cross border supplier under Section 2 of the Singapore Income Tax Act or the relevant avoidance of double taxation agreement. Also see section 14 of IRAS Transfer Pricing Guidelines on attribution of profit to permanent establishment.

- 5.4 A commodity marketing/trading entity may operate as a full risk-taking entrepreneur – purchasing commodity from multiple sources (i.e. from the MNE group and/or third parties) and be fully responsible for trading and maintaining market for the commodity on its own account. The commercial objectives for operating as a full risk-taking entrepreneur include balancing the market, aligning diverse suppliers and customers, taking on commitment to allow project investments, acting as central management for shipping, storage and risk management through physical and derivative transactions. Such commodity marketing/trading entity can operate through different business models as illustrated below.

Example 1

The commodity marketing/trading entity could be set up within the MNE group's supply chain that stretches from exploration and production to supply to customers. The commodity marketing/trading entity could optimise returns on the commodity and reduce earnings volatility through various strategies, such as:

- Trading on commodity and arbitraging its position through aggregated regional or global trading book.
- Adopting a portfolio trading strategy (i.e. a portfolio of varied supply sources with different contract pricing terms and contract lengths) for flexibility in managing diverse customers' needs and customer non-performance, in meeting supply and demand imbalances through diversion of cargoes and arbitrage, etc.

The commodity marketing/trading entity could offer producers in the MNE group guaranteed offtake of the production so that producers eliminate the risk in finding customers. It could also offer customers flexible and competitive terms due to its portfolio mix.

Example 2

The commodity marketing/trading entity could be set up as a commodity trading entity to purchase, transport, store and deliver commodities as principal and sell them to customers. It bridges gaps between producers and customers. For example, to bridge quality gap, the commodity marketing/trading entity blends commodities from multiple sources to match customer requirements. It also seeks out arbitrage opportunities to derive trading profits. For example, by sourcing and selling commodities in every region of the world, the commodity marketing/trading entity could optimise the geographical location of its supply and demand to reduce logistical costs. The commodity marketing/trading entity conducts its trading and arbitrage activities with other commodity trading entities within the MNE group on an aggregated regional or global trading book basis. Its trading volumes are usually from

third party producers but the MNE group may have its own production capability to better manage risks and to be more effective in trading.

Example 3

A MNE group produces and trades in multiple commodities from multiple mines in multiple countries around the world. By centralising commodity marketing/trading activities within a commodity marketing/trading entity, the MNE group is able to market its production more effectively through better coordination of supply and customers' demand schedules and more macro oversight and management of risks.

- 5.5 Commodity marketing/trading activities and their value to the MNE groups are further elaborated in section 6 of this e-Tax guide.

Commercial considerations in setting up commodity marketing/trading entities in Singapore

- 5.6 Commodity marketing/trading entities usually choose to locate their operations in places with necessary attributes that facilitate commodity marketing/trading activities. Singapore is a preferred location because of the depth of her trading market and her close proximity to key markets that drive supply and demand for key commodities. Some of the key attributes that Singapore possesses are described in the following paragraphs.

Participant network

- 5.7 Singapore has an extensive network of buyers and sellers and a mix of participants operating under various models and across different commodities. Some examples are marketing for producers, global trading and procurement for customers. Singapore offers a neutral playing field where no single producer or consumer can dominate the market. These factors facilitate price discovery and demand/supply matching and balancing, and allow commodities marketing/trading entities to effectively structure deals, create new commodity trading opportunities and deepen market liquidity.

Human capital

- 5.8 Singapore offers a multi-lingual talent pool that possesses the knowledge and cultural awareness to facilitate marketing and trading with the world's largest growing markets such as China, India and ASEAN. Singapore's high living standards and world-leading infrastructure also attract top decision-makers and leaders from major MNE groups.

Financial and trading infrastructure

- 5.9 As a global financial centre, Singapore offers:
- (a) A wide range of financial institutions for the commodity industry.
 - (b) An efficient foreign exchange clearing, risk management infrastructure and easy access to commodity exchanges.
 - (c) A wide range of price discovery and hedging solutions, such as SICOM rubber futures, SGX iron ore swaps, Platts FOB Straits benchmark and LNG spot index (SGX LNG Index Group).³

Legal and arbitration framework

- 5.10 Singapore offers political and economic stability and a strong legal and arbitration framework. This helps commodity marketing/trading entities to mitigate risk of holding assets out of Singapore and gives them the confidence to invest in key infrastructures and capabilities here.

General business environment

- 5.11 With direct air routes to more than 400 global destinations, Singapore acts as a gateway between East and West and provides a central location for commodity marketing/trading entities to manage relationship with their counterparts across Asia.

Physical flows and infrastructure

- 5.12 Singapore's geographical advantage is also complemented by her logistics capabilities, infrastructure and wide access to processing and storage facilities. With Singapore being a key global shipping centre, material synergies can be achieved when commodity marketing/trading activities are co-located with freight service providers.

Summary of Singapore's key attributes

- 5.13 Figure 1 below summarises the key attributes which are often the commercial considerations for commodity marketing/trading entities choosing to locate their operations in Singapore.

³ SICOM and SGX stand for Singapore Commodity Exchange and Singapore Exchange, respectively.

Figure 1: Singapore's key attributes for commodity marketing/trading entities⁴



1 / Participant network

- // 60-80% of world's top oil and gas, steel and metals, mining and agricultural commodities companies operating within a neutral jurisdiction
- // "The extensive network allows us to capture more market intelligence and optionality"
– *Asian oil marketer*
- // "Asia is the centre of consumption. We want to be closer to our customers."
– *Global leading independent trader*



2 / Human capital pool

- // #1 in Asia for quality of life
- // "A trading business is all about traders. To retain them you need the "soft" factors: culture, lifestyle and quality of living"
– *Asian oil marketer*
- // Culturally adaptive workforce fluent in important business languages English and Mandarin
- // "Singapore has a global and world-class talent pool for commodity trading"
– *Major bulks producer*



3 / Financial and trading infrastructure

- // #2 banking sector in the world with deep regional knowledge and dedicated commodity teams
- // "There's a concentration of service providers ... they are knowledgeable about the commodity and the local market"
– *Asian softs trader*
- // 3rd largest
 - global FX market
 - pool of RMB deposits
 - global USD daily average FX turnover



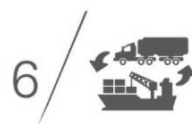
4 / Legal, regulatory and tax framework

- // #4 globally for contract arbitration
- // "Singapore has a competitive edge with its stability"
– *Asian metals trader*
- // #1 in Asia for anti-corruption
- // "Singapore has a robust and transparent institutional framework"
– *Major bulks producer*



5 / General business environment

- // Direct flights to 408 destinations
- // "Being in the centre of Asia benefits communication with our counterparts in Europe and Middle East"
– *Asian LPG player*
- // Over 65% of global base metals and 80% of thermal coal consumption takes place within a 6 hour flight radius



6 / Physical flows and infrastructure

- // 10 million m³ of independent oil storage - the largest amount in Asia
- // "Physical infrastructure is important. We can break bulk in Singapore"
– *Asian natural gas producer*
- // 8 of 46 LME warehouses in Asia
- // "Being close to the tankage helps us manage our supply chain better"
– *Global oil & gas marketer*

⁴ Source: This diagram is obtained from the former IE Singapore's article on Commodity trading hub – Singapore's role and proposition.

6 Transfer pricing for commodity marketing/trading activities

Introduction

- 6.1 A commodity marketing/trading entity must price its transactions with its related parties that involve commodity marketing/trading activities (“related party commodity transactions”) at arm’s length.⁵
- 6.2 This section provides guidance on how to analyse related party commodity transactions and the transfer pricing methods that may be appropriate to determine the arm’s length transfer price. This section does not cover other related party transactions, such as related party loans. The guidance for other related party transactions is provided in the IRAS Transfer Pricing Guidelines.
- 6.3 While this section discusses the functional analysis and selection of transfer pricing methods from the perspective of the commodity marketing/trading entity, this is not to say the contribution of the related party to the transaction is not important. The guidance in this section applies to the related party as it would apply to the commodity marketing/trading entity depending on which is the tested party.

Comparability analysis

- 6.4 Depending on the arrangement between the commodity marketing/trading entity and its related party, a related party commodity transaction can take many forms, such as:
- (a) Market research service relating to certain commodity,
 - (b) Marketing functions relating to certain commodity,
 - (c) Purchase or sale of certain commodity, or
 - (d) Trading certain commodity on an aggregated regional or global trading book basis by commodity trading entities within the MNE group.
- 6.5 Thus, it is important to accurately delineate the actual related party commodity transaction. This requires understanding the commodity industry in which the MNE group operates and establishing the economically relevant characteristics of the transaction which broadly cover:
- (a) The contractual terms of the related party commodity transaction. Where there are material differences between the contractual

⁵ The arm’s length requirement is provided in section 34D of the Income Tax Act.

terms and the actual conduct of the related parties, the actual related party commodity transaction should be determined from the actual conduct.

- (b) The characteristics of commodity sold or purchased, services received or provided, or intangible properties used or transferred under the related party commodity transaction. See guidance below relating to functional analysis.
- (c) The functions performed, assets used and risks assumed by the parties to the related party commodity transaction. See guidance below relating to functional analysis.
- (d) The commercial and economic circumstances of the related parties and of the market in which they operate. These circumstances can have considerable impact on the pricing of the related party commodity transaction. For instance, whether the market is at the stage where supply exceeds demand or vice versa may affect the value of a commodity marketing/trading entity's functions.

Functional analysis

- 6.6 The functional profile of a commodity marketing/trading entity for a related party commodity transaction is dependent on the nature of the commodity marketing/trading activities it performs (taking into account assets used and risks assumed) which in turn define its contribution to value.

Functions performed by and the role of commodity marketing/trading entity

- 6.7 The intensity of functions performed by a commodity marketing/trading entity varies according to the nature of the related party commodity transaction.
- 6.8 Figure 2 gives some examples of commodity marketing/trading activities that may be undertaken in a related party commodity transaction. Figure 3 describes some possible benefits and outcomes from commodity marketing/trading activities.

Figure 2: Some examples of commodity marketing/trading activities

Market intelligence and marketing & trading execution	Business and relationship management	Management of commodity movement	Transaction and risk control
<ul style="list-style-type: none"> • Develop and implement trading, sales and marketing strategies, including optimising sourcing based on demand forecasts • Understand flows, customer demand, supply availability • Identify mismatches in supply/demand • Forecast demand and plan capacity, including margin forecasting based on product differentials • Structure transactions to meet customer and counterparty's needs • Determine optimum pricing • Analyse system to find efficiencies, modelling • Make and execute deal decision 	<ul style="list-style-type: none"> • Establish market coverage (buyer/seller) • Build relationships • Source for suppliers • Manage portfolio, ensure diversification • Make strategic decision based on term versus spot pricing mix, location selection and optionality • Engage in counterparty education and collaboration • Build brands • Source for financing 	<ul style="list-style-type: none"> • Schedule movement of commodities, including ship chartering, vessel management and logistics coordination to minimise demurrage costs • Manage stockpiles and warehousing • Audit and check commodities' quality • Direct transformation of commodities 	<ul style="list-style-type: none"> • Finance flows and stockpiles • Arrange legal documentation and insurance • Determine and implement risk management strategy • Manage credit, price, foreign exchange, volume, title, logistics and all other risks relating to commodity marketing/trading activities

These activities require employees with specialised expertise and investment in people and specialised systems

Figure 3: Some possible outcomes from commodity marketing/trading activities

Right product (Commodity)	Provide access to a commodity or alternate forms/lot sizes to improve reliability or quality Example: Nickel ore is replaced by lower cost nickel pig iron
Right form (Intermediates)	Determine more optimal transformations of the commodity to better match customers' needs or for more value-add Example: Modify output mix from a refinery based on relative product demand Blend products to meet the product specifications and customer's requirements
Right credit (Financing)	Secure cheaper financing sources for production, logistics or consumption points to reduce costs (capital expenditure or working capital) Example: Commodity marketing/trading entity provides prepayments to secure long-term commodity supplies
Right place (Geography)	Determine better geographic matches (beyond just proximity) for origin-destination to improve system efficiency and lower overall cost Example: Ship Australian ore to China and American ore to Europe
Right way (Logistics)	Deploy a better optimal structure for the overall logistics network to serve suppliers/customers more effectively Example: Better use of shipping routes to optimise empty haul backs and therefore, avoid need for additional ships
Right time (Time)	Use more optimal timing for physical delivery (or pick-up) of a commodity based on market pricing or demand expectations Example: Pre-buying LNG and stocking in tanks for high-demand winter seasons
Right conditions	Match the above factors to forecast and changing market conditions so as to manage those factors more effectively in a volatile market environment Example: Commodity marketing/trading entities provide real-time monitoring, possess commercial skills and expertise to react to market volatility, and possess decision making capacity to act on opportunities or to mitigate risk.

6.9 In identifying the functions performed in a related party commodity transaction, it is also relevant to consider the capabilities provided by the commodity marketing/trading entity. Such capabilities include decision-making capacity (for example, developing trading and business strategy, making decisions about assumption and control of risks) and capacity to exercise authority.

Nature of commodity and assets used by commodity marketing/trading entity

6.10 The functions of a commodity marketing/trading entity will also depend on the commodity that it deals in and the specific market characteristics for that commodity.

6.11 Commodity market is subject to supply and demand imbalances, industry cycles, price volatility, etc. The physical nature of the commodities also makes them unique. For example:

- (a) The physical attributes, characteristics and quality could vary for a particular commodity. Customer requirements would likewise vary for a particular commodity and different commodities.
 - (b) Commodities' physical properties may be affected by environmental factors. For example, certain commodity must be kept dry and if contaminated by moisture, it cannot be used for production. It may also have a shelf life and cannot be stored for an indefinite period. The short shelf life and storage requirements make warehousing/storing the commodity challenging.
 - (c) Different commodities may require very different logistics and handling, depending on the physical characteristics and market requirements.
 - (d) Commodities are subject to different pricing. For the same commodity, pricing bases could also vary across different regions in the world.
- 6.12 Depending on the liquidity of a particular commodity market, country political risks, macroeconomic conditions and so on, a commodity marketing/trading entity may have different arrangements in place for different commodities that it trades and the markets it buys from and sells into.
- 6.13 Given the complexity of the commodity market and the characteristics of commodities, specialised expertise is necessary to conduct commodity marketing/trading activities and to manage risks arising from such activities. Such specialised expertise would include knowledge and experience on logistics and financing. The examples below illustrate specialised expertise is essential in optimising the returns on a commodity. More examples are provided in Appendix A.

Example 4

With deep industry specialised knowledge, a commodity marketing/trading entity may:

- Develop both short and long term models to understand the steel industry and where and what type of iron ore inputs will be required in that industry within a country.
- Make comparisons across different iron ore consuming industries and across a broad number of countries in order to determine where it is possible to realise higher premium (or lower discount) for the traded commodity.
- Provide input back into the mining operations to ensure the mine is producing the right quality and quantity of iron ore (within context of the available resource) to market to customers.

As a result, the commodity marketing/trading entity is enabling the mine to best use its expertise to optimise production and plan resource and logistics. This would help in reducing operating costs for the mine and facilitating the objective of achieving maximum value from the resource.

Example 5

The quality and characteristics of commodities from suppliers are variable. To match customer specifications, a commodity marketing/trading entity may blend different grades of refined oil, blend ore with different purity levels from various suppliers, etc. To do so, it needs to identify when and where blending can take place and know where other blending ingredients can be acquired, and thus, meeting customer specifications at competitive prices while enhancing its profitability.

- 6.14 In addition to know-how generated from specialised expertise, a commodity marketing/trading entity may develop valuable marketing intangibles, such as relationships with customers and suppliers. They are key to doing business in commodities markets. When market is not liquid, opportunities are often identified through relationships with customers and suppliers. Strong and trusted relationships provide valuable real time market intelligence of market conditions, global flows and demand-supply patterns. Market intelligence is important to identify deal opportunities, forecast demand and supply, better understand ever-varying customer specifications and requirements, etc. Relationships also facilitate control of risks (see Table 1 and Table 2 under paragraph 6.19).
- 6.15 A commodity marketing/trading entity may also have developed advantageous logistical know-how or software and other tools that it uses in conducting its commodity marketing/trading activities.
- 6.16 The use of various intangibles by the commodity marketing/trading entity must be considered when determining the arm's length transfer price.

Risks assumed by commodity marketing/trading entity

- 6.17 It is necessary to analyse the risks that have been assumed in a related party commodity transaction, the risk control functions performed and the parties that assumed those risks. To assume a risk for transfer pricing purpose, the party must be able to control the risk and has the financial capacity to assume the risk.
- 6.18 Risks cover those generated directly by commodity marketing/trading activities ("internal risks") and those not generated directly by commodity marketing/trading activities ("external risks"). External risks are caused by factors, such as economic environment, political and regulatory events, competition, technological advance, or social and environmental

changes. Such factors could create global supply/demand imbalances. External risks are as relevant as internal risks. The ability of a commodity marketing/trading entity to face, respond to and mitigate external risks is likely to be a necessary condition for the business to remain competitive.

6.19 Table 1 below gives some examples of risks relating to commodity marketing/trading activities. Table 2 gives some examples on how those risks may be controlled.

Table 1: Examples of risks relating to commodity marketing/trading activities

Risks	Description
Excess production risk	<p>This risk may arise when the commodity marketing/trading entity purchases the full production of a commodity. The excess production may also result in the commodity marketing/trading entity being exposed to inventory risk and quality risk arising from stockpiles.</p> <p>The commodity marketing/trading entity may need to find alternative buyers to sell the excess or sell it in the spot market.</p> <p>Where the commodity marketing/trading entity assumes such risk, it bears the consequential losses and costs relating to shipping, storage, damage to the quality of the commodity, etc.</p>
Shortfall production risk	<p>This risk may arise when the commodity marketing/trading entity purchases the full production of a commodity.</p> <p>With the shortfall in production, the commodity marketing/trading entity may not be able to fulfil customers' requirements. It may need to find alternative sources or buy from the spot market to fulfil supply commitments to customers.</p> <p>Where the commodity marketing/trading entity assumes such risk, it bears the consequential losses and costs from failure to supply.</p>
Customer non-performance risk	<p>When customers reject the delivery of the cargoes or do not fulfil their part of the contracts, the commodity marketing/trading entity may need to find alternative buyers to sell the cargoes or sell them in the spot market. Where the commodity marketing/trading entity assumes such risk, it bears the consequential losses and costs.</p>

Risks	Description
Supply risk	This risk may arise from the commodity marketing/trading entity's failure to deliver cargoes to its customers. This risk may be due to shortfall production risk.
Inventory risk	Where the commodity marketing/trading entity takes ownership of the commodity, it may be exposed to inventory risk. Such risk could arise for example, from excess production or customer non-performance.
Price risk	The commodity marketing/trading entity may be exposed to price risk, for example when the quotation period between its customers and supplier is different or when the prices for the customers and supplier are referenced to different indices due to different markets.
Market risk	This risk arises from market changes in supply and demand for a commodity. This risk has similar effect as excess production risk and shortfall production risk.
Credit risk	This risk arises from customers' default or delay in payment. This risk may affect the commodity marketing/trading entity's cash flow.
Contract risk	This risk arises from different contractual terms between customers and supplier. For examples, different international commercial terms ("incoterm"), different quotation period, different threshold for specification variations before penalty clause is invoked, etc.
Logistics risk	The commodity marketing/trading entity may be exposed to the risk of changes in delivery schedules or shipping quote in the contract being different from the actual shipping price it has to pay where the commodity is sold on delivered incoterms.
Demurrage risk	This risk arises from failure to unload from a vessel or load a vessel within the allotted time period, resulting in cost being charged by ship owner or freighter of a ship. This risk may be due to excess production risk or shortfall production risk.
Quality risk	The commodity marketing/trading entity may have uncertainty on the quality of commodity it will receive. This may result in not meeting customers' requirements and possibility of penalty or cargo rejection.

Risks	Description
Foreign exchange risk	A commodity marketing/trading entity may be exposed to foreign exchange risk, for example, when its purchases and sales of a commodity are denominated in different currencies.
External risks	A commodity marketing/trading entity may be exposed to external market events which are beyond its control, such as economic environment, political and regulatory events, competition, technological advance, or social and environmental changes.

Table 2: Example of ways to control risks relating to commodity marketing/trading activities

Controls	Description
Customer base	Expand and diversify customer base to manage excess production or supply.
Customer relationship	Maintain and establish good customer relationship. For example, good customer relationship may facilitate the commodity marketing/trading entity in renegotiating timing of shipments to manage excess or shortfall in production.
Optionality	Provide better optionality to enhance margins, such as satisfying customers order from different sources, customising the cargo to a customer's need, blending different grades of the commodity, blending commodity from different locations, breaking up the cargo into smaller shipments or accepting specific payment terms.
Global supply book	Manage a global supply book to increase flexibility in diverting cargoes, blending varying qualities of commodity, managing excess or shortfall in production, managing changes in demand and supply, etc.
Portfolio trading strategy	Maintain a portfolio of varied supply sources with different contract pricing terms and contract lengths for flexibility to manage diverse customers' needs, customer non-performance, and supply and demand imbalances through diversion of cargoes and arbitrage, etc.
Spot trading	Use spot market strategically.
Market experience	Use experience to obtain best possible outcome given market opportunities. For example, market arbitrage.

Controls	Description
Analytical tools	Use a variety of tools to manage risk. For example, use credit checks prior to sales, enhanced receivables management, insurance products, letters of credit, etc. to control credit risk.
Capability development	<ul style="list-style-type: none"> • Develop in-house shipping and logistics expertise to manage risks relating to freight and optimise freight. • Develop deep portfolio structuring expertise. • Develop functional capabilities in finance and accounting, systems risk management.
Hedging	Employ sophisticated hedging techniques to manage the financial and foreign exchange risks arising from market price volatility.
Price adjustment mechanism	Structure price review clauses in agreements to facilitate price adjustment so that over time the price for commodities supplied under the agreements reflects changes in the market.

6.20 Where a commodity marketing/trading entity contractually assumes certain risks, an analysis of risk assumption is required. Where the analysis indicates that the commodity marketing/trading entity indeed controls those risks and has the financial capacity to assume those risks, those risks will be allocated to the commodity marketing/trading entity for transfer pricing purpose, and thus, it must be compensated appropriately. The compensation will usually be derived from the consequences of being allocated risk, and therefore the commodity marketing/trading entity will be entitled to receive the upside benefits and to incur the downside costs.

Example 6

Commodity marketing/trading entity, Company A, claims that it is exposed to price risk of a commodity. An analysis of risk assumption indicates that:

- Company A buys the commodity from its related party in one market and sells it in other markets. The price volatility among the different pricing bases across various markets exposes Company A to price risk
- Under the terms and conditions between Company A and its related party, the price risk is not passed back to the related party.
- Company A determines the volume sold at different pricing bases. Company A also monitors the price risk closely and hedges the exposures through certain derivatives where appropriate.

- Company A has the expertise to evaluate the risk, makes decisions in relation to the risk, and has the financial capacity to bear the risk.

Based on the analysis, Company A is said to assume price risk.

- 6.21 Analysis of risk assumption should also take into consideration the extent to which any shared risks are borne by the commodity marketing/trading entity. In some instances, the commodity marketing/trading entity and its related party to the related party commodity transaction assume a specific risk. They together control the specific risk and each has the financial capacity to assume their share of the specific risk, then that assumption of risk by each party should be respected.

Example 7

Under an agreement between a commodity marketing/trading entity, Company A, and its related producer, demurrage risk is contractually assumed by both parties. If there is a failure to load or unload a ship, any charge payable to the ship owner is to be shared between Company A and its related producer.

Company A's functions include planning, scheduling, logistics and other functions to ensure ships are available when needed, ships arrive at the right time, there is no idle ship at the port and ships are loaded and discharged within the time agreed, etc. Such functions ensure incidence of demurrage is minimised. Company A also has shipping and long term charter arrangements to fulfil shipping requirement.

The analysis of risk assumption found that:

- Both parties together control the demurrage risk,
- The contractual assumption of demurrage risk is consistent with the conduct of both parties, and
- Each party has the financial capacity to assume its share of the demurrage risk.

Therefore, the assumption of demurrage risk by Company A and its related producer should be respected.

- 6.22 Even if a commodity marketing/trading entity does not assume certain risks associated with the related party commodity transaction, it may perform control functions relating to those risks assumed by the other party to the transaction. Such risk control functions need to be taken into account in determining the appropriate amount of compensation to the commodity marketing/trading entity.

Example 8

The fact is the same as Example 7 in paragraph 6.21 except that under the agreement, only the related producer contractually assumes demurrage risk and bears any charge payable to the ship owner.

The analysis of risk assumption found that:

- Both parties together control the demurrage risk,
- The contractual assumption of demurrage risk by the related producer is consistent with its conduct, and
- The related producer has the financial capacity to assume the demurrage risk.

The fact that Company A also exercises control over the demurrage risk does not affect the assumption of that risk by the related producer. Company A needs to be compensated appropriately for performing risk control functions to mitigate the demurrage risk.

Taking title to commodity

- 6.23 By taking title to a commodity, a commodity marketing/trading entity is able to trade as a principal and optimise returns on the commodity through various strategies (such as adopting a portfolio trading strategy, reallocating and directing commodity to meet the needs of customers, blending, etc.) for its own account. It receives upside benefits and bears downside consequences from assuming various risks. Taking title to the commodity also enables the commodity marketing/trading entity to control those risks (see Table 1 and Table 2 in paragraph 6.19).
- 6.24 Where a commodity marketing/trading entity does not take title to a commodity, its functions and risks may be more limited relative to trading as a principal for the commodity. Notwithstanding that it does not take title to the commodity, a commodity marketing/trading entity performing marketing functions may well contribute significant economic value to its related party such as in building strong customer networks and access to timely customers' information that facilitate the subsequent deal making. See example in paragraph 5.3.
- 6.25 A commodity marketing/trading entity may buy and sell commodity on a back-to-back basis taking "flash title" to the commodity. While this may indicate a limited suite of inventory-related functions and risks in some cases, it may not necessarily be so in other cases. In these other cases, a commodity marketing/trading entity typically enters into a purchasing arrangement with its supplier based on certain terms that are fixed and applied consistently to all its purchases. The commodity marketing/trading entity has a number of choices about the terms on which to sell the commodity to its customers – (1) using contractual terms that have the effect of passing title or risk (or both) to its customer immediately after it receives it, (2) using contractual terms that pass title and risk at a later

point in the supply chain, or (3) applying a range of different contractual terms depending on the commodity, market, shipping terms, etc. If the commodity marketing/trading entity decides to take “flash title” under (1), it is a consequence of how the market operates, the choices available to it or how it manages its exposure to risk, rather than a decision to align the supplier’s and customer’s contractual terms. Consequently, while taking “flash title” may limit the commodity marketing/trading entity’s inventory risk, it is unlikely to have an impact on its functions and assumption of other risks listed in Table 1 in paragraph 6.19.

- 6.26 In summary, taking title to a commodity alone is not a sufficient differentiator to determine the overall functional profile of a commodity marketing/trading entity. A commodity marketing/trading entity could create significant economic value even though it does not take title to the commodity. Likewise, taking “flash title” is not indicative of limited functions and risks. All relevant facts and circumstances need to be taken into account in determining the actual functional profile.

Economic value created by commodity marketing/trading entity

- 6.27 Due consideration must be given to the contribution that the commodity marketing/trading entity makes to the value creation when determining the arm’s length transfer price for a related party commodity transaction as such contribution is defined by the intensity of activities undertaken (taking into account assets used and risks assumed).
- 6.28 Contribution to value creation is not based on the number of functions performed, but the economic significance of those functions in terms of their frequency, nature and value to the respective parties to the transaction that is important.
- 6.29 Contribution to value creation is also not dependent on whether the commodity marketing/trading entity takes title to a commodity. As highlighted in the earlier paragraphs, a commodity marketing/trading entity could create significant economic value even if it does not take title or take “flash title” to the commodity.
- 6.30 See Appendix A for more examples.

Transfer pricing methods to price actual related party commodity transactions

- 6.31 Every effort should be made to price the actual related party commodity transaction as accurately delineated using the five methods set out in the IRAS Transfer Pricing Guidelines:

Traditional transaction methods	Transactional profits methods
1) Comparable uncontrolled price (“CUP”) method 2) Resale price method 3) Cost plus method	4) Transactional profit split method 5) Transactional net margin method (“TNMM”) with profit level indicators (“PLI”) such as: <ul style="list-style-type: none"> • Operating profit margin (“OM”) • Full cost mark-up • Value-added cost mark-up • Berry ratio • Return on asset

6.32 When selecting the most appropriate method to price a related party commodity transaction, besides considering the availability of reliable independent comparables, it is important to consider industry practices. Common industry practices provide indications of what independent parties would have agreed to pay or receive under comparable circumstances.

6.33 It should not be assumed that a commodity marketing/trading entity is always the tested party. If the functional analysis of the actual related party commodity transaction indicates that the related party with which the commodity marketing/trading entity transacts has less complex functional profile, the related party could well be the tested party.

CUP method

6.34 Under the CUP method, the arm’s length price for a related party commodity transaction may be determined by reference to:

- (a) Comparable independent party transactions and
- (b) Comparable independent party arrangements represented by the quoted price (“quoted price CUP”).

Comparable independent party transactions

6.35 Where comparable independent party transactions are available, the prices in such transactions can be used as a reference for establishing the arm’s length price for the related party commodity transaction.

Example 9

- (a) Commission rates in comparable independent party contracts may be used as reference for pricing commodity marketing/trading activities involving an agent or marketing as in the example in paragraph 5.3 depending on the actual facts of the case.

- (b) Certain commodities may be priced based on a percentage of London Metal Exchange (“LME”) price. The percentage of LME in comparable independent party contracts may be used as reference for determining the percentage.

Quoted price CUPs

- 6.36 Quoted price CUP is appropriate where quoted price is widely and routinely used in the ordinary course of business in the industry to negotiate prices for independent party transactions comparable to the related party commodity transaction.⁶ Accordingly, depending on the facts and circumstances of each case, quoted prices can be considered as a reference for pricing the sale or purchase of a commodity between a commodity marketing/trading entity (for example, a full risk-taking entrepreneur described in paragraph 5.4) and its related parties.
- 6.37 The term “quoted price” refers to the price of the commodity in the relevant period obtained in an international or domestic commodity exchange market. A quoted price also includes prices obtained from recognised and transparent price reporting or statistical agencies, independent brokers or from governmental price-setting agencies, where such indexes are used as a reference by independent parties to determine prices in transactions between them.

Example 10

Jet fuel, gasoline and diesel can be priced based on the relevant MOPS indices (i.e. Means of Platts Singapore).

- 6.38 The use of quoted price should also be consistent with the industry norms. For example, in the liquefied natural gas (“LNG”) industry, pricing could be based on a combination of indices (i.e. hybrid contracts or hybrid pricing formula) rather than a single index.

Example 11

- LNG prices in Asia Pacific are commonly indexed to crude oil, example, Japanese Crude Cocktail (“JCC”)
 - LNG supply from North America is indexed to Henry Hub (“HH”), i.e. a gas price
 - LNG Hybrid contracts could involve using a formula that combines gas price with an oil indexed supply. For example, 70% oil-linked + 30% HH-linked
- 6.39 If there are different indices or different ways of using indices to price a commodity in the industry, it is important that the commodity marketing/trading entity explains in detail with proper documentation the

⁶ Reference: Paragraphs 2.18 to 2.22 of OECD 2017 Transfer Pricing Guidelines

basis of using one index or formula over another index or formula to price the commodity.

Comparability adjustments

- 6.40 To apply the CUP method reliably, the economically relevant characteristics of the related party commodity transaction and the independent party transactions or the quoted price CUPs need to be comparable. Where there are differences and such differences materially affect the price of the related party commodity transaction being examined, reasonably accurate comparability adjustments should be made to ensure that the economically relevant characteristics of the transactions are comparable. For commodities, the economically relevant characteristics include physical features and quality of the commodity, and the contractual terms of the related party commodity transaction (such as volumes traded, period of the arrangements, the timing and terms of delivery, transportation, insurance and foreign currency terms).
- 6.41 When applying quoted price CUPs to determine prices of commodity, there must have a high degree of commodity comparability. In contrast, when applying comparable independent party transactions to determine pricing of commodity marketing/trading activities of an agent or relating to marketing (see paragraph 6.35), a greater emphasis is placed on functional comparability than commodity comparability as minor commodity differences are less likely to have a material effect on the pricing as they do on prices of commodity.
- 6.42 Comparability adjustments should be considered only if they are expected to increase the reliability of the results. For example, physical volume of a commodity traded per contract (or transaction) is significantly smaller than the total volume traded on the exchange during the day. If the difference in volume traded has no bearing on the quoted price of the exchange, comparability adjustments need not be made.
- 6.43 Examples of comparability adjustments: ⁷
- (a) Adjustment for product quality or metal content.
 - (b) Adjustment for different incoterms. If the quoted or indexed price is a DAP price⁸ while the incoterm of the related party commodity transaction is FOB⁹, an appropriate shipping and other relevant cost is required to be adjusted against the quoted or indexed price to convert it into a FOB price.

⁷ See examples in paragraphs 2.23 to 2.26 of OECD 2017 Transfer Pricing Guidelines.

⁸ DAP refers to the incoterm, Delivered at Place (previously, DES or Delivered Ex-Ship).

⁹ FOB refers to the incoterm, Free On Board.

- (c) Adjustment for freight. Where the quoted or indexed price assumes a specific physical location of the commodity at point of sale that is different from the actual location of the related party commodity transaction, a freight adjustment may be required for the cost of transportation between the two locations. The adjustment may be based on market reference freight pricing.
- (d) Adjustment for premium or discount. Generally, in transactions conducted by independent parties, a premium or discount may be applied to the quoted price after negotiations. As such, it may be necessary to factor in premium or discount that are consistent with industry norms. They can be based on average market premium earned on third party sales or common margins earned in the industry.

Pricing date for commodity priced by reference to quoted price

- 6.44 Where the price for the sale or purchase of a commodity between a commodity marketing/trading entity and its related parties is determined by reference to the quoted price, a particularly relevant factor is the pricing date. Pricing date refers to the specific time, date or time period (example, a specified range of dates over which an average price is determined) selected by the related parties to determine the price for the commodity.
- 6.45 The commodity marketing/trading entity and its related parties must ensure that they have reliable evidence of the pricing date agreed in the related party commodity transaction at the time the transaction was entered into and it is consistent with their actual conduct or with other facts of the case. Examples of evidence of the pricing date are proposals and acceptances, contracts or other documents setting out the terms of the arrangements.
- 6.46 In the absence of such evidence or the agreed pricing date is inconsistent with actual conduct, the commodity marketing/trading entity and its related parties may face the risk of double taxation arising from tax administrations deeming the pricing date for the related party commodity transaction on the basis of the evidence available to the tax administrations. This may be the date of shipment as evidenced by the bill of lading or equivalent document depending on the means of transport.¹⁰

Difficulties in applying CUP method

- 6.47 Where the comparable independent party transactions produce a range of prices, it may be difficult to arrive at a specific price that is the arm's length price. In such situation, an inter-quartile range or a full range (i.e.

¹⁰ See paragraph 2.22 of OECD 2017 Transfer Pricing Guidelines.

when all the points in the range are equally reliable) established from the prices of such comparable independent party transactions could be applied to determine the arm's length price range for the related party commodity transaction.

- 6.48 It may be difficult to find transactions between independent parties that are similar enough to the related party commodity transaction. This is especially so when agreements relating to commodity transactions are usually highly confidential and are not publicly available. Furthermore, commodity industry generally involves complex inter-company structures and value chains that can make the use of CUP method inappropriate. In such situations or when reasonably accurate adjustment cannot be made without affecting the reliability of the CUP method, it might be necessary to select another less direct method.

Example 12

A commodity marketing/trading entity, Company A, enters into an agreement with a related company, Company B. Under the agreement, Company B is responsible for purchasing Commodity Z, processing it and on selling it to Company A under the strategic direction and within the operating standards and procedures set by Company A. Company B has limited risk while Company A assumes production risk (excess or shortfall production risk), market risk, counterparty risk (supply risk, customer non-performance risk, credit risk, etc.) and inventory risk. Suppose based on a thorough functional analysis, Company B assumes the role of a contract manufacturer.

Although the quoted price is available for Commodity Z, the need to perform numerous or substantial adjustments, for example to account for the risks assumed by Company A, may render using quoted price CUP inappropriate and unreliable.

Based on the general rule for determining tested party, Company B is considered the tested party as it has less complex functional analysis as compared to Company A. Thus, it may be more appropriate to apply a cost plus method or TNMM to determine the arm's length compensation for Company B.

Resale price method

- 6.49 This method is likely to be useful where the related party commodity transaction involves marketing operations and market evidence also shows that independent parties performing comparable operations are remunerated by reference to sales values and earn a percentage discount (or resale price margin or gross margin) from a sale price.
- 6.50 The commission rates available in comparable independent party contracts (i.e. CUPs) can be considered as a reference for determining

the appropriate percentage discount. The percentage discount can also be determined based on internal comparables or external comparables obtained from commercial databases.

- 6.51 To the extent that the percentage discount could be reliably determined based on internal or external comparables, in the absence of CUPs, this approach may be considered for determining the arm's length compensation for a related party commodity transaction that involves an agent and marketing functions (see paragraph 6.35).
- 6.52 Where there are material differences in the related party commodity transaction and independent party transactions that affect the gross margins earned, comparability adjustments should be made to eliminate such differences. For example, the commodity marketing/trading entity, being the tested party, assumes credit risk. However, the comparable CUPs selected do not assume credit risk. Reasonably accurate comparability adjustments should be made to account for the assumption of credit risk. For instance, third party data on pricing credit risk could be used to determine the adjustments.

Cost-based transfer pricing methods

- Cost plus method
- TNMM with full cost mark-up as PLI

- 6.53 Cost-based transfer pricing methods, i.e. cost plus method and TNMM with full cost mark-up as PLI, are appropriate where costs are a relevant indicator of the value of the commodity marketing/trading activities performed by the commodity marketing/trading entity in a related party commodity transaction, taking into account assets used and risks assumed. Typically, the methods are appropriate where the commodity marketing/trading activities are services related which do not require significant specialised expertise, risks assumption or risk control functions relating to the commodity in the related party commodity transaction. For example, the services as in paragraph 5.2 depending on the actual facts of the case. The arm's length mark-up may reliably be based on comparable independent service providers.
- 6.54 Cost-based transfer pricing methods may also be appropriate where the related party commodity transaction involves contract or toll manufacturing. See Example 12 in paragraph 6.48.
- 6.55 The reliability of cost-based transfer pricing methods may be reduced where the commodity marketing/trading activities performed by the commodity marketing/trading entity in a related party commodity transaction involve significant value, including decision-making capacity, capacity to exercise authority, risks assumption or risk control functions. These activities affect business outcomes and thus, their value to the related parties may correlate to revenues or profits rather than costs. Furthermore, if the commodity marketing/trading entity genuinely

assumes risks in the related party commodity transaction when performing these activities, applying cost-based transfer pricing methods may distort the transfer price as the commodity marketing/trading entity is precluded from encountering upside or downside consequences of risk outcomes, both of which should generally be expected of a risk bearing entity. Depending on the facts and circumstances of such cases, CUP method or transactional profit methods may be more appropriate.

Transactional profit split method

6.56 This method is appropriate where:

- (a) The commodity marketing/trading entity's interaction with its related parties and their contributions to the related party commodity transaction are highly inter-related and integrated.
- (b) The commodity marketing/trading entity and its related parties make unique and valuable contributions to the related party commodity transaction.
- (c) The existence of unique intangible assets makes it difficult to find reliable comparables.
- (d) The commodity marketing/trading entity and its related parties share the assumption of one or more of the economically significant risks in relation to the related party commodity transaction or the parties assume the economically significant risks separately but those risks are so closely inter-related or correlated that the playing out of the risks of each party cannot reliably be evaluated separately.

6.57 The transactional profit split method may be appropriate for global trading of commodities by the commodity marketing/trading entity with its related commodity trading entities as in Examples 1 and 2 in paragraph 5.4 depending on the actual fact of the case. This is further illustrated in the example below:

Example 13

A commodity marketing/trading entity, Company A, and its related party, Company B, perform high value commodity trading functions. Company A is located in Asia Pacific and undertakes commodity trading and risk management for the Asia Pacific region. Company B is located in North America and undertakes commodity trading and risk management for the America and Europe region. Both Company A and Company B trade on commodities and arbitrage their positions through an integrated, single, global trading book. Both companies work closely to optimise the global profitability of the book. They also share the assumption of economically significant risks relating to commodity trading. As such,

transactional profit split method can be considered. Traders' remuneration of both companies may be considered an appropriate profit splitting factor if it is directly linked to the profits (or losses) generated from commodity trading.

TNMM with OM as PLI

- 6.58 TNMM with OM as PLI may be appropriate where sales is a relevant indicator of the value of the functions performed by the commodity marketing/trading entity, taking into account assets used and risks assumed. The arm's length OM may reliably be based on comparable independent party transactions.
- 6.59 A commodity marketing/trading entity that conducts commodity trading may purchase commodities from its related parties for resale and sales is one indicator of the value of its trading activities. However, this does not necessary mean TNMM with OM as PLI is appropriate. Relevant considerations include:
- (a) While TNMM with OM as PLI may be appropriate for distribution activities, commodity trading entails more than just distribution activities of buying and selling commodities for its related parties. Commodity trading involves sourcing, collecting real time market intelligence, managing logistics, optimising physical movement and delivery of cargoes, determining commodity placement strategy, sales and marketing, blending, storage, building and maintaining customer relationships, managing risks and cash flows, financial management, etc. Such activities are carried out with the objective of optimising returns on the commodities for the business and require specialised expertise. This method is, therefore, unlikely to be reliable if the commodity marketing/trading entity makes valuable contributions from its commodity trading with know-how generated from specialised expertise.
 - (b) Where the commodity marketing/trading entity undertakes risk-taking entrepreneurial activities, it assumes and takes on the upside and downside consequences of risks arising from its activities and bears the financial and other consequences. Applying TNMM with OM as PLI may preclude the commodity marketing/trading entity from receiving upside benefits and incurring downside costs, both of which should generally be expected of a risk bearing entity.
 - (c) Where the commodity marketing/trading entity undertaking commodity trading has a complex functional analysis, it may be difficult to identify reliable comparables or may entail numerous or substantial adjustments to the comparables rendering TNMM method with OM as PLI inappropriate and unreliable.

- 6.60 Considering the above, TNMM with OM as PLI is unlikely to be an appropriate method to price valuable contributions and risk-taking entrepreneurial activities in relation to commodity trading.
- 6.61 This method may, however, be considered in cases with limited buy-sell activities and risks.

Example 14

A commodity marketing/trading entity, Company A, buys commodity from related producers for sale to third parties on a back-to-back basis taking “flash title” to the commodity. It conducts limited buy-sell activities, such as identifying and negotiating sales opportunities and determining sales volume and prices. It assumes limited inventory risk, price risk and credit risk. As sales is a relevant indicator of the value of the functions performed by Company A, TNMM with OM as PLI may be considered to be an appropriate transfer pricing method where comparable independent party transactions are available.

- 6.62 TNMM with OM as PLI may afford a practical solution to otherwise insoluble transfer pricing problems when used sensibly with appropriate adjustments to comparable independent party transactions to account for differences.

Example 15

A commodity marketing/trading entity, Company A, buys commodity from related producers for sale to third parties. It undertakes sales and marketing activities (such as collating and analysing market intelligence, maintaining customer databases, developing market strategy and sales plan, analysing customer demand, etc.) and coordinates freight and logistics. Company A bears the obligation to purchase all output from the related producers and assumes freight risk, credit risk, customer non-performance risk and limited price and foreign exchange risks. The functional analysis indicates that Company A’s activities add value over and above limited buy-sell activities.

TNMM with OM as PLI may afford a practical solution if comparable independent party transactions are available and reasonably accurate adjustments can be made. Suppose in this example, it is possible to identify broadly comparable independent party transactions performing similar functions and assuming similar risks as Company A and supplying similar commodity as between Company A and the related producers.

As Company A performs higher value-add functions and assumes higher risks than the independent party transactions (example, in relation to Company A’s obligation to purchase all output from the related

producers), comparability adjustments are necessary to obtain reliable results.

If reasonably accurate comparability adjustments cannot be made without affecting the reliability of the analysis, an OM range may be considered to mitigate the level of inaccuracy of the adjustment to some extent. Consideration is then required to determine where within the OM range Company A would be expected to fall.

TNMM with Berry ratio and value-added cost mark-up as PLI

- 6.63 Berry ratio (i.e. the ratio of gross profit to operating expenses) is effectively a cost-based PLI. The considerations for appropriateness of cost-based transfer pricing methods set out in the earlier paragraphs apply equally to the application of Berry ratio.
- 6.64 Section 5 of IRAS Transfer Pricing Guidelines limits the use of Berry ratio, for example to cases where the following circumstances in a particular transaction are present:
- (a) The taxpayer acts as an intermediary purchasing goods from related parties and on-selling them to other related parties;
 - (b) The taxpayer does not perform any value-added functions other than distribution relating to the products distributed;
 - (c) The value of the functions performed by the taxpayer is not affected by the value of products distributed;
 - (d) There is a direct link between operating expenses and gross profits; and
 - (e) The taxpayer does not employ any intangibles in the particular transaction.
- 6.65 Essentially, Berry ratio relies on the presumption that the value of the functions performed is proportional to the operating expenses and not to sales. For instance, Berry ratio may be appropriate in a situation where the commodity marketing/trading entity buys commodity from related parties for resale to other related parties under back-to-back arrangements taking “flash title”, and it does not bear any risk or perform any value-added functions relating to the commodity other than distributing the commodity. In such situation, operating expenses may be a relevant indicator of the value of the commodity marketing/trading entity’s functions performed.
- 6.66 Like Berry ratio, TNMM with value-added cost mark-up as PLI relies on the presumption that the value of the functions performed is proportional to the operating expenses and not to sales. Thus, the consideration for

applying TNMM with value-added cost mark-up as PLI will be the same as that for Berry ratio.

- 6.67 Where the commodity marketing/trading entity's costs of goods sold are a key driver of its profitability and it has the ability to influence those costs (example, through freight planning, scheduling and logistics functions) or where the commodity marketing/trading entity incurs significant costs in modifying, altering or bringing a commodity to the market, the Berry ratio and value-added cost mark-up become unreliable as PLI.

TNMM with return on asset as PLI

- 6.68 Return on asset can be an appropriate PLI in cases where assets (rather than costs or sales) are a better indicator of the value of the commodity marketing/trading activities carried out in a related party commodity transaction. This method may be appropriate for contract manufacturing activities undertaken in a related party commodity transaction – see Example 12 in paragraph 6.48.

Other methods

- 6.69 If circumstances render another method, other than the above five methods, to be more appropriate to establish the transfer price, the commodity marketing/trading entity may apply that method provided the outcome of that method satisfies the arm's length principle. The commodity marketing/trading entity would need to explain and maintain proper transfer pricing documentation on the reasons for the method being more suitable compared to the above five methods.
- 6.70 IRAS may use any of the five methods or other reasonable basis to evaluate the appropriateness of the method applied by the commodity marketing/trading entity.

Arm's length results of related party commodity transactions

- 6.71 Once the most appropriate transfer pricing method has been selected, it is applied to establish the arm's length price for the related party commodity transaction.
- 6.72 Where independent parties would in comparable circumstances enter into substantially different commercial or financial relations than those between the commodity marketing/trading entity and its related parties, IRAS would determine the arm's length price for the related party commodity transaction based on the commercial or financial relations of those independent parties.
- 6.73 IRAS recognises that a commodity marketing/trading entity and its related parties may have the ability to enter into more varied

arrangements than independent parties. They may also conclude transactions of a specific nature that are not encountered, or are very rarely encountered, between independent parties. They may have done so for sound business reasons. Thus, IRAS would not disregard a related party commodity transaction or replace it with an alternative transaction unless the transaction is commercially irrational.

- 6.74 In the event transfer pricing adjustments are made by IRAS, such adjustments are subject to a surcharge of 5% regardless of whether there is tax payable on the adjustments.¹¹

¹¹ The imposition of surcharge on transfer pricing adjustment made by IRAS is provided in section 34E of the Income Tax Act.

7 Transfer pricing documentation requirement

- 7.1 When a commodity marketing/trading entity meets certain conditions, it is required to prepare transfer pricing documentation (“TP documentation”) for its related party transactions. If it fails to do so, it shall be liable to a fine not exceeding \$10,000.¹² Where a commodity marketing/trading entity is not required to prepare TP documentation, IRAS encourages it to document and explain its transfer pricing arrangement.
- 7.2 To comply with the TP documentation requirement, IRAS expects a commodity marketing/trading entity to include the following information in its TP documentation:
- (a) Economic circumstances and business strategies for the related party commodity transaction.
 - (b) Details on how value is generated by the MNE group as a whole, the inter-dependencies of the functions performed by the commodity marketing/trading entity and its related parties with the rest of the group and the contribution that the commodity marketing/trading entity and its related parties make to that value creation.
 - (c) A thorough functional analysis, including a detailed analysis on risks assumption and how those risks are managed and controlled.
 - (d) Reliable evidence (such as actual examples on risk materialisation) and document to support the commodity marketing/trading entity’s assumption and management of risks. It is possible that a commodity marketing/trading entity assumes certain risks but the effect of those risks is not apparent in its financial statements. This may be due to the commodity marketing/trading entity has effectively managed them or the risks have not been played out. In such situation, the commodity marketing/trading entity must be able to explain in detail with documentation how it manages and controls those risks.
 - (e) Price-setting policy, including the appropriate transfer pricing method used, basis of selecting the method, and information and document needed to justify the pricing.
 - (f) Where CUP method is applied, information is needed to justify pricing based on the comparable independent party transactions or quoted price CUPs, as well as any other relevant information, such as:

¹² The TP documentation requirement is provided in section 34F of the Income Tax Act following the rules prescribed in the Income Tax (Transfer Pricing Documentation) Rules 2018.

- Pricing formulas used,
 - Third party end-customer agreements,
 - Premium or discount applied,
 - Supply chain information,
 - Information prepared for non-tax purposes,
 - If there are different indices or different ways of using indices to price a commodity in the industry, detailed explanation with proper documentation on the basis of using one index or formula over another index or formula to price the commodity, and
 - Reliable evidence of the pricing date agreed in the related party commodity transaction at the time the transaction was entered into and it is consistent with their actual conduct or with other facts of the case.
- (g) Comparison of terms and conditions agreed between the commodity marketing/trading entity and its related parties with industry practices and terms and conditions agreed between independent parties, and the basis for the difference.
- (h) Information and document needed to justify the comparability adjustments, such as reasons for the adjustments being considered appropriate, how they were calculated, how they changed the results for each comparable and how the adjustment improves comparability. For example, if comparability adjustment is made for the assumption of risks or performance of certain functions, information and document relating to the basis of such comparability adjustment must be provided.
- 7.3 It is a good practice for the commodity marketing/trading entity to set up a process to establish, monitor and review its transfer prices.

8 Avoiding and resolving transfer pricing dispute

- 8.1 When a commodity marketing/trading entity suffers double taxation from adjustments made by IRAS or a foreign tax authority on the transfer prices of its related party commodity transactions, it can choose to resolve the issue through:
- (a) Taking legal remedies in the jurisdiction in which the transfer pricing adjustments are made; and/ or
 - (b) Requesting IRAS to resolve the double taxation through the Mutual Agreement Procedure (“MAP”).
- 8.2 The commodity marketing/trading entity may also choose to avoid transfer pricing disputes by applying for an Advance Pricing Arrangement (“APA”) for its related party commodity transactions for future years.

9 Contact information

- 9.1 If you wish to seek clarifications on this guide, please email ct_transfer_pricing@iras.gov.sg or contact IRAS, Transfer Pricing and Dispute Resolution Branch, for a discussion.

Appendix A – Illustrations on economic value of commodity marketing/trading activities

Illustration 1
Commodity marketing/trading entity is a risk-taking entrepreneur

This example illustrates how a commodity marketing/trading entity operating as a risk-taking entrepreneur and taking title to the commodity could bring value to the supply chain.

Within an MNE group, a producer in Country X (“Producer X”) produces a commodity (“Commodity A”) which are used by numerous customers in several countries (“Customers”).

Producer X is prone to production issues resulting in irregular production volume. When there is a shortfall in production, Producer X has to source for Commodity A from the spot market or from its competitors to meet Customers’ requirements. When there is excess production, Producer X has to store the excess production or dispose of the excess production in the spot market or to its competitors. In both situations, it bears the consequential losses (example, buying and selling Commodity A at unattractive prices) and costs (example, demurrage charges and storage cost).

Customers require adequate and reliable supply of Commodity A to ensure continued operation of their plants. Their plants cannot be shut down as it will affect the quality of the products and is also costly to restart them. Customers operate their plants with different capabilities and size. Furthermore, with different supply and demand dynamics across their various locations, their requirements for Commodity A are not homogenous.

To address Producer X’s production issue and to ensure the value of Commodity A is maximised, the MNE group set up a commodity marketing/trading entity in Singapore (“SG Entity”) to conduct commodity trading activities.

SG Entity purchases Commodity A from Producer X under an arrangement where:

Producer X	SG Entity
Sells full amount of its production bound for international sales to SG Entity	Commits to acquire the same from Producer X
Secures future sales for its production at an agreed reference price index	Takes title to Commodity A

Producer X	SG Entity
Not required to perform any additional marketing or risk functions	Fully responsible for all marketing, trading and risk functions, including finding customers and maintaining the market for Commodity A

SG Entity sells Commodity A to Customers under a combination of:

- Term agreements – where the grade, volume and delivery schedule for Commodity A is agreed for a period of time (example, one to five years) and there is an agreed reference price index and quotation period to set the price. Each customer would have different terms.
- Spot agreements – where each cargo is offered to the market and the price is fixed, set by tender or set by an agreed reference price index.

The economic value of SG Entity’s activities is illustrated based on three events using the arrangements with Producer X and Customers.

Event 1 – Shortfall in production
<p>Due to some production issue, Producer X is unable to produce Commodity A at a volume that it has forecasted.</p> <p><u>Producer X</u> With the arrangement with SG Entity, Producer X does not have to source for Commodity A to fulfil Customers’ requirements or bear any consequential losses and costs arising from the shortfall in its production.</p> <p><u>Customers</u> With the agreements with SG Entity, Customers are not affected by the shortfall in supply and their operations are not affected.</p> <p><u>SG Entity</u> SG Entity takes on the responsibility of fulfilling Customers’ agreements and manages this risk by developing a term/spot sale strategy to mitigate the risk of over committing Commodity A to Customers. It responds to the performance risk from shortfall in production under the agreements with Producer X and Customers through various ways such as:</p> <ul style="list-style-type: none"> • Develops a term/spot sale strategy to mitigate the risk of over committing Commodity A to Customers. • Diverts the ship which is intended to load Commodity A from Producer X to other use and reschedules a ship to Producer X at a later time. In doing so, SG Entity avoids or minimises demurrage charges.

Event 1 – Shortfall in production

- Finds alternative sources and uses spot market strategically to fulfil Customers’ requirements. For example, with its good relationship with certain customers, SG Entity may renegotiate timing of shipments to these customers and divert the shipments meant for these customers to meet Customers’ requirements.
- Uses its commodity trading knowhow to adapt and respond to unforeseen changes in production (example, reduce spot sales) and to utilise its established position in the market to respond quickly to unplanned changes in production (example, rescheduling deliveries among customers) in order to manage its supply risk to Customers.

SG Entity bears the consequential losses and costs arising from unscheduled purchases and ship diversions.

Economic value of SG Entity’s activities to the group

Producer X is alleviated from the risk and consequential losses and costs arising from the shortfall in its production to focus on its core production-related risks. If Producer X bears the demurrage costs, it benefits from the action by SG Entity to avoid or minimise demurrage charges.

SG Entity maintains trusting relationships with Customers by assuring them of adequate supply of Commodity A under their agreements with SG Entity.

SG Entity maximises the value of the commodity even in distress time:

- By diverting shipment, SG Entity avoids losses from buying Commodity A at unattractive prices.
- By having a term and spot placement strategy and a diversified customer base, SG entity has flexibility to deal with production shortfalls without being exposed to additional risks from purchasing Commodity A from the market.

Event 2 – Excess in production

Producer X produced Commodity A in excess of SG Entity’s agreements with Customers.

Producer X

With the arrangement with SG Entity, Producer X does not have to manage the excess production or bear any consequential losses and costs.

Event 2 – Excess in production

SG Entity

SG Entity takes on the responsibility of selling the excess production. It responds to the excess production or inventory risk and quality risk arising from the excess production through various ways such as:

- Redirects ship to Producer X to avert a stock pile situation. In doing so, SG Entity saves on storage costs for the excess production and addresses Producer X's storage constraints.
- Uses its diverse and geographically differentiated customer base and the spot market to strategically sell the excess production. For example, through its relationship with other customers, SG Entity may sell additional shipments to other customers in the spot market. In doing so, SG Entity avoids damage to Commodity A as certain commodities may have a short shelf life.
- Takes advantage of optionality, such as breaking up the excess production into smaller shipments to create sales opportunities to smaller customers.
- Uses its commodity trading knowhow to adapt and respond to unforeseen changes in production and to utilise its established position in the market to respond quickly to unplanned changes in production in order to manage excess production risk.

SG Entity bears the consequential losses and costs arising from unscheduled sales and ship diversions.

Economic value of SG Entity's activities to the group

Producer X is alleviated from the risk and consequential losses and costs from the excess production to focus on its core production-related risks. Producer X benefits from the action by SG Entity to avoid or minimise its storage costs.

SG Entity maximises the value of the commodity even in distress time:

- By diverting shipment, SG Entity avoids losses from selling Commodity A at unattractive prices.
- By regularly trading in the market, both on the purchasing and sales sides, SG Entity is able to buy or sell additional tonnage without causing suspicion in the market that Producer X has production issue. If Producer X sells the excess production, it may raise suspicion within the market that it is under pressure to sell the excess production. This may result in a lower price being negotiated as Producer X may be viewed as in distress.

Event 3 – Customer non-performance

Due to changes in demand for Customers' products, Customers do not require as much Commodity A as produced by Producer X.

Producer X

With the arrangement with SG Entity, Producer X does not have to manage customer non-performance risk or bear any consequential losses and costs

SG Entity

SG Entity takes on the responsibility of dealing with Customers rejecting the shipment and defaulting on their agreements. It responds to customer non-performance risk through various ways such as:

- Performs due diligence of Customers' credit risk to mitigate credit risk.
- Diverts shipment to other customers.
- Takes similar measures as in Event 2 to sell the excess supply.

It bears the consequential losses and costs arising from unscheduled sales and ship diversions.

Economic value of SG Entity's activities to the group

Producer X is alleviated from the risk and consequential losses and costs arising from customer non-performance.

SG Entity maximises the value of the commodity as in Event 2.

Illustration 2
Commodity marketing/trading entity performs marketing functions

This example illustrates how the marketing activities of a commodity marketing/trading entity could bring value to the supply chain even if it does not take title to the commodity.

A producer in Country Y (Producer Y) produces Commodities A and B. Producer Y operates a capital intensive business that requires long term production planning and requires operations to be conducted at or close to capacity to remain viable.

Commodities A and B are the same commodity type but have different quality specifications and may be considered imperfect substitutes for each other. They are bulk commodities and are difficult to store or stockpile in significant quantities. Value of Commodities A and B is, thus, maximised where production is consistent and sold contemporaneously into the market.

Entity Z, a Singapore commodity marketing/trading entity related to Producer Y, conducts marketing activities for Commodities A and B to Customers located in the broader Asian region. Customers purchase Commodities A and B on a delivered basis in the seaborne market. The objective of the marketing activities is to maintain volume throughput for each commodity and concurrently achieve best possible price for each commodity. Entity Z does not take title to the product and as such does not bear inventory risk. Despite not taking title, the remit of Entity Z is to find buyers at an appropriate price for the commodity mix that is produced by Producer Y.

The arrangement between Producer Y and Entity Z is as follows:

Producer Y	Entity Z
Produces Commodities A and B at operational capacity	Commits to obtaining best possible price for production of Commodities A and B in accordance with Producer Y's Production Plan
Enters into contractual agreements for the sale of Commodities A and B	Does not take title to Commodities A and B
Delegates all sales and marketing related functions to Entity Z	Responsible for <ul style="list-style-type: none"> • Developing and maintaining market for Commodities A and B • Developing and maintaining customer relationships • Developing marketing strategy across Commodities A and B and across Customers in various geographical locations

Producer Y	Entity Z
	<ul style="list-style-type: none"> • Analysing pricing dynamics and negotiating prices for Commodities A and B to maximise their value • Ascertaining credit worthiness of Customers • Planning and managing logistics associated with selling a bulk commodity in the seaborne market
<p>Seeks to ensure that where possible price and volume risk, inventory risk, credit risk and logistics risk are managed and mitigated</p>	<p>Responsible for</p> <ul style="list-style-type: none"> • Managing risks directly associated with its marketing functions • Providing recommendations to Producer Y in relation to the price, volume, inventory, credit, and logistics risks

The economic value of Entity Z's activities is illustrated based on three events.

Event 1 – Additional production
<p>Producer Y has increased capacity and production of Commodity A has been increased by 20%.</p> <p>With the additional production of Commodity A, Entity Z must:</p> <ul style="list-style-type: none"> • Identify new customers and/or seek additional sales volumes to existing customers for Commodity A, • Ensure that demand for Commodity B is not compromised, • Ensure credit considerations are not compromised, • Ensure customer relations are maintained, • Maximise price across all commodities, and • Manage the increased volume and complexity of the logistics function associated with increased seaborne sales volumes.

Event 2 – Fall in demand
<p>Weaker economic conditions in key markets have resulted in a decrease in demand for both Commodity A and Commodity B.</p> <p>With the fall in demand for Commodities A and B, Entity Z must:</p> <ul style="list-style-type: none"> • Ensure that throughput of volume and commodity optimisation are maintained while prices in the given market is maintained, and

Event 2 – Fall in demand

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| <ul style="list-style-type: none">• Manage trade-off between maintaining volume and (i) discounted prices, (ii) credit terms, (iii) stockpiling costs and/or (iv) reducing production. |
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Event 3 – Customer non-performance

Weaker economic conditions in key markets have resulted in customer financial stress and Customers not honouring commitments to purchase Commodities A and B.

Entity Z must:

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| <ul style="list-style-type: none">• Manage credit risk while maintaining customer relationships,• Ensure Customers retain the ability to trade out of their difficulties,• Find alternate buyers for Commodities A and B, often at short notice,• Ensure throughput of Commodities A and B, and• Manage the changing logistics requirements through this event. |
|---|

These three events illustrate Entity Z's value-added activities for Producer Y in terms of the following:

- Throughput of volume – shift commodity in market where demand is weakened.
- Price maximisation – ensure that best price achievable is realised.
- Commodity optimisation – ensure the way that Commodities A and B are sold to customers is optimal.
- Credit – ensure Commodities A and B are sold to creditworthy Customers who will not default on payment or delay payment.
- Logistics – ensure that freight is procured effectively and shipping queues are managed efficiently.

Depending on the contractual terms between Entity Z and Producer Y, and Entity Z and Customers, Entity Z could take on a number of risks even if it does not take title to Commodities A and B. For example, inventory, credit and logistic risks could all be taken on by Entity Z. Depending on the risk assumption analysis, Entity Z could either assume these risks or perform risk control functions for these risks.