Competition Commission SINGAPORE

Section 57 of the Competition Act (Cap. 50B)

Grounds of Decision issued by the Competition Commission of Singapore

In relation to the proposed acquisition of ICAP's global wholesale broking business by Tullett Prebon Plc pursuant to section 57 of the Competition Act

18 July 2016

Case number: CCS 400/004/16

Confidential information in the original version of this Decision has been redacted from the published version on the public register. Redacted confidential information in the text of the published version of the Decision is denoted by [✂]

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I. Introduction

The notification

1. On 24 May 2016, Tullett Prebon plc ("TP") and ICAP plc ("ICAP") (collectively referred to as the "Parties") filed a joint notification pursuant to section 57 of the Competition Act (Cap. 50B)(the "Act") for a decision by the Competition Commission of Singapore ("CCS") as to whether the proposed acquisition by TP of ICAP's global wholesale broking business (the "Transaction") will infringe the section 54 prohibition, if carried into effect.

2. In reviewing the Transaction, CCS contacted 17 competitors engaged in the provision of broking services to institutions trading financial and commodity instruments in wholesale Over-the-Counter ("OTC") and exchange based markets such as wholesale Inter-Dealer Brokers ("IDBs")[1] and 28 customers for these broking services. CCS also contacted 6 competitors engaged in the provision of data sales at the wholesale and retail level[2] and 5 customers, comprising of information vendors and end users who acquire pricing data. CCS also engaged the Monetary Authority of Singapore ("MAS") and International Enterprise Singapore ("IE") for information as well as their respective views on the money and commodities broking services in Singapore.

3. Of the third-parties contacted, 29 replied, with 21 third-parties providing substantive responses to CCS's questions. Most customers[3] indicated they have no concerns with the Transaction save in respect of the provision of hybrid broking services. These concerns are related to certain sub-products (i.e. hybrid broking services for Singapore Dollar Interest Rates Swaps ("SGD IRS") and Oil derivatives) for which the Parties may have a competitive advantage.[4] Customers generally stated that they trade multiple products across a variety of wholesale intermediaries or channels, and thus it is generally easy to switch between different brokerage service providers or alternative channels of trading, with the exception of certain niche products. Most customers noted that buyer power is strong and would likely continue to remain so post-Transaction. They are therefore of the view that the Transaction is unlikely to have any major impact for them.[5] Most of the

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[1] Annex 5 of Form M1.
[2] Paragraphs 364 to 365 of Form M1.
[3] [✂]
[4] [✂]
[5] [✂]

competitors have similarly provided feedback that they have no concerns with regard to the Transaction or that the Transaction would have limited effect on them.[6] One concern that was raised by competitors relates to the competitive advantage that the Parties might have in relation to the brokerage of certain sub-products (i.e. SGD IRS and Oil derivatives) and consequently the trading data associated with the brokerage service.[7] These concerns will be addressed in Section VIII (Competition Assessment) below.

4. At the end of the consultation process and after evaluating all the evidence, CCS concludes that the Transaction, if carried into effect, will not infringe section 54 of the Act.

II. The Parties

<u>TP</u>

5. TP is a company incorporated in England and Wales and publicly listed on the London Stock Exchange. TP is the parent entity of the Tullett Prebon group of companies. TP operates in Europe, the Middle East, Africa, North and South America, and Asia Pacific. Its principal offices are in London, New York, New Jersey, Singapore, Hong Kong and Tokyo.[8] TP's business involves the provision of wholesale intermediary or broking services to participants operating in the world's major wholesale OTC and exchange-traded financial and commodity markets. TP offers services in five major product groups: Fixed Income, Interest Rate Derivatives ("IRDs"), Treasury, Equities and Energy & Commodities.[9] TP also has a data sales business which collects, cleanses, collates and distributes real-time and periodic financial trade information generated through its broking activity. In addition, TP is engaged in the risk management services business, which provides clients with post-trade, multi–product matching services platform, known as tpMatch.[10]

6. In Singapore, TP offers wholesale intermediary services in relation to Treasury Products (Spot FX, Forward FX, FX options and Cash Deposits, IRDs (Interest Rate Swaps ("IRS")), and Fixed Income (Repurchase Agreements). TP also offers broking services in relation to Energy & Commodities (Oil, Gas Metals, Freight and Iron Ore). In additional to

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[6] [✂]
[7] Response by [✂]; response by [✂].
[8] Paragraph 45 of Form M1.
[9] Paragraph 43 of Form M1.
[10] Paragraph 44 of Form M1.

wholesale intermediary/broking services, TP is also engaged in the data sales business and tpMatch in Singapore. Singapore is the regional management hub for Asia and the global hub for tpMatch.[11]

7. The registered entities of TP in Singapore are[12]:

    i. Tullett Prebon (Singapore) Limited;
    ii. Tullett Prebon Energy (Singapore) Pte. Limited;
    iii. Prebon Technology Services (Singapore) Pte. Ltd;
    iv. PVM Oil Associates Pte. Limited;
    v. PVM Oil Futures Pte. Limited; and
    vi. Prebon (Singapore) Holding Limited.

8. Global turnover for TP was approximately S$1.673 billion in the financial year ended 31 December 2015. Turnover in Singapore for the same period was approximately S$[✂] million.[13]

<u>ICAP</u>

9. ICAP is a company incorporated in England and Wales and publicly listed on the London Stock Exchange. ICAP is the parent entity of the ICAP group of companies and operates in Europe, the US and Canada, Latin America, the Middle East, Africa and Asia Pacific.[14] ICAP provides electronic execution, broking, risk mitigation, messaging and information services to wholesale market participants. ICAP provides broking services for a wide range of asset classes, including FX, commodities, emerging markets, credit and equities. ICAP also operates a number of electronic platforms in a range of asset classes and instruments; these include EBS Market for spot FX currencies, NDFs and precious metals, BrokerTec for fixed income trading, EBS Treasury, ISDX and i-Swap. ICAP also has a post-trade risk mitigation and information services business which comprises of the following: portfolio risk services business Reset, ReMatch and TriOptima, ICAP transaction processing business Traiana and its information and data sales business. ICAP's data sales business provides real-time, end-of-day and historical data solutions sourced from ICAP.[15]

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[11] Paragraphs 51 to 54 of Form M1.
[12] Paragraph 37 of Form M1.
[13] Paragraph 79 of Form M1.
[14] Paragraph 49 of Form M1.
[15] http://www.icap.com

10. In Singapore, ICAP offers wholesale intermediary services in relation to Treasury Products (Forward FX and Cash Deposits) and IRDs (Interest Rate Swaps).[16] ICAP also offer broking services in relation to Energy & Commodities (Oil, Iron Ore, Coal and Freight). Fusion, an ICAP proprietary platform that provides an all-day Indication of Interest screen in support of the hybrid broking business also operates in Singapore. ICAP also provides data sales in Singapore.[17]

11. The registered entities of ICAP in Singapore are[18]:

    i. ICAP AP (Singapore) Pte. Ltd;
    ii. ICAP Financial Products Pte. Ltd;
    iii. ICAP Energy Ltd (Singapore Branch);
    iv. Noranda Investments Pte. Ltd;
    v. ICAP Management Services Pte. Ltd;
    vi. ICAP Currency Options Pte. Ltd; and
    vii. ICAP Energy Pte. Ltd.

12. Global turnover for ICAP was approximately S$[✂] billion in the fiscal year ended 31 March 2015. Turnover in Singapore for the same period was approximately S$[✂] million.[19]

III. The Transaction

13. The Transaction only involves the global wholesale broking business of ICAP, including Fusion which is ICAP's associated technology portal used to access other online broking portals and platforms, parts of ICAP's associated data sales business, and ICAP's interest in certain joint ventures and associates (together referred to as "IGBB").[20]

14. The IGBB business is managed separately from ICAP's other business by a dedicated management team and is comprised of the following assets[21]:

    a) IGBB's three regionally managed voice and hybrid broking business in EMEA, the Americas and Asia Pacific, which offer wholesale intermediary services in the following major product groups: IRDs,

[16] Paragraph 55 of Form M1.
[17] Paragraphs 56 to 58 of Form M1.
[18] Paragraph 39 of Form M1.
[19] Parties' response to question 10 of CCS RFI dated 30 June 2016.
[20] Paragraph 30 of Form M1.
[21] Paragraph 47 of Form M1.

Treasury, Fixed Income, Energy & Commodities and Equities. In addition to IGBB brokers and associated assets, certain other services which support the hybrid broking business will be transferred to TP pursuant to the Transaction. These include:

i) Fusion: ICAP's e-commerce portal for accessing trading venues, which acts as a front-end service to distribute broker-assisted matching sessions in products with more episodic liquidity; and

ii) ICAP's 40.23% economic interest in i-Swap Limited[22]: ICAP's hybrid electronic trading platform founded in 2010 for OTC IRDs for banks that are clearing members of a recognized clearing house for IRDs.

b) ICAP's related data sales business.

15. The Transaction involves an acquisition by TP of ICAP Global Broking Holdings Limited ("IGBHL") which is the proposed holding company of IGBB.

16. Prior to completion, ICAP will insert a new listed holding company for the ICAP group ("ICAP Newco"). ICAP Newco will become the direct holder of 100% of the issued share capital of both ICAP and IGBHL.

17. On completion, TP will issue shares directly to ICAP Newco shareholders in consideration for the transfer of approximately 64.5% of the shares of IGBHL to TP. Assuming the satisfaction of certain conditions and as is expected, that an option is exercised, TP will issue further new shares to ICAP Newco directly in consideration for the transfer of the remaining 35.5% of IGBHL shares to TP.[23]

18. ICAP Newco, which will not be transferred to TP pursuant to the Transaction, is involved in the provision of a variety of electronic execution, post-trade and information services for wholesale market participants. The products/services that will be retained by ICAP Newco following completion of the Transaction include some electronic trading platforms (e.g. EBS platform for Treasury trades and BrokerTec for Fixed Income trading) and a remaining portion of the data sales business.[24]

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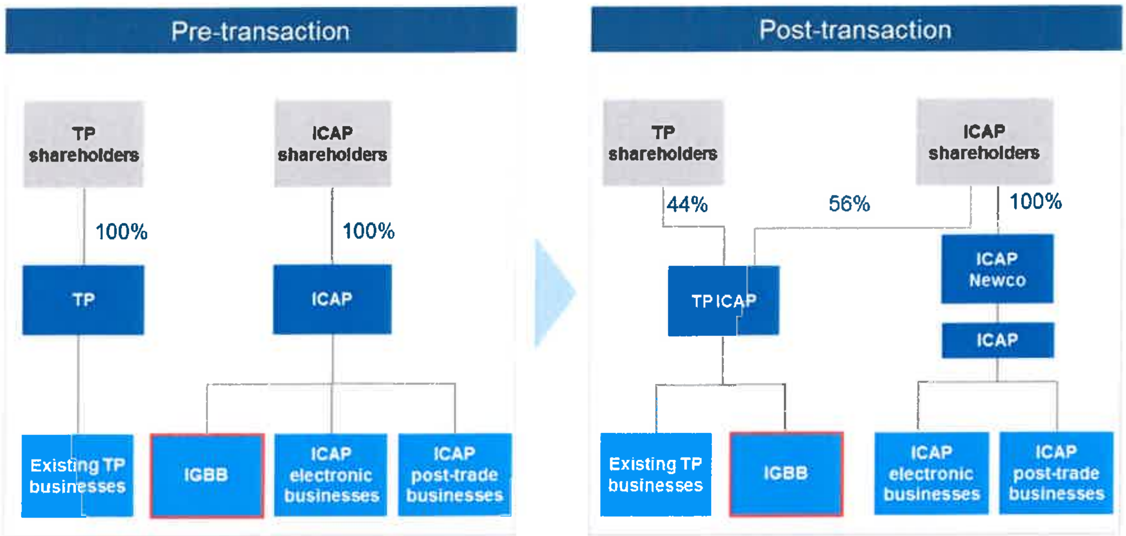
[22] ICAP has sole decisive influence over i-SWAP. Footnote 6 of Form M1.
[23] Paragraphs 31 to 33 of Form M1.
[24] Paragraph 48 of Form M1.

19. The Parties submitted that the completion of the Transaction is expected to take place in Q4 2016,[25] and the Transaction has been notified to competition authorities in three other countries, namely Australia,[26] the United States ("US")[27] and the United Kingdom ("UK").[28]

Minority Shareholding of ICAP Newco in TP

20. Pursuant to the Transaction it was originally intended that ICAP Newco will obtain a direct 19.9% stake in TP (and therefore also IGBB). 36.1% of TP will be owned by ICAP Newco shareholders and 44% will be owned by current TP shareholders.[29] However as of 21 June 2016, TP and ICAP have agreed that ICAP Newco will no longer retain a 19.9% stake in TP and that subject to requisite approvals (including the approval of requisite ICAP shareholders), these shares will now be issued directly to ICAP Newco shareholders such that they will hold approximately 56% of TP share capital on completion.[30] In light of this restructuring, ICAP would no longer hold a minority stake in TP and thus would not be entitled to a director.[31] The updated transaction structure is as follows[32]:

[25] Paragraph 69 of Form M1.
[26] The Australian Competition and Consumer Commission ("ACCC") has completed its informal review and approved the Transaction.
[27] The US Department of Justice ("US DOJ") had concerns under their legislation which prohibits interlocking directorate. (An interlocking directorate is where one person – or an agent of one person or company – sits on the board of directors of two competitors). The specific legislation is Section 8 of the Clayton Act. This led to a restructuring of the Transaction to address US DOJ's concerns. Subsequently, the Parties submitted a revised shareholding structure to CCS on 6 July 2016 and CCS has assessed the Transaction on the basis of the revised structure.
[28] The UK Competition and Markets Authority ("CMA") had raised concerns in relation to the provision of brokering services for oil products in the Europe, the Middle East and Africa ("EMEA"). On 21 June 2016, the Parties offered to sell ICAP's London-based oil trading desks which provided oil broking services to customers in the EMEA, to an up-front purchaser(s). As any decision by CMA on whether to accept undertakings would be limited to oil broking business based out of the London desk for customers in the EMEA region, it is unlikely to have a material impact on CCS's decision, as CCS considers the impact of the Transaction on Singapore.
[29] Paragraph 36 of Form M1.
[30] Section 4 Part 2 of Parties' response to CCS RFI dated 16 June 2016.
[31] Section 3 Part 1 of Parties' response to CCS RFI dated 16 June 2016.
[32] Parties' response to CCS RFI dated 30 June 2016.



21. CCS has assessed the Transaction on the basis of the revised transaction structure.

22. Based on the Parties' submission that TP will acquire direct control over IGBHL, the proposed holding company of IGBB through an acquisition of 100% of the shares in IGBHL, the Transaction constitutes a merger pursuant to section 54(2)(b) of the Act.[33]

IV. Competition Issues

23. As set out in the *CCS Guidelines on the Substantive Assessment of Mergers* ("CCS Merger Guidelines"), CCS is generally of the view that competition concerns are unlikely to arise in a merger situation unless the merged entity will have a market share of 40% or more or the merged entity will have a market share of more than 20% with the post-Transaction CR3[34] at 70% or more.[35]

24. TP and IGBB operate as wholesale intermediaries, principally in the provision of broking services to institutions trading financial and commodity instruments in the world's major wholesale OTC and exchange based markets. For this Transaction, the Parties submitted that with respect to Singapore, they overlap in relation to the provision of broking services to institutions trading in respect of:

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[33] Paragraph 63 of Form M1.
[34] Paragraph 5.14 of the *CCS Merger Guidelines*. CR3 refers to the combined market shares of the three largest firms.
[35] Paragraph 5.15 of the *CCS Merger Guidelines* .

- IRS which forms part of the IRD asset class;
- Forward FX and Cash Deposits, which form part of the Treasury asset class; and
- Oil, which forms part of the Energy & Commodities asset class.[36]

collectively, the "Overlapping Products".

25. In addition to the provision of wholesale broking services, each Party also has an associated data sales business, which provides real-time data feeds ("RTDFs") and periodic pricing information generated through their broking activity both at the wholesale level to downstream aggregators and directly to end-users ("Data Sales Business").

26. TP and ICAP also provide competing post-trade risk mitigation services named tpMatch and Reset respectively. As noted in paragraph 18 above, ICAP Newco will no longer retain a 19.9% stake in TP post-Transaction. Accordingly, CCS has not examined the impact of the transaction in relation to post-trade risk mitigation services.

27. In evaluating the potential impact of the Transaction, CCS considered whether the Transaction will lead to coordinated, non-coordinated and vertical effects that would substantially lessen competition or raise competition concerns in the businesses described above in paragraphs 24 to 25.

V. Counterfactuals

28. As stated in paragraph 4.6 of the *CCS Merger Guidelines*, CCS will, in assessing mergers and applying the Substantial Lessening of Competition ("SLC") test, evaluate the prospects for competition in the future with and without the merger. In which case the competitive situation without the merger is referred to as the "counterfactual".

29. The *CCS Merger Guidelines* also states that in most cases, the best guide to the appropriate counterfactual will be prevailing conditions of competition, as this may provide a reliable indicator of future competition without the merger. However, CCS may need to take into account likely and imminent

[36] For completeness, the Parties have a minimal overlap in respect of iron ore. TP's revenue derived from iron ore in 2015 was less than [✂].

changes in the structure of competition in order to reflect as accurately as possible the nature of rivalry without the merger.[37]

The Parties' submissions

30. The Parties submitted that in the past few years, wholesale financial markets have been subject to structural changes driven by global regulatory reforms. In particular, in the years following the financial crisis of 2008, regulatory authorities have increased oversight and compliance requirements on dealer banks and counterparties for OTC trades and consequently, costs have also increased. This has resulted in a decline in trading activity and therefore also broking activity by IDBs such as the Parties. Further, the regulatory drive towards greater transparency has also supported the growth of electronic intermediation platforms, exchanges and single dealer platforms ("SDPs") which bypass IDBs.[38]

31. The Parties submitted that there has been continuing reductions in their prices (commissions) charged to their customers due to very strong countervailing buyer power. The combination of reduced volumes and lower commissions has resulted in wholesale intermediaries facing declining revenues and margins. The reduction in the profitability of the wholesale intermediary services has placed pressure on intermediaries, leading them to reduce the number of brokers and/or close unsustainable desks.[39]

32. The Parties also submitted that the current shrinking market will see business line closures and industry consolidation in the longer term and that the Transaction should be considered against the counterfactual of this broader industry dynamic.[40]

33. CCS notes the Parties' submission that the industry may be undergoing changes i.e. regulatory overhaul, a global drive to electronic and exchange-like execution venues, and a significant reduction in demand from 'dealer' banks, which may impact the conditions of competition. CCS considers that the appropriate counterfactual at this time is the status quo, absent the anticipated changes that may affect the industry in the future.

VI. Relevant Markets

[37] Paragraph 4.7 of the *CCS Merger Guidelines*.
[38] Paragraph 156 of Form M1.
[39] Paragraphs 157 to 158 of Form M1.
[40] Paragraphs 160 to161 of Form M1.

34. The Parties submitted that the relevant markets for the purpose of this notification are:

a) The market for the provision of wholesale broking services; and
b) The market for the provision of real-time and periodic pricing data.

PROVISION OF WHOLESALE BROKING SERVICES

(A) Overview of wholesale broking services and its associated trading channels

(i) Wholesale trading

35. Wholesale trading is the buying and selling of a range of financial instruments between counterparties active on wholesale financial markets, i.e. banks (sometimes referred to as "bank to bank" or B2B trading). Wholesale trading can take place directly, on exchange, or via wholesale intermediaries.[41]

(ii) Wholesale intermediaries

36. The Parties submitted that they operate as wholesale intermediaries. Wholesale intermediaries facilitate trades between counterparties and provide access to OTC and/or exchange-traded pools of liquidity.[42] The Parties facilitates trades on behalf of a variety of customers through the provision of wholesale traditional voice, electronic and hybrid broking services.[43]

(iii) Financial market participants

37. Financial markets have an array of participants that vary by asset classes. Participants are typically banks. In the area of commodities, participants comprise of corporates and physical trading houses. Subject to regulation, trading may also be all-to-all ("A2A") (meaning that counterparties include a mix of wholesale and "end user" institutions), including banks, hedge funds, corporates, pension funds, small investment houses e.g. swap execution facilities ("SEFs"). Participants in financial markets are generally known as "sell-side" or "buy-side". The "sell-side" is a description commonly used to encompass a number of large global investment banks who stand ready to provide the market with liquidity by being prepared to trade (i.e. buy and sell)

[41] Paragraph 95 of Form M1.
[42] Paragraph 97 of Form M1.
[43] Paragraph 95 of Form M1.

with the buy-side market participants (i.e. they undertake to buy/sell assets at specified prices at all times).[44] The "buy-side" is composed of many individual trading institutions ranging from small investment houses to hedge funds, asset managers, large corporates, non-dealer banks and pension funds. These institutions tend to be the 'end-users' of the financial instrument being traded, and are generally 'liquidity takers' rather than act in a market-making role.[45]

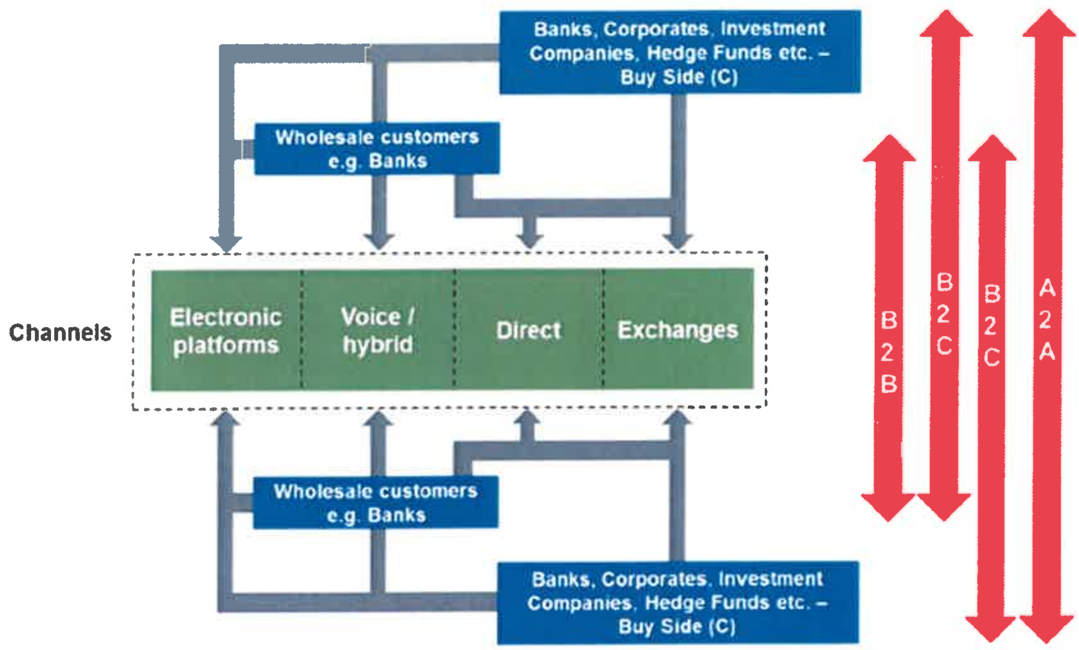
(iv) Trading channels

38. In light of the various market participants described above, trading channels are often described by reference to the participants allowed to trade on them and the role that types of participants are permitted to play (i.e. whether they are able to provide liquidity). The Parties submitted that there are three types of channels in the market (also shown in Figure 1 below), namely:

a) B2B channels that allow trading between bank to bank (whether dealer or non-dealer);
b) B2C channels that allow trading between banks and buy-side institutions; or
c) A2A channels that allow trading between two buy-side participants, a buy-side participant and a bank (e.g. B2C) or between two banks (e.g. B2B).[46]

[44] Paragraphs 101 to 103 of Form M1.
[45] Market-making role generally refers to a firm that stands ready to provide the market with liquidity by being prepared to buy and sell a particular stock on a regular and continuous basis at specified prices. Paragraphs 101 and 104 of Form M1.
[46] Paragraph 110 of Form M1.

Figure 1: Flow of Financial Trades[47]



39. The Parties submitted that there is generally no functional difference between channels that offer B2B, B2C or A2A trading and the distinction has largely been based on the target customer. This is particularly the case with regard to electronic platforms. The primary difference between electronic B2B, B2C and A2A platforms relates to restrictions on the access criteria afforded to different market participants, i.e. the type of participant able to 'make the market' and hence provide liquidity to the platform.[48]

(a) Wholesale traditional voice broking

40. Wholesale traditional voice broking involves the facilitation of trades where brokers relay bids and offers made by customers between each other and to other customers directly by telephone to the relevant counterparty.[49]

(b) Electronic trading platforms

41. Pure electronic trading platforms provide proprietary trading systems through which participants can post prices, enter orders automatically and execute transactions, with bids and offers matched electronically without any

[47] Figure 1 provided in Form M1.
[48] Paragraph 111 of Form M1.
[49] Paragraph 97 of Form M1.

involvement from brokers. Such electronic platforms allow counterparties to directly trade in OTC products and have become increasingly widely-used across all asset classes. Electronic trading offers the advantage of increased transaction speed, discretion, and commission rates that are generally significantly lower than hybrid brokerage, reflecting the fact that trading via electronic platforms is to some extent 'self-service'. Examples of electronic platform providers include Bloomberg and Thomson Reuters.[50]

(c) Hybrid broking

42. Hybrid broking is a combination between traditional voice and electronic broking where voice brokers are supported by electronic platforms displaying historical data, analytics and real-time prices.[51] In hybrid broking, the electronic platforms facilitate customer trading through electronic matching of bids and offers to execute trade or through voice broker support including operating as order management and trade capture systems for both brokers and customers.

43. In this regard, the Parties submitted that wholesale intermediaries with a broking background (including the Parties themselves) have developed their own electronic capability both to support and enhance their traditional voice broking offerings and to provide stand-alone electronic broking capabilities. As all wholesale intermediaries have developed their electronic broking capabilities, the Parties submitted that the distinction between the electronic platforms offered by traditional voice brokers and other wholesale intermediaries has become progressively blurred.[52]

(d) Direct Channel

44. The direct channel allows dealers to directly trade OTC products, thereby eliminating the need for the services of a wholesale intermediary. Such direct trading can either be (i) 'inter-dealer' (i.e. between traders at different dealers/banks); (ii) directly between dealers and buy-side clients (B2C); or (iii) 'intra-dealer' (i.e. between traders at the same bank).[53]

(e) Exchange channel

[50] Paragraphs 116 to 117 of Form M1.
[51] Paragraphs 97 to 98 of Form M1.
[52] Paragraph 118 of Form M1.
[53] Paragraph 119 of Form M1.

45. Exchange trading is generally executed via a central limit order book system ("CLOB") which is a transparent system that matches the highest bid order and the lowest offer order in a given financial instrument. Exchange trading is a fully transparent, real-time, anonymous and low cost execution method and is generally open to all market participants and market making is not restricted to dealers (i.e. exchanges provide an A2A trading platform). Products traded on an exchange generally rely on a broad base of active buyers and sellers and large transaction volumes. The trend toward product standardization creates extra liquidity on exchanges and is increasingly being utilised by dealers. [54]

(B) Regulatory environment

46. Entities that provide broking services in respect of foreign exchange or money markets products to banks in Singapore are required to obtain MAS's approval as an Approved Money Broker ("AMB"). An AMB is subject to a set of conditions, including the requirement to hold shareholders' fund of at least $3 million.[55] Entities providing broking services in respect of futures contracts to any investors in Singapore are, unless exempted, required to hold a Capital Markets Services Licence ("CMSL") under the Securities and Futures Act (Cap. 289). The criteria for grant of the CMSL are stated in the MAS *Guidelines on Criteria for the Grant of a Capital Markets Services Licence.*[56]

47. Entities involved in activities related to commodity trading are subject to licensing under the Commodity Trading Act (Cap. 48A) ("CTA") unless specifically exempted under section 14A of the CTA to the extent specified in the Schedule to the CTA. In the event where licensing under the CTA is required, such entities would need to comply with the requirements of the CTA and Commodity Trading Regulations 2001. IE is the regulatory body responsible for administering the CTA.[57]

(C) Global regulatory reforms

48. The Parties submitted that there has been a global effort by regulators and legislators to implement a slate of regulatory changes that call for, among

[54] Paragraphs 126 to 127 of Form M1.
[55] Response by MAS.
[56] http://www.mas.gov.sg/~/media/MAS/Regulations%20and%20Financial%20Stability/Regulations%20Guidance%20and%20Licensing/Securities%20Futures%20and%20Fund%20Management/IID%20Guidelines/GuidelinesGrant%20of%20CMS%20licence%202014.pdf
[57] Response by IE.

other things, central clearing of certain derivatives, mandatory collateralisation of certain OTC derivatives, greater transparency and reporting of derivatives transactions, mandatory trading of certain derivatives transactions on regulated exchanges or SEFs or other trading venues and the required or increased use of electronic trading system technologies following the 2008 Global Financial Crisis.[58]

49. The Parties submitted that due to the global nature of the products traded by the Parties' customers, the regulatory reforms have impacted local and international financial institutions alike with some firms required to comply with layers of regulation (international and domestic) due to the local and global reach of their trading activities in Singapore.[59]

50. This regulatory drive towards greater transparency has also supported the growth of electronic intermediation platforms, exchanges and SDPs.[60] For instance, Dodd-Frank in the US and MiFID II in the EU encourage the use of electronic platforms to execute certain trades and require that trading platforms should be open and accessible to all participants.[61]

(D) Description of Overlapping Products[62]

(i) IRS

51. IRS forms part of the Interest Rate Derivatives ("IRD") asset class. An IRS is a derivative instrument in which two parties agree to exchange interest rate cash flows, based on a specified notional amount from a fixed rate to a floating rate (or vice versa) or from one floating rate to another. The Parties submitted that the IRS product group comprises fixed/floating swaps,[63] basis swaps, overnight index swaps and forward rate agreements[64].[65] The most basic IRS is "fixed/floating".

(ii) Forward FX

[58] Paragraph 1 of Annex 3 of Form M1.
[59] Paragraph 2 of Annex 3 of Form M1.
[60] Paragraph 156 of Form M1.
[61] Paragraph 115 of Form M1.
[62] Paragraph 130 of Form M1.
[63] Where Party A pays Party B a fixed rate that is agreed upon between the two parties, and Party B pays Party A a floating rate (hence the instrument being a 'swap').
[64] A forward contract on a short-term interest rate between parties that specifies the rate of interest to be paid or received on a specified principal amount beginning at a future start date. The cash flow amount exchanged at maturity is determined by the net difference between the forward rate and the value of short term interest rate on the specified future start date.
[65] Parties' response to question 16 of CCS's RFI dated 16 June 2016.

52. Forward FX forms part of the Treasury asset class. Forward FX is an agreement between two parties to buy one currency against selling another currency at two different value dates, usually a spot price and a forward price. The Parties submitted that the Forward FX product group comprises outright forwards and FX swaps.[66]

(iii) Cash Deposits

53. Cash Deposits form part of the Treasury asset class. Cash Deposits are financial market products where highly liquid securities with short term maturities are traded (e.g. cash, certificates of deposit). The Parties submitted that the Cash Deposits product group comprises certificate of deposits, fixed deposits and T-bills.[67]

(iv) Oil

54. Oil forms part of the Energy & Commodities asset class. Unlike other asset classes where the Parties play a wholesale intermediary role, trading in Energy & Commodity products is predominantly A2A. The Parties provide broking services to a range of customers - mainly, commodity specialists such as oil and gas majors, utilities, and commodity trading houses and corporates, as well as investment banks and other financial institutions. The Parties submitted that the Oil product group comprises crude oil, middle distillates, naphtha and fuel oil.[68]

(a) Product market

55. The Parties have submitted that the relevant market for the purposes of wholesale broking services for the Overlapping Products includes all trading channels (i.e. voice, hybrid and electronic wholesale intermediation, B2C (between banks and buy side institutions) trading activity, direct trades and exchanges).[69] The Parties also submitted that a discrete hybrid inter-dealer broking market no longer exists due in part to the significant regulatory changes described in paragraph 48 above that have changed the trading landscape.[70]

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[66] *Ibid.*
[67] *Ibid.*
[68] *Ibid.*
[69] Paragraph 114 of Form M1.
[70] Paragraph 149 of Form M1.

56. The Parties also referred to decision of the Office of Fair Trading ("OFT") in both *Collins/Fulton*[71] and *ICAP/EBS*[72] in support. In the former, the OFT made the observation that the electronic volumes and the existence of the competitive constraint exercised by the direct channel substantially reduced the merging parties' combined market shares.[73] In the other case, the OFT observed that the volume of trades being voice brokered had eroded rapidly since the introduction of electronic trading.[74]

57. The Parties submitted that from a demand perspective, customers today generally have a wide range of competing trading methods and market participants to choose from when seeking to execute a particular trade. Their choice of trading channel will depend on various factors such as the product involved, nature of transaction and the type of counterparties. Regardless, the Parties noted that all major financial and commodity instruments are traded in more than one trading channel, and typically in all.[75]

58. From a supply side perspective, the Parties submitted that all of the major wholesale intermediaries (from financial data providers to traditional voice brokers) offer customers hybrid and electronic broking options. Further, the Parties submitted that the historical distinction between voice and electronic broking has been further eroded due to traditional voice broking businesses (such as TP and IGBB) having far greater electronic and hybrid capability than they did at the time of the OFT's decision, and traditional electronic platforms (such as Bloomberg and Tradeweb) typically offering either hybrid execution support or electronic trading.[76]

59. In this regard, the Parties argue that functionally there is no difference between the electronic platforms owned by different types of wholesale intermediaries, implying strong supply-side substitutability.[77]

CCS's assessment

60. With regard to the provision of wholesale broking services for the Overlapping Products, CCS notes the Parties' submission that from a demand-side substitution perspective, hybrid broking services for the

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[71] Anticipated acquisition by Collins Stewart Tullett plc of Fulton Prebon Group Holdings ltd, 7 October 2004.
[72] Completed acquisition by ICAP plc of EBS Group Limited, 20 June 2006.
[73] Paragraph 145 of Form M1.
[74] Paragraph 147 of Form M1.
[75] Paragraph 150(i) of Form M1.
[76] In other words, electronic broking with similar functionality to voice broking.
[77] Paragraph 150(ii) of Form M1.

Overlapping Products are generally substitutable with all forms of trading channels.[78]

61. In this regard, third-parties' comments are mixed on the extent of demand-side substitution in relation to broking services provided for the Overlapping Products. Some comments suggest that the substitutability of other trading channels in relation to the wholesale hybrid broking services provided by the Parties are dependent on the complexity of the product being traded; the more complex/structured or customised the product the lower the degree of substitutability between hybrid broking and other trading channels. In relation to simple or vanilla products, the degree of substitutability for trading across all forms of trading channels is high as these are highly liquid and fungible.[79] However, it was pointed out that for complex or odd-dated products or transactions, hybrid broking may be more efficient in order to identify suitable counterparties.[80]

62. CCS notes the Parties' submission that increasingly, the wholesale intermediaries involved in traditional voice broking have developed their own electronic capability to provide hybrid and electronic services.[81] CCS assessed that competition in the hybrid and electronic segments have intensified.

63. However, CCS notes third-parties' comments which suggested that the suitability of hybrid broking could depend on the complexity of the product being traded.[82] [✂] noted that SDPs, exchanges and dealer to customer platforms are not directly comparable to hybrid wholesale broking services.[83] [✂] noted that the traditional voice and hybrid services of IDBs have been replaced in certain sectors by fully electronic non-broker systems for low trade size and high liquidity sub-categories of certain products.[84] Additionally, CCS notes that the majority of third-parties' comments reflected that traditional voice broking and hybrid broking belong to a single market[85] although there might be associated technological costs involved for suppliers to switch from traditional voice broking to supply hybrid services.[86]

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78 Paragraph 150(i) of Form M1.

79 Response by [✂]; response by [✂].

80 Response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂].

81 Paragraph 150(ii) of Form M1.

82 Response by [✂]; response by [✂]; response by [✂]; response by [✂].

83 Response by [✂].

84 Response by [✂].

85 Response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂].

86 Response by [✂]; response by [✂]; response by [✂].

64. From a regulatory perspective, CCS notes that the current regulations in Singapore do not distinguish the types of licence required for the provision of broking services for the Overlapping Products based on the mode of offering. In addition, CCS notes that there are minimal regulations for the Overlapping Products, with the exception of energy and commodities derivatives. CCS notes that there are currently 14 licensed commodity brokers in Singapore.[87] CCS is of the view that current regulations do not pose an undue constraint with regard to the demand-side and supply-side substitutability for the provision of broking services for the Overlapping Products, and if anything, the extent of substitutability is determined by the type and complexity of the product being traded.

65. The information received by CCS suggested that generally there is a high degree of demand side and supply side substitutability across all trading channels in relation to the Overlapping Products concerned. However, complex or bespoke products and/or transactions which are not regularly traded may be more suitably brokered through hybrid services. For the purposes of this assessment, CCS is of the view that although the relevant market may possibly extend to all trading channels, it is unnecessary to conclude on the exact product market definition given that no SLC concerns will arise even in the narrowest possible relevant market (i.e. hybrid broking for each product class). This is due to the existence of sufficient credible competitors post-Transaction and strong countervailing buyer power. These reasons will be elaborated at Section VIII below.

66. In light of the above and given the assessment of competition below, CCS is of the view that the relevant product markets for the purposes of this assessment are, **separately**, the provision of wholesale hybrid broking services for each of the Overlapping Products listed, namely:
   a) IRS;
   b) Forward FX;
   c) Cash Deposits; and
   d) Oil.

(b) <u>Geographic Market</u>

67. The Parties submitted that the relevant geographic market is Singapore. The Parties submitted that although the vast majority of products in the financial

[87] Taken from IE's website. Inclusive of CBL holders eligible to provide broking services for both commodity contracts and spot commodity contracts to retail investors.

trading markets are international in nature, in theory being able to be freely traded across geographical boundaries and time zones, it is the Parties' experience that the majority of business conducted in the Asia Pacific ("APAC") region is 'siloed' by country. There are very limited transactions conducted on an intra-regional basis. The framework agreements and commission rate cards in place with clients relate to Singapore trades and are negotiated at a Singapore level.[88] On the demand side, the Parties submitted that wholesale intermediaries have structured themselves to mirror the structure of their customers. In each region, they have developed relationships with the regional subsidiaries of the global banks as well as the global banks.[89]

CCS's assessment

68. CCS has considered the Parties' submissions regarding the geographic market at paragraph 67 above. CCS notes that third-parties have provided feedback that brokerage services can be provided to and procured from outside of Singapore,[90] citing Hong Kong, Sydney and Tokyo as examples.[91] It was observed that some competition exists among brokers outside of Singapore for customers within Singapore.[92] In this regard, CCS is of the view that the relevant geographic market in respect of brokerage services at the narrowest is Singapore. It is possible that the geographic market may be expanded to include developed trading markets in countries in a similar time zone, such as Tokyo and Sydney. However, given that there are no competition concerns arising from the narrowest geographic market, the case team did not consider this further.

69. On account of the above at paragraph 68, CCS finds it unnecessary to define the relevant product and geographical markets for the purposes of this notification. However, for CCS's competition assessment in the following sections, CCS considered separately, the provision of wholesale hybrid broking services in Singapore for each of the Overlapping Products listed.

DATA SALES BUSINESS FOR REAL-TIME AND PERIODIC PRICING DATA

[88] Paragraph 153 of Form M1.
[89] Paragraph 134 of the Parties' responses to the Commission's comments in relation to Draft Form M1.
[90] Response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂].
[91] Response by [✂].
[92] Response by [✂].

(A) Overview of Data Sales

70. The Parties submitted that pricing data consists of indicative or tradable prices for a wide range of financial instruments from sources including exchanges, dealer banks, brokers and clearing houses; and comprises both real-time information as well as periodic and reference data. Such pricing data is drawn upon by financial professionals and organisations to monitor markets, make effective investment decisions, enable valuation and pre-trade price discovery, manage investment risk and compliance and advise their clients. End-user customers tend to be sophisticated organisations such as global and very large institutions including central banks, financial institutions such as investment banks, traders and broker operations, as well as hedge funds and private equity funds.[93]

71. The Parties explained that pricing data supplied by data sellers takes two main forms[94]:

a) Real-time data feeds ("RTDFs"): Data is distributed to customers in a direct or "raw" format, which customers feed into their own internal applications or portals. In the case of sales to downstream aggregators (such as a Thomson Reuters or Bloomberg terminal), these vendors either integrate RTDFs into end-user retail products or provide the RTDFs to customers to use in their own applications. End-user retail feed products may consolidate multiple raw RTDFs and also provide extra services such as charting and analytics.

b) Packages of periodic data: Data is compiled periodically, for example, end-of-day or intra-day, and distributed to customers as a data package relating to that period.

72. The form of the pricing data supplied is generally driven by its function[95]:

a) Front office end-users involved in the sales and trading of financial instruments and trade execution access RTDFs from a large variety of market sources in undertaking their trading activity. In most cases, the RTDFs received by front office users will have been supplied via a downstream vendor and will be aggregated with other market data in an end user product. They rarely if ever use packages of periodic data.

[93] Paragraph 278 of Form M1.
[94] Paragraph 281 of Form M1.
[95] Paragraph 282 of Form M1.

b) Back/middle office end-users are involved in scrutinising front office trading activity for the purpose of overall risk management and portfolio valuation and management. They may seek to use either RTDFs or packages of periodic data in exercising this function.

73. Data sellers may supply their pricing data to end-users directly or through downstream aggregators. Downstream aggregators use two main distribution models[96]:

a) The royalty model: The data seller contracts with the downstream vendor and, in return for a fee,[97] typically allows the downstream aggregator to integrate the seller's content into its end user products for distribution. The data seller will not receive any fee directly from end-users.[98] The data seller is akin to a traditional wholesaler.

b) The agency model: The data seller contracts directly with the end-user and pays a distribution fee to the downstream vendor to allow the data to be distributed to the end-user through the downstream vendor's end user product.

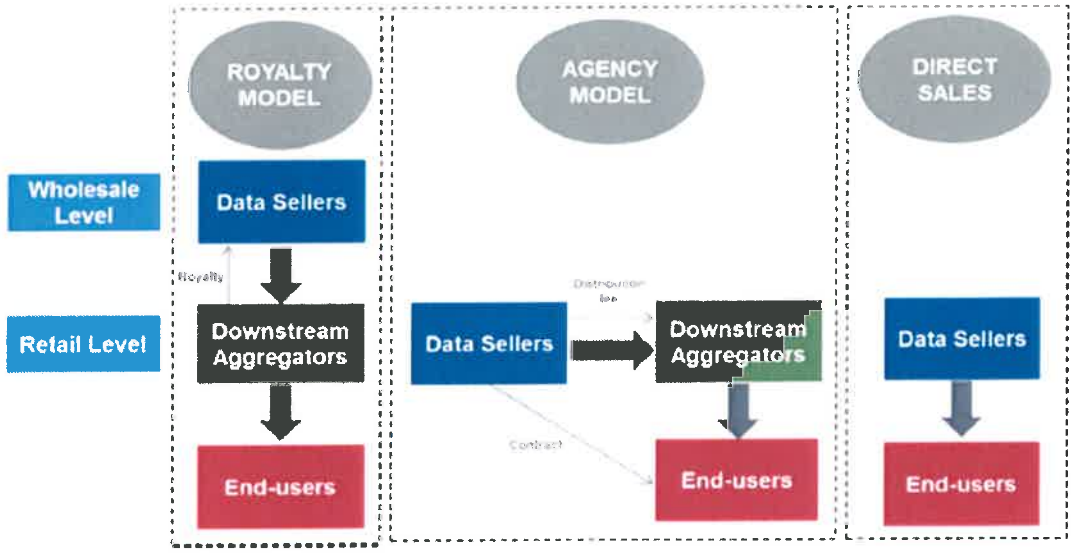
74. Figure 2 below provides a schematic of the three methods of data supply.

[96] Paragraph 283 of Form M1.

[97] The nature of the fee will vary from case to case but may be either a fixed royalty, a variable royalty calculated by reference to end user sales or a combination of both fixed and variable.

[98] However in some cases, a proportion of end-user charges may be passed on to the data seller.

Figure 2: Methods of Data Supply[99]



75. The Parties submitted that downstream aggregators gather pricing data from a number of different sources for integration in their retail products, including exchanges, dealer banks, brokers and clearing houses, with the bulk of the data derived from securities and futures exchanges. Pricing data in respect of OTC products in particular is available from dealers in the form of bilateral OTC data, wholesale or B2C intermediaries (such as Tradeweb and MarketAxess, exchanges and clearing houses.[100]

a) **Product market**

76. The Parties submitted that the data sales market consists of two levels: (i) the wholesale supply of data to downstream aggregators and (ii) the retail supply of data to end-users. The relevant wholesale market includes pricing data from exchanges, dealer banks, brokers, B2C platforms and clearing houses. In making this submission, the Parties cited *Collins/Fulton* where the OFT accepted that the appropriate frame of reference was the "wholesale supply of pricing data" and that the data generated from the merging parties' broking activity faced competition from a range of other sources.[101] As data is sold by downstream aggregators in their retail products, the Parties submitted that the same is also true at the retail level.[102]

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[99] Figure 8 of Form M1.
[100] Paragraph 286 of Form M1.
[101] Collins/Fulton paragraph 21; paragraph 298 of Form M1.
[102] Paragraphs 307 to 308 of Form M1.

77. In this respect, the Parties submitted that TP supplies both RTDFs and packages of periodic data together at: (i) the "wholesale level" to downstream aggregators, such as [✂], [✂] and [✂], and; (ii) the end-user level to entities such as hedge funds and banks. IGBB's data sales business in Singapore is comprised [✂].[103]

78. The Parties further submitted that the relevant wholesale and retail markets for data should not be further delineated by asset class as the supply of data comprise of both RTDFs as well as packages of periodic data.[104]

79. Finally, the Parties also submitted that pricing data generated through a wholesale intermediary will not necessarily horizontally overlap with pricing data generated through another wholesale intermediary's activity. As such, the extent of global desk coverage and product coverage of each wholesale intermediary will vary so that the offering across wholesale intermediaries in Singapore is by no means identical and accordingly the Transaction cannot be capable of leading to any upward pricing pressure in respect of data sales.[105] The Parties cited the European Commission ("EC") cases of *Deutsche Börse/NYSE Euronext*[106] and *Intercontinental Exchange/NYSE Euronext*[107] in support of this position where the EC noted that proprietary data is generated on each parties own platforms and is "by definition the sole provider" of the information. Therefore the EC concluded that there was no horizontal overlap and that "their proprietary data products should be considered complementary".[108]

80. The Parties submitted that there are no specific financial services regulations that apply to TP or ICAP's data sales business.[109]

CCS Assessment

81. CCS notes the Parties' submissions above that the relevant market should be the supply of pricing data from exchanges, dealer banks, brokers, B2C

[103] Paragraph 279 of Form M1.
[104] Paragraph 309 of Form M1.
[105] Paragraph 310 of Form M1.
[106] Case No. COMP/M.6166 Deutsche Borse/NYSE Euronext, 1 February 2012 ("Deutsche Borse/NYSE Euronext").
[107] Case No. COMP/M.6873 Intercontinental Exchange/NYSE Euronext, 24 June 2013 ("Intercontinental Exchange /NYSE Euronext"); paragraphs 299 to 301 of Form M1.
[108] Deutsche Borse/NYSE Euronext paragraphs 151-160; Intercontinental Exchange /NYSE Euronext paragraphs 10-11.
[109] Paragraph 72 of the Parties' responses to the Commission's comments in relation to Draft Form M1.

platforms and clearing houses, without regard to the further subdivision of data supplied by level of distribution, type of data or product/asset class.

82. Third-parties' feedback suggest that there is no distinction between the supply of data at the wholesale and retail level, with many comments suggesting that data can be supplied directly or through a data vendor.[110]

83. The feedback from third-parties also indicated that there did not seem to be a distinction between RTDFs and periodic data packages, with similar third-parties purchasing both kinds of data types from the Parties.[111] CCS also noted that [✂].[112]

84. Although most third-parties did not have an issue with the data sales business of the Parties post-Transaction, there were a few third-parties that indicated that there might be some degree of difficulty in relation to the ease of substituting the data provided by the Parties with data from other sources. The comments indicated that the Parties may have a niche in market data for the brokerage of certain sub-products, as well as a more extensive scope and better quality of data coverage compared to its competitors, and hence there would be difficulty in switching away from the Parties when it comes to the procurement of data.[113] [✂] further noted that the data it currently licenses from the Parties is widely distributed internally in many applications that would require re-tooling should it switch to other data providers.[114]

85. CCS notes the above comments by the third-parties and is of the view that the quality of the data provided by the Parties is linked to volume of broking services provided by the Parties. CCS is hence of the view that the relevant markets are, **separately** and without regard to whether data is provided at the wholesale or retail level, the supply of pricing data from exchanges, dealer banks, brokers, B2C platforms and clearing houses for each of the Overlapping Products listed, namely:
    a) IRS;
    b) Forward FX;
    c) Cash Deposits; and
    d) Oil.

b) <u>Geographic market</u>

[110] Response by [✂]; response by [✂]; response by [✂]; response by [✂].
[111] Response by [✂]; response by [✂]; response by [✂].
[112] Response by [✂].
[113] Response by [✂]; response by [✂]; response by [✂].
[114] Response by [✂].

86. The Parties submitted that the relevant geographic market is at least Asia-Pacific ("APAC") and probably worldwide in scope. The Parties cited CCS's decision in *Thomson/Reuters,* noting that the CCS considered a worldwide market for the provision of content sets for fundamentals, earnings estimate and aftermarket broker research reports to be appropriate because the content was offered and purchased on a worldwide basis.[115]

87. The Parties also referenced *Collins/Fulton* and *Deutsche Borse/NYSE Euronext*, indicating that these decisions consistently advanced wide geographic markets, suggesting that the market for the supply of pricing data is at least APAC-wide and probably worldwide in scope. Further, the Parties also submitted that the data products sold by both TP and IGBB are aggregated by market segment rather than geography, and are global in nature.[116]

88. CCS notes the Parties' submissions relating to geographic market being at least APAC-wide or if not worldwide in scope. In this regard, the majority of the third-parties' comments suggested that the competition for the supply of pricing data happens on a worldwide basis.[117] In light of this, CCS agrees with the Parties' submission and is of the view that the geographic market for the purposes of CCS's assessment is at least APAC-wide or if not, worldwide in scope.

OVERALL ASSESSMENT ON RELEVANT MARKET

89. CCS is therefore of the view that the relevant markets for the purpose of this assessment are:

    a) in relation to brokerage services, **separately**, the provision of wholesale hybrid broking services in Singapore for each of the Overlapping Products listed; and

    b) in relation to data sales, **separately** and without regard to whether data is provided at the wholesale or retail level, the APAC or if not, worldwide supply of pricing data from exchanges, dealer banks, brokers, B2C platforms and clearing houses for each of the Overlapping Products listed, namely:

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[115] Paragraph 311 of Form M1.
[116] Paragraphs 305 and 306 of Form M1.
[117] Response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂].

i) IRS;
ii) Forward FX;
iii) Cash Deposits; and
iv) Oil.

VII. Market Structure

Market shares and market concentration

The Parties' submission

Market for the provision of wholesale hybrid broking services in Singapore

90. The Parties submitted market shares figures based on estimates for each of the Overlapping Products (i.e. IRS, Forward FX, Cash Deposits and Oil). The Parties explained that the market size estimates are calculated based on independent third-party sources where these are available.[118]

Market shares by product traded

(i) IRS

91. The Parties provided in Table 1 below the share estimates for the hybrid broking segment for IRS.

Table 1: Market shares for hybrid broking services in Singapore for IRS (by value) (2015)[119]

Interest Rate Swaps	Market size (SGD. million)	TP	IGBB	TP / IGBB combined	BGC/GFI	Tradition	Others
2015	[✂]	[20% – 30%]	[20% – 30%]	[40% – 50%]	[20% – 30%]	[20% – 30%]	[0% – 10%]

(ii) Forward FX

[118] Paragraph 3 of Annex 4 of Form M1.
[119] The rough IGBB estimates for IRS broadly confirm the TP estimates. The Parties noted that they have not relied on these estimates. For completeness, the Parties' combined share was estimated by IGBB to be lower in FY2015 at around [30% – 40%] and Nittan's share higher [10% – 20%]. The shares of other rivals were the same. Over the 2013 to 2015 period, IGBB's estimates suggest the shares of IGBB and BGC/GFI fell while the shares of Tradition and Nittan grew.

The Parties provided in Table 2 below the share estimates for the hybrid broking segment for Forward FX.

Table 2: Market shares for hybrid broking services in Singapore for Forward FX (by value) (2015)[120]

Forward FX	Market size (SGD, million)	TP	IGBB	TP / IGBB combined	BGC/GFI	Tradition	Nittan Capital
2015	[✂]	[10% – 20%]	[20% – 30%]	[40% – 50%]	[20% – 30%]	[20% – 30%]	[10% – 20%]

(iii) Cash Deposits

92. The Parties provided in Table 3 below the share estimates for the hybrid broking segment for Cash Deposits.

Table 3: Market shares for hybrid broking services in Singapore for Cash Deposits (by value) (2015)[121]

Cash Deposits	Market size (SGD, million)	TP	IGBB	TP / IGBB combined	BGC/GFI	Tradition
2015	[✂]	[30% – 40%]	[20% – 30%]	[50% – 60%]	[10% – 20%]	[20% – 30%]

(iv) Oil

93. The Parties provided in Table 4 below the estimates of shares based on the hybrid segment.

[120] The Parties' own revenues have been taken from actual revenue estimates for the full year 2015. The Parties submitted that overall revenues for the segment and competitors' revenues are based on estimates made by TP of trading activity and the competitive landscape (these estimates are for 2015). As the revenue shares are based on TP estimates, they are inevitably subject to a degree of subjectivity. Nevertheless, the Parties submitted that they have been able to carry out a robustness check by, firstly, comparing TP's estimates for IGBB with IGBB's actual figures and, secondly, comparing the shares to similar albeit less robust estimates made by ICAP. In each case, the Parties submitted that the estimates are similar. The Parties further noted that these estimates have been made by brokers engaged in trading activity in the course of the day to day business, rather than for the purposes of a merger review or antitrust filing. In this context, the Parties noted that brokers have an incentive to overestimate their own success and share.

[121] The Parties' own revenues have been taken from actual revenue estimates for the full year 2015. Overall revenues for the segment and competitor revenues are based on estimates made by TP of trading activity and the competitive landscape (these estimates are for 2015).

Table 4: Market shares for hybrid broking services in Singapore for Oil (by value) (2015)[122]

	Market size (SGD, million)	TP	IGBB	TP / IGBB combined	BGC/GFI	Tradition	Others
Oil	[✂]	[30% – 40%]	[0% – 10%]	[40% – 50%]	[10% – 20%]	[10% – 20%]	[20% – 30%]

Markets for the APAC-wide, if not worldwide supply of Data Sales Business into Singapore

94. The Parties referenced the Burton-Taylor report in their submission of estimated market shares for their Data Sales Business.[123] According to the Parties, the Burton-Taylor Report provides revenue information for data sales in 2014 in three geographies (Americas, EMEA and Asia) and eight "segments" (Investment Banking, Investment Management, Equity Sales & Trading, Retail Wealth Management, FX/Treasury Sales & Trading, Fixed Income Sales & Trading, Corporate and Commodities & Energy).[124]

95. As well as providing aggregate and segment specific data sales totals, the Burton-Taylor Report also lists significant operators and their estimated revenues individually.

[122] The Parties' own revenues have been taken from actual revenue estimates for full-year 2015. Overall revenues for the segment and competitor revenues are based on estimates made by TP of trading activity and the competitive landscape (these estimates are for 2015).
[123] See Burton-Taylor International Consulting LLC (2015) – "Financial Market Data/Analysis Global Share & Segment Sizing 2015" (the "Burton-Taylor Report"), page 7. The Burton-Taylor Report does not cover direct data sales from exchanges, dealer banks and clearing houses. However, where downstream aggregators use pricing data from these sources in their offerings, such pricing data will be covered.
[124] Paragraph 314 of Form M1.

Table 5: Worldwide data sales market shares, 2014[125]

Asset Class (Burton-Taylor Segment)	Total worldwide data sales (£million)	TP's share	IGBB's share	Combined shares
Treasury (FX/Treasury Sales & Trading)	[✂]	[0% – 10%]	[0% – 10%]	[0% – 10%]
Interest Rate Derivatives (Investment Management)	[✂]	[0% – 10%]	[0% – 10%]	[0% – 10%]
Energy (Commodities & Energy)	[✂]	[0% – 10%]	[0% – 10%]	[0% – 10%]
Total of above	**[✂]**	**[0% – 10%]**	**[0% – 10%]**	**[0% – 10%]**

Table 6: Asia data sales market shares, 2014[126]

Asset Class (Burton-Taylor Segment)	Total Asia data sales (£million)	TP's share	IGBB's share	Combined shares
Treasury (FX/Treasury Sales & Trading)	[✂]	[0% – 10%]	[0% – 10%]	[0% – 10%]
Interest Rate Derivatives (Investment Management)	[✂]	[0% – 10%]	[0% – 10%]	[0% – 10%]
Energy (Commodities & Energy)	[✂]	[0% – 10%]	[0% – 10%]	[0% – 10%]
Total of above	**[✂]**	**[0% – 10%]**	**[0% – 10%]**	**[0% – 10%]**

96. Only two third-parties provided estimates relating to market shares for data sales. [✂] estimated that the market share of the Parties post-Transaction would be over [✂] globally. In addition, it also provided an estimate of its own revenues from data sales for the year 2015 to be about [✂].[127]

97. [✂] estimated that the combined market share of the Parties is about [✂].[128] In addition, it also provided an estimate of its own revenues from data sales for the year 2014 to be about [✂].[129]

[125] Paragraph 317 of Form M1.
[126] *Ibid.*
[127] Response by [✂].
[128] Note that [✂] estimate for the total market size for data sales is [✂].
[129] Response by [✂].

CCS's assessment

Markets for the provision of wholesale hybrid broking services in Singapore

98. CCS notes that in all of the products markets in which the Parties overlap in the provision of hybrid broking services in Singapore, the market share of the Parties post-Transaction crosses the indicative thresholds set out in the *CCS Merger Guidelines*, i.e. the merged entity will have a market share of 40% or more and that the merged entity will have a market share of more than 20% with the post-Transaction CR3 at 70% or more.

(i) IRS

99. With regard to the IRS product group, CCS notes that the Parties submitted that although the Parties' combined share in IRS is large in the voice/hybrid space, they will continue to face significant competitive constraints in this space from BGC/GFI, Tradition and Nittan Capital.[130] This view is corroborated by most customers, who suggested that there may be too many brokers in the hybrid space for IRS products in Singapore. However, some third-parties noted that the Parties each are significant in providing hybrid broking for particular sub-products within the IRS product group, such as SGD IRS.[131] The Transaction may hence result in a lessening of competition in the provision of hybrid broking services for these sub-products within the IRS product group.

100. In this regard, CCS notes that the Parties overlap in the provision of broking services for IDR, INR, MYR, PHP, SGD, THB. and USD. Of these currencies, SGD and MYR IRS account for the majority of the Parties' IRS broking activities (approximately [✂] % of IGBB's revenues and [✂] % of TP's revenues). The Parties further submitted the following table for the market share estimate of the Parties for SGD and MYR.[132]

[130] Paragraph 19 of Annex 4 of Form M1.
[131] Response by [✂]; response by [✂].
[132] Parties' response to question 6 of CCS's RFI dated 16 June 2016.

Table 7: Market shares for hybrid broking services in Singapore for IRS sub-product (by value) (2015)[133]

IRS	Market size (SGD, million)	TP	IGBB	TP / IGBB combined	BGC/GFI	Tradition	Others
Total IRS	[✂]	[20% – 30%]	[20% – 30%]	[40% – 50%]	[20% – 30%]	[20% – 30%]	[0% – 10%]
SGD	[✂]	[30% – 40%]	[10% – 20%]	N.A.	N.A.	N.A.	N.A.
MYR	[✂]	[10% – 20%]	[30% – 40%]	N.A.	N.A.	N.A.	N.A.

101. Although CCS notes that post-Transaction the combined market shares for the Parties for SGD and MYR IRS would be above the indicative thresholds, CCS is of the view that there would be sufficient constraints in the form of alternative brokers/channels of trading and strong countervailing buyer power, as explained in paragraph 135 and paragraphs 155-158 below.

(ii) Forward FX

102. With regard to the Forward FX product group, CCS notes that the Parties submitted that the combined shares are not at a level to give rise to significant prima facie competition concerns and that they will continue to face significant competitive constraints in this space from BGC/GFI, Tradition and Nittan Capital.[134] This view is also corroborated by third-parties, who also suggested that there are alternative channels of trading available for these products,[135] which provide sufficient competitive constraint on the Parties.

103. However, CCS notes that some third-parties have pointed out that the Parties may be relatively strong in providing hybrid broking for Non-Deliverable Forwards ("NDFs").[136] In this regard, the Parties submitted in their response to CCS's RFI the estimated market shares of NDFs in the table below.[137]

[133] CRA analysis of Parties' actual revenues and TP's estimates of market size and competitor revenues.
[134] Paragraphs 13 to 14 of Annex 4 of Form M1.
[135] Direct dealing platforms such as Reuters Dealing.
[136] Response by [✂]; response by [✂].
[137] Parties' response to question 2 of CCS's RFI dated 30 June 2016.

Table 8: Market shares for hybrid broking services in Singapore for NDF sub-product (by value) (2015)[138]

	Market size (SGD, million)	TP	IGBB	Parties combined	BGC/GFI	Tradition	Nittan Capital
Total NDF	[✂]	[10% – 20%]	[20% – 30%]	[30% – 40%]	[20% – 30%]	[20% – 30%]	[10% – 20%]
INR	[✂]	[10% – 20%]	[0% – 10%]	[15% – 25%]	N.A.	N.A.	N.A.
KRW	[✂]	[0% – 10%]	[20% – 30%]	[20% – 30%]	N.A.	N.A.	N.A.
IDR	[✂]	[30% – 40%]	[0% – 10%]	[30% – 40%]	N.A.	N.A.	N.A.
TWD	[✂]	[0% – 10%]	[0% – 10%]	[0% – 10%]	N.A.	N.A.	N.A.
CNY	[✂]	[10% – 20%]	[0% – 10%]	[10% – 20%]	N.A.	N.A.	N.A.
MYR	[✂]	[0% – 10%]	[10% – 20%]	[10% – 20%]	N.A.	N.A.	N.A.
PHP	[✂]	[0% – 10%]	[40% – 50%]	[40% – 50%]	N.A.	N.A.	N.A.

104. CCS notes that the Parties combined market shares crossed the indicative threshold for only one currency. Further, as the Parties are unable to provide an estimate for the breakdown of the market shares of the competitors by currency, CCS is unable to ascertain the post-Transaction market share for each competitor.

105. Notwithstanding the above, CCS notes that in all of the NDFs listed by currency, the incremental market share post-Transaction for each currency is relatively small, ranging from 0%-10%. CCS is thus of the view that the

[138] Parties' revenues by currency provided by the Parties. Market size estimates for INR, KRW, IDR, TWD, CNY provided by TP. Parties' shares and market size for MYR and PHP based on ICAP's estimates of own share and the ratio of TP revenue to IGBB revenue in the respective currencies.

Transaction would not bring about a substantial lessening of competition within the NDF sub-product as the overlap between the Parties was small.

(iii) Cash Deposits

106. With regard to Cash Deposits, CCS notes that the Parties submitted that both BGC and Tradition will remain as strong competitors to the Parties post-Transaction, as will alternative channels of trading, which is the similar case for the other products.[139] CCS notes that most third-parties are of the view that there would be a limited impact to competition in the market, as there exists sufficient buyer power and direct dealing and electronic platforms also provide a constraint on the Parties.[140]

(iv) Oil

107. With regard to Oil, CCS notes that the Parties submitted that today's market structure in Oil provides compelling evidence to show that the relevant product market should include all trading channels. Consequently the Parties submitted that they face competitive constraints in this market by a myriad of other hybrid intermediaries as well as from exchanges.[141] Although [✂] noted that in some circumstances, it is nearly impossible to switch to an alternative mode of trading (i.e. electronic platform or exchanges), it also noted that there are a number of hybrid intermediaries in the market that a customer is able to switch to easily, and that it is not 'locked in' to trade using the Parties.[142]

108. CCS notes that although some third-parties had mentioned that there would be a certain degree of difficulty in switching away from using the Parties' broking services for complex products; they also noted that this is primarily due to the Parties' strength in certain sub-products within the Overlapping Products. In this regard, further clarifications were sought from these parties. These third-parties noted that they are able to find alternatives even for these complex products in which the Parties are relatively strong in, and that they are not locked in to trading these products through the Parties.[143]

[139] Paragraph 28 of Annex 4 of Form M1.
[140] Response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂].
[141] Paragraph 24 of Annex 4 of Form M1.
[142] Responses by [✂].
[143] Response by [✂]; response by [✂]; response by [✂].

109. The Parties submitted that TP is active in five Oil sub-products, namely crude oil, naphtha, physical fuel oil, paper fuel oil and middle distillates. IGBB is active in crude oil and middle distillates. The Parties further submitted the market shares estimate for the Overlapping Products of crude oil and middle distillates in the table below.[144]

Table 9: Market shares for hybrid broking services in Singapore for Oil and its sub-products (by value) (FY15)[145]

	Market size (SGD, million)	TP/PVM	IGBB	BGC/GFI	Tradition	DQL	OTC	Gingha
Oil	[✂]	[30% – 40%]	[0% – 10%]	[10% – 20%]	[10% – 20%]	N.A.	N.A.	N.A.
Crude oil	[✂]	[40% – 50%]	[0% – 10%][146]	[10% – 20%]	[20% – 30%]	[10% – 20%]	[0% – 10%]	N.A.
Middle distillates	[✂]	[20% – 30%]	[0% – 10%]	[30% – 40%]	[30% – 40%]	N.A.	N.A.	[10% – 20%]

110. CCS notes that although the combined market shares of the Parties for both crude oil and middle distillates cross the indicative thresholds, the incremental market share from the Transaction is small and limited, ranging from 0%-10%. In this regard, CCS is of the view that the impact to competition may be limited as the extent of overlap between the Parties is limited in the initial instance.

111. In light of the above, CCS notes there are a number of alternative trading methods and alternative hybrid intermediaries for each of the Overlapping Products in which the Parties provide hybrid broking services for in Singapore. In this regard, despite the fact that the Parties' combined market shares cross the indicative thresholds for each of the Overlapping Products above, CCS is of the view that there is sufficient competitive constraint to the Parties post-Transaction in each product market.

<u>Markets for the APAC-wide, if not worldwide supply of Data Sales Business into Singapore</u>

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[144] Parties' response to question 8 of CCS's RFI dated 16 June 2016.

[145] The Parties' own revenues have been taken from actual revenue estimates for full-year 2015. Overall revenues for the segment and competitor revenues are based on estimates made by TP of trading activity and the competitive landscape (these estimates are for 2015).

[146] [✂].

112. CCS notes the Parties submission that the Burton-Taylor report identified TP as a "small" data provider in, Treasury, Interest Rate Derivatives and Energy asset classes. IGBB is only directly listed as a "small" data provider in the Treasury and Energy asset classes.[147] Based on the Parties submissions, with reference to the categorization of asset classes in the Burton-Taylor report, we understand that in relation to the Overlapping Products, Forward FX and Cash Deposits form part of the Treasury product asset class, IRS forms part of the Interest Rate Derivative asset class and Oil forms part of the Energy asset class.

113. The Parties submitted in Table 5 above worldwide market shares in data sales shows that in all of the four asset classes on both Asia and worldwide basis, the Parties' combined shares are between [0%-10%], which is well below the levels where horizontal effects concerns could arise.[148]

114. The Parties submitted that data is not available at a country level and that estimates for Asia is the most disaggregated available. The Parties further submitted that the combined shares of the Parties are between [0%-10%] in all asset classes in Asia (see Table 6 above).

115. CCS notes that the combined market share of the Parties on an Asia and worldwide basis for each of the asset classes does not cross the indicative thresholds.

Barriers to entry and expansion

116. In assessing barriers to entry and expansion, CCS considered whether entry by new competitors or expansion by existing competitors may be sufficient in likelihood, scope and time to deter or defeat any attempt by the merger parties or their competitors to exploit the reduction in rivalry flowing from the Transaction (whether through coordinated or non-coordinated strategies).[149]

The Parties' submission

<u>Markets for the provision for wholesale hybrid broking services in Singapore</u>

117. The Parties submitted that entry into the wholesale intermediary space today is easier than it used to be a few years ago due to the rise in electronic

[147] Paragraph 315 of Form M1.
[148] Paragraph 316 of Form M1.
[149] Paragraph 7.2 of the *CCS Merger Guidelines*.

broking technology such that anyone with an effective CLOB and/or RFS/RFQ system is able to compete. The Parties highlighted the entry of recent electronic platforms that entered the OTC space in Singapore, including Bloomberg, ICE, BCG/GFI, Tradition and Arnstel (for bonds), EBS and BrokerTec, R5, HotspotFX, 360T, FXAll, ParFC and JB Drax. The Parties also noted that market participants are able to initiate sponsored entry in the industry where offerings from the existing players are not competitive, and have in the past done so. Apart from 'formal' (e.g. equity-backed) sponsorship, a consortia of banks can also align informally with a new wholesale intermediary to ensure that it has a critical mass of liquidity and is a credible means of execution. One example provided by the Parties regarding such sponsored entry was BrokerTec in 2000.[150]

118. The Parties also submitted that there are low barriers to expansion. The Parties noted that a wholesale intermediary not currently active in specific segments could move into those areas easily and quickly if it saw an opportunity to do so. In this regard, the Parties explained that taking the NDF sub-product as an example, the Parties' brokers actively work across a number of currencies, typically two or more, and can (and regularly do) switch easily between currencies in response to small changes in demand.[151]

119. The Parties also note that their major customers generally have activities across multiple if not all asset classes, and hence have pre-existing relationships with niche brokers that specialise in a particular asset class. According to the Parties, even in a product area where the number and size of specialised brokers as alternatives to the main wholesale intermediaries may be more limited, customers have relationships with larger specialists in other areas, and so would be well placed and easily able to sponsor the expansion of those intermediaries if they felt it were necessary.[152]

120. Although no examples of such expansion were provided, the Parties considered that a number of smaller wholesale intermediaries would be well placed to expand into other asset classes, such as [✂] and [✂], as well as [✂],[✂],[✂] and [✂] who are active across APAC.[153]

121. The Parties also submitted that in the Energy & Commodities asset class, Trayport GlobalVision Trading Gateway is helping to lower barriers to entry significantly, as its price aggregation functionality allows new entrants to

[150] Paragraph 237 of Form M1.
[151] Parties' response to question 2 of CCS's RFI dated 16 June 2016.
[152] Paragraph 238 of Form M1.
[153] Paragraph 239 of Form M1.

display their prices without having to compete for limited and expensive 'screen real estate'. This has led to a proliferation of smaller brokers and trading venues which have equal billing with the larger or more established brokers and venues.[154]

122. In addition, the Parties submitted that there has been a recent shift within the broking of Energy & Commodities, and in particular with respect to Oil products, for hybrid brokers to conduct their business on a block trade basis on exchanges rather than deal with traders on a name-give-up basis, which has lowered barriers to entry. In name-give-up trading, it is advantageous for hybrid brokers to have a pre-existing relationship with an Oil or Gas major (e.g. BP). By contrast, block trades on exchange are anonymous, meaning that the market does not know which broker has a relationship with which customers. Therefore, the Parties submitted that it is possible for a hybrid broker to operate effectively on the basis of having five or six relationships, which is more achievable for small players and new entrants, rather than needing to obtain some of BP's business, for example.[155]

123. The Parties submitted that they did not have the information necessary to provide an estimate of the capital expenditure required to enter the market. The Parties noted that advertising is not a normal method to grow market share in this industry. Rather, personal relationships and the skill and experience of brokers are important, and hence, market share is gained by employing or poaching staff with the relevant relationships and/or retraining staff to provide broking services in another product.[156]

124. In relation to regulations, the Parties submitted that the approval of MAS is required to broker wholesale money market OTC products in Singapore. The key financial requirement for MAS approval is to hold SGD $3 million as a cash deposit. The Parties further submitted that there are currently no regulatory requirements to satisfy in order to broker commodities in Singapore.[157]

<u>Markets for the APAC-wide, if not worldwide supply of Data Sales Business into Singapore</u>

125. The Parties submitted that as an originator of data, [✂].[158]

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[154] Paragraph 243 of Form M1.
[155] Paragraph 244 of Form M1.
[156] Paragraphs 176 and 177 of Form M1.
[157] Paragraph 178 of Form M1.
[158] Paragraph 328 of Form M1.

126. The Parties further submitted that in terms of (downstream) non-broker data, there are no real barriers to expansion other than the commercial demand for a particular type of data offered and having the necessary technological systems in place, the scale of which is determined by the type of data provided and the customer base targeted. In the Parties' experience, the necessary technological infrastructure is relatively easy to establish.[159]

Feedback from third-parties

Markets for the provision of wholesale hybrid broking services in Singapore

127. Third-parties comments generally indicated that there were no new entries into the wholesale hybrid broking space for the past three years,[160] although [✂] noted that Nittan is a new provider of voice broking services for IRS.[161] [✂] also noted that the current industry is seeing a shift from labour intensive model to automated/electronic model and more players are shifting into hybrid broking in order to capture more business.[162]

128. In addition, the third-party comments also seemed to suggest that entry by international brokerage service providers is unlikely due to the size of the Parties in the hybrid broking space.[163]

129. Other third-party comments suggested that the barriers to entry into the hybrid wholesale broking business are generally quite high. These third-parties noted that apart from licensing requirements, other barriers include hiring and training of staff, broking relationships, investment in infrastructure, economies of scale as well as client on-boarding in relation to accommodating a new execution facility.[164] In particular, [✂] commented that it could take up to 3 years to establish a new brokerage firm in this space and up to 6 years to become profitable.[165] CCS notes however that [✂] commented that it would not be difficult to set up a brokerage business with the right customer contacts and competitive price quotes.[166]

[159] Paragraph 329 of Form M1.
[160] Response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂].
[161] Response by [✂].
[162] Response by [✂].
[163] Response by [✂]; response by [✂]; response by [✂].
[164] Response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂].
[165] Response by [✂].
[166] Response by [✂].

Markets for the APAC-wide, if not worldwide supply of Data Sales Business into Singapore

130. In relation to the supply of Data Sales Business into Singapore, third-parties' comments indicated some barriers to entry. [✂] noted that the ability to supply market data is tied to the underlying broking services provided by the Parties.[167] In this regard, [✂] noted that the share of market data provided strongly correlates with the size of the share of the broking services provided by the Parties and that unless other participants are already established or provide a unique niche data set or have a similar level of coverage that could replace or complement the Parties, there may be barriers to new entries.[168] [✂] was of the view that the Parties are dominant in Spot, NDFs, FX Forwards, certain government bonds and IRS.[169] [✂] noted that in the case of a merger, there would no longer be any competition in the reference pricing business.[170]

CCS's assessment

Markets for the provision of wholesale hybrid broking services in Singapore

131. Although there are no estimates available on the costs of setting up a brokerage firm in Singapore, CCS notes that there are limited, if not no new entrants into the hybrid space for each of the Overlapping Products in Singapore in the past three years. Third-parties also did not seem to suggest that there was potentially any new entrant that could enter the Singapore market. On balance, CCS is of the view that barriers to entry may be high.

132. However, CCS is of the view that the barriers to expansion are not as high. In this regard, CCS notes that the essential role of a broker is to find matching trades on the buy-side and sell-side of the product market. In addition, third-parties' feedback suggested that most, if not all, of the customers currently have existing relationships with multiple hybrid brokers in the relevant Overlapping Products that they trade in. CCS notes that this facilitates expansion by competitors as customers can easily re-route existing trades for the Overlapping Products to them. Third-parties also suggested that customers can easily and quickly shift volumes of trades to another hybrid

[167] Response by [✂]; response by [✂].
[168] Response by [✂].
[169] Response by [✂].
[170] Response by [✂].

broker.[171] In light of the above, CCS considers that barriers to expansion are not significantly high or prohibitive, as they are mainly linked to the customers' ability to switch and move volumes of trades to another brokerage service provider.

Markets for the APAC-wide, if not worldwide supply of pricing data into Singapore

133. Based on third-party feedback, CCS notes that there may be a strong link between the data supplied by the Parties with its underlying hybrid broking services. As the Parties are mainly originators of pricing data, CCS is of the view that there may be significant barriers to entry and expansion in the provision of pricing data for the hybrid broking services for each of the Overlapping Product.

134. CCS also notes that the Parties submitted that all data provided by the Parties is provided and marketed as "reference pricing" data. The Parties explained that this data is used by customers in mark-to-market processes or used as indicative pre-trade pricing data. The Parties noted that the data services are not bundled with the hybrid broking services, and that the factors that influence a customer's selection of data provider include reliability, brand, reputation, after sales support and pricing based off observable market activity.[172] In this regard, CCS is of the view that barriers to entry and expansion for data sales in relation to the products in which the Parties are relatively strong in (i.e. high liquidity of trades through the Parties) would likely be high.

135. However, CCS is of the view that these barriers are not insurmountable, as they are largely tied to the strength of the Parties in the provision of hybrid broking services in Singapore for the Overlapping Products. Consequently, as mentioned in paragraph 132 above, customers that shift volumes of trades away to other hybrid broking providers would significantly lower the barriers to expansion in the supply of pricing data.

Countervailing buyer power

The Parties' submission

Markets for the provision of wholesale hybrid broking services in Singapore

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[171] Response by [✂]; response by [✂]; response by [✂].

[172] Parties' response to question 22 of CCS's RFI dated 16 June 2016.

(i) Customers are large and sophisticated

136. The Parties submitted that their customers exert significant influence over the commercial behavior of wholesale intermediaries. The Parties noted that customers negotiate aggressively with intermediaries on commission rates (as shown by declining hybrid broking commissions, including in areas where the Parties have nominally high combined hybrid shares), as both customers and suppliers are willing and able to switch large volumes to another wholesale intermediary or away from the intermediary segment entirely if necessary.[173]

137. The Parties submitted that customers are generally large, sophisticated institutions, well able to protect their interests and are in a strong bargaining position when negotiating price. As far as the Parties are aware, every customer has a relationship with more than one hybrid broker, and is active through other wholesale intermediaries and trading channels. The Parties also submitted that many dealer customers operate their own SDPs, while some buy-side customers trade on electronic platforms first and foremost in any event.[174]

138. The Parties further noted that although customers generally prefer to consolidate volumes in order to ensure liquidity and transactional efficiencies, they are price-sensitive institutions that will not tolerate increases in commission rates, particularly in the face of credible and growing alternatives from other trading methods.[175]

(ii) Demand is concentrated

139. The Parties submitted that demand for broking services in most areas is concentrated in relatively few customers. As a result, the Parties submitted that each customer represents a material amount of liquidity (and revenue) to each wholesale intermediary, constraining any hypothetical attempt by an intermediary to increase prices. In most asset classes, there are a handful of major customers who account for a significant proportion of the market demand.[176]

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[173] Paragraph 207 of Form M1.
[174] Paragraph 208 of Form M1.
[175] Paragraph 210 of Form M1.
[176] Paragraphs 211 to 212 of Form M1.

(iii) Customers actively monitor and limit wholesale intermediaries' strength

140. The Parties submitted that customers of wholesale intermediaries seek to ensure that their business is spread around the wholesale intermediary segment (including among hybrid brokers in particular), so as to ensure continued competitive pressure and to maintain customers' significant buyer power. [✂].[177]

141. The Parties submitted that the proven ability of customers to move their volumes between different trading options expressly in order to suppress wholesale intermediaries' strength demonstrates customers' countervailing buyer power. The Parties argue that in any product area in which customers were concerned that there were insufficient options post-Transaction – even on a narrow basis (i.e. hybrid only broking) – the customers would proactively route their volumes through another wholesale intermediary (or specifically, another broker) to ensure that they had sufficient choice.[178]

(iv) Customers negotiate aggressively on commission rates

142. The Parties submitted that over the last five to ten years, most major banks have moved to institutionalise their fee negotiations, with a brokerage manager responsible for negotiating commission rates downwards, motivated by set targets to bring down costs.[179]

143. The Parties noted that customers can choose to negotiate on commission rates in a variety of ways, namely through bilateral conversations in relation to a particular product of set of products, unilateral 'fee letters' in which the customers notify the Parties of their willingness to pay, negotiations on a global coordinated cross-product basis, brokerage fee caps and discounted brokerage rates. The Parties further noted that their commission rates have fallen dramatically in recent years as they fight to retain volumes in the face of such significant competition, and that the multitude of options available to customers gives them significant negotiating strength and that has driven prices lower and lower.[180]

144. The Parties also submitted that the corollary of potentially lower individual buyer power for the smaller regional banks is the ability to use other

[177] Paragraph 215 of Form M1.
[178] Paragraph 216 of Form M1.
[179] Paragraph 217 of Form M1.
[180] Paragraphs 218 to 219 of Form M1.

wholesale intermediaries and other trading channels (i.e. trading directly using SDPs). In this regard, the Parties noted that the merged entity could not discriminate against smaller customers (i.e. those that bring less liquidity), as those customers are particularly able to switch easily to other trading options.[181]

(v) Switching costs are low and customers can and do switch easily

145. The Parties submitted that all or nearly all of the customer base of an individual hybrid broker already overlaps with that of other hybrid brokers. In these circumstances, the Parties estimated that there is no cost or time in switching to another broker. In circumstances where a customer wanted to switch away from a wholesale intermediary such as a broker but did not have a pre-existing relationship with one or more other intermediaries, the Parties submitted that switching would still take place very quickly (i.e. within 24 hours).[182] Accordingly, even the complete absence of any pre-existing relationship with wholesale intermediaries is no barrier to timely switching.[183]

146. In the Energy & Commodities asset class, the Parties submitted that switching is facilitated by Trayport. The Parties noted that Trayport's aggregated trading system enables traders to easily move business between brokers, as they are able to view market prices across multiple venues and hit any price on the market screen.[184]

(vi) Customers control supply to wholesale intermediaries

147. The Parties noted that wholesale intermediaries require two parties to conclude a trade (a buyer and a seller), and cannot operate unless its customers provide it with liquidity. Consequently, the Parties submitted that 'customers' have two roles in relation to wholesale intermediaries – customer and supplier. This means customers are able to exercise strong buyer power since they control the supply of liquidity which is essential to the ability of the broker to facilitate and conclude a trade. Wholesale intermediaries therefore have a clear commercial imperative to keep customers returning to

[181] Paragraph 220 of Form M1.
[182] On-boarding cannot be instantaneous where the customer is brand new to the wholesale intermediary, as there are certain 'Know Your Customer' and Anti-Money Laundering checks that need to be followed. Note that where the customer is new to the intermediary in that particular asset class or geographic location but has a pre-existing relationship with the intermediary globally, switching can take place within a matter of minutes.
[183] Paragraphs 166 to 167 of Form M1.
[184] Paragraph 225 of Form M1.

their services, which means they are vulnerable when set against the buying power of their primary clients.[185]

Markets for the APAC-wide, if not worldwide supply of pricing data into Singapore

148. The Parties submitted that the Data Sales business is effectively a by-product of the main wholesale broking activities such that there is a significant degree of overlap between brokerage customers and data customers. In this regard, the Parties submitted that any attempt to engage in upward pricing pressure in respect of data sales is swiftly countenanced by customers aggressively negotiating fees for brokerage services. The Parties noted that the merged entity would therefore be constrained by the countervailing buyer power of customers who actively monitor and limit the strength of intermediaries.[186]

Feedback from third-parties

Markets for the provision of wholesale hybrid broking services in Singapore

149. Third-parties have commented that buyer power is generally high and this is the case across all Overlapping Products. The third-parties commented that they generally enter into negotiations with the Parties every one to two years, or when the business needs arise. All of the customers who replied to CCS's RFI (with the exception of [✂]) noted that they had no contractual price caps with the Parties, though some recognized that the Parties do provide volume discounts. Most customers felt that the Transaction would result in a minimal impact to their ability to negotiate brokerage rates with the Parties.[187]

150. Third-parties on the supply side also noted that customers have very strong bargaining power evidenced by the falling commission rates in the industry.[188] In particular, [✂] noted that customer influence depends on the volume and liquidity they provide.[189]

[185] Paragraph 226 of Form M1.
[186] Paragraph 342 of Form M1.
[187] Response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂].
[188] Response by [✂]; response by [✂]; response by [✂].
[189] Response by [✂].

151. Third-parties have also commented that it is generally easy for customers to switch to other providers of wholesale brokerage services.[190] CCS further notes that even for complex or products with low liquidity (i.e. specific currencies' IRS and forwards), third-parties have indicated that they are able to find alternative brokers for switching and are not locked in to using the broking services provided by the Parties.[191]

152. With regard to switching to alternative trading channels, third-parties noted that there might be some difficulty for customers in switching to other alternative trading channels for more complex products (i.e. oil derivatives), and in some circumstances, nearly impossible.[192] CCS however notes third-parties comments that customers for Oil products in particular can easily allocate or re-route their trading volumes across multiple broking intermediaries and alternative trading channels, which has already happened with the launch of WebICE.[193]

<u>Markets for the APAC-wide, if not worldwide supply of pricing data into Singapore</u>

153. Third-parties' comments generally stated that there is currently a strong ability for customers to negotiate when procuring data from wholesale intermediaries. However, the feedback is mixed and inconclusive with regard to whether this ability would continue to exist post-Transaction.[194]

154. The third-parties' feedback also suggested that there seems to be a limited ability to switch to other providers of market data as the Parties would have a niche market in relation to the provision of data for certain sub–products and that competitors are limited in their scope of market coverage and have a lower quality of data provided as compared to the Parties.[195] [✂] noted that other IDBs can provide similar data to the Parties only if they capture as much market share as the Parties and have the technology in place to be able to collect and distribute the data.[196] [✂] noted that the Parties' market share data strongly correlates to the size of the brokerage market share.[197] [✂] noted that the data currently licensed with the Parties is widely distributed

[190] Response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂]; response by [✂].
[191] Response by [✂]; response by [✂]; response by [✂].
[192] Response by [✂]; response by [✂]; response by [✂].
[193] Response by [✂]; response by [✂]; response by [✂].
[194] Response by [✂]; response by [✂]; response by [✂]; response by [✂].
[195] Response by [✂]; response by [✂]; response by [✂].
[196] Response by [✂].
[197] Response by [✂].

internally in many applications that would require re-tooling, and this prevents it from switching to other data providers easily.[198]

CCS's assessment

Markets for the provision of wholesale hybrid broking services in Singapore

155. CCS notes that the Parties' submission that their customers are large and sophisticated institutions with strong countervailing buyer power is largely corroborated by the comments from third-parties. In particular, CCS notes that most customers stated that they have and will continue to have a strong ability to negotiate rates with the Parties post-Transaction without regard to the products being traded.[199]

156. CCS understands that part of that ability to negotiate lies in the fact that customers are able to quickly and easily switch to other hybrid brokerage service providers, even for complex products.[200] In this regard, CCS notes that most third-parties provided feedback that they deal concurrently with multiple brokerage service providers for the products that they trade in and that they are able to adjust the volume of business they provide to each brokerage firm easily. Doing so prevents these customers from being overly reliant on any one single brokerage firm, and enhances their buyer power.

157. In addition, some of the third-parties also noted that electronic platforms, exchanges and direct dealing are viable alternatives for the Overlapping Products that they trade in, and are increasingly more so, given the pace of technological advancement and regulatory reforms globally. CCS is of the view that the ease of switching noted by the third-parties, coupled with the existence of viable alternatives of brokerage service providers or trading channels provide a credible threat that customers would switch should the Parties fail to meet the customers' expectations with regard to the prices and quality of services rendered.

158. CCS also agrees with the Parties that customers are their source of liquidity and that this liquidity would fall should the customers carry out their threat to switch away to other brokers or alternative channels of trading. In this regard and in light of the above, CCS is of the view that customers' countervailing buyer power is strong as they pose a credible and sufficient threat to cut off

[198] Response by [✂].
[199] Response by [✂]; response by [✂].
[200] Response by [✂]; response by [✂]; response by [✂].

liquidity to the Parties by switching to other methods of trading easily and quickly.

Markets for the APAC-wide, if not worldwide supply of pricing data into Singapore

159. CCS notes that the quality of data supplied by the Parties is essentially linked to the underlying broking services provided by the Parties. CCS also notes the third-parties' feedback that the Parties might have an advantage in the provision of hybrid broking services for certain sub-products which would limit the ease of substituting the Parties' data with data from other sources (i.e. other wholesale hybrid intermediaries or alternative trading channels). In this regard, CCS is of the view that the countervailing buyer power that customers can exert on the Parties is fairly weak when confined to data purchases only.

160. However, CCS notes that while the countervailing buyer power for data sales may be weak, this is primarily due to the strength of the Parties in the wholesale hybrid broking segment, and in particular the volumes of trades for certain products that are brokered by the Parties. In addition, CCS is of the view that where customers who purchase data from the Parties are also customers of their wholesale hybrid broking business, these customers would likely be able to exert considerable buyer power by leveraging on their existing relationship with the Parties for hybrid broking services.

VIII. Competition Assessment

(a) Non-coordinated effects

161. Non-coordinated effects may arise where, as a result of the Transaction, the merged entity finds it profitable to raise prices (or reduce output or quality) because of the loss of competition between the merged entities.[201] Other firms in the market may also find it profitable to raise their prices because the higher prices of the merged entity's product will cause some customers to switch to rival products, thereby increasing demand for the rivals' products.[202]

Markets for the provision of wholesale hybrid broking services in Singapore

[201] Paragraph 6.3 of the *CCS Merger Guidelines*.
[202] Paragraph 6.3 of the *CCS Merger Guidelines*.

162. The Parties submitted that the Transaction would not give rise to non-coordinated effects in any market in Singapore for the following reasons:

i) Competition from other wholesale intermediaries and trading channels;

ii) Continued broking competition;

iii) Customer's countervailing buyer power;

iv) TP and IGBB have no market power;

v) Barriers to entry and expansion are low; and

vi) Falling volumes and falling commission rates.

CCS's assessment and conclusion on non-coordinated effects for the markets for the provision of wholesale hybrid broking services in Singapore

163. CCS notes that the Transaction leads to an increase in the market share of the merged entity in the markets for the provision of wholesale hybrid broking services for each of the Overlapping Products in Singapore. CCS notes that all of the combined market share figures cross the indicative thresholds set out in the *CCS Merger Guidelines*. However, CCS is of the view based on the Parties' submissions which have been corroborated by several third-parties,[203] that the Transaction is unlikely to substantially lessen the level of competition in the brokerage services, as the merged entity would still face sufficient competitive constraints from other hybrid broking service providers as well as alternative channels of trading, even in specific sub-products (e.g. SGD IRS) that the Parties may currently enjoy a competitive advantage in. With regard to Oil derivatives, CCS notes that the extent of overlap of hybrid services provided by the Parties is limited in the initial instance, and hence there is unlikely to be a significant impact on competition in this area post-Transaction.

164. Although the Parties posed as competitive constraints on each other pre-Transaction, CCS notes that it is unlikely that there would be significant non-coordinated effects post-Transaction, as the industry structure is one that is characterized by decreasing commission rates and volumes.[204]The downward

[203] Response by [✂]; response by [✂]; response by [✂].
[204] Paragraphs 245 to 249 of Form M1

trend is due to the customers' ability to switch across broking service providers quickly and easily (and these competitors are able to scale up to absorb the increase in customer demand) and across trading channels e.g. electronic and to negotiate for lower rates for each of the Overlapping Products.

165. CCS notes the dynamic industry changes (i.e. trend towards consolidation, increased competitive constraints from electronic platforms leading to reduced demand for a wholesale intermediary brokerage service, resulting in increase in countervailing buyer power) as the counterfactual. However, as the Transaction does not give rise to SLC even when compared to the status quo as the counterfactual, it would be even less likely to give rise to SLC should these industry changes materialise with or without the merger.

<u>Markets for the APAC wide, if not worldwide supply of pricing data into Singapore</u>

166. The Parties submitted that for the vast majority of customers, the data provided by TP and IGBB are complementary products, and not substitutable. That is to say most individual customers demand the same pricing data from both TP and IGBB in order to provide greater coverage of the sectors in which they operate. This stems from a greater focus on compliance and regulatory risk in the financial services industry.[205]

167. The Parties submitted that the complementarity of TP's and IGBB's pricing data is supported by an analysis of their data sales:

    i) TP and IGBB share the vast majority of the same top customers in data sales overall.[206] Out of the top 20 customers of IGBB, [✂] also purchase data from TP ([✂]%); identically, out of the top 20 customers of TP, [✂] also purchase data from IGBB ([✂]%);

    ii) [✂];[207]

    iii) [✂];[208]

[205] Paragraph 343 of Form M1.
[206] Table 8 of Form M1.
[207] Table 9 of Form M1.
[208] Tables 10 and 11 of Form M1.

iv) In the small number of cases where customers may purchase pricing from one of TP or IGBB only, multiple alternatives to TP and IGBB exist:

a) TP's and IGBB's own pricing data can be obtained through downstream aggregators – [✂] – that provide the vast majority of TP and IGBB's data, and hence would constrain the TP's and IGBB's pricing;

b) Dealers which use TP's and IGBB's brokering services, in particular large banks, also have a record of the trades and therefore would be able to provide pricing data in respect of the same trades;

c) In order to settle and clear trades, wholesale intermediaries use settling and clearing houses, for example Trayport for Energy & Commodities or LCH Clearnet (a clearing house) for a multitude of products. These operators would also be able to provide pricing data in respect of the same trades; and

d) To the extent that TP's and IGBB's pricing data is substitutable with other pricing data, it should be noted that there are a multitude of sources of such pricing data, as denoted by TP's and IGBB's low shares set out in their market share submission.[209]

Feedback from third parties

168. Third-parties have provided feedback that although customers frequently use data in relation to the same products from more than one data source, other IDBs can provide similar data to TP and IGBB only if they capture as much market share as these two companies and have the same technology in place to be able to collect and distribute the data. The market share data strongly correlates to the size of the brokerage market share.[210]

CCS's assessment and conclusion on non-coordinated effects for the APAC-wide, if not worldwide supply of pricing data into Singapore

169. CCS notes based on Table 5 and Table 6 that the Transaction does not lead to a significant increase in the market share of the merged entity in the market

[209] Tables 6 and 7 of Form M1.
[210] Response by [✂]; response by [✂].

for APAC-wide, if not worldwide provision of market data in Singapore on the whole. In fact, none of the market share figures cross the indicative thresholds set out in the *CCS Merger Guidelines*.

170. However, CCS received feedback from some third-parties that the Transaction could potentially lessen the level of competition in certain sub-products (e.g. market for the provision of data sales for SGD IRS).

171. CCS understands that the Parties' market position for the provision of data is directly associated and intrinsically linked to the Parties broking services.[211] CCS is of the view that there would not be any significant competition concerns in the market for the provision of data for any sub-products, if there is sufficient competition at the broking level. CCS notes that this is likely to be the case as the merged entity would still face sufficient competitive constraints from other hybrid broking service providers as well as alternative channels of trading in the market for the provision of brokering services, even for these sub-products (refer to paragraph 163 above). This view has been confirmed by third-party responses from customers, who noted that they have existing relationships with other brokers and are not locked in to using the Parties' services.[212] As such, CCS is of the view that competition concerns are unlikely to arise in the market for the provision of data for any of the sub-products.

172. Further, with regard to Oil derivatives, CCS notes that the overlap in the provision of hybrid broking services by the Parties is limited. Hence, the incremental market share for data sales for oil products is likely to be limited as well.

173. In light of the above, CCS concludes that the Transaction does not raise concerns in terms of non-coordinated effects on competition.

(b) Coordinated effects

Markets for the provision of wholesale hybrid broking services in Singapore

174. A merger may also lessen competition substantially by increasing the possibility that, post-Transaction, firms in the same market may coordinate their behavior to raise prices, or reduce quality or output. Given certain market conditions, and without any express agreement, tacit collusion may

[211] Response by [✂]; Paragraph 310 of Form M1.
[212] Response by [✂]; response by [✂].

arise merely from an understanding that it will be in the firms' mutual interests to coordinate their decisions. Coordinated effects may also arise where a merger reduces competitive constraints in a market, thus increasing the probability that competitors will collude or strengthen a tendency to do so.[213] Vertical mergers may facilitate coordination, for example by increasing market transparency. Integration may afford the merged entity better knowledge of selling prices in the upstream or downstream market, thereby facilitating collusion in either of those markets.[214]

175. The Parties submitted that the combination of TP and IGBB will not result in any increase in the risk of coordinated effects. Whilst the merger reduces the absolute number of voice brokers, this will not have a significant impact on the ability to reach a coordinated outcome for the following main reasons[215]:

a) There are a significant number of alternative trading platforms beyond the narrowly defined wholesale hybrid intermediary space that TP's and IGBB's customers can use. These platforms provide a relevant competitive constraint to wholesale intermediaries and therefore would have the ability and incentive to defeat any attempt by a subset of intermediaries to reach or sustain a coordinated outcome;

b) Wholesale intermediaries' customers have substantial buyer power. Customers would have the ability and incentive to defeat any attempt to coordinate within the intermediary space either by shifting their business to a smaller intermediary, or by sponsoring entry by a new player; and

c) Even looking at the narrow wholesale hybrid intermediary segment, the merger actually results in greater asymmetry between wholesale intermediaries rather than increased symmetry. Given the reduced symmetry, the incentive to reach and maintain a coordinated outcome will be reduced rather than increased. Furthermore, the fact that there was no coordination when the main wholesale intermediaries had relatively symmetric shares implies there is unlikely to be coordination as the shares become less symmetric.

CCS's assessment and conclusion on coordinated effects

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[213] Paragraph 6.7 of the *CCS Merger Guidelines*.
[214] Paragraph 8.8 of the *CCS Merger Guidelines*.
[215] Paragraphs 251 to 254 of Form M1.

176. CCS is of the view that customers have significant countervailing buyer power and this would potentially render cooperation between competitors ineffective. However, the availability of alternative trading platforms might only apply to product types that are simple, plain vanilla and standardized (e.g. FX spot, US Government Bonds). The substitutability of alternative trading platforms such as exchanges and electronic trading platforms is called into question for products that are complex, exotic with odd-date transactions and require negotiations between parties to agree on specific terms of trade. For these products, hybrid broking might be deemed more suitable. Based on a narrow wholesale hybrid intermediary segment, CCS notes that pre-Transaction, there are four main players in each of the product markets with relatively equal market shares (i.e. TP, IGBB, BGC/GFI and Tradition), with the exception of Oil, as indicated by Table 10. Post-Transaction, there is greater asymmetry in each of the product markets. However, CCS notes that there is competition from potential substitutes (from electronic platforms, exchanges and direct dealing) for the provision of broking services in each of the product markets. This may render any attempts to coordinate behaviour difficult and/or unsustainable.

177. In the market for the provision of hybrid broking services for Oil, CCS notes that the incremental change in market shares post-Transaction is small (0%-10%), which will not lead to any significant increase in coordinated effects.

Table 10: Market shares for hybrid broking services in Singapore for the Overlapping Products (by value) (FY15) [216]

Product	Market Size (SGD, million)	TP	IGBB	TP/IGBB combined	BGC/GFI	Tradition	Nittan Capital	Others
Forward FX	[✂]	[10% – 20%]	[20% – 30%]	[40% – 50%]	[20% – 30%]	[20% – 30%	[10% – 20%]	N.A.
IRS	[✂]	[20% – 30%]	[20% – 30%]	[40% – 50%]	[20% – 30%]	[20% – 30%]	N.A.	[0% – 10%]
Cash Deposits	[✂]	[30% – 40%]	[20% – 30%]	[50% – 60%]	[10% – 20%	[20% – 30%]	N.A.	N.A.
Oil	[✂]	[30% – 40%]	[0% – 10%]	[40% – 50%]	[10% – 20%]	[10% – 20%]	N.A.	[20% – 30%]

178. In light of the above, CCS concludes that the Transaction does not raise concerns in terms of coordinated effects on competition.

216 Data submitted by the Parties.

Markets for the APAC-wide, if not worldwide supply of pricing data into Singapore

179. With regard to data sales, the Parties submitted that the combination of TP and IGBB will not result in any increase in the risk of coordinated effects. For the majority of customers TP and IGBB provide complementary products rather than substitute products. Furthermore, for the small number of customers for whom TP and IGBB products are substitutes there will remain a significant number of alternative data providers. In such a fragmented structure it would be extremely difficult to come to a coordinated agreement and the merger of the Parties will not have any significant impact on this.

CCS's assessment and conclusion on coordinated effects

180. CCS notes based on Table 5 and Table 6 that the Transaction does not lead to a significant increase in the market share of the merged entity in the market for APAC-wide, if not worldwide provision of market data in Singapore on the whole. Therefore, the Transaction does not increase the risk of coordinated effects.

181. However, CCS notes that some concerns have been raised by third-parties in relation to the provision of data for certain sub-products (e.g. provision of data for SGD IRS). CCS is of the view that there would not be any significant coordinated effects in the market for the provision of data for any sub-products, if there is sufficient competition at the broking level. CCS has noted in paragraphs 163 to 165 and 176 to 178 above that there are sufficient competitive constraints at the broking level. As such, CCS is of the view that the Transaction does not raise competition concerns with regard to coordinated effects.

182. In light of the above, CCS concludes that the Transaction does not raise concerns in terms of coordinated effects on competition.

(c) Vertical effects (in relation to brokerage and data sales)

183. With regard to the brokerage and data sales businesses, the Parties submitted that the combination of TP and IGBB will not give rise to any vertical relationships. Whilst in theory, the overlap between the two businesses could give rise to a vertically affected market as data derived from broking activities is used an input into the data sales business, in reality TP's and IGBB's broking data is proprietary and neither TP nor IGBB distributes the

data as an input into any downstream data sales business and as such, there is no vertically affected market.

CCS's assessment and conclusion on vertical effects (with regard to both brokerage services and data sales)

184. In light of the assessment in the preceding paragraphs and submissions by third parties, CCS is of the view that the Parties may have a significant segment of data sales with respect to certain OTC sub-products (e.g. SGD IRS), as only brokers engaged in the brokerage of these sub-products are in a position to provide indicative prices based on historical transactions.[217] This view is supported by third party submissions.[218] In relation to these sub-products which are non-standard in nature and traded OTC, market prices may not be readily available.[219] Third parties have estimated post-Transaction, TP/IGBB will have a global market share of between [✂][220] and [✂][221] in relation to the data sales of all OTC products and sub-products. This market share, however, was not confirmed by the Parties as they were unable to provide the estimates based on their data.

185. Customers have indicated that despite the above concerns, they believe that the merged entity would not be in a position to raise prices of their data packages as competition still exist from other broking houses such as Tradition or BGC/GFI, even in these sub-products (e.g. SGD IRS).[222]

186. CCS considered whether the Parties' data may constitute a key input (as pre-trade indicative prices), used for reference in the provision of wholesale hybrid broking in relation to the sub-products identified. In this regard, the Parties would have the incentive and ability to raise prices for their data packages for these sub-products, or to withhold these data packages from other hybrid brokerage service providers, with the effect of foreclosing competition in the sub-product market(s).

187. CCS considers that it is unlikely that the Parties would be able to foreclose competition in the sub-product markets. This is because the price discovery process for such sub-products involves verifying all possible sources (including banks and brokers) to understand current market value and obtain

[217] The global market share for broking services for SGD IRS for the Parties is estimated to be at least [✂]%, as submitted by the Parties themselves.
[218] Response by [✂]; response by [✂].
[219] Source: "Over-the-Counter (OTC) Derivatives" Federal Reserve Bank of Chicago, 2014.
[220] Estimate provided by [✂].
[221] Estimate provided by [✂].
[222] Response by [✂]; response by [✂]; response by [✂].

visibility of prices. In this regard, none of the competitors or customers would be constraint by the data provided by the Parties to trade through the Parties for these sub-products.[223]

188. Based on the foregoing, CCS concludes that it is unlikely that the Transaction will give rise to vertical effects that would raise competition concerns in the market for brokerage services in connection with the provision of data sales.

IX. Efficiencies

189. The Parties submitted the Transaction will provide synergies for the joint entity in three key areas across which TP and IGBB are expected to save about £60m (S$120.33m[224]) per year, or 19% out of their combined cost base of £340m (S$681.84m[225]) per year. These three key areas are:

a) Consolidation of managerial and support staff which eliminates management and support costs;

b) Reduction in the average brokerage commission paid out in the regions where both TP and IGBB was individually active pre-merger.[226] The expected reduction in commission pay-outs results in a direct reduction of the variable cost per trade and hence can be expected to benefit customers directly via lower transaction fees; and

c) Reductions in front office costs due to the consolidation. The Parties estimate savings particularly in the information sales costs, travel and entertainment costs and communications and information service costs. These front office cost reductions can be expected to feed into the pricing decisions of the firm in the medium term, thereby enabling the firm to price more competitively to the benefit of customers.[227]

CCS's assessment

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[223] Parties' response to question 24 of CCS's RFI dated 16 June 2016; response by [✂].
[224] Converted to SGD using exchange rate as at 18 May 2016. Exchange rate sourced from European Central Bank data available at http://sdw.ecb.europa.eu/export.do?node=2018794
[225] Converted to SGD using exchange rate as at 18 May 2016. Exchange rate sourced from European Central Bank data available at http://sdw.ecb.europa.eu/export.do?node=2018794
[226] UK, Germany, the USA, Hong Kong, Australia and South Africa.
[227] Paragraphs 258 to 261 of Form M1.

190. CCS notes that claimed efficiencies may be taken into account at two separate points in the analytical framework: first where they increase rivalry in the market so that no SLC will result from the Transaction and second, efficiencies can be taken into account where they do not avert a SLC but will nevertheless bring about lower costs, greater innovation, greater choice or higher quality and be sufficient to outweigh the detriments to competition caused by the Transaction in Singapore.

191. Given that the above competition assessment did not point to an SLC, CCS is of the view that it is not necessary to make an assessment on the claimed efficiencies by the Parties.

X. Ancillary Restraints

192. Paragraph 10 of the Third Schedule to the Act states that "the section 34 prohibition and the section 47 prohibition shall not apply to any agreement or conduct that is directly related and necessary to the implementation of a merger" (the "Ancillary Restriction Exclusion"). In order to benefit from the Ancillary Restriction Exclusion, a restriction must not only be directly related, but also necessary to the implementation of the merger.[228] A restriction is not automatically deemed directly related to the merger simply because it is agreed at the same time as the merger or is expressed to be so related[229] but needs to be connected with the merger but subordinate to its main object.[230] In determining the necessity of the restriction, consideration such as whether its duration, subject matter and geographical field of application are proportionate to the overall requirements of the merger will be taken into account.[231]

193. The Parties have submitted that the following non–compete and confidentiality obligations on the part of ICAP Newco and non-solicitation obligations by ICAP Newco and TP detailed in the Sale and Purchase Agreement ("SPA") constitute ancillary restrictions to the Transaction:

(a) Non- competition restriction

<u>ICAP Newco non-compete restriction</u>[232]

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[228] Paragraph 10.9 of the *CCS Merger Guidelines*.
[229] Paragraph 10.12 of the *CCS Merger Guidelines*.
[230] Paragraph 10.10 of the *CCS Merger Guidelines*.
[231] Paragraph 10.13 of the *CCS Merger Guidelines*.
[232] Paragraph 263 of Form M1.

194. Under Clause 2.1 of Schedule 17 of the SPA, ICAP Newco is restricted for a period of [✂] after completion of the Transaction from the following:

a. [✂];

b. [✂]; or

c. [✂].

CCS's assessment regarding the Parties non-compete restriction

195. The *CCS Merger Guidelines* state that non-compete clauses, if properly limited, are generally accepted as essential if the purchaser is to receive the full benefit of any goodwill and/or know-how acquired with any tangible assets. CCS will consider the duration of the clause, its geographical field of application, its subject matter and the persons subject to it. Any restriction must relate only to the goods and services of the acquired business and apply only to the area in which the relevant goods and services were established under the previous/current owner. [233]

196. The non-compete restriction prevents ICAP Newco from competing with TP [✂] and it is the Parties' submission that these are directly related and necessary to the Transaction as it only restricts ICAP Newco in respect of [✂].[234]

197. In the circumstances of this case, CCS is of the view that the non-compete restriction is directly related to and necessary for the Transaction and cannot be achieved in a less restrictive way. CCS notes that the product scope of the restriction relates [✂]. CCS also notes that the restriction from [✂] limits this clause to only [✂].[235] CCS also considers that the [✂] duration is proportionate amount to time to protect the value of the acquired business as well as to fully benefit from the goodwill acquired from the Transaction.

198. In view of the above, CCS is satisfied that the non-compete restriction in the context of the Transaction constitutes ancillary restrictions and consequently fall within the exclusion under paragraph 10 of the Third Schedule of the Act insofar as they apply to Singapore.

(b) TP and ICAP Newco non-solicitation restriction

[233] Paragraph 10.15 of the *CCS Merger Guidelines*.
[234] Paragraph 266 of Form M1.
[235] Parties' response to question 30 of CCS RFI dated 16 June 2016.

199. TP and ICAP Newco non-solicitation restriction[236] set out in Clause 4 of Schedule 17 of the SPA provides the following:

a. [✂]; and

b. [✂].

CCS's assessment regarding the Parties non-solicitation restriction

200. It is the Parties' submission that the non-solicitation restriction is directly related and necessary to the Transaction as it relates to the directors and employees of TP and IGBB. It ensures that TP ICAP will have a workforce with sufficient expertise following the Transaction. ICAP will also be less likely to proceed with the Transaction if there was a risk that directors or employees might leave to work at TP ICAP.

201. In the circumstances of the case, CCS notes that the non-solicitation restrictions are entered into by the Parties for the purposes of retaining and benefitting from the human resource assets. CCS understands that it is necessary that these human resource assets are retained as the hybrid broking business is to a large extent based on personal relationships between a broker and the customers.[237] CCS further notes that the non-solicitation restriction prior to completion and in the event of termination is limited only to directors, key employees and top brokers of the Parties. CCS is of the view that the [✂] duration for the non-solicitation restriction post competition is reasonable and allows the Parties to protect the value of the business.

202. In view of the above, CCS concludes that the non-solicitation restriction constitutes an ancillary restriction and consequently falls within the exclusion under paragraph 10 of the Third Schedule of the Act insofar as they apply to Singapore.

(c) ICAP Newco confidential information restriction

ICAP Newco confidential information restriction[238]

203. Clause 5 of Schedule 17 of the SPA provides that ICAP Newco shall not, for a period of [✂], make use of, or disclose or divulge to any third party, any

[236] Paragraph 264 of Form M1.
[237] Parties' response to question 32 of CCS RFI dated 16 June 2016.
[238] Paragraph 265 of Form M1.

information of a secret or confidential nature relating to, or to the business or affairs of the voice broking business or any member of the ICAP group falling within the perimeter of the Transaction (i.e. involved in hybrid broking services).

204. The Parties submit that the confidential information restriction is directly related to the Transaction as ICAP Newco is only restricted in respect of confidential information relating to voice broking. It is also necessary for the Transaction as without it TP would not proceed if ICAP Newco were able to use or divulge confidential information or business secrets as it would undermine the value of TP ICAP.[239]

205. In the circumstances of the case, CCS notes that the confidential information relates only to the product scope of the Transaction, i.e. voice broking. Further CCS also notes that the transfer of the business also involves the transfer of employees and therefore associated knowledge of operational and commercial aspects of the business such as customer lists and contact details, profitability and margins and pricing information.[240]

206. In view of the above, CCS concludes that the confidential information restriction constitutes an ancillary restriction and consequently falls within the exclusion under paragraph 10 of the Third Schedule of the Act insofar as they apply to Singapore.

XI. Conclusion

207. For the reasons above and based on the information available, CCS has assessed that the Transaction, if carried into effect, will not infringe section 54 of the Act. In accordance with section 57(7) of the Act, this decision shall be valid for a period of one year from the date of this decision.

Toh Han Li
Chief Executive
Competition Commission of Singapore

[239] Paragraph 268 of Form M1.
[240] Parties' response to question 35 of CCS RFI dated 16 June 2016.