FOR ISSUE IN THE UK AND EU.
FOR PROFESSIONAL CLIENTS AND QUALIFIED INVESTORS ONLY.
NOT TO BE REPRODUCED WITHOUT PRIOR WRITTEN APPROVAL.
PLEASE REFER TO ALL RISK DISCLOSURES AT THE BACK OF THIS DOCUMENT.

Insight
INVESTMENT

JANUARY 2022

# CONSULTATION RESPONSE CLIENT CLEARING: ACCESS AND PORTABILITY

#### INSIGHT INVESTMENT INSIGHT INVESTMENT

Insight Investment is one of the UK's largest investment managers, managing over £836bn in assets, primarily for UK defined benefit pension funds, as well as insurers, sovereign wealth funds and financial institutions<sup>1</sup>. The majority of Insight's assets under management are in risk management solutions that we provide for our clients (primarily asset-liability management solutions) and active fixed income

#### **OVERVIEW OF INSIGHT'S POSITION**

We agree with the issues represented by the DAT on CCSP (client clearing service provider, or clearing member) concentration issue, lack of certainty re porting and access. We support the initiative by BCBS/IOSCO in exploring this further.

We see two key risks associated with client clearing:

- The need to post variation margin in cash. Many buyside clients are limited in how much excess cash they can hold and therefore require an efficiently functioning repo market, especially during periods of market stress. This is expanded in our response to the October 2021 consultation on the review of margin practices.
- The inability to port within short time frames upon either a CCSP default (usually two business days), or CCSP termination provision (can be one to three months depending on commercial terms). The focus of our response to this consultation focuses on this risk. We do not believe porting risk has reduced in recent years.

Note that while we do clear in the US as well as Europe, our experience is greatest in Europe (including UK), and so our response will be more influenced by those models.

## Potential solutions to help mitigate porting risk

In order to reduce this risk we propose a number of potential solutions for consideration below. We appreciate each of these suggestions has its own challenges, but it does not appear that there are easy solutions to this issue.

- Bank capital rules: Regulators could consider recalibrating bank capital rules to encourage more banks to provide CCSP services so that porting becomes more likely.
- Minimum notice period for CCSP termination: We would support a regulatory minimum notice period of at least six months for the termination of services by CCSPs in order to provide a greater chance that porting is successful even for large directional portfolios and in stressed conditions. Bank capital rules would need to be appropriately calibrated to ensure that this extension of notice period does not discourage banks from providing CCSP services.
- Ability to extend the porting window by client connecting with CCPs directly:
  - We believe it is crucial that under any model (whether it is a standard client clearing model or sponsored access model), that clients have the ability to extend the porting window by connecting with the CCP directly in the event of CCSP default/termination. This would allow clients to post initial margin (IM) and variation margin (VM) directly to the CCP to support the trades. A sensible multiple of initial margin may be considered during this phase as clients are unlikely to be able to post

<sup>&</sup>lt;sup>1</sup> As at 30 September 2021. Assets under management (AUM) are represented by the value of cash securities and other economic exposure managed for clients. Figures shown in EUR. FX rates as per WM Reuters 4pm spot rates. Reflects the AUM of Insight, the corporate brand for certain companies operated by Insight Investment Management Limited (IIML). Insight includes, among others, Insight Investment Management (Global) Limited (IIMG), Insight Investment International Limited (IIIL), Insight Investment Management (Europe) Limited (IIMEL) and Insight North America LLC (INA), each of which provides asset management services.

default fund contribution and make intra-day margin calls. Further consideration may also be needed to ensure that risks and complexity around intra-day margins are addressed appropriately.

- There has been a lot of discussion and interest in the market about the development of sponsored access models and, while we are supportive of these models and may at some point provide a solution to some of the issues set out here, we unfortunately do not believe that they currently solve these issues for the OTC derivatives market. There are a number of reasons for this: we are only aware of one CCP that provides this service for OTC derivatives and other CCPs (where much clearing liquidity resides) are still unwilling or unable to; the number of banks willing to provide clearing services on such a sponsored access model is also highly limited (we are only aware of one); and finally, but importantly, these models do not currently provide the ability for the client to connect to the CCP directly in the event of a CCSP default to extend the porting window beyond the standard window of around two business days. The combination of these factors means that porting risk remains high, similar to a standard clearing arrangement. These models work better for repo clearing as explained further below, however the number of banks providing CCSP services is still highly limited (we are aware of only two for any particularly CCP in Europe).
- o We would be highly supportive of any model whether a standard client clearing model or sponsored access clearing model that permits the extension of porting windows as described above. This is one of the most robust ways to reduce the porting risk in the short term in a scenario where banks are not willing to provide clearing services. However, the risk for a longer-term solution remains open as CCPs are unlikely to want clients to maintain this interim status indefinitely.
- o Direct access clearing models would naturally provide a direct connectivity to CCPs at all times, thereby eliminating porting risk. However, the impediments of getting this to work for buyside firms are high and, even if it was theoretically possible to make this work (which would require significant alteration to the CCP models on direct access), it would only be available for the very largest clients. Therefore, it is not a market wide solution and so is unlikely to significantly reduce any systemic risk in the unfortunate event that banks are unwilling or unable to provide clearing services (e.g. in stressed market conditions).
- Game plan: We are supportive of any plans that CCPs are able to develop that enable successful porting. However, as the discussion paper notes, the value of such plans may be limited for example, they may become outdated as circumstances change and CCSPs may change their view on accepting client ports during times of significant market stress. We understand that in the US, the regulator works with the CCP to ensure that porting takes place for the client's positions; we are not aware of this arrangement existing in European markets and can see significant benefits, if it were possible.

Finally, we summarise below the key features that we believe are necessary for client clearing models to be successful:

- A feature allowing clients to port margin directly to CCPs in the event of CCSP default. This may be either within the standard client clearing model or via a sponsored clearing model.
- Strong support from the banking community to provide clearing services to all models, whether standard clearing models or sponsored clearing models.
- Greater confidence that the CCSP relationship is for the long haul and one that can be relied upon even in stressed conditions.
- Any clearing model, other than perhaps the pure direct access clearing models, should be available for large, medium and small clients.

#### Sponsored access models

Below, we provide some thoughts on sponsored access models that exist today. Note that the sponsored access clearing model experience is different for repos to OTC derivatives.

## Sponsored access clearing model for repos:

These models do exist and are something we actively support. However, they are currently only available to large buyside clients, with few banks willing to provide sponsored clearing services. In Europe we are only aware of a couple of banks providing these services for repo clearing sponsored access models.

Generally, CCPs are willing to provide the ability for clients to post margin directly to the CCP in the event of a agent member default. This is something we very much support as it means that the transactions can still be maintained upon agent member default and thus, if the positions are properly collateralised, the CCP should be less likely to close out open positions. This feature potentially provides additional time for the client to find an alternative sponsored clearing provider.

This feature is more easily supported for repo clearing because repo transactions are short dated (usually no more than 6-12months long) so the risk associated with this is smaller. We are not aware of this feature being offered for OTC derivatives.

#### Sponsored access clearing model for OTC derivatives

We are only aware of it being offered by one CCP and only for the largest clients. The number of CCSPs supporting this are limited (we believe just one). We are not aware of other CCPs, where significant liquidity still resides, offering such models for OTC derivatives clearing.

Where this model does exist for OTC derivatives, our understanding is that these models do not have the ability to provide margin directly to CCPs upon CCSP default. Therefore, this model does not offer the same level of protection that is available on sponsored clearing models for repos. As such, client must still find an alternative agent member within a short (circa 2 business days) of agent member default, or positions will be liquidated.

One of the benefits that was hoped for with a sponsored clearing model was that it would reduce balance sheet utilisation for banks as bank capital rules would provide an advantage versus standard clearing service models. It was believed that this would encourage more banks to offer clearing services, bringing greater competition and addressing the CCSP concentration issue. In reality we have not seen much evidence of this. We are only aware of one bank supporting this service for OTC derivatives which is also only available at one CCP, and similarly only a couple of banks for sponsored repo clearing services (in Europe).

#### Direct access models

While in theory there could be many benefits to getting a direct access model to work for clients, in practise there are number of impediments which would require CCPs to have to change their models significantly to work. The impediments include the following:

- Minimum capital requirements: this would not work for many of the buyside, including pension funds, as they are fully invested and do not have uninvested capital.
- **Default fund contribution:** this may not be permitted by some buyside firms, including potentially pension funds, depending on their local regulation. We were interested in the BCBS/IOSCO consultation report that mentioned some CCPs offering a model where the need to contribute to a default fund is dropped and replaced by greater initial margin collateralisations. We would support such models but, although we have explored this with some CCPs, we are not aware that they exist, even though we do manage investments for large pension funds.
- Participation in default management process: this is likely to be problematic for buyside firms not only because some clients may be prevented from taking positions that would result in them being exposed to loss mutualisation, but also because they do not have the market making experience to be able bid on these portfolios.
- Operation liquidity: practical consideration around intra-day margin calls would also need to be considered, including the potential for out of hours margin calls, which could possibly be solved by having a paying agent.

Even if it was possible to solve the above issues, it would only be for the largest clients. Therefore, it is not a market wide solution and so is unlikely to significantly reduce any systemic risk in the unfortunate event that banks are unwilling or unable to provide clearing services (e.g. in stressed market conditions). However, if the largest clients were able to gain direct access, it may remove some pressure from the market and therefore may still be helpful.

#### **ACCESS**

## Design of direct and sponsored access models

QUESTION 1: Do you agree with the observation in the discussion paper that the direct and sponsored access models are designed for and generally used more by larger and/or more sophisticated clients?

Yes, we would agree with this observation.

QUESTION 2: Could there be any other solutions that would facilitate access, either through greater use of such access models by small and medium-sized clients, or through some other solution?

#### Barriers

QUESTION 3: Do you agree with the findings in the discussion paper that direct and sponsored access models are used more for certain types of products (eg repos) than for others? Do you agree with the reasons described in the paper for why this is the case? Why/why not?

Agree, please see executive summary for more information.

## Challenges related to direct and sponsored access models

**QUESTION 4**: Do you agree that direct and sponsored access models have the potential to diversify the risk profile of the direct clearing participant basis of a CCP by introducing new types of direct participants? Why/why not?

No comment.

QUESTION 5: Do you think that CCPs have introduced sufficient safeguards to prevent risk transmission from direct participants using direct and sponsored access models? Why/why not? If not, what additional safeguards do you think are necessary?

No comment.

**QUESTION 6:** Do you think that sponsors are properly incentivised to closely monitor the activity of their sponsored participants (ie the direct participants)? Why/why not? If not, how do you think sponsors could be properly incentivised?

No comment.

**QUESTION 7:** Do you think that the number of sponsors is limited? Are you concerned about sponsor concentration risk? If so, is this because it is difficult to find a sponsor? Are there any other reasons?

We do believe that the number of sponsors is limited and have some concerns about sponsor concentration risk. We are only aware of one or two banks supporting these services for sponsored repo clearing services, and OTC derivatives and similarly a couple of banks for.

One of the benefits that was hoped for with a sponsored clearing model was that it would reduce balance sheet utilisation for banks as bank capital rules would provide an advantage versus standard clearing service models. It was believed that this would encourage more banks to offer clearing services, bringing greater competition and addressing the CCSP concentration issue. In reality we have not seen much evidence of this.

**QUESTION 8:** Do you think that CCP rules adequately address the issue of sponsor default? If so, what are the CCP rules that adequately address this issue? If not, what kind of CCP rules are required to address this issue?

We believe these are adequately addressed.

We would encourage other models to also be created where clients can post margin directly to the CCP in the event of a CCSP default to extend the porting window. A sensible multiple of initial margin may be considered during this phase as clients are unlikely to be able to post default fund contribution and make intra-day margin calls. This is further discussed in the executive summary above.

## Testing

QUESTION 9: Have you participated in default management exercises that test direct and sponsored access models?

No but we would be keen to if the CCP was to initiate this.

QUESTION 10: Without providing identifying information, what has worked well in such exercises? What has not? Do you have recommendations as to what could be improved for such exercises?

No comment.

#### Additional considerations

QUESTION 11: Please describe any additional factors that may be impacting the activity and uptake of direct and sponsored models that are not considered in this paper.

We repeat from our executive summary below:

While in theory there could be many benefits to getting a direct access model to work for clients, in practise there are number of impediments which would require CCPs to have to change their models significantly to work. The impediments include the following:

- **Minimum capital requirements:** this would not work for many of the buyside, including pension funds, as they are fully invested and do not have uninvested capital.
- Default fund contribution: this may not be permitted by some buyside firms, including potentially pension funds, depending on their local regulation. We were interested in the BCBS/IOSCO consultation report that mentioned some CCPs offering a model where the need to contribute to a default fund is dropped and replaced by greater initial margin collateralisations. We would support such models but, although we have explored this with some CCPs, we are not aware that they exist, even though we do manage investments for large pension funds.

- Participation in default management process: this is likely to be problematic for buyside firms not only because some clients may be prevented from taking positions that would result in them being exposed to loss mutualisation, but also because they do not have the market making experience to be able bid on these portfolios.
- Operation liquidity: practical consideration around intra-day margin calls would also need to be considered, including the potential for out of hours margin calls, which could possibly be solved by having a paying agent.

Even if it was possible to solve the above issues, it would only be for the largest clients. Therefore, it is not a market wide solution and so is unlikely to significantly reduce any systemic risk in the unfortunate event that banks are unwilling or unable to provide clearing services (e.g. in stressed market conditions). However, if the largest clients were able to gain direct access, it may remove some pressure from the market and therefore may still be helpful.

QUESTION 12: Please provide any additional comments with regards to the impact that direct and sponsored access models have on access to client clearing.

We repeat from our executive summary below:

There has been a lot of discussion and interest in the market about the development of sponsored access models and, while we are supportive of these models and may at some point provide a solution to some of the issues set out here, we unfortunately do not believe that they currently solve these issues for the OTC derivatives market. There are a number of reasons for this: we are only aware of one CCP that provides this service for OTC derivatives and other CCPs (where much clearing liquidity resides) are still unwilling or unable to; the number of banks willing to provide clearing services on such a sponsored access model is also highly limited (we are only aware of one); and finally, but importantly, these models do not currently provide the ability for the client to connect to the CCP directly in the event of a CCSP default to extend the porting window beyond the standard window of around two business days. The combination of these factors means that porting risk remains high, similar to a standard clearing arrangement. These models work better for repo clearing as explained further below, however the number of banks providing CCSP services is still highly limited (we are aware of only two for any particularly CCP in Europe).

QUESTION 13: Please provide additional comments with regard to access to client clearing more generally.

These are well captured in the DAT report, but some issues include:

- Lack of sufficient CCSP to make the client clearing model reliable in stressed conditions
- High concentration CCSP such that a default or an exit of business by one of them could lead to systemic risks in the market
- Lack of confidence that porting will reliably work in stressed conditions
- Lack of confidence that CCSP will be there to support the business in less favourable times, given they have an "option" to walk away through termination provisions
- Concern that directional portfolios will experience the difficulties of all of the above to a greater extent
- Concern that the portfolios will be forced into liquidation due to CCSP no longer supporting service (either due to default or commercial reasons to exit the business).

#### **PORTING**

#### Risks from not porting

**QUESTION 14:** Are there any additional risks or potential harm associated with not porting following a clearing participant default, which were not described in the discussion paper? If so, please describe such additional risks and/or harm.

Portfolios shall be liquidated, clients will lose their exposure (which may have been providing a hedge for a liability), and clients will also not have visibility on when and what is liquidated which leaves them unable to also try to manage this risk.

QUESTION 15: Potentially effective practices. Do you agree with the two tools identified in the discussion paper as potentially successful porting practices? Are there any other tools that should be identified as potentially effective practices?

Agree but we also request the consideration of the points below as ways to make porting more successful.

We repeat from our executive summary below:

We appreciate each of these suggestions has its own challenges, but it does not appear that there are easy solutions to this issue.

- Bank capital rules: Regulators could consider recalibrating bank capital rules to encourage more banks to provide CCSP services so that porting becomes more likely.
- Minimum notice period for CCSP termination: We would support a regulatory minimum notice period of at least six months for the termination of services by CCSPs in order to provide a greater chance that porting is successful even for large directional portfolios and in stressed conditions. Bank capital rules would need to be appropriately calibrated to ensure that this extension of notice period does not discourage banks from providing CCSP services.
- Ability to extend the porting window by client connecting with CCPs directly:
  - o We believe it is crucial that under any model (whether it is a standard client clearing model or sponsored access model), that clients have the ability to extend the porting window by connecting with the CCP directly in the event of CCSP default/termination. This would allow clients to post initial margin (IM) and variation margin (VM) directly to the CCP to support the trades. A sensible multiple of initial margin may be considered during this phase as clients are unlikely to be able to post default fund contribution and make intra-day margin calls. Further consideration may also be needed to ensure that risks and complexity around intra-day margins are addressed appropriately.
  - There has been a lot of discussion and interest in the market about the development of sponsored access models and, while we are supportive of these models and may at some point provide a solution to some of the issues set out here, we unfortunately do not believe that they currently solve these issues for the OTC derivatives market. There are a number of reasons for this: we are only aware of one CCP that provides this service for OTC derivatives and other CCPs (where much clearing liquidity resides) are still unwilling or unable to; the number of banks willing to provide clearing services on such a sponsored access model is also highly limited (we are only aware of one); and finally, but importantly, these models do not currently provide the ability for the client to connect to the CCP directly in the event of a CCSP default to extend the porting window beyond the standard window of around two business days. The combination of these factors means that porting risk remains high, similar to a standard clearing arrangement. These models work better for repo clearing as explained further below, however the number of banks providing CCSP services is still highly limited (we are aware of only two for any particularly CCP in Europe).
  - o We would be highly supportive of any model whether a standard client clearing model or sponsored access clearing model that permits the extension of porting windows as described above. This is one of the most robust ways to reduce the porting risk in the short term in a scenario where banks are not willing to provide clearing services. However, the risk for a longer-term solution remains open as CCPs are unlikely to want clients to maintain this interim status indefinitely.
  - o Direct access clearing models would naturally provide a direct connectivity to CCPs at all times, thereby eliminating porting risk. However, the impediments of getting this to work for buyside firms are high and, even if it was theoretically possible to make this work (which would require significant alteration to the CCP models on direct access), it would only be available for the very largest clients. Therefore, it is not a market wide solution and so is unlikely to significantly reduce any systemic risk in the unfortunate event that banks are unwilling or unable to provide clearing services (e.g. in stressed market conditions).
- Game plan: We are supportive of any plans that CCPs are able to develop that enable successful porting. However, as the discussion paper notes, the value of such plans may be limited for example, they may become outdated as circumstances change and CCSPs may change their view on accepting client ports during times of significant market stress. We understand that in the US, the regulator works with the CCP to ensure that porting takes place for the client's positions; we are not aware of this arrangement existing in European markets and can see significant benefits, if it were possible.

Finally, we summarise below the key features that we believe are necessary for client clearing models to be successful:

- A feature allowing clients to port margin directly to CCPs in the event of CCSP default. This may be either within the standard client clearing model or via a sponsored clearing model.
- Strong support from the banking community to provide clearing services to all models, whether standard clearing models or sponsored clearing models.
- Greater confidence that the CCSP relationship is for the long haul and one that can be relied upon even in stressed conditions.
- Any clearing model, other than perhaps the pure direct access clearing models, should be available for large, medium and small clients.

QUESTION 16: What additional approaches do CCPs use to pre-emptively identify a backup CCSP? What incentives can be provided to assist the development of alternative/backup CCSP relationships? Are there any other considerations for alternate/backup CCSPs not set forth in the report?

No comment.

No comment.
QUESTION 18: In addition to those outlined in the paper, what attributes of account structures facilitate or impede porting client accounts?
No comment.
QUESTION 19: Are some client accounts not suitable for porting?
QUESTION 20: Does holding excess collateral and the ability to make direct payments improve the probability that a client will be ported successfully or are there impediments to using this collateral?
We strongly support this. See executive summary for more information.
QUESTION 21: What is your view of a client consent mechanism that could be used to facilitate porting, if permitted under applicable law?
No comment.
QUESTION 22: Are the potentially effective practices described in the discussion paper consistent with prior porting experiences?
No comment.
QUESTION 23: Are there any barriers to implementing potentially effective porting practices that are not described in the discussion paper?
No comment.
Communication and coordination  QUESTION 24: Are there any additional communications by the CCP or the defaulting CCSP that may increase the probability of porting
client accounts?
No comment.
QUESTION 25: Are there additional actions CCPs can take following a clearing participant default to coordinate that are not set forth in the discussion paper? Are there any limitations on coordination that are not included in the paper?
No comment.
Harmonisation
QUESTION 26: Are there additional items CCPs can harmonise or standardise during business as usual that are not outlined in the discussion paper? Are there any factors that may impede harmonisation or standardisation that are not provided in the paper?
No comment.
Notable issues to consider when developing a porting protocol
<b>QUESTION 27</b> : Are there additional regulatory requirements that could impede porting? Can such impediments be addressed or mitigated through action prior to the CCSP's default?

No comment.

QUESTION 28: Are there any additional factors that should be addressed in testing exercises?

No comment.

QUESTION 29: Please provide examples of good disclosure practices from your perspective.

No comment.

QUESTION 30: Are there other arrangements a CCSP can make to ensure that, post default, the CCSP can help coordinate porting at multiple CCPs if the CCSP is a non-defaulter? If the CCSP defaults, what arrangements can the CCSP make to facilitate the porting of its clients?

No comment.

#### Suggested next steps

QUESTION 31: Please provide feedback on the suggested next steps for consideration. Do you agree that these issues warrant further consideration by CCPs, CCSPs and/or clients? Are there additional issues that may warrant further consideration?

We encourage policy makers to consider all options including those that are set out in the executive summary. We are grateful to BCBS and IOSCO in engagement on this topic.

#### **RISK DISCLOSURES**

Past performance is not indicative of future results. Investment in any strategy involves a risk of loss which may partly be due to exchange rate fluctuations.

Any target performance aims are not a guarantee, may not be achieved and a capital loss may occur. Funds which have a higher performance aim generally take more risk to achieve this and so have a greater potential for the returns to be significantly different than expected.

 $Portfolio\ holdings\ are\ subject\ to\ change, for\ information\ only\ and\ are\ not\ investment\ recommendations.$ 



#### Institutional Business Development

businessdevelopment@insightinvestment.com +44 20 7321 1552

#### **European Business Development**

europe@insightinvestment.com +49 69 12014 2650 +44 20 7321 1928

#### Consultant Relationship Management

consultantrelations@insightinvestment.com +44 20 7321 1023



@InsightInvestIM



company/insight-investment



www.insightinvestment.com

### **IMPORTANT INFORMATION**

Material in this publication is for general information only. This material is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. This document must not be used for the purpose of an offer or solicitation in any jurisdiction or in any circumstances in which such offer or solicitation is unlawful or otherwise not permitted. This document should not be duplicated, amended or forwarded to a third party without consent from Insight Investment.

This material may contain 'forward looking' information that is not purely historical in nature. Such information may include, among other things, projections and forecasts. Forecasts are not guarantees.

#### Past performance is not indicative of future results.

Investment in any strategy involves a risk of loss which may partly be due to exchange rate fluctuations.

Index returns are for illustrative purposes only and are used in the context of our macro-economic models and analysis only. Returns cannot be linked to any fund or investment strategy and results do not represent or infer any links to actual fund or strategy performance. Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index.

Insight does not provide tax or legal advice to its clients and all investors are strongly urged to seek professional advice regarding any potential strategy or investment.

References to future returns are not promises or even estimates of actual returns a client portfolio may achieve. Assumptions, opinions and estimates are provided for illustrative purposes only. They should not be relied upon as recommendations to buy or sell securities. Forecasts of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice.

The information and opinions are derived from proprietary and non-proprietary sources deemed by Insight Investment to be reliable, are not necessarily all-inclusive and are not guaranteed as to accuracy. As such, no warranty of accuracy or reliability is given and no responsibility arising in any other way for errors and omissions (including responsibility to any person by reason of negligence) is accepted by Insight Investment, its officers, employees or agents. Reliance upon information in this material is at the sole discretion of the reader.

Telephone conversations may be recorded in accordance with applicable laws.

## For clients and prospects of Insight Investment Management (Global) Limited:

Issued by Insight Investment Management (Global) Limited. Registered in England and Wales. Registered office 160 Queen Victoria Street, London EC4V 4LA; registered number 00827982.

#### For clients and prospects of Insight Investment Funds Management Limited:

Issued by Insight Investment Funds Management Limited. Registered in England and Wales. Registered office 160 Queen Victoria Street, London EC4V 4LA; registered number 01835691.

## For clients and prospects of Insight Investment Management (Europe) Limited:

Issued by Insight Investment Management (Europe) Limited. Registered office Riverside Two, 43-49 Sir John Rogerson's Quay, Dublin, D02 KV60. Registered in Ireland. Registered number 581405. Insight Investment Management (Europe) Limited is regulated by the Central Bank of Ireland. CBI reference number C154503.

## For clients and prospects of Insight Investment International Limited:

Issued by Insight Investment International Limited. Registered in England and Wales. Registered office 160 Queen Victoria Street, London EC4V 4LA; registered number 03169281.

Insight Investment Management (Global) Limited, Insight Investment Funds Management Limited and Insight Investment International Limited are authorised and regulated by the Financial Conduct Authority in the UK. Insight Investment Management (Global) Limited and Insight Investment International Limited may operate in certain European countries in accordance with local regulatory requirements.

For clients and prospects based in Australia and New Zealand:

This material is for wholesale investors only (as defined under the Corporations Act in Australia or under the Financial Markets Conduct Act in New Zealand) and is not intended for distribution to, nor should it be relied upon by, retail investors.

Both Insight Investment Management (Global) Limited and Insight Investment International Limited are exempt from the requirement to hold an Australian financial services licence under the Corporations Act 2001 in respect of the financial services; and both are authorised and regulated by the Financial Conduct Authority (FCA) under UK laws, which differ from Australian laws. If this document is used or distributed in Australia, it is issued by Insight Investment Australia Pty Ltd (ABN 69 076 812 381, AFS License No. 230541) located at Level 2, 1-7 Bligh Street, Sydney, NSW 2000.

## For clients and prospects of Insight North America LLC:

Insight North America LLC is a registered investment adviser under the Investment Advisers Act of 1940 and regulated by the US Securities and Exchange Commission. INA is part of 'Insight' or 'Insight Investment', the corporate brand for certain asset management companies operated by Insight Investment Management Limited including, among others, Insight Investment Management (Global) Limited, Insight Investment International Limited and Insight Investment Management (Europe) Limited (IIMEL).

© 2021 Insight Investment. All rights reserved.