

## **Form ADV Part 2A - Brochure**

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This brochure provides information about the qualifications and business practices of Harmonic Capital Partners LLP ("Harmonic" or "We" or "Our"). If you have any questions about the contents of this brochure, please contact us at +44 20 7448 0300. The information in this brochure has not been approved or verified by the United States Securities and Exchange Commission ("SEC") or by any state or foreign securities authority.

Additional information about Harmonic is available on the SEC's website at [www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov)

Registration does not imply that we, or our associates, have attained a certain level of skill or training.

This brochure does not constitute: (1) an offer or agreement to provide advisory services to any person; (2) an offer to sell interests or the solicitation of an offer to purchase interests in a Harmonic sponsored fund; or (3) a complete discussion of the risks, features or conflicts associated with Harmonic's advisory business. This brochure should not be relied on in determining whether to invest or establish an advisory relationship with Harmonic.

## **Item 2 – Material Changes**

This Form ADV Part 2A (“Brochure”) was updated on December 21, 2015. Material changes have been made to this Brochure versus the previous version dated September 2, 2015, as follows:

- Update to the value of our Assets Under Management;
- Update to Item 4 and I0, including changes related to Harmonic’s change in ownership, organisational structure and the removal of related party arrangements with Julian Samways.

Please read this Brochure in its entirety.

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## Item 4 – Advisory Business

Harmonic, a limited liability partnership incorporated under laws of England and Wales, was founded in 2002 and commenced offering investment advisory services in 2003. Harmonic is owned directly or indirectly by its partners.

Harmonic is a quantitative macro manager that aims to generate excess returns by modelling investor behaviour to predict market moves. We specialise in offering investment strategies which seek exposure to global fixed income, currency, commodity and equity markets, which are accessed through liquid futures, forwards and other derivative contracts. The strategies are based on computerised models that use market and macroeconomic data to make systematic trading decisions. Our main focus is on spread-based strategies which seek to determine the value of pairs of long and short positions in related markets on a relative basis using a range of financial and economic variables, with the resulting aggregated views expressed as long and short positions in the relevant markets for the given strategy. This approach aims to capture convergence and divergence between economies and sectors and deliver returns that are non-correlated to the underlying markets and other investment advisers. The core spread-based strategies are complemented by directional trading strategies which use a range of financial and economic variables to determine positions for individual markets.

Our investment strategies are offered in three standard investment programs:

- Harmonic Macro, which seeks exposure to both spread-based and directional strategies, allocating to all our traded markets, and which is offered in a fund that we sponsor (Harmonic Alpha Plus Macro Fund) and to third party managed accounts;
- Harmonic Currency, which seeks exposure to both spread-based and directional strategies, allocating to our traded currency markets only, and which is offered to third party managed accounts; and
- Harmonic Liquid Alternatives, which seeks exposure to a smaller number of strategies than Harmonic Macro that focus on the most liquid markets, and which is offered to third party managed accounts.

The Currency and Liquid Alternatives investment programs share the same research and risk management process as the flagship Macro investment program. Targeted performance volatilities for investment programs will vary based on the requirements of clients.

All clients are subject to certain eligibility requirements, which are further discussed under Item 7 “Types of Clients”.

Underlying investors in the fund that we sponsor may generally redeem their interests no later than on a monthly basis which is typically subject to, at most, a calendar month’s notice period.

The standard programs discussed above may be tailored to meet the objectives or requirements of specific clients. For example, managed account clients may request a specific target volatility, or restrict the use of certain instruments, the size of positions taken in certain instruments, or else place limitations on the individual or aggregate exposures of the account. All such restrictions are agreed in writing before the commencement of investment advisory services. Managed account clients will typically have daily liquidity, and may generally terminate the investment advisory agreement at their discretion, subject to minimal notice periods.

We also retain the cash mandate where we act as an adviser to the fund we sponsor. The cash is held in a client-approved list of money market funds with the aim of preserving liquidity and capital whilst maintaining yield competitiveness.

All discussions of clients' investment terms in this Brochure, including but not limited to investments, strategies, fees and other costs, conflicts of interest and relevant material risks are qualified in their entirety by reference to the relevant offering documents, such as an investment advisory agreement or prospectus and governing documents.

Our Assets Under Management (AUM) as of November 30, 2015 is US\$1,613.3 million which is all managed on a discretionary basis. AUM is calculated using the actual account size for fully funded client accounts plus the nominal account size of partially funded accounts (where the nominal account size consists of both actual funds on deposit plus notional funds). The targeted performance volatilities on client accounts vary considerably reflecting the risk appetite of particular clients.

The value of our AUM, as defined above, differs from the value of Regulatory Assets Under Management (RAUM) as defined by the SEC and disclosed in our Form ADV Part 1A. We act as a commodity pool operator/commodity trading advisor (as applicable) for fund clients and managed account clients that primarily invest, reinvest and trade in futures, forwards and swaps ("commodity interests"). Our RAUM only shows the aggregate gross assets of fund clients on the basis that their holdings of cash and cash equivalents are included as securities. Regardless, the management of the cash and cash equivalents for these clients is merely incidental to, and of negligible significance to, the intended source of gains and exposure to risk of loss from the trading of commodity interests.

## Item 5 – Fees and Compensation

Harmonic's standard fee schedule for its investment programs consists of a management fee, payable monthly in arrears as of the last business day of each calendar month, at the rate 2% per annum based on the account size of the client account, and where applicable a performance fee, payable quarterly in arrears equal to 20% of the net profits attributable to the client account, subject to offset by previous losses attributable to that client. The fee rates, calculation methodologies and periodicity of payment are subject to negotiation based on the particular circumstances of the client and other factors, including but not limited to the specified level of targeted volatility, the type of program, the size of the account, and whether the client seeded or was an early investor in a program.

The fees and expenses for the fund we sponsor will differ depending on fund share class. All fees and expenses will be outlined in the prospectus of that fund. The independent administrator of the fund calculates and deducts the fees and then makes payment to Harmonic, in accordance with fund governing documents. We generally prepare an invoice for managed account clients and the client arranges payment to Harmonic, in accordance with the advisory agreement.

Harmonic and its affiliates and their respective principals and employees (including investors where the ultimate beneficiary is one or more of these parties) have invested in one or more separate share classes of the fund we sponsor which are not charged a management fee or a performance fee or which are charged a reduced management or performance fee.

Our clients will incur additional fees, costs and expenses in connection with our investment advisory services. Specifically clients will incur brokerage and clearing commissions, exchange fees, give-up and reverse give-up fees, NFA fees, interest charges and other related transaction costs and expenses. Clients should review Item 12 "Brokerage Practices" which provides further detail on brokerage and other transactional costs.

Clients will also incur their own operational expenses. Specifically investors in the fund we sponsor will incur the additional fees, costs and expenses as laid out in the relevant governing documents, which may include: administrator and external valuer fees and expenses, custodian and/or prime brokerage fees, depositary fees, directors fees, establishment/organizational expenses, fees and expenses for legal, auditing and other professional services, the cost of liability insurance for its directors, registration and filing fees and other expenses due to regulatory, supervisory and fiscal authorities or agencies in various jurisdictions in relation to the obtaining and maintenance of authorisations, registrations or stock exchange listings of the funds or their shares and other fees, costs and expenses incurred in connection with the conduct of its business and the offering or promotion of the shares.

Neither Harmonic nor any of our principals or employees receives any direct transaction based compensation for the sale of instruments or other investment products.

## **Item 6 – Performance-Based Fees and Side-by-Side Management**

Harmonic typically receives both management and performance-based fees from clients for the provision of investment advisory services. Harmonic does not ordinarily receive a performance-based fee in respect of the Liquid Alternatives investment program. Consequently we may have a conflict of interest in rendering investment advisory services because our fees for advising certain clients may exceed the fees for advising other clients, thus providing an incentive to prefer certain clients. Moreover, we generally make investment decisions for all clients at or about the same time, so that a specific client may be competing with other clients for the same or similar positions if they are investing in similar or overlapping programs. We address the potential conflict through adoption of policies and procedures that seek to ensure that all investment opportunities are allocated on a fair and equitable basis between clients. Specifically the quantities to be traded for each client in an aggregated order are predetermined before the order is generated, and the actual execution prices are allocated among the clients included in the order to achieve, as closely as possible, the average execution price. Clients should review Item 12 “Brokerage Practices” which provides further detail on our aggregation and allocation procedures.

## **Item 7 – Types of Clients**

Our investment advisory services are offered to the fund we sponsor and to third party managed accounts.

Our managed account clients are institutional organisations, which may include pension funds, government agencies, fund of funds, banking institutions and corporations. All clients are subject to certain eligibility requirements, which for underlying fund investors are laid out in the relevant fund’s prospectus. Any potential client must be a “Qualified Eligible Person” (QEP) as defined in Rule 4.7(a)(2) of the U.S. Commodity Exchange Act. QEPs include such persons as certain investment professionals, qualified purchasers, non-United States persons, and accredited investors who meet a portfolio requirement. The fund we sponsor is privately placed and is not registered under the U.S. Investment Company Act of 1940, as amended. Interests in this fund are not registered under the U.S. Securities Act of 1933, as amended or under any U.S. State securities laws.

The minimum initial nominal account size required for a client to open a managed account is US\$10 million, which may be varied at the discretion of Harmonic. The fund that we sponsor requires a minimum initial investment amount of US\$100,000, subject to share class requirements.

## **Item 8 – Methods of Analysis, Investment Strategies and Risk of Loss**

### **Methods of Analysis**

Harmonic is a quantitative macro manager that aims to generate excess returns by modelling investor behaviour to predict market moves.

Harmonic's trading philosophy is to exploit market inefficiencies in the pricing of individual or groups of related instruments using a variety of investment strategies over a range of timeframes.

All research and investment strategies used in our programs have been developed internally by our portfolio managers and evaluated using our proprietary back-testing environment. A committee of portfolio managers review all research projects, allocating resources to strategy research, risk management, software development, data analysis and the implementation in live trading. Ideas are generated from researching discretionary, technical and fundamental phenomena in markets and applying them in a highly disciplined way through a systematic investment process.

The research team is constantly looking to improve existing models or add new high quality sources of alpha. Ideas and inspiration are taken from academic, industry and broker research and the experience of trading our models.

We use widely available market and macroeconomic data. For example we receive information from electronic data retrieval systems, such as dedicated execution platforms and real-time data providers. We also have access to a network of industry and market contacts as well as published academic and broker research. This information may be used as an input to our proprietary financial research.

We aim to ensure performance consistency in our programs is achieved by diversifying portfolios across three uncorrelated axes of investment, namely a range of markets, trading frequencies and investment strategies. We believe that the investment strategies employed in our programs are independently constructed, individually profitable and have a low correlation to each other.

### **Investment Strategies**

Our programs allocate on a leveraged basis to a diversified range of strategies. Our main focus is on spread-based strategies which seek to determine the value of pairs of long and short positions in related markets on a relative basis using a range of financial and economic variables, with the resulting aggregated views expressed as long and short positions in the relevant markets for the given strategy. This approach aims to capture convergence and divergence between economies and sectors and deliver returns that are non-correlated to the underlying markets and other investment advisers. The core spread-based strategies are complemented by directional trading strategies which determine the value of individual markets using a range of financial and economic variables.

The trading frequency for our investment strategies currently varies between several days and several months, exploiting both short term tactical market phenomena and longer term structural market moves.

Fixed income strategies are currently employed in the major government bond and interest rate markets using futures on these markets.

Currency strategies are currently employed using over-the-counter (OTC) FX contracts in G10 and liquid emerging market currencies (including several non-deliverable forwards).

Commodity strategies currently trade a selection of futures on commodities (covering energy, metal and agricultural markets).



Equity strategies currently trade a selection of liquid futures on equity indices.

We combine multiple strategies in an attempt to produce positive performance in most market conditions. For example, spread-based strategies may perform strongly when global markets are disassociated such as in periods of non-synchronised growth. Conversely in periods of synchronised recovery, these strategies tend to perform less well. Directional strategies may perform well in markets with strong trends such as synchronised economic recovery or downturn and may perform less strongly in orderly sideways markets.

Our investment strategies are offered in three standard investment programs:

- Harmonic Macro, which seeks exposure to both spread-based and directional strategies, allocating to all our traded markets, and which is offered in the fund we sponsor and to third party managed accounts; and
- Harmonic Currency, which seeks exposure to both spread-based and directional strategies, allocating to our traded currency markets only, and which is offered to third party managed accounts.
- Harmonic Liquid Alternatives, which seeks exposure to a smaller number of strategies than Harmonic Macro that focus on the most liquid markets, and which is offered to third party managed accounts.

The Currency and Liquid Alternatives investment programs share the same research and risk management process as the flagship Macro investment program.

In normal market conditions, all trade generation and portfolio risk management processes are fully systematic and run without discretion. In exceptional circumstances the portfolio managers may collectively determine that it is appropriate to take action to control prospective volatility or losses or address prevailing market conditions (such as illiquidity in an asset or its characteristics changing).

#### *Portfolio Risk Management*

The portfolio managers are responsible for the risk management of Harmonic's investment management processes. Day-to-day risk management is automated and executed systematically.

Portfolio, strategy and market risk is measured using Value at Risk (VaR). If program level VaR exceeds predefined limits, positions across the portfolio are reduced in size to bring portfolio risk towards its target level. Positions sizes are normalised with respect to market volatility on an intraday basis in order to achieve the desired level of risk exposure. Accordingly, as our forecast of market risk increases, positions sizes shrink.

Margin and exposures are monitored intra-day. Positions may be adjusted to maintain margin and exposure within predefined limits.

During periods of reduced market liquidity, positions may be reduced across the portfolio to allow for continued effective trading.

Harmonic's investment programs use a number of approaches that limit position taking and aim to reduce losses. All of these methods, described below, are systematically applied "hard" rules:

Position Reduction: we calculate the potential for future losses for each position in the portfolio based on recent market events. If the forecast loss is in excess of a pre-defined position reduction level, the position is reduced in size. Positions are re-entered when the loss is no longer in excess of the position reduction level.

Strategy Reduction: this is similar to Position Reduction, but applied at a strategy level. This helps protect the portfolio when market conditions are unfavourable with respect to a particular strategy, rather than for an individual position.

Portfolio Risk Control: portfolio VaR is measured in near real time. When VaR exceeds predefined limits, positions across the portfolio are reduced in size to bring portfolio risk towards its target level.

Intra-month De-gear: when losses experienced reach certain predefined intra-month levels, all positions are scaled back.

### **Risk of Loss**

An investment in one of Harmonic's investment programs is speculative and involves a high degree of risk, and any such investment should be made only after consultation with independent qualified sources of investment, legal and tax advice. Accordingly, prospective clients should consider the following risk factors before making an investment in the program. These risk factors may not be a complete list of all risk factors associated with an investment in a program.

There can be no assurance that the investment objective of an investment program will be met or that its investment strategies will be successful. We utilise alternative investment strategies that employ leverage, short sales and derivatives trading which involves substantial risk of loss. An investment in one of our investment programs should be considered only as one part of an investment portfolio. Past results are not necessarily indicative of future results and there can be no assurance that the investment advisory services referenced in this document will achieve results in line with those presented. Future performance may be materially worse than past performance causing substantial or total loss of investment.

### General Risks:

#### *Market Risks*

Our investment programs seek exposure to financial instruments on a purely speculative basis. A principal risk in trading financial instruments is the volatility in the market prices of such instruments. Prices may be influenced by, among other factors; changing supply and demand relationships; the domestic and foreign policies of Governments, particularly policies to do with trade or with fiscal and monetary matters; political events, particularly elections and those events that may lead to a change in Government; the outbreak of hostilities, even in an area in which an investment program is not invested; economic developments, particularly those related to balance of payments and trade, inflation, money supply, the issuance of Government debt, changes in official interest rates, monetary revaluations or devaluations and modifications in financial market regulations. No assurance can be given as to when or whether adverse events might occur which could cause significant and immediate loss in value of a client's account. Even in the absence of such events, trading financial instruments can quickly lead to large losses. Such trading losses could sharply reduce the value of a client's account.

#### *Legal, Tax and Regulatory Risks*

Legal, tax and regulatory changes could occur which may adversely affect the investment programs. The prices of instruments in which we may trade or invest are subject to certain risks arising from government regulation or intervention in the markets, through regulation of the local market, restrictions on investments by foreign residents or limits on flows of investment funds. Such regulation or intervention could adversely affect the performance of an investment program. The regulatory environment for leveraged investors is evolving and changes to the direct or indirect regulation of leveraged investors may limit the ability of us to pursue our investment strategies.

*Credit Risk from Counterparties*

FX trading in over-the-counter markets will expose a client to the credit of counterparties, hence the risk that the counterparty may default on its obligations to perform under the relevant contract. In addition, the bankruptcy or default of clearing-houses by or through which exchange traded transactions are carried or settled may result in losses to a client. A client may experience significant losses in the event of a bankruptcy or insolvency of a counterparty, a prime broker, a clearing broker or clearing-house. The financial problems at Lehman Brothers group and other well-known financial institutions since 2007 illustrate these risks.

Risks relating to the investment strategies:

*Reliance on Harmonic and our and our data providers' systems*

Clients must rely on our judgment in formulating our investment strategies. We rely heavily on computer hardware and software to make our investment decisions, to operate our risk control system, to systematically generate client orders, to execute, match and clear the resulting trades, and to monitor the client accounts. Our or our data providers' systems or software may be subject to defects, failures or interruptions and any such defects, failures or interruptions could have a material adverse effect on a client.

Our investment strategies are heavily dependent on mathematical models. Such models may not be well-suited to prevailing market conditions. Models that have been formulated on the basis of past market data may not be predictive of future price movements. Models may not be reliable if unusual events specific to particular market participants, or major events external to the operations of markets, cause extreme market moves that are inconsistent with the historic correlation and volatility structure of the market. Models also may have hidden biases or exposure to broad structural or sentiment shifts. Furthermore, the effectiveness of such models tends to deteriorate over time as other investment advisers seek to exploit the same market inefficiencies through the use of similar models.

We rely on third parties to provide us with different types of data, including real time, raw, and calculated data. The investment programs could be adversely affected if our or our data providers' computer systems or infrastructure cannot properly process and calculate the information needed for us to conduct our investment strategies.

The performance of an investment program will depend on the financial and asset management skills of certain of our personnel. Subjective decisions made by these key individuals may cause a program to incur losses or to miss profit opportunities which it would otherwise have benefited from. The loss of any key individual could have a material adverse effect on the performance of a program. The dissolution, bankruptcy or liquidation of Harmonic may have an adverse impact on a program.

No risk control system is fail-safe and no assurance can be given that any risk control framework employed by us will achieve its objectives. Target risk limits developed by us are based on historical patterns of returns and correlations for the instruments and strategies in which an investment program invests. No assurance can be given that such historical patterns will provide an accurate prediction of future patterns.

We are not required to devote substantially all of our time to any one client and we advise and manage a number of client accounts. Orders for such accounts may occur contemporaneously with orders for any one client. We endeavour to ensure that all investment opportunities are allocated on a fair and equitable basis between client accounts.

#### *Investment Strategies*

The success of the investment strategies depends upon our ability to construct a portfolio of long and short derivative financial instruments. Any factor which would make it more difficult to execute timely buy and sell orders, such as a significant lessening of liquidity in a particular market would be detrimental to profitability. No assurance can be given that the strategies used or to be used will be successful under all or any market conditions.

The spread-based strategies will be exposed to purchases and sales of two or more markets based on the expectation that the spread between such markets will contract or increase over time. There can be no assurances that the spread will in fact contract or increase, or even if such spreads do contract or increase how long they will take to do so. There is also a substantial risk that the price differential could change unfavourably and, due to the leveraged nature of derivative trading, result in increased losses. The strategies are subject to the risks of disruptions in historical price relationships, and the obsolescence or inaccuracy of our models. Market disruptions may also force us to close out one or more positions which may result in substantial losses.

Directional trading strategies aim to profit from forecasting price movements for specific markets using a variety of financial data. Predicting future prices is inherently uncertain and losses will be incurred if the market moves against these positions, since such positions may not be hedged.

#### *Portfolio Turnover*

Turnover of the instruments traded within the investment programs may be materially higher than the average for more traditional portfolios. High transaction and commission costs incurred, including prime brokerage fees imposed by one or more prime brokers, in the frequent trading of instruments will adversely affect investment performance of a client's account.

#### *Concentrated Programs*

The Currency investment program is limited to trading currencies. Trading a relatively concentrated portfolio in a single asset class may involve greater risk than more broadly diversified trading. The Currency and Liquid Alternatives investment programs are expected to trade substantially fewer investment strategies than the Macro investment program. Trading a more concentrated portfolio that employs fewer investment strategies may involve greater risk than a more broadly diversified investment program.

#### *Replication Risk*

A client's performance will not necessarily track or correlate to the performance of any other account advised by us. Different accounts may have different performance results even if traded pursuant to the same general investment program due to various factors, including trading to different volatility targets, charging different fees, differing counterparty terms and difference in the starting dates of trading.

#### *Volatility*

The returns of an investment program are expected to be volatile. Volatility is a statistical measurement of the dispersion of returns of an instrument or index or the value of a program, as measured by the annualised standard deviation of its returns. Higher volatility generally indicates higher risk. Targeted performance volatilities for investment programs will vary based on the requirements of clients. There can be no assurance that the volatility target for a particular investment program will be met – realised volatility over any given time frame may be significantly higher or lower than the target.

Risks relating to investment techniques:

*Derivatives*

The investment programs trade a range of derivative instruments including exchange traded futures contracts and over-the-counter foreign exchange contracts. These instruments may be extremely volatile and involve risks that can result in a loss of all or part of an investment. Some derivatives may be more volatile than their underlying securities and therefore, on a percentage basis, an investment in derivatives may be subject to greater fluctuations than an investment in the underlying security. Furthermore, trading in derivatives is a highly specialised activity and it may give rise to additional operational and market risks.

*Leverage*

Derivatives involve significant amounts of leverage, which can substantially magnify market movements and result in losses greater than the amount of the investment. These risks are further highlighted below.

*Short Selling*

Short selling exposes the seller to unlimited risk due to the lack of an upper limit on the price to which an instrument may rise. Short selling is an integral component of our strategies, and any regulatory limitations on short-selling could materially adversely affect our ability to implement our strategies.

Risks relating to the financial instruments employed:

*Futures Trading*

The Macro and Liquid Alternatives investment programs trades futures contracts, which involve the obligation to make, or to take, delivery of the underlying asset of the contract at a future date, or in some cases to settle the position with cash. Futures trading involves substantial risk of loss.

The low margin deposits normally required in futures trading (typically between 1% and 15% of the value of the futures contracts purchased) permit an extremely high degree of leverage. Accordingly, a relatively small adverse price movement in a futures contract may result in a substantial loss. For example, if at the time of purchase 10% of the price of a futures contract is deposited as margin, a 10% decrease in the price of the futures contract would result in a total loss of the margin deposit (and, additionally, brokerage commission expense would have been incurred). A decrease of more than 10% would result in a greater loss. Many commodity exchanges limit fluctuations in futures contract prices during a single day through "daily" limits. Daily limits prevent trades from being executed during a given trading day at a price above or below the daily limit. Once the price of a futures contract has moved to the limit price, positions in the futures contract can be neither taken nor liquidated unless traders are willing to effect trades at or within the limit. Such limits could prevent us from promptly liquidating unfavourable positions. In addition, even if futures prices have not moved to the daily limit, we may be unable to execute trades at favourable prices if the volume of trading in the relevant contracts is not adequate. It is also possible for an exchange to suspend trading in a particular contract, order immediate settlement of a particular contract or order that trading in a particular contract be conducted for liquidation only.

The Macro investment program allocates exposure to global exchange traded futures on short-term interest rates. Short term interest rate futures have extremely short duration which makes them significantly less sensitive to interest rate changes than longer term interest futures. The notional exposure of the short term interest rate components will therefore be large, both relative to the notional exposure of other futures contracts (including longer term interest rate

futures), and in absolute terms, in order to ensure that the short term interest rate positions make a meaningful contribution to the performance of the relevant programs.

#### *Foreign Exchange (FX) Trading*

The investment programs trade over-the-counter FX contracts, which are the purchase or sale of a specific quantity of a foreign currency at a specified price, with delivery and settlement at a specified future date. These FX contracts are not traded on exchanges and are not standardised; rather, banks and dealers act as principals in these markets, negotiating each transaction on an individual basis. Forward and “cash” trading is substantially unregulated; there is no limitation on daily price movements and speculative position limits are not applicable. The principals who deal in the forward markets are not required to continue to make markets in the currencies they trade and these markets can experience periods of illiquidity. There may be periods during which certain participants in these markets may refuse to quote prices for certain currencies or quote prices with an unusually wide spread between the price at which they are prepared to buy and that at which they are prepared to sell. Disruptions can occur in any market due to unusually high trading volume, political intervention or other factors. Arrangements to trade FX may be made with only one or a few counterparties, and liquidity problems therefore might be greater than if such arrangements were made with numerous counterparties. Market illiquidity or disruption could result in major losses in portfolio value. The “gearing” or “leverage” often obtainable in FX trading, due to the low margins normally required means that a relatively small movement in the price of a forward contract may result in a profit or loss which is high in proportion to the amounts of funds actually placed as margin and may result in unquantifiable future losses exceeding any margin deposited.

We enter into FX contracts in respect of the currencies of certain emerging markets. Many emerging markets have underdeveloped capital market structures where the risks associated with holding currency are significantly greater than in other, less inflationary markets. Such currency exchange rates are highly volatile and subject to severe event risks, as the political situation with regard to the relevant foreign government may itself be volatile.

We generally utilise one or more prime brokerage arrangements for trading FX contracts which may result in additional risks when compared with trading exchange traded futures. A prime brokerage arrangement allows us to trade on behalf of clients with a variety of executing brokers as an agent of a prime broker. The executing brokers “give-up” the trades to a prime broker for processing and, if applicable, the prime broker will reverse “give-up” trades to a client’s clearing broker. Our power to execute trades within a prime brokerage arrangement is subject to certain limitation and restrictions. For example an FX prime broker will only accept give ups of pre-approved types of FX trades entered into by us with a pre-approved group of FX execution brokers, subject to tenor and position limits. Additionally the reverse give-ups between a prime broker and a clearing broker also specify ceiling limits or similar position limits. Such limits may generally be changed at any time on a unilateral basis by a prime broker or clearing brokers. A breach of these limits may mean that an FX prime broker or clearing broker will refuse to accept trades, and may lead to the termination of the underlying contractual arrangements with immediate effect. An FX prime brokerage arrangement may lead to less flexibility in trading. For example, we may not be able to trade through a particular executing broker if ceiling limits or position limits are already fully utilised. The immediate termination of the prime brokerage agreement or a related give-up agreement would require us to continue trading without “give-up” facilities. The use of FX prime brokers may lead to higher commission charges (in the form of prime brokerage fees) when compared with direct trading with the client’s clearing broker. Such fees are generally collected at point of acceptance of the trades by an FX prime broker by way of spread adjustment to the exchange rate on each trade. A client may incur more than one layer of prime brokerage fees where we use more than one FX prime broker to route the same trade to the client’s clearing broker.

In the absence of prime brokerage "give-up" facilities, we would trade FX contracts direct with a client's own clearing brokers/counterparties. This could lead to increased transactional costs because more time would be needed to execute the aggregate of all FX transactions across all the client accounts and the clearing brokers may provide less competitive bid-ask prices than the panel of executing brokers established under a prime brokerage arrangement.

*Exposure to Currency Exchange*

The profit or loss in transactions in foreign currency denominated contracts will be affected by fluctuations in currency rates where there is a need to convert from the currency denomination of the contract to another currency.

Risks relating to programs offered via Swap Agreements

A client may seek exposure to an investment program indirectly through a swap agreement. Swap agreements are two party contracts entered into primarily by institutional investors for periods ranging from a few weeks to a number of years. In a standard "swap" transaction, two parties agree to exchange the returns (or differentials in rates of return) earned or realized on particular predetermined investments or instruments. The gross returns to be exchanged or "swapped" between the parties are calculated with respect to a "notional amount" (i.e., the return on or increase in value of a particular amount invested in a "basket" of instruments representing a particular program). The "notional amount" of the swap agreement is only a fictive basis on which to calculate the obligations that the parties to a swap agreement have agreed to exchange. Most swap agreements entered into by a client would calculate the obligations of the parties to the agreement on a "net" basis. Consequently, the a client's obligations (or rights) under a swap agreement will generally be equal only to the net amount to be paid or received under the agreement based on the relative values of the positions held by each party to the agreement (the "net amount"). A client bears the risk of loss of the amount expected to be received under a swap agreement in the event of the default or bankruptcy of a swap agreement counterparty.

Risks relating to programs offered to managed account clients:

Clients may access our investment programs by means of a managed account which may allow them to tailor the standard programs. Managed accounts clients may decide to use notional funding which is the difference between the actual funds on deposit with their clearing broker and the agreed nominal account size of the account. It is the nominal account size that establishes the level of trading and is the basis for the calculation of our management and performance fees. Notional funding can add significant risk to managed accounts and clients who choose to use such funding must fully understand the risk involved. Managed accounts also expose clients to theoretically unlimited liability, and it is possible for an account to lose more than the capital allocated to it by a client.

Risks relating to programs offered to fund clients:

Further important risk factors are set out in the relevant fund's prospectus. Investors in a fund should carefully consider the relevant prospectus to fully understand these additional risks.

## **Item 9 – Disciplinary Information**

There are no legal or disciplinary events that are material to a client's or prospective client's evaluation of our advisory business or the integrity of our management.



## Item 10 – Other Financial Industry Activities and Affiliations

Our sole business is the provision of investment advisory services.

We are registered with the Commodity Futures Trading Commission (CFTC) as a commodity trading advisor (CTA) and commodity pool operator (CPO) and are a member of the National Futures Association (NFA) with NFA ID 0328710.

We have claimed exemption under CFTC Regulation 4.7 from certain specific requirements of Part 4 of the CFTCs regulations in connection with acting as a CPO and CTA since our clients (or underlying participants of commodity pools) are limited to Qualified Eligible Persona (QEP) as defined in Rule 4.7(a)(2) of the U.S. Commodity Exchange Act. QEPs include such persons as certain investment professionals, qualified purchasers, non-United States persons, and accredited investors who meet a portfolio requirement.

The following individuals involved in the management our firm are registered as associated persons with the NFA:

Name	Title	Registration number
David Pendlebury	co-CEO	0328861
Romael Karam	co-CEO	0328710
S. Patrik Safvenblad	CIO	0437972
Richard Conyers	Investment Partner	0328859
Alastair Smith	Head of Business Development	0333671
Samir Sheldenkar	Investment Partner	0437973
Per Ivarsson	Investment Partner	0461636

We are also authorised and regulated by the United Kingdom Financial Conduct Authority (FCA). Our FCA firm registration number is 219865.

## **Item 11 – Code of Ethics, Participation or Interest in Client Transactions and Personal Trading**

All personnel are required to adhere to standards of conduct laid out in our Code of Ethics (Code) which sets forth restrictions on certain activities, including personal account trading, the giving or receipt of gifts and benefits, confidentiality of information, and insider trading. Our personnel must provide an annual certification of their continuing adherence to the Code.

Clients may obtain a copy of our Code by writing to the Chief Compliance Officer at Harmonic's address.

Harmonic does not trade financial instruments for its own account; rather we (and our affiliates and their respective principals and employees including investors where the ultimate beneficiary is one or more of these parties) co-invest with the fund we sponsor alongside third party investors. An incentive to favour this fund over other client accounts is addressed through adoption and implementation of our aggregation and allocation policy.

### *Personal Account Dealing Policy*

Any dealings of Harmonic's personnel are subject to personal account dealing restrictions that are set out in the Code and our compliance manual. These include the prior written consent of the compliance function where required and a holdings and transaction disclosure requirement. Furthermore, all personnel must use their reasonable endeavours to ensure that no connected person deals except in accordance with the above rules. Our compliance function monitors and reviews the personal account dealing of all our partners and employees as part of our regular compliance monitoring program. We take any breach of the personal account dealing restrictions seriously, and personnel may be subject to disciplinary action.

### *Market Abuse / Insider Trading*

Harmonic's personnel are prohibited from engaging in any market conduct which may be considered abusive and are obliged to report any suspicious activities to our compliance team. Our compliance manual includes guidance as to what constitutes market abuse.

### *Gift/Benefit Policy*

Harmonic and its personnel must not offer, give, solicit or accept any inducement, or direct or refer business to another person, if it is likely to conflict in any material way with any duty that Harmonic owes to its clients, or any duty that the recipient person owes to its clients. Harmonic expects that all its employees will exercise good judgment in considering the value, frequency and intent of gifts and entertainment. Employees must consult with the compliance function before giving or accepting anything of significant value. All employees must report details of gifts or benefits in kind and their estimated cost. Prior approval is required from the compliance function to give or receive any gift or inducement that would be in excess of a monetary limit.

### *Conflicts of Interest Policy*

We have implemented a conflicts of interest policy which sets out the principles and guidelines for identifying, managing, recording and, where relevant, disclosing existing or potential conflicts and protecting the interests of our clients. Some of the more material potential conflicts, and mitigation, include the following:

- An incentive to unfairly allocate transactions between customers (for example, where investment decisions may be influenced by the customer remuneration structure) is addressed through a clear allocation policy and post-trade monitoring.
- An incentive to favour certain counterparties may be driven by Harmonic self-interest rather than customer interest (for example, a counterparty that invests or introduces assets or provides excessive gifts or benefits or where dealing commissions are driven by services

received by Harmonic at the expense of the customer) is addressed through adoption and implementation of certain policies and procedures; for example, those concerning the giving and receiving of gifts, the selection of counterparties, and order execution. Specifically the order execution policy requires Harmonic to take all reasonable steps to obtain the best possible results for customers when executing trades on their behalf.

*Charitable Donations*

We may donate to charitable enterprises that are supported by clients or by their employees. All such donations are approved by our partners. We or our partners/employees may solicit clients, service providers, brokers, or their respective employees for donations to charities.

*Political Donations*

We do not make political donations.

## Item 12 – Brokerage Practices

### *General*

Our discretionary investment decisions for clients are generally implemented through transactions in exchange traded futures and over-the-counter (OTC) foreign exchange (FX) contracts. OTC FX transactions include purchase or sale of currencies for spot or forward delivery, foreign exchange swaps, and non-deliverable forward transactions.

Futures are executed at exchange prices and are subject to brokerage commissions, clearing fees, exchange fees and NFA fees. Brokerage commissions for futures orders that are routed electronically are generally lower than for those orders communicated by telephone. FX transactions are executed on a net dealing basis where no direct brokerage commission is paid but rather the broker is remunerated by making a turn on the bid/offer spread. FX transactions are generally prime-brokered which allows us to source liquidity from a variety of execution brokers (or give-up brokers) whilst consolidating trade allocation, the credit relationship (where applicable), confirmation and settlement with one or more FX prime brokers. FX prime brokers generally charge volume based fees for these services which are typically collected at the point of the acceptance of the transaction by an FX prime broker by way of a spread adjustment to the exchange rate on each transaction. A client may incur more than one layer of prime brokerage fees where we use more than one FX prime broker to route the same trade to the client's clearing broker. A client will also generally select a specific financial institution to act as custodian or clearer for their account (which may not be one of the FX prime brokers) and transactions effected through such an arrangement will generally also attract custody and/or clearing fees at a rate agreed between the client and that financial institution.

Harmonic generally has the discretion to determine the execution brokers that it uses to effect the investment advisory services it provides (and therefore the quantum of brokerage commissions). Harmonic also generally has the discretion to determine a FX prime broker (and therefore the quantum of FX prime broker fees). We have established a Broker Approval Committee which is responsible for approving broker selection and in doing so considers factors including: profile in market; demonstrated commitment to their brokerage business; product capability; appropriate time zone support; operational efficiency; strength of technology and reporting; awards / citations and price. We perform on-going reviews of broker trading volumes and regular assessments of overall execution and service quality. We also perform a regular review to ensure that the brokerage commission and prime brokerage rates being paid are reasonable versus the market and commensurate with the service received.

Our order execution policy sets forth our methodology for achieving the best possible result when executing orders for our clients, taking into account price, costs, speed, likelihood of execution and settlement, size and nature of the transaction, counterparty exposure or any other relevant consideration. Our execution obligations will be discharged in a manner that takes into account the different circumstances associated with the execution of the order as they relate to the particular financial instruments involved. For example: (a) for orders of futures contracts which are routed electronically to a particular venue, price and costs would generally be considered significant factors; (b) for orders of futures which are communicated by telephone, increased emphasis is placed on other factors that may help the dealer improve executions (which may include technical levels, flow data, knowledge of barriers or stop losses, knowledge of open interest or first notice day, roll direction, seasonal influences); and (c) for OTC FX transaction types, increased emphasis may be placed on the sourcing of liquidity or on counterparty exposure.

### *Soft Dollar Benefits*

We have not entered into, and do not intend to enter into, any soft dollar benefit agreements (in respect of the provision of research or other products or services other than for execution) with

any broker. Although we do have access to the published research of several brokers (and this information may be used as an input to our proprietary financial research) we do not pay up for such access and we neither rely on nor require such information from a broker.

We receive execution-related services from brokers such as tradable pricing data, execution platforms and voice/data lines, and may use broker provided trading algorithms for execution purposes.

Potential conflicts exist since a broker that provides benefits (or gifts) may unduly influence Harmonic but we have addressed this by application of our gift/benefit policy and procedure (see Item 11 above for further details) and by executing client transactions in accordance with our order execution policy (see above).

#### *Brokerage for Client Referrals*

A broker may itself invest in our investment programs or else introduce potential investors to us. Such brokers may expect to receive a benefit in terms of transactional flow. A potential conflict exists as our choice of broker may therefore be driven by Harmonic self-interest rather than client interest, although we have addressed this through adoption and implementation of policies and procedures concerning the selection of brokers as discussed above, and by executing client transactions in accordance with our order execution policy. A broker that is also an investor may have access to more timely information about our programs than other investors, and may be able act on such information.

#### *Directed Brokerage*

Clients do not instruct us as to which execution broker to use when executing trades, although a client may place restrictions on the use of certain counterparties. We select all brokers for executing client transactions from a list of counterparties that has been pre-approved by our Broker Approval Committee.

A managed account client will generally elect to use a specific clearer or custodian for their account; transactions effected through such an arrangement will generally attract clearing fees at a rate agreed between the client and the clearer.

#### *Aggregation and Allocation*

Harmonic may make investment decisions on an aggregated basis, in which case we will aggregate orders for different client accounts. We have established and implemented an allocation policy and procedure which seeks to execute any such aggregated orders, and subsequently allocate the resulting split trades, on a basis that we consider to be fair, reasonable and equitable between clients. The procedures are summarised as follows:

- The quantities to be traded for each account in an aggregated order are predetermined before the order is generated.
- Where the aggregated trade is not filled at one price, Harmonic uses proprietary software to allocate the actual fill prices among the accounts included in the order to target, as closely as possible, the average fill price. This price allocation method offers a consistent non-preferential method for allocating split trades.
- In cases where a portion of the order is executed at more than one broker or in more than one trading session, each portion is allocated as if it were a whole trade. This procedure is followed to ensure there is no favouritism in allocation of prices and all accounts are treated equally.
- Split trades are allocated promptly during the trade date, and no reallocations are permitted except where the original allocation was made in error.
- There may be exceptional circumstances where we over-ride the systematic allocation procedures, but the reason to do so must be provided for audit trail purposes. These manual over-rides are captured and reviewed by operations and compliance.

- Trade allocations are monitored by operations and compliance.

#### *Cross Trades*

We do not generally effect cross trades on behalf of clients (in which one client account buys or sells instruments versus another client account), because such clients could have differing interests in the same transactions. However we may effect such transactions in limited circumstances, such as an instruction by one client to increase the nominal account size of their account at the same time that another client instructs us to decrease the nominal account size of their account. Cross trades in both futures and OTC FX transactions are executed through brokers at current market pricing, with the former subject to exchange rules and regulations. The brokers may receive transactional commissions from the clients concerned.

#### *Trade Errors*

The firm has established a series of controls designed to prevent trade errors from occurring, or on occurrence to minimise the period of time that lapses before their detection.

For example: generally all trade orders are systematically determined by our proprietary trade generation system from a limited list of pre-approved financial instruments; electronic trading systems are preconfigured to accept orders on certain instruments only; and the use of FX prime brokers ensures that all FX trades flow to the FX prime broker from pre-approved counterparties and subject to pre-defined credit limits. Where an issue does occur during T then our near real-time systems for matching of executions should allow us to address the issue on T. Reconciliation on T+1 facilitates timely detection of trade errors and allows them to be corrected quickly.

## **Item 13 – Review of Accounts**

Harmonic's operations personnel ordinarily perform a daily reconciliation of trades, open positions and cash between Harmonic's post-execution records and the external records maintained by the client's prime broker or clearer (subject to Harmonic having permission to access such external records). The operations personnel also performs a daily reconciliation of the executed open positions to those known by Harmonic's proprietary trading models and also monitor compliance with investment restrictions. Each operations employee is responsible for less than ten client accounts. At least one of Harmonic's portfolio managers performs a daily review of the investment performance of each account.

An independent administrator maintains the books and records of the fund we sponsor. The administrator performs periodic reconciliations between Harmonic's trade data and the prime broker/clearer records, and prepares the official monthly valuation.

Clients may receive weekly estimates of performance and a monthly commentary from Harmonic. Underlying investors in the fund we sponsor will receive transactional statements (where applicable), monthly account statements, quarterly CFTC reports and annual audited reports from the independent administrator. Managed account clients should receive regular account statements from their clearing brokers. Certain clients or underlying investors in our fund may also receive supplemental reporting.

## **Item 14 – Client Referrals and Other Compensation**

We are compensated solely by management and/or performance fees earned from our clients. We do not receive any other compensation.

We may enter into solicitation arrangements with third parties whereby Harmonic compensates such persons for referrals of potential investors. Such persons are compensated by us from the management and/or performance fees earned and only if the referred investor becomes a client.

Our clients may retain investment consultants to advise them on the selection and review of their investment advisers. Such investment consultants may place us into searches or other selection processes for their clients. Harmonic may, from time to time, purchase products or services from some investment consultants or their affiliates, for example, payment of registration fees to attend consultant-sponsored conferences along with other investment advisers.

## **Item 15 – Custody**

Harmonic does not hold any client money or assets.

## **Item 16 – Investment Discretion**

Harmonic is retained on a discretionary basis and is authorized to make certain investment decisions without consulting the client. Clients may limit Harmonic's discretion by restricting the use of certain instruments, by limiting the size of positions taken in certain instruments or the individual or aggregate exposures of the account, by placing restrictions on the use of certain counterparties and may also impose other limits. All such restrictions are agreed in writing before the commencement of investment advisory services.

## **Item 17 – Voting Client Securities**

Harmonic does not invest investment program assets in instruments that carry voting rights. However Harmonic acts as investment adviser to a fund that we sponsor where we also hold the mandate to manage cash. Such cash is held in a client-approved list of money market funds with the aim of preserving liquidity and capital whilst maintaining yield competitiveness. We do not vote proxies in respect of the money market funds, as we do not believe that our votes would materially affect the value of such funds. Clients may not influence our voting decisions. Clients may obtain a copy of our voting policies upon request.

## **Item 18 – Financial Information**

Harmonic has no financial condition that impairs our ability to meet our contractual and fiduciary commitments to our clients, and we have not been the subject of a bankruptcy proceeding.