

TWIN Capital Management Inc.
3244 Washington Rd. Suite 202
McMurray, PA 15317
Main Phone: (724) 942-2000
Fax: (724) 942-2002
www.twincapital.com

This brochure provides information about the qualifications and business practices of TWIN Capital Management Inc., an investment adviser registered with the United States Securities and Exchange Commission (the “SEC”). If you have any questions about the contents of this brochure, please contact Jim Drake, our Chief Compliance Officer, at (724) 942-2000. This information has not been approved or verified by the SEC, or by any state securities authority. Registration with the SEC or with any state securities authority does not imply a certain level of skill or training.

Additional information about TWIN Capital Management Inc. is available on the SEC’s website at www.adviserinfo.sec.gov.

March 27, 2020

Material Changes

Annual Update

TWIN Capital Management Inc. (hereafter referred to also as “TWIN Capital”, “we”, or “us”) is providing this information as part of our annual updating amendment which contains material changes from our last annual update. This section discusses only material changes since the last annual update which most recently occurred on March 27, 2019.

Material Changes since the Last Update

- 1.) Client assets under management have been updated.
- 2.) We added the TWIN Enhanced All Cap Select strategy in Item 8.
- 3.) We added additional risk disclosure to Item 8.
- 4.) We clarified our error correction policy in Item 12.
- 5.) We updated the list of soft dollar services we receive in the Brokerage Practices section.

Full Brochure Availability

The Firm Brochure for TWIN Capital follows. It is also available by contacting Jim Drake via email at jimd@twincapital.com or by calling (724) 942-2000.

Table of Contents

Item 2. Material Changes	2
Annual Update	2
Material Changes since the Last Update	2
Full Brochure Availability	2
Item 3. Table of Contents.....	3
Item 4. Advisory Business.....	5
Firm Description	5
Principal Owners.....	5
Types of Advisory Services.....	5
Tailored Relationships	5
Wrap Fee Programs.....	6
Client Assets	6
Item 5. Fees and Compensation	6
Description	6
Fee Billing	7
Other Fees	8
Fees Paid in Advance	8
Additional Compensation	9
Item 6. Performance-Based Fees & Side-by-Side Management	9
Sharing of Capital Gains or Capital Appreciation.....	9
Item 7. Types of Clients	10
Description	10
Account Minimums.....	10
Item 8. Methods of Analysis, Investment Strategies and Risk of Loss	10
Methods of Analysis.....	10
Investment Strategies	11
Risk of Loss	12
Item 9. Disciplinary Information	15
Legal and Disciplinary.....	15
Criminal or Civil Action.....	15
Administrative Proceeding	15
Self-Regulatory Proceeding	15
Item 10. Other Financial Industry Activities and Affiliations	15
Broker-dealer or Registered Representative.....	15
Futures Commission Merchant, Commodity Pool Operator, Commodity Trading Adviser or Associated Person	15
Material Relationships or Arrangements with Financial Industry	15
Recommend or Select Other Investment Advisers	16
Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading	16
Code of Ethics.....	16
Recommend Securities with Material Financial Interest	16
Investing in Same Securities Recommended to Clients	17
Conflicts of Interest Created by Contemporaneous Trading	17
Personal Trading Policies	17
Item 12. Brokerage Practices	17
Selecting Brokerage Firms.....	18
Research and Soft Dollars	18
Brokerage for Client Referrals.....	20
Directed Brokerage	20

Order Aggregation	21
Error Correction	22
Item 13. Review of Accounts	22
Periodic Reviews	22
Review Triggers	22
Regular Reports	22
Item 14. Client Referrals and Other Compensation	23
Economic Benefits	23
Third Party Solicitors	23
Item 15. Custody.....	23
Deduction of Fees	23
Account Statements	23
Item 16. Investment Discretion	23
Discretionary Authority for Trading.....	24
Item 17. Voting Client Securities	25
Proxy Voting.....	25
Item 18. Financial Information	26
Prepayment of Fees.....	27
Financial Condition	27
Bankruptcy	27

Item 4. Advisory Business

Firm Description

TWIN Capital is an investment adviser with its principal place of business in McMurray, Pennsylvania. We commenced operations as an investment adviser on April 16, 1990 and have been registered with the SEC since April 1990.

Principal Owners

Geoffrey Gerber is the principal owner of TWIN Capital.

Types of Advisory Services

TWIN Capital provides advisory services to individuals, institutions, and other organizations such as family offices. We provide investment supervisory services through the discretionary management of separate accounts, and also furnish investment advice through consultations not involving investment supervisory services (where we do not have discretion over the assets). We focus on a quantitative valuation method and the use of quantitative tools and models. We also incorporate fundamental factors and technical analysis into many of our investment strategies. We specialize in quantitative analysis with a unique Fundamental Tilt® approach. (More information regarding Fundamental Tilt® is provided in the section titled “Methods of Analysis”.) When we provide investment advice and have discretion over the assets, our advice is generally limited to equity investments that trade on U.S. exchanges, including large, mid, and small cap stocks. When we provide investment advice and do not have discretion over the assets, our advice may also include general asset allocation as well as a broader range of securities and investment vehicles. We also provide our models to certain clients to assist them in constructing their investment portfolios (the assets with respect to which we provide such services, our “assets under advisement”).

Tailored Relationships

We provide advice to client accounts based on specific investment objectives and strategies. Generally, we manage our investment advisory accounts without detailed knowledge or consideration of all the individual needs and objectives of the specific client. A large majority, if not all, of our clients are institutional in nature and retain professional investment consultants and/or possess significant internal investment expertise. TWIN Capital typically manages only a small portion of our client’s overall assets. We formulate an investment program which is deemed prudent and appropriate to the nature of the account, relying on the client’s and their consultant’s assessment, if any, that our strategies and/or benchmarks are appropriate for their needs. We may agree to tailor advisory services to the individual needs of clients. Clients may impose restrictions on investing in certain securities or certain types of securities.

Wrap Fee Programs

We serve as a portfolio manager for the Wells Fargo Advisors Private Advisor Network wrap fee program and the UBS Managed Accounts Consulting (MAC) Program. Wells Fargo and UBS, as the sponsors for the programs, are responsible for providing all wrap fee clients with a copy of their Wrap Fee Brochure. The Wrap Fee Brochure provides a description of the additional fees charged under the program, a description of the portion of fees provided to persons providing services under the program, and the services provided. Conflicts of interest and other material arrangements must also be disclosed. Wrap fee clients should let their Financial Advisor know if they did not receive a copy of the Wrap Fee Brochure from Wells Fargo or UBS and if they have any questions regarding the information contained in it.

TWIN may receive a portion of the wrap fee as payment for our investment management services.

We manage wrap fee accounts in the same manner as non-wrap fee accounts, but since a portion of the wrap fee paid by clients is for execution services, their accounts will typically be traded with the wrap fee sponsor rather than at the broker/dealer selected for our non-wrap fee accounts. Please refer to our disclosures for Directed Brokerage in the Brokerage Practices section of this document.

Client Assets

As of December 31, 2019, the Adviser had approximately \$1.197 billion in client assets under management. As of that date, we managed \$1.104 billion on a discretionary basis and \$0.093 billion on a non-discretionary basis. In addition, as of December 31, 2019, the Adviser had approximately \$259.5 million in assets under advisement.

Item 5. Fees and Compensation

Description

Asset-Based Compensation

TWIN Capital charges each client an investment management fee based on the value of the client's assets under management. These fees are negotiable. Following are the strategy-specific standard fee schedules:

1. TWIN Enhanced Equity – Enhanced Index with an S&P 500 Benchmark: The fee schedule is 0.35% on the first \$50 million; 0.20% on the next \$50 million, and negotiable thereafter.
2. TWIN Prime – Active Large/Midcap Strategy with a Russell 1000 Benchmark: The fee schedule is 0.50% on the first \$25 million; 0.35% on the next \$25 million, and negotiable thereafter.
3. TWIN Dividend Select and Dividend Select Plus- Stocks are selected from S&P 500 Index constituents meeting a custom dividend screen. The Dividend Select Plus includes a covered call option component. The benchmark is the S&P 500

Index: The fee schedule is 0.35% on the first \$50 million; 0.20% on the next \$50 million, and negotiable thereafter.

4. TWIN Small Cap - Concentrated Small Cap Portfolio with a Russell 2000 Benchmark; the fee schedule is first \$10 million: 0.75%, next \$15 million: 0.65%, next \$25 million: 0.60%, 0.50% thereafter.
5. TWIN Balanced- The fee schedule is: 0.60% on the first \$10 million of account assets under management and 0.40% thereafter.
6. TWIN Enhanced 50- The fee schedule is: 0.35% on the first \$50 million; 0.20% on the next \$50 million, negotiable thereafter.
7. TWIN Enhanced All Cap Select- The fee schedule is: 0.35% on the first \$50 million; 0.20% on the next \$50 million, negotiable thereafter.

An alternative management fee compensation arrangement based partially or entirely on the investment performance of a client's portfolio is provided for some of our investment strategies. These arrangements are negotiated on a case-by-case basis depending upon the investment strategy, account market value, and other factors. Please contact us for more information.

Fixed-Fee Compensation

We also provide non-discretionary investment advice through consultation. The fees charged for this advice may be negotiated as a percentage of assets or as a fixed retainer fee for consulting based on the level and extent of services we provide to the client. The fees charged for this advice are negotiable. We may receive payment for these consulting and research services from a brokerage firm(s) through soft dollar arrangement(s) between that broker and our mutual client.

Performance-Fee Compensation

We are also paid performance-based compensation, which is compensation that is based on a share of capital gains on or capital appreciation of the assets we manage for certain clients. When these arrangements are in place, the performance-based compensation ranges from 15 to 35%. These fees are negotiable.

Fee Billing

Investment management fees are normally charged each quarter in arrears based on the average of the total market value of the assets in the client account (including net unrealized appreciation or depreciation of investments and cash, cash equivalents and accrued interest) on the last day of each month during the quarter. If a new client account is established during a quarter, the investment management fee will be prorated for the number of days remaining in the quarter. If a client's investment management agreement is terminated during a quarter, the fee payable to us will be calculated based on the value of the assets on the termination date and prorated for the number of days during the quarter in which the investment management arrangement was in effect.

Each client's Investment Management Agreement will govern the specifics of how fees are calculated for their account. Certain clients have asked us for changes to the standard calculation described above, and we have accommodated these requests.

For example, some of our clients require a monthly fee calculation, different treatments for contributions, withdrawals, and/or accrued income. We are willing to negotiate these terms with our clients at their request.

Our clients may select the method by which they pay our management fees. We typically bill the client directly, and will use this method unless instructed otherwise by the client. If the client prefers it, we can usually arrange to have our management fees directly deducted from their account with our instruction to the client's custodian.

For accounts managed by TWIN Capital through the UBS Managed Accounts Consulting (MAC) and other UBS programs, please refer to the UBS Financial Services Inc. Form ADV Wrap Fee Program Disclosure Brochure and the Institutional Consulting Form ADV Disclosure Brochure for information regarding the specifics of the management fee calculation and deduction from the account.

Other Fees

In addition to paying investment management fees and, if applicable, performance-based fees, client accounts will also be subject to other investment expenses such as custodial charges, brokerage fees, commissions and related costs; interest expenses; taxes, duties and other governmental charges; transfer and registration fees or similar expenses; costs associated with foreign exchange transactions; other portfolio expenses; and costs, expenses and fees (including, investment advisory and other fees charged by investment advisers with, or funds in, which the client's account invests) associated with products or services that may be necessary or incidental to such investments or accounts. Client assets may be invested in pooled investment vehicles. In these cases, clients will bear their pro rata share of the underlying fund's operating and other expenses including, in addition to those listed above: sales expenses, legal expenses; internal and external accounting, audit and tax preparation expenses; and organizational expenses. Client assets may be invested in money market mutual funds, ETFs or other registered investment companies. In these cases, the client will bear its pro rata share of the investment management fee and other fees of the fund, which are in addition to the investment management fee paid to TWIN Capital. Please also refer to Brokerage Practices section of this Firm Brochure for a discussion of our brokerage practices.

Accounts managed through wrap-fee programs will incur additional fees and expenses. For fees charged in connection with the UBS Managed Accounts Consulting (MAC) and other UBS programs, please refer to the UBS Financial Services Inc. Form ADV Wrap Fee Program Disclosure Brochure and the Institutional Consulting Form ADV Disclosure Brochure. For fees charged in connection with the Wells Fargo Advisors Private Advisor Network wrap fee program, please refer to the Wells Fargo Advisors Financial Network Wrap Fee Brochure.

Fees Paid in Advance

The clients may be required to pay our fees in advance. This only applies to instances where we furnish investment advice through consulting arrangements where we do not retain any level of supervision, management, or discretion over the client's investments.

The client may obtain a refund of a pre-paid fee in the following manner if their contract is terminated before the end of a billing period: The client should terminate their relationship with us as described in their contract. We will then automatically refund any pre-paid fees.

The refund will be prorated based on number of days the contract was in effect during the billing period over the total number of days in the billing period.

For accounts managed by TWIN Capital through the UBS Managed Accounts Consulting (MAC) and other UBS programs, please refer to the UBS Financial Services Inc. Form ADV Wrap Fee Program Disclosure Brochure and the Institutional Consulting Form ADV Disclosure Brochure for information regarding fees paid in advance.

Additional Compensation

This item is not applicable.

Item 6. Performance-Based Fees & Side-by-Side Management

Sharing of Capital Gains or Capital Appreciation

TWIN Capital and our investment personnel provide investment management services to multiple portfolios for multiple clients. We are entitled to be paid performance-based compensation by certain clients. TWIN Capital and our investment personnel manage both client accounts that are charged performance-based compensation and accounts that are charged an asset-based fee, which are non-performance-based fees. In addition, certain client accounts may have higher asset-based fees or more favorable performance-based compensation arrangements than other accounts. When we and our investment personnel manage more than one client account a potential exists for one client account to be favored over another client account. TWIN Capital and our investment personnel have a greater incentive to favor client accounts that pay us (and indirectly the portfolio manager) performance-based compensation or higher fees.

TWIN Capital has adopted and implemented policies and procedures intended to address conflicts of interest relating to the management of multiple accounts, including accounts with multiple fee arrangements, and the allocation of investment opportunities. We review investment decisions for the purpose of ensuring that all accounts with substantially similar investment objectives are treated equitably. The performance of similarly managed accounts is also regularly compared to determine whether there are any unexplained significant discrepancies. Our procedures relating to the allocation of investment opportunities require that similarly managed accounts participate in investment opportunities pro rata based on asset size and require that, to the extent

orders are aggregated, the client orders are price-averaged. In addition, we have adopted a trade rotation policy that seeks to allocate transactions among client accounts equitably over time, subject to extenuating circumstances and to trading directions imposed by clients. Finally, our procedures also require the objective allocation for limited opportunities (such as initial public offerings and private placements), if indeed they were to be used, to ensure fair and equitable allocation among accounts. These areas are monitored by TWIN Capital's Chief Compliance Officer.

Item 7. Types of Clients

Description

Our clients consist of high net worth individuals, pension and profit sharing plans, charitable organizations, state or municipal government entities (including government pension plans), other investment advisors, and corporations or other businesses not listed above.

Account Minimums

TWIN Capital requires a minimum investment to open an account. The minimum investment is \$2 million for a separately managed account.

Item 8. Methods of Analysis, Investment Strategies and Risk of Loss

Methods of Analysis

TWIN Capital utilizes a variety of methods and strategies to make investment decisions and recommendations. We focus on a quantitative valuation method and the use of quantitative tools and models. We also incorporate fundamental factors and technical analysis into many of our investment strategies. We specialize in quantitative analysis with a unique Fundamental Tilt® approach. Our Fundamental Tilt® approach is a key and distinguishing factor in our investment process because it allows us to analyze at the market-segment level. The result is performance that's more "macro" because our portfolios tilt to what we believe will be the best style and capitalization segments within the benchmark. The process begins as stocks are run through our proprietary multi-factor model and ranked from highest to lowest expected return. Our investment team then focuses on the highest-ranked stocks within the different sectors. The resulting group is subjected to our portfolio construction process where our distinctive Fundamental Tilt® approach helps identify the stocks that will be included in the portfolio.

Investment Strategies

TWIN Capital provides the following investment strategies:

We manage the **Enhanced Equity** Portfolio using the TWIN EQUITY™ Model (“the Equity Model”), a multi-factor valuation model that combines elements of relative value, expected growth, and earnings quality. The output of the Equity Model is an expected residual return, or alpha, for each stock. The Enhanced Equity Portfolio typically consists of high alpha stocks within the S&P 500 Index; sector and individual stock weight constraints are actively employed to reduce risk. The primary objective of this strategy is to produce a total return, over time, exceeding that of the S&P 500 Index.

TWIN Capital manages the **Prime** Portfolio using the Equity Model. The Prime Portfolio focuses on the highest alpha candidates from among the large- and mid-cap US equity segments, while relaxing the sector and individual stock weight constraints present in our enhanced index strategies. Although alpha is the primary driver of the selection process, dynamic size allocation also plays a part. The primary objective is to outperform, on a total return basis net of fees, the Russell 1000 Index.

We manage the **Dividend Select** Portfolio using the Equity Model. The Dividend Select Portfolio is typically created from high alpha stocks of large-capitalization companies which meet a custom screen for consistent and increasing dividend payments. The primary objective of the Portfolio is to produce a return, over time, which exceeds that of the S&P 500 Index. In 2011, we retroactively changed the primary benchmark for Dividend Select from a custom benchmark to the S&P 500 Index.

We manage the **Dividend Select Plus** Portfolio using the Equity Model. The Dividend Select Plus Portfolio consists of the higher alpha stocks within TWIN’s proprietary Dividend Select Club (as in the closely related Dividend Select strategy) however at the portfolio managers’ discretion, the Dividend Select Plus strategy may also include a covered call option component for a select group of stocks held in the portfolio. This component of the investment portfolio consists of writing a call that is covered by an equivalent long stock position. The primary motive is to earn premium income, which may have the effect of boosting overall returns on the stock and providing a measure of downside protection. It provides a small hedge on the stock and allows an investor to earn premium income, in return for temporarily forfeiting much of the stock’s upside potential.

We manage the **Small Cap** Portfolio using a quantitative, model-driven approach. This concentrated, long-only strategy invests in the stock of small capitalization U.S. companies. The primary objective of this active strategy is to earn a rate of return exceeding that of the Russell 2000 Index.

The **Balanced** Portfolio’s primary investment objective is the preservation of capital while attempting to earn a rate of return exceeding that of the strategy’s benchmark consisting of 60% Bloomberg Aggregate Bond Index, 30% S&P 500® Index, and 10% Global Stocks Ex. US Index. A combination of mutual funds, exchange traded funds, and equity securities may be held in the portfolio.

We manage the **Enhanced 50** Portfolio using the Equity Model. The Enhanced 50 Portfolio typically consists of 50 or less high alpha stocks within the S&P 500[®] Index; sector and individual stock weight constraints are actively employed to reduce risk. The primary objective is to outperform, on a total return basis net of fees, the S&P 500[®] Index.

We manage the **Enhanced All Cap Select** Portfolio using our TWIN EQUITY[™] Model and TWIN Small Cap[™] Model rankings (“the Equity Models”), multi-factor valuation models that combine elements of relative value, expected growth, and earnings quality. The output of the Equity Models is an expected residual return, or alpha, for each stock. The Enhanced All Cap Select Portfolio typically consists of 150 or less high alpha stocks within the Russell 3000[®] Index; sector and individual stock weight constraints are actively employed to reduce risk. The primary objective is to outperform, on a total return basis net of fees, the Russell 3000[®] Index.

These methods, strategies and investments involve risk of loss to clients and clients must be prepared to bear the loss of their entire investment.

Risk of Loss

Material Risks (Including Significant or Unusual Risks) Relating to Investment Strategies:

Issuer-Specific Changes. Changes in the financial condition of an issuer or counterparty, changes in specific economic or political conditions that affect a particular type of security or issuer, and changes in general economic or political conditions can increase the risk of default by an issuer or counterparty, which can affect a security's or instrument's value. The value of securities of smaller, less well-known issuers can be more volatile than that of larger issuers. Smaller issuers can have more limited product lines, markets, or financial resources.

Lack of Diversification. Client accounts will not be diversified among a wide range of types of securities, countries or industry sectors. Accordingly, client portfolios are subject to more rapid change in value than would be the case if we were required to maintain a wider diversification among types of securities and other instruments.

Relative Value Risk. In the event that the perceived mispricings underlying our relative value trading positions were to fail to converge toward, or were to diverge further from, relationships expected by us, client accounts may incur a loss.

Frequent Trading. Our active strategies use frequent trading which results in higher commissions and charges to client accounts due to increased brokerage, which will offset client profits.

Trading Models. Our strategies are based on models which our key personnel have developed over time. As market dynamics shift over time, a previously successful model may become outdated – perhaps without us recognizing that fact before

substantial losses are incurred. There can be no assurance that we will be successful in maintaining effective models.

Market Risk and Selection Risk. Market risk is the risk that one or more markets in which we invest will go down in value, including the possibility that the markets will go down sharply and unpredictably. The value of a security or other asset may decline due to changes in general market conditions, economic trends or events that are not specifically related to the issuer of the security or other asset, or factors that affect a particular issuer or issuers, exchange, country, group of countries, region, market, industry, group of industries, sector or asset class. Local, regional or global events such as war, acts of terrorism, the spread of infectious illness or other public health issues, recessions, or other events could have a significant impact on the investments we hold in client accounts. Selection risk is the risk that the securities we select will underperform the markets, the relevant indices or the securities selected by other funds with similar investment objectives and investment strategies. This means you may lose money.

Effects of Health Crises and Other Force Majeure Events. Health crises, such as pandemic and epidemic diseases, as well as other catastrophes that interrupt the expected course of events, such as natural disasters, war or civil disturbance, acts of terrorism, power outages and other unforeseeable and external events, and the public response to or fear of such diseases or events, have and may in the future have an adverse effect on clients' investments and the Adviser's operations. For example, any preventative or protective actions that governments may take in respect of such diseases or events may result in periods of business disruption, inability to obtain raw materials, supplies and component parts, and reduced or disrupted operations for client portfolio companies. In addition, under such circumstances the operations, including functions such as trading and valuation, of the Adviser and other service providers could be reduced, delayed, suspended or otherwise disrupted. Further, the occurrence and pendency of such diseases or events could adversely affect the economies and financial markets either in specific countries or worldwide.

Risks Associated With Types of Securities that are Primarily Recommended (Including Significant or Unusual Risks):

Equity Securities. The value of equity securities fluctuates in response to issuer, political, market, and economic developments. Fluctuations can be dramatic over the short as well as long term, and different parts of the market and different types of equity securities can react differently to these developments. For example, large cap stocks can react differently from small cap stocks, and "growth" stocks can react differently from "value" stocks. Issuer, political, or economic developments can affect a single issuer, issuers within an industry or economic sector or geographic region, or the market as a whole. Changes in the financial condition of a single issuer can impact the market as a whole. Terrorism and related geo-political risks have led, and may in the future lead, to increased short-term market volatility and may have adverse long-term effects on world economies and markets generally.

Additional Risks Relating to Our Business:

Cybersecurity Risk. Our information and technology systems and those of our and our clients' key service providers may be vulnerable to potential damage or interruption from computer viruses, network failures, computer and telecommunication failures, infiltration by unauthorized persons and security breaches, usage errors by their respective professionals, power outages and catastrophic events such as fires, tornadoes, floods, hurricanes and earthquakes. Although we have implemented various measures designed to manage risks relating to these types of events, if these systems are compromised, become inoperable for extended periods of time or cease to function properly, it may be necessary for us to make a significant investment to fix or replace them and to seek to remedy the effect of these issues. The failure of these systems and/or of disaster recovery plans for any reason could cause significant interruptions in our operations or those of our clients and result in a failure to maintain the security, confidentiality or privacy of sensitive data, including personal information.

Risk Management Failures. Although we attempt to identify, monitor and manage significant risks, these efforts do not take all risks into account and there can be no assurance that these efforts will be effective. Moreover, many risk management techniques, including those we employ, are based on historical market behavior, but future market behavior may be entirely different and, accordingly, the risk management techniques employed on behalf of clients may be incomplete or altogether ineffective. Similarly, we may be ineffective in implementing or applying risk management techniques. Any inadequacy or failure in risk management efforts could result in material losses to clients.

Systems and Operational Risk. We rely on certain financial, accounting, data processing and other operational systems and services that we employ or are employed by third party service providers, including brokers, administrators, market counterparties and others. Many of these systems and services require manual input and are susceptible to error. These programs or systems may be subject to certain defects, failures or interruptions. For example, we and our clients could be exposed to errors made in the confirmation or settlement of transactions, from transactions not being properly booked, evaluated or accounted for or related to other similar disruptions in the clients' operations. In addition, despite certain measures established to safeguard information in these systems, we, our clients and our third party service providers are subject to risks associated with a breach in cybersecurity which may result in damage and disruption to hardware and software systems, loss or corruption of data and/or misappropriation of confidential information. Any such errors and/or disruptions may lead to financial losses, the disruption of the client trading activities, liability under applicable law, regulatory intervention or reputational damage.

Business Continuity Planning. An investment adviser's fiduciary obligation to its clients includes the obligation to take steps to protect its clients' interest from being placed at risk as a result of the adviser's inability to provide advisory services after, for example, a natural disaster or, in the event of smaller firms such as TWIN Capital, the death or incapacity of the owner or other key personnel. The clients of an investment adviser that is engaged in the active management of their assets could be placed at significant risk if the advisor ceased operation unexpectedly.

We have formed a Business Continuity/Disaster Recovery Committee to help prepare us for such an event. This Committee is responsible for maintaining a business continuity plan and for testing the plan periodically. However, our clients should expect to encounter a certain amount of risk exposure in this area due to our concentrated ownership structure and the fact that we may have fewer resources at our disposal relative to some organizations. Clients and prospective clients are encouraged to inquire about our plans and level of preparedness so they may make an informed decision regarding whether the level of risk present is appropriate for their circumstances.

Item 9. Disciplinary Information

Legal and Disciplinary

This item is not applicable.

Criminal or Civil Action

This item is not applicable.

Administrative Proceeding

This item is not applicable.

Self-Regulatory Proceeding

This item is not applicable.

Item 10. Other Financial Industry Activities and Affiliations

Broker-dealer or Registered Representative

This item is not applicable.

Futures Commission Merchant, Commodity Pool Operator, Commodity Trading Adviser or Associated Person

This item is not applicable.

Material Relationships or Arrangements with Financial Industry

TWIN Capital is related to Twin Partners LLC (doing business as TEAM Systems). TEAM systems licenses investment systems software and provides other consulting and research services to various institutional investment managers. We wholly own

Twin Partners LLC. The President and certain other employee's of TWIN Capital spend a portion of their time working on TEAM Systems business affairs.

Recommend or Select Other Investment Advisers

This item is not applicable.

Item 11. Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

Code of Ethics

We have adopted a Code of Ethics (the "Code") that obligates us to put the interests of our clients before our own interests and to act honestly and fairly in all respects in our dealings with clients. All of our personnel are also required to comply with applicable federal securities laws. Clients or prospective clients may obtain a copy of the Code by contacting James Drake, Chief Compliance Officer by email at jimd@twincapital.com or by telephone at (724) 942-2000. See below for further provisions of the Code as they relate to the preclearing and reporting of securities transactions by related persons.

TWIN Capital, in the course of our investment management and other activities (e.g., contact with clients that are issuers of securities or board committee service), may come into possession of confidential or material nonpublic information about issuers, including issuers in which we or our related persons have invested or seek to invest on behalf of clients. We are prohibited from improperly disclosing or using such information for our own benefit or for the benefit of any other person, regardless of whether such other person is a client. We maintain and enforce written policies and procedures that prohibit the communication of such information to persons who do not have a legitimate need to know such information and to assure that we are meeting our obligations to clients and remain in compliance with applicable law. In certain circumstances, we may possess certain confidential or material, nonpublic information that, if disclosed, might be material to a decision to buy, sell or hold a security, but we will be prohibited from communicating such information to the client or using such information for the client's benefit. In such circumstances, we will have no responsibility or liability to the client for not disclosing such information to the client (or the fact that we possess such information), or not using such information for the client's benefit, as a result of following our policies and procedures designed to provide reasonable assurances that we are complying with applicable law.

Recommend Securities with Material Financial Interest

This item is not applicable at this time.

Investing in Same Securities Recommended to Clients

In addition, we or our related persons invest in the same securities (or related securities, e.g., warrants, options or futures) that we or a related person recommends to clients. Such practices present a conflict where, because of the information we have, we or our related person are in a position to trade in a manner that could adversely affect clients. For example, we or a related person could place our own trades before or after client trades are executed in order to benefit from any price movements due to the clients' trades. In addition to affecting our or our related person's objectivity, these practices by us or our related persons may also harm clients by adversely affecting the price at which the clients' trades are executed. We have adopted the following procedures in an effort to minimize such conflicts: TWIN Capital requires our access persons to preclear certain limited offerings and initial public offerings in their personal accounts with the Chief Compliance Officer, who may deny permission to execute the transaction if such transaction will have any adverse economic impact on one of our clients. All of our related persons are required to disclose their securities transactions on a quarterly basis and holdings on an annual basis. All of our related persons are also required to provide broker confirmations of each reportable transaction in which they engage and an annual certification of such transactions. Trading in employee accounts is reviewed by the Chief Compliance Officer and compared with transactions for the client accounts.

Conflicts of Interest Created by Contemporaneous Trading

TWIN Capital or a related person from time to time recommends securities to clients, or buys or sells securities for client accounts, at or about the same time that we or related person buys or sells the same securities for our own account in accordance with the procedures described below in order to minimize the conflicts stemming from situations where the contemporaneous trading results in an economic benefit for us or our related person to the detriment of the client. In addition, we have adopted the aggregation policies and procedures discussed in the Brokerage Practices section.

Personal Trading Policies

TWIN Capital or a related person may buy or sell securities that we also recommend to clients. Every employee of ours is required to acknowledge receipt of and compliance with our "Code of Ethics and Policy relating to Trading of Securities by Personnel of Investment Advisor". These documents govern personal security transactions by our investment staff and other access persons, prohibited transactions, our prohibition of Insider Trading, and the other requirements. Clients or prospective clients may obtain a copy of the these documents by contacting James Drake, the Adviser's Chief Compliance Officer, by email at jimd@twincapital.com or by telephone at (724) 942-2000.

Item 12. Brokerage Practices

Selecting Brokerage Firms

TWIN Capital considers a number of factors in selecting a broker-dealer to execute transactions (or series of transactions) and determining the reasonableness of the broker-dealer's compensation. Such factors include net price, reputation, financial strength and stability, and efficiency of execution. In selecting a broker-dealer to execute transactions (or series of transactions) and determining the reasonableness of the broker-dealer's compensation, we need not solicit competitive bids and do not have an obligation to seek the lowest available commission cost. It is not always our practice to negotiate "execution only" commission rates, thus a client may be deemed to be paying for research, brokerage or other services provided by a broker-dealer which are included in the commission rate. Our Best Execution Committee meets periodically to evaluate the broker-dealers we use to execute client trades using the foregoing factors.

Research and Soft Dollars

We receive research or other products or services other than execution from broker-dealers and/or third parties in connection with client securities transactions. This is known as a "soft dollar" relationship. We will limit the use of "soft dollars" to obtain research and brokerage services to services that constitute research and brokerage within the meaning of Section 28(e) of the Securities Exchange Act of 1934 ("Section 28(e)"). Research services within Section 28(e) may include, but are not limited to, research reports (including market research); software providing analysis of securities portfolios; corporate governance research and rating services; consultants' advice on portfolio strategy; data services (including services providing market data, company financial data and economic data); and advice from broker-dealers on order execution. Brokerage services within Section 28(e) may include, but are not limited to, services related to the execution, clearing and settlement of securities transactions and functions incidental thereto (i.e., connectivity services between an adviser and a broker-dealer and other relevant parties such as custodians); trading software operated by a broker-dealer to route orders; software that provides trade analytics and trading strategies; software used to transmit orders; clearance and settlement in connection with a trade; electronic communication of allocation instructions; routing settlement instructions; post trade matching of trade information; and services required by the SEC or a self regulatory organization such as comparison services, electronic confirms or trade affirmations.

When we use client commissions to obtain Section 28(e) eligible research and brokerage products and services, our Best Execution and Soft Dollar Committees meet periodically to review and evaluate our soft dollar practices and to determine in good faith whether, with respect to any research or other products or services received from a broker-dealer, the commissions used to obtain those products and services were reasonable in relation to the value of the brokerage, research or other products or services provided by the broker-dealer. This determination will be viewed in terms of either the specific transaction or our overall responsibilities to the accounts or portfolios over which we exercise investment discretion.

The use of client commissions (or markups or markdowns) to obtain research and brokerage products and services raises conflicts of interest. For example, we will not have to pay for the products and services ourselves. This creates an incentive for us to

select or recommend a broker-dealer based on our interest in receiving those products and services. We may cause clients to pay commissions (or markups or markdowns) higher than those charged by other broker-dealers in return for soft dollar benefits (known as paying-up), resulting in higher transaction costs for clients.

Research and brokerage services obtained by the use of commissions arising from a client's portfolio transactions may be used by us in our other investment activities, including, for the benefit of other client accounts. We do not seek to allocate soft dollar benefits to client accounts proportionately to the soft dollar credits the accounts generate. During our last fiscal year, as a result of client brokerage commissions (or markups or markdowns), we and/or our related persons acquired:

MSCI BARRA

Barra AEGIS Suite: Application and data provide tools to evaluate portfolio risk and characteristics and help evaluate model performance and potential refinements. Subscription includes US current & historical equity risk model data, plus the AEGIS Portfolio Manager & Performance Analyst applications.

STANDARD & POORS

S&P Index Data Subscription: Subscription provides daily access to S&P index constituent lists and associated data (e.g., index weight, available capitalization, GICS classification) via Barra AEGIS Suite and FactSet. Access via FactSet to official daily index levels is also included. Data is used for benchmarking purposes and in formulating investment strategies.

FACTSET

FactSet Research Systems Subscription: Subscription provides daily access to security prices, financial statement data, and news for a large universe of assets (stocks, bonds, currencies, etc). Access also provided to selected third-party vendor data (I/B/E/S earnings estimates; Russell and Standard & Poors index value & constituent data). This data is used in quantitative investment strategies.

REFINITIV (FORMERLY THOMSON REUTERS)

I/B/E/S Estimates Database: Database subscription provides daily access to analysts' corporate earnings estimates and other fiscal year/quarter elements. Data is used in quantitative investment strategies. Access to data is via FactSet and Ford US Equity database.

StarMine Quantitative Models Database: Subscription provides daily access to StarMine's Earnings Quality Model (EQM) score which measures the likely sustainability of prior earnings patterns. The score is one factor in the Advisor's determination of investment attractiveness.

DTCC OMGEO

TradeSuite Confirm/Affirm Application: Application assists with post-trade matching and electronic communication of allocation/settlement instructions.

In determining whether to direct client brokerage transactions to particular broker-dealers, our Best Execution and Soft Dollar Committees meet periodically to review and

evaluate our soft dollar practices and to determine in good faith whether, with respect to any research or other products or services received from a broker-dealer, the commissions used to obtain those products and services were reasonable in relation to the value of the brokerage, research or other products or services provided by the broker-dealer.

We have entered into “client commission arrangements” pursuant to which we may execute transactions through a broker-dealer and request that the broker-dealer allocate a portion of the commissions or commission credits to another firm that provides research and other products to us. We exclude from use under these arrangements those products and services that are not eligible under Section 28(e) and applicable regulatory interpretations.

In some instances, we obtain a product or service that is used, in part, by us for Section 28(e) eligible purposes and, in part, for other purposes. In such instances, we will make a good faith effort to determine the relative proportion of the product or service used to assist us in carrying out our investment decision-making responsibilities and the relative proportion used for administrative or other purposes outside Section 28(e). Such determination will be made based on the actual use of the product or service by our personnel. The proportion of the product or service attributable to assisting us in carrying out our investment decision-making responsibilities will be paid through brokerage commissions generated by client transactions and the proportion attributable to administrative or other purposes outside Section 28(e) will be paid for by us from our own resources. The determination of the appropriate allocation of “mixed use” products and services creates a potential conflict of interest between us and clients.

Brokerage for Client Referrals

From time to time we may participate in capital introduction programs arranged by broker-dealers. We may place client portfolio transactions with firms who have made such recommendations or provided capital introduction opportunities, if we determine that it is otherwise consistent with seeking best execution. In no event will we select a broker-dealer as a means of remuneration for recommending us or any other product managed by us (or an affiliate) or affording us with the opportunity to participate in capital introduction programs.

Directed Brokerage

When a client directs us to use a specified broker-dealer to execute all or a portion of the client’s securities transactions, we treat the client direction as a decision by the client to retain, to the extent of the direction, the discretion we would otherwise have in selecting broker-dealers to effect transactions and in negotiating commissions for the client’s account. Although we attempt to effect such transactions in a manner consistent with our policy of seeking best execution, there may be occasions where we are unable to do so, in which case we will continue to comply with the client’s instructions. A client who directs us to use a particular broker-dealer to effect transactions should consider whether such direction may result in certain costs or disadvantages to the client. Such costs may include higher brokerage commissions

(because we may not be able to aggregate orders to reduce transaction costs) and less favorable execution of transactions. By permitting a client to direct us to execute the client's trades through a specified broker-dealer, we will make no attempt to negotiate commissions on behalf of the client and, as a result, in some transactions such clients may pay materially disparate commissions depending on their commission arrangement with the specified broker-dealer and upon other factors such as number of shares, round and odd lots and the market for the security. The commissions charged to clients that direct us to execute the client's trades through a specified broker-dealer may in some transactions be materially different than those of clients who do not direct the execution of their trades. Clients that direct us to execute the client's trades through a specified broker-dealer may also lose the ability to negotiate volume commission discounts on batched transactions that may otherwise be available to our other clients. We may use step-outs (where an executing broker steps out of a trade and a clearing broker steps into the trade and confirms the trade, or where an executing broker steps out a portion of their commission to a different broker) to satisfy client directed brokerage requests or to gain access to research assistance provided by other brokers. When we utilize step-outs, it is because, in our opinion, they are likely to result in more favorable execution price and quality. Under a step-out arrangement, commission rates for clients who request directed brokerage are likely to be higher than our other clients.

However, because clients requesting directed brokerage may receive the benefit of research services provided to us through "soft dollar" arrangements in addition to commission recapture or other credits which other clients do not receive, clients requesting directed brokerage may in certain instances receive an advantage relative to our other clients.

Order Aggregation

We believe bunching trades enhances efficiency and results in a more equitable treatment for our clients. Therefore, we will generally bunch trades so that each client receives the same average execution price. Unless circumstances warrant otherwise, all trades executed on a particular day (even though not necessarily executed at the same time) will be aggregated and all participating clients will receive the same average price for any commonly traded security and will pay a prorated commission. Additionally, any clients with custodians that levy ticket charges will pay these charges in addition to the prorated commission amount when applicable. Exceptions to this general policy may arise from cash flows in or out of client portfolios, client directed brokerage requirements, restrictive client custodial arrangements, or significant charges such as ticket charges. If a trade is not fully executed, we will generally prorate the amount executed to each client based on their respective share of the total trade, unless circumstances warrant otherwise.

However, in cases where the client has negotiated the commission rate directly with the broker, we will not be able to obtain more favorable commission rates based on an aggregated trade. In such cases, the client will be precluded from receiving the benefit of any possible commission discounts that might otherwise be available as a result of the aggregated trade. In cases where trading or investment restrictions are placed on a client's account, we may be precluded from aggregating that client's transaction with others. In such a case, the client may pay a higher commission rate and/or receive less

favorable prices than clients who are able to participate in an aggregated order. When an aggregated order is completely filled, we allocate the securities purchased or proceeds of sale pro rata among the participating accounts, based on the purchase or sale order. Adjustments or changes may be made under certain circumstances, such as to avoid odd lots or excessively small allocations. If the order at a particular broker is filled at several different prices, through multiple trades, generally all such participating accounts will receive the average price and pay the average commission, subject to odd lots, rounding, and market practice. If an aggregated order is only partially filled, our procedures provide that the securities or proceeds are to be allocated in a manner deemed fair and equitable to clients. Depending on the investment strategy pursued and the type of security, this may result in a pro rata allocation to all participating clients.

Error Correction

If it appears that a trade error has occurred, we will review the relevant facts and circumstances to determine an appropriate course of action. To the extent that trade errors and breaches of investment guidelines and restrictions occur, our error correction procedure is to ensure that clients are treated fairly. In the event that a client account incurs a trade error as a result of our violation of the standard of care that is applicable to the client account, we will reimburse the client. We have discretion to resolve a particular error in any appropriate manner that is consistent with the above stated policy.

Item 13. Review of Accounts

Periodic Reviews

Each client account is reviewed by a Portfolio Manager of TWIN Capital, on at least a quarterly basis, to determine whether securities positions should be maintained in view of current market conditions. Matters reviewed include specific securities held, adherence to investment guidelines and the performance of each client account.

Review Triggers

Significant market events affecting the prices of one or more securities in client accounts, changes in the investment objectives or guidelines of a particular client, or specific arrangements with particular clients may trigger reviews of client accounts on other than a periodic basis.

Regular Reports

For a client that is a separate account: upon request and based on their individual requirements and preferences, clients will generally be provided with valuation and performance attribution statements at the end of each month and/or quarter. These statements may describe securities held, quantity and market price for each position, and the market value of the entire account, among other things. If a client does not

wish to receive reporting from us, we will comply with the request with the understanding that similar information is being received by the client or their agent from another party. Such reports may be delivered by unsecured electronic mail and/or the Internet to the client unless otherwise specified in the client's agreement with us.

Item 14. Client Referrals and Other Compensation

Economic Benefits

We receive certain research or other products or services from broker-dealers through "soft-dollar" arrangements. These "soft-dollar" arrangements create an incentive for us to select or recommend broker-dealers based on our interest in receiving the research or other products or services and may result in the selection of a broker-dealer on the basis of considerations that are not limited to the lowest commission rates and may result in higher transaction costs than would otherwise be obtainable by us on behalf of our clients. Please see Brokerage Practices for further information on our "soft-dollar" practices, including our procedures for addressing conflicts of interest that arise from such practices.

Third Party Solicitors

This item is not applicable.

Item 15. Custody

Deduction of Fees

We are deemed to have custody of funds and/or securities held for certain client accounts as a result of our authority to instruct the client's custodian to deduct our fee directly from the client account.

Account Statements

Separate account clients will receive account statements from a broker-dealer, bank or other qualified custodian and clients should carefully review those statements. In most cases, we also send monthly or quarterly statements directly to clients in addition to those sent by the qualified custodian. Clients should compare any statements they receive from the custodian with those received from us. Any discrepancies should be brought to our attention and the attention of the custodian. If the client is not receiving their account statements from their custodian, they should first contact the custodian to

resolve the issue. If it remains unresolved after such contact, the client should let us know.

Item 16. Investment Discretion

Discretionary Authority for Trading

TWIN Capital provides investment advisory services on a discretionary basis to clients. Please see the Advisory Business section for a description of any limitations clients may place on the Adviser's discretionary authority.

Prior to assuming full or limited discretion in managing a client's assets, the Adviser enters into an investment management agreement or other agreement that sets forth the scope of the Adviser's discretion.

Unless otherwise instructed or directed by a discretionary client, TWIN Capital has the authority to determine (i) the securities to be purchased and sold for the client account (subject to restrictions on its activities set forth in the applicable investment management agreement and any written investment guidelines) (ii) the amount of securities to be purchased or sold for the client account. Because of the differences in client investment objectives and strategies, risk tolerances, tax status and other criteria, there may be differences among clients in invested positions and securities held. Our portfolio managers submit an allocation statement to our trading desk describing the allocation of securities to (or from) client accounts for each trade/order submitted. The portfolio managers may consider the following factors, among others, in allocating securities among clients: (i) client investment objectives and strategies; (ii) client risk profiles; (iii) tax status and restrictions placed on a client's portfolio by the client or by applicable law; (iv) size of the client account; (v) nature and liquidity of the security to be allocated; (vi) size of available position; (vii) current market conditions; and (viii) account liquidity, account requirements for liquidity and timing of cash flows. Although it is our policy to allocate investment opportunities to eligible client accounts on a pro rata basis (based on the value of the assets of each participating account relative to value of the assets of all participating accounts), these factors may lead a portfolio manager to allocate securities to client accounts in varying amounts. Even client accounts that are typically managed on the pro rata basis described above may from time to time receive differing allocations of securities based on total assets of each account eligible to invest in the particular investment type (e.g., equities) divided by the total assets of all accounts eligible to invest in the particular investment.

Class Action Participation

The decision to participate in a class action (or opt out) or to sign a release of claims when submitting a proof of claim typically involves the exercise of legal judgment beyond the customary expertise of an investment adviser and touches on matters within the purview of an account owner. Therefore, unless specifically instructed otherwise in writing by a client: 1.) TWIN Capital bears no responsibility for the submission of class action claims for which a client is or may be eligible for a monetary or other recovery; 2.) TWIN Capital is not responsible to otherwise advise or act for clients in legal

proceedings, including class actions or bankruptcies, involving securities purchased or held in their accounts; 3.) TWIN Capital will assume it is not necessary to forward copies of any class action notices it receives or otherwise notify clients when it becomes aware of a potential claim, rather the client has made other arrangements to obtain this information.

Nonetheless, if a client requests that we participate in class action claims on its behalf and we agree to provide this service, we will only file proof of claims that we passively become aware of and that in our sole judgment are likely to result in a material recovery for the client's account. Our participation on the client's behalf will typically involve a release from future claims, and it is the client's responsibility to notify us if this is not appropriate for their situation.

Item 17. Voting Client Securities

Proxy Voting

To the extent we have been delegated proxy voting authority on behalf of our clients, TWIN Capital complies with our proxy voting policies and procedures that are designed to ensure that in cases where we vote proxies with respect to client securities, such proxies are voted in the best interests of its clients. In voting proxies, we utilize the services of a third-party proxy agent (currently Glass, Lewis & Co., LLC ("GLC")) to provide proxy-related services, including research, analysis and voting recommendations as well as reporting, auditing and assistance for the handling of proxy voting responsibilities. Therefore, for a detailed analysis of proxy issues we will rely primarily on the independent proxy service, and will generally vote proxies in accordance with the recommendations received from the independent proxy service. The independent proxy service has developed a comprehensive written set of guidelines which it follows in formulating its voting recommendations. These guidelines, which are designed to be consistent with the best economic interests of shareholders, cover the following voting issues:

I. Board of Directors That Serves the Interests of Shareholders

- Election of Directors
 - Independence
 - Performance
 - Experience
 - Other Considerations
 - Controlled Companies
 - Exceptions for Recent IPOs
 - Mutual Fund Boards
- Declassified Boards
- Mandatory Director Retirement Provisions
 - Director Term and Age Limits
- Requiring Two or More Nominees per Board Seat
- Shareholder Access
- Majority Vote for the Election of Directors

II. Transparency and Integrity of Financial Reporting

- Auditor Ratification
- Pension Accounting Issues

III. The Line Between Compensation and Performance

- Advisory Vote on Executive Compensation
- Equity-Based Compensation Plan Proposals

IV .Governance Structure and the Shareholder Franchise

- Anti-Takeover Measures
- Reincorporation
- Authorized Shares
- Advance Notice Requirements
- Voting Structure
- Transaction of Other Business at Meetings of Shareholders
- Anti-Greenmail Proposals
- Mutual Funds: Investment Policies and Agreements

V. Compensation, Environment, Social and Governance Shareholder Initiatives

- Compensation
- Governance
- Environment
- Social Issues

Our clients are permitted to direct their votes in a particular solicitation or direct that a different set of guidelines govern the voting of proxies for their account (e.g., AFL-CIO guidelines for labor-sensitive accounts). A client that wishes to direct its vote in a particular manner should give us reasonable prior written notice indicating such intention and provide written instructions directing our vote in regard to the particular solicitation. Where such prior written notice is received, we will vote proxies in accordance with such written instructions received from a client, provided that such instructions are provided to us in a timely manner.

If a material conflict of interest between TWIN Capital and a client exists, we will determine whether voting in accordance with the guidelines set forth in the proxy voting policies and procedures is in the best interests of the client or take some other appropriate action.

Clients may obtain a copy of our proxy voting policies and procedures and information about how we voted a client's proxies by contacting James Drake, Chief Compliance Officer, by email at jimd@twincapital.com or by telephone at (724) 942-2000.

Item 18. Financial Information

Prepayment of Fees

This item is not applicable.

Financial Condition

This item is not applicable.

Bankruptcy

This item is not applicable.

SK 26412 0001 8485164 v1