

Strategic Guidance

FORM PF – A Guide To Creation, Calculations, And Reporting for RIAs

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On October 31 2011, the SEC and CFTC released final rules regarding the submission of FORM PF for Registered Investment Advisors (RIAs) and Private Equity (PE) funds. This strategic guidance reviews the FORM PF with an eye towards operations and reporting infrastructure enhancements for RIAs.

PERFORMANCE THINKING & TECHNOLOGIES, INC.

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On October 31, 2011, The Securities and Exchange Commission (SEC) and Commodity Futures Trading Commission (CFTC) enacted final rules that requires Registered Investment Advisors (RIAs) to file a Form PF with the SEC.

The purpose of the FORM PF is to gather information that can be used by the Financial Stability Oversight Council (FSOC) to evaluate systemic risk(s) to the US financial ecosystem. To this end, the SEC is requesting detailed information across a broad operational spectrum, including:

- Assets Under Management (AUM), Net Asset Value (NAV), Gross Asset Value (GAV)
- Long & Short Value by Fair-Value (L1, L2, L3) & Cost-based valuations
- Exposure by asset class, geography, and counterparty
- Trading, settlement, and turnover of total positions
- Liquidity of securities, financing, and investors
- Risk measurements such as VaR and Stress Test results

Large RIAs with aggregated assets greater than \$1.5 billion AUM must file the FORM PF quarterly within 60 days after the end of each quarter. Smaller advisors (> \$150M AUM) will file annually within 120 days after each fiscal year.

Unlike the Form ADV, the FORM PF will not be public. However, funds should be very aware that many investors are planning to request copies of the FORM PF once the SEC mandates submission. In addition, in terms of accuracy, the SEC has noted that data on the FORM PF could be used for investigatory purposes in an enforcement action. Filing of the FORM PF will be done electronically through the FORM PF filing system on the Investment Advisory Registration Depository website (www.iard.com).

PURPOSE OF THIS WHITEPAPER

The purpose of this whitepaper is to identify key aspects from an operational and technical perspective for RIAs. It is not intended to serve as a legal interpretation on concepts and definitions within Dodd Frank and/or the FORM PF framework.

This whitepaper will cover:

- Information included in the Form PF and completion requirements
- Potential technical and operational issues
- Potential aggregation, classification, and data integrity issues

Summary of Form PF:

Section	Who must complete?
1a	All RIAs
1b	All RIAs – separate 1b for each private fund advised
1c	All RIAs – separate 1c for each hedge fund advised
2a	RIA > \$1.5B AUM (Aggregated)
2b	RIA > \$1.5B AUM -separate 2b for each hedge fund advised
3	Liquidity Funds (> \$ 1B AUM)
4	Private Equity Advisors (> \$2B AUM)
5	Hardship Exemption

As highlighted above, the FORM PF has three sections for RIAs and six sections overall. Completion requirements are based on an aggregated AUM and the number of hedge funds advised by the RIA. Each section applicable to RIAs and hedge funds is covered below. Additional details and a Form PF toolkit can be referenced on the Performance Thinking & Technologies website, <http://www.p-t-t.com>.

Section	Completion Requirement	Key Questions
1a	All RIAs	Advisor name and related person(s)...[Item A, 1] Total Regulatory AUM and Net AUM....[Item B, 3] Assumptions [Item C, 4]
1b	All RIAs with a separate section 1b for each private fund advised	Gross Asset Value (GAV)....[Item B, 8] NAV....[Item B, 9] Value of Parallel Managed Accounts....[Item B, 11] Total Borrow....[Item B, 12] [12a] Total Borrowings [12b] From US Fin institutions [12c] From non-US Fin institutions [12d] From US, non-Fin institutions creditors [12e] From non-US, non-Fin institutions creditors Aggregate value of derivative positions...[Item B, 13] Assets & Liabilities (Fair-Value vs Cost-Basis)....[Item B, 14] Fair-Value of Assets segregated by L1, L2, L3 pricing Fair-Value of Liabilities segregated by L1, L2, L3 pricing Cost-Basis of Assets & Liabilities Ownership percentage of top 5 beneficial owners...[Item B, 15] Ownership percentage of following ownership types...[Item B, 16] [16a] Ownership by US persons [16b] Ownership by non-US persons [16c] Ownership by Broker-Dealers [16d] Ownership by Insurance Companies [16e] SEC Registered Investment Companies [16f] Private Funds [16g] Non-Profits [16h] Pension Plans [16i] Banking or Thrift Institutions [16j] State or Municipal Entities (not Pension Plans) [16k] State or Municipal Pension Plans [16l] Sovereign Wealth Funds

PERFORMANCE THINKING & TECHNOLOGIES, INC.
 FORM PF – A Guide To Creation, Calculations, And Reporting for RIAs

Section	Completion Requirement	Key Questions
		[16m] Non-US indirect beneficial ownership [16n] Other Performance as reported to investors...[Item B, 17] Last Day of Fiscal Period...[17a-q] Gross Performance...[17a-q] Net Performance...[17a-q]
1c	All RIAs with a separate section 1c for each hedge fund advised	Name of Reporting Fund and Private Fund ID...[Item A, 18 a,b] Single or Multi-Strategy...[Item B, 19] Investment Strategy per defined strategy...[Item B, 20] % of NAV (required) % of Capital (optional) Percentage of NAV managed using algorithmic computer-driven trading...[Item B, 21] Counterparty credit exposure - top five counterparties...[Item B, 22] Legal Name of Counterparty [22a-e] Affiliation with Major Fin Inst [22a-e] As a percentage of NAV...[22a-e] Counterparty credit exposure to the fund - top five counterparties...[Item B, 23] Legal Name of Counterparty [23a-e] Affiliation with Major Fin Inst [23a-e] As a percentage of NAV...[23a-e] Trading & Settlement mechanism, including exchange vs OTC...[Item B, 24] Estimated % of value of securities exchange vs OTC [24a] Estimated % of derivatives exchange vs OTC [24b] Estimated % of derivatives cleared by CCP vs bilateral [24c] Estimated % of repos cleared by CCP vs bilateral vs tri-party [24d] % of NAV not in categories from Item B, 24...[Item B, 25]

Section	Completion Requirement	Key Questions
2a	All RIAs for aggregated AUM greater than \$1 Billion during any day of the reporting period.	Monthly Valuation of Long and Short positions by asset class and sub-asset class (defined)....[Item A, 26] Equity Equity Derivatives Corp. Bonds Convertible Bonds Sovereign, Govt, and Munis Loans Repos ABS Credit Derivatives FX Derivatives Non-US FX Holdings Interest Rate Derivatives Commodity (Derivatives) Commodity (Physical) Other Derivatives Physical Real Estate Investment in internal/external private funds/RIC Cash & Cash Management investments Turnover rate (as measured by absolute value of transactions) for 1 st , 2 nd , and 3 rd month...[Item A, 27] Equity Corp. Bonds Convertible Bonds Sovereign Bonds US Treasuries Agencies GSE Bonds

PERFORMANCE THINKING & TECHNOLOGIES, INC.
 FORM PF – A Guide To Creation, Calculations, And Reporting for RIAs

Section	Completion Requirement	Key Questions
		G10 non-US Sovereign Bonds Other Sovereign Bonds Geographic breakdown of % of NAV(per defined regions)...[Item A, 28a i to viii] Country-specific breakdown of % of NAV (per defined country)...[Item A, 28b i to vi]
2b	All RIAs for aggregated AUM greater than \$1Billion with a separate section 2b for each hedge fund that is advised	Name of fund and private fund ID....[Item A, 29] Monthly Valuation of Long and Short positions by asset class and sub-asset class (defined)...[Item B, 30] Equity & Equity Derivatives Corp. Bonds Convertible Bonds Sovereign, Govt, and Munis Loans Repos ABS Credit Derivatives FX Derivatives Non-US FX Holdings Interest Rate Derivatives Commodity (Derivatives) Commodity (Physical) Other Derivatives Physical Real Estate Investment in internal/external private funds/RIC Cash & Cash Management investments Reporting Fund’s base currency...[Item B, 31] Liquidity (as defined by % of portfolio capable of defined categories below)...[Item B, 32]: 1 day 2 – 7 days 8 – 30 days 31 – 90 days 91 – 180 days 181 – 364 days 365+ days Dollar value of unencumbered cash per month...[Item B, 33] Number of open positions by month...[Item B, 34] Portfolio Concentration by month (on positions > 5% of NAV) as defined by asset class...[Item B, 35] Collateral – posted to fund by counterparty – based on top 5 counterparties and summarized by defined collateral type...[Item B, 36] Collateral – posted by fund to counterparty - based on top 5 counterparties and summarized by collateral type...[Item B, 37] Of Collateral posted to the reporting fund, % of collateral that may be rehypothecated and has been rehypothecated by reporting fund...[Item B, 38] Value at Risk Analysis...[Item C, 40], including: Confidence interval...[i] Time horizon...[ii]

PERFORMANCE THINKING & TECHNOLOGIES, INC.
FORM PF – A Guide To Creation, Calculations, And Reporting for RIAs

Calculation method...[v]
VaR by month...[vii – ix]

Any other risk metrics other than VaR important to fund's risk management...[Item C, 41]

Stress Tests utilized based on various market factors and asset classes...[Item C, 42]

Financing Information by month and summarized based on defined categories...[Item D, 43]
Unsecured Borrowing...[a-i to a-iv]
Secured Borrowing...[b-i to b-iii]

Aggregate value of derivatives and posted collateral by month...[Item D, 44]

Derivative positions not cleared by a CCP...[Item D, 45]
Aggregate net MTM value...[a]
Net value of cash collateral...[b]
Net value of collateral (securities)...[c]
Net value of collateral (LoC and credit support)...[d]

Financing Liquidity...[Item D, 46]
Aggregate borrow/financing available to reporting fund...[a]
Liquidity of financing by time period...[b] by categories:
1 day
2 – 7 days
8 – 30 days
31 – 90 days
91 – 180 days
181 – 364 days
365+ days

Creditor(s) to which the reporting fund owes (based on borrowings) > 5% of NAV...[Item D, 47]
Name of Creditor
Dollar amount owed to each creditor

Investor Information
% of NAV in side-pocket arrangement...[Item E, 48a]
Additional assets placed in sidepocket since last filing...[Item E, 48b]

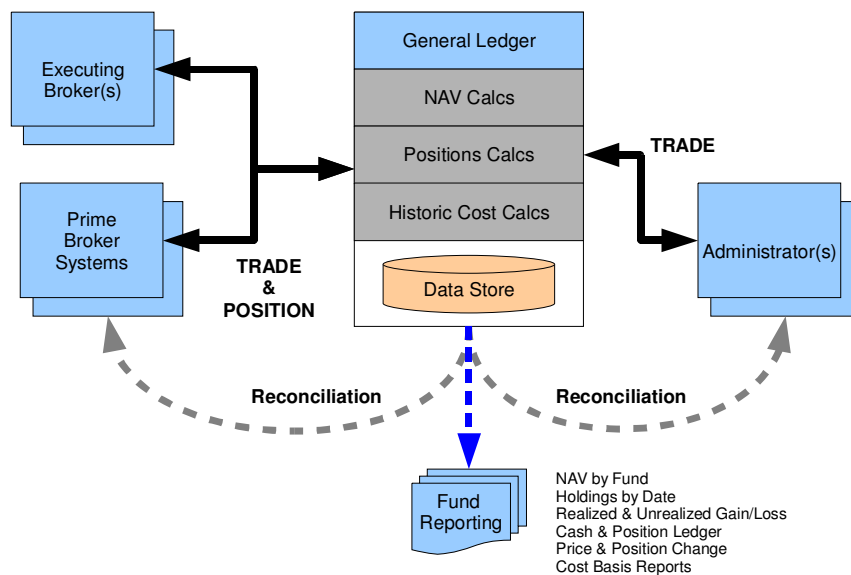
Restrictions on Investor Withdrawals & Redemptions...[Item E, 49]
% of NAV that may be subject to suspension of investor withdrawal...[b]
% of NAV that may be subject to material restrictions on withdrawals (gates)...[c]
% of NAV that IS subject to suspension of investor withdrawal...[d]
% of NAV that IS subject to material restrictions on withdrawals (gates)...[e]

*Investor Liquidity as % of NAV locked for specified time periods...[Item E, 50]
1 day
2 – 7 days
8 – 30 days
31 – 90 days
91 – 180 days
181 – 364 days
365+ days

OPERATIONAL AND TECHNICAL ISSUES RELATED TO FORM PF

Reporting requirements for the FORM PF “raise the bar” on regulatory reporting to a much higher standard than the previous Form 13F-HR standard. RIAs (and underlying hedge funds) will need to review the underlying data management and reporting capabilities to determine potential upgrades and systems needed to produce the FORM PF. As many of these changes involve ‘master data’ and aggregation of data across funds/feeder-funds, we advise clients to start this review as soon as possible.

Chart1 – Standard Architecture of a General Ledger/Portfolio Management System



As the above diagram shows, a portfolio management system is designed as a general ledger system (G/L). The basis for G/L systems are cash-in/cash-out flows and the analysis of these cash flows on a point-in-time basis. G/L systems are good at reporting NAVs and changes in historic cost. These systems are not good at “classification” and aggregation of data across parent and child ‘master-feeder’ fund structures. **FORM PF reporting requirements rely on classification (security, financing, liquidity) and aggregation for a number of key questions.** We therefore anticipate that RIAs, at a minimum, will need to add additional classifications to Portfolio Management Systems.

New Classifications/Master Data Management fields

Chart 2 shows potential classification and aggregation fields that are required to meet FORM PF requirements. This does not represent an exhaustive list of all fields that require either new classification or will require aggregated reporting.

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 FORM PF – A Guide To Creation, Calculations, And Reporting for RIAs

Chart 2 – Master Data To Review for FORM PF

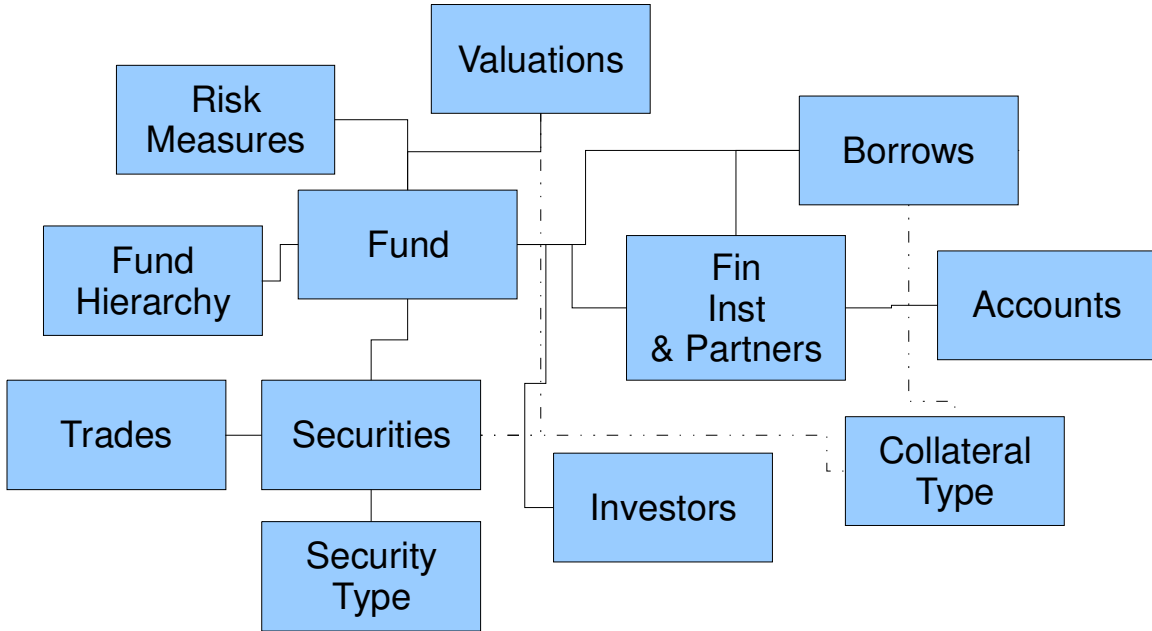
Question	Field/Section	Description
3	Regulatory Assets Under Management	Aggregation – includes assets held in parallel managed accounts
8	Gross Asset Value	Aggregation – master feeder or parallel managed account
10	Value Of Investments In Private Funds	Aggregation & Classification – Private Funds
11	Value of Parallel Managed Accounts	Aggregation & Classification – Parallel Accounts
12	Borrows	Classification – Classification by counterparty and sub-classification(s) by institution
13	Derivatives Value	Aggregation – Derivatives
14	Fair-Value by Pricing Method (L1, L2, L3)	Aggregation & Classification – Pricing Method
14	Cost Basis Valuation	Aggregation & Classification
15, 16	Investor Classification	Aggregation & Classification
20	Investment Strategies	Classification – Form PF defined strategies
22,23,36,37, 38	Counterparty Exposure	Aggregation & Classification – Aggregation across top 5 counterparties and classification by margin type
24	Trading & Settlement	Aggregation and Classification – Classification by Regulated vs Bi-lateral, sub-classification by security type
26,27,30,35	Exposure & Turnover by security type	Classification & Aggregation – Classification and sub-classification by security type
28, 29	Geographic & Country exposure	Classification – Classification and sub-classification by region
32,46,	Liquidity (Liquidity Period, Financing)	Classification & Aggregation by liquidity factors
40	Value At Risk	Calculation & Classification by VaR simulations
42	Stress Tests	Calculation & Classification by estimated changes in market conditions
43, 47	Financing & Borrow Exposure	Aggregation & Classification by collateral type & counterparty
44, 45	Derivative Exposure	Aggregation & Classification by collateral type
48, 49, 50	Investor Liquidity	Aggregation & Classification by Investor Redemption Characteristics

As the above table shows, the FORM PF involves much more than the ability to produce a NAV or list of holdings at a given point in time. Large funds greater than \$1.5 Billion AUM (filing quarterly) and small funds (filing annually) should develop a strategy for FORM PF submission requirements.

A Simplified FORM PF Architecture.

In the next whitepaper, **FORM PF Solutions**, PTT will identify solutions (both internal via a data mart and externally offered through service providers) to complete FORM PF reporting requirements. These solutions will focus on the data architecture as pre-viewed below in Chart 3 Simple FORM PF Data Architecture.

Chart 3 – Simple Form PF Data Architecture



About Performance Thinking & Technologies, Inc.

Performance Thinking & Technologies (PTT) focuses on operations, infrastructure, and risk management for alternative investments and the hedge fund industry.

As the past few years have shown, operational excellence is no longer an option. The ability to analyze operational risk, deliver institutional reporting needs, perform due diligence, and comply with new regulations is a core requirement for success.

So, let PTT help you maintain your investment focus. We'll help you build world-class operational capabilities. You focus on investment opportunities and generating return.

For more information about PTT, PTT operational toolkits, research, or FORM PF, please visit our website at <http://www.p-t-t.com> or email us at info@p-t-t.com.



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