



PENSION  
CONSULTING  
ALLIANCE

# Rhode Island SIC

Crisis Protection Class  
Systematic Trend Following  
Managers Recommendation

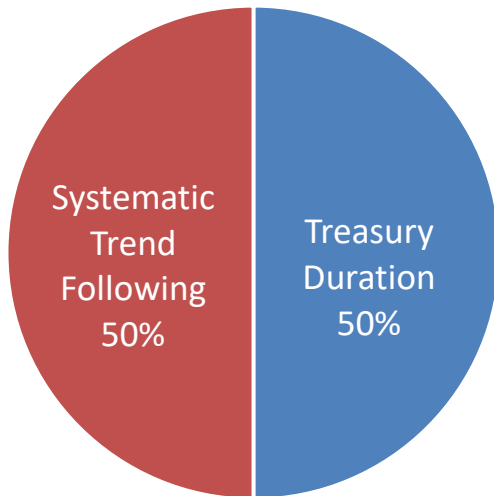
John Linder, CFA, CPA  
April 26, 2017

# ERSRI CPC Portfolio

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Board-approved structure for CPC Portfolio:

## Strategy Allocation



- 8% allocation
- 50% Treasury Duration / 50% Systematic Trend Following
- Relatively Simple and Low Cost
- Likely to produce appreciation during a growth crisis
- Class volatility similar to that of the total portfolio

# Crisis Protection Class: Systematic Trend Following (STF) Managers

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## RI Investment Staff / PCA joint recommendation:

- Credit Suisse
- Crabel
- Welton

~ \$300 million (4% of total fund assets)

- Propose an equal capital allocation to each managers (\$100mm each)

## Portfolio mandate:

- Broadly diversified, liquid, systematic trend following strategies
- Products primarily employ medium-term, average lookback
- Products managed to ~ 18% volatility target
- Portfolio benchmark: Credit Suisse Managed Futures Target Vol 18 Index

# STF Manager Selection Process: Investment Staff and PCA Evaluation

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## Manager due diligence process:

- Manager Request for Information (“ RFI”) document issued December 9, 2016
- Proposer responses due January 6, 2017
- Ten firms submitted proposals (list on next page)
- Proposals reviewed / rated by investment staff and PCA
- Conference call with proposers seeking additional information
- On-site due diligence meetings: Aspect, Crabel, Credit Suisse, Welton
- Best and Final fee proposals reviewed
- Reference checks
- Proposals rerated / manager recommendation to SIC:
  - Crabel
  - Credit Suisse
  - Welton

## Other milestones:

- Platform manager selected March 2017
- Platform manager operational due diligence April 2017
- CPC portfolio projected funding May – June 2017

# STF Manager Submissions: Investment Staff and PCA Evaluation

Submitted Proposals	Low Fees / Competitive Product	Finalists via Scoring	Recommended
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<ul style="list-style-type: none"> <li>Alpha Simplex</li> <li>Aspect</li> <li>Crabel</li> <li>Credit Suisse</li> <li>Fort</li> <li>Graham Capital</li> <li>GSA</li> <li>Man / AHL</li> <li>Rotella</li> <li>Welton</li> </ul>	<ul style="list-style-type: none"> <li>Alpha Simplex</li> <li>Aspect</li> <li>Crabel</li> <li>Credit Suisse</li> <li>GSA</li> <li>Welton</li> </ul>	<ul style="list-style-type: none"> <li>Aspect</li> <li>Crabel</li> <li>Credit Suisse</li> <li>Welton</li> </ul>	<ul style="list-style-type: none"> <li>Crabel</li> <li>Credit Suisse</li> <li>Welton</li> </ul>
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- Onsite reviews were conducted with each finalist
- Aspect is the alternate

## Recommended STF Manager Descriptions:

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### Credit Suisse – CS Managed Futures Target Vol 18 Index

- Index replication
- Pure trend strategy
- Trades a total of 18 futures contracts
- Provides liquid and diversified exposure to market trends across the four main asset classes
- The strategy tracks 16 time horizon signals to identify trends across various horizons
- Simple, liquid and low cost. 23.5 bps management fee.

### Crabel – Advance Trend (target 18 volatility)

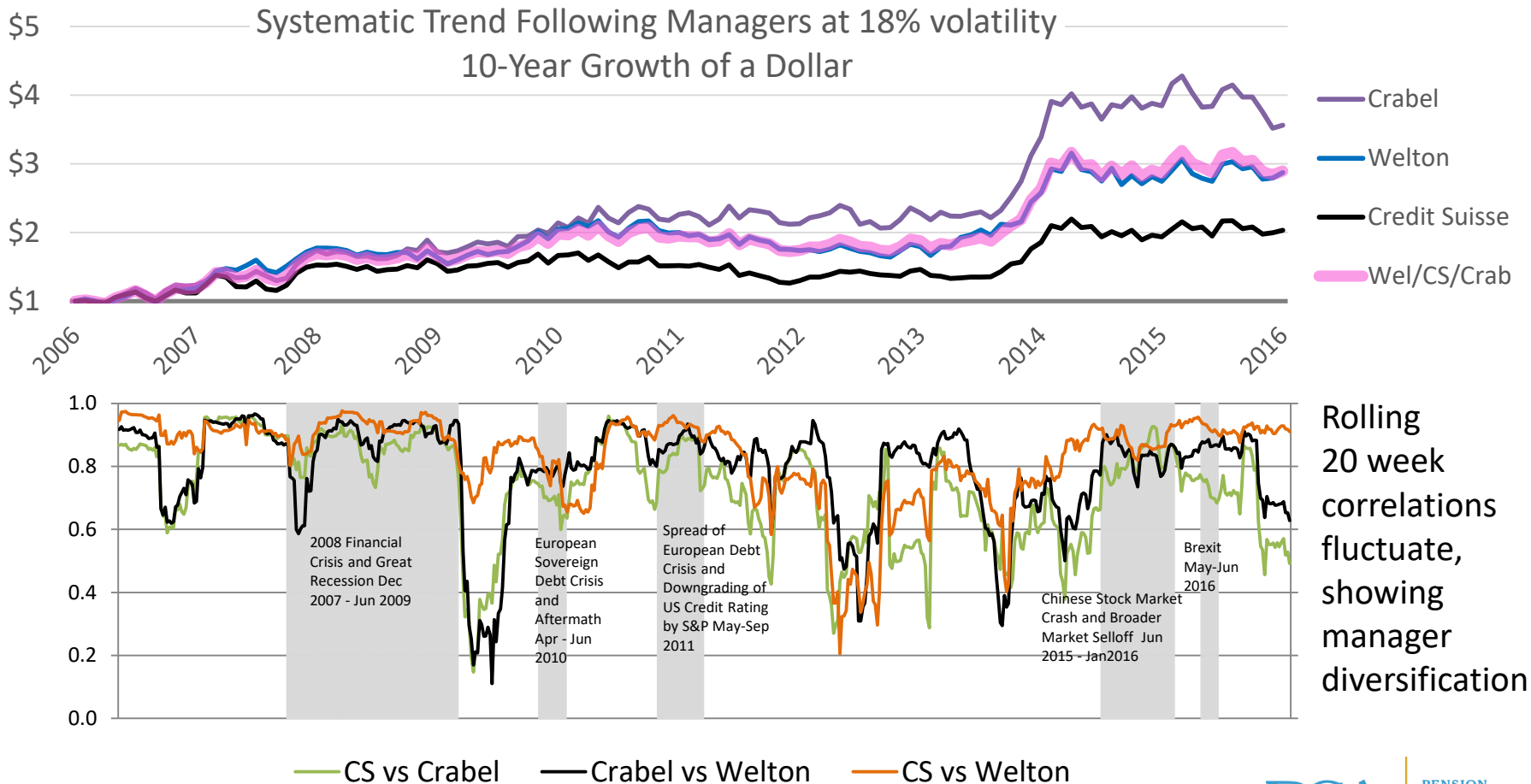
- Pure trend strategy, alter lookback period based on market environment, responsive
- Trades 200 markets, most diversified of managers recommended, highest expected return
- Crabel is an excellent trader, lowest trading costs by a factor of at least 4x
- Utilized trading intelligence gathered via their flagship multi-product to benefit this strategy
- 50 bps management fee, extremely low trading cost.

### Welton – Global Trend Following (target 18 volatility)

- Three different trend models
- Time series trend model, statistical trend model, and breakout (distance related) model
- Most reactive, can respond inter-day if movements are significant enough
- Trade approximately 60 markets
- Low cost. 29 bps management fee with admin fee.

# Selected STF Manager and STF Portfolio Analysis

- Managers are all highly correlated (capturing trends), but diversify one another at key times
- Crabel has the highest return (most diversified by markets), Credit Suisse is lowest return (index)
- Welton is lower cost and we expect them to be more responsive in crisis periods



# Systematic Trend Following Managers: Guidelines

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- Guidelines for Individual Managers
  - 1) Target average volatility 18%
  - 2) Maximum drawdown 27%
  - 3) Margin to equity review limit 36%
  - 4) Margin to equity maximum 50% (requiring a cure within 2 days)
  - 5) Outperformance relative to CS Index over 5 year period
- STF portfolio expectations
  - 1) Target volatility 16.75%
  - 2) Maximum drawdown 25%
- Managers run their systems according to systematic rules
- Portfolio positions change constantly according to the systematic rules
- Markets traded can be added, subtracted, changed
- However, system changes are rare

\* Margin to equity is calculated by the exchange, limiting margin available to investors based on the market environment.



# Systematic Trend Following Managers Best And Final Fee Proposal

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- Investment staff negotiated best and final fees from the manager
- The fee will comply with Most Favored Nation Clause (MFN) – there is no other client with the same mandate and a lower fee
- Crabel Advanced Trend – 50 basis points management fee
- Credit Suisse Managed Future 18% Target Vol Index - 23.5 bps management fee
- Welton Global Trend Following – 29 basis points management fee with pass through administrative fee

# Crisis Protection Class Expected Implementation Timeline

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- Platform manager hired
  - Contracting complete April 1
  - Counterparty and service provider agreements negotiated and contracted (May)
- Platform manager operational due diligence – systematic trend following managers
  - Completed (April)
- Systematic trend following manager selection SIC (April)
  - Contracting complete (May)
  - Manager guidelines approved (May)
- Long-Duration U.S. Treasury portfolio funded (May / June)
- Systematic trend following manager portfolio funded (May / June)

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