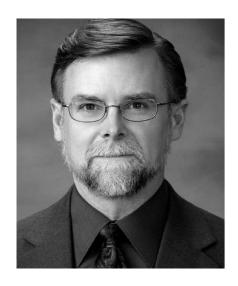
JULEXCAPITAL

Good and bad designs for TAA portfolios

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Success/failure factors

What to look for

Key design elements



Setup

- Performance objective
- Decision frequency
- Playing field
- Cash?

Operation

- Trading costs
- Exposure limits
- Diversification minimums

Evolution

- Subjective intervention
- Model adaptation



Setup

Performance objective

Decision frequency

Playing field

Cash?

Setup - Performance objective



- Avoid attempting to be all things to all people
 - Participation and protection
 - Capture the upside, while protecting against loss
- Versus a index benchmark, very difficult . . . no correlation
 - 1-, 3-, 5-, 7-years . . . wacko
- Superior approach
 - Maximize the probability of earning at least "X%" but measured only at "Y-years"
- This is not an absolute return solution . . . no such thing



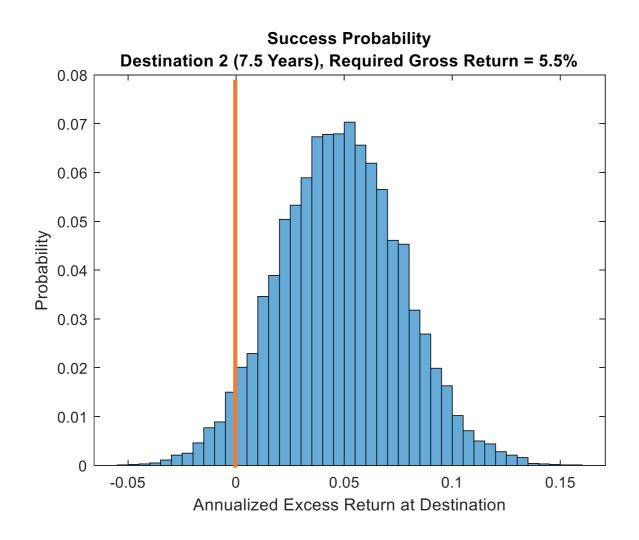


Destination Number	Investment Horizon (Years)	Destination (Years)	Target Return
2	6-10	7.5	4.0% (Net) 5.5% (Gross)
3	11-15	12.5	5.0% (Net) 6.5% (Gross)
4	16-20	17.5	6.0% (Net) 7.5% (Gross)
5	21+	22.5	7.0% (Net) 8.5% (Gross)

Investment Objective – Seek the highest possible probability of earning at least the target returns at destinations.

- Hypothetical Back Test Results
- Destination 2 5.5%





Year	Destination 2	Excess Return
2003 Sept. –Dec.	11.0%	9.6%
2004	11.3%	5.8%
2005	6.0%	0.5%
2006	11.6%	6.1%
2007	13.7%	8.2%
2008	4.3%	-1.2%
2009	16.1%	10.6%
2010	15.1%	9.6%
2011	3.2%	-2.3%
2012	10.6%	5.1%
2013	19.2%	13.7%
2014	5.9%	0.4%
2015	2.5%	-3.0%
2016	10.0%	4.5%
2017	17.1%	11.6%
2018	2.0%	-3.5%

Note: The performance results shown on this slide are HYPOTHETICAL based on modeled results and are gross before investment management fees. Please see Disclosures for more information..

^{*} The success probability is estimated with 100,000 samples created by bootstrapping the back-testing monthly returns.

Setup - Decision frequency



Frequent portfolio adjustments

Benefit

- Responsiveness
- Potentially better mitigate a hyper-short downdraft (only 2 in last 150 years)

Cost

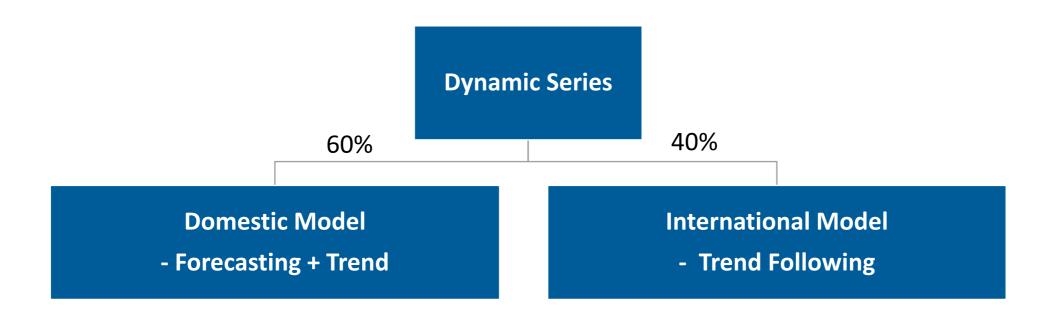
- Whipsaw
- Greater trading costs

Optimal

- Effectiveness . . . trends last for finite windows
- Maybe monthly
- Superior approach taken by Julex

• Investment Approach – Multi Strategies





Benefits of Multi Strategies:

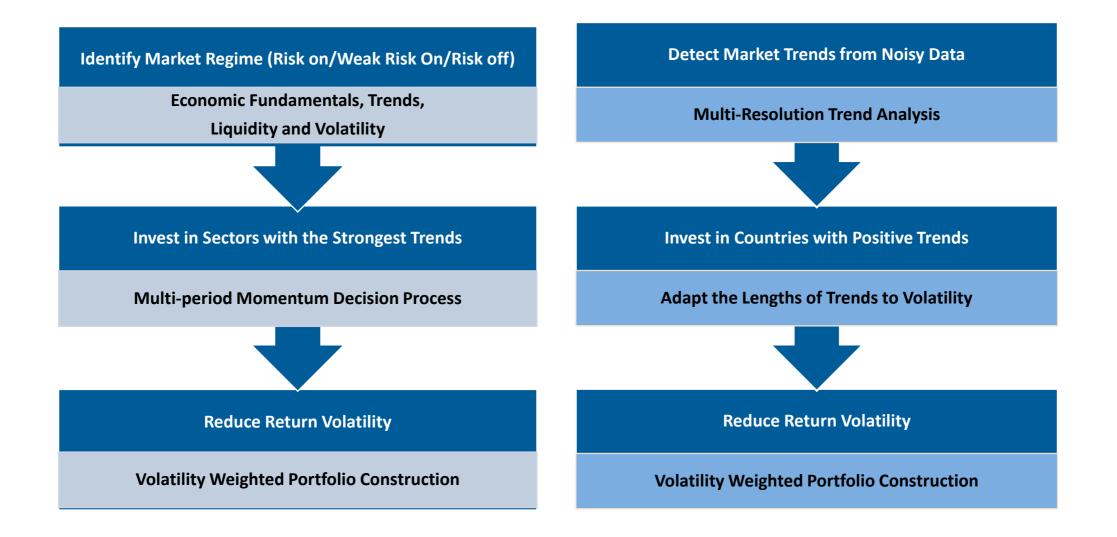
- Better risk-adjusted return
- Model risk mitigation

Investment Approach – Multi Strategies





International Model



Setup - Playing field



Classic wrong approach

• 8 primary US industry sectors

Desire

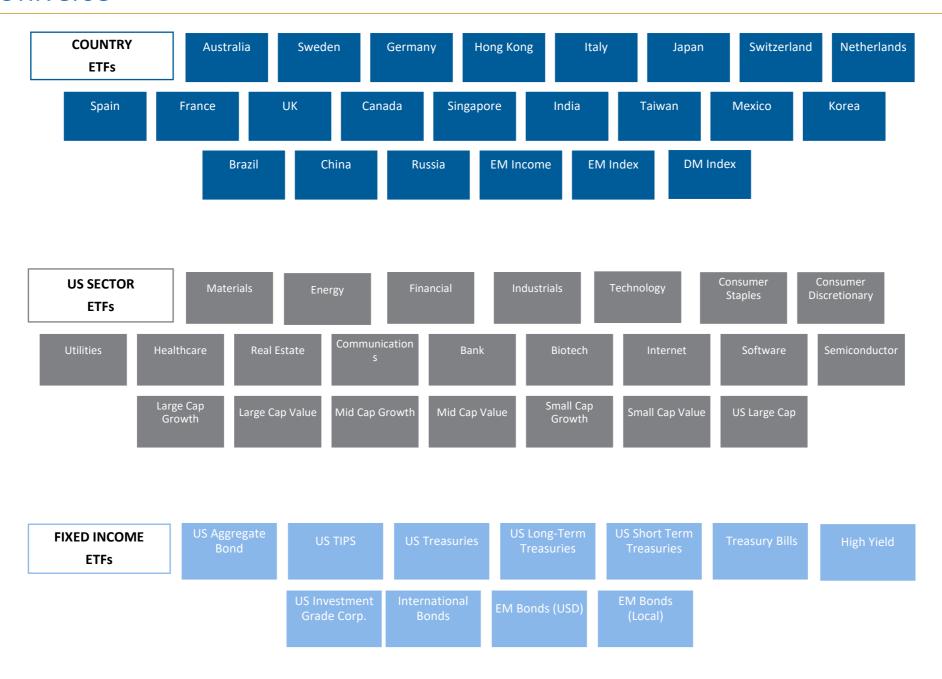
- Sources of return, and sources of risk mitigation
- But for different types of risk: Recession, i-rates, Inflation, US Dollar, Energy prices, Politics, War, Pandemics, Financial crisis
- Broad range
- Cost effective exposures
- Different, low correlation . . . So can always find something that's trending

Interaction effects

- Absolute trend
- Relative trend . . . Critical to a well-defined playing field

Investment Universe







- Personally . . . I don't like cash
- Maybe, it makes no difference today, with interest rates so close to zero
- But why not just use SHY or SHV
- Disagreement about the use or non-use of cash is reasonable



Operation

Trading costs

Exposure limits

Diversification minimums

Operation - Trading costs



- Rob Arnott critique (and others)
 - Trading costs are big
 - Large enough to fully neutralize the benefits of TAA
 - Therefore, no net benefit
- Not what I've seen
- But . . . I have seen that trading costs are
 - Big
 - Important
 - Account for a sizeable deterioration in performance if unattended
- Solution
 - Turnover rate
 - Bid/ask spread and market-push

Operation - Exposure limits



- Let's return to first principals
 - Markets trend
 - All markets trend
 - They always have, still do, and always will
 - Winners repeat, and losers repeat . . . For just one additional period
- How do we harvest this behavioral aspect?
 - Overweight the recent relative winners
 - Underweight the recent relative losers
 - Rinse, wash, and repeat
- BUT . . . maintain prudent balance in what is built
- OTHERWISE . . . fingers burned, or worse yet, knocked out of the game

Operation - Diversification minimums



- Requiring a minimal level or nature of diversification
- Forces risk management
- It helps promote a more risk-managed posture during or in preparation for significant market downdrafts

Portfolio Construction



Momentum driven, volatilityweighted portfolio

Position limits:

• Total equity exposure: 0-100%.

• International equity exposure: 0-40%

• US equity exposure: 0-60%

• Individual equity ETF exposure: 0 - 15%

• Total bond exposure: 0-100%

• Cash: 0-2%

• Number of positions: 4 - 20

• Trading Frequency: Twice a month

• Annual Turnover: 379% (average based on back test)

Dynamic Series 5 Portfolio (9/1/2020)

Ticker	Name	Weight
	Technology Select Sector SPDR	
XLK	Fund	4.02%
	Consumer Discretionary Select	
XLY	Sector SPDR Fund	4.80%
IBB	iShares NASDAQ Biotechnology ETF	3.52%
FDN	FT Internet	3.28%
	iShares Expanded Tech-Software	
IGV	Sector ETF	3.61%
SOXX	iShares PHLX Semiconductor ETF	3.41%
	SPDR Portfolio S&P 500 Growth	
SPYG	ETF	4.12%
IWO	iShares Russell 2000 Growth ETF	3.24%
EWD	iShares MSCI Sweden ETF	3.94%
EWG	iShares MSCI Germany ETF	4.37%
EWJ	iShares MSCI Japan ETF	7.31%
EWL	iShares MSCI Switzerland ETF	5.70%
EWN	iShares MSCI Netherlands ETF	4.75%
EWT	iShares MSCI Taiwan ETF	5.63%
EWY	iShares MSCI South Korea ETF	3.67%
FXI	iShares China Large-Cap ETF	4.63%
SHV	iShares Short Treasury Bond ETF	20.00%
LQD	iShares IBOXX Investment Grade Corp	10.00%
درن	COLP	10.00/0



Evolution

Subjective intervention Model adaptation

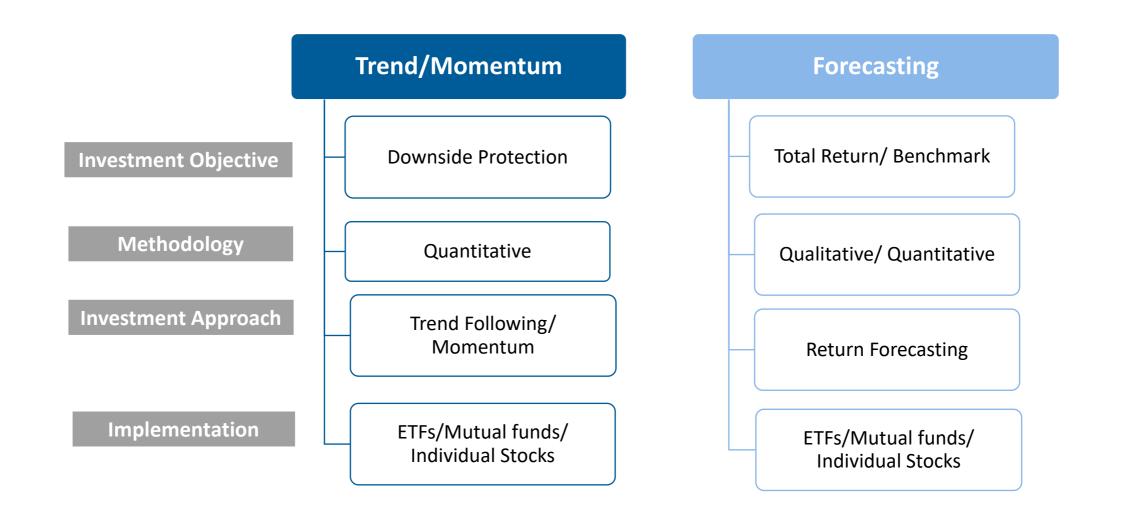
Evolution - Subjective intervention



- Worst
 - Investment team overrules the model
- But
 - Need to have that ability While at the same time never using that right
 - Example: Terrorist act or natural disaster closes markets for 7-days need and be willing to override the model in order to accommodate profoundly atypical market behavior
- 99.9% of the time, overriding the model is bad

• Different Approaches to Tactical Asset Allocation





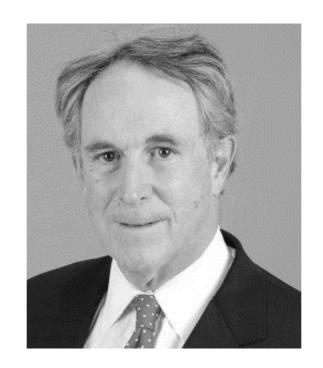
Evolution - Model adaptation



- Nevertheless, quantitative models must evolve
- New data arrives
- Data quality improves
- New products appear . . . new ETFs
- Existing product properties improve, making them more useful
- The challenge is limiting the pace of the model evolution









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Whipsaw in TAA portfolios, why, how bad, and solutions

Fri, Nov 13, 2020 11:00 AM - 11:45 AM (EST)

Important Disclosures



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One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the presentation of hypothetical performance results and all of which can adversely affect actual trading results.

The composition of a benchmark index may not reflect the manner in which a Julex portfolio is constructed in relation to expected or achieved returns, investment holdings, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility, or tracking error targets, all of which are subject to change over time.

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