## **Quantamental - The Best of Both Worlds**

Stockholm (HedgeNordic) - Linköping-based money manager Alexander Hyll relies on a quantamental approach to run long/ short equity fund **Adaptive Paradigm Alpha**, seeking to use the strengths of both "quant"-itative and fund-"amental" investing at every step of the way. "In our minds, a quantamental approach is combining human creative thinking and insight with the power and precision of technology to try and get the best of both worlds," argues Hyll.

Using a long/short equity approach, Adaptive Paradigm Alpha seeks to identify and capture smaller paradigm shifts, "which essentially are trends or shifts that serve as headwinds for some businesses and as tailwinds for others." Hyll goes on to explain that paradigms are "market conditions stemming from measurable cause-effect relationships affecting market behavior."

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The fund manager views fundamental analysis and quantitative techniques as symbiotic and essential in identifying and capturing paradigms. "For us, it is always about combining the quantitative with the fundamental side, where one validates the other," explains Hyll, who founded his own asset management firm in 2020. "We are looking for a synthesis between the two."

## **The Process**

The investment process starts with the idea generation, with the lookout for paradigms, where ideas are generated either through a quantitative screening or fundamental brainstorming process. "We start with idea generation through either a systematic, quantitative screening where we crawl through our data sets and look for patterns," explains Hyll. "Alternatively, we start from the fundamental side where we seek to find paradigms in the economy, markets, industries or geographies," he continues. "We use a quantitative validation process for our fundamentally generated ideas, and likewise a fundamental validation process for our quantitatively generated ideas. We need the quantitative and fundamental views to align."

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"If views do not align, we need to evaluate and consider if we missed something in our models, or if our fundamental understanding is not complete or if we need to reevaluate the idea entirely," explains Hyll. "Whenever we have synthesis between the two views, we can move on. The idea generation process is no different."

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One paradigm identified by Adaptive Paradigm Alpha focuses on smart farming and involves the

increasing automatization and adoption of precision farming techniques, which can both increase yield from farmland and reduce costs for crop inputs such as pesticides and fertilizers. For every idea, Hyll and his team design a new statistical model, based on regression, clustering or other statistical methods, to find and quantify the drivers for the paradigm.

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"When we have a feasible idea, we use different statistical methods on which causal inference can be used to find market drivers," says Hyll. "We do not have a single powerful model that finds answers to all unknowns, we have a framework from which we construct models that are tailored to each specific situation," he adds. "Our objective is to identify paradigm shifts and use portfolio construction to extract alpha."

"The universe of impacting factors for a paradigm is typically very large, so a large part of our statistical modeling and analysis revolves around identifying those with the most causal effect," emphasizes Hyll. "We identify causal relationships by connecting patterns in the data to our understanding of the economy to form a view on developments and their drivers."

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In the case of smart farming, Adaptive Paradigm Alpha identified that rising crop prices and low-interest rates exhibited strong correlation with sales of farm machinery, indicating a favorable environment for the adoption of smart farming technologies. Hyll and his team also identified ESG-concerns about creating new farmland and the usage of pesticides, which only strengthened the validity of the smart farming paradigm.

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In the screening process, Adaptive Paradigm Alpha primarily screens for companies sensitive to a paradigm rather than a set of predetermined key metrics. "While we can make use of all the tools at disposal for fundamental analysis of screened companies, we always want the sensitivity to the paradigm to be as high as possible because that is where we can best isolate alpha," explains Hyll. "Looking for a spread of future returns within a paradigm, a more neutral metric than 'cheap' or expensive,' helps us reduce bias."

Each of the 6-8 paradigms reflected in the fund's portfolio are represented by 1-3 fully beta- and currency-hedged long and short positions. To capitalize on the smart farming paradigm, Adaptive Paradigm Alpha identified an industry leader within precision agriculture and automation as the most sensitive to the paradigm on the long side and a crop protection manufacturer was most vulnerable to the paradigm on the short side. Looking back at the fund's inception-to-date journey, performance attribution shows a contribution of 55 percent from the long side and 45 percent from the short side, reflecting the team's ability to isolate and capitalize on paradigms.

## The Best of Both Worlds

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"Each step of the process has a quantitative component. Quantitative analysis is mainly used for idea generation, for finding factors driving paradigms, and identifying sensitivity," Hyll points out. "The stock picking itself is typically more fundamentally driven, but also has a quantitative overlay," he continues. "Each process ends with a human decision based on largely quantitative analysis."

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"Computers are considerably better at analyzing large quantities of data and using relative sizes for inference, whereas humans are better at identifying and understanding concepts," Hyll elaborates on the advantages of a quantamental approach. "A quantamental approach minimizes the risk of correlation and causation issues by introducing a filter of understanding."

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"Quantitative approaches are used to identify patterns in data, but are limited by data availability. In contrast, the human brain has incredible pattern recognition skills, making it possible to identify complex relationships given limited or possibly non-existing data." The human ability to recognize patterns and identify idiosyncratic characteristics of a market is one reason Adaptive Paradigm Alpha will never rely on a fully automated systematic investing approach. "We would be giving up too much by being fully systematic," says Hyll. "There are obvious merits to both systematic quantitative and fundamental investing, this way we get the best of both worlds."

This article featured in HedgeNordic's "Quant Strategies" publication.