## **No One-Trick Pony**

Stockholm (HedgeNordic) - Coeli Prognosis Machines, a systematic macro strategy combining financial models with artificial intelligence to make investments in a wide array of asset classes, is the second-best performing fund within the NHX CTA category this year after returning 10.4% year-to-date. Most strikingly, the strategy developed and managed by Alex Gioulekas, one of the founding members of multi-billion systematic asset manager IPM, performed exceptionally well in September, when most Nordic and global CTAs got whipsawed by trend reversals in most major asset classes. The strategy maintained its momentum in October, a month characterised by a strong comeback on the part of CTAs.

With most CTA funds performing in tandem on most occasions, one could undoubtedly view Prognosis Machines as a whole different animal. HedgeNordic interviewed Gioulekas in an attempt to understand what makes his strategy stand out from the crowd.

Before delving into the details of the Prognosis Machines strategy, let's hear the story of how Alex Gioulekas came up with the idea of combining artificial intelligence with macro-oriented financial models. After selling his stake in Swedish hedge fund IPM, Gioulekas thought that he would retire after enjoying a fruitful career in the asset management industry. Being an M.I.T. alumn, Gioulekas enrolled in online M.I.T. classes teaching artificial intelligence, and he quickly realised that he could incorporate AI into systematic macro models. "I know that others were already using AI to design trading models at the time," he acknowledges, "but people were using the AI algorithms in a stupid way; they were feeding them prices to forecast prices. I had experience in building macro models, and understood that I needed to feed macro data to forecast prices."

Investors make use of macroeconomic and company data to make investments, but they tend to overweigh some factors and ignore others when unpredictable events such as wars, crises, policy errors, or natural disasters happen. Prognosis Machines uses artificial intelligence to determine the factors investors ignore and the ones investors overweigh in the present environment. "My strategy tries to replicate how investors make decisions," explains Gioulekas. "The strategy uses AI to learn how fear and greed on the part of investors mix with sound financial principles to determine market prices."

When asked about the relative underperformance of trend-following strategies in market environments with short-lasting trends, Gioulekas believes one of the reasons for their underperformance stems from the fact that "most of them are using medium-term lookback windows to make their investment decisions." While trend-following funds seek trends with a time span of 11-12 months, markets are experiencing much shorter cycles. "One of the reasons is that stricter capital requirements do not allow banks to warehouse risk," Gioulekas pointed out. "Previously banks were dampening volatility in prices. Another important reason is that central banks are very active, they are trying to prevent big crises. But instead of having deep crises and healthy recoveries, we have a lot of small crises. And these small crises are linked to risk-on risk-off." The emotional trading of day traders and the news flow driven by social-media such as President Trump's so-called "tweetstorms" create a lot of unexpected moves and increase volatility. In summary, Gioulekas reckons, both systematic macro funds and CTAs are struggling because of these risk-on risk-off episodes.

When he designed the Prognosis Machines model four years ago, Gioulekas thought he was one of a handful of managers using AI to run systematic macro strategies. Nowadays, he acknowledges, more managers are incorporating the same algorithms into their investment decision-making processes,

but he tries to stay one step ahead. In addition to machine learning, Gioulekas also uses deep learning to advance his strategy. "Deep learning helps me model the price dynamics from a new vantage point and exploit the feedback mechanisms that exist in the marketplace. When added to the original machine learning, deep learning made my model react much faster," explains Gioulekas.

Despite having already built a successful career in asset management, Gioulekas does not want to stay put just yet, and he hopes to be able to grow his strategy fast. "The fact that the Prognosis Machines strategy made money both during September and October shows the strategy is not a one-trick pony, but it has some depth," adds Gioulekas. "I develop the strategy all the time because I like building new things and need to stay ahead of the competition. My fund will keep bringing new ideas into production very fast. That's what my investors are benefiting from."