New research helps predict stock market

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(PhysOrg.com) -- Researchers from Massey University have developed a new way to predict stock markets that has been recognised with an award from New Zealand finance specialists.

Professor Ben Jacobsen, Associate Professor Ben Marshall and Dr Nuttawat Visaltanachoti have found that analysing data on a daily basis or other shorter intervals - rather than monthly - offers a much higher success rate of stock market predictions.

Traditionally, institutional investors, such as hedge funds or mutual and pension funds, try to predict stock markets one month ahead relying on information also measured at monthly levels.

The academic researchers have moved away from that convention with what they have described as "amazing results".

The research was awarded best investments paper by the Institute of Financial Professionals at the New Zealand Finance Colloquium this month.

The team studied how changes in prices of energy,

such as oil, and industrial metals, such as aluminium and zinc, strongly influence world stock markets.

Dr Marshall says the paper, Return Predictability Revisited, is an eye-opener both practically and academically. "While the change of intervals seems innocent enough, this new approach suggests that stock market returns are much more predictable than previously thought. Economic variables that seemed unimportant now may warrant a second look, but measured at a different interval.

"Professional investors in Europe are already starting to implement this approach. Theoretically, the study is of interest because it shows how an innocuous change in observation intervals has a dramatic impact on the way we think about financial markets in the academic world.

"With hindsight, it seems surprising that many professional investors and academics alike have overlooked the possibility that the interval of observation would make a huge difference in trying to predict markets."

Dr Marshall says the traditional approach to use monthly observations to predict monthly returns is a "crude" approach based on convention rather than theory. "When predicting March, we are saying look at the last week or even the last day of February because that could be more relevant," he says. "Using a full month of data to predict may increase noise levels and understate - or even fully mask, the actual predictability present."

It is the third time Professor Jacobsen has received the investments paper award and the second time for Dr Visaltanachoti.
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Provided by Massey University

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