Uncertain Worlds
Economics, Banking & Finance

LEHMAN BROS

THE FINANCIAL CRASH OF 2007-08 SHOCKED THE WORLD.

PRESS

LEHMAN

BANKERS HAD BECOME TOO RELIANT ON COMPLEX ALGORITHMS AND MODELS

HI! I'M ALGORITHM. I'M YOUR FRIEND.

I LOVE YOU AL.

SOME ECONOMIC MODELS HAD ASSUMED SUCH A CRISIS WAS IMPOSSIBLE. TRADES WERE BEING MADE IN NANOSECONDS, AND VOLATILITY SPREAD VERY FAST.

TRA-LA-LA!

BANKERS THOUGHT THEY UNDERSTOOD THE RISKS, BUT THEY WEREN'T READY FOR UNCERTAINTY AND 'UNKNOWN UNKNOWNS'!

ECONOMISTS HAD FORGOTTEN THAT THERE WAS AN IMPORTANT DISTINCTION BETWEEN RISK, WHERE YOU CAN PREDICT AND PLAN, AND UNCERTAINTY...

...WHERE YOU DON'T KNOW WHAT THE FUTURE HOLDS.

YET IN THE PAST, UNCERTAINTY WAS AT THE CORE OF ECONOMIC THINKING.

FRANK KNIGHT
FRIEDRICH VON HAYEK
JOHN MAYNARD KEYNES

RISK IS DIFFERENT TO UNCERTAINTY

THE PRETENCE OF KNOWLEDGE

WE SIMPLY DO NOT KNOW

Risk Uncertainty & Profit

The General Theory of Employment Interest & Money

AFTER THE CRASH ECONOMISTS NEED TO RECLAIM OLDER IDEAS, MAKING UNCERTAINTY CENTRAL AGAIN.

WHO CAN THEY LEARN FROM? PASTORALISTS ARE USED TO LIVING WITH UNCERTAINTY.

THEY DON'T TRY TO ELIMINATE VARIABILITY — THEY MAKE USE OF IT.

KNOWLEDGE

THIS REQUIRES EXPERIMENTATION, IMPROVISATION, LEARNING-BY-DOING AND PRACTICAL PROBLEM SOLVING.

MUNCH!

HOW CAN BANKING, FINANCE AND ECONOMICS CHANGE?

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ACKNOWLEDGE THAT SURPRISES CAN HAPPEN.

TREAT OPAQUE AND COMPLEX RISK-BASED MODELS AND ALGORITHMS WITH CAUTION.

$(1+2) = n$
$x + 2(n)$

ALLOW SPACE FOR DELIBERATION AMONG OPTIONS, WHEN INFORMATION IS INCOMPLETE.

ENCOURAGE MORE HUMAN INTERACTIONS WITHIN FINANCIAL NETWORKS.

AND MAKE UNCERTAINTY CENTRAL TO ECONOMIC ANALYSIS AGAIN.