

# FT WEEKEND

Plus Sundowners with Morgan Tsvangirai, Zimbabwe's prime minister

FINANCIAL TIMES | Saturday March 12 / Sunday March 13 2011 | EUROPE

World Business Newspaper

## We need new models in an uncertain world



**John Authers**  
THE LONG VIEW

The most important words in economics are also the words that doom it to failure; *ceteris paribus*, or "all other things equal". Assume all else is equal and you can build a decent model. Physicists and chemists do this with controlled experiments. Economists cannot.

Their work is vitiated by human errors and failings. And as is painfully clear today, economics is also vulnerable to the forces of nature. No economic model can predict the worst earthquake in more than a century. In the event, markets must adjust, in real time, burdened by confusion and imperfect information – the gyrations of the yen (see chart) are an example. Economists can still build models but they are inevitably flawed.

Laymen might think this is beside the point when confronted with tragedy on such a scale. But it matters. The capitalist world relies on markets and banks. The debate over how to re-regulate them to avoid another financial crisis is urgent and it cannot conclude without resolving the philosophical problem that economics' most basic assumption is flawed.

That debate was under way before the crisis. Efficient models held that markets always incorporate all known information in stock prices. This is demonstrated with elegant

mathematical models, in which the words *ceteris paribus* necessarily recur frequently. The idea is often unfairly parodied. Of course markets are often inefficient, but they are remarkably efficient most of the time. Nobody has yet come up with a more efficient way to allocate capital than the market.

Against this came the behaviouralists, who substituted the findings of behavioural psychology for assumptions of rationality. This found that people suffer from predictable biases, such as a desire to travel in herds. Thus markets will be predictably inefficient.

If efficient marketeers are right, governments must stay out of markets, beyond reforms to ensure transparency, and to eliminate government-created distortions.

If behaviourists are right, governments must from time to time intervene to keep markets on track. If

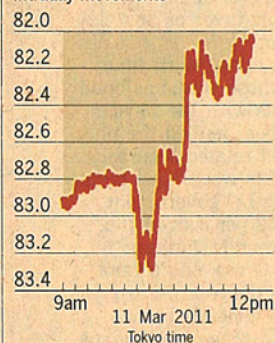
Even before the tragic news of Japan, this week saw alarm over Portugal and Middle Eastern unrest

not an argument for full-blown state planning, this does argue for giving markets a "nudge".

Now the attempt is on to break free from this debate and find a new way to model markets. Two of the most interesting contributions recognise that mathematical models are flawed, and focus on the problem that the value of an asset now resides in the cash it will earn in the

### All else not equal

Yen against the dollar (¥ per \$)  
Intraday movements



Source: Thomson Reuters

future, and is therefore always unknowable.

For Amar Bhide, this calls for "judgment", or individual discretion, when allocating capital. Modern capitalist economies require decentralised decision-making tied to individual judgment. But the "efficient markets" approach to banking that preceded the crisis ran against this. A system of banks allocating credit using centrally determined models cut costs but obliterated judgment.

Good credit officers, who get to know companies and managers, could recognise poor credit risks; models, not knowing that all else is not equal, could not. The subprime disaster resulted.

Thus Bhide's focus is on reversing what he calls the "industrialisation" of banking. Banks should be smaller, and bankers empowered while being made responsible for their decisions. Regulators also need more scope for judgment. Another way to look at the problem is to recognise markets as an exercise in combating our own imperfect knowledge.

For Roman Frydman and

Michael Goldberg, market participants are for ever trying to conquer uncertainty. As they look for sensible answers, the market will swing. Big swings are consistent with rationality.

This leads them to call for regulating asset price swings directly. In most asset classes, there are clear long-term norms. When prices become severely detached from that norm, there is a risk of a big market dislocation, which could damage the economy. So central banks should announce the level at which they think prices would be excessive, and reserve the right to intervene to keep prices within reasonable bounds.

Beyond raising rates to push down share prices, they suggest that margin requirements should make borrowing more expensive for those who want to push prices further from their norm, and cheaper for those who are pushing prices back to normal.

This debate must continue but conditions are not ideal. Even before the tragic news of Japan, this week saw fresh alarm that Portugal's debt would need a bail-out, and fresh unrest in the Middle East.

These are the kinds of events that standard models find it hard to incorporate. They could easily drive another big market dislocation. The world needs to get its ideas in order on re-regulation, because all else continues not to be equal.

*A Call for Judgment* by Amar Bhide, Oxford University Press, \$29.95;  
*Beyond Mechanical Markets* by Roman Frydman and Michael Goldberg, Princeton University Press, \$35.00