Funding the Future

Quantum economics, part 5: Speculation, Potential, and ...

https://www.taxresearch.org.uk/Blog/2025/09/11/quantum-economics-part-5-speculation-potential-and-e

Published: January 12, 2026, 8:16 pm

This post continues the story of quantum economics, which began here. There is a summary of posts to date at the end of this post.

Can you please note when reading this post and others in the series that I am not suggesting that quantum physics and economics are akin to each other. Instead, I am exploring how quantum thinking might help build new economic narratives, which is quite a different goal.

"Speculation is an effort, probably unsuccessful, to turn a little money into a lot. Investment is an effort, which should be successful, to prevent a lot of money from becoming a little."– Fred Schwed

To continue our exploration of a quantum economics metaphor, consider the possibility that every balance in a bank account represents potential. It is, in other words, stored energy, waiting to be released. That release might come through consumption, by buying goods and services. It might come through investment, by creating productive capacity. Or it might be channelled into speculation by gambling on the future prices of assets.

Each route uses the same potential, but with very different effects.

Consumption sends ripples through the economy.

Investment creates lasting change.

Speculation, however, often traps energy in sterile loops that can quite easily be destructive.

The same monetary potential, deployed differently, leads to profoundly different

outcomes.

To see this, quantum thinking helps.

First: money as stored energy

In physics, energy can be stored as potential. A boulder at the top of a hill has gravitational potential. Release it, and the potential becomes kinetic.

Money functions in a similar way. A bank balance is potential energy in the monetary field. It can be released to set processes in motion. Until it is spent or invested, it is latent.

This potential is not fixed. Its impact depends on how it is released.

Second: consumption as wave propagation

When money is spent on consumption, the potential energy within the money is released and turns into waves of demand.

*
You spend £100 at a shop.

*
The shop pays its staff, and then their suppliers.

*
The suppliers pay their workers, and their suppliers.

*
All the workers noted previously spend their wages.

In other words, the ripple created by a single decision to spend spreads far and wide. The multiplier effect means the £100 can generate several times its value in economic output. Seen in this way, consumption is wave propagation: the energy released from money gainfully spent into the economy is amplified as it circulates.

This, of course, is why fiscal stimulus works. Government spending creates demand

that ripples outward. And it is why austerity fails: cut spending, and the waves collapse.

Third: investment as a quantum jump

Investment behaves differently. It does not just propagate waves. It alters the system.

When money is used to build a factory, train a worker, or create a new technology, the productive capacity of the economy changes. This is a quantum jump: the system moves to a new energy state.

The effects are lasting. A trained worker continues to produce. A new factory continues to generate output. Investment transforms potential into structural change.

This is why public investment is so powerful. It does not just stimulate demand. It creates new states of capacity, shifting the economy permanently.

Fourth: speculation as a standing wave

However, money used for speculation is quite different. It traps energy within financial markets. Examples of this activity might include this simple series of transactions:

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Money is used to buy shares, hoping their price will rise.

*
Another trader buys at the higher price, hoping to sell later.

*
The cycle repeats.

In this case, the money circulates, but entirely within what is, in effect, a closed loop. Prices oscillate, but little new output is created. In fact, resources may be drained from the productive economy. This is a standing wave: energy bouncing back and forth, creating volatility but not propagation.

In physics, standing waves can build to resonance, amplifying dangerously until systems collapse. In finance, bubbles do the same. Prices spiral upward, detached from reality, until collapse is inevitable.

Fifth: the costs of speculation

Speculation has real costs.

First, there is crowding out. Money tied up in speculation is money not spent on consumption or investment. Potential energy is trapped in sterile circuits.

Second, there is instability. Bubbles burst, causing crashes. The energy released destroys confidence and output.

Third, there is inequality. Gains from speculation accrue to the wealthy, who own financial assets. Losses, when crashes occur, are socialised.

Fourth, distorted signals are being sent. Asset prices rise not because of productive value but because of speculative demand, misleading policymakers and investors.

Speculation is not harmless gambling. It destabilises the economy.

Sixth: the entanglement of speculation and reality

Speculation may seem detached from the real economy, but it is always entangled with it.

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Housing bubbles raise rents, pricing people out of homes.

*
A stock bubble drives executive pay, skewing corporate priorities.

*
A commodity bubble raises food prices, hurting many, and most especially the poorest in any society.

Financial speculation feeds back into real lives. The entanglement cannot be ignored.

Seventh: policy implications

If money is potential energy, we must ask how best to release it.

First, we must encourage sustainable consumption. This supports wages, incomes, and, in turn, public services by creating greater potential for tax revenues that control the impact of additional state spending. This keeps waves propagating.

Second, prioritise investment. This requires the funding of infrastructure, training, and the green transition. These create quantum jumps in capacity.

Third, control speculation. This requires capital controls, financial transaction taxes (an issue I will address in a video, soon) and tighter regulations. Dampen standing waves before they destabilise.

The choice is not neutral. Left to itself, money flows towards speculation, because returns appear quicker. Policy must redirect potential energy into channels that sustain society.

Eighth: the myth of neutrality

Mainstream economics often treats the use of money as neutral: whether spent on consumption, investment, or speculation, it is all the same "demand."

This is wrong. The macroeconomic effects differ radically. Consumption supports demand today. Investment builds capacity for tomorrow. Speculation destabilises both.

To treat them as equivalent is inappropriate. One produces nothing useful, and might actually drain productive resources from the economy. The other drives the system forward.

Ninth: the politics of potential

Recognising money as potential energy shifts politics.

*
It exposes austerity as waste: leaving potential idle rather than releasing it.

*
It exposes inequality as damaging: concentrating potential in hands likely to hoard or speculate.

*
It exposes financial liberalisation as reckless: allowing standing waves of speculation to

destabilise society.

The politics of potential is about directing energy wisely: towards flows that sustain, towards investments that transform, away from loops that destabilise.

Conclusion

Money is not wealth. It is potential. What matters is how that potential is released.

*
Consumption propagates waves.

*
Investment creates quantum jumps.

*
Speculation traps energy in dangerous loops.

Policy that ignores these differences will fail.

Policy that recognises them can succeed.

If we treat money as potential energy, and direct it towards constructive channels, we can sustain flows, build capacity, and avoid destructive resonance.

And only then can we fund the future.

Previous posts in this series

* *Discussing quantum economics, accounting, money and more*
* *Quantum economics, part 1: Why Quantum Thinking Matters for Economics*
* *Quantum economics, part 2: Money as Particle and Flow*
* *Quantum economics, part 3: Entanglement and Double-Entry Bookkeeping*
* *Quantum economics, part 4: Quantum Uncertainty and Economic Forecasts*

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