Funding the Future

iscussing quantum economics, accounting, money and mor

Published: January 13, 2026, 5:30 am

As I mentioned yesterday, I went to Cambridge for the day. This was partly to recover my MacBook, which had been in for repair, although it seems I got very little of the original back. Still, I will have proper editing capacity again next week.

More important was the objective of having the opportunity to:

sit and read, have a coffee, continue the conversation that I've had with Jacqueline for decades now, and watch the world go by.

We did this at Michaelhouse cafe, which is in St Michael's church, which was once the chapel of Michaelhouse College, which was merged to form Trinity College by Henry VIII, as I recall. For those who read murder mysteries (and I do sometimes), the Matthew Bartholomew series of novels by Susan Gregory, set around 1350, is all based in Michaelhouse, and I rather enjoy the novels, the connection, and the coffee, which is very good.

Murder mysteries were not, however, the subject of our conversation. Quantum theory was. Jacqueline has been reading on quantum biology, and I have been doing some thinking around quantum theory and economics, and even quantum accounting. As a result, she asked the question, which we Googled:

What is the equivalent of a photon in economics?

This produced no useful answers. For those not familiar,

A photon is an elementary particle that is a quantum of the electromagnetic field, including electromagnetic radiation such as light and radio waves, and the force carrier for the electromagnetic force. Photons are massless particles that can only move at one speed, the speed of light measured in vacuum. The photon belongs to the class of boson particles.

It is not as basic as a quark, but it is the fundamental energy transmitter within the quantum physics world.

I had been musing on whether the answer might be money, although I suspected the answer was not that, but that option did not materialise from Google, and in fact nothing much of any use did, so we decided to use ChatGPT as the prompt for our discussion instead.

This discussion took place over two hours, and the following prompts were used as we sought to develop the argument we were creating. I stress that each question was answered, usually at some length, and each subsequent prompt was a response to ChatGPT's answer and our discussion of it as we sought to develop a coherent argument. Right now, I am just recording the prompts as they are part of the methodology of what we did:

* In quantum terms, is money a particle or a flow?

* How does this fit with the concept of entanglement, and how can that be related to double-entry bookkeeping?

* [Chat GPT response: Would you like me to push this one stage further — and frame it in terms of **quantum** uncertainty too (e.g. how forecasts, valuations, and fiscal rules behave like probability clouds rather than certainties)?] Please do.

* Another question. If we increase the cash balance in a business by £100 this is as you noted a debit. You say a credit follows, but what if we do not know which credit? How does that fit into quantum thinking?

* I can’t see where this links to entrainment, but does it?

* Sorry to persist with this, but does this quantum thinking make the economic concept of equilibrium meaningless? Does it also make dynamic stochastic general equilibrium analysis futile?

* [Chat GPT response: Would you like me to sketch how a “quantum-informed” economic model might look — one that replaces DSGE with concepts like probability clouds, entanglement, and collapse events?] Please do.

* I want to go back a bit. A bank balance represents potential. What happens if it is used for speculation rather than investment in tangible assets or consumption? How do those relationships work, and how are they expressed in the quantum sphere?

* Let’s assume fixed energy at a moment (I think that is fair). How then does speculative activity of the sort described entangle with the rest of the economy, because energy must be used in the process of speculation? If that denies energy (potential) to other activities, what are the consequences for those other activities?

* Now, a twist. MMT explains that there is no limit to the amount of money that might exist in a system. This is true. If money is a promise to pay, then there is no limit to the number of possible promises. But three things follow. First, is the energy associated with each unit of currency changed? Second, does the use made of the currency change the energy potential and third, does speculation create greater instability in

such a system, suggesting, for example, that something like capital controls is required?

* So there is no equivalent of the photon in economics, to ask an obvious question. Or, is that the labour theory of value and did economics go wrong when it abandoned the economic classicists belief in that idea?

* Does Henry George's theory on land add any value here?

* Now, this is really unfair. Might you summarise all this in a long-form piece (as many words as you like - many thousands if you wish) that summarises all this for posting on the Finance for the Future blog? You will need to break it into chapters and then subheadings. I am looking for narrative flow. Thanks.

As I have made clear, our conversations to create each prompt took a while, although a great deal of what ChatGPT was saying in response to the queries confirmed the arguments that we had already discussed. In fact, on occasion, this was so uncanny that Jacqueline wondered whether ChatGPT was listening to us, or I had already written the ideas and all I was getting back was effective confirmation of my own opinion. I don't think that was the case, but I have trained ChatGPT on the material on this blog, and **I have been previously using it as a learning and discussion tool on some of the issues we now discussed, and so it may be it was reflecting my own opinion back to me, at least in part.**

That said, note the last question. In fact, I developed the last query to create a series of posts for this blog. There are at least ten of these, and with a few edits, I will start posting these on the blog because I think they are helpful.

In essence, the discussion was dialectical: we used ChatGPT as a platform to help confirm, develop, and challenge arguments, to then help take the process forward. For example, the question on Henry George was a direct challenge to a previous ChatGPT answer that I felt was overly confident and too certain on the labour theory of value. In this way, we made much more rapid progress than we might otherwise have done.

I know we stand open to the criticism that this is not necessarily the most relaxing way to take a Saturday coffee break (more than one each was consumed in the course of developing these ideas), but we much enjoyed this, and the conversation continued as we walked around Cambridge colleges for the afternoon, something we had not done for ages.

A good day out, and the first piece will follow soon. Meanwhile, this is where it happened:

And finally, a note on the posts that will follow. The posts were initially edited/drafted by ChatGPT, but all were based on the directed flow created by Jacqueline and me during our discussion, which was informed by my original thinking. We needed to adjust this flow through the questions we posed to suit our quite specific goals, checking the results as the exchange developed. All the drafts have then been re-edited by me.

These blog posts, then, began in my thinking, were developed based on discussions with Jacqueline, and were informed by research located by ChatGPT. They were then summarised by ChatGPT and edited by me. I claim full authorship as a result, whilst acknowledging this method of development. This is, after all, how research, thinking and writing have always happened, but with a modern twist added. Initial thoughts provoke discussion. Research follows. First drafts are edited, revised, checked and tested before final edits and publication. ChatGPT was just a tool in that process as much as the resources in a library might once have been.

Comments

When commenting, please take note of this blog's comment policy, **which is available here. Contravening this policy will result in comments being deleted before or after initial publication at the editor's sole discretion and without explanation being required or offered.**