Sudipta Basu and Gregory Waymire wrote a paper in 2017 putting forward the invention of double entry bookkeeping as a crucial item in European enrichment. Here is the email I sent to Waymire:

Dear Greg,

I've looked superficially at your paper, and have grave doubts.

In *Bourgeois Dignity* and the rest I believe I showed that "diligence" is not what matters. Not at all. Everyone is diligent, or they starve. You're adopting a conventional and somewhat silly view that the bourgeoisie were especially diligent, when it is not true as fact and is anyway not the character of the bourgeoisie that mattered to the Great Enrichment (which by the way was a factor of 30 per capita in countries that fully adopted economic liberalism, not the factor of 10 you quote: look at the passage again, and read slower and longer). Weber sometimes got this right, sometimes wrong. But people tend to read him as saying that higher savings and more diligence, Ben Franklin style (and even Ben did not actually do it), is what made us rich.

One trouble which such a conventional argument is an economic one that Solow-type models (and Smith- and Marx- and Weber-type models) that reduce growth to savings and labor effort are radically mistaken. What matters is human creativity released from ancient trammels.

Another trouble is the historical fact that many other places had diligence and savings (and trade and slavery and science and any number of conventionally proffered causes). For example, savings rates in northern European agriculture in the Middle Ages were high, not low (as Rostow mistakenly believed), because yield to seed ratios were pathetically low. You had to put a quarter of
your wheat or barley crop back into the ground and let it sit there for the growing season, or you starved the next year. Literally starved, as people regularly did. Check out other places: China was diligent and saving and advanced technologically by the pathetic standard of Europe at the time.

What made us rich, I argue at no doubt tedious and unreadable length in the Bourgeois Era trilogy, is imagination, ingenuity, radical ideas released. They were released in turn by liberalism, Smith's "liberal plan of [social] equality, [economic] liberty, and legal [justice]."

I sympathize with your problem here. I myself had to give up over the past couple of decades—gradually, not without a struggle against my training and teaching—the idea what this or that marginal change in procedure made the modern world. The Bourgeois Era trilogy makes the point again and again. And, I flatter myself, it proves it—against diligence, saving rates, transportation improvements, empire, science, slavery, or DEB [by the way, never, ever introduce novel acronyms that the reader has to memorize; you would do well to study Economical Writing on this and some other points].

I realize you think that it suffices to establish the mere existence of an innovation that seems necessary, looked at from present routines. But the method is mistaken. For one thing, as a matter of logic a necessary X does not imply a sufficient X. For another thing, you have not shown that your favored X is quantitatively important. And for still another thing, the economic history does not support any of the usual X’s as necessary. As Alexander Gerschenkron long ago reminded us, economics, and therefore economic history, is about substitutes, not necessities, flexibilities, not fixed coefficients. Joint sufficiency is what we seek.

And the latest X to be proposed might possibly have prevailed outside Europe. Are we quite sure, for example, that China or South Asia or whatever did not in effect have double entry? How do you know? If double entry is claimed to be a crux, you need to show it was unique to Europe. And if you do so, you have then to explain why its heartland, Northern Italy and Barcelona, did not become the heartland of the Great Enrichment.

We can't rely on Eurocentric and elderly research by, say, Sombart, intelligent though he was, It would be not the first time that a condition claimed to be unique to Europe was shown by later research, as historical writing became more professional in, for example, Chinese studies, to be widespread. I give many such
examples in detail in *Bourgeois Dignity* (which I believe you have not read with attention) and in the final volume, *Bourgeois Equality* (which I take it you have not seen).

And there is another problem with resting on accounting. I yield to no one in my admiration for accounting research. See for example my paper long ago with Arjo Klamer, ”Accounting as the Master Metaphor of Economics,” *European Accounting Review* 1 (1, May, 1992): 145-160. But accounting, whatever its form, is an account of the past. In the passage where you quote me you quarrel with the point, but you are mistaken. Accounting does not reveal future opportunities. The opportunities come from human imagination. You need to read in Austrian economics, especially Israel Kirzner, to get the point perfectly clear. But it is not a difficult one. As both Nils Bohr and Yogi Berra put it, ”It's difficult to predict. Especially about the future.”

An historian can hardly disagree that a sound accounting of the past is valuable for getting into the future without disaster. One wishes that Trump and his friends appreciated such an ancient truth. But creativity remains the substance of the Great Enrichment, and neither accounting nor conventional models of economics have anything much to say about its radical release, 1800 to the present.

Sincerely,

Deirdre

*Greg Waymore replied a few days later. Here is my further reply:*

Dear Greg,

You write:

> Since we are trying to tell a story that relies on effects that complement those you identify in your *Bourgeois* trilogy, until we get the writing correct... . . . The basic story we are telling concerns how accounting systems accurately classify market outcomes in the process of determining what you term “trade-tested betterments.”

One cannot “determine” trade-tested betterments *ex ante*, which was my point about accounting in general.
Our story is that a double-entry bookkeeping system identifies trade-tested betterments more accurately and in a timelier fashion than would be the case for a single-entry bookkeeping system.

Not *ex ante*.

In common sense terms, accounting influences how effective people are in accomplishing some goal but does not directly change that goal.

Yes, I understand. But it’s largely mistaken.

What this means is that a system with cross-referenced transactions . . . makes an “alert” entrepreneur more nimble because the data can more easily preserve a feedback loop running from market changes to changes in entrepreneurs’ decisions.

You do not prove this, and anyway it is not relevant to the *future*. One cannot account the future.

2) **DEBITS=CREDITS & Transaction Analysis.** Prior to the entry of a new transaction

Yes. I (half) understand double entry in all its glory. It is an elderly point to claim that it was a crucial development. But that’s not the point. The point is that any account is necessarily about what happened in the *past*. Of course. It has *something* to do with the future, but precision in accounting about the past is liable merely to give people false certitude about the unknown and largely unknowable future. General Motors accounts were splendid in 1970. In ten years it was being strongly challenged by Toyota. Amazon’s accounts for a long time told merely of a bookstore on steroids. Facebook’s *accounts* undoubtedly looked lousy in the few years after its founding. Now . . . .

3) **Consistent Application.** Successful implementation of a double-entry system requires that it be consistently applied through time and across transactions. . . . That is, the double-entry system, despite its promise, will be worthless (in accurately communicating feedback) if not implemented in a manner that
preserves integrity of data obtained from consummated market transactions.

“Feedback” is fine for routine business decisions, and not to be disdained. But the important decisions are mostly not routine, being hopelessly about the future. I suggest you read some Kirzner. The heart of modern economic growth, and the story of the rise and fall of businesses, is unanticipated innovation or its lack. Unaccounted, one might say.

4) Effects on the Entrepreneur’s Decisions. Double-entry firms will be better positioned to respond to perceived changes when such beliefs can be checked against the data from recent transactions that have been entered in the accounting system.

Well, sure. You don’t need to persuade me, or anyone, of it. But “responding to perceived changes” is what business is. You are not facing up to what an entrepreneur does.

Regards,

Deirdre