

The Wreckage of Austrian Business Cycle Theory

by Victor Aguilar

In [Time and Money: The Macroeconomics of Capital Structure](#), Roger Garrison introduces Chapter 3, “Capital-Based Macroeconomics,” as follows:

Macroeconomics in the Austrian tradition owes its uniqueness to the Austrian capital theory on which it is based. This is the central message of Chapter 2. But as hinted in Chapter 1, there are critics in the tradition who take “Austrian Macroeconomics” to be a term at war with itself.

Specifically, the “hint” in Chapter 1, “The Macroeconomics of Capital Structure,” is:

Some members of the school have long turned a blind eye to the issues of business cycles and to macroeconomics more broadly conceived. Classics in Austrian Economics: A Sampling in the History of a Tradition, edited by Israel Kirzner (1994), gives little or no hint that Austrian economists ever asked a macroeconomic question... Similarly, Nicolai Foss’s The Austrian School of Modern Economics: Essays in Reassessment (1994) gives no clue of the existence of modern Austrian macroeconomics. Karen Vaughn’s Austrian Economics in America: The Migration of a Tradition (1994) leaves the impression that macroeconomics never reached – or possibly shouldn’t have reached – the American shore. And in her recent reflections on the development of the Austrian tradition (1999), she hints that progress is to be measured in part by the school’s distancing itself from the issues associated with the business cycle.

In my [Critique of Austrian Economics from 1930 to 1990](#), I identify seven serious problems with Austrian capital theory on which Austrian Business Cycle Theory, ABCT, is based and to which the school owes its uniqueness:

- 1) As discussed in [Section II](#), Hayek was unclear whether his structure of production represents a yearly flow of goods or a distribution of wealth. Mises and Rothbard, like Hayek, seem to mean one and *also* the other. Skousen is at least consistent but, unfortunately, he is consistently wrong. He definitely means the amount of goods flowing by every year. This author's work (1999) is about stock, not supply.
- 2) As discussed in [Section III](#), Hayek's triangle is printed sideways and backwards. The former problem can be corrected by rotating the graph but the latter problem is more fundamental. Hayek is speaking from the perspective of the owner of the final product looking back on his costs of production. He is speaking from Marx's perspective. The perspective that we want is from right now, at time zero, looking forward into the future.
- 3) As discussed in [Section IV](#), there must be *some* temporal measure or the Hayekian's incessant references to "lengthening the period of production" would not mean anything at all. Their theory of business cycles depends on credit expansions lengthening the period of production and on the inevitable contraction shortening it. It is impossible to talk about something being lengthened or shortened unless one knows how to measure it.
- 4) As discussed in [Section V](#), Hayekian theory depends entirely too much on the specificity of capital goods. In reality, many companies make products or provide services which are used in all of Hayek's five stages – and they experience cyclical behavior too. Rothbard was wrong when he said "To the extent that the new money is loaned to consumers rather than businesses, the cycle effects do not occur" (1970, p. 940 footnote).
- 5) As discussed in [Section VI](#), Garrison's conception of the natural rate of interest is faulty. The Hayekians are naïve to cling to this mythical concept. There is no such thing as a natural rate of interest. In any case, credit limits are more important than interest rates. The necessity of a bust following boom times is adequately explained by the transfer of capital from smaller companies to larger ones.
- 6) In Garrison's own words: "the [Hayekian] theory of the business cycle is a theory of the unsustainable boom. It is not a theory of depression *per se*. In particular, it does not account for the severity and possible recalcitrance of the depression that may follow on the heels of the bust" (2001, p. 120). In 1930, Hayek could explain how the depression started. In 1936, he could not explain why it still persisted. See [Section VII](#).
- 7) Austrian economists seem naïve because their belief in a natural interest rate implies an ethical judgment on what is natural or unnatural, their discussion of the inevitable collapse of a credit expansion is typically presented as a sort of morality play and because they advocate an impractical 100% reserve requirement based solely on ethical considerations. See [Section VIII](#).

[Judith Thommesen](#), Managing Editor of the *Quarterly Journal of Austrian Economics*, responds:

The author [[Aguilar](#)] grossly errs in equating the Austrian tradition itself with capital theory, thus ignoring the core of Austrian economics: praxeological price theory. The author further spends an inordinate amount of time [parsing details](#) regarding which direction capital structure triangles lie and which way arrows on diagrams point. Although these may be important regarding pedagogy, they hardly define who gets the theory right and who gets it wrong.

The QJAE does not publish papers about capital theory? How much things have changed since Fall 2001 when they devoted an entire issue to apotheosizing the author of a book titled *The Macroeconomics of Capital Structure!* I defend my “gross error” by quoting from the [dust jacket](#) of her master’s 2001 book:

Roger W. Garrison claims that modern Austrian macroeconomics, which builds on the early writings of F. A. Hayek, can be comprehended as an effort to reinstate the capital-theory core that allows for a real coupling of short- and long-run perspectives.... This volume [Time and Money: The Macroeconomics of Capital Structure] puts forth a persuasive argument that the troubles that characterize modern capital-intensive economies, particularly the episodes of boom and bust, may best be analyzed with the aid of a capital-based macroeconomics.

Lest anyone doubt that Garrison is the master of the QJAE, consider Mark Thornton’s justification for their Fall 2001 issue, “While it is quite unusual to devote an entire issue of a journal to the appraisal of a single book [Garrison’s *Time and Money*], in this case it is warranted.... [T]he book is an important contribution to Austrian economics as well as the comparative study of macroeconomic schools of thought” (2001, pp. 3-4).

Yet, almost immediately, Garrison’s comrades turned against him. [Jörg Guido Hülsmann](#) (2001, p. 38) writes:

The first thing to notice is that Garrison (pp. 44 and 70) employs a rather idiosyncratic definition of the PPF. In his eyes, the “PPF represents sustainable combinations of consumption and investment.” Thus the PPF is not a choice-independent physical limitation of human action, but a permeable frontier, which in economic booms can be transgressed at least for short periods, albeit at the price of necessary busts at some later point of time. This unusual use of language is likely to spur misunderstandings and misinterpretations... It is one thing to draw a curve and say that it represents a limit for sustainable

combinations of alternative production processes. It is another thing to explain why combinations are sustainable or unsustainable.

So what does "unsustainable" mean in Garrison's lexicon? Nobody knows. In my [Critique](#) I write, "Since he defines consumption on the PPF (which is real) to be the same as consumption on the Hayekian triangle (which is nominal), the unsustainability *cannot* have anything to do with a devaluation of the currency." Garrison has (apparently inadvertently) defined away the only real problem that credit expansions face: inflation.

This is just one problem with Austrian Business Cycle Theory, and not even one to make my list of [seven serious problems](#). Clearly, the Austrian position is indefensible. [Robert Murphy](#) tried in vain to defend ABCT; see my [Rejoinder to Mr. Murphy](#). Like Bush's Iraq venture, the question is not whether ABCT *should be* abandoned, but how it *can be* abandoned, after so much blood and treasure has been expended on it.

Thommesen agrees with Kirzner (1994), Foss (1994) and Vaughn (1994) that "progress is to be measured by the school's distancing itself from the issues associated with the business cycle." Perhaps I should have reminded Thommesen that the full title of my paper is [Critique of Austrian Economics from 1930 to 1990](#) and that the Austrians did not abandon their business cycle theory, ABCT, until 1994. But I doubt if even that would have convinced her to publish my [Critique](#); clearly, distancing themselves from ABCT includes editing mention of Hayek's capital theory out of their school's historical record.

And, as managing editor for the school's only refereed journal, Thommesen is in a position to enforce their retreat from business cycle theory. So we must conclude that the Austrian leadership has indeed, if only tacitly, agreed to abandon Hayek's capital theory. Even Roger Garrison, who once wrote, "macroeconomics in the Austrian tradition owes its uniqueness to the Austrian capital theory on which it is based" is now in line with Thommesen, as he declines to defend his [Macroeconomics of Capital Structure](#), even when [offered \\$1000](#) to do so.

Yet, in spite of his capitulation, Garrison continues to have Hayek's triangle displayed prominently on the homepage of [his website](#), apparently out of nostalgia. Thus, the purpose of the present paper: To make sure that everybody in the Austrian tradition is aware that their leaders have abandoned Austrian Business Cycle Theory. Some of them, especially the young devotees of Ron Paul, may not have gotten that memo yet.

So, can *anything* be salvaged from the wreckage of Austrian Business Cycle Theory? [Roger Garrison](#) writes, "The Austrian label usually denotes (1) subjectivism, as applied to both values

and expectation; and (2) methodological individualism with its emphasis on the differences among individuals." Very well, Dr. Garrison, let us consider these two defining characteristics in turn and then, for good measure, a third one:

- 1) Israel Kirzner writes, "[R]ecent Austrian work on Hayekian cycle theory seems, on the whole, to fail to draw on the subjectivist, Misesian, tradition which the contemporary Austrian resurgence has done so much to revive" (1996, p. 2). For once, I agree with Kirzner. (I [disagree with Kirzner](#) when he plays into the hands of the Keynesians (1991) by trying to deny the Great Depression.) In my [Rejoinder to Mr. Murphy](#), I write:

"Hayek's triangle is printed sideways and backwards. The former problem can be corrected by rotating the graph but the latter problem is more fundamental. Hayek is speaking from the perspective of the owner of the final product looking back on his costs of production. He is speaking from Marx's perspective. The perspective that we want is from right now, at time zero, looking forward into the future" ([Aguilar, p. 27](#)).

The first objection, that Hayek defied the convention of mathematicians by putting the independent variable on the vertical axis, is not, as I point out in this quote, the fundamental problem. That is an expository issue. The fundamental problem is that the Austrians are speaking from the perspective of the owner of the final product looking back on his costs of production. Murphy baits us with the promise of defending against this fundamental objection and then switches to addressing the expository objection.

Then, while Murphy is busy extolling the virtues of sideways graphs, he does not notice that he himself is hopelessly mired in the Marxist perspective. Murphy writes, "the consumer's good is always the 1st order, regardless of how far back we push the analysis, even if we go back to axes carved by prehistoric men" ([Murphy, p. 6](#)). How far back we push the analysis??? That sounds like we are speaking from the perspective of the owner of the final product looking back on his costs of production. Think about it: When did copper axes exist? Past, present or future? Obviously, they existed in the past. So why does Murphy, who claims to believe in the subjective theory of value, care about them?

What sort of analysis is Murphy doing that requires knowing the cost of copper axes in millennia past? For that matter, what sort of analysis is he doing that requires knowing the cost of a load of lumber I purchased from Home Depot last week? Maybe it was wisely bought or maybe it was a stupid purchase, but Home Depot is not going to take it back, so what is

done is done. Those boards are valued now, according to the subjective theory of value, only for the value attached to the consumer goods they can be made into, discounted for time preference. If my architectural dreams come to naught and I wind up feeding the boards into my stove, then they are valued for no more than I would value a load of firewood. It does not matter how much I paid for them or how much labor was expended at the sawmill cutting them into the proper dimensions.

I insist, "The perspective that we want is from right now, at time zero, looking forward into the future. Thus, the DWCS [Distribution of Wealth over the Capital Structure] is defined from zero to positive infinity... The DWCS includes all wealth currently in existence, which was (of course) all manufactured in the past. But its date of manufacture is irrelevant since its value is determined entirely by considerations of the future. By the subjective theory of value, all goods are valued for their contribution towards future consumption, not for their past cost of production" ([Aguilar, pp. 8,7](#)).

Clearly, Murphy did not read as far as [the conclusion](#) of the *Critique* that he was supposed to be rebutting, where I write:

Menger, Mises and this author are the only truly subjectivist economists. Böhm-Bawerk's average period of production demonstrates that he was still mired in the labor theory of value. Hayek's backwards triangle and his use of the terms "earlier stages" and "later stages" is no better. Skousen gives plenty of lip-service to subjectivism but is belied by his instructions for compiling the APS (1990, pp. 184-185), which depend on remembering the date of an item's manufacture and when its costs of production were paid. Making everybody save their receipts is not that much different than Böhm-Bawerk's trying to remember the one hundred working days that were expended in the production of a consumption good.

- 2) [Hülsmann](#) writes, "the author of *Time and Money* [Garrison] seems to follow the orthodox neoclassical approach in that his main concern is with the relations between observable data; he tends to treat the actual analysis of human action as a secondary issue, one that essentially serves to make a plausible case for the 'story' underpinning the relations that are the true object of his curiosity" (2001, p. 37).

I agree. In my [Critique of Austrian Economics](#), I write, "Garrison (2001, p. 47) follows Hayek (1967, p. 39) to the letter by drawing his triangle with five stages: mining, refining, manufacturing, distributing and retailing. Yet he infers a great deal more from the same illustration."

The orthodox neoclassical approach is to partition the capital structure into two categories: production and consumption goods. In sharp contrast, Hayek and, slavishly, Garrison, have five partitions. But it is still true that Austrian Business Cycle Theory is concerned only with aggregate quantities. After all, five partitions is not many more than two. All that they have really accomplished is to choose aggregates for which there are no statistics available.

Even worse, they do not seem to know what they are aggregating. In my [Rejoinder to Mr. Murphy](#), I write:

Garrison was obfuscating when he wrote, "The time dimension that makes an explicit appearance on the horizontal leg of the Hayekian triangle has a double interpretation. First, it can depict goods in process moving through time from the inception to the completion of the production process. Second, it can represent the separate stages of production, all of which exist in the present, each of which aims at consumption at different points in the future" (2001, p. 47). He knew very well that his triangle represented supply or he would not have attached it to the Production Possibilities Frontier, PPF, which illustrates how a nation's budget is partitioned. The term "production" is defined as how much of something is produced in one year, e.g. "Twenty-eight new houses were built (produced) last year." The term never refers to how much of a thing exists at the moment.

Murphy is no better. He gives an example of what is basically my DWCS ([Murphy, p. 3](#)) with wealth measured in wine bottles, both the 1987 vintage that are ready to consume now and the nouveau ones that that will not be ready for consumption until 2027, with the former being of more value than the latter because the latter are discounted for time-preference. As I describe, "Inventory items that do not depreciate are discounted for time-preference on the expected time until they make their contribution to final consumption" ([Aguilar, p. 5](#)). But then, after having illustrated my DWCS, Murphy easily slips into defending Skousen's conception of the APS and Garrison's plan to attach it to the PPF, apparently not noticing that he is now discussing something completely different from what he illustrated.

Frankly, having five partitions instead of two is not a big move in the direction of methodological individualism. All that they have really accomplished is to hopelessly confuse themselves as to what is being aggregated.

- 3) Garrison is too proud to mention what the Austrian label denotes to the vast majority of its young adherents: The claim that Mises and Hayek predicted the Great Depression and, more recently, that Ron Paul, Roger Garrison, Robert Murphy, *et al*, predicted the current (2008) financial crisis. The beardless veneration that Austrian professors enjoy is based not at all on their claims to subjectivism and methodological individualism, but on their supposedly swami-like predictions.

That the Austrians troll for young converts with such claims is embarrassing to those who are actually familiar with Mises' views. Mark Skousen (2001, p. 313) writes about Mises' attitude towards the use of empirical studies in economics:

Mises claimed in Human Action that the only pure economic science is radical apriorism – using solely deductive reason without the help of experience. He built his entire system on logic and self-evident assumptions, similar to geometry. Mises rejected all forms of inductive aposteriorism, or the use of empirical studies or history to prove a theory. Mises (1966, p. 862) solemnly declared, “its particular theorems are not open to any verification or falsification on the grounds of experience.”

Yet only 22 pages earlier, Skousen was busy trolling for young converts by extolling Mises' “gift of prophesy,” which he illustrated by repeating a story by Machlup (1974, p. 12) that has been told and retold to generations of 18-year-olds:

As his assistant in the university seminar which met every Wednesday afternoon, I usually accompanied him home. On these walks we would pass through a passage of the Kreditanstalt in Vienna [one of the largest banks in Europe]. From 1924, every Wednesday afternoon as we walked through the passage for pedestrians he said: “That will be a big smash.” Mind you, this was from 1924 onwards; yet in 1931, when the crash finally came, I still held some shares of the Kreditanstalt, which of course had become completely worthless.

Very well, but, had Machlup heeded Mises' warning, would he have made money short-selling Kreditanstalt stock? No. Consistent loses for seven years are not going to be recouped by one successful short sale in 1931. Oh well – at least Skousen is honest enough to get the story straight. In the re-telling, most 18-year-old Austrians have Mises predicting the U.S. stock market crash, not the failure of one European bank, and calling the exact month or even the hour of the crash rather than making the same gloomy prediction every day from 1924 onwards.

Similar trolling for young converts can be found in [The Prophet of the Great Depression](#). Frank Shostak writes, “Here we have evidence that the master economist [Mises]

foresaw and warned against the breakdown of the German mark, as well as the market crash of 1929 and the depression that followed.”

In the introduction to this essay collection, Percy Greaves (Mises, 2006, p. xiii) gloats:

The first [contribution], Stabilization of the Monetary Unit – From the Viewpoint of Theory, was sent to the printers in January 1923, more than eight months before the German mark crashed... The second contribution, Monetary Stabilization and Cyclical Policy... appeared in 1928 and must have been completed early that year. Yet, with his usual exceptional foresight, [Mises] foresaw the futile policies that the Federal Reserve System was to follow from the 1928 fall election in the United States until the stock market crashed the following fall.

Actually, Mises' predictions were not particularly amazing. If one reads only to the third paragraph of his 1923 paper, which begins "In recent months," it is obvious that he is describing the crash of the German mark, not predicting it. Calling a purely descriptive paper a prediction of the events that it describes is just plain dishonest.

Skousen (2001, p. 292), who is more honest than Shostak, admits:

Mises' predictive powers were not always prescient, however. In September 1931, Ursula Hicks (wife of John Hicks) was attending Mises' seminar in Vienna when England suddenly announced it was going off the gold standard. Mises predicted the British pound would be worthless within a week, which never happened. Thereafter, Mises always expressed deep skepticism about the ability of economists to forecast.

The truth is that the Austrians are *always* making “worthless in a week” predictions about fiat currencies; hence the familiar joke about the Austrian economist who claims to have predicted nine of the last five recessions. A Gloomy Gus who is always predicting downturns will be right at least *some* of the time, just as a paranoid who is suspicious of every stranger will see his fears realized in at least *some* encounters.

The coxcomb bird, so talkative and grave,
Cries from his cage, “Cuckold, whore and knave!”
Though many a passenger he doth rightly call,
You hold him no philosopher at all.

Anyway, the Austrians certainly did *not* predict the current (2008) financial crisis. [Hülsmann](#) (2001, p. 36) defines Austrian Business Cycle Theory:

ABCT claims that injections of new quantities of money into the credit market can reduce the rate of interest below its equilibrium level; with the new money, entrepreneurs make additional investments in higher-order production stages, bidding laborers away from other branches of industry.

But that is not what has happened since Hülsmann wrote this definition in 2001. Entrepreneurs did not make additional investments in higher-order production stages; people without any verifiable income bought houses that they could not afford. Only the most die-hard Austrian would call such people “entrepreneurs” and their McMansions “higher-order production stages.”

Similarly, in 2008, [Ron Paul](#) echoes Hülsmann’s 2001 definition, “Entrepreneurs engage in malinvestments that occur in more temporally remote stages of the capital structure than the pattern of consumer demand can support.” He then concludes that “the financial meltdown the economists of the Austrian School predicted has arrived.”

In my [2004 paper](#), I criticize the Procrustean bed that the Austrians try to fit every boom-and-bust episode into:

Skousen writes: “The very essence of the market economy is the specificity of capital goods. Suppose, for the sake of argument, that all capital goods were completely non-specific and totally versatile. This would mean that they could be transferred from one project to another at no cost. If this were the case, there would be no structure to the economy and therefore no lags, no structural unemployment of resources or labor – in short, no business cycle...”

Rothbard is as emphatic as Skousen: “What are the consequences [of a credit expansion]? The new money is loaned to businesses. (To the extent that the new money is loaned to consumers rather than businesses, the cycle effects do not occur.) These businesses, now able to acquire money at a lower rate of interest, enter the capital goods’ and originary factors’ market to bid resources away from the other firms” (1970, p. 855). An easy counter-example is cycle effects occurring when new money is loaned to consumers. In the 1990s, banks would make consumer loans up to 125% of the equity in people's houses. Today, foreclosures are skyrocketing and the streets are lined with “We Buy Ugly Houses” billboards.

In conclusion, *nothing* can be salvaged from the wreckage of Austrian Business Cycle Theory; not its capital-theory core, not its supposed subjectivity, not its methodological individualism,

not its prescient predictions. Nothing. Disappointing, I know. Perhaps some poetry would lighten the mood?

Ode to an Economics Troll

Troll sat alone on his seat of stone,
And critiqued what the Austrians did enthrone;
For Hayek had got his triangle backwards, clear
But a rebuttal was hard to come by.

Done by! Gum by!

In a cave in the hills he dwelt alone,
And a rebuttal was hard to come by.

Up came Bob with his big boots on.
Said he to Troll: "Pray, what is yon?
It looks like *Prices n' Production* o' my nuncle Fritz.
As should be a-lyin' in the graveyard.

Caveyard! Paveyard!

This many a year has Fritz been gone,
And I thought his books were lyin' in the graveyard."

"My lad," said Troll, "Hayek's triangle you extol
But what be a theory with a logical hole?
Thy nuncle was dead as a lump o' lead,
Afore I wrote my *Critique*.

Weak! Shriek!

He can spare a share for a poor old troll,
For he don't need his theory whole."

Said Bob: "I don't see why the likes o' thee
Without axin' leave should go makin' free
With the books or the larning o' the Austrian's kin;
So hand the old book over!

Rover! Trover!

Though dead he be, it belongs to he;
So hand the old book over!"

"For a couple o' pins," says Troll, and grins,

"I'll refute thee too, and gnaw thy work's withins.
A bit o' fresh theory will go down sweet!
I'll try my polemics on thee now.

Hee now! See now!

I'm tired o' gnawing old books and skins;
I've a mind to refute mod' Austrians now."

But just as he thought his reputation wrought,
He found his hands had hold of naught.
Before he could mind, Bob slipped behind
And gave him the boot to larn him.

Warn him! Darn him!

A bump o' the boot on the seat, Bob thought,
Would be the way to larn him.

But harder than stone is the flesh and bone
Of a troll that sits in the hills alone.
As well set your boot to the axiomatic root,
For the seat of a troll don't feel it.

Peel it! Heal it!

Old Troll laughed, when he heard Bob groan,
And he knew the young Austrian could feel it.

Bob's reputation is game, since home he came,
And his doctorate degree is lasting lame;
But Troll don't care, and he's still there
With the rebuttal he boned from its owner.

Doner! Loner!

Troll's old seat is still the same,
And the rebuttal he boned from its owner!

You see, Bob pushed his analysis to caveman days,
But Troll insisted that value in the future lays.
Value is always subjective, not intrinsic at all,
And supply is not the same as stock, he explained.

Reigned! Deigned!

The Economics Troll won, Hayek's triangle he did raze,
As Axiomatic Theory prevailed, Austrianism waned.

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