A cycle of capital waste, Chicago, 1830-37

The following notes purport to show how the above principles may be derived from events in a 19th-century episode of boom and crash.[1] The narrative centers on Chicago, then an infant city.

A Cycle of Boom and Bust: Chicago, 1830-40

Notes by Mason Gaffney

These notes are most useful if studied in conjunction with "The Canal Boom," a chapter in Homer Hoyt, *100 Years of Land Values in Chicago*, Chicago: University of Chicago Press, 1933.

Herewith a summary of major events, major principles at work, and their interpretation.

1. What happened in Chicago happened elsewhere in the nation, and the N. Atlantic economy. The world moved more or less in sync. Even then, much of the world was linked by capital flows; Chicago was a part, a particularly volatile part, of one stupendous world drama.
2. What happened in this cycle happened both earlier and later: this was only one of many. Chicago grew in fits and starts, not steadily.
3. The amplitude of cycles was greater on the economic/geographic fringes than at the core. This refers to cycles in population, land values, and economic activity.
    a. Chicago was at the macro fringe of settlement based on New York State's Erie Canal, opened in 1825. Besides that canal, there was new freedom of competition in shipping, barging, and steamboating on rivers and the Great Lakes: in 1824 the U.S. Supreme Court outlawed shipping monopolies (Gibbons v. Ogden).

    Chicago held what we now realize is a key macro-geographic site, a continental crossroads and a breaking point. Its importance was not yet clear to all contemporaries, however, so it was marginal for its times. The famous Gallatin Report[2] of 1808, which identified almost all key routes needing improvement, missed the route of the Illinois and Michigan Canal, the key to developing the advantage of Chicago's location. More credit goes to General "Mad Anthony" Wayne, who defeated the Shawnees and other Indians in 1794 at the Battle of Fallen Timbers near modern Toledo, Ohio. Wayne then urged Congress to found Ft. Dearborn on the site of Chicago. Wayne's insight into economic geography and location value had been sharpened by his earlier profession, surveying, coupled with his strategic military planning.

[1]Alternatively, they may be derived a posteriori from world history, then applied a priori to Chicago. This writer's evolution began in Chicago with a study of Homer Hoyt's work.

[2]Albert Gallatin was Jefferson's Secretary of the Treasury. His report on transportation routes was a logical follow-up of the Lewis and Clark expedition, but was national in scope.

Chicago's micro-site was and remains a "stinking swamp," which is what Chicago means in the tongue of the Potawatomi Indians who named it. It is still "The Windy City," with an unattractive climate. Shawneetown on the Ohio and Cairo at the meeting of the Ohio and Mississippi seemed more promising. It was not clear for decades that this site would become the capital of the Midwest. In a famous early incident, the banks of Shawneetown refused credit to a town as unpromising as Chicago.

   b. Amplitudes were higher, percentagewise, six to ten miles from central Chicago than at the city center.

4. New building in Chicago depended on the flow of capital imported from the east; the U.S. depended in part on capital imported from Europe. We were a colonial economy, with heavy foreign debts and absentee ownership.
5. Capital import took the form of consumer goods, i.e., an import balance. Ships returned east with sand for ballast. What did the sellers get in exchange? Read on!
6. Chicago lived by exporting IOUs. These were secured mostly by Chicago real estate. Hence, the volume of imports varied as a function of the level of land prices, and also with their liquidity.[3] Lord James Bryce, an English visitor, observed that "Many a place has lived upon its boom until it found something more solid to live on."
7. Market agents (buyers and sellers) knew that cities are highly interdependent and synergistic. In a period of rapid growth, optimistic buyers acted as though complementary buildings and public facilities were already in place, or soon would be. Lord Bryce was struck by it: "Men seem to live in the future ... they see the country not merely as it is, but as it will be."

   Owners of central land and old buildings did not oppose, but supported, new building and street extensions, bringing more land into the ambit of the central market. Under boom conditions they are more sensitive to synergy than to competition. They tolerate logrolling and cross-subsidy, anything to expand the market. They know they are threatened by rival cities, and they race for the No. 1 position. A growing city should be happy, said Bryce, "But there is often a malignant influence at work to destroy happiness in the shape of a neighboring city, which is making progress as swift or swifter, and threatens to eclipse its competitors." Some famous rivalries are Philadelphia vs. New York; Chicago vs. St. Louis; Seattle vs. Tacoma; Charleston vs. Savannah; Mobile vs. New Orleans; and San Francisco vs. Los Angeles.

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[3]Liquidity varies with volume of land sales, or land turnover:

a. A sale is the occasion for a loan (although not the only occasion);

b. A sale often precedes building; building also occasions another loan, a "construction loan" followed by a "take-out loan" to fund the loan semi-permanently.

(Later, in depressions, the reverse attitude sets in: everything competitive is opposed, and local leaders support policies to lock up land, to keep it off the market. The nation has long shown a manic-depressive collective personality.)

The prime example of a key public facility is the Illinois and Michigan Canal, designed to link Lake Michigan and the Great Lakes and the St. Lawrence system and Erie Canal with the Illinois River and the entire Mississippi System.[4] It would exploit the connection to New York opened by the Erie Canal, opened in 1825. A federal land grant was given in the 1820s to help finance this I&M Canal.

Just *talking* about building the canal sold lots. From 1830 on, buyers acted as though this would soon be a *fait accompli*. Chicago building and speculation boomed in anticipation. In the event, however, the canal was not even begun until 1836, and not usable until 1848.

The social psychology of land booms is revealed in the language used by eyewitness reporters: mania, epidemic, fever, madness, contagion, rage, etc. Mob psychology is not comprehended in formal mathematical models, especially those that include words like "rational" among their axioms. Land is peculiarly subject to herd psychology because its value is based entirely on expectations of the distant future, remote from the realities of today. Land is irreproducible, so its value is unchecked by the ability to produce new supplies at a known, finite cost.

There is a steep gradient of land values out from the center, due to internal transportation costs. This limits the area of land that can effectively be urbanized around the center, in spite of the vast prairies stretching endlessly to the horizon.

8. This all occurred in a time of peace, profound peace. The nearest thing to a war was the Black Hawk "War" of 1832, whereby local militia, with little federal expense, drove the Sauk and Fox Indians from northern Illinois. The U.S. in these years defended its very long border with few troops and minimal taxes, and was even preparing to distribute a surplus to the states. The surplus came from booming sales of federal lands.

   The absence of heavy taxes, federal debts and foreign threats, and the "peace dividend" of a boundless public domain waiting to be exploited, contributed to the optimism that became a mania of speculation.

9. Asking prices for land lagged demand for land.
   a. On the upswing, buyers got bargains with a free joyride up the price elevator. Until 1834, legitimate buyer-users were the majority. They gained both from building and the rise of land prices. After 1834, speculation took over completely.

[4] Did you know there is a "continental divide" between the St. Lawrence and the Mississippi valleys? It is a low ridge, hardly noticeable, a few miles west of Lake Michigan. It was easily penetrated through the "Calumet Sag" in southwest Chicago.

   b. On the downswing, sellers held out for much more than buyers would pay, and turnover dropped nearly to zero. Here is where "a page of history is worth a volume of theory." In theory, buyers and sellers have the same information and expectations. In history, sellers hold out when demand falls, and sales virtually stop. Hoyt documents this through five full cycles, 1833-1933, and you can see it in southern California today.

10. The amplitude of land price swings was truly extreme: a 60-fold rise, 1830-36.

    The amplitude of all cycles related to land (prices, sales, subdivision, building permits) far exceeded, by orders of magnitude, the amplitude of swings in other economic data (production, commodity prices, income, etc.). Ordinary life must go on, even in the blackest depression. Speculation is what stops.

11. Building lagged behind population growth.
    a. In 1834 there were ten persons per dwelling unit.
    b. In 1840 there were many empty buildings. Buildings could not be "unbuilt," or otherwise liquidated, when people had fled.

12. Land values drew in capital:
    a. From outside buyers, some of whom moved to town.
    b. From lenders, who took it as collateral.
        i. Loans to the state, or its canal company, taking their lands as collateral. This occurred in 1835 especially. The state had a vast land grant, as the railroads did later. In 1835, the State Legislature pledged the lands for a loan.
        ii. Loans to private land buyers.
    c. From payees who held bank notes issued by Chicago banks, and held elsewhere.[5]

       High land values induced builders to build higher, and more intensively, to match the land value. They built with borrowed money, secured in part by land value.

13. Banks *monetize* rise in Chicago and other Illinois land values.
    a. Land seller creates bank to finance his own sales. The state of Illinois owned "Illinois and Michigan" lands, from a federal grant. It chartered a state bank in 1835 to lend to buyers thereof.[6] Liberal credit is a potent device for raising land prices.

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[5]Someone used the bank notes to pay to sink fixed capital in Chicago, and the bank notes were held by suppliers outside Chicago. This implies growth of Chicago banks, and use of them by depositors elsewhere. The same net effect also resulted when Chicagoans who previously banked elsewhere moved their accounts to new Chicago banks.

[6]At this period, American states were allowed to charter banks, although this would appear to have violated the Constitution. This practice continued until 1863, at which time the absence of southern Congressmen permitted a

The Illinois Bank also loaned to the Illinois and Michigan Canal Co. to begin building the above-referenced canal, not finished until 1848. As collateral it took lands granted to said Canal Co.

The Illinois Legislature *required* the state bank, as a condition of its charter, to lend to the state by buying state bonds. These bonds were used for a phantasmagoric, premature, subeconomic network of canals. Canal planning was driven mainly by the desire of marginal counties to raise their land values. The modern name for this behavior is "rent-seeking." Abe Lincoln, downstate in Springfield and the Sangamon Valley, was caught up in it.

b. The state bank, and all banks, also loaned to buyers of others' lands.

c. Out-of-state (mainly Michigan, Indiana, and Wisconsin) banks also loaned to buyers of Chicago land. These notes for a while circulated in Chicago, helping raise land and other prices.[7]

d. This new M helped raise land prices, making more land value to monetize, a positive feedback loop,[8] adding to amplitude of cycle.

Monetary expansion holds down interest rates below the level of an unbiased market. Land value is more sensitive to interest rates than other values are.

14. At the peak, 1836-37, demand dropped but asking prices held. Result: sales (measured by deeds recorded) fell like a stone.

In 1837, sales from the Federal Land Office were 3.6% of those in 1836. Federal asking prices were absolutely fixed, regardless of demand.

15. In the crisis, the state plunged inexorably ahead, like a bull rhino charging with its eyes closed, with its comprehensive statewide canal network. It also projected a statewide rail grid. Abe Lincoln was all for it. It issued $10 million in bonds—a lot of money then. This crowded out other investment, sucking capital away and forcing up interest rates.

All parts of the state demanded their shares, to get the same gains as the I&M Canal was bringing to Chicago. The program was much too great for the existing resources of Illinois and its lenders.

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drastic change. The change did not, however, abort the excesses of what is called "The Gilded Age," 1865-73, and the severe crash of 1873. Banking reform alone, without reinforcing land and tax reform, has never yet stopped the boom/bust cycle.

[7]Higher prices would tend to drive notes back out. However, during a boom fever, overpriced land looks cheap, keeping the Michigan notes in Chicago. Later, when the Michigan money flew out, the Michigan banks dishonored their notes, sucking capital from Chicago when it most needed it.

[8]Positive feedback loops are also called spirals, snowballing factors, cumulative factors, perverse factors, reinforcing factors, aggravating factors, non-equilibrating factors, etc.

16. There developed an "artificial abundance" of lands seeking buyers, owing to overextension of infrastructure and planned infrastructure. High land prices induce the following:

    a. Land-saving capital, like high buildings. Land-saving comprises intensification of use of previously rentable lands, a.k.a. exploiting the intensive margin of production.

       Land-enhancing capital, meaning capital used to improve land for a new, higher use. That includes bringing previously submarginal land into production, way out on the frontiers. In urban growth, it also means converting farmland or wasteland to urban use.

    b. Developing submarginal land is particularly capital-intensive, and the payoff is notably slow. A generic example is reforesting land that is high, cold, dry, and sloping, where the timber does not ripen for over a century.

    c. Rent-leading capital. In urban growth, an example is overimproving land today, expecting higher demand tomorrow. There are "economies of simultaneity" in building, so if you are going to build to four stories, you nearly always have to do it all at once. Suppose today's demand is high enough to justify a two-story building, but you see the demand rising steadily over the sixty-year life of the building. You build a four-story building today, and absorb early losses on the upper two stories, as an investment for future years. A city builds a four-lane street, where two would do today, anticipating higher future usage. Such examples are legion. (Note that such behavior betrays the existence of markets in which demand, at any time, is less than perfectly elastic. If it were elastic, you would build the lowest-cost size immediately.)

       Along with economies of simultaneity are economies of scale. Building higher, taken by itself, suffers *dis*economies, a.k.a. increasing costs. On the other hand, building larger, with horizontal expansion, evinces economies of scale. It also requires more land, meaning more land rent. It comes into style during periods of rent-leading capital building.

    d. Land-linking capital, like canals and rails and city streets.

    e. Land-capturing (rent-seeking) capital, like squatters' improvements, and canal and rail lines built to secure land grants. Cf. the racing of California cities for water sources over the last century.

17. The combination of high interest rates with a surplus of land for sale broke the land market.

18. High interest rates resulted from:

    a. A huge rise in demand for capital to link, develop, improve, and provision new lands, both extensively and intensively, locally, nationally, and worldwide. Francois Quesnay, often called the founder of economics, described capital as "advances," noting that capital consists of resources paid "up front," as we say today, before there is any return. Quesnay noted that each kind of capital requires more of the other kinds, to complement it. He listed *avances souveraines* (public works, and sometimes military conquest), *avances foncieres* (clearing, draining, fencing, building), *avances primitives* (equipment, cattle, etc.), and *avances annuelles* (current expenses, including public expenses like police and soldiery). Those who advance one kind of capital often fail to reckon how much more of their *own* capital they must advance to match the first kind, and hardly ever reckon how much more of *others'* capital must be advanced.

During this canal-boom era, six or more major trunk canals were being built by Atlantic Coast states to breach the Appalachian barrier. Hundreds of feeder canals, many of them submarginal and heavily cross-subsidized, were started at the same time. Seven or more canals were being built from Lake Erie south to the Ohio River. Drains on world capital were beyond world resources.

b. Capital in the forms of *avances souveraines, foncieres, et primitives* did not revolve, but was sunk for decades. Too much was locked into hard forms like canals and rails and bridges and tunnels and cuts and fills, from which recovery is slow at best and, as it turned out, often impossible ever. In a bust, even many *avances annuelles* are lost. Adam Smith, David Ricardo, John Stuart Mill, Knut Wicksell, Stanley Jevons, Karl Spiethoff, perhaps Boehm-Bawerk, and other great economists recognized this as a cause of depression and unemployment.[9]

c. Too high a share of income was generated by long-term investments. When funds ran out, these employments could not be continued, and stopped generating income. There was a loss of the priming, driving, income-creating power of capital to sustain real production and income, from which alone real savings come.

d. Too little propensity to save from current income. The rise of land prices was treated like current income by the owners, and consumed, even though it did not correspond to any production of consumable goods. Once the values had risen, they satisfied the owners' need for assets without those owners having to save and create real capital.

One prodigal living on land sales was the U.S. government. At this period it collected less in taxes than it spent, and lived by selling off the public patrimony for cash, using the proceeds for current expenses. This aborted capital formation, just as private prodigality does. (Today the U.S. government does the same thing by going into debt, which has the same effect.)

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[9]Tragically, neo-classical economists and their successors have stuffed these insights down the memory tubes of history. Their reasons, if any, do not bear examination, and are generally not even given.

19. Why was so much capital locked in?

a. Stretch-out of lines in space. Stretch-out in space was caused by the combined force of leapfrogging over the better, rentable lands which developed too slowly, combined with speculative promotional forces trying to force premature or other subeconomic development of marginal lands. Chicago itself was a leapfrog, in the continental picture. The Hudson and Connecticut valleys were still undeveloped. At the micro level, the city of Chicago itself sprawled out six to ten miles, when it lacked population to fill in a circle of one mile. The same was true of dozens of growing cities in the U.S. at the same time.

b. Stretch-out of construction times. Overambitious projected lines, and grand systems, took generations to go on line and start throwing back cash. Meanwhile, capitalized interest doubled and quadrupled the capital sunk in them. By the crash, the state had put millions into the unfinished canal and rails. This capital became torpid: it stopped revolving. The effect on the body economic is much the same as the effect on the human body of slowing metabolism (the rate of turnover of your protoplasm).

   In addition, delay in completing one improvement diverted demand elsewhere and stimulated competing improvements. The I&M Canal was just one of dozens of routes projected from the St. Lawrence system to the Mississippi system. There were six in Ohio alone (all completed, too) south from Lake Erie to the Ohio River. There was one, craziest of all, projected from the Maumee River (near modern Toledo) southwest to the Wabash through Indiana. Every such project created new townsites, and an avalanche of new towns was thrown on the market.

c. Effect of premature high land values on shaping the character of capital investment. High land values stimulate land-saving, land-enhancing, land-linking, and rent-leading investments (as described above, Section 15). This may be a rational economic response, basically, when and if the market is sending the right signals. Ideally, an optimally high level of land rents and values serves as a community synchronizer, causing everyone to build *as though others were going to build complementarily in sync*. In the frenzy of a speculative boom it sent (as it still sends) the wrong signals.

   In addition, high land prices motivate land-seizing ("rent-seeking") investments, which are *never optimal for society*, and always waste capital. Land-seizing investments will be laid out by self-seeking individuals ("rational economic agents") with no expectation of *ever* recovering the capital invested, because the payoff comes as title to land, which never wears out. Canal promoters were mainly in the business of selling townsites at stations and terminals along the canals.

d. Overpricing of land reserves land for two contrasting kinds of buyers and holders:

i. Type A plans to and does develop land for a future demand higher than present demand. In Chicago, this was exemplified by building four-story buildings outside The Loop (the city center) in 1835. Overpricing and consequent overimprovement gets greater the farther out you go.

When that demand fails to materialize, he cannot recover his money. He cannot rent out all his floor space, if that is what he built. Or he cannot use the full capacity of his tannery, harbor, shipyard, sawmill, packing plant, soap factory, brickyard, or whatever he overbuilt.

When Type A develops land beyond the reach of existing infrastructure, he forces extensions of same, which are often losers, cross-subsidized by the whole system.

ii. Type B plans to hold, and sell for a rise. His land absorbs no capital directly, but much capital indirectly, by forcing the stretching-out of all land-linking investments in space, and generating no traffic or use to justify those that are built to and past them. Empty land also generates no synergistic spillover gains to raise the cash flow of surrounding, complementary lands, thus helping freeze up capital sunk in improving them.

e. Misperception of real interest rate.

A boom generates inflationary psychology. Imported consumer goods are costly; local land values rise even more. Borrowers see the real value of their debts falling, offsetting some or all of their interest payments. Such expectations come to be the mark of the shrewd, knowing, cutting-edge, state-of-the-art inside-dopester, whose expectations come to be considered more "rational" than those of conventional old fogeys. Today, this kind of thinking is apotheosized in "rational expectations," the (University of) Chicago School economists' answer to divine omniscience.

Thus inspired, people take on mountains of debt that they cannot service unless the market keeps rising.

f. The promotional wiles[10] of engineers, contractors, financiers, empire builders, materials sellers, et al.

The same kind of folks who sold the pyramids, the Tower of Babel, Angkor Wat, the Mayan-Aztec temples, the Great Wall of China, the long canals of Peru, the Roman roads and aqueducts, Irish famine relief through road-building, the Yukon-San Diego Aqueduct, the Rancho Seco, the Three Mile Island and Chernobyl nuclear generating stations, the Washington Public

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[10]One could write another paper or book on their various wiles, and the legislative logrolling processes of partial funding and whipsawing that stretch out two-year construction periods into twenty-five-year periods, piling up capitalized interest.

Power Supply System, and other sterile or abortive monuments are busily at work in all times and places. These sellers played on the fears and ambitions of public leaders, who need "experts" to intimidate the public. They got paid up front, leaving the public to clean up their messes.

The U.S. Army Corps of Engineers was in there. They dredged Chicago Harbor, using federal dollars. They were the agent for implementing Henry Clay's "American System," a compromise whereby Eastern states got tariff protection and Western states got federal aid for internal improvements. It's been called "The Great American System of Public Works for Private Gain." This was an early way of distributing federal surpluses to the states: "River and Harbor Improvements" became synonymous with "pork barrel politics" early on. Thus the surpluses were turned into capital, all right, but often it was capital of low productivity and long, long deferred payoff.

Chicago came off well in this Congressional bargaining. It got its federal aid, and then the South Carolina Nullification Crisis of 1832 forced the tariff, which was raised in 1828, back down anyway. Besides, as a potential industrial site, Chicago was positioned to gain from the tariff, too.

20. Artificial abundance of land for sale was caused by:

    a. Speculative holdouts pushed prices up high, and held them there too long.

    b. The market responded slowly but massively, adapting capital to this artificially-high land price level.

       Macro-infrastucture like the Erie Canal and Mississippi River improvements were justified by tapping and enhancing lands that were worth it at the higher price level.

       Micro-infrastructure like streets in Chicago. Hoyt found that in 1836 there was enough subdivided land in Chicago to house and support 50,000 people, when the actual population was 4,000.

       Intensification of private land is the most intuitively obvious result of high land prices.

21. Capital import inevitably was overpowered by debt service. That has to happen as debt rises, which it cannot do forever. That forces a new city back on its basic, long-term export industries and services. As it and its competitors seek to expand those, the terms of trade turn against them: more supply means lower prices.

    Chicago then was like many Third World nations today, e.g., Mexico and Nigeria with their oil. As they turn to debt service, human and other resources previously used to build new capital (exporting IOUs) must be turned to exporting real goods. If they are one of many in the same position, that lowers prices of their exports and puts them on a downward price treadmill.

22. At the national level there were only blue skies and smooth sailing. In 1835 the national debt was totally extinguished, and surpluses mounted swiftly from soaring land sales and excise taxes. President Jackson deposited the surpluses in private banks around the country, giving them reserves on which to expand fast. They loaned to speculators to buy more federal lands, raising the surplus still more.

    In 1836 Texas won independence from Mexico, giving spirits a lift. No powerful nation threatened our rapid westward expansion.

23. In Chicago, however, there was a fragile circle of dependence among several elements. Previously we have looked at positive feedback loops of the first kind, simple ones with just two elements. Here there were many elements, serving to disguise the elements of positive feedback. The arrows below show the direction of support: i.e., the element at the tip of the arrow, to the right, depends on the element at the shank end, to the left. Closing the loop, the first element on the left depends on the last element on the right.

    GO --> Chicago's basic economy --> Chicago speculative land prices --> Illinois banks --> Illinois state bonds --> Illinois state building program --> The Illinois and Michigan Canal --> Return to GO

    Take especial note of the dependence of banks on speculative land prices. *This is the great secret that macro-economists never tell*. It has been obvious to all contemporary reporters, even as it is today. Yet you look in vain through volumes of macro-economic theory for any recognition of it. Classicals, Keynesians, Monetarists, Post-Keynesians, Lucasians, econometricians, cliometricians, radicals, conservatives: they almost all theorize in the clouds as though it never happened, or could never happen again. It is a fantastic feat of collective amnesia that should make us very wary of received doctrines and their expositors. This is one reason why "A page of history is worth a volume of theory." In principle, theory should be useful; in practice, theory seems to be dominated by those who are willfully blind and deaf.

    Every element depended on every other. It was too much to understand: the interdependency and vulnerability was shrouded in complexity, in a naive age. It was too much to keep working for long: one failing element would bring down the whole system, and did. What element failed? Read on!

24. The weakest element was speculative land pricing. We have cited over-subdivision, enough to support 50,000 people when there were at most 4,000. The market was bound to fall in any credit pinch. Recall the extreme sensitivity of speculative land prices to interest rates. Current cash flow was "overcapitalized," in the common expression, meaning the price-to-earnings ratio of land was extremely high, and correspondingly dependent on easy credit.

25. Much publicity went to President Jackson's "Specie Circular" of May 1836. After that, the Federal Land Office would not accept bank notes for public lands, except from banks that settled their balances in specie, and except from bona fide settlers. Apparently there

were only a few of those: in 1837, sales from the Federal Land Office dropped to 3.6% of those in 1836.[11]

The Land Office had been selling mainly to speculators, financed by "wildcat" banks that printed their own notes. Jackson demanded "specie," a term of the times for gold and silver. He was either tired or apprehensive of getting burned by wildcat banks. He did continue to accept bank notes from banks that settled in specie.

Too much has been blamed on this episode, because of its dramatic and political nature. If anything, it should have upheld the market for lands previously sold, and may have had that intent. It meant federal lands were held off the market. It did undercut many wildcat banks, thus helping create a shortage of cash in frontier areas. We will see, however, that world banking was about to collapse anyway. We will also see from the Illinois case that banks depended heavily on the collateral value of lands already sold, more than the prospect of lending on lands not yet sold.

26. In January 1837 President Jackson began distributing the surplus to state governments, as authorized by Congress six months earlier. This staved off crisis for a few months, causing the cycle to have a double peak.

27. In May 1837 New York banks suspended specie payments. New York had its own problems, of a similar kind. New York City, despite its advanced age, had never previously developed anywhere near its potential, partly due to the aristocratic “patron” landholding system that aborted development of its Hudson Valley, plus the New England orientation of settlers who developed the upstate Mohawk Valley.

    This was New York's first great boom, and it went as wild as Chicago, and fell as hard. Perhaps it went wilder: it had the misfortune of a good credit rating. For a few years before 1837, 90% of the cost of government in New York City was spending on new streets, financed by local improvement bonds. After 1837, its speculative land values melted away like snow in the April sun.[12] Buffalo, at the west end of the Erie Canal, also had a wild ride.

    New York banks were also under pressure from England. When we were discovering canals, they were discovering railroads, with similar results. Chicago's crisis, like most crises, was a small scene of a vast worldwide drama.

    Suspensions swept the south and west. At the end of May, Illinois banks suspended specie payments.

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[11] There was a double peak in some measures. President Jackson's Specie Circular of 1836 halted federal land sales in 1836. In 1837, Congress and the president began distribution of federal surpluses to the states. This revived local investment for a while. Thus, the peak is usually described as 1836-37.

[12] The same happened to dozens of small towns in the Mohawk Valley. The case of Auburn, New York, is documented in detail by Philip Cornick, *Premature Subdivision and its Consequences*.

A general liquidity crisis followed. People scrambled to convert real goods into cash. Converting normal provisions into cash is an everyday occurrence: loans on such collateral are "self-liquidating." On the other hand, converting huge volumes of real estate into cash is extraordinary, and cannot be done. What resulted was total collapse of sales. Demand dropped but asking prices held. The result: sales (measured by deeds recorded) fell like a stone. Cf. Southern California, 1989-93.

28. Subdividing land came to a complete halt, 1837-43.
29. Asking prices for land held until mid-1839. Then, finally, they dropped by 75% overall, and 90% on the most speculative fringes. 1842 was the nadir, when most construction everywhere came to a complete standstill.
30. The Illinois state bank foreclosed on lands but could not sell them. It failed in 1842. Many marginal wildcat banks failed earlier.
31. Indiana and several Southern states declared bankruptcy, repudiating their state bonds, ruining their credit for years to come. (This severely weakened the Confederate states in the Civil War.)
32. The tide of migration ebbed back east. Chicago's population fell; houses lay vacant.
33. Revival began around 1844, leading to another peak and crash in 1857, following nearly the same patterns.

"When will they ever learn?" could have been written much earlier, and probably will play again. Make sure you, at least, learn now. From 1987 to 1990 I had students study this material, and asked on the final if they saw any danger of its happening again now. Almost everyone answered "It can't happen here." Thus, most people get caught up in the mass delusion. Be you, rather, the rare one who learns from history! In time!