Financial and Credit Cycles—Generic or Episodic?

*by Allen Sinai**

Introduction

The paper by Cantor and Wenninger is largely a descriptive analysis of the 1989-92 credit cycle, its characteristics, and the process. Because of a pronounced, prolonged reduction in the growth of credit, widespread complaints by potential borrowers, and anecdotal evidence that credit has not been available, the behavior of credit during this period is a subject for study. Cantor and Wenninger seek to determine whether the episode is best depicted as a credit slowdown, credit crunch, or something uniquely different.

The authors examine and analyze data on credit growth and the supply side of lending, draw comparisons with prior situations of credit restraint, and try to determine if and how this latest episode fits previous models of the credit cycle. They conclude with a scenario model of the credit cycle and credit crunches that describes interactions between finance and the economy through a stagewise series of characteristics depicting the process

The paper makes a number of worthwhile and useful contributions by analyzing what happened to credit during the period, why, and at what institutions The authors home in on the role of banks, stressing this essential element of the credit-supplying process. In addition, considerable attention is paid to the role of the bank regulators, a possible cause of a crunch in lending from the supply side. Useful data are presented that measure credit availability, including borrower surveys (from the National Federation of Independent Business), lenders' surveys (the Senior Loan Officers Opinion Survey conducted by the Federal Reserve Board), and information on standards of creditworthiness for various types of loans (Senior Loan Officers Opinion Survey) These data provide valuable information on whether a credit crunch might have occurred and when, and are a future source for monitoring the presence of a crunch

But the paper is wanting in demonstrating how this latest episode fits in with others and relates to endogenous credit cycles, despite conclusions that "the credit cycle phenomenon. .appears to have contributed significantly to the recent period of recession followed by weak recovery" and that "the credit cycle model outlined here is general enough to be consistent with the view that the credit cycle is an inherent feature of our financial system "

It is this aspect of the paper that I wish to focus on, since the episode, when viewed over the time frame of 1987-91, does seem to show the same underlying processes that have characterized all financial cycles. By focusing on one aspect of the credit cycle—credit growth and the role of banks in supplying credit during 1989-90, a definite contribution in a descriptive historical sense—the authors fail to emphasize the essential ingredients of the credit, or financial, cycle that are germane to business cycles As a consequence, the historical account of the credit slowdown and the comparison with past episodes are too limited. The more general character of these financial events and processes is not captured The systematic and interrelated nature of financial and real economic phenomena thus cannot be fully appreciated and understood

A definitive theme of the Fisher (1933), Minsky (1975) (1977), Eckstein-Sinai (1986), Sinai (1976) (1992), and, recently, Benjamin M. Friedman (1989) work on credit crunches and financial crises has been the systemic, endogenous, and generic-like nature of these episodes which, if so, should make them subject to characterization within a coherent framework

Whether the credit slowdown in the United States from 1989 to 1992 was an isolated incident or part of a generic business cycle process is a matter of considerable importance, not just for the study of the business cycle and its causes, but also for monetary policy As long as each episode of this sort is viewed as isolated and disconnected, monetary policy may hold back and not respond in any particular way, awaiting further information and events If, however, an episode is thought to be part of an endogenous business cycle process, recognizable and systematic, monetary policy might be practiced differently, perhaps more efficiently, during a credit slowdown; in particular, it might move more quickly to reduce interest rates, always a key to reversing or cushioning the negative economic effects

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from a credit crunch process

The conclusion of Cantor and Wenninger that "the phenomenon of credit cycles, as outlined here and as experienced in the recent past, must figure importantly in any realistically eclectic theory of the business cycle" is essentially correct In addition, the observation that the phenomenon may be universal (my word, not the authors'), "a conspicuous factor in many other countries, including the United Kingdom, Australia, Japan, and some Scandinavian countries," is well taken.

Japan, in particular, has been in a financially fragile state, with its economy overwhelmed and thrust into a Western-style recession through a crunch process that was preceded by a boom and rising inflation, a tight monetary policy, high and rising interest rates, asset deflation and debt-deflation, speculative finance, negative effects from disappointed expectations concerning profits and incomes, balance sheet deterioration, weakened and overleveraged financial institutions, a credit slowdown, a credit crunch, and interruptions in the uses of funds for spending by households and business A similar situation may also be occurring in Germany, where a severe recession has emerged after a prior boom· high and accelerating inflation, a tight monetary policy, high interest rates and an inverted yield curve, asset deflation, deteriorated balance sheets, and disruptions of expenditures in the private sector—all characteristics of a crunch process

The German situation owes much to the onetime, but permanent, inflationary and recessionary shock of unification and the particular tight exchange rate relationships set by the European Monetary System (EMS) High interest rates in Germany, through the EMS grid, have spread to other European Community countries, causing economic weakness and asset deflation whether or not a given country was suffering from too much inflation. To relieve the situation in Europe, either Germany has to lower interest rates a lot, with other countries following, or countries in the EMS must drop out to freely pursue stimulative domestic policies, or, at least, realign currencies

Credit crunch, credit slowdown, or both?

Cantor and Wenninger appear to think that this last episode was both different from and similar to other credit cycles, indicating that it played a role, but not decisively so, in the recession and unprecedented long period of weakness in the U.S. economy from 1989 to 1992, that there was no financial crisis as in other episodes, and that generally the episode broadly fits the credit cycles described in Fisher (1933), Minsky (1975), and others

This ambiguity is confusing, since if the episode did broadly fit the pattern of other credit cycles, then the preconditions leading up to the slowdown or credit crunch (Eckstein and Sinai 1986) and events such as financial crises (Minsky 1977) should have been present. And if so, the financial factor should have been decisive in the downturn (Sinai 1992).

During 1987-90 the conditions of a crunch process appear to have been evident. There was rising inflation, strong loan demand, accumulating debt, much speculation and speculative finance, a tighter monetary policy and rising interest rates, increased financial instability and credit risk, and eventually an inverted yield curve Subsequently, there were disappointments in expectations concerning incomes and the profits and cash flow of business, strains on financial institutions, and disappointing tax receipts at the federal, state, and local government sector levels Asset deflation and a debt-deflation occurred. Failures, bankruptcies, and loan losses became quite pronounced, especially in the thrift and banking industries and the numerous examples cited in Cantor and Wenninger's paper All of these are characteristic of crunch episodes. Some conditions were very pronounced, especially heavy borrowing and rising debt, increased debt service burdens, speculative finance in commercial real estate, and leveraged buyouts (LBOs) The real estate boom, wave of LBOs, surge in the stock market, and Crash of '87 represented the result of speculative bubbles and busts, all part of the financial business cycle.

The authors are right in noting the systematic and repetitive nature of the latest episode and that it resembled others on "a general level," but wrong in dismissing or downplaying the presence of any financial crisis. There are numerous examples of "financial crisis" type of events, many mentioned in the Cantor-Wenninger paper itself. These include the collapse of the thrift industry and the federal government bailout that ensued, numerous bank failures, more defaults by commercial paper issuers in 1989 and 1990 than ever before, bankruptcies of several major airlines, the greatest number of business bankruptcies since the 1930s, the stock market crash of October 1987, the collapse of the junk bond market after the financing of United Airlines failed in October 1989, and the collapse of the commercial real estate market

The system reaction and adroit management by the Federal Reserve cushioned these events so that no cataclysmic disruption in the flow of funds occurred But they certainly were crunch-like in nature, generically similar to other situations in crunch periods, and thus contributed, probably in a major way, to the stagnation and recession of 1989-92

As to whether the financial factor was decisive in the downturn, how could it have been otherwise? The Federal Reserve followed an anti-inflationary monetary policy from 1986 to 1989, except for a onetime interruption after the stock market crash. Rising interest rates, declining growth in the money supply, and the slowdown in the growth of credit were signs of the monetary tightening. The burden of debt and debt service rose sharply over the period, in part from the increases in nominal interest rates engineered by the central bank. The inverted yield curve that followed was a crunch characteristic, with its significance being the financial pressure on financial institutions and corporations stemming from high-cost, short-term financing and from credit rating downgrades. Wide spreads between corporate bond rates and U.S. Treasury yields were also characteristic of a crunch, and so were the wide spreads between lesser rated and higher rated corporate securities

In the Eckstein-Sinai (1986) terminology, this episode *was* a Crunch Period, followed by a crunch and recession in 1990-91 The generic nature of the process seems quite clear and the financial factor was quite decisive in the downturn.

Whether the credit slowdown of 1989-92 was a crunch or contained one is a question asked by Cantor and Wenninger The terms are often used interchangeably The credit slowdown, which the authors interpret as referring to both demand and supply, and the credit crunch (interpreted as supply-side only) do not appear distinct, so that what the authors are trying to identify and associate with past episodes becomes hard to disentangle

Credit slowdown in Cantor and Wenninger's terminology could have been the period leading up to the crunch, a period (Crunch Period in Eckstein-Sinai) with certain measurable characteristics Or it could have been the period and process correlated with the recession. A "crunch" is the crisis, event, or set of events that culminates the prior stage, whatever it is called, and helps precipitate the recession. The authors are vague on the dates of the "flow" concept of the credit slowdown and the "stock" notion of a credit crunch A credit slowdown also can occur during the recession following a crunch, since credit demand normally plummets at such a time In the paper, it is hard to tell the difference

A credit crunch can be indicated as one phase in an endogenous process that occurs as part of a credit or financial cycle There are many dimensions to the credit cycle process, described by Fisher (1933) as debt-deflation, Minsky (1975) (1977) as systemic financial fragility, or Sinai (1976) (1992) and Eckstein-Sinai (1986) as a Crunch Period

The data in the tables and charts depicting the credit slowdown appear to be largely an effect of the 1990-91 recession and weak 1991-92 recovery, not a crunch, with the crunch occurring in late 1989 and early 1990, and a Crunch Period, defined by Eckstein-Sinai (1986) as the time period and processes leading up to a crunch and recession, occurring from 1987 to 1989.

The slowdown in credit growth and the decline in the ratio of debt to GDP were principally in 1990-91 (Tables 1 and 2, Chart 11). Profit margins at banks, measured by the prime rate less the federal funds rate, were lowest before and during the early stage of the recession and then higher late in the recession and recovery (Chart 3). Spreads between lesser rated and higher rated fixed income securities were highest in the recession (Charts 19, 20, 25). Loan losses, delinquencies, bond defaults, and credit rating downgrades were highest in 1990-91 (Charts 10, 13, 14, 15, 17, 18).

The credit cycle and the crunch

In a modern economy with complex, sophisticated, and leveraged financial systems, the availability of credit and finance in varied instruments and across different financial or quasi-financial intermediaries can serve to extend and amplify economic expansion, allowing stronger and more extended activity than otherwise would occur Important linkages from money, credit, and finance to the real economy exist, among them the credit channel from lending institutions and other financial intermediaries, interest rates, through their effects on the cost of capital, marginal borrowing costs, and debt service; balance sheet positions, including the net worth of households and business, the financial positions and credit risk of households, businesses, and financial institutions; debt and debt service burdens, and in this last episode, the exposure of government at all levels because of large budget deficits. These linkages also operate to depress economic activity or to extend a period of weakness if interrupted or in a negative configuration for an extended time. Still to play out this time are potential financial instabilities in the international economies, present to a greater extent than at any time since the 1930s, mainly from a financially fragile Japan but probably also from Europe.

There is a generic character to credit crunches. Each episode shows different superficial characteristics, but the fundamentals remain the same. Notions of possible uniqueness or of major differences from earlier episodes probably arise from a lack of understanding or detailed study of the financial process and interactions with the real economy.

What are the dimensions, categories, or characteristics of a Crunch Period, the process leading up to and including a crunch or financial crisis and usually preceding a recession? What follows covers many of them and is more extensive than the discussion in Cantor and Wenninger's paper. The authors describe a number of characteristics of the process, but in a limited way focused on a shorter time span surrounding the crunch

First, there is a *boom* before the financial trouble, with economic growth well above potential and growing excesses that set up for stock adjustment and cyclicality in the real economy and financial system. Some characteristics are full or near-full employment in the labor, product, and financial markets. Some examples in the 1987-89 period were the overbuilding in real estate and the accumulated real estate debt, heavy purchases of cars and houses and the associated indebtedness of households, and the debt excesses from LBOs in the corporate sector.

Second, *inflation* rises, accelerating at a rate too high for policy objectives, a situation that existed in 1986-89. Inflation does not have to be rising, just higher than the policy target. Inflation-induced spending and financial activities also tend to be operating, adding to the inflationary thrust and growing financial leverage and risk. Certainly, this was present in the late 1980s, observed by the central bank and moved against by monetary tightening.

Third, *speculation, speculative finance, and leveraged balance sheets* emerge, engendered by the expectations associated with the boom and high inflation. This also was clear in the late 1980s, especially in the stock market (1987), certainly in the real estate and real estate speculative boom of the mid- to late 1980s, in the wave of LBOs and junk bond issues (1987 to 1989), and in the aggressive lending and risk-taking at thrifts and banks (1986 to 1989).

Fourth, *the Federal Reserve* has a pivotal role. Tight money always has been a key characteristic of the Crunch Period and crunch (Sinai 1976, pp. 255-56). This was the case from 1986 to early 1989, whether measured by interest rates or by the monetary aggregates. The Federal Reserve was mainly targeting a reduction in inflation. The real economy weakened in the process. Cantor and Wenninger do not deal with the role of the Federal Reserve in the credit slowdown and do not discuss it in their account of the ten-stage credit cycle and crunch scenario. How can any descriptive or analytical credit cycle framework omit the central bank?

Fifth, *expectations disappointments* occur in relation to profits and cash flow, incomes, jobs, and tax government receipts, often stemming from the effects of tighter monetary policy. These disappointments magnify the negative feedback from the prior excesses that have built up.

Sixth, *increasing financial risk and financial instability occur by sector*. Households, business, financial institutions, and sometimes the government show worsening financial positions, evidenced by deteriorating financial measures such as rising debt ratios and heavier burdens of debt service relative to income or cash flow. Such developments can be all right if the asset value of collateral holds up, but are not so when there is an asset deflation.

Seventh, *balance sheets deteriorate*, with declines in net worth and worsening financial positions for households and businesses. Balance sheet shock probably was one of the main sources of trouble for the economy in the late 1980s.

Eighth, *rising credit risk occurs and lender restraints come into play* through the financial intermediary system or from markets becoming cautious. For example, more caution in the commercial paper market may exacerbate an economic downturn, further slow the economy, disappoint expectations regarding cash flows and incomes, and worsen balance sheets.

Ninth, *asset deflation* is present in the equity and fixed income markets but can also set in for real assets, eroding the asset value of collateral and making a bad situation worse.

Tenth, *market reactions* play a role. Financial and real asset markets react to the Crunch Period process, first the approaching crunch and then, when it comes, the actual crunch—a reaction that can be seen in interest rates, stock prices, and the exchange rate, often with distress selling intensifying price declines.

Typically, short-term interest rates are rising from Federal Reserve tightening and large credit demands. Long-term interest rates also rise with inflation fears, heavy financing, and possibly distress sales of assets to raise cash to replenish the disappointing cash flows, income, and profit flows. Yield spreads between risky and safer assets widen. Declines in stock and bond prices worsen balance sheets, particularly the value of net worth, limiting spending and hurting economic activity further. Finally, real asset prices generally also decline.

Eleventh, *financial institution problems* arise. Losses of deposits through various sources of disintermediation limits lending. This is usually where the focal point of the crunch lies. Loan losses and credit risk cause a retrenchment by banks and other financial intermediaries, which adds to the economic decline. Banks always have a special role in this stage and, through the credit channel, worsen economic activity.

Twelfth, *failures, bankruptcies, and rating downgrades* appear and can become pervasive, in turn feeding back to limit spending and lending because of increased credit risk.

Thirteenth, there may be an *international dimension*. If economies are weak and enough trade in goods, services, and in real and financial assets is going on, a ripple effect to the external sector can emanate as well.

This scenario has some overlap with Cantor and Wenninger's scenario and covers many of the generic characteristics of the process leading up to a crunch.

Credit growth tends to rise in the earlier stages of the process, with heavy financing occurring in order to maintain prior spending and speculative activity and to cover debt service and even asset deflation. There is a credit slowdown near the crunch and after the crunch into the recession.

Some specific comments

There are a few specific points, questions, and comments to be made on Cantor and Wenninger's paper.

In the paper, it is not clear that the analysis of the credit slowdown is an analysis of a crunch or crunch process. The many and varied dimensions of the crunch or crunch process are really not highlighted.

Worth repeating is that the role and actions of the Federal Reserve are notably absent from the authors' scenario of the credit slowdown—a serious omission, especially given the relation of central bank policy to bank liquidity and other channels that affect real economic activity and, in turn, credit demand Described in detail is the regulatory side of the central bank—important in this particular episode, but a minor element in a picture that contains all the dimensions of a crunch process.

When a more general view is taken of the credit crunch process, the set of forces that gave rise to the slowdown in credit is probably not very different from those generating other crunch episodes In post-World War II history, these have evolved over fairly long periods of time (Sinai 1976, Eckstein-Sinai 1986)

The information on the trends and sources of credit by depository, nondepository bank, and thrift categories is very useful, especially the attention and detail paid to the role of bank and bank lending The providers of credit are changing quite significantly Indeed, there is now more direct access to market financing than ever before, with intermediaries bypassed more and more frequently Securitized lending, a relatively new development, is a major reason

The authors mention that "some elements of speculation were present in the corporate, equity, and real estate markets" This surely is an understatement, given the Crash of '87, real estate depression, the LBO and junk bond waves of boom and bust, and the sizable asset deflation that occurred

There may not have been a single precipitating failure or bankruptcy, as the authors note But here, too, the role of failures and bankruptcies as an effect and cause of the credit slowdown is too much underemphasized. The thrift crisis, loan downsizing and consolidation, bank losses at depository institutions and insurance companies, and corporate and personal bankruptcies were the most serious and numerous since the 1930s. These failures, bankruptcies, and downsizings not only underscore the generic nature of the process, but also highlight its severity. Disintermediation was not present in the traditional way—that is, market imperfections that limit deposit rates and permit the cost of funds to rise without limit were not a factor in this episode—but perhaps disintermediation was present for other reasons—Federal Reserve stringency on reserves, leakages from M2 and M3 into other financial assets, and of course the thrift crisis, which caused a huge outflow of thrift deposits and limits on lending. Cantor and Wenninger could have looked more at deposit flows and the data on them in order to investigate this point

The authors stress high inflation expectations as a source of the excesses that, in turn, led to adjustments. I am not sure that Chart 1, which shows actual ex post real interest rates, supports this point. The chart implies that inflation expectations are extrapolative rather than rational or model-consistent. Rational or model-driven expectations on inflation may be significant in the real rates. At least, observation of how financial market participants form inflation expectation suggests this. The chart begs this question.

Yield spreads as a systematic part of a crunch have always been noticeable. Cantor and Wenninger point to high positive spreads between loan rates and costs, but the crunch years identified in Table 4 usually have low or negative spreads as a result of inverted yield curves, which did occur in this episode.

The 1987 stock market crash was perhaps part of the crunch process—an overvalued asset market, collateral for some, and a factor in the financial positions of households. Then there was the 1989 mini-crash in the market, also part of the asset deflation process Deflation in real estate prices began as early as 1989. These appear to be the first step in a long period of asset deflation that was an integral part of the process in this episode, but the authors do not really analyze it in this manner

Conclusion

Cantor and Wenninger's paper is a valuable addition to the chronicles of specific episodes of credit restraint and credit crunches in the U S economy and financial markets It provides much useful information, data, and insights on the credit slowdown of 1989-91 It does little, however, to increase understanding of the generic and systematic nature of the credit cycle and credit crunch process that characterizes the American business cycle.

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