

FRIEDBERG'S

COMMODITY & CURRENCY COMMENTS

Friedberg Commodity Management Inc.



Volume 23, No. 2 March 24, 2002

Darkening skies

The US is at war against a phantom enemy. No one knows where or how it will end, though the omens are not auspicious. By most accounts, Operation Anaconda did not go well. Worrisomely, this is only the first real encounter with an enemy who zigs and zags, and plays hide-and-seek while forcing Allied forces to waste billions of dollars of ammunition on deserted mountains and perhaps innocent civilians. In the meantime, its Afghan allies, led by a group of corrupt and bloodthirsty warlords, become increasingly less dependable.

Local conflicts are multiplying, and US involvement is growing. Somalia, Yemen, the Philippines, and now even Colombia ("Aid to Colombia prompts fears of US 'mission creep,'" blazes the headline in *Financial Times* of March 18). Iraq is being targeted, and a strike before the year is out is almost inevitable.

While the goal may be worthwhile – the eradication of evil and the defense of liberty – the implementation may bleed the US to death *first*. By fighting wars that cannot be won and spreading itself too thin, the US is in danger of losing the very liberty that it is trying to protect. (Revamping and strengthening a totally emasculated CIA, in our humble opinion, may still be the best and cheapest way to go).

As it is, new requests for spending authorizations are already on the increase: Yesterday, \$20 billion, today another \$20 billion, tomorrow who knows? As it is, yesteryear's budget surplus of \$127 billion has already turned into a year-to-date deficit of \$69.4 billion and a full-year budget deficit that will easily exceed the \$46 billion deficit estimate. In the meantime, the US central bank is at its most expansive mode in 30 years. Monetarism may be dead (as our good friend Vince deCaën explains nearby), but is there anyone who seriously doubts that inflation is caused by too much money?

The war effort will soon consume *meaningfully* real resources and slow down productivity. Just in case you didn't know it (the media, the Fed, and Washington don't), not all increases in national income are equal: Inventory accumulation and speculative buying can and will (temporarily) lift GDP – as it is doing now – but at the cost of more inflation and less real growth. Inevitably, the spent forces lead to a new bust.

Core inflation and the Cleveland Fed's median inflation are still running at close to 4% per annum, despite widely circulat-

ed predictions of sharply reduced rates on the back of miraculous productivity gains. In this wartime environment, it will not take much to ignite a hard-asset bubble, lower the demand for money and financial assets, and set the US off on a truly uncontrollable inflationary episode.

At the same time, given the fragility of the US financial system, it may take forever for the Fed to re-take the 300-basis-point reduction from the emergency Fed Funds rate that pre-

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vailed in the aftermath of the Russian default/LTCM crisis in 1998, let alone the 475-basis-point reduction engineered over the past 15 months.

While the gap between the 1.75% Fed Funds rate and first-quarter nominal national income (probably 5%-plus) is the highest in modern times, we are certain that the Fed will find other crisis along the way that will make it

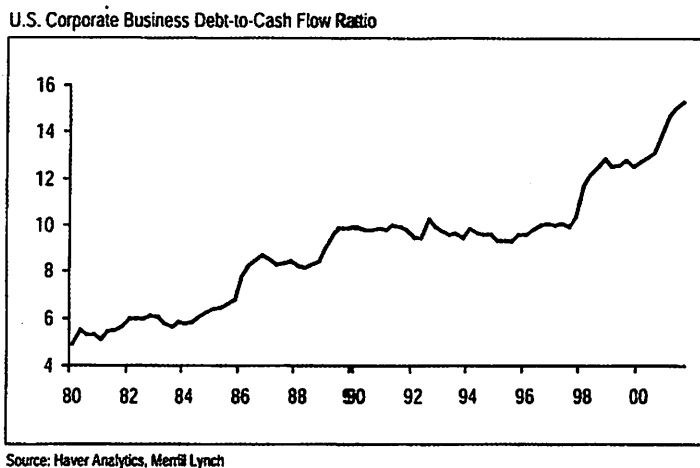
impossible or "imprudent" to tighten further. Indeed, in the face of soaring consumer and corporate debt (look closely at Charts 1 and 2), the Fed may find itself forced, after a very brief and largely ceremonial uptick, to ratchet rates down towards zero.

Gold and TIPS (see Steve Hanke's article, which follows) are looking better all the time.

Chart 1



Chart 2 – Corporate balance sheet strains



US ECONOMY

TIPS, safe and sound

By Steve H. Hanke

In recent testimony before the US Senate Alan Greenspan, chairman of the Federal Reserve Board, announced that "an economic expansion is underway." And recent data tend to support his claim. Indeed, with revisions in the GDP data, it appears that the US economy contracted only in the third quarter of last year. Such a one-quarter dip doesn't even qualify as a recession. Moreover, the unemployment rate (a lagging indicator) fell slightly in February to 5.5%, and productivity was revised upward to an annual rate of 5.2% at the end of last year, the third fastest in 18 years.

If Chairman Greenspan's claims are correct, it will be the second time since the Russian default and the Long-Term Capital Management (LTCM) collapse of 1998 that the Fed has pulled our chestnuts out of the fire. All this tends to do nothing more than reinforce the Keynesian notion that fine-tuning can save us from business cycles.

Just consider the recent fine-tuning story in a bit more detail. In the fall of 1998, the Fed moved decisively to avert a potential systemic crisis arising from the Russian default and the collapse of LTCM. It slashed interest rates by 75 basis points, to 4.75% from 5.5%, in a little over one month. US growth immediately responded by surging to a 6.7% annual rate in the fourth quarter of 1998. Then, in anticipation of a

Y2K problem, which never materialized, the Fed engineered a huge liquidity injection in 1999. This fueled the final stages of an extraordinary investment-led boom.

The game appeared to be over by the time the terrorist attacks of Sept. 11 rolled around. But again the Fed reacted with decisive speed. It cut interest rates in half, to 1.75% from 3.5% within one calendar quarter. This 50% reduction was by far the largest in 40 years. Now it appears that fine-tuning has saved the day and averted a second potential disaster in little more than three years.

I am not at all certain about the durability of the recovery, however. I fear that the fine-tuning story is literally too good to be true, because it ignores the many lessons from Austrian economics.

The Austrian theory of the business cycle, introduced early in the last century by Ludwig von Mises and developed by F. A. Hayek, teaches us that central banks can (and often do) set short-term interest rates below where the market would have set them. When this occurs, it sets economies off on unsustainable investment-led booms. These booms always end badly, with busts. The fine-tuning action of the Fed certainly set interest rates below market-clearing rates and produced a boom that was accompanied by imbalances, notably excess capacity. However, to date, we have not realized an economy-wide bust.

Another, perhaps simpler, way to view the Austrian business cycle is in terms of a profit cycle. Profits surge when the boom is in full gear. This occurred in 1999 and early 2000. But profits begin to wane as costs increase at a faster rate than revenues. When this occurs, investment comes to an abrupt halt, and the economy goes into a slump. The key to the cycle swing is, therefore, investment. Indeed, changes in investment are always the tail that wags the dog. Going back 40 years, swings in profits and investment have always driven the cycle, with consumption usually holding rather stable.

Since 1960, consumption (peak-to-trough) has declined only by 0.1% on average during recessions. And as far as consumption is concerned, the current slowdown has been no exception. However, in a typical recession, the Fed has started to fight inflation by increasing short-term interest rates. Not this time around. In consequence, investment in housing has hardly missed a beat, whereas this interest-rate-sensitive sector typically declines (peak-to-trough) by 19%. And while business investment typically declines by 6%, this time around the decline has been more than double the norm. The current slowdown has, therefore, been somewhat atypical. An Austrian-type bust hit business investment hard. However, the negative knock-on effects have been somewhat muted.

Just what does all this portend for a durable recovery? While growth might well reach 2% to 3% this year, I doubt that a sustained boom is in the cards. Indeed, there is plenty of room for disappointments. The near-term good news is centered on the fact that businesses are starting to build inventories after a considerable drawdown. In the short-term, this inventory rebuilding will obviously give the economy a boost and ensure that the numbers look pretty good, at least for the first half of the year. However, this effect is temporary and not the stuff required for a sustained recovery.

Consumption and investment in housing will probably

continue to hold their own. But a boom in these sectors is unlikely. In spite of low interest rates, households' debt service levels are very high, and household balance sheets are strained.

Business investment – which has plunged during the slowdown and has the most room for a bounce-back – will not be restarted anytime soon. Unlike inventory adjustments, it takes a long time to work off excess capacity that is left in the wake of an investment boom. No matter how low interest rates are, business investment simply won't materialize until excess capacity is worked off. And strong growth and prospects for higher profits are the only things that will accelerate a workoff of excess capacity.

At present, even under a rosy scenario of 2% to 3% growth this year, it is difficult to imagine a turnaround in business investment. As far as a sustained recovery is concerned, this is bad news, because investment is the tail that wags the dog. Indeed, the combination of excess capacity and squeezed profit margins (and prospective margins) cast a cloud over the optimism recently expressed by Alan Greenspan.

After the boost from inventory rebuilding, it appears that the US economy is set for modest growth, at best. Indeed, it is still not out of the woods. If yet another LTCM or Sept. 11 shock hits the fragile recovery, the Fed will not have much ammunition left. In that case an Austrian-type bust will finally become apparent and a double dip will occur.

Either way you cut it – a rosy scenario of market growth or a possible double-dip – those Treasury Inflation Protected Securities (TIPS) look pretty good. Real yields remain high at about 3.4% and are poised to come down, not go up.

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THE EURO

Europe's travails

By Steve H. Hanke

The euro was launched with huge hype at US\$1.17 on Jan. 1, 1999. Since then (and contrary to the expectations of most pundits and analysts), it has taken a beating. The only surprise is that anyone was surprised.

We can construct a synthetic euro by appropriately weighting the currencies that made up the euro. Looking at this synthetic currency's long-term trend, we see that it has been losing value against the dollar since the mid-1970s. In other words, the euro's post-launch weakness is simply the continuation of a pattern, not a one-off event that will soon be reversed. Confirming this, the euro has been on a downward trend against the yen and the Swiss franc for nearly 30 years and against the British pound for the past 20 years.

Why is the euro "soft"? Go to the fundamentals. Labor and product markets in Euroland have been and continue to

be highly regulated, and Europeans struggle under confiscatory tax regimes. Europe is in the grips of the welfare state. Consequently, capital, industry, and jobs have moved out of Western Europe into more business-friendly environments.

The euro's prospects aren't bright. Aided by the clarity of the French language, France's Socialist prime minister, Lionel Jospin, made things very clear recently when he stated that "it is the duty of the left to invent new regulations." It doesn't take a rocket scientist to conclude that Euroland's economy is no match for that of the US and that the euro's long-term sinking trend will continue.

Perhaps the best way to think about fiat currencies in a world of floating exchange rates is to remember that capital flows are much larger and dominate trade flows. And capital is attracted to where it earns the highest return. As capital has

been liberated and is not subject to controls, it is not surprising that it flows to the US and finances (overfinances) the US current account deficit. It is also not surprising that in our "globalized" world the dollar has remained strong relative to the euro. After all, the rate of return on capital in the US exceeds Euroland's by about 2.5%.

* * * * *

To get a better handle on Europe's travails, there is no better place to start than Germany, and to place Germany in the context of the rapidly changing global economy.

The German economy lacks the robustness and vitality of the Erhard era. It's now in the middle of the European pack in terms of employment, growth, and productivity. And its competitive position in world trade – like the rest of Europe's – is weak in cutting-edge high technology. If that wasn't bad enough, Germany lacks the incentives that would spark investment, entrepreneurial activity, and innovation.

The rise in German and European unemployment and the sluggish growth of employment is not a cyclical phenomenon. Traditional business cycle analyses of this problem are largely irrelevant. The problems of European unemployment are structural and have been created by a whole network of adverse incentives built into the German and European economies. Keynesian policies designed to stimulate aggregate demand have little role to play in improving the performance of the German economy.

Many features that govern the modern economy are different from those that governed the world economy 30 years ago.

First, markets are more open, and there are many more countries actively competing in world trade. This produces volatility and at the same time opportunity.

Second, as a consequence of the explosion in information and communication technology, trade itself has become more customized and trading partner-specific. There is an increase in competition in quality and specialization in high-end goods. The demand and supply for diversity has increased on a world scale.

Third, both because of the volatile nature of trading relationships and the burgeoning nature of world technology, new opportunities are being created at an accelerating pace. Consequently, a premium is now placed on individuals, firms, and entire economies that can respond rapidly to new trade and technology opportunities. Rule-bound and traditional ways of doing business and managing firms have become obsolete. Those firms or individuals that do not adapt perish, and institutions that retard adaptability retard economic growth.

The increased volatility and new economic order creates a major problem for the welfare states of Europe. Indeed, an economic order that was adapted to a more stable and predictable economic environment of the 1950s and 1960s has become dysfunctional in the world economy of the late twentieth and early twenty-first centuries. It is not just that the cost of labor to firms is too high in Germany. It is also that the cost of adjusting to economic change and opportunities is high as a result of the inflexibility of labor market and product market institutions. This is a

problem with long-run consequences that threatens the vitality of the German economy in the future.

Change and volatility in trading create opportunities for wealth creation for those who can flexibly adapt to it. This is a major theme in Austrian Economics. As Ludwig von Mises put it in his classic treatise, *Human Action*: "The driving force of the market, the element tending toward unceasing innovation and improvement, is provided by the restlessness of the promoter and his eagerness to make profits as large as possible."

The European welfare states, with their burdensome taxes and regulations designed to redistribute income, dull and distort the entrepreneurs' incentives. Consequently, the welfare state clashes with the realities of today's new economic order. Indeed, in the current economic order, the insights gleaned from the Austrian economists are even more powerful than they were when first discovered.

To put all this into perspective, consider the following. The tax wedge between gross labor costs and net wages is almost 35% in Germany and 45% in France. The US wedge is about 22%. And assuming no bureaucratic delays, it takes only seven days to start a new business in the US, whereas, in Germany and France, it takes 90 days and 66 days, respectively. Talk about red tape!

And that's not all. The "too-big-to-fail" mantra is alive and well in Europe. Just look at the way in which the Schroder government has handled the bailouts for the Phillip Holzmann construction group and Leo Kirch's media empire.

The cutting edge of German economic thinking, as articulated by the minister of finance Hans Eichel in February, included an embrace of the so-called Tobin tax on foreign exchange transactions and restrictions on short-selling. These, of course, are being promoted in the interest of saving the world from the volatility spawned by speculators. Perhaps Eichel's pronouncements were a smokescreen to cover up the fact that an audit of Germany's labor office revealed it had cooked the books and that 70% of the statistics it compiles were faulty, suggesting that Germany's true unemployment rate is probably significantly higher than the reported rate.

To compete in today's economic order, the welfare state vision must be put in the dustbin and replaced with an Austrian free-market vision. This required change is simply not in the cards held by European politicians.

* * * * *

If that were the end of the European story, it would be bad enough. However, there is more to the story, and it, too, spells more structural troubles down the road. These troubles are tangled up with demographics, employment ratios, and productivity. The growth of output in an economy is the sum of the change in the working-age population, the change in the proportion of the working-age population that works, and the growth in output per head.

The working-age population in Euroland is projected to remain stable until 2010. Then it starts falling. This decline becomes pronounced after 2020. The employment ratio, which is largely a function of taxes and tax wedges, will at

best be stable in Euroland. Indeed, it will probably decline as the ratio of dependents to the working-age population increases, requiring tax increases to finance state pensions and other welfare-state benefits. Productivity growth rates in Euroland have declined from about 4% annually in the 1950s and 1960s to only about 1% per annum.

Combining these three factors, Euroland's output growth will continue to be weak until about 2010, and will stagnate from then until 2020. After 2020, output will probably decline. Immigration, higher retirement ages, or radical changes in the welfare state could ease the constraints on

growth. However, the easing of each of those constraints will bring their own political problems and costs.

The combination of a new economic order with Europe's welfare state love affair and its demographics is a deadly cocktail. Any way you cut it, both the short-term and long-term picture look pretty gloomy.

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THE EURO

The official view

By Vincent deCaën

An unattributed article in the January *ECB Monthly Bulletin* (Jan. 24, 2002, pp 41-53) provides a useful summary of our previous articles on exchange rate theory (see our Oct. 1, 2001, Dec. 3, 2001, and Jan. 28, 2002, issues). The article reviews, as we did, the usual suspects for determining the exchange rate: domestic and foreign prices; relative productivity growth (Balassa-Samuelson effect); terms of trade; interest rate differentials; and other fiscal variables (such as government spending).

The article also reviews the inherent difficulties in studying such determinants, including codetermination, "stickiness," and nonfundamental (read "irrational") factors. A further difficulty, when working with *real* vs. *nominal* exchange rates is how to factor out inflation. The euro-specific problem is dealing with proxy or "synthetic" euros before 1999. It is difficult to discount the independent evolution of legacy currencies before the introduction of the euro.

The report also summarizes the basic approaches to the exchange rate mechanism that we have reviewed in our previous notes. Readers will recall that there are two basic approaches. The monetary approach is characterized by the assumption that foreign assets are *perfect substitutes* for domestic assets. The exchange rate, therefore, is reduced to the

supply and demand for money, and the long-term equilibrium rate is constant.

In the newer portfolio-balance approach, inflation and interest rates render domestic *versus* foreign assets *imperfect substitutes*. The supply and demand of other assets besides the financial becomes important, and risk premia must be taken into account. (Empirical support for this approach, however, does not appear much better than for the original monetary approach.)

It is often hoped that if unsuccessful *quantitatively*, at least such models might offer *qualitative* insights into forex mechanics. However, various models and studies point in opposite directions, and so do not even admit of qualitative interpretation. How strong are the variables? How do they interact? *Wer weiß?*

The article does, nevertheless, offer a very useful summary of the recent academic attempts to peg the long-term equilibrium rate of the euro. The range of rates is US\$1.03 to US\$1.45, but US\$1.15 to US\$1.20 appears to be the consensus value. Coincidentally, this consensus value of US\$1.15 to US\$1.20 is also the rate at which the euro was originally launched. But it is certainly nowhere near today's rate of about US\$0.87!

JAPAN

Moving towards a systemic collapse

We expressed hope in our last comments (Jan. 28, 2002) that Japan would see its way clear to resolving the banking crisis by simply biting the bullet. This is not to be. The Bank of Japan has been cajoled into printing money with abandon, largely ignoring its self-imposed current-account target of ¥10-¥15 trillion. As a result, the monetary base grew an astronomical 27.5% over the year earlier. Even a malfunctioning banking system can expand money supply on such an injection. In fact, broad money supply rose an annualized 5%

for the month, well above its recent 2.7% pace.

Clearly, the authorities have chosen inflation over reform. Unfortunately, if they succeed, the crisis will deepen; long-term bond yields, now at 1.62% levels, will collapse, taking down with them whatever is still left standing of the insurance and banking sectors. As large depositors continue to take protection, banks will become illiquid and will be forced to close. The process will come to a head when deposit insurance is finally removed from current accounts

(before the end on next fiscal year), though it is quite probable that markets will accelerate the process.

Since the authorities insist on burying their heads in the sand, it is not improbable that we will witness an inflationary explosion accompanied by collapsing forex and bond mar-

kets, to be followed by foreign exchange restrictions (with a view to "trapping" domestic depositors) and a deposit freeze (*à la* Argentina's *corralito*).

Once again, gold and other precious metals are looking better all the time.

OIL

On a collision course

Despite Opec's dramatic cutback, nearby supplies remain plentiful, as attested by the generous contango in West Texas Intermediate's first two positions. Instead, oil prices have firmed up on jitters over a US attack on Iraq. Ironically, a surgically precise removal of Saddam Hussein, if such a thing is possible, would be accompanied by a collapse in prices as Iraq rejoins the Opec 10 at higher rates of production.

The non-Opec bloc continues to gain market share. The Former Soviet Union, now represented by hungry private

producers, has failed to cut exports and is even less likely to carry out its pledge in the present environment of moderately firm prices.

Sooner or later, the Gulf producers will discover the error of their ways. When they do, they will attempt to regain market share and displace competition at any cost. Short-term pain for long term gain, as they say. While we cannot be too far from a price war, timing a sale is tricky.

Sell on the sounds of a cannon?

THE ECONOMY

On the specter of stagflation

By Vincent deCaën

Fourth quarter to fourth quarter, M2 and MZM increased approximately 10 and 20 percent, respectively. M2's growth was two-thirds more than its average during the previous two years, and MZM's more than twice its average. Such rapid growth has led some analysts to express concern that the past two decades' progress toward low, stable inflation may be at risk. ... Sustained money growth at 10 percent per year is not consistent with long-run price stability.

*—Anderson, Federal Reserve
Bank of St. Louis (2002)*

The growth rate of the American money supply declined through the 1980s and came to a halt by the end of 1992. From a rate of approximately 0% at the beginning of 1993, the growth rate of the American money supply (M2, M3) has mushroomed back to double digits (Chart 3) The 10-year moving average bottomed out in 1997 and has since started creeping upwards as well (Chart 5).

According to monetarist theory, as the epigram from the St. Louis Fed highlights, this must presage a spurt of US inflation. Combined with the threat of a continued contraction in the global economy, we would then be facing the worst of all possible worlds: widespread stagflation.

This note evaluates a collection of recent monetarist con-

tributions, with special attention to the important paper by McCandless and Weber (2001), which serve as timely warnings about the expanding American money supply and its inflationary potential.

1. Background

1.1. The Quantity Theory of Money

The Quantity Theory of Money assumes that there is difference between the real *versus* nominal quantity of money. By "nominal quantity" is meant some count of monetary units (it is never clear what to include here as "money," or how to weight different aggregates, and debate degenerates to the arcane metaphysics of "moneyness"). By "real quantity" is meant purchasing power, the amount of goods and services that can be had for a given amount of money (practically, real quantity is measured by a standard, weighted basket of goods and services).

Quantity Theory also assumes that agents desire to hold a definite real quantity of money. Such desires are the source of the theory's dynamic. An increase in nominal money balances will spur spending. Such spending could be met by increased production; alternatively, failing increased production, spending will bid up prices. In either case, resulting inflation will bring real balances back into equilibrium. Change in the system, then, is *supply-driven* (changes in the nominal quantity of money); one can also imagine demand-driven change (changes

in the real quantity of money desired).

This dynamic is captured by the equation $MV = PT$. On the right-hand side we have a transfer of goods and services (volume of trade (T) multiplied by prices (P)). On the left-hand side we have a transfer of money (the quantity of money (M) multiplied by its turnover or *velocity* (V)). The Quantity Theory assumes that $V (= PT/M)$ is constant; in practice, V is treated as the statistical discrepancy in empirical studies.

(There is some doubt, however, whether V is sufficiently stable, at least in the short run, to make the targeting of M a practical monetary policy. Part of Keynes's critique in 1936 was that demand for money, his "liquidity preference," is highly unstable during economic crisis.)

1.2. Monetarism

Monetarism is essentially classical, *laissez faire* economics revived on the foundation of this Quantity Theory of Money. Crucially, on this view, the money supply is positively and proportionally related to prices (as we saw, $MV = PT$), modulated by economic output and the k-factor (or $1/V$, the inverse of velocity – assumed, as noted above, to be stable).

Generally, monetarists are staunch libertarians; however, the monetarist policy recommendation is government intervention to regulate the money supply and thereby the value of money. To obtain noncyclical, noninflationary growth, therefore, the government through its central bank simply needs to contain the growth of the money supply. (This also implies that budget deficits, funded by borrowing from the banking system, must be eliminated.)

The view that Opec price shocks, for example, or rising grain prices, or militant unions pressing their wage demands, or military spending in Southeast Asia without the tax increases to fund it, had anything to do with inflation is naïve, therefore, on this view. It might be true, in the very short term, that such factors had some impact. But in the long term, inflation can only be, as Dr. Milton Friedman famously asserted, always and everywhere a *monetary phenomenon*.

Economic growth, on this view, should equal the *difference* between monetary growth and inflation. If, to take a concrete example, the UK economy was expanding (1980 through 1986) at an average of 3% while sterling-M3 was growing at 17%, we would expect inflation to be running at an average of 14% (in fact, inflation in this case was running at an average of 3% through this period).

Empirical disconfirmation from the 1980s (as well as from the 1960s – see Chart 5), as illustrated by this concrete example, discredited monetarism among American policymakers (see, for example, Hafer & Wheelock, 2001). Similarly, the numbers in the 1990s do not show "a perfect correspondence." But such deviation is considered "transitory" and "not that unusual" (Dwyer & Hafer, 1999).

Still, it might be premature to dismiss outright the signals from the money supply as uninformative. There is certainly some sort of relation between the growth of the money supply and other economic variables. In the short term, variables are often loosely related, but a broad, decades-long statistical cor-

relation between money supply and inflation is well-established. Monetarism, in any case, views inflation as "sluggish," and lags can be "long and variable".

2. Summary of papers

2.1. McCandless & Weber (2001)

McCandless and Weber offer a study that boasts of more monetary measures over more years and in more countries than any previous study, and conveniently summarizes previous studies as well. It is a valuable paper. Of the 110 countries surveyed, they also create two important subsamples for testing: the OECD (21 countries) and Latin America (14 countries).

The authors conclude on the basis of this extensive survey that the rate of growth of the money supply is highly correlated ("almost unity" in their words) with the rate of inflation (magnitude of correlation 1:1). While correlation says absolutely nothing about causation, they do suggest that the results do support a hypothesis in which monetary growth drives inflation rates (e.g., monetarism).

2.2. Hafer (2001)

Hafer offers a brief overview of monetarism, and laments the inattention to the theory in favor of traditional manipulation of the short-term interest rates and Keynesian demand management. The paper serves as another warning about the dangers of recklessly expanding the money supply beyond the demands of real economic output and the very real upward pressures on prices. He concludes with the standard policy recommendation of the monetarists: curb the growth of the money supply, and otherwise show some humility about the ability to directly and precisely manipulate aggregates in the short term. (Cf. Dwyer & Hafer, 1999.)

2.3. Hafer & Wheelock (2001)

While the piece is focused on the St. Louis Fed as a key player in developing monetarism, it also offers useful general background. The article traces the development of short-term policy and the empirical contradictions through the 1980s, quickly discrediting the short-run targeting of monetary aggregates in the US. The overconfidence in conducting short-term stabilization should not distract us from the role of money in long-term economic explanation.

2.4. Barsky & Kilian (2000)

The authors outline a monetarist explanation of the stagflation experienced in the 1970s. Traditionally, stagflation is explained in terms of an adverse shift in the supply curve ("cost shocks"), which lowers output while raising prices. They offer a second explanation in terms of a one-time, endogenous shock to the growth of the money supply accompanied by contractionary responses of a central bank ("monetary shocks"). They rely heavily on the explanatory power of delayed or "sluggish" inflation, citing earlier work: Agents are slow to revise their inflation expectations in the face of large increases in the growth of the money supply.

2.5. Dewald (1998)

The author offers an important supplement to the other papers. He focuses on the "longer-term monetary relationships," employing 10-year moving averages for M2, inflation rates, and nominal and real GDP (Chart 6). It is true that in the "noisy short-term," variables sometimes appear unrelated; but over decades, the relations are in fact established. He concludes (1) that real GDP does not move together with the other variables and (2) that growth of the money supply matches inflation over "extremely long cycles" (Chart 7).

3. Brief critique of McCandless and Weber (2001)

3.1. Sampling

Despite the great fanfare of exceeding previous studies, sample is still limited. This study of inflation covers only the years 1960-1990. We should ask, are these decades a representative sample with respect to inflation? Maybe not: The sample might be biased. The period of postwar reconstruction and Keynesian demand management has been the age of inflation. (Dewald's 10-year moving average indicates that this period is pretty much unique for the matching growth rates of money and inflation.)

This criticism, however, might be met by a monetarist as follows. We live in an unprecedented era, the era of irredeemable paper money: a *terra incognita*. In the good old days, we had specie and redeemable banknotes. This was an era of automatic balancing of international payments and little power for monetary authorities. But since 1971 (the final breakdown of Bretton Woods), we have gotten by with "fiat" money. Governments can and have turned on their printing press, often with disastrous results. Government, through their monetary authorities, are in command. If, therefore, we operate in unprecedented circumstances, the foregoing critique is of no effect.

3.2. Studies of contraction

It is also interesting that McCandless and Weber cite, in passing, two studies of periods of sharp contraction (colonial USA and the hyperinflationary Europe of the 1920s) and that in these cases, rates of money growth *exceeded*, "perhaps significantly," the rates of inflation. Indeed, the outliers in their own study show this same marked tendency: Monetary growth can "significantly" exceed inflation.

What might we then conclude in light of these additional studies? I conclude that the causal nexus is much more complicated in a modern economy – certainly neither direct nor unidirectional. Further, the suggestion in light of this additional data is that the growth rate of the money supply generally acts as an *upper limit* for inflation rates: Inflation can equal but not surpass the monetary growth rate – just as the river cannot rise above its source, or just as the pace of evolution cannot exceed the natural rate of mutation. To return to our concrete example above, there was the *potential* in the UK for up to 14% inflation, even though other factors must have been keeping a lid on it.

4. Comments on the 10-year moving average

Historically, as Dewald (1998) convincingly shows, the *long-run* trends of monetary growth, inflation, and nominal (but crucially not *real*) economic growth do tend to move together – his "extremely long cycles." Let us grant this much. In this light, then, the misguided attempts to corral the money supply in the short term were acts of hubris (cf. Hafer & Wheelock, 2001). Nevertheless, it certainly does appear that monetarism is supported empirically in the longer term (decades or generations).

There is, however, a disturbing but relevant observation to make on the 10-year moving averages reported by Dewald (Chart 7 again). The *trough* of the synchronous, precipitous declines in the growth rates is associated with modern economic disasters: 1929 and the subsequent world war; and 1950 and the disturbing postwar slump. Indeed, as part of the critique of Keynesianism, monetarists have long pointed out that the money supply was allowed to contract by fully one third (!) between the years 1929 and 1933. It may be more accurate to conclude that monetary contraction is a necessary and sufficient condition for severe depression.

A similar synchronous, precipitous decline in the 10-year averages seems to have troughed at the end of the 1990s. That being the case, we are getting mixed signals from the monetarist studies.

5. Deflation or inflation? a mixed picture

What then should we make of conditions in the US that are reminiscent of Japan in 1991? Has inflation vanished in the global economy? There are still those calling for a "double dip." The US GDP price deflator has recently plunged into negative territory (Chart 8). Unit labor costs have been falling in the past two quarters. Inventories may be running down, but there is no real pent-up demand. The consumer is hanging on, some would say "recklessly," but there is excess capacity and capex has yet to materialize. The US current-account deficit looms overhead like a guillotine, and the strong dollar isn't helping. With its entry into the World Trade Organization, the Chinese dragon will also inject deflationary pressures. Crucially, as Berner points out, consumer inflation expectations are at historical lows: "If consumers expect inflation to remain low or decline, their behaviour will help make the prophecy self-fulfilling."

Still, there are some inflationary signals. Housing prices in Toronto, New York, and especially Vancouver suggest there is inflationary pressure in the non-traded-goods sector. This appears to be true also of services, especially American health-care. As Berner indicates, "the sky's the limit." In the traded sector, energy prices may be on a rebound, and there is noise about drought and bad crops in the coming year. And don't forget that war can be inflationary if not properly financed. Republican foreign policy suggests an expanded military Keynesianism and represents an inflationary threat.

But even if an expanding money supply *were* inflationary, *ceteris paribus*, we should imagine that things may *not* be

equal. There is, for example, that k-function (the inverse of velocity variable V). What if the monetarists are in fact mistaken about the assumption of *stable velocity*? The inflationary potential of the money supply could be held in check by a rising V (a rising demand for money). This is probably the reasonable explanation for the failure of inflation to keep up with the expanding money supply that we currently observe in the major economies: Agents have a growing "liquidity preference." As long as investors want to hold money balances (or even financial assets), the mismatch could extend indefinitely.

6. Conclusion

It would be very unwise, however, to discount the disconcerting warnings emanating from St. Louis and other monetarist enclaves, despite the din of the deflationary chorus.

Fact: The growth of the American money supply is taking off into the blue.

Fact: There is a consistent statistical correlation between the growth rates of the money supply and inflation – at least in the longer term.

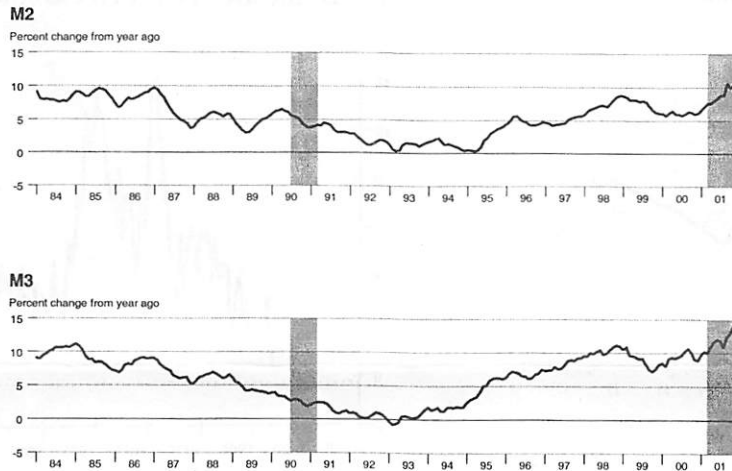
Suggestion: "Sluggish inflation" can take time to set in, depending on how long it takes for market agents to wake up and smell the coffee.

Possible scenario: Just as outlined in Barsky & Kilian (2000), the planets could align to produce the stagflation of the 1970s.

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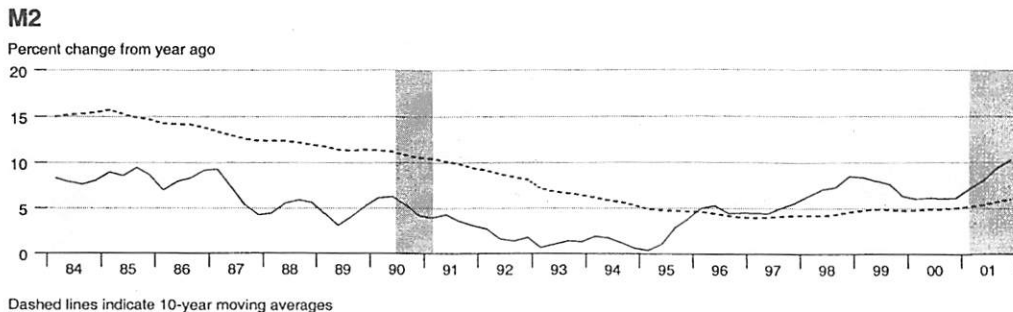
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Chart 3



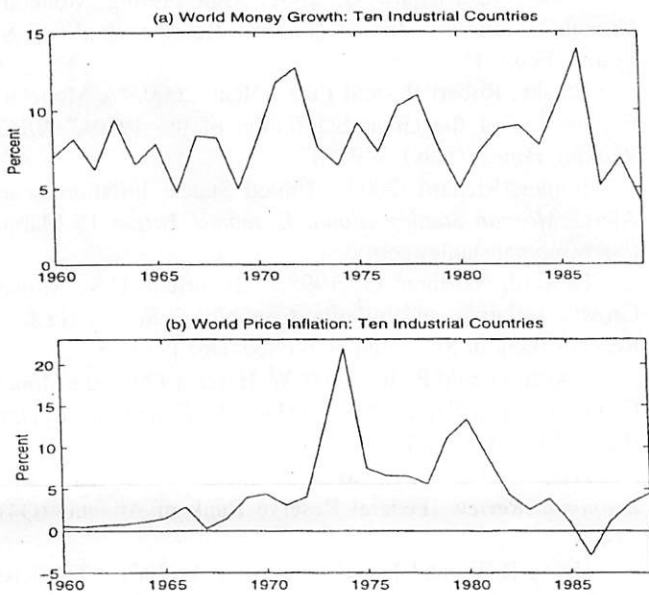
Courtesy Federal Reserve Bank of St. Louis, *Monetary Trends* (Feb.)

Chart 4



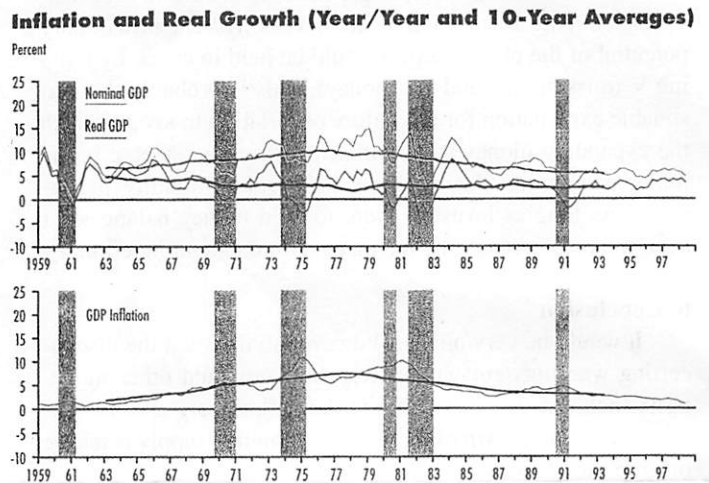
Courtesy Federal Reserve Bank of St. Louis, *Monetary Trends* (Feb.)

Chart 5



Courtesy Barsky & Kilian, Fig. 2

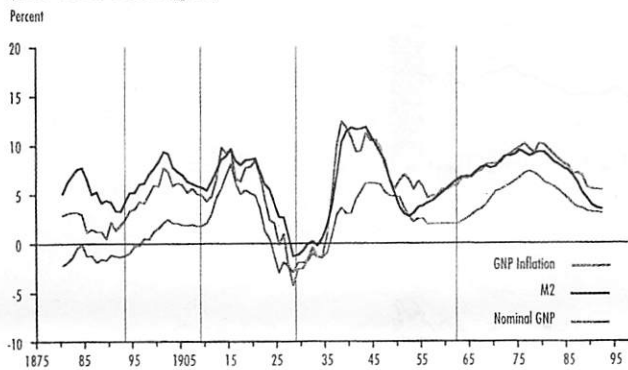
Chart 6



Courtesy Dewald, Fig. 2, p. 16

Chart 7

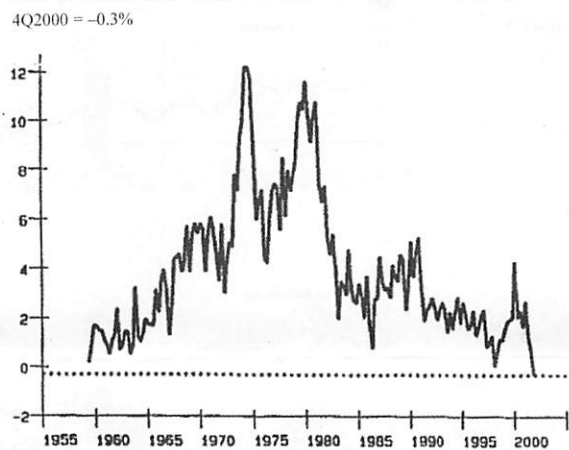
M2, Nominal GNP Growth, and Inflation (10-Year Averages)



Courtesy Dewald, Fig. 4, p. 18

Chart 8

US Domestic GDP Price Deflator (Q/Q % A.R.)



Courtesy ISI Group

INTEREST RATES**What are swap spreads saying?***By Neil Rackoff*

Swap spreads and swap-spread curves are sometimes used by economists as predictors of future economic activity. Monetizing the usefulness of those predictions, though, may prove to be difficult, if not unsatisfying.

Let's begin by defining what swap spreads and swap-spread curves are.

Simply put, interest rate swaps are a tool that allows banks and corporations to match their assets and liabilities more closely. For instance, if a bank has short-term floating-rate liabilities (such as savings accounts) but long-term fixed-rate assets (such as loans), it can "swap" long-term assets into short-term ones. Likewise, companies can use swaps to convert fixed-rate debt (which investors might prefer) into floating-rate debt.

The swap rate reflects, among other things, the willingness of the market to accept corporate debt rather than government debt. Swap spreads are calculated by taking the difference between the swap rates and government bonds. The spread is a measure of the risk premium that compensates investors for holding the risky corporate debt rather than risk-free debt. The swap-spread "curve" graphically plots swap spreads over time.

An IMF Working Paper, published in January 2002, entitled *The Corporate Spread Curve and Industrial Production in the United States*, by Jorge A. Chan-Lau and Iryna V. Ivaschenko, posits that because the prices of financial assets, including the well known Treasury yield curve, are useful at conveying information on the market's expectations about the future, swap-spreads must therefore contain some information about the future too. They endeavor to find a correlation of spreads to industrial production.

In their paper Chan-Lau and Ivaschenko point out that recent studies have cast doubt on using the Treasury yield curve as a predictor of economic growth in the US. The reason for that dislocation might be the consequence of one of two factors: On the supply side, the government's reduction in new debt issues (until recently), because of stronger fiscal performance; on the demand side, the increased "safe-haven" status accorded Treasuries, the result of turbulent financial markets during recent years. Therefore, they suggest using agency bonds as the default-free benchmark against which to measure swap spreads.

Their results show that a steepening of the swap-spread curve precedes declines in industrial production. This idea is consistent with their previous work (Chan-Lau, Ivaschenko, 2001), which posited that the shape of the swap-spread curve seems to be a predictor of either improving or deteriorating economic conditions, in much the same way that the Treasury yield curve had been used. That is, a steepening of the swap-

spread curve indicates the market's expectation of future credit deterioration and increasing corporate default risk, both of which are characteristic of a recession. On the other hand, an inversion or flattening of the curve perhaps would indicate improving economic conditions.

Assuming the validity of Chan-Lau and Ivaschenkos' idea, we would like to share an example application of their theory from an article that appeared in the June 10, 2000, edition of *The Economist*, entitled "Danger signs: The swaps market is behaving very oddly. Why?" This article questioned the then seemingly-strange rise in swap spreads that had peaked in the spring of 2000.

When *The Economist* article was written, swaps-spreads had peaked to "alarming" levels. Citing researcher James Bianco, *The Economist* argued that two things traditionally dominate the pricing of interest-rate swaps: interest rates and general credit concerns. For most of the 1990s, swap rates went up and down with interest rates, pretty much in tandem.

In June 2000, however, it appeared to Mr. Bianco that markets were pricing in not only general corporate credit concerns but also concerns over the size of the swaps market, thus questioning the financial intermediaries themselves. The market itself had become so large that the wide spreads indicated some heavy-duty concerns over risks to the entire larger financial system.

Finally, *The Economist* asked why there were concerns about the banking system in the first place, especially in America. The answer: The banking system was, they said, taking ever more risk to generate the returns demanded by shareholders. Bank lending was growing by a 10% annual rate (in 2000), and property lending by 13.5%, the highest rate since 1989.

But in the most amazing statement of all, *The Economist* wrote, "[deals] are accelerating [because] after nine years of growth and few defaults, banks' backward-looking risk models tell them that lending is fine business [!]."

The Chart 9 shows the 10-year swap spread from the summer of 1998. We can see that in the spring of 2000, spreads were at their peak (at even a higher level than during the LTCM crisis of the fall of 1998). Chart 10 shows a comparison of the shape of the swap-spread curve between today and late spring 2000, the spring of 2000 being much steeper than today.

Without much effort, we could say (with the benefit of hindsight) that according to Chan-Lau and Ivaschenkos' theory, the wide spreads of 2000 and the shape of the swap-spread curve at that time were predicting the next 1-1/2 years of negative equity returns, the telecom and tech bubble crash, and maybe Enron. Perhaps then it was more than a few lonely stock market bears that were fed up with the days of 100+

price-earnings ratios and bank loan officers offering loans at 4 to 5 times EBITDA.

Looking at the charts of today's swap-spread market and swap-spread curve, we are thus tempted, if Chan-Lau and Ivaschenko are right, to conclude that the data indicate improvement ahead. The caution, though, is in monetizing this idea. Certainly, all would agree that swap-spreads and swap-spread curves are only one of the pieces to the puzzle.

Let me conclude with a word of caution. It seems to us that if spreads are really useful as a leading indicator of future

economic activity, it follows that spreads should also display some predictive power at the margin, i.e., as in high-yield debt versus Treasuries or AAA's. However, Martin S. Fridson, Chief High Yield Strategist for Merrill Lynch, states that he finds no statistical basis to assert that spreads of high-yield debt versus Treasuries are a good leading indicator of future economic activity, citing the inconsistent relationship over the years.

Neil Rackoff is President of Friedberg Mercantile Group, Inc. in New York.

Chart 9 – US\$ swap spread - 10-year

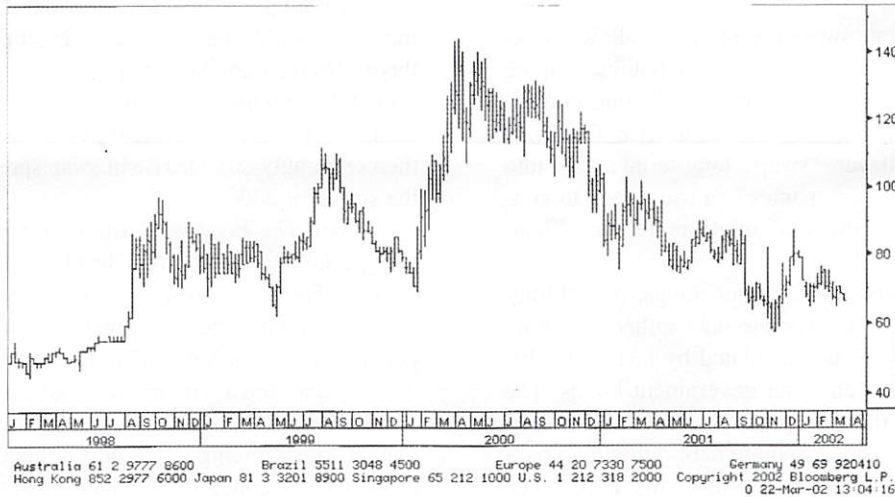
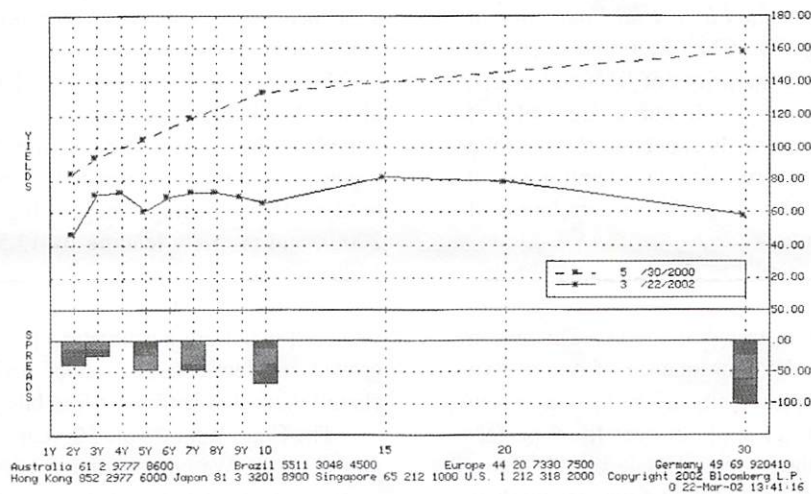


Chart 10 – Yield changes for US\$ swap spreads



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