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The Great Debate:
Inflation, Deflation and the Implications for Financial Management

BY CARL STEIDTMANN, DAN LATIMORE AND ELISABETH DENISON
> ILLUSTRATION BY YUKO SHIMIZU
As the economy bounces between recession and recovery, financial executives have to make a bet between whether the economy, their industry and their business will experience rising prices going forward or whether they will have to grapple with the balance sheet and operational effects of deflation. They will have to choose wisely as this has the potential of being a bet-your-business risk.

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Zero interest rate policy coupled with quantitative easing has produced the easiest Federal Reserve monetary policy in history. Inflation should follow. Credit destruction and deleveraging are inherently deflationary. Falling prices should be the order of the day. Unprecedented budget deficits have typically preceded a rise in inflation. Massive expansion of industrial capacity in China and India should put downward pressure on global prices. Improvement in the Chinese and Indian standard of living is putting upward pressure on global commodity prices and is inflationary.

From an economic perspective, there would seem to be compelling signals for a forecast in either direction. This keeps economists fully employed but offers scant comfort to business leaders facing what may be an unprecedented environment.

As the economy bounces between recession and recovery, financial executives have to make a bet between whether the economy, their industry and their business will experience rising prices going forward or whether they will have to grapple with the balance sheet and operational effects of deflation. They will have to choose wisely as this has the potential of being a bet-your-business risk. The decision is made all that more difficult by the simple fact that few senior managers have ever had to deal with either high inflation or deflation in their careers. Except for those who spent some time in Brazil or Argentina in the 1980s or Japan in the 1990s, disinflation has been the reality. The future may be very different.

THE CASE FOR INFLATION

Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output …

Milton Friedman - The Counter-Revolution in Monetary Theory (1970)

Central banks around the world are printing money at unprecedented rates. Nowhere is that more true than in the United States where, in the past year, the most significant economic policy development was the Federal Reserve’s announcement that inflation was less than their target rate.

For the first time in its nearly 100-year history, the Federal Reserve is on record as favoring higher inflation. Even more to the point, they are in a position to do something about it. As this is being written in the fall of 2010, the Fed is engaged in a process of quantitative easing in which they print money and use it to buy U.S. government debt in the hope that the expansion of the money supply will spark inflation, increase credit creation and induce both businesses and consumers to spend and borrow more.
The Transmission Effect of Quantitative Easing

The path for quantitative easing to work runs through the currency and commodity markets. In the 1930s, the U.S. government sought to raise the price of gold as a means of breaking the grip of a deflationary cycle that had started in the mid-1920s. In the fall of 1933, the U.S. Treasury raised the official price of gold from $20.67 to the market price of $29.82 and began to buy gold at slightly above market prices.

The result was a sharp drop in the value of the U.S. dollar and a general rise in the price of commodities. In early 1934, the price of gold was fixed at $35 an ounce by the Gold Reserve Act. A rising price of gold and other commodities reversed the deflationary spiral of the previous eight years and gave a sharp boost to the economy that lasted until the recession of 1937-8.

Despite a weak global economy, the dollar price of gold and other commodities has been rising. Copper, industrial commodities and grains have all experienced sharp gains, with the still rapid pace of growth in commodity poor countries like China and India adding to global demand for commodities. The rise in commodity prices gives a lift to commodity related businesses and also gives a boost to inflation. In the early 1970s, a rise in commodity prices preceded a broader rise in consumer prices for the next ten years. Rising commodity prices coupled with a falling dollar are again signaling inflation.
Monetary policy is not the only economic mechanism driving inflation. Record government deficits are also playing a role. Over the course of the past three years, U.S. federal government deficits as a percentage of GDP have increased significantly. Forecasts by the Congressional Budget Office project massive increases in government deficits well into the future. In the last three years government debt as a share of GDP has risen from 35.1 percent to 62 percent, with CBO estimates suggesting that by 2020 that figure will rise as high as 87 percent.

Government debt creates inflationary pressures in at least three ways. First, rising government deficits represent an increase in aggregate demand over supply. While small increases in the deficit have little impact on price levels, large increases in deficits can have a big impact. Second, by shifting resources from the more productive private sector to the public sector, government spending can reduce productivity and increase the bias in the economy towards inflation. And lastly, the greater the debt as a share of GDP, the greater the temptation a government has to inflate its way out of that debt.

**Regulatory Drag**

New regulations, regardless of their target or intent, impose additional costs on business. Those costs eventually get passed along to consumers in the form of higher prices. In the late 1970s, the political push for deregulation was one of the key policy changes that contributed to the disinflationary environment of the next 20 years. Over the past two years we have seen a reversal of that policy transformation.

In 2010, Congress passed and President Obama signed two massive pieces of
legislation that will significantly alter the regulatory landscape for every industry, every business and every individual.

The 1000-plus-page Patient Protection and Affordable Care Act creates more than 100 new federal programs and bureaucracies. The full impact of the bill will not be known until the hundreds of new regulations associated with the bill are written, in some cases litigated and then enforced. By expanding coverage, eliminating lifetime caps on policies and prohibiting price discrimination or refusal of coverage based on pre-existing conditions, the cost of health care insurance is likely to go much higher.

The 848-page Dodd-Frank Wall Street Reform and Consumer Protection Act creates 243 new regulations in addition to 17 new offices, agencies or boards. The startup cost for the bill was $19 billion. New regulations will cover consumer credit, the trading of derivatives and capital standards, among other things. These changes may increase costs for financial service providers. These costs will likely have to be passed on to the final consumers of credit in the form of higher prices.

From a monetary, fiscal and regulatory perspective there is a strong case to be made that the U.S. economy faces higher, and potentially significantly higher, inflation in the years ahead.

Europe, too, is facing regulatory changes – though the focus is different. As in other industrialized nations, empty state coffers owing to the past recession are accelerating the pace at which governments try to push the costs of healthcare and pension systems toward the private sector. In Germany, health insurance contribution of companies and individuals—which was lowered during the crisis to ease the burden—is being raised back to precrisis levels. However, universal healthcare and patient protection has been a standard in the “social market economies” of continental Europe for some time – so sweeping changes like those in the United States will not be necessary.

On the other hand, there are likely to be major regulatory reforms related to securing the stability of the monetary union in Europe. The crisis has highlighted the risks of having independent fiscal policy setting in the framework of a single currency area. Control and adjustment mechanisms are likely to be much tighter in the future. In the context of the discussion of inflation versus deflation, however, the effort of governments in Europe to bring finances back into line with Maastricht criteria is seen more as a deflationary danger.

**PLANNING FOR INFLATION**

Inflation plays out on both the balance sheet and the income statement of all businesses and households. Anticipating the future effects of inflation can work
to the advantage of the savvy financial executive. The fundamental principle to be followed in inflationary times is that cash is guaranteed to lose value over time while the physical assets will gain in value. Incorporating this principle into all financial transactions becomes critical for success.

The Balance Sheet

Since inflation erodes the value of cash, firms should reduce their working capital and shift assets toward inventory or longer-term fixed assets. The obvious first step is to become more efficient in the use of cash, reducing cash and other financial assets. This will require a major shift in current financial management sentiment. Over the past 20 years, cash and financial assets as a share of total assets have soared: Chief financial officers have viewed cash as a safe haven against uncertainty. Cash in an inflationary environment, in contrast, is a depreciating asset and should be economized as much as possible as was the case during the period of rising inflation between 1965 and 1982. Inflation will encourage all businesses to reduce accounts receivable and increase accounts payable.

The role of inventories must also change. Billions of investment in just-in-time inventory management over the past two decades has enabled more and more businesses to operate with less and less inventory. Inventory-to-sales ratios for the broad economy have steadily declined. In an inflationary environment, inventories are an
appreciating asset. Accumulating strategic inventories will become a major shift in inventory management.

Capital investment will become more challenging. While the nominal cost of capital will rise in an inflationary environment, so too will the future inflated income stream from capital investment. Capital intensive businesses will want to buy tangible assets today with fewer dollars, rather than waiting to buy them in the future with more dollars. Inflation will help bail out poor investments and will make good investments even more lucrative.

Financial management will take on a large role in an inflationary environment. On the liability side of the balance sheet, debt becomes more attractive in an inflationary environment. Businesses should increase their leverage and consider issuing longer-term fixed-rate debt whose real interest rate will decrease as inflation increases. For multinational firms, borrowing in depreciating currencies while holding their financial assets in appreciating currencies will be a way to further leverage the balance sheet in an inflationary environment. Geographic location of assets will also become more important. For businesses producing for global demand, having assets in countries with depreciating currencies and higher inflation will be advantageous.

**The Income Statement**

From an income statement perspective, accounting for inventory using the FIFO method will be most beneficial, reducing the tax liability that can come from inflationary gains. Hedging future inventory price increases will become a common practice for a wide variety of different resources. Hedging will be done for both price as well as currency risk. The airline industry provides a prominent example, with some players having become adept at hedging their fuel risk. With the dollar declining in an inflationary environment, every business that depends on commodities or imported resources will need to hedge their price and currency risk.

Pricing becomes a significant challenge in an inflationary environment. Increasing prices can always be challenging, but in an inflationary environment it will become a requirement for success. Changing product size and packaging as a way of drawing attention away from price changes will become a common practice. Firms may also consider lengthening contracts with vendors to create some degree of certainty. Of course, maintaining the ability to increase prices to customers on a more frequent basis is a critical component of a go-to-market strategy.

Managing wage and salary costs also will become a more complicated task. With the dollar declining in value, the benefits of outsourcing will be diminished. Labor unions and even nonunionized workers will seek out cost of living
protections, which will institutionalize cost increases. At the end of the day, an inflationary environment requires a more nuanced understanding of the time value of money. Effective financial management becomes the key to operational success even at the expense of operational efficiency.

THE CASE FOR DEFLATION

Thus Inflation is unjust and Deflation is inexpedient. Of the two perhaps deflation is ... the worse; because it is worse, in an impoverished world, to provoke unemployment than to disappoint the rentier.

John Maynard Keynes (1923)

If excessive growth in the supply of money is the source of inflation, then excessive growth in the demand for money is the source of deflation. The lesson from Japan in the 1990s was that credit destruction was the key driver in both reducing the supply of money while at the same time increasing its demand. That same dynamic is now playing out in the U.S. economy.

A rising demand for money can be seen in the actions of banks, households and corporations. Over the past two years, these three sectors have collectively increased their demand for money by nearly $2 trillion. The rise in cash holdings can be attributed in large part to a strong rebound in corporate profitability coupled with high levels of uncertainty over the impact of recently passed health care and financial services regulation. Potential changes in the rate of future taxation of corporate income have also added to the uncertainty. Liquid assets at nonfinancial, nonfarm corporations in the United States have soared over $400 billion in the past year and a half.

For households, high levels of unemployment and fear of future job loss have added to their uncertainty. Household savings began to rise in mid-2008 as the recession deepened. While consumer savings can be volatile month to month, smoothed out over a 12-month period, household savings is up just over $450 billion over the past two years. This is the sharpest increase in savings in the post-World War II era. By increasing their demand for money, consumers have reduced their pace of spending, putting downward pressure on prices.

At over 14 percent of disposable income, the household savings rate in the eurozone is among the highest in industrialized nations. Maybe owing to its post-war experience and fear of hyperinflation, there is a clear preference for savings over debt on the continent. However, despite this fundamental commonality, there has been a divergence within the eurozone in the choices of private households in recent years: While countries at the fringe of the monetary union, particularly Portugal, Italy, Ireland, Greece and Spain, took advantage of free access to cheap
funds to pile on debt (and are now being forced to deleverage), the German household debt-to-income ratio has continued its steady decline; it now stands below 90 percent in comparison to almost 150 percent in the United Kingdom.
In the United States, cash accumulation is not the only source of deflation. Private sector deleveraging has been widespread over the past two years. From mortgage debt to consumer debt, from commercial and industrial lending to commercial paper, private sector indebtedness has seen the largest decline in the post-World War II era. The elimination of debt represents a decline in demand and a contraction the supply of money.

Since peaking in early 2008, private sector debt has declined by just over $3 trillion. Coupled with the increase in cash holdings, this dramatic shift in private sector balance sheets is dramatically contributing to deflation by increasing the demand for, while reducing the supply of, money.

Structural changes in the economy are giving deflation an additional boost. The explosive growth in labor productivity coupled with the still high levels of unemployment point to falling labor costs. As prices tend to follow labor costs, this combination will add to deflationary pressures in the economy as businesses take these costs out.

Business sector productivity growth peaked at 6.3 percent in early 2010 and has eased somewhat. At 3.7 percent, productivity growth is still well above the average for the past 30 years. While high productivity growth is keeping a lid on the demand for labor, high unemployment is giving a boost to supply.

For much of 2010, the unemployment rate averaged above 9.5 percent. Broader measures of unemployment that include discouraged workers and those working part time for economic reasons range as high as 17 percent. High levels of labor market slack will keep a lid on wage gains, reducing consumer purchasing power in the process and putting downward pressure on prices.
A final factor contributing to deflation is the low level of capacity utilization. Even with the recent rebound, capacity utilization remains at levels below those reached in most of the post-World II recessions.
PLANNING FOR DEFLATION

In many ways deflation is the obverse of inflation, driven by the fact that cash will be worth more in the future than it is today. Actors then have the desire to hold on to cash and defer purchases (since they can buy goods more cheaply in the future).

During deflation, then, holding financial assets is preferable to holding real assets. It is better to be a creditor than a debtor, if you assume that your debtor will remain solvent and that any collateral posted will hold enough value to cover the face amount of the debt. Cash as an appreciating asset is king.

There are, however, two key asymmetries with respect to inflation that pose fundamental challenges to managing during deflation. The first is that nominal interest rates cannot go below zero (no one would ever pay a bank to hold money for them!) The second key asymmetry is wages. During deflation, even wages that are flat in nominal terms will become higher over time in real terms. Going beyond that, to reduce nominal wages, is exceedingly difficult: They’re simply too sticky.

This ratchet effect poses perhaps the most difficult management challenge during deflation. Ultimately, the responses to sticky wages are to not hire in the first place (generally using temporary workers instead), reduce the work force through attrition or, more proactively, reduce wages. An especially pernicious consequence of deflation is that consumers and firms rationally defer spending because they
expect nominal prices of goods and services to decrease. Because spending is deferred, many individuals and firms will suffer some degree of financial distress, so the risk of defaults increases. As this spiral plays out, creditors, who should benefit from falling prices, may find themselves holding a defaulted asset. Even if it has a higher real face value, holding it through bankruptcy court is a pyrrhic victory.

So what are the financial levers that firms expecting deflation can pull? They’re essentially the opposite of what firms would do in an inflationary environment. Organizations should increase their working capital and reduce their holdings of real assets, including inventory (which will benefit from LIFO accounting).

They should reduce long-term borrowing and in general reduce the duration of their liabilities. Moving away from fixed costs to more variable arrangements would be prudent. Finally, diversifying the revenue and expense base by moving internationally can provide something of a hedge against domestic deflation. Increasing exposure to alternative currencies with higher real interest rates, particularly if there is a natural cash flow match, will be helpful in maintaining a decent rate of return on working capital.

From an operational perspective, deflation should prompt firms to increase their focus on operational efficiency, including improving their management systems. For firms with a solid financial footing, it can be a good time to protect market leadership as weaker firms feel the strain and potentially exit. They may find that they can strengthen long-term customer relationships by providing vendor financing.
(assuming, of course, that the borrower is creditworthy). Working creatively with both vendors and customers to structure innovative payment terms that are mutually beneficial can again fortify relationships. As purchasers of goods or services, firms should shift to shorter-term contracts that can be renegotiated when prices are lower. Unlike wages, prices can be negotiated downward, particularly when there are natural resets that occur at contract expiration dates.

Deflation presents asymmetric challenges that few who play in the economic environment of the developed world have ever had to contend with. Notably, negative real interest rates and sticky wages are unique. This can be a time for strong firms to improve their competitive position, gain market share and expand their global footprint.

**CREATING OPTIONS TO MANAGE UNCERTAINTY**

Whether the economy will experience inflation or deflation will remain an intense topic of debate. Regardless of what happens, business leaders will have to manage in a very different pricing environment than any they have experienced.

If a company is unsure whether inflation or deflation is next but wants to prepare nevertheless, there are certain common strategies that will stand it in good stead. While all of these ideas make sense in good times and bad, they become particularly relevant during times of uncertainty. All involve increasing future degrees of freedom by creating more strategic options for the firm.

The first requirement of operating in such an uncertain environment is to monitor changes in inflationary expectations. The Federal Reserve of Cleveland has a widely accepted methodology for tracking inflationary expectations. Such expectations tend to lead price movements and are a good leading indicator of future price movements. Within an industry or business there may be other leading price indicators. Business leaders may incorporate these into an economic dashboard that provides a sense of which way prices might be breaking.

The second strategy involves increasing diversification along a range of dimensions: funding sources and maturities, currency exposure, and manufacturing and selling destinations. This may also include being roughly neutral with respect to duration-matching assets and liabilities, while at the same time shortening that duration. When facing a broad spectrum of scenarios, more diversification reduces the volatility, or risk, associated with the range of possible outcomes.

Third, firms should be agile: Be prepared to respond quickly to changes in the macroeconomic environment, to take advantage of opportunities and to forge longer lasting relationships with customers and suppliers, relationships that will
have been tempered in the crucible of difficult and uncertain times. Rather than trying to lay risk off on others, consider sharing it with others. Those organizations that recognize that unprecedented times require unprecedented actions stand a better chance of success than those mired in the mindsets of previous experience. While none of us can predict the future, we can prepare ourselves to act more quickly and more nimbly in any one of a variety of scenarios.

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