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After a decade of deflation in Japan, things just *might* be turning for the better. Japanese bureaucrats in the Finance Ministry, the Economic and Fiscal Policy Ministry and the Bank of Japan have lost their legendary calm. They are pointing fingers at each other and scrambling for solutions. Two months ago, the Bank of Japan began buying 1 trillion yen of bonds per month to increase money growth. Last month the government tightened short-selling restrictions. Last week the BOJ added 27.7 trillion yen to bank reserves in one week. Because of these actions, the monetary base is 24% higher than it was six months ago. Last week's BOJ *Tankan* survey showed improved business confidence and February leading indicators suggest expansion.

It may be time to take these changes seriously and increase our exposure to Japanese markets.

As an economist and humanitarian, I think this is great news—deflation is terribly destructive. As an investor, however, I have to admit I am really going to miss this deflation. It made my job really easy.

Making money in the markets is hard work. You work to earn a dollar here, a dollar there, by hauling capital from one place to another to exploit temporary return differentials. But every once in a while, you find one so big that you can eat off of it for a week. In the case of Japan, it was more than ten years.

There are no investment strategies I am aware of that would have consistently beat the long US/short Japan strategy that Deborah Allen and I wrote about in our book *Rust to Riches* (Harper & Row) in 1989.

Thirteen years ago today, the Dow Jones Industrial Average closed at 2304; today it is over 10,000, for a return of more than four times your money. Over the same period, the Nikkei Index lost two-thirds of its value, from more than 40,000 in late 1989 to 11,000 today. Altogether, this un-leveraged long US short Japan

position made 16.8 times your money in those thirteen years, a return of roughly 25% per year. Not bad for one trade.

It's going to be a tough act to follow.

We didn't think it was such a tough call to make. The disinflation and tax cuts of the Reagan years had dramatically lowered the cost of capital for US companies. US manufacturers had restructured their brains out during the 1980's by selling low return assets and reducing costs. We were due for a boom.

Regulations on Japanese capital flows had just been eased, which exposed their overpriced assets to global arbitrageurs. Falling asset values would undermine the economy. Investors were counting the days until Japan owned the world. We thought Japan would shrink as it faced world capital markets. It was a great time to sell Japanese assets.





As I wrote last week, textbook Keynesian macroeconomic analysis denies a role for the full set of asset markets in determining economic activity. Keynesians restrict the transmission mechanism of monetary policy's influence on the production economy to the effect of interest rates on investment spending decisions. This was the essence of James Tobin's Presidential address to the American Economic Association thirty years ago and has been perceived wisdom among macroeconomists and macro modelers ever since.

This analysis leaves out the most powerful channel of monetary policy, real asset prices. Real, tangible assets—such as land, commodities, and existing stockpiles of produced goods—make up the bulk of people's net worth, represent almost the entire stock of collateral for the banking system, and exert a powerful influence on both credit markets and economic activity. Monetary policy, by directly influencing real asset values, exerts huge influences on the economy.

Economics is the study of how people make choices—between goods and services, between work and leisure, and between consumption now and consumption later—*using the information embodied in relative prices to help them make decisions*. Likewise, when analyzing macroeconomics and asset markets, we should focus on *relative returns*, which are, after all, nothing more than the *relative prices* of different claims on a dollar of future purchasing power.

Ironically, the most lucid statement of how to do this right was written by John Maynard Keynes in Chapter 17 of *The General Theory*. (His discussion of an asset's *own rate of interest* is the single most perceptive statement of the capital market choice problem ever written.) Keynes understood that all assets are simply devices for carrying over purchasing power into the future and that there are as many ways to do this, as there are non-perishable goods. And, he understood that people make choices among assets based upon their relative ability to accomplish this based on the assets' relative returns, not absolute returns or nominal interest rates.

Keynes knew that in order for an asset market to be in equilibrium, *total* expected returns on all assets, measured in any numeraire, had to be equal. This is the thermodynamic equilibrium I wrote about last week. His examples included a calculation of the own rate of interest for a bushel of corn, which shows that his definition of an asset was not restricted to bonds, bills, or other paper assets.

I have always been fascinated by the way a creative master's mind works. You can't learn that from textbooks; you have to read the original writings and do your best to understand the historical context in which they wrote. In doing so, I have found there is more in common among Irving Fisher, Knut Wicksell, Bohm-Bawerk, and John Maynard Keynes than their various disciples like to admit. Read the masters, not the students, if you really want to understand their ideas.

The economists at the Bank of Japan must have skipped Chapter 17. They believe monetary stimulus means low nominal interest rates—period. They are shocked that their *expansionary policy* has not produced results. They don't know what to do next to end the deflation.

In fact, Japanese monetary policy has been extraordinarily tight for the past decade. Japanese interest rates—the way they would measure real interest rates if they had read Chapter 17—have been the highest rates in the world for the past decade and quite possibly the highest for such an extended period in recorded history. Until they get this right, there is no hope for a turnaround in Japan.

Most economists measure real interest rates as a nominal interest rate minus a CPI inflation rate. This is easy to calculate and may tell us something about consumers, but it tells us nothing about the capital market. Most of the goods and services that make up the CPI basket are too short-lived, i.e., their physical depreciation rates are too high, for an investor to use them to carry over value from one period to the next. In the US, for example, services that are not storable at all make up 55% of the CPI basket. Keynes would have been appalled.

What investors do care about are relative returns on different assets they can use to carry over purchasing power to the future. An asset is, by definition, an economic good that lasts for more than one period. Such assets can either be in the form of security claims on future income, such as notes, bills, bonds or equities, or they can be real goods, i.e., physical stockpiles of future purchasing power, such as bushels of corn, houses, machines, cars, or other durable goods.

The reason we care about real interest rates—the differential return, or spread, between securities and real asset returns—is twofold. First, whether people choose to store wealth as real goods or as securities makes a big difference for interest rates, prices, and growth. Second, tax and monetary policies have important effects on relative returns and therefore on their decisions.

We should measure real interest rates as a simple spread—the difference between the total after-tax return on a financial asset, such as a bond, and a tangible asset, such as a house. We should include everything the investor cares about in our analysis—interest payments on the bond, the service (rental) value of the house, storage and maintenance costs, liquidity value, the prospect for capital gains, and all the complexities caused by taxes. And, we should account for risk.

Asset market equilibrium requires the total returns on financial and real assets to be equal. If they are not, investors rebalance their holdings in such a way that capital flows from the low return to the high return asset until equilibrium is again established. Everything else flows from that simple statement.

This is the fundamental logic behind the Fisher Equation linking interest rates, the real interest rate, and expected inflation. Using our terminology, the nominal rate of interest must equal the expected rate of TPI inflation—the inflation rate of the stock of tangible (storable) goods plus a term that represents the sum of all the other factors that matter when comparing the risk adjusted after-tax returns on financial and real assets such as tax rates, depreciation rates, service value, liquidity value, etc. It is this latter term that we can use as a measure of the real interest rate.



Chart 2 Tokyo Land Deflation

TPI inflation rates in Japan, using government data for Tokyo residential land prices as a proxy for the TPI, have been consistently negative for the past decade, as shown in Chart 2, reflecting massive deflation. Land is both long-lived and the

largest asset class in Japan, as it is in every other country, industrialized or otherwise. Land deflation is the heart of the Japanese deflation problem.

TPI real interest rates in Japan, shown in Chart 3, as the difference between the long term prime lending rate and the annual price inflation of a square meter of Tokyo residential land, have averaged 9.74% since the deflation began in 1989. This is extraordinarily high compared with normal (1-3%) levels, and compared with the negative real rates in the 1980's that drove land prices to high levels. The real rate in 2001 was still very high, at 6.41%, which explains why Japanese prices are continuing to deflate.



Chart 3 Tokyo Long Term Lending Real Rate

High TPI real rates caused by land deflation are a huge drag on real growth. I know of no example in history where an economy grows while land prices deflate. Deflation is especially hard on manufacturing companies, whose balance sheets are typically made up of tangible assets and financial liabilities. A company must offset its TPI real rate—the carrying cost of its balance sheets—with operating profits from its P&L in order to remain solvent. High TPI real rates make this almost impossible.

A simple regression of Japanese TPI real interest rates against real growth over the past decade shows that TPI real rates have a significant negative effect on growth. Each 100 basis point reduction in the TPI real rate adds about 20 basis points to real growth. Based on these estimates, the end of deflation would add at least two full percentage points to Japanese growth. Interestingly, the estimates show that Japan would grow at 4% per year with a zero TPI real rate, roughly the level they ran in the 1980's.

Real interest rate calculations based upon CPI and WPI data miss all this. The average CPI real rate for the same period was -2.21% using the short term prime lending rate and +0.96% using the long term prime lending rate. WPI real rates average -3.62% and -0.45% on the same basis. All four measures were negative for 2001, reinforcing the Bank of Japan's misguided claim that they have been pursuing stimulative monetary policy.

Land prices and other real asset prices are still falling. And they will continue to fall until TPI real rates move sharply lower. Deflation cannot end in Japan until the Bank of Japan makes it safe to hold tangible assets again. This will require a whole new attitude about printing money compared to anything we have seen before. That appears to be happening.



Chart 4 Monetary Base Growth

The Japanese monetary base has increased by 32.6% during the past twelve months and at an incredible 52% annual rate for the past six months, as shown in Chart 4. Yes, there is a credit crunch and, yes, there are tons of bad loans so don't expect to see a return to growth tomorrow. But rapid monetary base growth for an extended period would eventually re-liquefy the Japanese economy and end TPI deflation.

Loans are bad loans because the underlying assets do not have the ability to produce the free cash flow to service them. The most direct way to address the Japanese bad loan problem is to turn bad loans into good loans by monetizing asset values.

The recent acceleration of the Japanese Monetary Base could reflect a new religion at the Bank of Japan, but I doubt it. BOJ staff economists still have their noses in their textbooks and are still whining about liquidity traps. More likely, it reflects the growing pressure from Prime Minister Koizumi and the White House to end deflation. Most likely, it reflects the fact that the currency markets have decided to take over the reins of Japanese monetary policy and end the deflation themselves by depreciating the yen.

After a decade of public works projects, Japan is nearly covered in asphalt and government debt has reached crisis levels at more than 18 months GDP. Recent downgrades by rating agencies have made it clear the government cannot continue to borrow and spend money forever. Declining credit quality has produced a declining yen.

On top of these market forces, there has been a shift of attitude within the Japanese government in favor of pushing the yen lower to counteract deflation. The Bank of Japan has been actively buying dollars (with newly printed yen) in recent months to push the yen lower. This has been their first un-sterilized intervention since WWII. These purchases have flowed straight into an increase in the Japanese monetary base.

It is too early to tell yet whether the switch to stimulus is real, but it is worth keeping a close eye on in the coming weeks. If it is, this will be a huge opportunity to buy Japanese assets. I am inclined to make a small bet today and increase the size of the bet as we see more proof. The Japanese government has cried wolf many times before. This time, I think they mean it.

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