



Fixed Exchange Rates, Deflation, and Inflation

Summary

- The direction of the U.S. economy and capital markets largely hinges on whether we experience a sustained bout of Japanese deflation, a return of 1970's style inflation, or something in between.
- The way this scenario develops will significantly impact which assets perform well over the next five years and perhaps, surprisingly, may depend on exchange rate policy.
- As long as China and much of Asia continue to peg their currencies to the dollar, the United States could experience ongoing deflationary pressures.
- Alternatively, a free-floating yuan could induce an outbreak of inflation.
- Since China seems intent on having the yuan appreciate in a slow, controlled manner against the dollar, a healthy level of deflationary pressure and slow U.S. growth seem likely over the foreseeable future.
- Analysis of the dynamics of a fixed Eurozone exchange rate leads to tangible concerns.
- Finally, we look to the Fowler family dinner table to ruminate on the value of fixed exchange rates.

Dangerous Analogies

For anyone who endured taking the SAT, there is likely a remembrance of the annoying analogy section. At the risk of unearthing bad memories, I will ask you to please pick the answer that best fits the following,

China is to the United States as:

- a) Texas is to Michigan
- b) Germany is to Greece
- c) the United States was to Argentina
- d) All of the above
- e) None of the above

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Before dismissing this exercise, please consider the similarities between the initial comparison and choices (a), (b), and (c). In all four cases the exchange rate between the two government entities is either fixed through a common currency (Texas and Michigan, Germany and Greece) or a government policy (the United States and Argentina in the 90s, China and the United States in 2010).

The other similarity is the pairing of a strong economy, one with distinct comparative economic advantages, with that of a weaker economy. The combination of fixed exchange rates and mismatched economies yields similar results and may have serious implications for the United States. As long as currency rates between the United States and China are fixed, deflationary pressures are a greater risk than inflationary pressures, despite a chronically high budget deficit and, by many standards, a loose monetary policy. When and if the yuan either floats or increases dramatically in value, inflation could become a substantial problem in the United States.

We will evaluate this conclusion by considering each of these examples, starting with the case closest to home.

Texas Inflates, Michigan Deflates

Last I checked the dollar is still the currency in both Michigan and Texas. Rumors that Texas will announce its secession (again) ... or that Canada will quietly absorb Michigan to finally gain a team capable of winning the Stanley Cup¹ ... appear to be false.

However, the two states' economic prospects couldn't be more different. Texas has emerged from the 1980s' oil bust with a robust economy that combines the best of the business-friendly Sunbelt with the coastal, knowledge-based, urban economies found within 24/7 cities and university towns.

In some ways, Texas has a similar combination of economic characteristics as California had in the 1950s before its growth spurt. Austin is a large university town that has developed a reputation for venture capital, alternative thinking, and lifestyles characteristic of cosmopolitan business centers. In addition, many of the traditional corporate headquarters that once lined the streets of Cleveland, Philadelphia, New Jersey and other older economies have moved to the Lone Star State in pursuit of low taxes, cheap land, and a business-friendly environment.

Michigan, on the other hand, is a lovely state with some very big problems, predominantly its rapidly diminishing competitive edge. Cities generally gain an edge in one of two ways: either they enable businesses to operate more cheaply or they provide access to ample resource productivity.

1. Please pardon the jabs. I have tried very hard to be fair. Let me note that until 1993, Canadian teams had won about three-quarters of the Stanley Cups played. Since then, they have been shut out, giving way to such natural hockey territories as Dallas, Charlotte, Tampa Bay and Anaheim. The Detroit Red Wings have won the Stanley Cup three times during this fallow period for our Northern neighbor – thus, the potential interest. Hence, let me direct my greatest apologies to Canadian hockey fans, I am certain they are tremendously offended by my remarks (eh).

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A city's competitiveness does not depend entirely on its being the cheapest producer of a good or service. It can also depend on whether there is a critical mass of businesses and people that collectively produce higher-quality goods or services in a cost-effective manner. For example, a Ph.D in computer science is more likely to develop the next technological breakthrough among his or her fellow propeller-heads in Silicon Valley than in my hometown of Hartford, Connecticut.

Michigan once had a true competitive edge in automobile design and manufacturing. However, its higher cost structure and ossified business management eventually overwhelmed the advantage it held with its concentration of industry expertise.

It is also true that the two states have experienced different "inflation" rates. I make this point with quotations because my use of inflation does not fit the standard definition. Generally, when we speak of inflation, we think of a common basket of goods that could be bought anywhere. The pre-tax price of gasoline, for example, is more or less the same throughout the country. A broader definition of inflation considers incomes and asset prices, both of which are deflating in Michigan relative to Texas. The high-wage jobs once found in Michigan are leaving, forcing those who remain to work at lower compensation levels while housing and rental prices have fallen with the decline of business activity. Texas, on the other hand, has seen firmer housing prices and a relative increase in the demand for skilled workers.

Does the fact that Michigan is running a huge fiscal deficit create inflation? Not really. If anything, the deficit may cause a more deflationary impact as a result of higher taxes and a larger interest debt burden.

Deflation is not fun. It requires a region to quickly develop a new, highly profitable industry (very difficult); otherwise, wages, asset prices and, subsequently, standards of living, need to decline to yield more competitive pricing (very painful). Fortunately, Michigan's population can avert an economic collapse through a practice Americans have embraced for generations: individuals can move to greener pastures. The federal government, also, can reduce deflationary forces by subsidizing transfer payments and by supplying aid and assistance.

What would happen, however, if the movement between the two states was more difficult and the federal government was unable to shift aid from one area to another? Let's consider the case of Germany and Greece.

Greece and the Limits of Debt-Financed Growth

As seen in the prior example, when two states with different competitive positions are connected by a common currency, the weaker state suffers deflation and the stronger one inflation.

The sometimes-painful economic adjustments needed to restore a competitive balance can be deferred if the weaker borrows from the stronger. Borrowing allows the weaker country to maintain spending levels it couldn't otherwise afford based on natural

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income growth alone. Like the person who tapped his home-equity line of credit to buy a wide-screen television, a country can finance a higher standard of living ... for a while. Eventually, there is a limit to how much debt an individual or a country can amass. When this occurs, the deflationary adjustment in living standards can prove even more painful.

The ongoing situation in Greece fits this description. The 2009 fiscal deficit was about 12.8% of GDP while 2010 government debt is projected to be more than 120% of GDP. At this point, either taxes will need to be raised or spending will need to be cut. Lower spending means layoffs and wage cuts for government-supported employees. In the short run, this means less money in people's pockets, lower income levels, lower spending, and lower economic growth. Under the euro, Greece probably would have experienced deflationary pressures similar to Michigan had it not borrowed money to prop up its living standard. Now that the credit markets have grown intolerant, Greece and the other 'PIIGS' (Portugal, Italy, Ireland, Greece and Spain) are bound to have a more difficult adjustment period.

But this was not how things used to work in the "good old days" of floating currencies. Back when Greece had the drachma, an alternative means of making an adjustment existed. Either the central bank could devalue the currency or, if the currency was allowed to float, the market could automatically lower the drachma's value.

This adjustment would make the country's goods instantly more competitive. If the outstanding debt were denominated in drachmas, the bond holders (preferably foreigners) would see their debt values decline and would thus absorb some of the pain. In addition, prices of imported goods would shoot up, in effect lowering spending and wages the "easy way" — through inflation. I refer to inflation as the "easy way" because it prevents government and corporate employers from having to impose wage cuts. Workers just can't buy as much with their salaries.

As we have seen, (a) fixed exchange rates can exert deflationary pressures on weaker countries and (b) debt issuance can temporarily delay problems, but can also potentially make the eventual adjustment period more difficult.

At this point, it is natural to question whether a country with a weak economy should be in a fixed-exchange-rate relationship with a competitive, strong economy. What would be the impact if, for example, Greece was to break from the euro? Let us consider the case of Argentina over the last two decades and its on-and-off fixed exchange rate with the U.S. dollar.

Argentina and the End of Fixed Exchange Rates

There are few places in the world, other than perhaps Zimbabwe and the former Weimer Republic Germany, where it is as difficult to be a central banker as Argentina. Latin American countries, throughout their histories, have experienced periodic bouts of inflation and hyperinflation. The latest round of hyperinflation ended in 1989 when Argentina's annual rate of inflation reached 5,000%. As transactions based on the Argentinean currency became progressively more difficult, the U.S. dollar became the country's de

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facto currency. The Minister of the Economy at the time, Domingo Cavallo, set up a currency board that essentially fixed the exchange rate between the Argentinean peso and the dollar and reduced the inflation to a manageable level.

Unfortunately, Argentina's central and state governments still had very large budget deficits and continued to borrow — often in dollars. In addition, the strengthened U.S. dollar of the 1990's disadvantaged Argentina *vis a vis* its leading trading partners, including Brazil and Europe (which accounted for approximately half of trade flows). Deflation took hold and unemployment soared. In 2002, Argentina's new government corrected the problem by suspending convertibility of the peso into dollars. Once the peso was allowed to float in value, prices shot up, leading to a rise in cumulative inflation of around 80%.

This is an extreme example of what happens when an overleveraged, weak economy breaks with its fixed exchange rate. Prior to the break, the weaker economy generally experiences deflation and slow growth. After the break, inflation becomes a problem to varying degrees.

This brings us back to our original exercise. To repeat, the question is,

China is to the United States as:

- a) Texas is to Michigan
- b) Germany is to Greece
- c) the United States was to Argentina
- d) All of the above
- e) None of the above

All of the Above or None of the Above

If you circled (d), all of the above, you could make a fairly scary but convincing argument. Competition with China does place deflationary pressure on U.S. prices and wages. By funding U.S. debt issuance, China and other foreign investors allow our growth to continue. A breakdown in the yuan/dollar exchange rate would probably result in a good dose of inflation, not to mention a credit crisis.

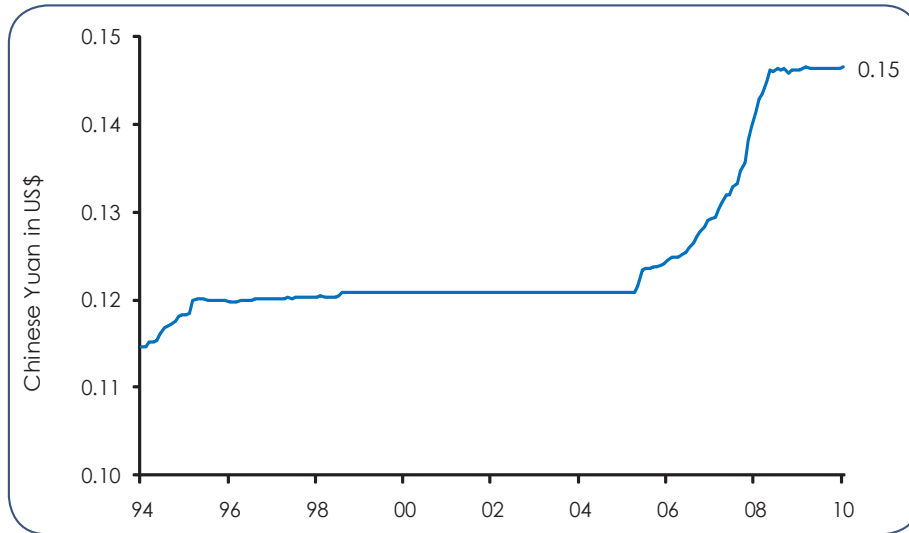
It is also possible to say that none of the choices is comparable based on three key reasons. First and second, China is not our only trading partner, nor does a fixed exchange rate actually exist. Finally, China has a vested interest in maintaining some form of currency stability and supporting a strong American economy.

Let's start by making the case that our relationship with China partially matches each of the prior examples. While the United States does not technically have a fixed exchange rate with China, our currencies are correlated by what is called a "crawling peg" — in essence, China recognizes that the yuan should appreciate relative to the dollar. However, this change has not happened precipitously. From mid-2005 to 2008, the yuan appreciated by 21% or roughly one-half of a percent per month. Since the economic downturn in 2008, China has held the exchange rate at a fixed level. At some point in the

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not too distant future, China will probably let it move again (at a measured pace). U.S. deflation could mean inflation for China and allowing the yuan to appreciate could help to control this rising inflation.

US \$ versus Chinese Yuan Exchange Rate



Sources: Glenmede Investment Research and Haver Analytics (People’s Republic of China - US\$/Yuan)

In addition, most Asian currencies are either “pegged” relative to the dollar — the currency is allowed to move in small, incremental bits each month — or “managed-floats” — in which the dollar exchange rate is managed so that it does not fall outside of a pre-set band. Essentially, this means we have some form of a fixed exchange rate with 24% of our trading partners:

De Facto Exchange Rate Policies of East Asia*

Economy	Exchange Rate Policy
China	Crawling Peg
Hong Kong	Pegged
Indonesia	Managed Float
Japan	Free Float
Macau	Pegged
Malaysia	Managed Float
Phillipines	Free Float
Singapore	Managed Float
South Korea	Free Float
Taiwan	Managed Float
Thailand	Managed Float

*Source: Congressional Research, as of April 30, 2008

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China's (and the rest of Asia's) exchange-rate management has given rise to the accusation that it purposely undervalues its currency so its goods remain cheap. I prefer not to enter that debate. Rather, I think it is fair to say that for the United States to attain a competitive balance with China, one of two things must happen under a fixed-exchange-rate regime. Either the costs of running a business need to fall relative to Chinese costs or resource productivity needs to improve. The latter is possible over the long run. The former is potentially deflationary over the short run and politically very difficult for the party in power.

The second valid comparison is that debt purchases by Asian investors will largely support our ability to grow over the next few years. Like Greece, we should be able to delay significant deflationary pain as our debt is funded by a competitive and growing region.

Finally, releasing the Chinese and American currencies from their relationship would probably be quite inflationary for the United States. Not only would import prices rise, but American businesses and labor would be relieved of a check on their respective ability to raise prices.

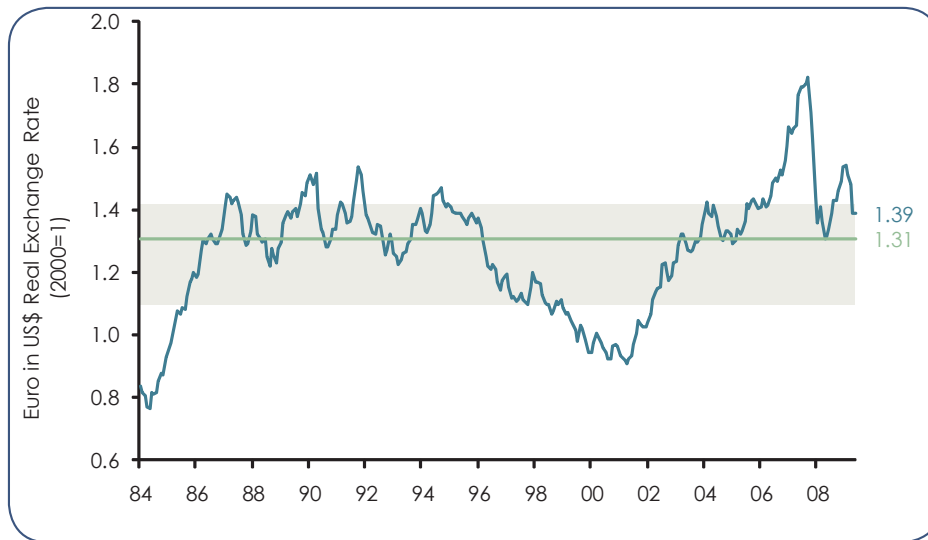
What Does All This Mean?

A few thoughts:

1. **Over the short run, the “fixed exchange rate” between China and the United States is probably a positive for the U.S.:** Thanks, in part, to a stable exchange relationship, Asian countries will continue to use their excess savings to purchase our debt, which in turn funds many of our spending needs.
2. **In the near term, deflationary pressures are more likely than inflationary:** Exchange rates could be the key to expectations of inflation. As long as the United States and the Chinese/Asian exchange rate is either fixed or closely managed, the United States will probably suffer from deflationary pressures similar to the long, slow deflation experienced by Michigan. If this relationship were to become severed, we would probably need to prepare for a nasty run of inflation.
3. **The situation for the euro is more problematic:** The wealthy European states, Germany and France, are disinterested in acting as a debt sugar daddy to 'PIIGS'. Germany and France are lobbying for fairly tough fiscal measures, which could put pressure on the euro versus the dollar for some time. The euro is also starting from a fairly high valuation level versus the dollar, even after its recent fall in price. European stocks are cheap and, in all likelihood, a good long-term investment. There is, though, a decent argument to be made for investing a portion of our international equity portfolios in strategies that are hedged out of the euro, back into the dollar.

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U.S. \$ versus euro (real effective exchange rate)



Sources: Glenmede Investment Research and Haver Analytics (JP Morgan Broad Real Effective Exchange Rate Indices Base=2000, Synthetic Euro pre-1999)

- Regardless of the trajectory of inflation in the U.S., real inflation-adjusted rates should rise:** When you issue too much debt, you must at some point pay for being a profligate borrower. At Glenmede, we have kept the average maturity of our bond portfolios relatively short in order to minimize the cost of an increase in real interest rates and to potentially take advantage of higher coupons. In theory, a rise in real rates should extend to the other capital markets. This sort of rise tends to come during periods when the economy is doing well and investors feel the glass is half full. As such, stocks may continue to do well in this environment.

The Dinner Table as a Fixed Medium of Exchange

Aside from the SAT, there are other coming-of-age experiences I prefer to forget. One in particular is the primary socialization ritual practiced on most college campuses: the dormitory/fraternity party. Perhaps you feel differently, but I don't remember having enjoyed these encounters where you were expected to initiate a conversation, beverage in hand, with music blaring in your ear. By 11 p.m., even a superficial, surface-oriented conversation would have been, well, too deep for most.

Alternatively, I am biased toward dinner parties. I love being seated next to someone new, with whom I attempt to either solve world problems or at least better understand them. There is nothing more interesting than a table filled with varying political, artistic, and cultural viewpoints (providing the participants remain civil and not take themselves too seriously, of course). Unfortunately, thirty years ago, the dinner party seemed headed toward extinction with my generation.

I suspect my generation was rebelling against some of the tradition-laden formalities

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associated with childhood dinners. There is scene from AR Gurney's 1981 play The Dining Room that I believe captures the generational split that played out across a wide spectrum of American households. In this scene Aunt Harriet, the grand-dame of the family, proudly displays her silverware for the benefit of her grand-nephew Tony, who busily snaps pictures of three-pronged forks and pistol-handled knives. When Aunt Harriet enthusiastically asks about his sudden interest in the family's heirlooms, traditions, and heritage, Tony responds, "It's a class project for Amherst ... for anthropology. We're studying the eating habits of vanishing cultures ... my professor suggested I do a slide show on us, the New England WASPs." Aunt Harriet is not amused. (For the record, I am from New England.)

This brings us to another important point. There are enjoyable dinners among people who complement each other and produce stimulating conversation ... and then there are family dinners.

In the spirit of this discussion, we will classify the "family dinner" as just another "fixed medium of exchange" — one with benefits and drawbacks. Because the preparation for and menu of many family meals, especially holiday meals, are often the same each time, the process is both convenient and, for those who like tradition, comforting. Therefore, beneficial aspects of this ritual are the standardization and predictability of the meal.

For my fourteen-year-old son, Easter dinner means that once a year he comes face-to-face with a plate of ham and vegetables prepared differently from his mother's kitchen. From his perspective, this is neither convenient nor comforting. In addition, fully enjoying the benefits of interacting with relatives requires, from his perspective, a painful "structural" adjustment.

Fixed exchange rates have a number of the same attributes as family dinners. They make working between countries more convenient and familial. In an ideal world, countries complement each other like guests at a dinner party.

Fixed exchange rates also, like my son's Easter dinner experience, involve some less than desired adjustments. For the weaker and disadvantaged countries, 'PIIGS', a fixed exchange rate introduces difficult adjustments that will require tremendous discipline. Adjusting to this protocol may mean aligning government spending growth with taxation levels and instituting politically difficult policies that enhance a country's competitive advantages. While acclimating to such adjustments may be hard, it may produce a better outcome than to delay the problem via a flexible exchange rate.

I have reason for some level of optimism, even if that optimism arises purely from my dinner-party analogy. At our recent Easter family dinner, my son experienced a conversation and finished all the ham on his plate. Even more encouraging, on a recent visit at my daughter's school, my daughter invited her mother to a series of dinners, both alone and with her friends - there is hope for this generation. Fortunately, for us, she did not select a restaurant with silver three-pronged forks and pistol-grip knives.

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