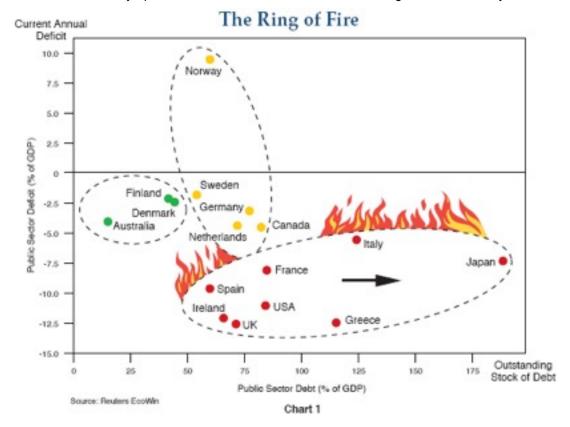
Mechanism of Debt Deleveraging

The Reinhart/Rogoff book speaks primarily to public debt that balloons in response to financial crises:

- The true legacy of banking crises is greater public indebtedness, far beyond the direct headline costs of bailout packages. On average a country's outstanding debt nearly doubles within three years following the crisis.
- The aftermath of banking crises is associated with an average increase of seven percentage points in the unemployment rate, which remains elevated for five years.
- 3. Once a country's public debt exceeds 90% of GDP, its economic growth rate slows by 1%.



A study by the McKinsey Group analyzes current leverage in the <u>total</u> economy (household, corporate and government debt) and looks to history, finding 32 examples of sustained deleveraging in the aftermath of a financial crisis. It concludes:

- 1. Typically deleveraging begins two years after the <u>beginning</u> of the crisis (2008 in this case) and lasts for six to seven years.
- 2. In about 50% of the cases the deleveraging results in a prolonged period of belt-tightening exerting a significant drag on GDP growth. In the remainder, deleveraging results in a base case of outright corporate and sovereign defaults or accelerating inflation, all of which are anathema to an investor.
- 3. Initial conditions are important. Currently the gross level of public and private debt is shown in Chart 2.

What then is an investor to do?

1. Risk/growth-oriented assets (as well as currencies) should be directed towards Asian/developing countries less levered and less easily prone to bubbling and therefore the negative deleveraging aspects of bubble popping. When the price is right, go where the growth is, where the consumer sector is still in its infancy, where national debt levels are low, where reserves are high, and where trade surpluses promise to generate additional reserves for years to come. Look, in other words, for a savings-oriented economy which should gradually evolve into a consumer-focused economy. China, India,

Brazil and more miniature-sized examples of each would be excellent examples. The old established G-7 and their lookalikes as they <u>delever</u> have lost their position as drivers of the global economy.

- 2. Invest in less risky, fixed income assets in many of these same countries if possible. Because of their reduced liquidity and less developed financial markets, however, most bond money must still look to the "old" as opposed to the new world for returns. It is true as well, that the "old" offer a more favorable environment from the standpoint of property rights and "willingness" to make interest payments under duress. Therefore, see #3 below.
- 3. Interest rate trends in developed markets may not follow the same historical conditions observed during the recent Great Moderation. The downward path of yields for many G-7 economies was remarkably similar over the past several decades with exception for the West German/East German amalgamation and the Japanese experience which still places their yields in relative isolation. Should an investor expect a similarly correlated upward wave in future years? Not as much. Not only have credit default expectations begun to widen sovereign spreads, but initial condition debt levels as mentioned in the McKinsey study will be important as they influence inflation and real interest rates in respective countries in future years. Each of several distinct developed economy bond markets presents interesting aspects that bear watching: 1) Japan with its aging demographics and need for external financing, 2) the U.S. with its large deficits and exploding entitlements, 3) Euroland with its disparate members Germany the extreme saver and productive producer, Spain and Greece with their excessive reliance on debt and 4) the U.K., with the highest debt levels and a finance-oriented economy exposed like London to the cold dark winter nights of deleveraging.

Of all of the developed countries, three broad fixed-income observations stand out: 1) given enough liquidity and current yields I would prefer to invest money in Canada. Its conservative banks never did participate in the housing crisis and it moved toward and stayed closer to fiscal balance than any other country, 2) Germany is the safest, most liquid sovereign alternative, although its leadership and the EU's potential stance toward bailouts of Greece and Ireland must be watched. Think AIG and GMAC and you have a similar comparative predicament, and 3) the U.K. is a <u>must to avoid</u>. Its Gilts are resting on a bed of nitroglycerine. High debt with the potential to devalue its currency present high risks for bond investors. In addition, its interest rates are already artificially influenced by accounting standards that at one point last year produced long-term real interest rates of 1/2 % and lower.

4. The last decade – the "aughts" – were remarkable in a number of areas: jobless recoveries in major economies, negative equity returns in U.S. and other developed markets, and of course the financial crisis and its aftermath. If an investment manager and an investment management firm proved to be good stewards of capital markets during the turbulent but vapid "aughts," they may be granted a license to navigate the rapids of the "teens," a decade likely to be fed by the melting snows of debt deleveraging, offering life for unlevered emerging and developed economies, but risk and uncertainty for those overfed on a diet of financed-based consumption. Beware the ring of fire!