



ECONOMIC POLICY NOTE 7/6/2016

The New Fragile

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- We are living in a fragile interim period between the Great Financial Crisis and another crisis that is likely to be no less (and may possibly be even more) severe.
- As there is no sign that policy authorities recognize the dangers of the fragile environment they have created, we need to assume that they will continue on their present course until the fragile system breaks again.
- This note argues for the creation of robustness in asset selection and portfolio construction to survive in this difficult environment.

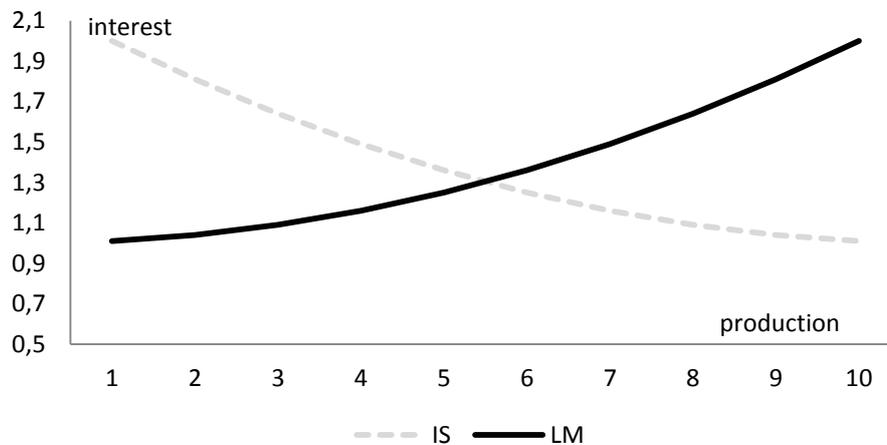
The recovery from the “Great Recession” of 2008-09 triggered by the “Great Financial Crisis”, which culminated in the collapse of Lehman Brothers, has been dubbed the “New Normal” or, more recently, the “New Mediocre”.¹ These terms have been used to capture the abnormally low growth and inflation that have characterized the recovery for the last eight years. But they are misleading as they imply that the economy moved to a new equilibrium after the recession, albeit at lower rates for both economic growth and inflation, and that financial stability was restored. In my view, neither the first nor the second suggestion is true.

In the following, I shall argue that we are living in a fragile interim period between the Great Financial Crisis and another crisis that is likely to be no less (and may possibly be even more) severe. I see no sign that policy authorities recognize the dangers of the fragile environment they have created in the course of their crisis management. Hence, we need to assume that they will continue on their present course until the fragile system breaks (again) into parts. For investors to survive, they need to create robustness.

¹ The term „New Normal“ has been attributed to Mohamed El Erian, formerly CEO of PIMCO, the term “New Mediocre” was coined by IMF Managing Director Christine Lagarde.



Figure 1. The IS-LM Diagram



Source: Own exposition (Flossbach von Storch Research Institute)

Led by the blind

Mainstream economists in governments, central banks, and academia look at the economy through the lens of the New Keynesian economic model. Its simplest version can be summarized in the IS-LM diagram, which relates production to interest rates. The IS and LM curves show real economy and money market equilibria for different combinations of interest rates. A unique product and money market equilibrium exists, where the two curves meet (Figure 1). If the central bank decides to increase the money supply, the LM curve moves to the right and the new equilibrium is characterized by lower interest rates and higher production.² The IS-LM diagram can be supplemented with an explanation of inflation as a function of production to provide for the central bank a theoretical framework for the pursuit of an inflation target.

In the New Keynesian model the creation of money is not explained. It is simply assumed, that the central bank can increase or reduce

money supply and influence interest rates this way. Neither credit nor capital markets exist in the model and indebtedness plays no role. But it was the debt overhang created by excessive credit extension that led to the Great Financial Crisis. Mainstream economists did not see it coming because their model was blind to the extension of credit and build-up of debt.

One would have expected that all economists would have reconsidered their models that have failed to alert them to the build-up of a dangerous credit bubble and debt overhang. To my big surprise, this has not been the case. Mainstream economists have hung on to myopic macroeconomic theories and, perhaps, tinkered a little with models of market structure. Central bankers, in particular, have followed policies to overcome the crisis derived from the model that led them into the crisis in the first place. As the policies have failed to achieve the desired results, central bankers have questioned policy doses rather than their model and decided to increase the doses rather than dump their model.

² If the government increases expenditures, production and interest rates increase. If both money supply and government spending are increased, production rises even more while interest rates may remain unchanged.



The role of credit

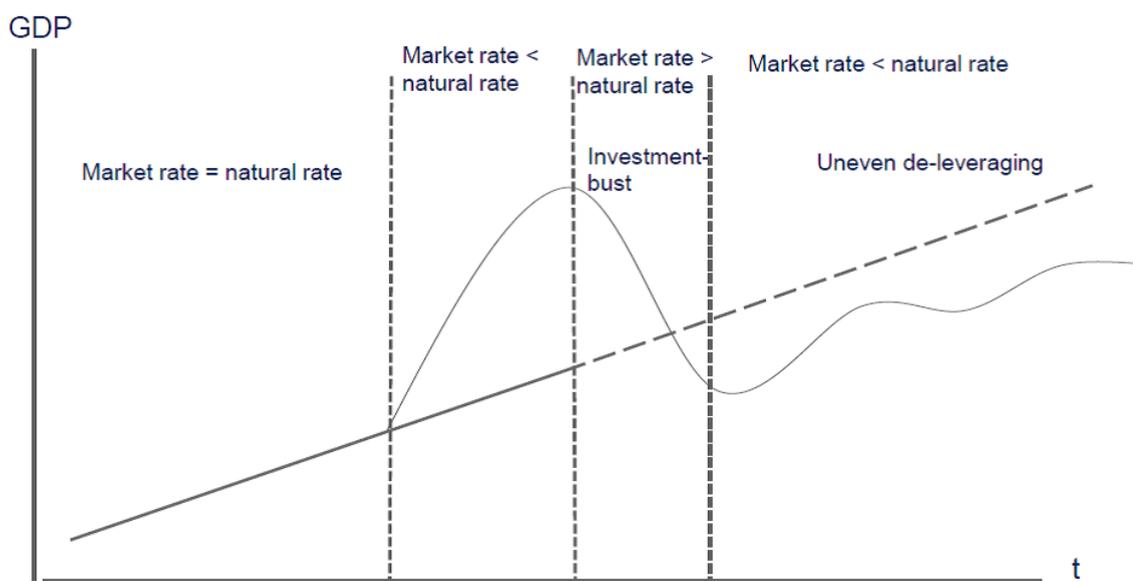
Mainstream economists and central bankers could have reduced the risk of model error if they had considered other economic models than the New Keynesian one as tools for the analysis of the credit and debt boom-bust cycle. Some practitioners and off-mainstream economists found some enlightenment in the Post-Keynesian theory of Hyman Minsky, which focuses on the risk appetite of borrowers during the credit cycle. Others studied the more elaborate school of Austrian economics, where the central banks play a key role in the creation of credit cycles. As I was looking for answers to the famous question of Queen Elizabeth II on the credit bubble (“Why did nobody notice it?”), I moved from Minsky to the Austrians.

A stylized description of the Austrian credit and investment boom-bust cycle is given in Figure 2. As long as the actual interest rate in the credit market is in line with the natural rate ensuring ex ante equilibrium of savings and investment, the economy grows along a steady path. How-

ever, when monetary policy temporarily pushes the market rate below the natural rate, new investment is induced and new savings are discouraged, so that ex ante investment exceeds ex ante savings. For a while, the economy grows above its steady state rate. But when the negative savings gap is felt as investment projects move nearer completion, interest rates rise. Marginal projects fall short of the required return to cover costs and must be abandoned. The investment boom turns into bust. As projects fail, the savings gap begins to close and capital misallocation is being eliminated.

However, when the central bank intervenes and pushes the credit market rate again below the natural rate to end the recession, adjustment stops. Capital that would not be viable at the natural rate remains in place and supports employment. But factor productivity declines as resources are captured in inefficient uses. The preservation of a high debt burden reduces borrowers’ appetite for new borrowing and induces lenders to restrict credit. As a result, the economy moves to a lower growth path.

Figure 2. The credit boom-bust cycle according to Wicksell, von Mises, and von Hayek



Source: Own exposition (Flossbach von Storch Research Institute)

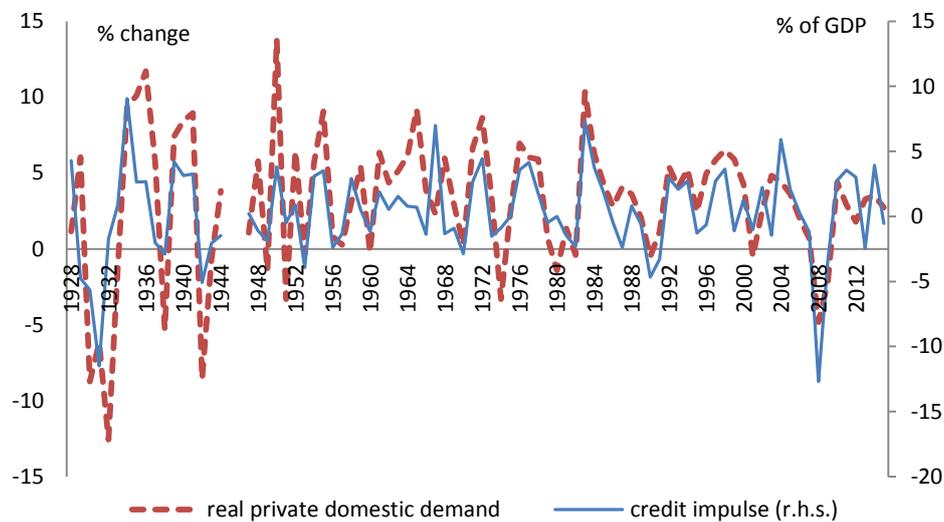


At the same time, growth becomes more variable when policy makers and private agents make repeated and only partially successful efforts at reducing the debt overhang. Low growth begets low inflation, seemingly justifying easy monetary policies that keep interest rates low, which in turn prevent the structural adjustment needed to increase growth. And due to higher economic variability, any temporary uptick in growth is too short to justify tighter monetary policy that would lead to higher interest rates. Thus, policy and the economy become trapped in a low growth, low inflation, and low interest rate environment. The longer this environment lasts, the more the misallocation of resources becomes entrenched and the more costly becomes the required structural adjustment. In the event, only a new financial crisis followed by another economic downturn

can break the deadlock, but it is an open question whether a better new environment will be found thereafter.

The picture of the credit and investment boom-bust cycle painted by Austrian economics is well supported by empirical evidence. Figure 3 shows the year-on-year change of real private demand and credit flows (relative to GDP, because of its lead dubbed “credit impulse”) for the US economy in the period from 1928 to 2015. As can be seen from the figure, the credit impulse is well correlated with demand growth and occasionally (especially into and out of crises) leads demand. Table 1 gives the average year-on-year growth rate and coefficient of variation (standard deviation relative to mean) of US GDP growth during the last two upswings. It is clear that during the upswing before the

Figure 3. Real private domestic demand (percent yoy growth) and credit impulse (change in private credit flows relative to GDP) in the US, 1928 - 2015



Source: Federal Reserve, own calculations (Flossbach von Storch Research Institute)

Table 1. US GDP growth and growth variation (in %)

	Mean	Variation
Q102-Q407	2.7	35.4
Q309-Q415	1.8	71.3

Source: Haver Analytics, own calculations (Flossbach von Storch Research Institute)



Great Financial Crisis growth was higher and variability lower than during the post-crisis upswing, as suggested by the Wickseil-Mises-Hayek model.

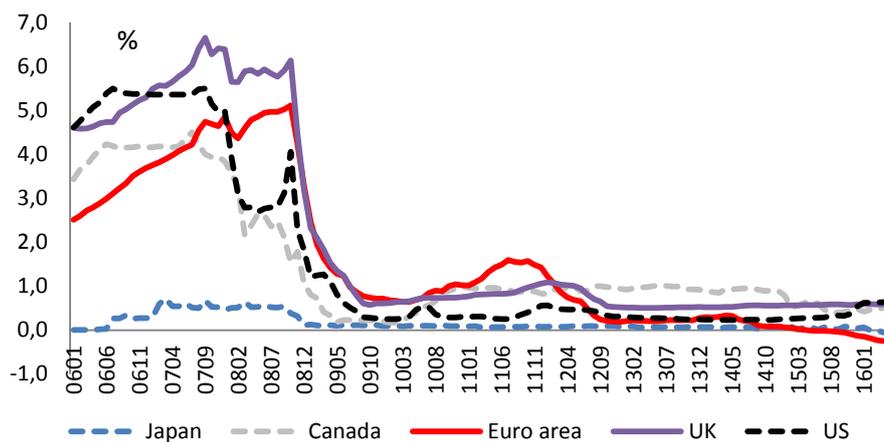
Increased fragility

The already high degree of fragility of the global economy and financial system before the Great Financial Crisis (and its regional variations in the euro area and China) has increased further due to the reactions of central banks and other policy makers to the burst of the credit bubble (and its regional “bubbles”).

In the spirit of Nassim Taleb,³ I regard a system of parts (physical object, economy, financial sector) as fragile when (i) it is centrally managed; (ii) the parts are closely and rigidly connected; and (iii) it has little margin for error. In

the aftermath of the Great Financial Crisis, central banks have employed “non-standard monetary policy measures”, such as “forward guidance” of interest rate expectations, asset purchase programs and negative interest rates, to extend their influence on interest rates and asset prices in the capital markets. This has led to an increase in the central management and of the interconnectedness of the financial system. Moreover, as the pervasive weakness of economic growth has led to a competition in avoiding currency appreciation, more active exchange rate management has linked economies more rigidly together. These features are illustrated in Figures 4-6. As Figure 4 shows, short-term money market rates of G7 countries have converged towards zero as a result of policy convergence.

Figure 4. Three-month money market rates in G7 countries

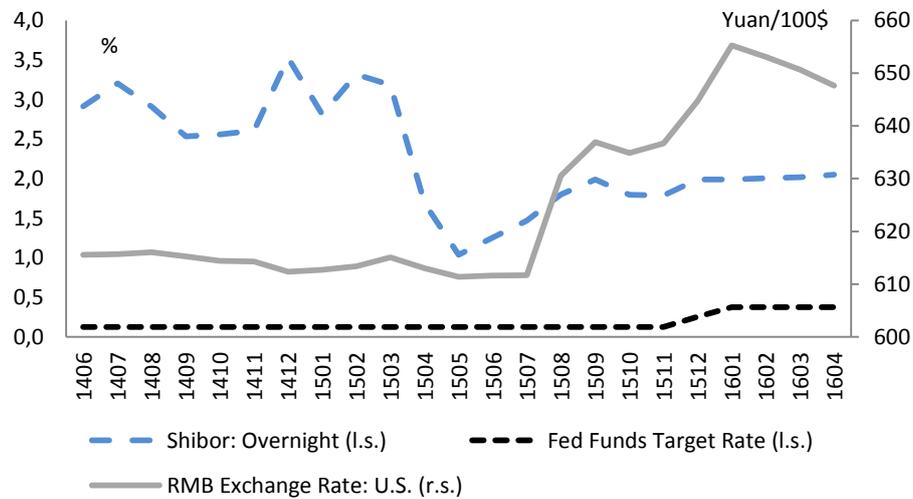


Source: Haver Analytics

³ Nassim Taleb, *Antifragile – Things that gain from disorder*. New York 2014.

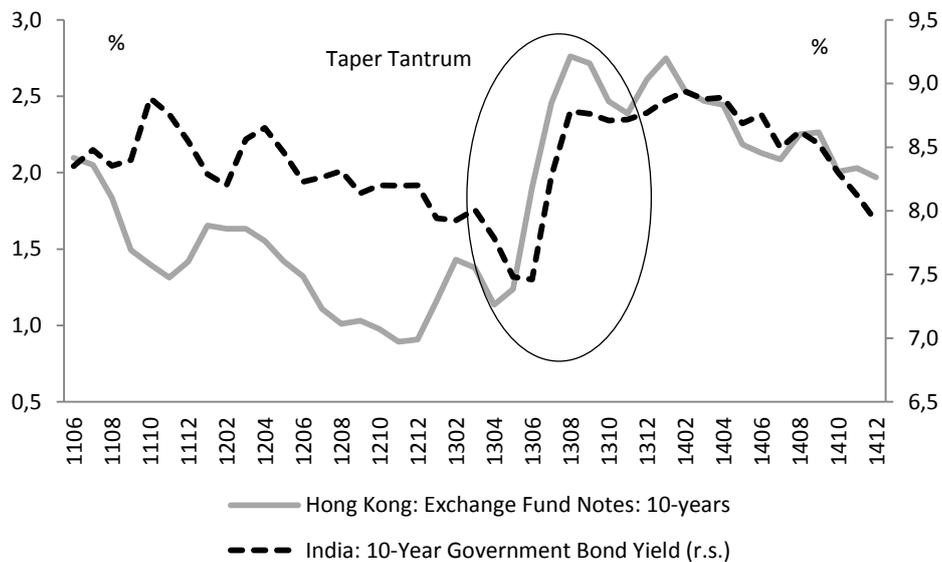


Figure 5. Interest rates in the US and China and the exchange rate



Source: Haver Analytics

Figure 6. Ten-year government bond yields in India and Hong Kong



Source: Haver Analytics

Figures 5 and 6 illustrate the intense and rigid interconnectedness of different areas in the financial system. As economic growth slowed, the People’s Bank of China eased monetary policy in the course of 2015 (Figure 5). At the same time, however, the US Federal Reserve prepared the markets for an interest rate hike, which it eventually delivered in December. As a result, pressure on the exchange rate of the

Renminbi mounted, forcing the Chinese government to modify its exchange rate arrangement and to partly reverse the monetary policy course.

Another example for the intense and rigid interconnectedness is the so-called “Taper Tantrum”. In June 2013, Federal Reserve Governor Ben Bernanke indicated that the US central



bank would soon begin to gradually reduce (“taper”) its asset purchases in the context of its policy of Quantitative Easing. The news came as a shock especially to investors in emerging market securities. As Figure 6 shows for the example of India and Hong Kong, bond yields surged in emerging market economies in the wake of Bernanke’s speech—another sign that the financial system had become more closely and rigidly linked after the Great Financial Crisis.

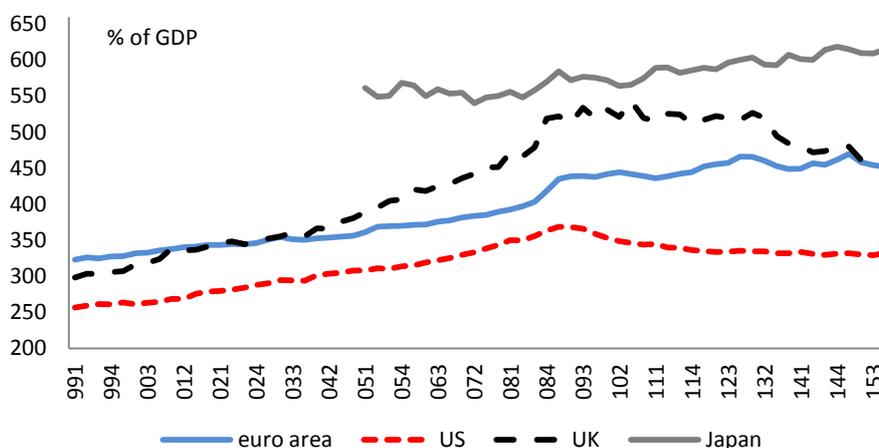
Finally, the continuously high burden of debt in a low growth and low inflation environment has reduced the margin of error in economic management. In this environment, even moderate recessions can quickly trigger another debt crisis. Figure 7 shows the level of the debt of all economic sectors (including the financial sector) relative to GDP in the G7 economies. Debt ratios have increased substantially since the end of the 1990s. Although debt ratios were recently reduced somewhat from their peaks in the US and UK, they were still up 76 percentage points of GDP in the US and 164 percentage points in the UK at the end of 2015 from their level of the beginning of 1999. In the euro area and Japan, debt ratios were still higher at the end of 2015 than at the end of the Great Recession in 2009.

High debt would perhaps be less of a concern if there was good reason to expect a pick-up of real growth and inflation. But this is not the case. Global economic growth has remained weak and uneven throughout the present recovery. As Figure 8 shows, composite purchasing manager indices (for the manufacturing and services industries) have recently fallen back towards the 50 percent line that divides expansion from contraction in major regions and the global economy.

How to navigate in the New Fragile

As there is no sign that policy authorities recognize the dangers of the fragile environment they have created we need to assume that they will continue on their present course until the fragile system breaks (again) into parts. In this environment, the investor has three choices: (i) stick with investments that do well in the fragile environment and hope for the best; (ii) bet on the next crisis and the break-up of the system; or (iii) seek robust investments with sufficient buffers to survive the next crisis. In my view, the third choice is the most preferable.

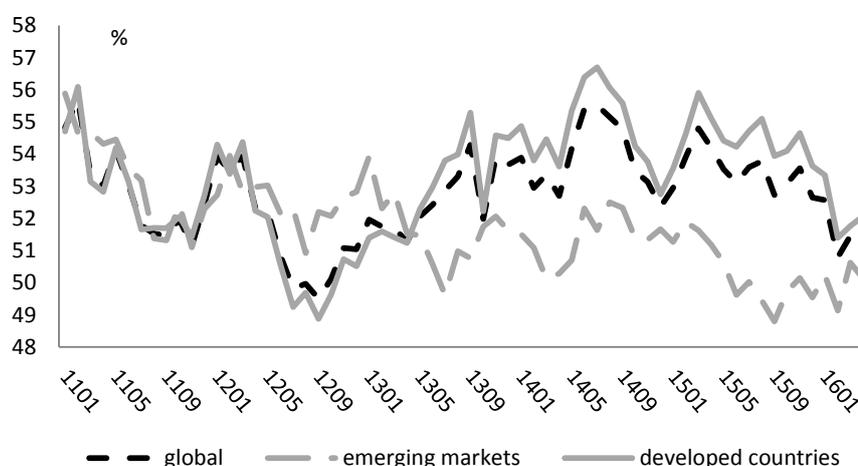
Figure 7. Total debt in G7 countries



Source: Haver Analytics



Figure 8. Composite purchasing manager indices



Source: Haver Analytics

The first choice, “going with the flow” and “hoping for the best”, suffers from what has become known as the “turkey effect”. Turkeys gain weight until the eve of Thanksgiving – then they are slaughtered. For them, death comes as unanticipated and suddenly as catastrophic loss comes to the “turkey investor” who has sold volatility to receive a moderate premium income as long as times remain quiet. Turkey investors are myopic, focusing on the near-term and disregarding the long-term because they believe it is too far away to have any influence on them. Typical turkey investments would be selling credit insurance, buying structured credit products or owning bank stocks. All these investments may do reasonably well during the upswing but may suffer catastrophic losses when fragility manifests itself.

A particularly prominent turkey investment is the first loss insurance driving the European Fund for Strategic Investment (EFSI), commonly known as the “Juncker Fund”. The aim of this fund is to mobilize some EUR 315bn of private capital for infrastructure investments in the EU by insuring “first losses” of up to EUR 21bn in total. Investors in this fund are protected from

the first 7% of losses and are then left entirely on their own. This calms the nerves of people who believe in a well-behaved world without extreme events, which is pretty much the contrary of the reality we live in.⁴

The opposite of a turkey investment would be an investment that pays out when crisis hits. Examples of such investments are purchases of volatility (e.g., by acquiring put and call options on the same underlying asset) or safe haven bonds (e.g., US Treasury bonds or German Bunds). The problem with active bets on turkeys’ deaths is that they tend to create costs (actual or alternative) as long as the turkeys are fed to grow fatter. This raises an emotional and a liquidity problem: Has the investor the stoic mindset to endure the costs of waiting until he hits the jackpot? Has the investor sufficient liquidity to survive the waiting period? Probably few people can answer both questions in the affirmative.

⁴ Malicious Wall Street traders tended to call investors falling for financial products engineered to popular tastes “suckers”. EFSI seems to assume (probably correctly) that there are enough “suckers” in the group of institutional investors that it wants to tap for the funding of its lending activities.



This leaves the third choice, the creation of robustness. Robust investments do reasonable (though not spectacularly) well in quiet times and have sufficient resilience to come through stormy times. In contrast to bets on the turkeys' death they have positive returns during the time of turkey fattening. They suffer temporarily from the turkeys' deaths, but recover thereafter to good health. The only requirement investors in robustness must fulfill is keeping their nerves during crises. They must not panic and dump their robust investments at fire sale prices at the peak of a crisis. To create robustness in investments, it is necessary to choose assets built on robust business models (protected against ruinous competition and resilient in economic downturns), operated in a safe distance from government influence (to avoid the unpredictable and often destructive influence from government policy), exposed to low debt (to create "airbags" to soften a crash), and to assemble them in a well-diversified portfolio (to spread unmeasurable risk).

Summary and conclusion

In this note, I have argued that the "new normal" is a misnomer for the aftermath of the Great Financial Crisis, because it suggests a new, stable equilibrium. But instead of stability the economic policy response to the crisis has created more fragility. As there is no sign that policy authorities recognize the dangers of the fragile environment they have created, we need to assume that they will continue on their present course until the fragile system breaks again.

I see three possible choices for the investor in this environment: (i) stick with investments that do well in the fragile environment and hope for the best; (ii) bet on the next crisis and the break-up of the system: or (iii) seek robust investments with sufficient buffers to survive the next crisis. In this note I made the case for the third choice, the creation of robustness in asset selection and portfolio construction.



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