

A New Generation of Zombie Enterprises

by Barry Poulson, February, 2021

The George W. Bush Administration responded to the 2008 financial crisis by enacting the Emergency Economic Stabilization Act. That Act was the basis for the Troubled Asset Relief Program (TARP) that authorized up to \$700 billion in subsidies to bail out financial institutions (Congressional Budget Office 2012). That amount was later reduced to \$475 billion, and actual disbursements from the fund were estimated at \$431 billion.

TARP was designed to purchase toxic assets and equity from financial institutions to strengthen the financial sector. The Fed used the funds to bail out selected financial institutions. Some favored financial institutions considered too big to fail, such as AIG, Citigroup, Bank of America, JP Morgan Chase, Wells Fargo, Goldman Sachs, and Morgan Stanley, were rescued; while other institutions, such as Bear Stearns, were allowed to go into bankruptcy (Congressional Budget Office 2012).

The Bush bailout of financial institutions was followed in 2009 by a more ambitious bailout by the Obama Administration, the \$830 billion American Recovery and Reinvestment Act (ARRA), (Congressional Budget Office 2009). The Act targeted subsidies to two auto firms, Chrysler and General Motors. The government then forced financial institutions that had received TARP funding to purchase the stock of these auto firms, in effect nationalizing the firms. Federal government mandates on the auto industry, and other industries, have continued since then. The Congressional Budget Office (2009) estimated that the American Recovery and Reinvestment Act (ARRA) would increase deficits by \$185 billion in 2009, \$399 billion in 2010, and \$134 billion in 2011, or \$787 billion over the 2009-2011 period.

The actual deficits incurred by the Obama Administration were unprecedented. In his first year in office deficits tripled from about half a trillion dollars to almost one and a half trillion dollars. Deficits remained above a trillion dollars a year while these bailout programs were in effect, and then decreased to about half a trillion dollars when they ended. To support fiscal stimulus, the Fed expanded the money supply, pushing interest rates close to zero. Through quantitative easing the Fed purchased billions in government bonds and mortgage backed securities to shore up the financial system (Taylor 2009, 2010, and 2014).

In 2019, the Fed made a commitment to normalize monetary policy. After years of financial market repression, the Fed made a commitment to restore interest rates to something closer to real interest rates. “Effective October 15, 2019, The Federal Open Market Committee directs the Desk to undertake open market operations as necessary to maintain the federal funds rate in a tight range of 1-3/4 to 2 percent” (Federal Reserve Board 2019). But before the Fed made much progress in normalizing monetary policy the coronavirus pandemic triggered a new era of fiscal stimulus and monetary easing.

The onset of the coronavirus in 2020 led to a more drastic bailout by the federal government, in the Consolidated Appropriations/Response Relief Act. The Committee for a Responsible Federal

Budget (CFRFB) (2021a), provides a breakdown of the various relief measures that have been enacted. Relief measures enacted by Congress total \$4.0 trillion; and measures enacted through administrative actions total another \$660 billion. That does not include relief measures proposed in 2021 legislation (Committee for a Responsible Federal Budget 2021b).

Congress enacted legislation that greatly expands the role for the Federal Reserve in providing relief through emergency lending, asset purchases, and other liquidity actions. The Committee for a Responsible Federal Budget (2021a) estimates the total relief funds allocated to the Fed at \$7.3 trillion, which was subsequently reduced to \$5.7 trillion. In an unprecedented relief measure the Treasury set aside \$195 billion as a backstop for the Fed to lend directly to private firms. This backstop for Fed allowed for \$1.95 trillion in direct lending and liquidity operations. This program was terminated in 2020, after the Fed provided only \$42 billion through direct lending operations.

The macro policy response to the financial crisis in 2008 and the coronavirus pandemic in 2020 have made it more difficult to address the debt crisis in several ways. Fiscal stimulus has ratcheting up spending in the years following each crisis. The new monetary framework created by the Fed is designed to support fiscal stimulus, low interest rates and asset purchases are pursued long after the crisis. In short, over the past two decades the federal government has failed to normalize fiscal and monetary policy, and there is little evidence that it will do so in the near term. These macro-policy failures set the stage for a new generation of zombie enterprises.

The Intuition behind Zombie Firms

A zombie enterprise is defined as one that is insolvent, i.e. unable to meet financial obligations in full and on time. Zombie enterprises are kept afloat only due to federal bailouts; and as a result new more efficient firms do not enter. This misallocation of resources is causing retardation in productivity and economic growth. Solving the debt crisis is more difficult because of the higher levels of debt and slower economic growth.

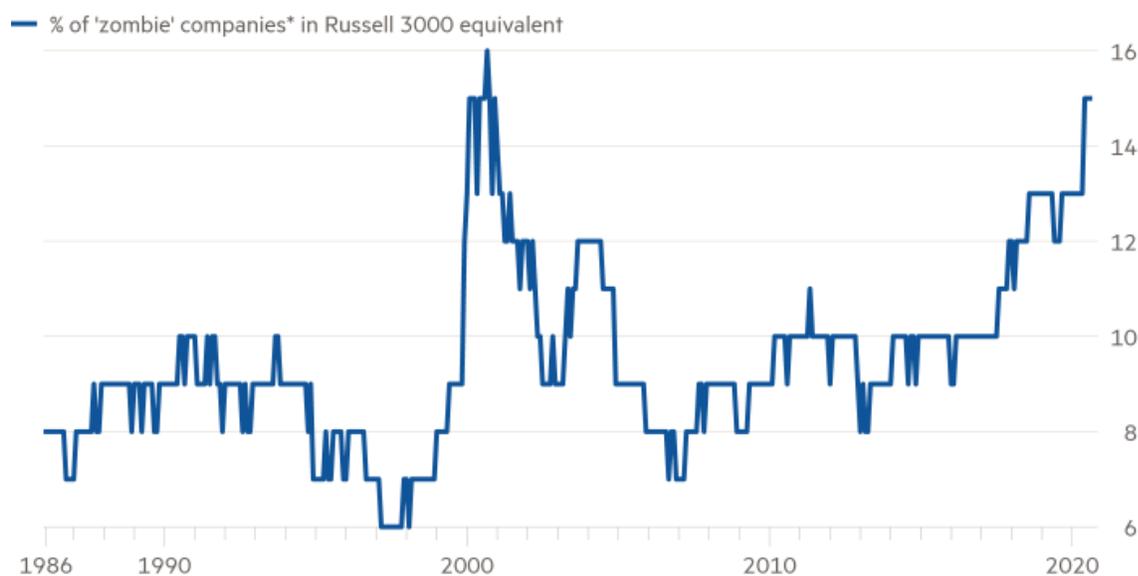
Different criteria are used to identify zombie enterprises. One criteria is whether a firm is receiving subsidized credit (Caballero et al. 2008). Banerjee and Hofmann (2018, 2020) argue that a firm may receive subsidized credit for reasons other than insolvency. They identify zombie firms as ones that are unable to cover debt servicing costs from current profits over an extended period of time.

The term zombie firms was used by Caballero et al. (2008) in their analysis of Japan's 'lost decade' of the 1990s. McGowan et al. (2017) found evidence for a rise in the share of zombie firms (the zombie share) following the financial crisis across a broad cross section of developed countries following the financial crisis. More recently, Banerjee and Hoffman's studies (2018, 2020) show a ratcheting up of the zombie share in the wake of economic downturns in developed countries over several decades extending back to the 1980s.

The Empirical Evidence for Zombie Firms in the U.S.

The Leuthold Group defines zombie firms as “Companies where profits are less than interest paid on their debt for at least three years” (Financial Times 2021). The following chart shows the percent of zombie firms in their index, which is comparable to the Russell 3000 index of U.S. corporations.

Number of US 'zombie' companies nears 2000 peak



*Companies where profits are less than the interest paid on their debts for at least 3 years / Data based on the Leuthold 3000 Universe (Russell 3000 equivalent)

Source: The Leuthold Group

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During the Great Moderation of the 1990s the zombie share was less than 10 percent, and by the end of that decade had fallen to 6 percent. The chart shows a peak of 17 percent zombie companies during the dotcom bubble in 2000. In the years following the dotcom bubble the zombie share fell below 10 percent. During the financial crisis in 2008 the zombie share again rose to 10 percent and remained at about that level for the next decade. In the years prior to the coronavirus pandemic, the zombie share increased, and during the pandemic increased to levels comparable to that during the dotcom bubble.

The link between zombification and macroeconomic policy is clear in those data. The Great Moderation of the 1990s was a period of normalization in macroeconomic policy. Orthodox monetary policy kept interest rates close to the long term real market interest rate. The Fed did not attempt to bail out financial firms or corporations during the recession in 1991. The prudent monetary policies constrained corporate borrowing. Corporations had an incentive to borrow only when borrowing costs could be covered by profits. By the end of that decade a relatively small share of corporations could be classified as zombies.

The sharp rise and fall of zombie enterprises during the dotcom bubble is not surprising. Speculative borrowing and investing by technology firms during those years is now well documented.

What is unique is the growth of zombie firms over the past two decades. Zombification of firms in this period is linked to the failure to normalize macroeconomic policy. Nonorthodox monetary policy designed to support fiscal stimulus has created an environment conducive to zombification. When interest rates are held artificially below long term real market interest rates firms have an incentive to borrow even when borrowing costs cannot be covered by profits (Acharya et al 2018; Jorda et al. 2020).

The market intervention by the Fed in response to the coronavirus pandemic reduced borrowing costs to zombie firms to unprecedented levels. The Fed announcement in March 2020 that it would purchase corporate bonds and ETFs triggered a huge rally in corporate bonds, including those issued by zombie firms. Corporate bonds issued by zombie firms in 2020 hit an all-time high of almost \$2 trillion (Bloomberg News 2021). The growth in junk bond issues has created a new generation of zombie firms. Bloomberg analysis estimates that zombies now account for nearly a quarter of the 3000 largest publicly traded U.S. corporations.

The Fed bailout of zombie firms includes enterprises in some of the industries hardest hit by the coronavirus pandemic, including retail, service, and energy sectors. Carnival, one of the largest cruise ship operators has been kept afloat by the Fed bailout (Richter 2021). It was able to issue \$900 million in bonds with deep junk bond rating, ccc, at a yield of 10 percent. With no operating income, Carnival is burning its way through this debt. Carnival is clearly insolvent and at some point will have to restructure this debt through bankruptcy or exit the industry. Meanwhile, instead of restructuring, Carnival and other cruise operators continue to take on debt backed by the Fed.

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