

Attentive students in any history class may recall hearing the quote credited to George Santayana in 1905ⁱ, “Those who cannot remember the past are condemned to repeat it.” Although this thought may be useful in grabbing the attention of students, it is much more significant echoing through the halls of parliaments, central banks, capitols, and businesses across the world. But why do we constantly need to be reminded to not repeat the mistakes of our past? As humans, we naturally compare a current situation to the most recent and similar past situation we have experienced ourselves; or, we convince ourselves that this time is different because of a variety of changing variables. As investors, our minds frequently revisit the crisis of 2008 or 2001, the early 70’s and 80’s for some.¹ We intimately know these events because 1) we participated in them, 2) they were the most recent, and 3) like common variables are easily identified (technology, processes, size). However, when bypassing these surface similarities, the underlying causes for each of the last 4 recessions differed substantially. So, why then would the recovery of 2008 act like the recovery of 01, 80, or 73?

The ‘Great Recession’ is still fresh in the minds of investors, workers, and political candidates, with references and blame consistently penetrating our news feeds. Trump’s ‘Make America Great Again’ slogan is completely anchored to the notion that America is not great now, predominantly adopted by large swath of people that believe they ‘lived better’ 8 or more years ago. Multiple social movements, directly ‘Occupy Wall Street’, were born out of the Great Recession. Dodd-Frank changed the way people purchase a home, low interest rates greatly influence the movement of capital, and even the ‘Brexit’ vote was made because of the global effects of the ‘Great Recession’.² The effects, direct and indirect, of the recession of 2008 are so large that we cannot easily move past them in our minds, nor can our actions not reflect the changed reality. It is for this exact reason why ‘another ‘08’ is very improbable in the near future – savings rates are elevated, household balance sheets are very healthy, and corporate credit is not exuberant.ⁱⁱ

History Lessons

[In the interest of brevity and simplicity, I skip over many complexities and details here.]

The old theory of ‘high risk = high reward’ applies here. By definition, households and corporations are in a good position to weather another downturn³ – meaning a recession would quickly be stemmed by these factors (making the downturn ‘mild’, instead of ‘steep’), all else equal. But if the economy as a whole is not taking much risk, why would we expect a high reward? If businesses and consumers are saving more now than they did pre-2008, then we cannot have the

¹ Referring to the economic recessions in 1974, 1980, 1990, 2001, and 2008.

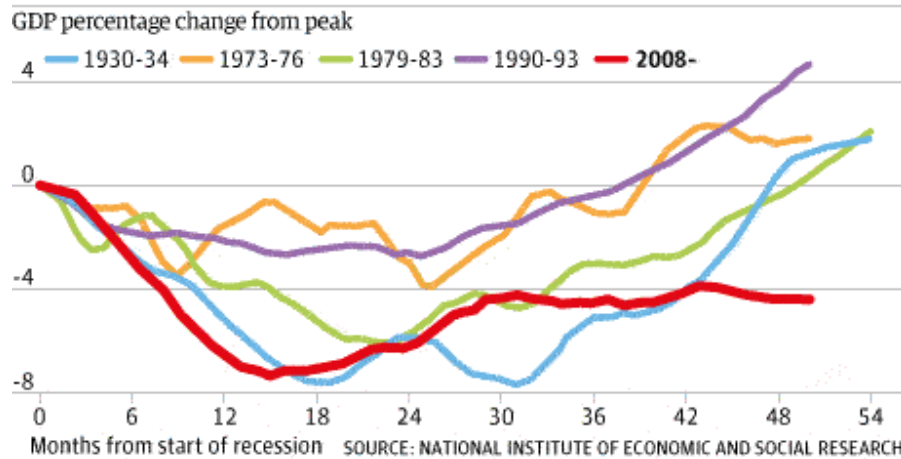
² Some effects are direct, other indirect. New policies and Social unrest are commonly born out of recessions.

³ Meaning an excess of leverage is not present, nor are interest payments as % of income.

same growth expectations as we did then. Clearly, this is not new and is seen after every recession, so why does our low growth environment still surprise people? Time.

Between 1974 and 1980 (each being the start of a new recession), real GDP grew 2.8% or above 4 out of 6 years. Between 1980 and 1990, 7 out of 10 years. Between 1990 and 2001, 8 out of 11 years. Between 2001 and 2008, 3 out of 7 years. Since 2008, 0 out of 8 years.ⁱⁱⁱ

Recession and recovery



Time matters. Low growth or the expectations of low growth effect a lot of decisions. Wealth funds, pensions, insurance companies, currencies, interest rates, etc. – all of which have a massive effect on asset prices globally, may alter their daily decisions based on these outlooks.⁴

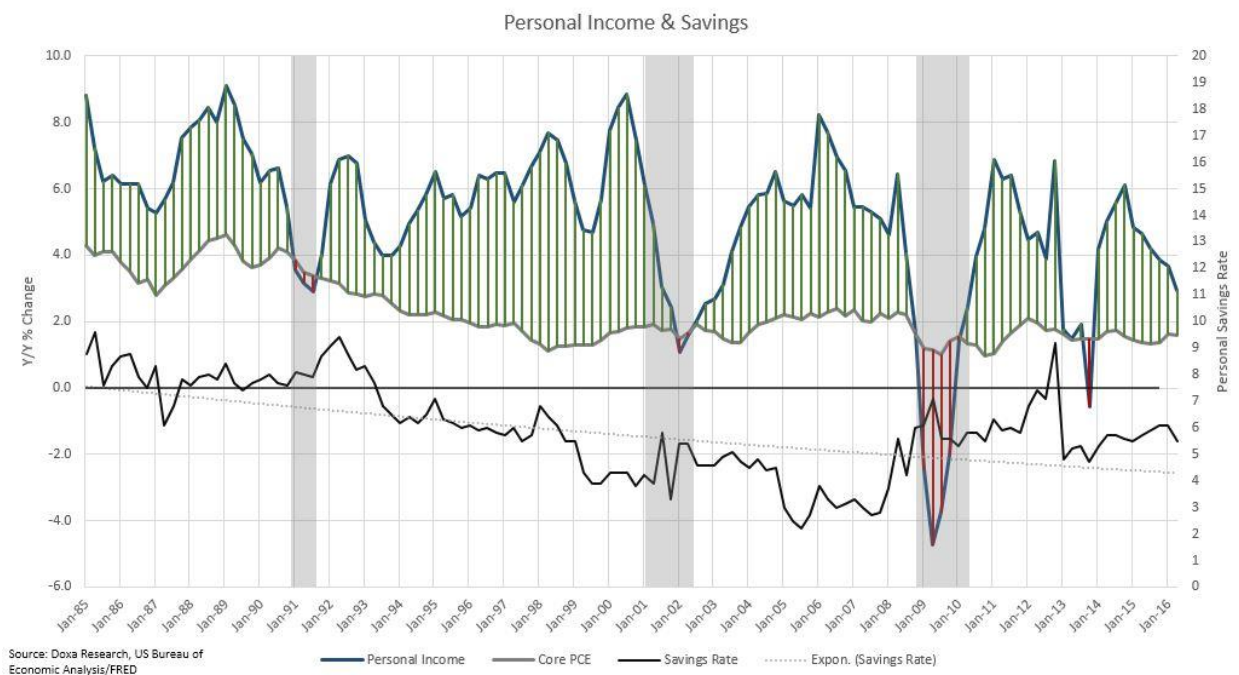
For simplicities sake, following our 'high risk = high reward' theory says consumers and businesses need to take more risk (e.g. spend more) and the economy should get its 3+% growth. This leads us to the question, "After 8 years, why aren't people spending more as they did in previous recessions?"^{iv} Our answer is somewhat a cause and effect: 2008 was different at its core and therefore hurt worse. *Again, hundreds of papers are written about this in depth – please consult the appendix for a more in depth look into cause and effects of recessions.*

The recession in the early 70's was sparked by the quadrupling of oil prices; therefore setting off a string of high inflation years – where costs rose faster than wages. The recession in the early 1980's was caused largely by the reaction to the high inflation of the 1970's. When Paul Volcker was nominated to head the Federal Reserve Board, he promptly raised interest rates, eventually to 20%, which nearly halted demand. The short recession of 1990 again had to do with a price shock in oil. The 2001 recession came from an asset bubble pop in the technology sector, amassing close to 6% of GDP at the time^v. Since the 70's, recessions largely came from price spikes (growth contracts because one inelastic good takes more share of a spender's budget) or bubble bursts effecting small portions of the economy. 2008 was different. It came from a credit burst, effecting a big majority. This credit bubble was built on housing, a sector representing nearly 20% of US GDP - 3x the effect of 2001.^{vi} A credit bust is hard to recover from because of the way it changes behavior, unlike price spikes. A credit bust is also much deeper since it involves leverage (multiplying effect), whereas price spikes can be somewhat contained.^{5 vii viii}

⁴ Most funds/pension have return or income obligations to meet, potentially altering rational investment decisions.

⁵ It could be argued that a credit boom was the cause of many recessions; however, the magnitude and breadth of a boom would determine the depth of the preceding recession.

So if we have emerged from a much deeper, broader recession caused by credit, why would the recovery imitate that of ‘price spike’ recessions or insulated bubble pops? To get a more accurate view, we look to the last time the country had a recession caused by a widespread credit burst – 1929.^{ix} *Before you waive the red flag, I will reiterate that important variables are different, such as technology, processes, and size, between now and then. We are focusing on similar principles, not similar variables.* Again, thousands of brilliant papers are written about the Great Depression, all of which will be more informative than I will be here. There is no question that the 1929 Depression was much worse than the 2008 recession – it took 6 years to regain the lost GDP of the Great Depression whereas it took 3 years to regain the lost GDP of the Great Recession^x – but the way both events changed long term behavior is important to note.⁶



Credit Crunch

The credit crunch of 1929 and 2008 were so broad and deep that consumers and businesses had no desire to take additional risks years after the events occurred. In turn, this reduced the expected rate of growth and kept monetary policy accommodative (attempting to spur risk). However, low interest rates feed on themselves when enacted for a long period of time. Most of the money in the world needs a certain return to fill a gap or meet obligations – this money has to double/triple down every time rates are cut in half or they risk next year’s returns being subpar. This need forces money out of ‘risk taking’ (or capital expenditures) and into yield chasing assets⁷. Wash, rinse, repeat.

Secondly, low rates and an elevated money supply (M2)⁸ are supposed to create higher demand – but when behavior changes this rule is very ineffective. Post-1929, bank runs and defaults made surviving banks very cautious, seen by their willingness to build excess reserves (money on

⁶ Note: a broad credit bust implies effects that reach into banks and cause a financial crisis.

⁷ Referring to an investment with a risk weighted yield higher than US Treasuries.

⁸ Being cash, checking & savings accounts, money market accounts, and short term CD’s.

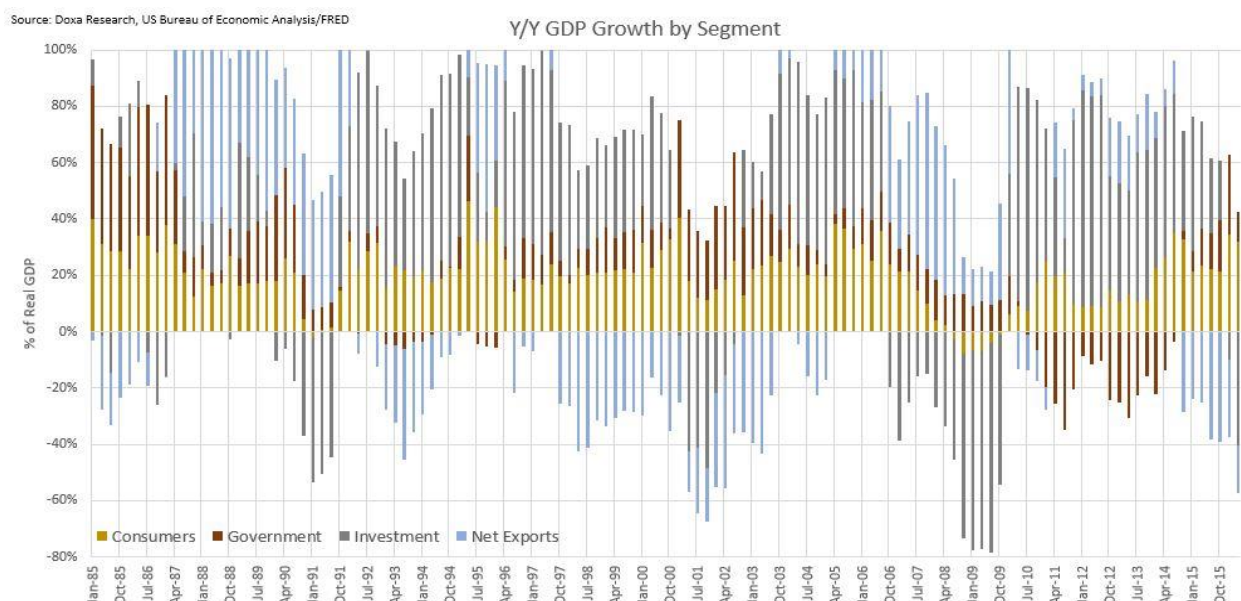
hand over what is required by the Federal Reserve). These reserves effectively quadrupled from 1933 to 1935, soaking up most of the increased money supply meant to spur demand. We see the same behavior take place today. Banks are cautious to lend, business are cautious to invest, and consumers are cautious to lever (credit growth) themselves. Quite simply, this means that 'savings' is greater than 'investment' - the money looking for investment is being overpowered by the money chasing yield.

But the obvious question remains: "These events have taken place after nearly every recession, albeit on a different timeline – why is this time different?"

We agree that this phenomenon happens in nearly every downturn, but it is important to understand how globalization aids in the recovery process: Investment (money) leaves the recessed country (country X) and finds better opportunities elsewhere to meet obligations (foreign), which reduces the demand for the country X's currency. A cheaper currency then boosts exports and make investments attractive to foreign money, spurring money to flow back to country X and generate a healthy recovery.

In short, when a recession diminishes risk taking, we find risk takers elsewhere.

This has worked time and time again across the globe: the Tequila Crisis, the Asian Financial Crisis, the 70's & 80's US recessions, etc., but it hasn't really worked over the last nine years – why? This is where the ghosts of the 1930's come back. The credit crunch of 1929 was so broad that all countries were in trouble together - meaning there wasn't another country to make up for the missing demand. Although the specific causes of each depression were somewhat unique to each country, the gold standard and trade linked them all together. Every major currency left the gold standard between 1931 and 1936 in an attempt to devalue their currency and boost exports (Note: Bretton Woods reestablished fixed priced currencies in 1941). The obvious problem here: if everyone constantly devalues to boost exports, who is going to buy the exports? Not coincidentally, today's monetary policy isn't much different. The US devalued first as the Great Recession began. The Eurozone was next as contagion spread, followed by Japan, then Asia Pacific, and most recently the emerging markets. The US dollar is now back in a position of strength although business confidence has not came back.



Behavioral Changes

The deep wounds of the Great Depression and Great Recession are not only similar across financial markets – but through political behavior. Roughly 13 million Americans voted for Donald Trump and 12 million for Bernie Sanders – both ‘non-traditional’ leaders prioritizing nationalism over globalization.^{xi} The British people voted to leave the Euro bloc, another move symbolizing pride and a desire to limit ‘free movement of goods and people’. The Russian annexation of Crimea was undoubtedly a move to boost nationalistic pride over economic hardship due to oil prices. While many reasons can contribute to the rise of ‘populist’ movements, it is undeniable that the Great Recession is a flagship cause.⁹

Directly and indirectly, the longevity of this slow global recovery has sparked movements for change and cast blame on globalization. This is not unlike the emerging recoveries in the 1930’s: hardline nationalism was embraced in the Soviet Union, Italy, and Germany. In Spain, the Spanish Civil War was the result of the competing ideologies of fascism and democracy (1936-1939). In the United States, the Smoot-Hawley Tariff Act was enacted in 1930 which raised import tariffs on close to 20,000 imported goods (making international trade expensive). Three neutrality acts were passed in the decade, preventing trade & travel to any nation in a war, fueled by a pacifist movement. The many arms of the first and second ‘New Deal’ gave rise to labor unions, social security, banking regulation, and securities regulation, among others.^{xii}

The parallels that exist in the behavioral change of people emerging out of a deep and widespread crisis are not insignificant, unsubstantiated, or common. The combined global scale of the Recession of 2008 was rare, making the recovery that much different than past recessions close to us. In search of ‘what comes next’, our work brought us to Larry Summer’s ‘secular stagnation’ case that he resurrected from economist Alvin Hansen in 1938.^{xiii xiv}

We feel that Dr. Summer’s makes his case quite well [here](#), and am certain I cannot say something better than he already has. On a high level, stagnation takes place over many years and on a net global basis. Growth in different countries or regions may fluctuate based on the timing of their ‘bigger thy neighbor’ (devaluations) policies, but on a net basis growth is next to zero. Stagnation isn’t a phase, it’s a repetitive circle. Initial low worldwide growth (a recession) causes low levels of investment. Low levels of investment equate to low expectations of future growth. Low expectations lead to more savings to meet obligations. Higher savings leads to lower investment. Lower investment equates to low expectations of future growth, and so on.^{xv}

If you run an under-funded pension plan and require 7% annually to fulfill obligations, the repetitive cycle can be a problem. If your cost of capital in an investment is 10%, a low growth environment could make the opportunity unprofitable. Luckily, many investors we talk to are free from these issues, meaning stagnation is merely a game of expectations. Don’t expect a 10% return when the current environment is pointing to 5%. Be opportunistic when a spat of fear causes panic and be wary when a period of calm creates jubilation. As we wrote in [‘The New Normal’](#) last fall,

“Interest rates can affect asset prices as much as LeBron James affects the Cleveland Cavaliers. The higher the interest rate – the higher the expected inflation rate – the higher return an investor expects on investments.”

⁹ It is really important to note that globalization is being blamed here, but is not necessarily the cause. Since 2001, the US has lost 3.2mn manufacturing jobs to China, but roughly three times that to technological advances.

In a stagnate environment, the opposite takes effect. Low growth → low inflation → low rates → low expected return. Reset expectations and patiently take opportunities when they are presented.

Volatility & Inefficiencies

In today's 'Information Era', the speed at which information travels, is processed, and is dismissed is truly astonishing. In the financial markets, this process is even faster. Over five consecutive days in July, the news cycle reported a terrorist attack in Nice, France, replaced by a military coup in Turkey, replaced by an ambush of officers in Louisiana, replaced by the Republican convention in Cleveland. It is certainly plausible that technology has hindered society's ability to focus and analyze, causing many decisions to be made based on the past 10 minutes, 10 days, or 10 months.¹⁰ This, paired with the theory of a 'herd mentality' can swiftly swing markets depending on the latest headline.

As mentioned at the beginning of the note, our worry is not of a precipitous decline in the economy. Businesses and consumers are too cautious. Likewise, our worry is not a surprise economic boom that we missed out on. Businesses and consumers are too cautious. Our foremost concern is that market prices have no idea how to price stagnation, creating increased volatility - with the last twelve months being a poster child. Yield curves are flattening, stocks and bonds are moving in tandem (which are inverse historically), and certain companies fetch over 20x times earnings when growth is next to zero. Add in the 10 second news cycle and we wonder why we are surprised that unexplainable volatility exists.

It would be intuitive to believe market prices today should be closer to intrinsic value than ever before: Information is free, fast, and comprehensive. Stagnation means that earnings and risk premiums should be easy to estimate. Although in theory this would check out, in practice the result seems to be very different. The 'information overload' teeters on overwhelming. There is now so much noise surrounding every data point that it can be cumbersome to sift through or easy to rely on others. An environment of stagnation puts some investors on their heels and forces others do something they wouldn't otherwise do if it wasn't for fund/investment obligations (e.g. negative interest rates). Our concern of increased volatility because of mispricing can be used as a strength. Mispricing can create market inefficiencies and allows for good investments at great prices. High quality, value investments that meet a strict criteria can be made in this environment that will weather the next.

Chase Lee

Director of Research

Authors Note: I do recognize that I have not offered any solution to a stagnation environment, nor do I care to speculate. I do believe the global economy will escape stagnation, most likely by a combination of many factors that occur slowly over a number of years. Doxa Capital's sole focus is not to bet on the outcome of future events, but to plan and manage client's assets around the probability of all future events.

¹⁰ Interestingly enough, brilliant article on this [here](#).

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ⁱ Santayana, George, *The Life of Reason*, 1905

ⁱⁱ Doxa Research & the US Bureau of Economic Analysis/FRED, 2Q16, also used company data in determining NCO rate

ⁱⁱⁱ Doxa Research & the US Bureau of Economic Analysis/FRED, 2Q16

^{iv} FRED, Real Gross Private Domestic Investment data

^v Technology & productivity growth, National Bureau of Economic Research, <http://www.nber.org/digest/oct01/w8359.html>

^{vi} National Association of Home Builders

^{vii} Recession history, <http://www.federalreservehistory.org/>

^{viii} Past Recessions, <http://www.investopedia.com/articles/economics/08/past-recessions.asp>

^{ix} History of the Great Depression, Britannica, <https://www.britannica.com/event/Great-Depression>

^x FRED, Real Gross Domestic Product

^{xi} Election 2016, Pew Research Center

^{xii} Legiwork.org, US Statutes at Large, 1891-1951

^{xiii} Hansen, Alvin, Progress and Declining Population Growth, 1938

^{xiv} Summers, Larry, My views and the Fed's views on secular stagnation, <http://larrysummers.com/2015/12/22/my-views-and-the-feds-views-on-secular-stagnation/>

^{xv} Summers, Larry, On Secular Stagnation, <http://larrysummers.com/2015/04/01/on-secular-stagnation-a-response-to-bernanke/>

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ECONOMIC INDICATORS AND FINANCIAL DEFINITIONS

GDP / Economic Expansion – GDP (Gross Domestic Product) measures the total market value of a nation's output of goods and services during a specific time period. It is usually measured on a quarterly basis. Current GDP is based on the current prices of the period being measured. Nominal GDP growth refers to GDP growth in nominal prices (unadjusted for price changes). Real GDP growth refers to GDP growth adjusted for price changes. Calculating Real GDP growth allows economists to determine if production increased or decreased, regardless of changes in the purchasing power of the currency.

Beggar-thy-Neighbor - an economic policy through which one country attempts to remedy its economic problems by means that tend to worsen the economic problems of other countries.

C + G + I + NX – this common equation refers to the composition of GDP. C = consumer spending, G= government spending, I = domestic investment, and NX = total imports less total exports.

Recession - A period of temporary economic decline during which trade and industrial activity are reduced, generally identified by a fall in GDP in two successive quarters.

Depression - a sustained, long-term downturn in economic activity in one or more economies. It is a more severe downturn than an economic recession, usually identified by a fall in GDP for four consecutive quarters.

Populism - a belief in the power of regular people, and in their right to have control over their government rather than a small group of political insiders or a wealthy elite.

Stagnation - a prolonged period of little or no growth in an economy. Economic growth of less than 2 to 3% annually is considered stagnation, and it is highlighted by periods of high unemployment and involuntary part-time employment.

Aggregate Demand - In macroeconomics, aggregate demand (AD) or domestic final demand (DFD) is the total demand for final goods and services in an economy at a given time. It specifies the amounts of goods and services that will be purchased at all possible price levels.

Neutrality Acts - laws passed in 1935, 1936, 1937, and 1939 to limit U.S. involvement in future wars. They were based on the widespread disillusionment with World War I in the early 1930s and the belief that the United States had been drawn into the war through loans and trade with the Allies.

Monetary Stimulus - an attempt to use monetary or fiscal policy to stimulate the economy by lowering interest rates and/or quantitative easing.

Monetary Policy - the process by which the monetary authority of a country controls the supply of money, often targeting an inflation rate or interest rate to ensure price stability and general trust in the currency.

Yield - The yield of a bond is inverse to its price: as bond prices increase, bond yields fall. For example, assume that an investor purchases a bond with a 10% annual coupon and a par value of \$1,000. The yield on this bond would be its par value divided by the interest it pays.

Unemployment – The Bureau of Labor Statistics measures employment and unemployment of all persons over the age of 15 using two different labor force surveys conducted by the United States Census Bureau (within the United States Department of Commerce) and the Bureau of Labor Statistics (within the United States Department of Labor) that gather employment statistics monthly.

Capital Expenditures (Capex) - A capital expenditure is incurred when a business spends money either to buy fixed assets or to add to the value of an existing fixed asset with a useful life extending beyond the taxable year.

Corporate profit - also called net income, the amount remaining after all costs, depreciation, interest, taxes, and other expenses have been deducted from total sales.

Wages - monetary compensation (or remuneration, personnel expenses, labor) paid by an employer to an employee in exchange for work done.

Developed Economy – countries with high gross domestic product (GDP) per capita and industrialization; countries in which the tertiary and quaternary sectors of industry dominate would thus be described as developed.

Emerging Economy - progressing toward becoming more advanced, usually by means of rapid growth and industrialization. These countries experience an expanding role both in the world economy and on the political frontier.

Potential Recession Causes:

- 1 High-interest rates. When rates rise, they limit liquidity, or the amount of money available to invest. The biggest culprit was the Federal Reserve, which often raised interest rates to protect the value of the dollar. The Fed raised rates to battle stagflation, causing the 1980 recession. It did the same thing to protect the dollar/gold relationship, worsening the Great Depression.
- 2 A stock market crash. The sudden loss of confidence in investing can create a subsequent bear market, draining capital out of businesses.
- 3 Falling housing prices and sales. As homeowners lose equity, it forces a cutback in spending as they can no longer take out second mortgages. Over time, it will cause foreclosures. This was the initial trigger that set off the Great Recession, but for different reasons. Banks that lost money on the complicated derivatives based on underlying home values.
- 4 A slowdown in manufacturing orders. Orders for durable goods started falling in October 2006, before the 2008 recession actually hit.
- 5 Wage-price controls. Fortunately, this only happened once, when President Nixon kept prices too high, cutting demand. Employers laid off workers because they weren't allowed to lower wages.
- 6 Slowdown after a war. This caused both the 1953 recession, following the Korean War, and the 1945 recession, following World War II.
- 7 Credit crunch. This occurred when Bear Stearns announced losses thanks to the collapse of two hedge funds it owned. The funds were heavily invested in collateralized debt obligations. When Moody's downgraded its debt, it, banks who were in a similar overinvested condition panicked. They stopped lending to each other, creating a massive credit crunch.
- 8 Asset bubbles: This is when the prices of internet companies, stocks or houses become inflated beyond their sustainable value. The bubble itself sets the stage for a recession to occur when it bursts.
- 9 Deflation, which encourages people to wait until prices are lower. This aggravated the Great Depression.