Third Quarter 2022

Welcome to Unintended Consequences and Interesting Times

he Law of Unintended Consequences is the premise that actions of people—and especially of government—always have effects that are unanticipated or unintended. Each and every purposeful act leads to results, which are unintended and unforeseen, apart from those which were intended.

The release of an unknown pathogen - Covid 19 - set off a cascade of reactions and consequences that have shattered the world. The social and financial repercussions of lockdowns and government intervention will spawn a generation of books and analvsis. The Russian invasion of Ukraine did not produce a quick victory and easy assimilation of the country into Russia but a disaster that now threatens the world with expanding violence, food and energy shortages and tremendous damage to third-world economies from rising prices. Every action taken to combat these issues and others, will in turn produce more

unintended consequences. We are indeed living in interesting times.

As investors, where do we go from here? The answer is "It depends." It depends on your level of risk tolerance, how much money you have, how your assets as positioned and what your particular financial needs are. One certainty we do have is that the combination of Covid fears, supply chain issues, inflation, government intervention and war have injected volatility into the equity markets that will buffet investors for some time.

This is why we start every investment relationship by striving to understand your needs and risk tolerance and develop your portfolio accordingly. While there can be no guarantees that we will succeed in meeting all your goals, without taking an active investment approach, your portfolio is at the mercy of the market.

Looking forward to what comes next, starts with looking back. Every recession continued on page 2

The Next Big Thing - Energy Innovation?

liminating fossil fuels faces a number of hurdles including the fact that there is insufficient energy to replace the role of oil and natural gas in today's economy. As a fuel, petroleum has advantages clean energy alternatives can't match. It is easily refined, transported, and stored, used only when needed, and available 24/7. Negatives include pollution, the release of greenhouse gases and the

impact on climate change, which have led to calls for the fossil fuel's demise.

Perhaps equally important for the long-term is that important nonfuel uses of oil and natural gas are so numerous that burning it up doesn't make sense in a world of increasing scarcity. Worldwide, the easy finds are gone. In January 1901, when the Lucas well at Spindletop, Texas, struck

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Six Tools of Persuasion

hat makes us more likely to respond to a request? In 1984, Robert Cialdini published six tendencies of human behavior that tend to result in a positive response. Those same six are still very true today:

- Reciprocation Feeling an obligation to reciprocate when given something.
- Commitment and consistency –
 Once we make a decision, we are loath to change.
- Social Validation Following the decisions of others, i.e., relying on what others do.
- Liking Preferring to say yes to people we like.
- Authority Obeying authority figures against our better judgment.
- Scarcity Finding items and information more attractive if they are perceived to be scarce.

Next time you are in a situation where someone is trying to persuade you to do something, stop and identify the psychological tools they are using. Have you been given something for free? Is the individual urging you to stay with an earlier commitment? Are the actions or statements of others being used to validate the decision? Do you find yourself liking the individual? Are authorities cited to support your decision? Is there the threat of scarcity? If you don't buy now, will you be able to later?

If you notice any of the six tools above being used to manipulate your response rather than facts, it may be best to step back and say no until you have a chance to think it over.

Welcome to Unintended Consequences continued

and every bear market has ended with a recovery. In fact, the biggest market gains on the S&P 500 occurred between double-digit corrections:

- 1990-1997: +302%
- 1984-1987: +147%
- 2003-2007: +112%
- 2011-2015: +109%

There have also been opportunities within down markets to exploit sector gains, short-term market rallies, and specific investment themes. While this time may be different, the past teaches us that to take advantage of the opportunities that may occur with a bear market, you need to

- limit losses,
- raise cash where you can,
- continue making contributions to investment accounts, and
- seek opportunities for profit to put your savings to work.

Bear markets are an inevitable part of investing. But they can also be an

opportunity for gains, not losses. This is the goal of active management. To create an investment environment that you can stick with through up and down markets so that when opportunities surface, you have not lost confidence in the market and fled.

This is a great time to schedule an appointment with our office and talk about your portfolio and any concerns you have. Please give us a call and let's make that happen, whether remotely or in person.

Preparing for Evacuation

2021 saw the evacuation of more than a million people from their homes in the U.S. alone in the face of natural and man-made disasters. If an evacuation order happened in your neighborhood, some of the most important items you need to take with you are documents.

If your home were destroyed today would you have proof of your identity? What about financial account numbers and insurance information? If your spouse disappeared in the disaster, would you have a power of attorney to act for him/her in their absence? Ideally, you should keep these documents in a safe deposit box away from your home. But as recent disasters have demonstrated, there is always the possibility that you will not be able to reach your safe deposit box location or that the safe depository itself could be destroyed.

To prevent a disaster from becoming even more disastrous, photocopies of the contents of your safe deposit box as well as passports, and other vital documents that would be difficult or impossible to replace should be in a readily accessible portable file in your home.

You may want to scan key documents and save them to a digital storage device that can be kept in your wallet, or upload your files to an online digital storage service that would be accessible should anything happen to

your hard copies. Just remember to always encrypt data stored digitally! The last thing you want is to have your information available to an identify thief who hacks into the online storage or someone who steals your wallet. There are several programs available that allow you to encrypt images, text documents, spreadsheets, etc. to store them more securely on portable or online media.

Listed below are some of your critical documents that should be readily accessible in the event of an emergency, whether in hard copy form, on a portable memory storage device or online. With this information accessible, you will be able to pick up the pieces and recover from a disaster with at least a little less stress.

- List of safe deposit box contents
- Location of safe deposit box key
- Copies of personal identification documents – including passports, birth certificates, driver's license
- Proof of homeowner's policy with policy number and emergency claim phone numbers
- USB memory chip with photographs or video of your home and possessions for insurance purposes
- Auto titles
- List of accounts: investments, checking and savings, loans, credit cards, debit cards, life insurance policies, etc. Ideally you should include the

- account number, company and a phone number.
- Purchase and appraisal records for collectibles
- Stock and bond certificates
- Wills only the most current copy
- Prescriptions and important medical information.
- Durable power of attorney if you are incapacitated and unable to make important decisions, this gives someone else the right to act on your behalf.
- Health care proxy this includes directives on what medical care you do not want to receive.
- Trust documents
- Original marriage certificate this may be required to file for survivor benefits under Social Security and pension plans, to change the title of real estate, automobiles, etc.
- Military discharge paperwork to be granted military honors at the burial
- Property deeds this includes any cemetery plots
- Burial instructions
- * Other items pertinent to your life

Once you have those documents recorded and available, remember to update them periodically, and then go enjoy life. While we don't know what tomorrow will bring, we have much to be grateful for today.

The Next Big Thing - Energy Innovation? continued

oil, the gusher blew for nine days at a rate estimated at 100,000 barrels (16,000 m3) of oil per day. Today, companies squeeze oil out of the rock of shale fields. Every technological advance to produce oil and gas from more difficult formations comes with increasing costs.

While solar and wind energy are proclaimed as clean energy, both have considerable environmental costs including production of materials used in panels and turbines, extensive land use, loss of wildlife habit and bird kills, and the failure to provide 24-hour energy reliability. Batteries capable of storing excess solar and wind energy are still under development and considerable environmental costs are incurred to mine and process minerals required for their construction. Efforts are underway to make these energy forms more efficient, including using blockchain technology to expedite distribution.

Hydroelectric energy, produced primarily through the release of water stored in large dams, is an ideal clean energy except it once again requires extensive land use, loses its capacity to produce energy when severe droughts decrease water storage, and new dams are fiercely resisted by environmentalists.

asoline accounts for approximately 46% of oil consumption in the U.S. Heating oil, diesel and other fuels make up 26%, followed by airline fuel at 8%. The remaining 20% is used to make 1000s of everyday products. Petroleum uses:

Lubricants: Almost all industries use lubricants for the proper functioning of machinery. In addition, lubricants are used in cooking, bioapplications on humans, ultrasound and medical examinations.

Pharmaceuticals: By-products like mineral oil and petrolatum are used in the manufacture of topical medicines. Complex organic molecules used in pharmaceuticals are linked to simple

The search for clean energy alternatives that overcome the disadvantage of current technologies may well be the next big thing in investing. Because without solving the energy problem, we can't continually add on demands to our energy grid for electronics, automation and so much more.

Some of the innovations underway

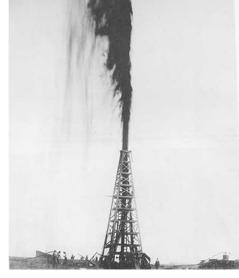
Nuclear energy's first use as a weapon of mass destruction has long tainted its acceptance as a source of safe energy. But advancements have been made in this area including small modular units that are attracting considerable interest.

Molten salt reactors could provide carbon-free electricity with fewer radiation risks than traditional nuclear. The concept is in the development stages.

Green hydrogen, produced from renewable sources rather than natural gas, is seen as a source of energy, as well as helping decarbonize industrial processes, gas heating and heavy transport.

Technologies developed in the oil and gas industry for drilling deeper and horizontally are expanding access to geothermal energy. Magma power uses heated steam produced by magma deep within the earth to generate electricity.

The quest to make fusion power



Spindletop gusher 1901. Original photo by John Trost.

a reality through the use of lasers is getting closer.

Development of the first commercial-scale, grid-connected wave energy test site in the United States is underway and expected to be operational in 2023.

The solution to our current energy woes may be some or none of the above. There may a new innovation that someone, somewhere, is beginning to conceptualize. The real game changers are often ideas whose potential is overlooked or viewed as impractical. Our challenge is to keep our minds and options open to new opportunity.

organic molecules of petroleum byproducts.

Agriculture: Ammonia, a source of nitrogen in agricultural fertilizers, is manufactured from petroleum using Haber's process. Many pesticides are produced from petroleum.

Chemical Industry: Chemical fertilizers, synthetic fibers, insecticides, synthetic rubber, nylon, plastics, pesticides, paints, etc. are produced using the major petroleum by-products like naphtha, grease, petroleum jelly, wax, butadiene etc. Distillates of petroleum that include toluene, benzene, xylene, amongst others are used to obtain raw materials that are further used in products like synthetic detergents, dyes, and fabrics. Benzene

and toluene which gives polyurethane is often used in oils or surfactants, and used to varnish wood.

Domestic uses: Household products like detergents, vaseline, wax, etc. are by-products derived from petroleum. Cosmetics that contain oils and perfumes are petroleum derivatives. Kerosene is used in many countries for cooking, lighting and other domestic purposes.

Rubber: Petrochemicals are used in manufacturing synthetic rubber which is further used to make rubber soles on shoes, car tires and other rubber products.

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Don't Forget to Put the Power of the List to Work!

Worried about how to stay in control of your life? Use the power of the list.

Lists are powerful tools for organiz

ing our lives and orienting our talents. Lists give you control over your life, from a list of what needs to be done, to friends you should contact, events to attend, items that you need to purchase, and so much more.

Without a written list, it is much too easy to get distracted and fail to start or finish priorities. There is also considerable satisfaction to be found in completing and crossing items off a list. Post your list where you will notice it several times a day. Don't let it disappear in a digital file that you can ignore.

Lists are also excellent tools for decision making. Considering pursuing a new job or opportunity? Write down the advantages and disadvantages of your current job; why you are dissatisfied; where your particular talents lie; what you enjoy doing the most and how your talents might fit a different job. Then look at the skills you might need if you change positions and how you can gain

USE THE LIST	POMER

those skills if you do not have them

Next time you find yourself worrying about a situation, a problem or life in general, make a new list that forces you to look for pros and cons, good and bad, opportunities and drawbacks. Then focus on what you need to do to take care of the situation so you can stop worrying. Lists are a path to better answers. Put them to use!

Petroleum uses continued

Other uses: Naphtha is used to manufacture solvents for paints, cosmetics, commercial dry cleaning etc. Paper manufacture and foodstuffs use wax. Asphaltic bitumen is employed in the construction of roads and airfields and the manufacture of roofing felts, waterproof papers, pipeline coatings, and electrical insulation. Decomposing liquid hydrocarbon fractions make carbon black which is compounded with rubber in tire manufacture and used in printing inks and lacquers.

Natural gas uses:

Hydrogen gas (H2) is one of the key ingredients to create fertilizer. Natural gas is primarily methane, which reacts with high-temperature steam to create large amounts of H2. In addition to being used in ammonia, methanol, propane, and acetic acid, the hydrogen produced by natural gas can also be used to make fuel cells—yet another source of electric power.

Commercial applications: Natural gas, plays an important role in the industrial production of materials such as steel, cement, glass, bricks, and paper. Many of the polymers in plastics for electronics, bottles, and clothes are made using natural gas.

