The Coronavirus, Covid-19 and the Complete Use of Scenario Planning

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March 24 2020

Introduction

I am writing this paper for two reasons: first, to be of any public service I can to help organizations and just regular people trying to plan their way in light of the emergence of the Coronavirus pandemic of 2020. The use of scenarios can help thinking and allow embracing of and management of uncertainty. Secondly, to suggest paths forward for some good scenario work already being done by Federal authorities.[1] The essential points here are as follows:

1. Scenarios are tool for managing uncertainty and creating strategic options and a learning orientation toward the future so that risk can be managed and opportunities seized. I will show the steps to that here.
2. Uncertainty need not be feared, but embraced and worked through. The steps I outline here show how this can be done.
3. In a time of such high uncertainty, the process must be used in an open way and continually updated, again in learning mode, and shared with a diverse pool of thinkers and stakeholders.

For a basic introduction to scenario analysis please go to my website and read the information here: https://www.artofquantumplanning.com/about.html

How to Use this document

This document is intended to be a starting point and guide to persons and organizations wanting to think and learn their way forward in managing the Covid-19 crisis. I am suggesting tools from the scenario planning toolkit that can be helpful. Following the steps and using the tools will be good way to jump start your planning process. The ideas here are not intended to suggest what persons should do in the immediate short term (today to 3 months out). Like others, my only advice here it to take care to not get infected, protect those closest to you, and practice the religion of compassion. I keep in mind the old song by Bill Withers, "I've seen love move mountains!"

The Coronavirus and Covid-19

I will not say much about this, as I am sure anyone reading this has ample resources for basic background. Suffice it say that the Coronavirus[2] emerged from human activity in the Wuhan Province of China in the fourth quarter of 2019 and has advanced globally to lead to widespread disease (Covid-19 as designated by the World Health Organization) death and massive downward pressure on national and global economies.   There is a flood of excellent information in the public media about the virus and its

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[1] See: The Worst-Case Estimate for U.S. Coronavirus Deaths
https://www.nytimes.com/2020/03/13/us/coronavirus-deaths-estimate.html?referringSource=articleShare
[2] See: https://www.sciencedaily.com/releases/2020/03/200317175442.htm

potential impacts across the board. I have found CNN, the New York Times, MSNBC (especially the interviews with Dr. David Ho by Rachel Maddow), and the CBS 60 Minutes Sunday March 22 show. I invite readers to constantly check for new and emerging information through whatever sources they respect.

At this point, NO ONE knows the long term impact of the disease on humankind or on our economic activities. So in light of that uncertainty, scenario-based planning and analysis tools can help as they have been used in the past to good effect (just Google "scenario planning" for examples, including what Royal Dutch Shell and the U.S. Intelligence agencies have used it for).

The Coronavirus Scenarios

I have created two interconnected scenarios for this analysis. I suggest that both scenarios be imagined as taking place **over the next 3 to 5 years.** It may be useful to think of the scenarios in phases (organized around various ideas, for example phases from treatment to vaccine cure in the management of the disease). Good scenario practice starts with a key question so one is clear on what is trying to be determined and planned for (no need for confusion early in the process. Here are the two questions anchoring the scenarios I will present:

A. What will the progression of the Covid-19 disease and its possible treatment be as it affects human health and society?

B. What will the course of impacts on national economies (and thereby the global economy) be as progress is made in addressing the Covid-19 disease?

Clearly, these are difficult and complex questions. I will only present scenario frameworks that can be used attack and address these questions over time. ***I have no easy answers***.

Scenario A: Human Health and Society

As explained in my referenced introduction to scenario analysis it is useful to create a matrix built around key drivers of change in the environment one is assessing. In this case, we are trying to assess the health related impacts on society at large. The question again is***: What will be the progression of the Covid-19 disease and its possible treatment as it affects human health and society?***

The question suggests two key drivers:

1. The strength or weakness of the Coronavirus based on its natural characteristics – Will it be a strong resilient virus that keeps coming back and mutates into something really tough. Or, will it turn out to be a weak virus that does not mutate and things like hot weather reduce its effectiveness in causing disease? The span of uncertainty is defined as below.

**Strong, Hard to defeat, virulent, repeats**　　　　**Weak, treatable, recoverable, declines**

2. How fast will scientist, researchers and the healthcare industry move to finding solutions to address Covid-19 disease (from medicines that reduce the impact of the illness and allow therapies—like how we treat the common cold; all the way to an effective vaccine that can be given to prevent the disease and protect the general public).

Slow development to treatments/vaccine　　　　**Fast development to treatments/vaccine**

There is a lot of information available to understand the two key uncertainties above and I recommend keeping up with fast changing developments.[3] Using the above key uncertainties leads to the following scenario matrix (or map) from which we visualize possible futures.

Scenario Matrix 1-Potential Futures for Health and Society -- **Figure 1**
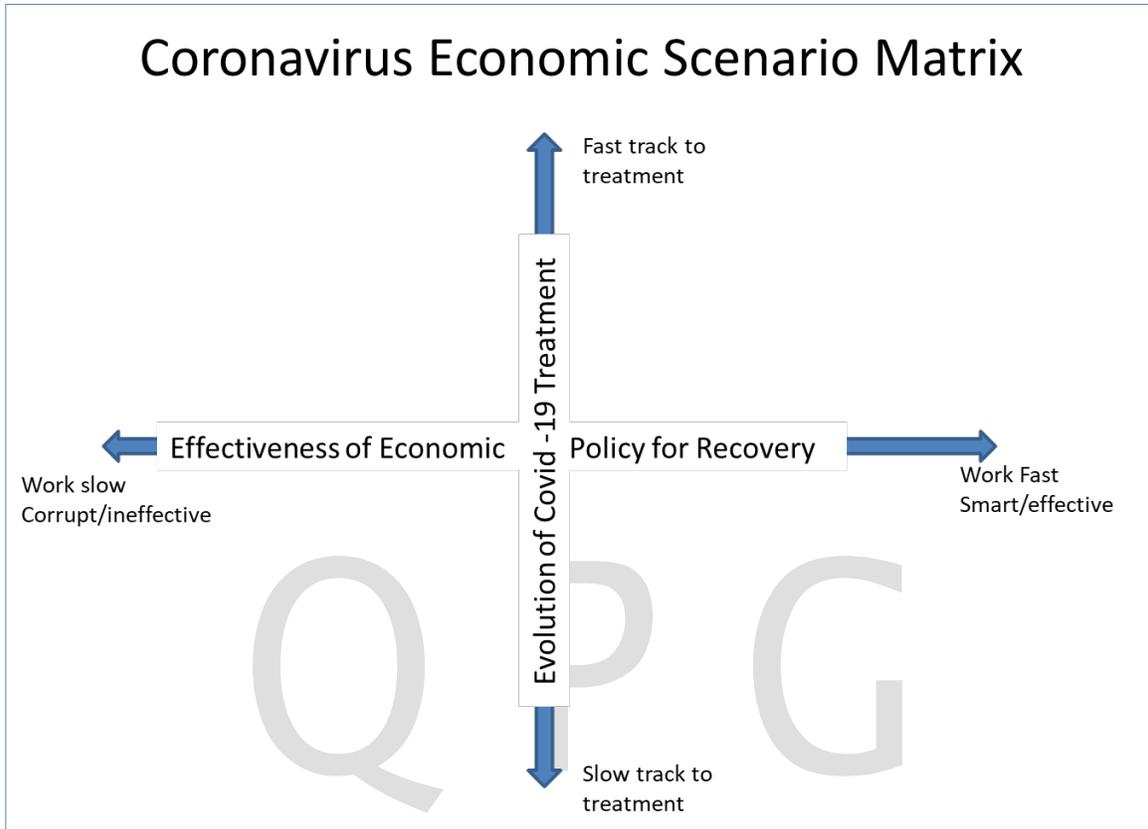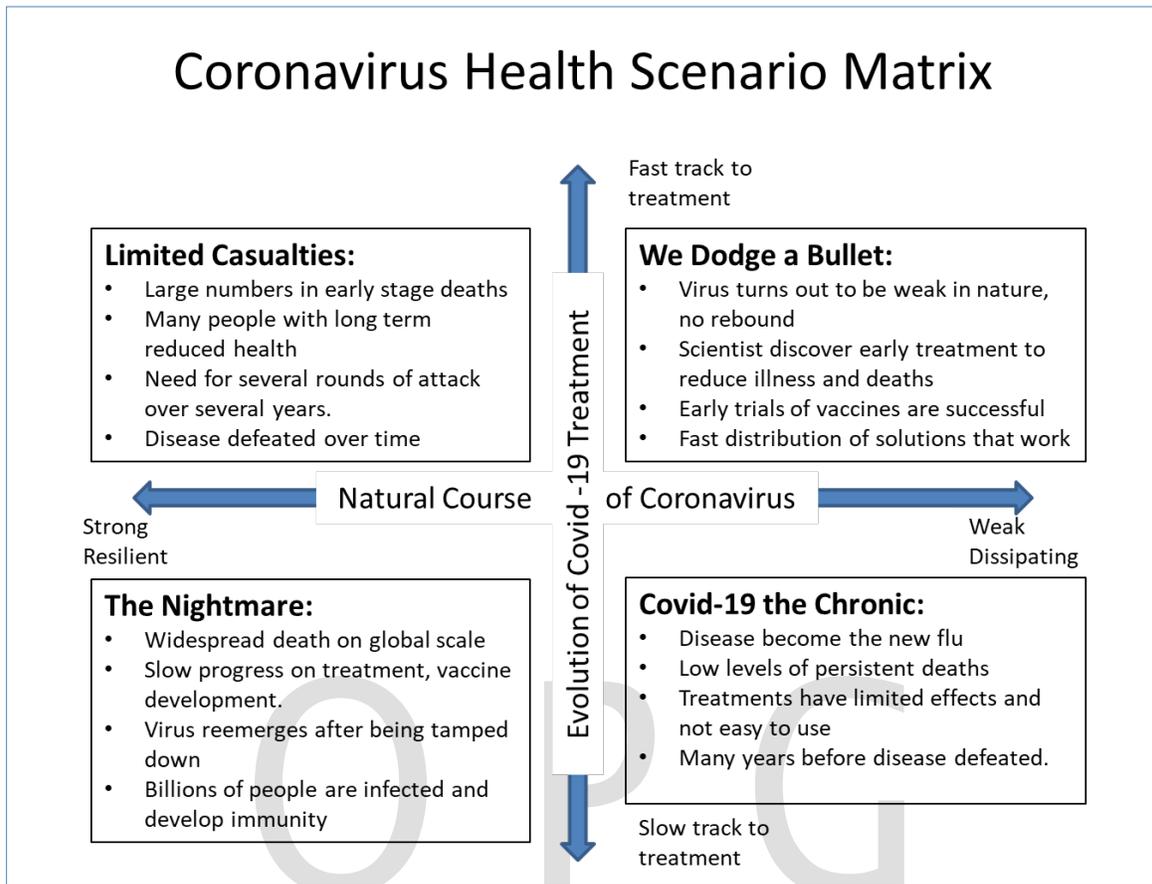

This matrix presents four possible future states for developments related to human health as the Coronavirus spreads. Think of this as a high level map. The key uncertainties pinpoint that we do not yet know the natural course of the virus and we do not know how fast our researchers and health care organizations will be able to create, expand and distribute treatments. Of course, there are other important uncertainties that will shape these potential futures. Among them:

a) Social and cultural responses to the disease and it impacts
b) Political responses to evolution of the disease in society
c) Economic impacts on society that impact health outcomes
d) Healthcare industry changes and evolution that impact health provision

We will get to some of the economic issues in the next scenario section. However, at this point keep in mind we are only trying to shed light on one question: ***What will the progression of the Covid-19 disease and its possible treatment be as it affects human health and society?*** Below is a build out of this basic matrix with ideas on (and names) what may be in the four potential futures.

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[3] Scientists Identify 69 Drugs to Test Against the Coronavirus
https://www.nytimes.com/2020/03/22/science/coronavirus-drugs-chloroquine.html?referringSource=articleShare

Coronavirus Health Scenario Matrix

Fast track to treatment

Limited Casualties:
- Large numbers in early stage deaths
- Many people with long term reduced health
- Need for several rounds of attack over several years.
- Disease defeated over time

We Dodge a Bullet:
- Virus turns out to be weak in nature, no rebound
- Scientist discover early treatment to reduce illness and deaths
- Early trials of vaccines are successful
- Fast distribution of solutions that work

Evolution of Covid -19 Treatment

Natural Course of Coronavirus

Strong Resilient

Weak Dissipating

The Nightmare:
- Widespread death on global scale
- Slow progress on treatment, vaccine development.
- Virus reemerges after being tamped down
- Billions of people are infected and develop immunity

Covid-19 the Chronic:
- Disease become the new flu
- Low levels of persistent deaths
- Treatments have limited effects and not easy to use
- Many years before disease defeated.

Slow track to treatment

I have presented here some starting point ideas about the potential futures. They are guides that you can build on and add to. I again suggest you build this world out over the next five years. You may want to brainstorm what happens for the next 18 months, then the next 18 months and then the last two years. Again, I don't have easy answers. Change the title names if you like! What this starting point can be used for is to imagine possible futures and then to plan against them.

Key steps to that planning include:

1. Suspending disbelief and accepting all four worlds as possibilities. Do not pick a favorite and spend time justifying it or defending it. If you have a team, divide the team up into groups who can develop ideas about each possible world.

2. Put your organization (or family, or group) in each world. Imagine the impacts and the possible actions and strategies that can be taken to manage and reduce risks and problems. Do this for each scenario. You may want to put your actions and strategies into key categories that allow you to keep up with what may be important. For example, you may have categories like easy and inexpensive to very costly, or quickly done versus longer term.

3. *This is a key: Take the strategies and actions developed in each individual scenario and rethink them in the other worlds. So if you have good ideas for the "**The Nightmare**" try them in "**We Dodged a Bullet.**" Do this for the whole set. This will deepen your thinking and help bring up new ideas and solutions.*

4. Return to the scenarios and think of events which if they occurred would be early indicators that a particular scenario might be emerging. Monitor and track the news for these. Suggestions on how a scanning and monitoring system can be built from the scenarios are provided here: https://nebula.wsimg.com/0cedaddd3eb00a07d49be818e9e5781f?AccessKeyId=E0D1B4E1C8BC00C19453&disposition=0&alloworigin=1 from the Services page on my website.

5. Go back to your strategies and possible actions and assign early indicators to them. This will allow you to be responsive to events and is a key part of managing uncertainty. **You now know what you can and might do as events unfold!**

Returning to the Federal Government's effort in this area, it is the steps above that I hope and trust they are taking. The matrix above may be similar to the one spoken about in the New York Times article referenced above. If they are, it can provide a road map for how to engage and inform the public on what steps are being planned. Now on to question #2 above and the next set of scenarios.

Society and the Economy Scenarios

The question here is: ***What will be the course of impacts on national economies (and thereby the global economy) as the progress in made in addressing the Covid-19 disease?***

Note that the focus has shifted to economic impacts and not mostly on human health and social impacts. The question suggests two key drivers that can shape the future:

1. **The ability to find and implement economic and political solutions that will lead to economic recovery**
2. **The progress in finding and implementing Covid-19 disease treatments in the world.**

Clearly, both of these are very important and highly uncertain. At the time of this writing national governments, including the U.S. are contemplating economic and market interventions to shore up economic growth and protect jobs and society from collapse. No one knows whether these will work, when, how fast or how effectively. Several additional packages of aid may be needed.

As discussed above in the first set of scenarios, the progress on finding treatments (from medicines which reduce the severity of disease all the way to a vaccine) is uncertain. However, we can all agree that the faster an effective vaccine is developed and widely distributed, the better. Below is the scenario matrix for this question.

Coronavirus Economic Scenario Matrix
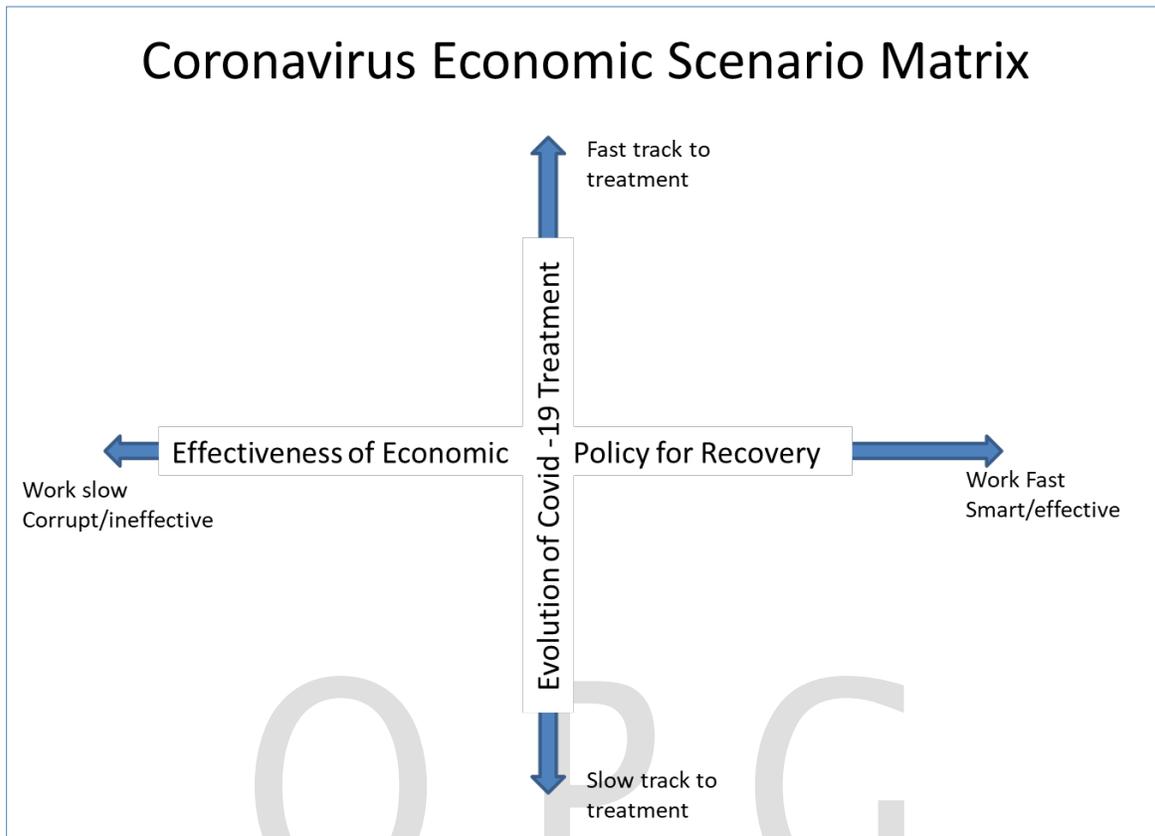
You will see that I retain as a key driver on the issue of uncertainty around the development of treatments and a preventative vaccine for the disease. I see this as a critical factor as policy maker and leaders assess the pathway forward. Put simply, this is the roadblock for everyone. For everyone to feel safe at home, at work and anywhere to engage in productive activity safety is a factor.
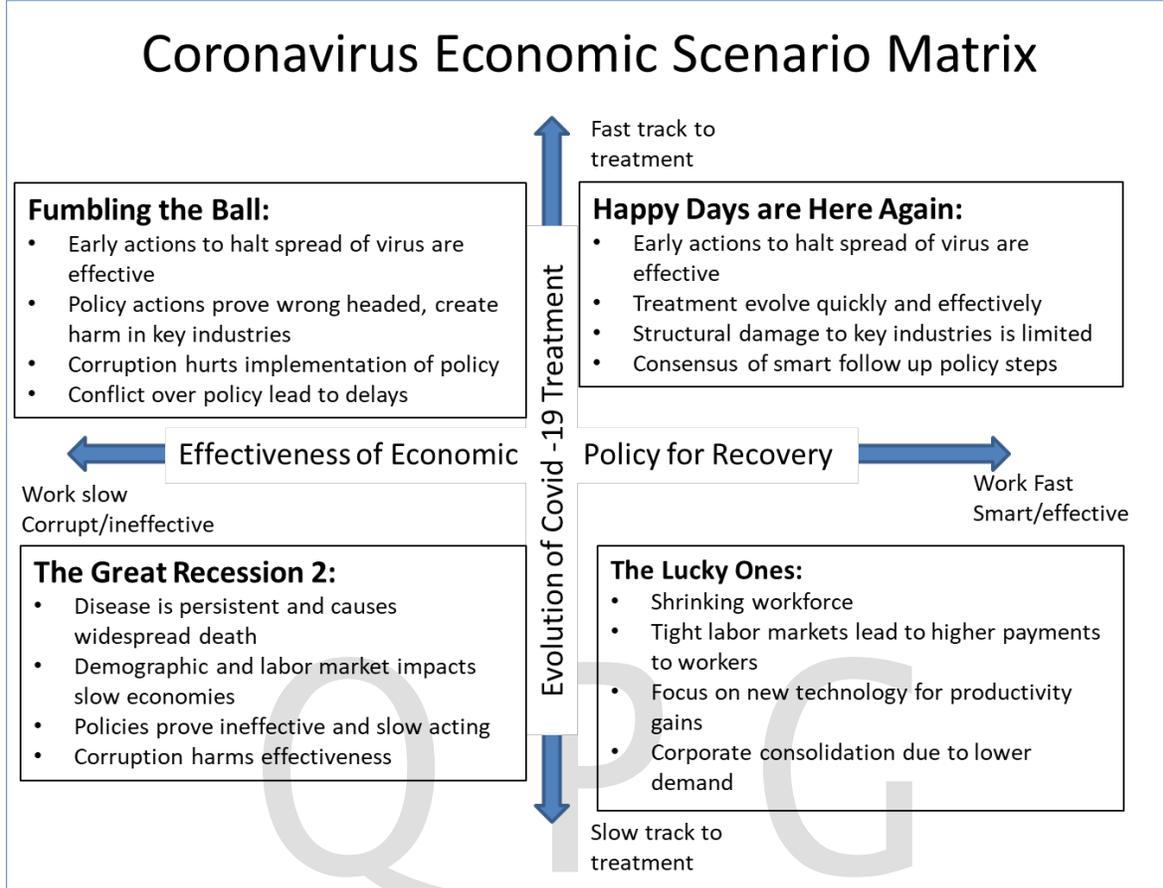
A second key driver for this scenario is focused on the uncertainty around whether effective policies can be found and implemented to help economic recovery. The economic policy play book from the past (fiscal and monetary policy interventions) are being tried on a large scale and by many national governments. To what degree these will work, how fast and for who is uncertain.

Economic policies prove weak slow & corrupted   Economic policies prove effective, smart, fast

Below are my starting descriptions and title names of the possible future worlds. You can build on these ideas and spread ideas over time (the next 18 months, then the next 18 months, then the last 2 years).

Coronavirus Economic Scenario Matrix

Fast track to treatment

Fumbling the Ball:
- Early actions to halt spread of virus are effective
- Policy actions prove wrong headed, create harm in key industries
- Corruption hurts implementation of policy
- Conflict over policy lead to delays

Happy Days are Here Again:
- Early actions to halt spread of virus are effective
- Treatment evolve quickly and effectively
- Structural damage to key industries is limited
- Consensus of smart follow up policy steps

Effectiveness of Economic   Policy for Recovery

Evolution of Covid -19 Treatment

Work slow
Corrupt/ineffective

Work Fast
Smart/effective

The Great Recession 2:
- Disease is persistent and causes widespread death
- Demographic and labor market impacts slow economies
- Policies prove ineffective and slow acting
- Corruption harms effectiveness

The Lucky Ones:
- Shrinking workforce
- Tight labor markets lead to higher payments to workers
- Focus on new technology for productivity gains
- Corporate consolidation due to lower demand

Slow track to treatment

As I mentioned in the first set of scenarios there are other drivers of change you can consider to build out potential future in more detail. Other key drivers might include:

a) Social and cultural responses to the implementation of policy interventions
b) How effective world governments are in dealing with other underlying issues in the global economy
c) Actions of large corporate players and key industries such a banking, energy, air travel, tourism, and medical care
d) Shifts in political leadership (the U.S. Presidential election results)
e) Use of advanced technology in reshaping society
f) Use of new technology in business operation and efficiency

As I shared above the next steps are as follows.

1. Suspend disbelief and accept all four worlds as possibilities. Do not pick a favorite and spend time justifying it or defending it. If you have a team, divide the team up into groups who can develop ideas about each possible world.
2. Put your organization (or family, or group) in each world. Imagine the impacts and the possible actions and strategies that can be taken to manage and reduce risks and problems. Do this for

each scenario. You may want to put your actions and strategies into key categories that allow you to keep up with what may be important.

3. *This is a key: Take the strategies and actions developed in each individual scenario and rethink them in the other worlds. So if you have good ideas for the* **"Fumbling the Ball"** *try them in "***The Lucky Ones.***" Do this for the whole set. This will deepen your thinking and help bring up new ideas and solutions.*

4. Return to the scenarios and think of events which if they occurred would be early indicators that a particular scenario might be emerging. Monitor and track the news for these.

5. Go back to your strategies and possible actions and assign early indicators to them. This will allow you to be responsive to events and is a key part of managing uncertainty. **You now know what you and your organization can and might do as events unfold!**

More Sophisticated Use of the Scenario Tools

What I say above in using the scenarios suggests that planners live in all four worlds and think through their implications to generate actions and solutions. Some organizations also create different pathways through the scenario maps. This suggests the idea of using the scenario map as a "terrain" and moving through over time. In this light, strategy and actions have to be flexible and resilient enough to adjust to expected changes in the environment. Vectors of movement can also be used on the earlier scenario matrix in Figure 2. In the period of high uncertainty we are facing it can be useful to "play" in the map to see what ideas emerge. The pathway I suggest here is only one possibility and I invite readers to "play" with it.

Enhanced Economic Scenario Matrix – **Figure 5**
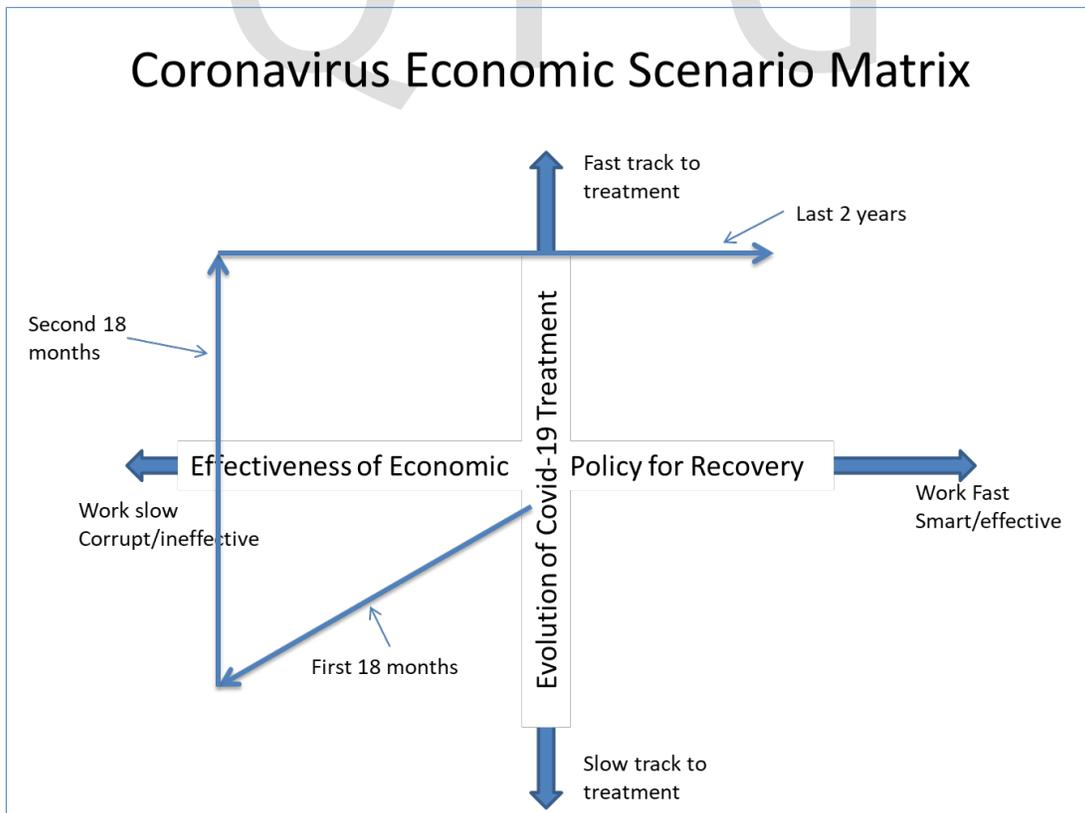
Conclusion: Use of Quantum Planning

My book, *The Art of Quantum Planning,* can be used in conjunction with this paper to deepen your thinking and strategy development. How?—by using the tools in the book to improve the quality of your thinking and strategy development. Here is an example: in Chapter 3 in the book, I warn against the error of dualistic thinking. Dualistic thinking emerges when people begin to think in the following terms:

a)   There is some "us" against some "them"
b)   There must be winners and losers
c)   Let's find a simple solution
d)   Blaming and fault finding

That kind of thinking will prohibit you from seeing innovative solutions and lead to a dumbing down of your effort.

Chapter 7 suggests catalytic and kaleidoscopic thinking. This involves imagining the emergence of something new that shifts the whole landscape, or changes the context of the world you are living in. This kind of thinking may be especially helpful in light of the issue at hand. This kind of thinking requires a diverse team and an open thinking approach. It is harder and takes more imagination. But the strategies that can emerge will be more complex and useful.

I welcome any emails and comments on what I have presented here. This is an early brainstorm that I intend to enhance and improve upon. Email me at: quantumplanner@gmail.com. I hope to incorporate new ideas as I hear from you.

All the best,

Gerald Harris, Founder and Managing Director
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And thank you to my colleague Richard Marrs who reviewed early drafts of this report and made good suggestions!

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