

A Proposal for Fighting Covid-19 and its Economic Fallout

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The current Coronavirus Pandemic has created a national emergency characterized by some as a War. In such case, it should be natural to adopt a War-like social and economic structure. In this short paper I will first provide two WWII examples of such civil structures, successfully supporting two fighting efforts: that of the Battle of Britain, in 1940, and that of the preparation and implementation of D-Day, for the 1944 Allied Forces invasion of France. And then, a proposal to help fight the Coronavirus Pandemic.

During 1940, the UK adopted a national model of defense that allowed it to successfully survive the daily bombings of the Nazi air force. It consisted in including in the model infrastructure all national resources, material and human, to support the war effort. For example, children from the large cities that were being bombed every night were sent to the countryside, in care of foster families. Women took many industrial and bureaucratic jobs, so men could be released and go fight in the front lines. Many seniors, in their 60s and up, who had fought in the Great War of 1914-18, were used in border surveillance duties. Everything and everybody was incorporated to the national effort, to optimize the existing resources to fight the war.

The June 1944 Invasion of Normandy, France, by the Allied Forces, known as D-Day, was an enormous undertaking, both military and civilian. And without the civilian support it would have never succeeded. The military prepared the battle plan. However, the civilians, through an exercise known as *Operations Research* (<https://web.cortland.edu/matresearch/OR&StatsFCSMPaper.pdf>), calculated the number of ships and planes necessary to support such operation, the fuel and bombs that would be used, the medical staff and supply needed, where to store these, how to transport them to the theatre of war, by whom, from which origins to which destinations, what quantities to distribute to those who would use them, etc.

A similar situation arises now with the Coronavirus Pandemic. Surely, Health Care professionals, like the military during D-Day, are the key players. But, just as occurred during the Battle of Britain or the D-Day Invasion, the struggle against the Coronavirus Pandemic requires a much wider civilian participation. For example, Health Care professionals require Protective Personal Equipment (PPEs). How many? Where do we get them from? How do we store and distribute them? Who organizes and maintains the supply chain?

Then, which industries should remain open, and which should not? How will industry operate, under the new public health and Social Distancing constraints? How about schools, police, fire fighters, etc.? How will, those who won't be able to work due to closings, make a living? When will there be a vaccine, a treatment, or enough testing kits? Who will produce and distribute them? Who will develop and control the supply chain to get the raw material? Where will the funds to support all of this operation come from? Finally, how will society survive, for as long as all this operation is required?

The basic trade-off is then between opening and shutting down the economy, defined by the Coronavirus transmission rate. We need to open slowly, to avoid increasing the transmission rate thus overwhelming the health care systems. However, this implies that there will be less resources to work with and larger expenses. There is then a need to maximize resources and minimize expenses. Resources include finding the qualified personnel to work in required activities, such as measuring and monitoring infection rates. Expenses include finding the funds to support such work, as well as the funds to provide for the laid-off workforce, that would be sent home to avoid or minimize such increase virus infection rates.

One efficient way to achieve both stated objectives is to organize a corps of volunteers willing to support, pro-bono, the required activities of local, state and national healthcare and government entities, engaged in the Covid-19 battle.

American Civil Society is composed of different organizations such as churches, lodges, clubs, veterans, and professional societies. These organizations have many retired members who exhibit several important characteristics. Many of them are well qualified and experienced in their professions and trades, having worked in them for decades. As retirees, they don't need to worry about losing their jobs. Instead, they receive a check every month. Such Pandemic-independent income allows them to work pro-bono. They are located nation-wide, accessible to state and local entities. They have available free time. They do constitute a Covid-19 high risk cohort (since they are aged 65 and over). But they can safely work out of their homes, using software and the Internet, without risking exposure to Covid-19 contagion.

Said voluntary corps would provide a much needed specialized work force, to support existing specialists. Furthermore, they would allow government to dedicate more resources to pay for basic needs such as first line responders and the necessary but expensive PPE equipment

Why would retirees want to sign on into such corps? There are both moral and material reasons for it.

We are all in this, together. Becoming a part of the effort to overcome the Coronavirus scourge may be of moral importance to some people, especially at no cost, or very little cost to them.

Secondly, to allow the Coronavirus Pandemic to prolong its duration, or even worse, to let it increase its infection rates, would make life very risky for retirees, a high risk cohort due to their advanced age. A surge of Covid-19 would overwhelm our hospitals and healthcare systems. If the 1918 Flu Pandemic is any model, there may be a second Covid-19 wave (and even a third), which will mean that Covid-19 will be around for at least a good couple of years.

Contributing to avoid higher infection rates, to shorten the duration of Covid-19 Pandemic, or to finding a vaccine or a cure for it, is very much to the advantage of said aged cohort. It is likely that the organization of a volunteer corps to cooperate to Covid-19 defeat will be well-received among many retirees.

About the Author:

Jorge Luis Romeu, has a doctorate in Statistics/Operations Research. He retired Emeritus from SUNY, was a Senior Research Engineer with IIT Research Institute, and worked for sixteen years as Research Professor for Syracuse University. Romeu is a Fellow of the Royal Statistical Society, a Member of the American Statistical Society and of the American Society for Quality. He is Past ASQ Regional Director and has received Fulbright assignments in Mexico, Ecuador, Colombia and the Dominican Republic.