

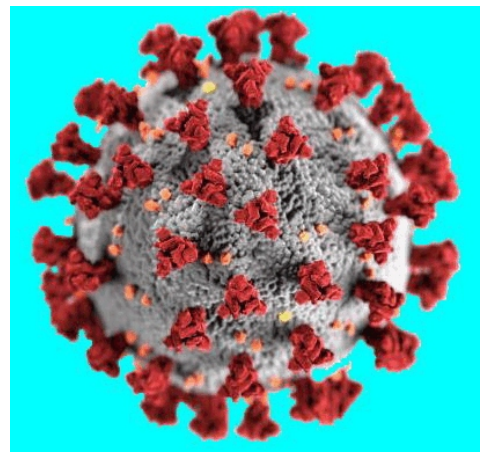
Coronavirus - Recession: Jobs Lost to Machines!

A recession will bring another round of technology displacement with job losses for Millennials and Generation-Z.

James Lyman BSAE, BSEE, MSSM

www.economicandfinancereport.com

It's now a considered fact that the U.S. will experience a recession resulting from the coronavirus threat across the world. It stands to reason, as first whole cities in China, then areas and finally whole countries like Italy and Spain, are sheltering in place with nations shutting down and effectively exiting the world economy. Even if America wasn't taking isolation steps, the rest of the slowing world economy would certainly drag America's economy down. A recession always means the loss of jobs from layoffs as business strives to save money and stay in business.



But another overlooked aspect of employment in a recession is the 'fertile fields' created within an economy for new technologies to sprout and grow, and therefore propagate as labor saving devices. New technologies that businesses can use to save money, in particular to save money by reducing labor cost.

Machines to replace people.

Recessions spur technology displacement of people by eliminating their jobs . . . permanently! Once lost to machines, those jobs never come back. We saw many examples of that in the 2008 Great Recession where high price corporate executives were laid off. There were a number of news reports about those professionals, who previously could find a new job in just days to weeks, but after being laid off, had gone first months, then years with nothing. And they just couldn't understand why suddenly . . . no one wanted them any more! Turns out the answer was simple. While times had been good, computer and telecommunications technologies had developed, but laid relatively dormant in the background. Then came the financial crisis and resulting downturn for business. Corporations needed to reduce cost to preserve themselves, and they found that by using those new technologies they could reorganize themselves and eliminated much of their high priced executive talent . . . you know . . . cost savings. As a few companies did this and reduced their operating cost, the strategy of using technology and reorganization quickly spread to other corporations, so suddenly, there was a massive surplus in this career field- with no jobs to be had.

Recessions replace people with machines.

And this holds true across the spectrum of American career fields. Today, in America, no one is immune from job displacement by technology. But this time, things will be much worse. Since the '08 recession, the technologies of AI (Artificial Intelligence) and artificial vision have made huge advancements. These technologies allow more to be done in designing machines to do the jobs which people are now doing. So, we can expect deep inroads to be made in automation and robotic systems, therefore a recession will purge the economy of people having limited abilities in a technologically advanced society.

As the shutdown continues, with people working at home, businesses will find ways to do the work with fewer people and they will mostly do this by using new technologies. They will reorganize, simplify and streamline their operations to save money. They will do their work with fewer people needing fewer skills and less education, and therefore with a lower labor cost.

In the '79 recession, which resulted from the second oil crisis, there were 11 million people who lost their jobs, but only about 7 million of those jobs ever came back. This happened just as microprocessor-computers were coming into their own. With the advancements made in microprocessors and computer technology since then, automation has become much easier to do and therefore has proliferated. The specter of unemployment is the alarming numbers of joblessness: but the real question is 'How many of those jobs will ever come back?' Judging from past recent recessions, we can expect that a significant number won't come back. The work force will again contract, able to do the same work and at a lower cost.

I remember a visit to my sister-in-law several years ago, and we were watching the evening news with an announcement that a large technology company was laying off 15,000 people. My sister-in-law, who was a technology-challenged person, exclaimed: "Why do they do that? Who's going to do the work? They will just have to hire them back because they can't do the work without them!" I then explained to her that with new computers and telecommunication systems, not only will they be able to do the work without them, but most likely they would do it cheaper, faster and more accurate than when using humans. Those jobs were gone for good! And while the company, as so often the case, eliminated the jobs by retirements and natural attrition to minimize the impact on people, nevertheless those jobs were gone. For the young people coming up, those positions were now gone, leaving them with fewer opportunities.

This is a natural process that has been going on since the mid-twentieth century or earlier, both during boom times and bust. The thing is, a recession greatly accelerates the process of automation over a broader spectrum of career fields. It's just this time it will be deeper and more pervasive, leaving many at the bottom of the heap . . . those living in tents we now see on so many American city streets.

The impact of the oil supplies will be the 'joker in the deck'.