## McKinsey Global Institute

## The 'war' on COVID-19: What real wars do (and don't) teach us about the economic impact of the pandemic

Seven lessons taken from past conflicts may provide economic insights in a time of crisis, from government spending to sectoral implications.

by Gary Pinkus and Sree Ramaswamy



The specter of war is frequently invoked in discussions about the COVID-19 pandemic. Heads of state and government leaders from Donald Trump to Emmanuel Macron have employed wartime rhetoric to describe the crisis—"we are at war," Macron declared in his March television address announcing a nationwide lockdown, while Trump has tweeted about the virus as "the invisible enemy." And as the death toll rises in the United States, many have made comparisons to the number of those killed in the Vietnam War.

The past is not prologue, and the comparisons to war have limits and detractors (Germany's president, Frank-Walter Steinmeier, for one, has said the pandemic is not a war but rather a "test for humanity"). Still, wartime analogies can be useful for an understanding of the potential economic consequences of this crisis. Wars last longer than downturns, and the economic cycle in which we suddenly find ourselves is unlike any peacetime cycle we have experienced in the past half century—including during the Vietnam War and in the aftermath of 9/11. In some key ways, the period we are going through resembles the fully immersed experience of a mass mobilization, wartime economy. While some European countries and parts of the United States are now starting to loosen lockdown measures, the duration of this "war" will be dictated by the time it takes to defeat the virus with effective treatments, vaccines, and immunity, and its depth will be dictated by how much and how effectively we mobilize.

Here are seven insights from a sweep through history highlighting parallels and some differences with today's pandemic:

1. This could go on much longer than we anticipate. Years-long wars often don't start with that expectation. At the onset of the First World War, in August 1914, Kaiser Wilhelm II told German troops they would be "home before the leaves have fallen from the trees," and in England, the talk was about the war being over by Christmas. Churchill, then Lord of the Admiralty, used the

phrase "business as usual" in December 1914 to describe the maxim of Britain in the war. In the American Civil War, thousands of volunteers signed up for 90 days in the expectation of a brief conflict.

What does this mean for us today? Parts of the economy are slowly reopening, though in most cases the opening is tentative and will remain below capacity. Are we at the "end of the beginning," or should we prepare for a resurgence in the fall or even sooner? History shows us we have been in this fog before. Unlike political leaders and the general public though, in most of those cases, military leaders—similar to some epidemiologists and medical experts in the early phase of the COVID-19 crisis—did expect the crisis to be drawn out and more painful than the conventional wisdom. In Britain in 1914, for instance, the secretary of state for war, Lord Kitchener, predicted a war lasting at least three years, with fighting down to "the last million" soldiers.

2. Government becomes a much bigger actor in the economy. As war expands, deficit-financed public spending ramps up to levels unimaginable in peacetime—slowly at first, then suddenly as the magnitude of the conflict becomes evident. Government becomes the primary actor and purchaser in the economy. At the start of the First World War, government consumption in Britain rose from 8 percent of GDP in 1913 to 13 percent in 1914; by 1915, it had shot up to 33 percent of GDP and peaked at nearly 40 percent in 1917, according to the Bank of England's "millennium of macroeconomic data" set, the source of the UK statistics in this article. In the Second World War, America's government consumption rose from 15 percent of GDP in 1940 (already up from 9 percent in 1930) to 48 percent by 1943. The increase in spending was supported by both taxes and debt. The US federal deficit, which averaged 5 percent of GDP in the mid-1930s before falling to zero in 1938, ramped up to 26 percent of GDP in 1943. Federal tax receipts also

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rose, from 7 percent of GDP in 1941 to 19 percent by 1944 (US data cited here is mostly from Federal Reserve Economic Research).

What's different now? Public debt is much higher to begin with. By 2018, central-government debt was at 80 to 85 percent of GDP in France and the United Kingdom, 130 percent of GDP in Italy, and nearly 200 percent of GDP in Japan, according to International Monetary Fund data. At 106 percent of GDP, US public debt is already near its historical peak in 1946. US federal tax receipts have remained above 15 percent of GDP during the postwar period. Total assets on the federal balance sheet amounted to \$4 trillion in 2019—at nearly 20 percent of GDP, which is close to the ratio at the end of the Second World War—and in the Covid-19 response has increased to nearly \$7 trillion. Central-bank assets in the euro area also jumped by around €800 billion to €5.3 trillion in April 2020. The public purse is thus already as stretched in many countries as it was at the end of the Second World War. Yet if the "wartime economy" continues for longer than we expect, growth in government consumption is what will keep GDP growth going as households cut back on consumption, businesses cut back on investment, and exports fall.

3. Wartime increases in government spending come with wartime mobilization of people

and materials. Britain's armed forces doubled in 1914 from 400,000 to 800,000—then shot up to more than four million by 1917. During the Second World War, US military personnel grew from 330,000 in 1939 to two million in the European theater alone, with frontline troops making up roughly 40 percent, according to some estimates. To sustain such mobilization there were additional resources for infrastructure, logistics, and administration in the theater, as well as increases at home for the production of machinery and equipment, vehicles, and agricultural and mining output to support the war effort.

Could such a mobilization happen this time? In one sense it may already be happening—with an "at-home mobilization" of residents being asked or required to stay home, forgo paychecks, and risk unemployment. Government spending has ramped up to finance such a reverse mobilization, paying workers directly or through their employers, just as it did soldiers in war. Across Europe's five largest economies, more than 30 million furloughed workers continue to receive much or all of their pay via government subsidies to companies. In the United States, roughly half the Coronavirus Aid, Relief, and Economic Security (CARES) Act package includes direct payments to households (\$300 billion), expanded unemployment benefits (\$260 billion) and paycheck protection for employed workers

(\$670 billion). The US at-home mobilization currently underway lasts through July 31 and amounts to nearly 6 percent of US GDP—roughly the US military budget's share of GDP in 1942. In France and the UK, government payments to furloughed workers alone amounts to roughly 2 percent of GDP.

Such a reverse mobilization, if extended over a long period, could be in addition to a more typical "frontline" mobilization of two to three million healthcare workers, including nurses, technicians, healthcare aides, contact tracers, and testers. The labor mobilization could come with a mandated redeployment of capital and direct government contracts. One example is the \$2.6 billion of contracts with Ford and GE, GM, Philips, and a half-dozen other firms for ventilators, a contract whose value is 0.1 percent of the US government's current \$3 trillion of final consumption.

4. Mobilization ramps up to absorb all the slack in the economy, tightening the labor market and raising inflation. The massive labor mobilization of wartime brings unemployment levels downsometimes down to levels not seen in peacetime. Britain's unemployment rate fell below 1 percent during the First World War as the civilian labor force shrank in size. Wages rose, and union membership doubled. The US unemployment rate in the Second World War also fell—from 17 percent in 1939 to 1 percent in 1944. Large-scale mobilization tightened the labor market and, combined with farm prices that were held high to ensure adequate food supply, contributed to inflation. In the First World War, Britain's price index tripled from 1913 to 1920; in America, the periods of highest inflation in the 20th century, aside from the 1970s, were the years immediately following the two world wars.

Such a scenario seems implausible today. It is hard to imagine that many or most of the 30 million US workers that filed for unemployment (as of May 1, 2020), or the 30 million

furloughed workers in France, Germany, Italy, Spain, and the United Kingdom will be absorbed by mobilization. Instead of a full-scale frontline mobilization of health workers and an at-home mobilization of nearly everyone else, we may instead settle for a half-normal situation. The Economist calls this the "90 percent economy," one in which travel and hospitality operate well below capacity, bankruptcies and financial hardships continue at a steady pace, and there remain persistent worries about a second or third wave of infections. In such a scenario, labor mobilization is unlikely to absorb much slack. The unemployment rate may be much higher than in prior war periods, along with a high risk of long-term unemployment, discouraged workers, and persistent distress in communities across the country. The relatively low mobilization of such an extended crisis may not contribute to inflation. In any case, over the past decade, inflation has remained persistently weak despite the longest economic expansion on record.

5. Wartime means major winners and losers among sectors. In recessions, economic resuscitation attempts focus on jump-starting the whole system, but in wartime economies, resources move quickly from one area to another. Governments call the shots for anything deemed strategic, from tanks to food. Britain's steel output grew by 25 percent between 1913 and 1917; its munition output increased 40-fold in the same period. France and Germany saw even greater increases in their munition output. Meanwhile sectors that depend on households' discretionary spending can see a fall in output sometimes enforced by constraints. Between 1941 and 1944, for instance, urban American households reduced their spending on household furnishings, appliances, recreation, and entertainment by 25 percent, according to research by the US Bureau of Labor Statistics. Spending on automobiles fell by more than 50 percent as automobile factories were retooled for military trucks, jeeps, tanks, aircraft, vehicle parts, and munition. The dispersion of

sector outcomes in wartime can be as wrenching as in the 2008–09 period (when automobile industry GDP fell by more than 50 percent, and many other industries saw 20–25 percent declines in a single year) and last much longer than in most recessions.

During this pandemic, economic loss has been disproportionately in sectors affected by the lockdowns. Sectors such as transportation, recreation, hospitality, and discretionary retail make up 50 percent of households' discretionary spend, or about 10 percent of total GDP. These sectors are usually the ones affected by the impact of war on households' discretionary budgets. We haven't yet seen the reallocation in this crisis, as the government response so far is mostly in the form of transfers to households and businesses to maintain current allocations, not direct government spending to reallocate resources.

6. War can end with a recession. When war causes great physical destruction, as in France and Germany during the Second World War, urgently needed reconstruction can fuel long economicgrowth periods—but that's not always the case. In the United States there was a recession after both world wars, the American Civil War, and the Korean War. Government consumption shrank quickly but households did not have the income growth to step up as economic engines. In some cases, inflation and central-bank action were additional triggers. The size and duration of the

recession were affected partly by the backlash to rising public debt or inflation. America and Britain saw sharp recessions in 1920–21, with falling farm prices and worker incomes, austerity measures, and high unemployment. In Britain, for instance, unemployment rose in the years following the First World War, reaching 11 percent by 1921. Historians suggest that some conditions for the 1929 crash and subsequent depression can be traced to policy actions immediately following the First World War.

What will happen when our efforts to defeat the virus end, for instance, with a vaccine? Some of the conditions for a postpandemic slowdown have already been seeded. Governments in many countries are taking extraordinary fiscal measures, and the end of war will be signaled by a pullback in those measures. The public debt could trigger concerns and calls for cutbacks and austerity (as has happened in our living memory after the financial crisis). Household spending has already been hit and may take time to recover if unemployment continues to be high and persistent. In the corporate sector, large firms may be more likely to bounce back from such a recession; smaller firms—especially those in smaller towns and nonmetropolitan areas—tend to be more vulnerable, and many may not survive. Trade growth had already been slowing since 2012 and could slow further if companies focus on localizing resilient supply chains (especially coming on the heels of tariff and "decoupling" concerns).

Household spending has already been hit and may take time to recover if unemployment continues to be high and persistent. 7. The end of war can bring institutional changes and a better social contract. The two world wars were followed by periods that saw a range of attempts to improve social services and reintegrate soldiers into the workforce and society. In Britain, France, and some other European countries, major welfare reforms were enacted during or at the end of the Second World War, including the introduction of universal social security in France and the Beveridge Reforms in Britain, which created the National Health Service. In the United States, the GI Bill gave returning soldiers an opportunity to upgrade their skills and education. The social contract between institutions and individuals was strengthened.

Could that happen this time? It may depend on the extent of mobilization. In a scenario of low mobilization and a half-normal economy, the COVID-19 pandemic could potentially heighten economic insecurity, which has grown for individuals in their roles as workers, savers, and consumers over the past two decades. The situation postpandemic would be very different from wartime precedents in such a scenario, with wages and inflation remaining subdued, interest rates remaining near or below zero, and high unemployment persisting even after labor mobilization. These factors would create major social and economic challenges for government and business leaders.

On the other hand, a full-scale healthcare and at-home mobilization could put us in a different situation. Just as previous wars brought forward labor-market changes, such as greater unionization, worker benefits, and increases in female participation in the workforce, this war could accelerate changes such as universal incomes, remote work, and greater resilience for households, workers, and companies in supply chains. With these changes we could end up with a renewed social contract that improves income security, expands access to technology, and creates a rising tide of productivity and economic prosperity.

"War is hell," General Sherman famously remarked, and the pain and suffering caused by the COVID-19 pandemic is also proving hellish for many victims. The economics of the pandemic are also looking bleak, and the timing and strength of any recovery is still unclear. Amid the talk of U-shaped and V-shaped recoveries and forecasts for the new normal, we are also being cautioned that pandemics create unforeseeable breaks in trends and that mean reversion, or moving back toward the norm over time, may not be the most likely outcome. Wartime analogies may not all be appropriate or relevant to this crisis—but they do provide some indication of what's likely to be an unpredictable road ahead.

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