

The CARES Act:

Caring About Effects, Not Just Intentions

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Abstract

This paper presents an analysis of the economic effects of the CARES Act – a massive relief package approved in March by the federal government. Both theoretical and empirical approaches are taken in an attempt to evaluate how well-suited the provisions of the Act are for achieving its stated ends and the extent to which its unintended consequences have effects on the real economy. Specifically, this paper investigates how the CARES Act affects prices, supply and demand, and resource allocation. Principles of the Austrian school of economic thought are applied to the analysis of resource allocation and monetary theory, and some neoclassical theory is employed in assessing the welfare dynamics of the Act. While this paper does not serve as a condemnation of the CARES Act, its findings suggest that the Act could have been more effective in achieving its stated welfare goals and had fewer distortionary effects if its provisions had been more targeted.

Keywords: CARES Act, inflation, resource allocation, government intervention

Introduction: The Structure of the CARES Act

“It is emergency relief. Emergency relief, that’s what it is.”

– Mitch McConnell, Senate Majority Leader

In March of 2020, the United States government passed the Coronavirus Aid, Relief, and Economic Security Act – the CARES Act as it will be referred to – in an attempt to help relieve some of the economic pressure resulting from the COVID-19 pandemic. This relief package disseminated more than \$2 trillion into the economy through various avenues – individuals, businesses, and state and local governments. Such a significant increase in liquidity will inevitably lead to changes in preferences/expectations and, subsequently, unintended consequences. This paper will explore some of these unintended consequences from a theoretical and empirical perspective. Though it is too early to make conclusions concerning the effectiveness of the CARES Act, general economic principles combined with unique aspects of the pandemic suggest that the CARES Act would have been more successful at achieving its welfare goals and had fewer unintended consequences if it was more targeted.

Before proceeding with our analysis, it is important to fully understand both the structure and goals of the CARES Act. According to the U.S. Department of Treasury, the stated end of the CARES Act is to provide “fast and direct economic assistance for American workers, families, and small businesses, and preserve jobs for our American industries” (The CARES Act 2020). It is by these objectives which we will judge the effectiveness of the Act. Senate majority leader Mitch McConnell emphatically stated on the Senate floor that the Act “is not even a stimulus package. It is emergency relief. Emergency relief, that's what this is” (Snell 2020). This appears to be an attempt to distance the ends of the CARES Act from those of a typical stimulus package,

and, likely, the efforts of the previous administration following the 2008 financial crisis.

However, is the CARES Act's structure and impact significantly different enough to justify this distinction?

The CARES Act is separated into four types of intervention: assistance for American workers and families, small businesses, preserving jobs, and state and local government (The CARES Act 2020). As previously mentioned, the CARES Act provided more than \$2 trillion to these ends – notably outpacing the 2009 package totaling \$831 billion. To give some perspective to that value, that is nearly 10% of the United States' 2019 GDP – \$21.3 trillion (Gross 2019). The analysis in this paper will focus on two of the four sections of the Act: assistance for workers and families and assistance for preserving jobs.

Inflation: The Unavoidable Consequence of Size

“Inflation is taxation without legislation.”

–Milton Friedman

Before analyzing the unique aspects of the Act, let us consider the general economic implications of such a massive intervention. In the six months following the passage of the Act, the Federal Reserve has reported a 58.5% increase in M1 and a 33.2% increase in M2 (Federal 2020). This significant monetary inflation is not surprising, but it is concerning. Obviously, this increase in the government's balance sheet was unanticipated, and the result will be a massive deficit. There is an expectation that the Federal Reserve will help finance this deficit through the purchase of U.S. Treasuries – that is, monetizing the debt (Lawson, 2020). The harmful effects of debt monetization are well known as it is “inflationary, and it imposes future heavy burdens on the taxpayers” (Rothbard 2008, 172). This remains to be seen.

What remains inevitable however are the market disturbances or Cantillon effects which will accompany this intervention. Typically, these effects are analyzed with respect to government provision of funds to a specific point in the economy. With the CARES Act, new funds are not injected into the economy at a specific point but spread throughout. Will we then see the same welfare shifts which accompany the former example? We certainly will. Murray Rothbard demonstrates that, even in the extreme case of all citizens instantaneously receiving equivalent funds, some will benefit at the expense of others (Rothbard, 2008, 46-47). Namely, those who go out and spend the new money first – before prices have had the opportunity to adjust – will benefit at the expense of their counterparts. Also, such uniform monetary expansion results in a general wealth transfer from the wealthier to the less wealthy. This is not necessarily an economic bad and seems relatively consistent with the goals of the Act, but monetary inflation is generally an inefficient form of transferring wealth. We should also note that monetary inflation harms pensioners and savers.

Moving forward, it is important to keep in mind that “all government activities necessarily divert incomes, resources, and assets from the market” (Rothbard 1981, 1). That is, government activity diverts resources from their free-market allocation – their most highly-valued allocation. *Ceteris paribus*, we would expect an increase in the size of government intervention to have a commensurate impact. Additionally, such a significant government intervention introduces a degree of uncertainty into the market. This is expounded by the fact that it is unclear whether a second relief bill will be passed or if it will be on the same scale. This introduces an element of regime uncertainty which makes prediction and thus entrepreneurship more difficult and tends to cause individuals and companies to delay spending.

Where is the Money Going? – What Price Changes Can Tell Us

“If economists did not concern themselves with economic efficiency, nobody would.”

–Dennis Holme Robertson

The way in which this monetary inflation manifests itself in prices will be telling as to how the funds are being allocated. We will consider this with respect to the section of the CARES Act dedicated to assisting workers and their families. This section includes a provision for payments of “\$1,200 per adult for individuals whose income was less than \$99,000” (The CARES Act 2020). Despite the efforts of the administration, these payments are colloquially referred to as “stimulus checks,” not emergency relief or “economic impact payments” as put forth by the Treasury (The CARES Act 2020). For the more than 235 million Americans with incomes in 2019, the median income was \$35,977 (Historical 2020). Evidently, this portion of the Act was not very targeted. In fact, of the total budget for the Act, an estimated \$560 billion was allotted to individuals (Snell 2020). These payments were not earmarked for any specific purpose.

Referring to them as stimulus checks or emergency relief has no impact on how they are utilized. Thus, to decide which term is more apt, we must return to our question of inflation.

According to the Bureau of Labor Statistics, the Consumer Price Index for All Urban Consumers (CPI-U) has increased by 1.2% over the last 12 months. Notably, the CPI-U decreased -0.8% in April and increased 0.6% in June and July following the allocation of many of the aforementioned payments – see Figure 1 on the next page.

Chart 1. One-month percent change in CPI for All Urban Consumers (CPI-U), seasonally adjusted, Oct. 2019 - Oct. 2020
Percent change



Fig. 1. Consumer price index for all urban consumers. From the U.S. Bureau of Labor Statistics. <https://www.bls.gov/news.release/pdf/cpi.pdf>

This would suggest that the CARES Act influenced consumer prices. However, relative to the monetary inflation, these numbers are not as significant. However, the same cannot be said for asset price inflation. At its lowest point in March 2020, the Dow Jones Industrial Average was 18,591.93. On November 24th, it reached 30,046.24 (Dow 2020). That is an increase of 61.6% which is quite near the level of monetary inflation. In his analysis of asset price inflation from an Austrian perspective, economist Brendan Brown characterized asset price inflation as “the empowerment of irrational forces in asset markets by monetary disorder” and states that it is “triggered by... monetary experimentation” (2017, 29, 42). Thus, these figures are not surprising from a theoretical perspective, but remain very telling.

Such significant asset price inflation indicates that many individuals are not using their payments for the express purpose of emergency relief. Rather, it is likely that many invested the money in the market. It should not be surprising that many of the recipients of these payments who are not facing economic distress would use the excess liquidity to invest, pay off debts, or buy various luxury goods. Thus, it is difficult to distinguish the effect of these payments in many cases from those of a stimulus package. While none of these allocations of funds are harmful in their own right, they are not in-line with the stated ends of the payments and Act as a whole.

We have established that a significant portion of the payments are likely not being used for emergency relief, but is this necessarily harmful? *Some* of the funds are certainly being used for their intended purpose, and increased saving and investing results in increased economic prosperity in general right? While this is true in the unhampered market economy, the same does not apply here. If increased saving and investing is not backed by a change in societal time preference, this will simply result in contradictions within the market which must be resolved – not incurring a net economic benefit. In absence of the Act and general government interference, the market would allocate the efficient level of funds to saving and investing. Frédéric Bastiat noted that “whatever may be the amount of cash and of paper which is in circulation, the whole of the borrowers cannot receive more plows, houses, tools, and supplies of raw material, than the lenders altogether can furnish” (Bastiat 2009). Thus, these additional funds, those not used according to the purpose of the CARES Act, do not confer any net economic benefit, and, as we will see, are in fact harmful.

Gordon Tullock is commonly cited for his insight: it is impossible to give money away for free. This refers not only to the costs of acquiring money by the government, but also to how people shift their actions in order to compete for it. On the market, individuals compete by satisfying consumer preferences, but when the government introduces different requirements for acquiring wealth, individuals compete along different margins. Therefore, if these payments were more targeted, there would be a reduction in the inflationary effects, more means would be allocated to their most highly valued ends, and administrative costs associated with their provision would be lower. This might be implemented through a reduction in the qualifying income level, or increased focus on the recently unemployed.

An Empirical Look at Commodity Prices

"Achieving and maintaining price stability is the bedrock principle of a sound monetary policy."

–Ben Bernanke, Federal Reserve Governor

"If we do not know what something is, we cannot very well act to keep it constant."

–Murray Rothbard, *Man, Economy, and State*

Returning to the topic of commodity price inflation, though it was relatively small, it would still be insightful to know the degree to which the dissemination of these relief payments has affected commodity prices. However, changes in commodity price can be brought about by a myriad of changes in the economy. Thus, there is far too much endogeneity to immediately state with any confidence that the payments were the cause of the price increases seen in the months following the passage of the CARES Act.

In order to isolate the effect of payments on prices, we will undertake a difference-in-difference analysis. This is made possible through the timing of payments made. The IRS sent out payments incrementally, moving from lowest income to highest income. Specifically, on April 24th, payments were sent out to taxpayers with incomes below \$10,000 based on their 2018 or 2019 tax information. On May 1st, payments were sent to those who earned \$10,001–\$20,000. This process continued on a weekly basis through September (Friedman 2020).

This is significant because it implies that areas with lower median incomes will receive more payments earlier, and thus, should see the effects of these payments on prices sooner. Therefore, completing a difference-in-difference using price index data from two cities with very disparate income levels should remove a significant portion of the endogeneity with changes in prices.

Before surveying any of the data, I chose Detroit, Michigan and Seattle, Washington for this analysis for the following reasons. According to the U.S. Bureau of Labor Statistics, Seattle was

one of the richest cities in the country in 2019 with a median hourly wage of \$25.65 and a median hourly wage that is 28% above the national average (Overview 2020). Contrastingly, at the same time, median hourly wage in Detroit was \$20.01 – one of the lowest in the country. Even more telling, median household income in Seattle was \$93,481 in 2018 compared to \$31,283 in Detroit during the same year (Seattle 2020; Detroit 2020).

Also, it is important to note that the populations of both cities are significant and relatively close. In 2019, the U.S. Census Bureau estimated the population of Seattle to be 753,675, and the population of Detroit to be 672,662 (QuickFacts Seattle 2019; QuickFacts Detroit 2019). Finally, the political environments Washington and Michigan are not extremely different according to a 2017 Gallup poll (Newport 2017).

We are now prepared to analyze the price indices for these cities. All of the following data was taken from the U.S. Bureau of Labor Statistics. In Seattle, during the first two months of the payments' distribution from April to June, prices decreased by 0.2%. During the corresponding time in Detroit, prices increased by 1.7% (Consumer Price Index, Seattle 2020; Consumer Price Index, Detroit 2020). The comparison can be seen in Figures 2 and 3 below.

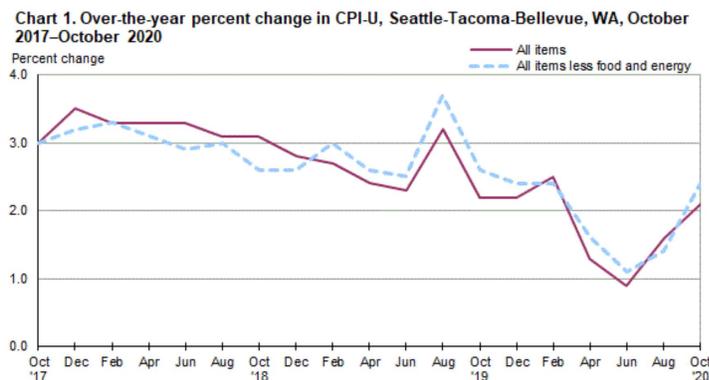


Fig. 2. Consumer Price Index for Seattle Area. From the U.S. Bureau of Labor Statistics. https://www.bls.gov/regions/west/news-release/consumerpriceindex_seattle.htm

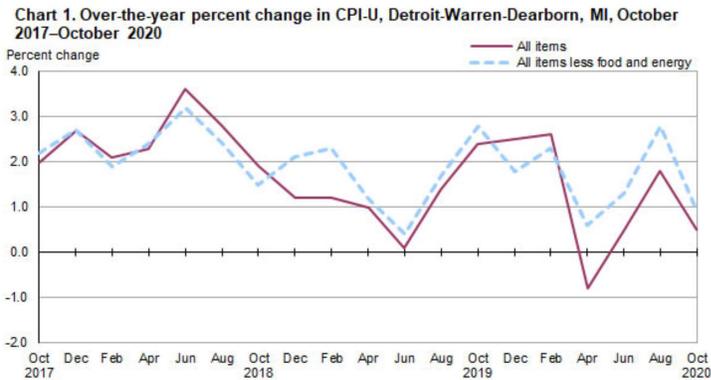


Fig. 3. Consumer Price Index for Detroit Area. From the U.S. Bureau of Labor Statistics. https://www.bls.gov/regions/midwest/news-release/consumerpriceindex_detroit.htm

Also, note the stark contrast in the trend for prices in Detroit before and after April. Thus, we can say with far more assurance that funds from the CARES Act have affected prices of consumer goods, but what is the significance?

Before moving on, it is important to address how the formation and modification of consumers' perceptions and expectations affect our quantitative analysis. As previously mentioned, such a significant government intervention introduces a degree of uncertainty into the market. This is compounded by the uncertainty already present due to the introduction of new regulations and forced government shutdown of businesses. Uncertainty can alter individuals demand, including demand to hold money. As uncertainty the principle reason individuals demand to hold money, heightened uncertainty increases said demand. In the words of Ludwig von Mises, "where there is no uncertainty concerning the future, there is no need for any cash holding" (1998, 414). This effect would in fact work counter to the inflationary effects we have already analyzed. Therefore, it appears even more likely that the inflationary effects seen are the result of the monetary inflation.

We should also consider how the massive increase in the federal balance sheet affects expectations. According to Ricardian equivalence, individuals are forward-looking and thus internalize the government's budget constraint when making their consumption decisions. Now, certainly not all consumers have this foresight, but those who do will be encouraged by the increase in the government's budget to increase saving in expectations of increased taxes in the future resulting from the newfound debt. This too works counter to increases in the CPI-U, again supporting the connection we have drawn between the increase and relief payments. Also, with this idea in mind, the immense asset price inflation previously observed is unsurprising. Now, rate of consumer price inflation remains small compared to that of the respective monetary and asset price inflation, but the administration of payments exerting some effect on consumer prices can still be insightful.

Let us first note that this finding is indicative of the fact that some of the payments are being allocated to their intended purpose. Food prices specifically followed the same trends as overall consumer prices – food being a prime example of a necessity, the purchase of which could necessitate emergency relief (Consumer Price Index, Seattle 2020; Consumer Price Index, Detroit 2020). Now, food being a normal good, theory would dictate that demand for it would increase with an increase in income regardless of whether or not the recipient is in financial distress. It is impossible to tell from the data what part of the increases in the prices is the result of people using the newfound funds for the express purpose of relief. For the same reasons discussed in the previous section, these changes in demand serve no positive economic function, and payments made beyond the intention of the Act do have adverse effects.

One possible alternative would be once again to make aid more targeted, or to direct more funds toward programs with the express purpose of helping give the needy access to these necessities.

One of the significant objections to the structure of the CARES Act from private groups such as Feeding America and The Center on Budget and Policy Priorities is that “it lacks a SNAP benefit increase, which is needed to help families afford food” (Parrott 2020). SNAP refers to the Supplemental Nutrition Assistance Program. This is a federal government program which helps low income individuals and families gain access to food (Supplemental 2020). It similarly provides funds directly to individuals and families, but it is more targeted, and the money is strictly for the purpose of food purchases. Thus, funds toward the SNAP program are more liable, in fact guaranteed, to be budgeted toward emergency relief.

The Families First Coronavirus Response Act (FFCRA), a subsidiary act which also went into effect in April, did have some provisions for SNAP along with policy changes for unemployment and wages (usda.gov). Also, the FFCRA and the CARES Act in conjunction have provided \$850 million to the Emergency Food Assistance Program – a similar federal program (USDA 2020). However, this quantity is dwarfed by the hundreds of billions going toward relief payments. While the former remains a far more direct avenue for emergency relief, the significant disparity between these values remains puzzling.

Before moving on, it is important to understand consider changes is consumer prices with respect to federal monetary policy. At the time of the passage of the CARES Act, the federal reserve lowered interest rates to near zero in an effort to stay “on track to achieve [their] maximum-employment and price-stability goals” (Powell 2020). Thus, the federal reserve is also making efforts through its monetary policy to suppress changes in prices. According to the Austrian school, money stability is an impossibility given the ongoing change of the market, and price stability as an objective can have damaging economic effects. It “is a recipe for bringing about

disastrous results, namely recurrent economic crises” (Polleit 2018). It will be interesting to see in the future how the CARES Act and the adjoining monetary policy affect the business cycle.

The Supply Side: American Industry and Employment

“When economics deals with the problems of interventionism, it has only those measures in mind which primarily affect the means and not the aims of action.”

–Ludwig von Mises; *Interventionism, An Economic Analysis*

We now shift our focus to the portion of the CARES Act dedicated to “preserving jobs for American Industry.” According to the U.S. Treasury, this part of the Act is for the assistance of employers suffering “economic hardship due to COVID-19” – once again, a very broad group. Specifically, among a few other provisions, the Act extends an employee retention credit, incentivizing employers to “keep employees on the payroll through a 50% credit on up to \$10,000 of wages paid or incurred from March 13, 2020 through December 31, 2020” (The CARES Act 2020). In total, the amount of money going to businesses from the CARES Act is approximately \$877 billion.

Firstly, note once again that the funds being allocated to this part of the program incur the same negative effects as previously discussed – they are inflationary and take funds from their efficient allocation on the market. Differently from the relief payments, the government may be more certain that these funds are being allocated to their intended ends. However, this does not imply that this is the most effective way to reach their goals, and there remain immense unintended consequences with this form of relief.

Notably, these payments will change constraints and incentives for firms. For example, it is sometimes profitable for a firm with low fixed costs to stop production briefly for various

reasons such as an expectation of increased demand in the future. For a firm facing decreased demand as a result of the pandemic, these payments decrease incentive to remain open. Thus, one would expect the marginal firms to close when they would not under free-market conditions. This incurs a deadweight loss on society – exchanges which would have occurred had the firm remained open will not. This is a net economic loss. This fact in its own right does not imply that this program is ill-advised. Taking into account the ends of the program, this and the following consequences may be acceptable to policy makers for the attainment of these ends. However, it is important to recognize them in order to assess the economic efficacy of the program.

Interestingly, while this program may cause some businesses to close temporarily, it is also liable to keep others from having to close permanently. For the marginal firm, these payments serve as a decreased budget constraint which may make it profitable to remain operating when it would have otherwise been forced to liquidate. The result is that factors of production are not reallocated to where they are most highly valued. Instead, they remain in lines of production which less effectively satisfy consumer preferences, or, in the present case, may not produce at all due to temporary closures. This too is a net economic loss.

However, given the unique circumstances of this economic crisis, the significance of these firms not liquidating must be considered further. Compared to the aid and government bailouts which helped mitigate closure of businesses following the 2008 financial crisis, the present economic crisis and respective aid are fundamentally different in some important respects. Namely, the *cause* of the crisis and subsequent business failures.

The 2008 crisis was primarily the result of improper valuation and subsequent malinvestment. In order for an economy to fully recovery from a crisis, malinvested capital must be allowed to be liquidated and reallocated. Otherwise, the recovery, though more moderate at first, will be

extended and more painful in the long run. Therefore, allowing companies to fail is a vital part of the recovery process for an economy.

Though this is sound economic theory, one must be careful when applying it to the present economic crisis. This is because many businesses are facing economic hardship as a result of events exogenous to the market. Instead of bankruptcy being the result of misallocation of resources, in many cases businesses are being adversely affected by new regulations and measures taken in response to the pandemic.

A business which is forced to liquidate assets as a result of the forced government shutdown of operations will not result in those resources being allocated where they are more highly valued. In fact, if the business would have been able to continue operations profitably without the forced shutdown, they will be reallocated to lines of production where they are of less value. The more specific a given capital good is, the more its value will decrease when reallocated. It is also important to note that there are transaction costs involved with the reallocation of capital goods – search costs, bargaining costs, transportation costs, etc.

When this is the case, beyond the normative goals of the program, the CARES Act's provisions to help keep struggling businesses from closing may also create another economic benefit.

Namely, to help prevent the costly movement of assets to less-valuable lines of production.

However, one must not lose sight of how this situation is an effective illustration of Ludwig von Mises' principle: intervention begets intervention. Although, the question of whether or not government shutdown of business is advisable is beyond the scope of economics.

Does the same apply to those companies which have been especially harmed by changes in demand as a result of the pandemic? For example, social distancing has had an especially

adverse effect on the service industry. Firstly, this is fundamentally different because it comes through the market mechanism – it is a result of changing demand from consumers. Therefore, business failure is a reflection of failure to best satisfy consumer preferences as it is at any other time. However, this does not immediately disqualify our previous analysis. The important question remains: what are the expectations of future demand? If there is an expectation that the pandemic will end moderately soon and demand for these goods and services will return to near its old level, curbing the liquidation of businesses in these industries may be economical in the long-run. However, this is impossible to know with any certainty, and there are private means by which a business can acquire funds to continue operating if they have these same expectations.

Once again, none of these can discredit or affirm the federal government's decision to create these programs, but they can give us insights into the economic effects, and how the government might achieve the same ends with fewer unintended consequences. Evidently, the extension of aid to certain businesses would have more economic benefits than it would to others. From a pure welfare economics perspective, aid would ideally be extended only to those businesses which are failing not as a result of malinvestment, but it is of course impossible or prohibitively costly to distinguish between these.

Similarly, it would be most beneficial to extend aid specifically to businesses which would fail without it as a result of the shutdown. This is certainly more targeted than the given means test: employers suffering economic hardship due to COVID-19. However, there is once again an information problem in distinguishing between these firms. Thus, by making these provisions more targeted, there would be a trade-off between increased search/information costs and decreased administration costs. The relative size of these changes in cost are impossible to assess

ex ante, this is an empirical question, but the more targeted aid also carries with it fewer market distortions.

Adopting a public choice framework, it is not surprising that, despite the possible economic gains to be had from being more discriminatory with aid, this is not the policy adopted. This is because policy makers adopt these programs with issues of public opinion and equity in mind. It would seem unfair to many for the government to give relief to one struggling business over another regardless of the relative consequences.

One possible alternative to maintaining workers on payroll would be to designate more funds toward unemployment. Of course, increasing unemployment benefits has a similar effect of decreasing the incentive to work. However, it would increase labor mobility relative to this alternative as workers would be free to shift into different lines of production where demand might be higher. Similarly, capital goods would be freer to move where they are demanded rather than remaining idle unnecessarily – keeping in mind however that liquidation might be always be the best option for closed businesses. It is with these idea in mind that we shift our focus toward the effects of the pandemic and these policies on supply.

Shocks and Shortages

“The paradox of ‘planning’ is that it cannot plan, because of the absence of economic calculation.”

–Ludwig von Mises, *Human Action*

Following the initial outbreak of COVID-19, there were significant demand shocks for various goods such as hand sanitizer and toilet paper. The shortages which followed were not surprising and much of this can be contributed to the uncertainty and panic associated with the outbreak.

Much like a bank run, once people realize supply of goods is short, it is hard to stop people from purchasing them in whatever quantity they can. The result was significant price gouging for these goods. Concerningly, the chief financial officer of St. Joseph's Medical Center in Rochester, NY reported the charging of \$25 for a protective shield normally costing \$1.25 (Jankowicz 2020).

It is possible that individual's increased liquidity as a result of receiving relief checks helped exacerbate this phenomenon. Despite this this money not being earmarked in any way, the timing and source of these payments may affect individuals mental accounting. This refers to people placing different values on the same amount of money based on subjective criteria. That is, people may be more likely to allocate these funds toward buying goods related to the crisis even if they would not allocate their normal income this way. Whatever the cause, shortages are to be expected in the short-run, but on the free market, shortages would be adjusted for with increased supply in the long-run. Why then have shortages of certain goods such as cleaning products persisted?

One possible factor on this lack of adjustment is the decreased mobility as a resulting from the provisions of the CARES Act – namely, the employee retention credit. If laborers have less incentive to shift into different lines of production, and capital goods which could be used to meet new demand are frozen in industries facing decreased demand, then the ability of the market to quickly and effectively adjust to changes in demand will be obstructed. Although, this is likely one among a number of factors affecting the mobility of labor and capital.

Supply chains for certain goods may be disrupted as a result of the forced shutdowns. However, if this was the only factor, one would expect to see shortages in goods which have not seen significantly increased demand. It may also be that the cost of acquiring and integrating new

capital goods outweighs the expected benefits for companies in the effected industry. Recall that the liquidation and reallocation of capital does not occur in a frictionless market – it is not costless.

Ultimately, the decision is based on the expectations about future demand. If suppliers in the industry believe this increased demand is transitory, then it may not be cost effective to make a large investment in new capital in order to increase output. The same can be applied to new entry. For example, toilet paper machines in many production lines were already running near capacity (92%) at the time of the outbreak according to the private, price reporting company Fastmarkets RISI (Wieczner 2020). Thus, increasing output would incur a significant fixed cost. According to Julio Nemeth, P&G’s chief supply officer, “whereas you could open up another assembly line to fill bottles of Tide detergent for under \$10 million, an additional paper machine would require an investment of roughly \$300 million” (Weiczner 2020).

This is indicative of the fact that certain lines will be able to adjust more effectively than others due to capital heterogeneity. Those lines of production with more specific inputs will have a harder time adjusting to increased demand regardless of general effects on the mobility of capital. Now, labor is one of the least specific and thus most easily transitioned inputs. Thus, industries facing increased demand which have a significant quantity of labor in their production structure will be more directly harmed by the decreased labor mobility resulting from the CARES Act.

Finally, we will consider how another form of government regulation impedes businesses’ ability to adjust supply to demand. At the time of the outbreak, when shortages were most severe, some already produced goods in wholesale trade could not be shifted to retail sale. One example being toilet paper idling in closed hotels. This is a consequence of the Fair Packaging and Labeling Act

(Fair 2020). The Act distinguishes between two classifications of products: “consumer packages” intended for sale in retail stores, and “non-consumer packages” intended for wholesale trade. According to the Federal Trade Commission, the purpose of the Act is to “to facilitate value comparisons and to prevent unfair or deceptive packaging and labeling of many household ‘consumer commodities’” (Fair 2020). Specifically, the FPLA requires stricter labeling practices for these household consumer commodities. Therefore, in order to move finished goods from wholesale to retail trade, a company would have to repackage them before sale. This is simply another fixed cost which will make the practice unprofitable for the marginal supplier.

In the face of these long-term shortages, there has been some direct government production of these goods. For example, in response to prevailing shortages of hand sanitizer, the state of New York has begun directly producing “NYS Clean” hand sanitizer at a rate of up to 100,000 gallons a week and distributing it free of charge (At Novel 2020). Let us consider the direct economic significance of direct government production. First, this effort will have a crowding-out effect; it will make it even more difficult for the private sector to adjust to increased demand because they now have to compete with a price of zero and with a government facing relatively non-existent budget constraints in the market for factors. Government provision will also decrease excess demand and thus the price of hand sanitizer, making new entry less attractive. Second, providing the product for free, the government cannot know how much of the good to provide because there is no possibility for economic calculation.

This is another example of how government intervention leads to further intervention. Through the CARES Act, forced shutdown of businesses, and packaging regulations, the federal government disrupts resource allocation and imparts new costs on production. The result is

prolonged shortages which the government responds to by providing goods directly – further disrupting production and resource allocation.

Learning from the Past – The 1918 Flu Pandemic

“If a government wishes to alleviate, rather than aggravate, a depression, its only valid course is laissez-faire”

–Murray Rothbard, *America’s Great Depression*

The closest analog in modern history to the present pandemic would be the Spanish Influenza Pandemic of 1918. In total, the estimated global mortality rate from this event was 2.1% (Barro et al. 2020, 1). During this pandemic, according to the Centers for Disease Control and Prevention, similar policies to the present social-distancing measures were put into place: “isolation, quarantine, good personal hygiene, use of disinfectants, and limitations of public gatherings” (1918 Pandemic 2020). Despite these, however, unemployment was at 1.4% in this year. However, this data point is not extremely insightful because the Influenza corresponded with the United States’ involvement in World War I, so one cannot draw any conclusions from this information as to the effect of the pandemic on employment directly.

Similarly, while the Covid-19 Pandemic first hit during a relative boom in the economy, the Spanish Influenza occurred following a downturn in the market – the DJII had in fact declined 21.7% in the prior year. Despite this, “the stock market recovered substantially during the pandemic, with the Dow index increasing by 10.5% in 1918 and by 30.5% in 1919” (Benmelech 2020). While there is still the problem of immense endogeneity with World War I, these points demonstrate the fact that a country can recover from such an event without massive

interventionism. Such practices were not commonplace until the Great Depression. Author James Grant hails this recovery as “America’s last governmentally unmedicated depression” (2014, 1).

One study by Harvard economist Robert Barro et al. attempted to isolate the economic effect of the 1918 Pandemic using 42 countries and their respective “war intensities,” or how closely they were involved in World War I (2020, 5). This paper concluded that the Influenza Pandemic played a role but was likely not responsible for a large part of economic contraction. By the numbers, “the U.S. cumulated flu death rate of 0.52% corresponds to estimated decreases by only 1.5% for GDP and 2.1% for consumption” (Barro et al. 2020, 14).

Conclusion

According to the same paper, a 1% increase in the death rate corresponded to a 3% reduction in real per capita GDP in the typical country (Barro et al. 2020, 11). This is significant because it serves as a reminder that individuals on the market have incentives to satisfy both the normative and economic goals of the CARES Act. They internalize a significant amount of the benefit from restrictions put in place by the government and are incentivized to do them already. *Ceteris paribus*, a business working to satisfy consumer’s preference for safety will receive increased profits. This is all to say that the market is a powerful tool for dealing with crises. A few years after the financial crisis of 2008, an empirical study concluded that the 2009 stimulus package had only transitory effects on initiating economic recovery (Lean and Russell 2011, 493).

Hopefully, as the government assesses the effects of the CARES Act and considers the administration of another massive relief package, policy makers take into account the unintended consequences discussed in this paper, and realize that their goal of economic relief is not always best achieved by command.

References

- At Novel Coronavirus Briefing, Governor Cuomo Announces State Will Provide Alcohol-Based Hand Sanitizer to New Yorkers Free of Charge. 2020. *New York State*. [cited 15 November 2020]. Available from: <https://www.governor.ny.gov/news/novel-coronavirus-briefing-governor-cuomo-announces-state-will-provide-alcohol-based-hand>
- Barro, Robert et al. 2020. The Coronavirus and the Great Influenza Pandemic: Lessons from the “Spanish Flu” for the Coronavirus’ Potential Effects on Morality and Economic Activity. *NBER Working Paper Series*. [cited 15 November]. Available from: <http://www.nber.org/papers/w26866>
- Bastiat, Claude. 2009. Credit. *Mises Institute*. [cited 15 November 2020]. Available from: <https://mises.org/library/credit>
- Benmelech, Efraim and Carola Frydman. 2020. The 1918 influenza did not kill the US economy. *VOXEU*. [cited 15 november 2020]. Available from: <https://voxeu.org/article/1918-influenza-did-not-kill-us-economy>
- Blinksworth, Roger. 1987. *Converging on the evanescent*. San Fransisco: Threshold Publications.
- Brown, Brendan. 2017. A Modern Concept of Asset Price Inflation in Boom and Depression. *The Quarterly Journal of Austrian Economics* 20, 29-60.
- Consumer Price Index, Detroit-Warren-Dearborn — August 2020. 2020. *U.S. Bureau of Labor Statistics*. [cited 23 October]. Available from: https://www.bls.gov/regions/midwest/news-release/consumerpriceindex_detroit.htm
- Consumer Price Index, Seattle area — October 2020. 2020. *U.S. Bureau of Labor Statistics*. [cited 23 October 2020]. Available from: https://www.bls.gov/regions/west/news-release/consumerpriceindex_seattle.htm#tableA
- Detroit, MI. 2020. *Data USA*. [cited 23 October 2020]. Available from: <https://datausa.io/profile/geo/detroit-mi/>
- Dow Jones Industrial Average. *Google Finance*. [cited 23 October 2020]. Available from: <https://www.google.com/finance/quote/.DJI:INDEXDJX?sa=X&ved=2ahUKewjxlpralrPtAhXQXc0KHZWkBW0Q3ecFMAB6BAgCEBE>
- Federal Reserve Statistical Release. 2020. *Federal Reserve*. [cited 23 October 2020]. Available from: <https://www.federalreserve.gov/releases/h6/current/h6.pdf>
- Lean, Hooi Hooi and Russell Smyth. 2011. Will Obama’s economic stimulus package be effective? Evidence from the misery index. *Applied Economic Letters* 18, 493-495.

- Powell, Jerome. 2020. Coronavirus and CARES Act [online]. *Board of Governors of the Federal Reserve System*. [cited 15 November 2020]. Available from: <https://www.federalreserve.gov/newsevents/testimony/powell20200630a.htm>
- Fair Packaging and Labeling Act: Regulations Under Section 4 of the Fair Packaging and Labeling Act. 2020. *Federal Trade Commission*. [cited 15 November 2020]. Available from: <https://www.ftc.gov/enforcement/rules/rulemaking-regulatory-reform-proceedings/fair-packaging-labeling-act-regulations-0>
- Friedman, Zack. 2020. Here's When You'll Get Your Stimulus Check. *Forbes*. [cited 23 October, 2020]. Available from: <https://www.forbes.com/sites/zackfriedman/2020/04/09/stimulus-check-dates/?sh=39ffb53f588c>
- Grant, James. 2014. *The Forgotten Depression*. New York, NY: Simon and Schuster Paperbacks.
- Gross Domestic Product, Fourth Quarter and Year 2019 (Advance Estimate). 2020. *Bureau of Economic Analysis*. [cited 23 October 2020]. Available from: <https://www.bea.gov/news/2020/gross-domestic-product-fourth-quarter-and-year-2019-advance-estimate#:~:text=Current%2Ddollar%20GDP%20increased%204.1,table%201%20and%20table%203>).
- Historical Income Tables. 2020. *United States Census Bureau*. [cited 23 October 2020]. Available from: <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-people.html>
- Jankowicz, Mia. 2020. A New York hospital struggling against the coronavirus says PPE price gouging is so bad that it's paying \$7 for gowns worth 50 cents, and \$25 for shields worth \$1.25. *Business Insider*. [cited 23 October 2020]. Available from: <https://www.businessinsider.com/ny-hospital-faces-ppe-price-gouging-in-coronavirus-crisis-2020-4>
- Lawson, Aidan and Greg Feldberg. 2020. Monetization of Fiscal Deficits and COVID-19 - A Primer. *Yale School of Management*. [cited 23 October 2020]. Available from: <https://som.yale.edu/blog/monetization-of-fiscal-deficits-and-covid-19-primer>
- Mises, Ludwig. 1998. *Human Action*. Auburn, Alabama: The Ludwig von Mises Institute.
- Newport, Frank. 2017. Wyoming, North Dakota and Mississippi Most Conservative. *Gallup*. [cited 23 October 2020]. Available from: <https://news.gallup.com/poll/203204/wyoming-north-dakota-mississippi-conservative.aspx>
- Overview of BLS Wage Data by Area and Occupation. 2020. *U.S. Bureau of Labor Statistics*. [cited 23 October 2020]. Available from: <https://www.bls.gov/bls/blswage.htm>

- Parrott, Sharon et al. 2020. CARES Act Includes Essential Measures to Respond to Public Health, Economic Crises, But More Will Be Needed. *Center on Budget and Policy Priorities*. [cited 15 November 2020]. Available from: <https://www.cbpp.org/research/economy/cares-act-includes-essential-measures-to-respond-to-public-health-economic-crises>
- Polleit, Thorsten. 2018. The Fateful Wish for Price Stability. *Mises Institute*. [cited 23 October 2020]. Available from: <https://mises.org/library/fateful-wish-price-stability#:~:text=For%20economists%20of%20the%20Austrian,of%20economic%20and%20political%20freedom.>
- Rothbard, Murray. 1981. *The Myth of Neutral Taxation*. Cheltenham, UK: Edward Elgar
- Rothbard, Murray. 2008. *Mystery of Money and Banking*. Auburn, Alabama: Ludwig von Mises Institute.
- Seattle, WA. 2020. *Data USA*. [cited October 23 2020]. Available from: <https://datausa.io/profile/geo/michigan>
- Snell, Kelsey. 2020. What's Inside the Senate's \$2 Trillion Coronavirus Aid Package. *NPR*. [cited 23 October 2020]. Available from: <https://www.npr.org/2020/03/26/821457551/whats-inside-the-senate-s-2-trillion-coronavirus-aid-package>
- Supplemental Nutrition Assistance Program (SNAP). 2020. *Benefits.gov*. [cited 23 October 2020]. Available from: <https://www.benefits.gov/benefit/361>
- The CARES Act Works for All Americans. 2020. *U.S. Department of the Treasury*. [cited 23 October 2020]. Available from: <https://home.treasury.gov/policy-issues/cares>
- USDA Increases Monthly SNAP Benefits by 40%. 2020. *U.S. Department of Agriculture*. [cited 15 November 2020]. Available from: [https://www.usda.gov/media/press-releases/2020/04/22/usda-increases-monthly-snap-benefits-40#:~:text=Other%20actions%20include%3A,Economic%20Stimulus%20\(CARES\)%20Act.](https://www.usda.gov/media/press-releases/2020/04/22/usda-increases-monthly-snap-benefits-40#:~:text=Other%20actions%20include%3A,Economic%20Stimulus%20(CARES)%20Act.)
- QuickFacts Detroit city, Michigan. 2019. *U.S. Census Bureau*. [cited 15 October 2020]. Available from: <https://www.census.gov/quickfacts/detroitcitymichigan>
- QuickFacts Seattle city, Washington. 2019. *U.S. Census Bureau*. [cited 15 October 2020]. Available from: <https://www.census.gov/quickfacts/seattlecitywashington>
- Wieczner, Jen. 2020. The case of the missing toilet paper: How the coronavirus exposed U.S. supply chain flaws. *Fortune*. [cited 23 October]. Available from: <https://fortune.com/2020/05/18/toilet-paper-sales-surge-shortage-coronavirus-pandemic-supply-chain-cpg-panic-buying/>

1918 Pandemic. 2020. *Center for Disease Control and Prevention*. [cited 15 November 2020].

Available from: <https://www.cdc.gov/flu/pandemic-resources/1918-pandemic-h1n1.html#:~:text=With%20no%20vaccine%20to%20protect,hygiene%2C%20use%20of%20disinfectants%2C%20and>