

Relief Check Meets Reality Check: Some Guidelines for Optimizing the Value from Your Stimulus Distribution



**BALL STATE
UNIVERSITY**

Manoj Athavale and Stephen P. Ferris
Miller College of Business
Ball State University

April 21, 2020

**Relief Check Meets Reality Check:
Some Guidelines for Optimizing the Value from Your Stimulus Distribution**

Abstract

In this report, we provide a set of guidelines to help Indiana taxpayers more effectively spend their stimulus checks. Our guidelines make use of basic financial planning concepts such as the compounding effect of interest rates, diversification, and the trade-off between risk and return. Our guidelines are based on both the individual's financial need and the desire for rainy day savings. The guidelines are immediately applicable and do not require any education in business, finance or investments to be understood and used.

Relief Check Meets Reality Check: Some Guidelines for Optimizing the Value from Your Stimulus Distribution

1. Introduction

The novel coronavirus outbreak in various parts of the world and the United States has created a health crisis of significant proportion. There is the very real fear that the spread of the virus if unchecked, would overwhelm our health infrastructure and magnify infections and fatalities. The federal government and local governments have taken various actions, including social distancing guidelines and stay-at-home orders, to slow the spread. However, many of the actions taken to slow the immediate spread of the virus and protect the health of the citizens have created an economic crisis for large portions of the population. Many individuals have been furloughed or laid off, many have lost access to health care when they needed it most, and unemployment has spiked. All this comes at a time when many families do not have a financial cushion to sustain themselves without their regular source of income.

The government uses various actions of fiscal policy, namely taxes and spending, to reduce the economic impact of the crisis and stimulate the economy. One of the comprehensive actions taken by the federal government in response to the outbreak and its impact on the economy, public health, state and local governments, and individuals and businesses, is the Coronavirus Aid, Relief, and Economic Security Act (CARES Act; P.L. 116-136). Amongst other actions, the Act funds loans, grants and other forms of assistance to various entities, temporarily expands unemployment benefits, suspends certain loan payments, and provides cash benefits to individuals and families.

The immediate cash benefit will be sent to eligible individuals by check or direct transfer to their bank account. These payments, also known as economic impact payments or stimulus payments, are expected to reduce the economic effects of the pandemic and provide an economic stimulus. These payments are in addition to various other measures like expanded unemployment payments and may therefore offer an opportunity for many individuals and families to improve their financial well-being.

2. Underlying Financial Analysis

There are several principles common to financial management and portfolio theory that are relevant for consumers as they determine how to either spend or invest their relief check (Brigham and Houston, 2016). An understanding of these concepts will allow an individual to maximize the usefulness of this money.

a. Cost of Debt and Compounding

Credit card debt is expensive. When you fail to pay off the entire balance on your credit card, you are effectively borrowing that money from the charge company. Because the debt is not tied to any specific collateral like a car or a house, the interest rate is higher than the rate for an auto loan or a home mortgage. Interest rates of 14 percent or even 21 percent would not be unheard of on unpaid credit card balances. In comparison, the current interest rate on 30-year home mortgages are less than 4.0 percent. Therefore, using the relief check to pay off high-interest rate credit card balance is like earning between a 14 percent to 21 percent rate of return.

The effect of high interest rates is magnified on consumers by how interest is calculated. When you don't pay off your balance in full, two things happen. Your unpaid principle rolls forward and becomes due in the next month. It is added to the total of any new expenses that you might incur during that month. Interest is then charged on both the new charges and the unpaid balance from last month. It becomes very expensive to continually roll the unpaid balance forward. This often occurs when you make the minimum payment, which consists largely of interest payment and very little principal reduction. Using the relief check to pay down expensive credit card debt is a high impact strategy for maximizing the value of the stimulus check.

b. Liquidity and Solvency

Both companies and individuals need to have a rainy-day fund. That is, they have cash on hand that will allow them to respond to emergencies or opportunities. Most financial planners recommend maintaining cash reserves equivalent to three to six months of operating expenses (Simko, Ferris and Wallace, 2018). Reviewing your monthly expenses and then estimating three months of those costs is a good start in determining the size of this reserve. This fund is a reserve against unforeseen

emergencies like car repairs or urgent health care, that can impact work attendance and cause you to lose salary. This rainy-day fund can also allow you to undertake home repairs or replace appliances. Allocating some of your relief check to a rainy-day fund is prudent financial management and can help you keep working and earning.

c. Diversification

We have all heard the old proverb of not putting all your eggs in one basket. The truth of that advice is especially important when it comes to saving and investing. Individuals should spread their money across a variety of assets to ensure that their wellbeing is not dependent solely on a single investment (Siegel, 2016). This means that some money is placed in safe and liquid bank accounts, and some money is put into longer-term certificates and bonds that often have a financial penalty if they are cashed in early. Still other money is invested in stocks which can range in riskiness from the very safe to the most uncertain. This collection of assets is referred to as a portfolio. The key point is that your portfolio should contain a variety of assets that differ with respect to their individual riskiness and the ease with which they can be converted into ready cash. The creation of a diversified portfolio of assets that provides money for immediate needs and the chance at long-term growth should be the goal of each household. Any investment of the relief check should be made only after prioritizing immediate needs, and considering the portfolio of assets that the individual currently has or aspires to create.

d. Risk and Return

As individuals consider different assets in which to place funds, they need to consider the basic principle underlying all investment decision-making. Investments which have lower risk also have lower expected returns, and if you expect to obtain higher gains from an investment, you will need to accept higher levels of risk (Viceira and Campbell, 2002). Stocks generally provide much higher returns than a bank certificate of deposit, but they are also much more uncertain. As one seeks higher investment returns, one must be prepared to accept greater uncertainty in the gains provided by those assets. Generally speaking, what this means is that investors should be willing to stay invested for a longer time period without focusing on daily or monthly

fluctuations in value. So, to earn returns in excess of the low but safe yields offered on bank CDs and government debt, one must be prepared to accept more uncertainty and be prepared to remain invested for a longer time period. Think investment in terms of years, not months.

3. Classes of Financial Need

The crisis will have a varying impact on individuals and the manner in which these cash payments would be utilized would of course depend on their individual circumstances. Nevertheless, it is possible to apply basic financial principles to create a general model to indicate how the cash payments could be deployed to improve financial well-being.

Most individuals and families maintain some amount of cash in the wallet and in checking accounts for transaction purposes. These types of assets have very high liquidity, and have no fluctuations in value, but also provide the most negligible of returns. These resources are generally used for paying current expenses and bills which are likely to come due in the immediate future.

Individuals and families may also maintain a somewhat larger balance in a savings or money market account for precautionary purposes. These types of assets have slightly lower liquidity, have no fluctuations in value, but do provide a very low level of return. These emergency resources may be equivalent to three to six months of necessary monthly expenses, and are designed to cover emergencies – the very real possibility of layoffs or furloughs – of the type we are facing today.

And finally, individuals and families may maintain other investments in certificates of deposit, government securities, and corporate securities (bonds and stock). These types of assets have lower liquidity, and they may fluctuate in value but do provide a wide range of possible return to compensate for the extent of risk inherent in the investment. Many of these investments are risky, though some of the risk can be reduced through diversification. Mutual funds allow small investors the benefit of participation in higher yielding investments, and diversification at low costs. These assets are designated to meet a wider range of longer-term cash outflows like

vacations, cars, weddings, down payments on homes, children's education, and retirement.

4. Expenditures by Need Type

Individuals and families who receive the cash credit will undoubtedly be faced with a myriad of options for using the money to further their financial well-being. Should they use the money to pay for immediate subsistence expenses? Or build an emergency fund? Or pay down debt? Or plan for longer-term goals? Much of this decision will depend on each specific situation: Some individuals will undoubtedly need to use it for their immediate needs while others who already have built an emergency fund to pay for their immediate needs may use the money to pay down debt, while still others may use the money to fund longer-term objectives.

The current state of financial well-being is reported by the Board of Governors of the Federal Reserve System's "*Report on the Economic Well-Being of U.S. Households in 2018*." Unfortunately, they report that 25 percent of adults are either "just getting by" or "finding it difficult to get by." Further, a sizable proportion of adults would have some difficulty with even a modest unexpected expense. Specifically, if faced with an unexpected expense of \$400, only 61 percent of adults say they would cover it with cash, savings, or a credit card paid off at the next statement, while 27 percent would borrow or sell something to pay for the expense, and 12 percent would not be able to cover the expense at all.

5. An Allocation Model for the Stimulus Check

Individuals will determine the best use of their relief check based on their specific circumstances. However, it is possible to provide some specific guidelines for spending these funds based on the degree of financial need. In the model below (*Table 1, pg. 7*), we provide check allocation guidelines for different investment horizons.

Individuals with acute financial need are worried about meeting the expenses of daily living. Often these individuals are living from paycheck to paycheck. These individuals worry about paying rent, getting to work, and putting food on the table. Because they face this acute need, their allocation focuses on the immediate. This

means paying delinquent bills, and bills with the highest interest rates or late fees. The spending of the check should emphasize retaining those capabilities that allow an individual to remain employed, safe and productive. This means paying rent to avoid eviction, making a car payment to maintain the ability to commute to work, and paying for medicines to remain healthy. Hence 100 percent of their checks should be allocated to the immediate needs of maintaining employment or occupational readiness.

Individuals who are classified as having moderate financial need are generally able to meet most of the immediate needs associated with maintaining employment readiness. Their most pressing challenge is to create a rainy-day fund. This refers back to the foundational concept of liquidity and solvency. They have a need to establish a reserve of cash that will allow them to overcome the unanticipated break down or emergency. We recommend that 50 percent of the relief check be used to address any immediate needs that remain, while the other half be spent in creating a buffer of assets. More specifically, we recommend that 40 percent of the relief check be allocated to shorter-maturity assets such as certificates of deposit or short-term government securities. The remaining 10 percent can be allocated to wealth creation by investing in longer term assets like stock mutual funds. Although modest, this is an important allocation since it is the start to long-term wealth creation.

Individuals who have a low degree of financial need would not allocate the stimulus check to meet immediate needs. Their employment or occupation provides adequate income to adequately meet their living expenses with some left over for investment purposes. We recommend that, if necessary, 40 percent of the check be added to their emergency funds. These assets have little risk and have shorter-term maturity, and can include bank certificates of deposit, government bonds, or money market accounts. The remaining 60 percent should be allocated to longer-term assets, which offer the potential for wealth creation and retirement security. Mutual funds, annuities, and insurance policies are likely elements in this allocation. With this allocation the foundational concepts of diversification as well as risk and return are especially relevant.

Table 1. Athavale-Ferris Allocation Model Based on Financial Need

Degree of Financial Need		Investment Horizon		
		<i>Immediate</i>	<i>Shorter Term</i>	<i>Longer Term</i>
	<i>Acute</i>	100%	0%	0%
	<i>Moderate</i>	50%	40%	10%
	<i>Low</i>	0%	40%	60%

Note: Percentages are indicative, not prescriptive.

6. Application of the Model Across Financial Needs

The allocation model presented here lends itself to convenient application in practice. Individuals who receive the stimulus checks should evaluate the degree of their financial need. They have acute financial needs if they experience some combination of the following: problems in paying for living expenses like rent and utilities, using high-cost check cashing services, rolling over balances on their high-interest credit cards, deferring car maintenance and repairs, and deferring medication. Such individuals should first and foremost use the stimulus money to meet these immediate needs. This will ensure that they retain a roof over their head, and the ability to commute to work and maintain their health, so as to keep gainfully employed.

Individuals who have generally been able to pay monthly living expenses, but may occasionally roll over credit card balances to pay larger-than-normal expenses and do not have an emergency fund to meet unexpected situations, should use the stimulus money to repay high-interest credit cards, build an emergency fund, and make longer-term investments, in that order of priority. These emergency funds can be used to cover unexpected car repairs, unexpected health expenses, unexpected needs for high-value home appliances, and the possibility of short-term unemployment. The emergency fund avoids the need for rolling credit card balances from one month to another. Beyond maintaining health and safety, the emergency fund is a first step to financial wellbeing, and should be invested in low-risk shorter-term options with a focus on liquidity and accessibility.

Individuals who have already built a sufficient emergency fund have little immediate need for the stimulus money and the entire amount can be invested with the

intention of accumulating wealth. These investments typically include government and corporate fixed income securities and corporate stock, and they are used to finance longer-term objectives like buying a home, children's education, and retirement. The investment options are many, but in making these longer-term investments, individuals should select the investment best matched to their investment horizon and to their risk tolerance. The amount being invested may appear small at this time, but returns compounding over a long period of time can lead to some wonderful outcomes. As the old adage goes, the journey of a thousand miles begins with the first step.

7. Summary and Discussion

The current COVID crisis has resulted in the unprecedented passage of an economic recovery bill that includes a direct transfer of money from the federal government to individuals. This study has attempted to provide guidance in how an individual might best use that money to bring financial stability to their household. We accomplish this through the creation of a simple allocation model based on the severity of financial need and the individual's investment horizon.

This model builds upon four foundational concepts of financial planning and investment. These concepts are liquidity, interest compounding, risk and return, and diversification. Each of these concepts helps to explain the reasoning behind the choices that individuals in the various need categories should make if they wish to optimize the value they receive from this distribution. Individuals with acute financial need should focus their relief check spending on immediate needs associated with maintaining their employment sustainability and physical health. Individuals with more moderate levels of financial need should direct some of this money to the creation of a rainy-day fund that will provide a reserve of cash to protect against emergencies and the unanticipated. For those check recipients with a low level of financial need, this relief check should be used to add to their own rainy-day fund, but also to invest in longer-term assets to allow for wealth creation and retirement security.

The goal of this model creation and discussion is to help maximize the usefulness of this relief check in the economic recovery. It provides a useful framework for a reality check of the individual's circumstances to guide spending of the relief

check. A prudent and practical allocation of these funds will not only accelerate economic recovery from this pandemic but will also enhance individual financial wellbeing.

References

Brigham, E.F. and J. Houston, 2016, *Fundamentals of Financial Management*, Boston: Centage Learning.

Siegel, J., 2014, *Stocks for the Long Run*, New York: McGraw Hill Education.

Simko, P., K.R. Ferris, and J. Wallace, 2018, *Financial Accounting for Executives and MBAs*, 4th ed., Cambridge Business Publishers.

Viceira, L. and J. Campbell, 2002, *Strategic Asset Allocation: Portfolio Choice for Long-Term Investors*, New York: Oxford University Press.