An Evaluation of Private Foundation Model Portfolios, Investment Returns, & Payout Rates

- A Study Commissioned by the Council of Michigan Foundations, 2020
Citation

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Philanthropy stands at the center of a fundamental struggle: how to use increasing wealth to address inequities in society. The Government Accountability Office\(^1\) notes that disparities in income and wealth have become greater over the past 30 years and there are few signs this trend will cease any time soon. This concentration of wealth has contributed to the amassing of more than $1 trillion in assets held by private foundations in America, assets that can support nonprofits on the front lines of our most challenging issues of inequality.

In 2020, the COVID-19 pandemic and the national reckoning for racial justice have laid bare both new challenges and existing inequities that remain rooted in our systems and policies. The role of philanthropy is critical not only through the current pandemic recovery efforts but also in future crises we may experience. Philanthropy is a core stakeholder as we strive to create reimagined, equitable systems, and thriving communities where every individual has the opportunity for success and well-being.

How philanthropy activates its resources against these challenges varies from foundation to foundation depending on their mission, their structure, and goals established by donors and founders. Some have long-term goals that call for perpetuity, while others are non-endowed or created with the explicit intent to spend down. Current federal law provides all these options to continue while ensuring a standard level of annual distribution.

Still, there are calls to do more by moving “parked wealth” into communities now, when the need seems greatest. Some have called for changes in the regulatory frameworks for private foundations to address what they see as too conservative spending policies. Private foundations are currently required to pay out 5% of their assets, a standard that was created in 1982 as part of a broader federal effort to tighten accountability measures for the sector. Over time the 5% payout rule has been questioned for its relevance.

The Council of Michigan Foundations (CMF) commissioned studies by Cambridge Associates in 2000, 2004, 2013, and 2016 to explore the relationship in Michigan between the 5% payout rate and distribution rates of private foundations. This one-of-a-kind study utilized a representative sampling method, frequently updated, to present the fullest possible picture.

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\(^1\)https://www.gao.gov/assets/710/700836.pdf
Research continued to reveal that private foundations consider the 5% payout rate as a “floor, not a ceiling,” and that increasing the payout rate above 5% could significantly impact the foundations’ financial performance and ability to carry out their missions in perpetuity. But is that data relevant in today’s climate of historically low interest rates, expanding philanthropic assets, and new pressures for philanthropy’s relevance?

While there is room to challenge foundations that have not adapted to meet current needs, many foundations have leaned-in during crises to increase their payout rates, without any federal mandates. **We need to ask: What does the data tell us? Have the market forces and growth in philanthropy — and for CMF, growth in Michigan philanthropy specifically — changed enough to warrant an increase in the 5% rule for private foundations?**

To answer this question and challenge our assumptions, CMF partnered with the research team at the Dorothy A. Johnson Center for Philanthropy and Plante Moran Financial Advisors to update this critical research as well as to deepen and expand our understanding by utilizing the actual IRS Form 990-PF. This new study captures what we believe is the most comprehensive snapshot of payout data available to foundations to date.

We encourage you to review the findings and examine how this data comports or contrasts with your own organization’s policies and practices. We also invite you to share questions with our research teams. We value this research as a tool for the sector to discern various approaches instead of a “one size fits all” method. Use this information to forecast your own immediate and long-term goals for your investment returns, impact investing strategies, grantmaking goals, and even the immediate needs your foundation seeks to address. Our hope is that these insights are helpful for the full philanthropy ecosystem — foundations, nonprofit partners, policymakers, and all those who are working together to catalyze positive and systemic change for the good of all.

Sincerely,

**Kyle Caldwell**  
President & CEO  
Council of Michigan Foundations

**Dr. Teresa Behrens**  
Executive Director  
Dorothy A. Johnson Center for Philanthropy
Executive Summary

The Council of Michigan Foundations (CMF) commissioned four prior studies between 2000 and 2016 to evaluate the required private foundation payout rate\(^2\) as well as hypothetical model portfolios and actual investment returns.

In 2020, the Dorothy A. Johnson Center for Philanthropy (Johnson Center), in collaboration with Plante Moran Financial Advisors (PMFA), updated and expanded this research by using a comprehensive database of IRS Form 990-PF (private foundation) returns, adding international investments to the model portfolios, presenting actual payout rates of all private foundations in the data set, and showing projections of how changes to the payout rate may affect future foundation assets.

**KEY FINDINGS:**

- The 2020 study can refute the argument that private foundations frequently treat the 5% payout as a ceiling, not a floor. Half of Michigan’s private foundations paid out 6% or more of their corpus during 2018, as did a similar proportion of foundations across the United States. Nearly a quarter of foundations across the nation paid out 15% or more of their corpus in each of the study years 2013-2018.

- Increasing payout rates in the short term can be the equivalent of choosing to decrease grants for 17 years (years 4-20) in favor of increased grants for the first 3 years.

- Historical and projected investment returns struggle to consistently deliver more than 5% annual real returns — regardless of investment model portfolio.

- Therefore, the project team cannot conclude that any change to the current federal payout rate for private foundations is warranted.

- This study and prior research from Cambridge Associates show that a mandated payout rate above 5% would be difficult to sustain on an inflation adjusted (that is, real) basis. The probability of exceeding a 5% investment return annually is just over 50%.

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Increasing payout rates in the short term can be the equivalent of choosing to decrease grants for 17 years.

- Calculated investment performance of private foundations from 2014-2018 fell well short of the 5% payout threshold. This is true for Michigan’s private foundations and for foundations across the nation.

- If payout rates were increased, it may take private foundations up to 20 years for assets to return to their current inflation-adjusted balance, even if investment returns remain above post-World War II averages. If future investment returns are below their long run historical averages, increasing payout rates may cause private foundation assets to end 20-35% below their current inflation-adjusted balance, even after 20 years.
For more information, please visit michiganfoundations.org/resources/payout-study

NEARLY

50,000
yearly filings analyzed.

2018 MICHIGAN PRIVATE FOUNDATION PAYOUT RATES

- 69% paid out 5% or more
- 49% paid out 6% or more
- 35% paid out 9% or more
Introduction

As part of its commitment to ensuring the health and integrity of the charitable sector, CMF conducts research relevant to the Michigan community of philanthropy as well as the field at large. As part of those efforts, CMF has commissioned research to evaluate the required private foundation payout rate as well as hypothetical model portfolios and actual investment returns. Cambridge Associates completed prior studies in 2000, 2004, 2013, and 2016 using data from a sample of 48 Michigan foundations over a nearly 30-year period.

The project team, composed of the Dorothy A. Johnson Center for Philanthropy (Johnson Center) at Grand Valley State University, in collaboration with Plante Moran Financial Advisors (PMFA), is pleased to update and expand this research in three specific ways:

- Rather than relying on a sample of foundations, this report uses the Johnson Center’s comprehensive database of private foundations that file electronic returns — which represent 84% of the nation’s 80,322 private foundations and 77% of the $707 billion in assets for 2017.
- The project team added international equities to the traditional equity and fixed income model portfolios, which we believe more accurately reflects current foundation investments compared with typical portfolios observed in the first report in 2000.
- In addition to calculating historical investment returns estimated by using actual IRS Form 990-PF data, we are presenting actual payout rates and projections showing how changes to the payout rate may affect future foundation assets.

The project team took care to compare model portfolio results with the results included in the most recent Cambridge Associates report (2016), and have confirmed that our starting point for the 2020 study matches the model portfolio returns identified by the Cambridge team for identical tax years. Therefore, this report takes the prior work as a given and focuses our attention on the new data and updated model portfolios.

This report, and the associated Technical Appendix:
- Includes information for Michigan’s private foundations, as well as comparative information for all private foundations in the nation.
- Presents the historical investment returns for two model portfolios based on 2014-2019 data.
- Compares these model portfolios to actual private foundation inflation-adjusted (that is, real) investment returns, using data from the most recent fully released tax years of 2013-2018.
- Examines the payout levels of private foundations against the 5% required minimum payout.
- Calculates how many foundations pay out more than the 5% minimum and how often payouts exceed multiple ranges (e.g., 7%, 10%, 20%).
- Calculates the effects of various increased payout rate scenarios (e.g., 7% and 10% payouts over the next 3 years) on foundation investment balances using forecast periods of 5, 10, and 20 years.
Part 1: Historical Investment Returns

**HOW HAVE MODEL PORTFOLIO INVESTMENTS PERFORMED OVER TIME?**

Whereas the Cambridge studies created model portfolios of U.S. stocks and bonds only, the project team added international equities to the model portfolios used to analyze returns for the 2014-2019 period. (See Table 1.) As international stocks have become easier to invest in over time, we believe a global approach more closely aligns with how most foundations allocate equity investments today.

**Important note:** For simplicity, all returns and asset balances referenced in this report refer to inflation-adjusted, real returns or values unless otherwise specified. In addition, all time periods longer than one year reflect annualized returns.

Annual real returns for both model portfolios averaged roughly 5-6% throughout the time periods covered by the overall series of reports, and returns from 2014-2019 fall in a similar range. Recent returns are closer to the long-term historical average from 1973-2014 than the 1986-2009 period referenced in the prior Cambridge reports. Despite the inclusion of the Great Recession, the 1986-2009 period stands out as an outlier of above average investment returns relative to the other periods. (See Table 2 for selected data; see the full table in the Technical Appendix.)
Investment returns for the analysis period were generally positive, supported by strong returns in U.S. stocks. From 2014-2019, U.S. stocks exhibited double-digit positive returns in 4 out of 6 calendar years. Meanwhile, international stock returns were less than half as high as their U.S. counterparts, and bonds provided less than a 2% real return over the 6-year period. When these individual asset classes are combined into the model portfolios, the portfolios achieved annualized returns in line with historical averages as presented in past Cambridge studies. However, the calendar year data shows that investment performance in any given one-year period can fall within a wide range of outcomes. (See Table 3 for selected data; see the full table in the Technical Appendix.)

<table>
<thead>
<tr>
<th>AVERAGE ANNUALIZED REAL RETURN, PER STUDY PERIOD</th>
<th>35% FIXED INCOME</th>
<th>25% FIXED INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973 – 2002</td>
<td>5.2%</td>
<td>5.2%</td>
</tr>
<tr>
<td>1973 – 2014</td>
<td>5.4%</td>
<td>5.6%</td>
</tr>
<tr>
<td>1986 – 2009</td>
<td>6.2%</td>
<td>6.4%</td>
</tr>
<tr>
<td>2014 – 2019 (including international equities)</td>
<td>5.6%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Table 2: Average Annual Real Returns for Model Portfolios by Study Period

Investment returns for the analysis period were generally positive, supported by strong returns in U.S. stocks. From 2014-2019, U.S. stocks exhibited double-digit positive returns in 4 out of 6 calendar years. Meanwhile, international stock returns were less than half as high as their U.S. counterparts, and bonds provided less than a 2% real return over the 6-year period. When these individual asset classes are combined into the model portfolios, the portfolios achieved annualized returns in line with historical averages as presented in past Cambridge studies. However, the calendar year data shows that investment performance in any given one-year period can fall within a wide range of outcomes. (See Table 3 for selected data; see the full table in the Technical Appendix.)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>35% fixed income</td>
<td>6.1%</td>
<td>-1.2%</td>
<td>5.5%</td>
<td>13.5%</td>
<td>-6.8%</td>
<td>18.5%</td>
</tr>
<tr>
<td>25% fixed income</td>
<td>5.9%</td>
<td>-1.6%</td>
<td>6.1%</td>
<td>15.5%</td>
<td>-7.8%</td>
<td>20.2%</td>
</tr>
</tbody>
</table>

Table 3: Real Annual Returns for Model Portfolios, Domestic and Global Equity, by Year

**CALCULATED REAL INVESTMENT RETURNS OF PRIVATE FOUNDATIONS**

Foundation returns calculated from the IRS Form 990-PF filings show that private foundations fell well short of the 5% real return target on an annual basis from 2014-2018. Returns from 2019 are not publicly available because the IRS is still processing these returns. (See Tables 4 and 5 for selected data; see the matching national data in the Technical Appendix.)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MEDIAN RETURN, MICHIGAN, IRS FORM 990-PF DATA</th>
<th>GLOBAL EQUITY, 35% FIXED INCOME MODEL PORTFOLIO</th>
<th>GLOBAL EQUITY, 25% FIXED INCOME MODEL PORTFOLIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1.8%</td>
<td>6.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td>2015</td>
<td>-1.3%</td>
<td>-1.2%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>2016</td>
<td>3.3%</td>
<td>5.5%</td>
<td>6.1%</td>
</tr>
<tr>
<td>2017</td>
<td>7.1%</td>
<td>13.5%</td>
<td>15.5%</td>
</tr>
<tr>
<td>2018</td>
<td>-5.5%</td>
<td>-6.8%</td>
<td>-7.8%</td>
</tr>
</tbody>
</table>

Table 4: Median Real Returns, IRS Form 990-PF Data vs. Model Portfolios, by Year. 5-year annualized return for Michigan foundations is the geometric average of the median annual returns presented in the table, and does not represent the 5-year return of any specific foundation.
In broad terms, foundations as a group appear to be more conservative than the models suggest; declines in negative return years such as 2018 are not as severe as model portfolio declines, while gains in positive return years are not as high as model portfolio gains.

When the project team looked deeper into the data, we observed a sizeable number of foundations (20%) that hold 90% or more of their assets in cash. In other words, most or all of the assets are held in checking and/or savings accounts — not equities, land, or any other asset types.

Therefore, these cash-heavy foundations could be removed from the analysis when we are comparing to equity and fixed income portfolios. Given the low interest rate environment during the study period, removing cash-heavy foundations would be expected to increase the median investment returns during periods of growth, but also increase losses during periods of market decline — and that is precisely what we observe in the actual results. But even with this adjustment, actual foundation investment returns again fall well short of a 5% baseline annual target. (See Table 6 for selected data; see the full table in the Technical Appendix.)

### Table 5: Real Annual Investment Returns, All Michigan Private Foundations

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MEDIAN RETURN, MICHIGAN</th>
<th>GLOBAL EQUITY, 35% FIXED INCOME MODEL PORTFOLIO</th>
<th>GLOBAL EQUITY, 25% FIXED INCOME MODEL PORTFOLIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>2.6%</td>
<td>6.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td>2015</td>
<td>-1.9%</td>
<td>-1.2%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>2016</td>
<td>4.6%</td>
<td>5.5%</td>
<td>6.1%</td>
</tr>
<tr>
<td>2017</td>
<td>9.1%</td>
<td>13.5%</td>
<td>15.5%</td>
</tr>
<tr>
<td>2018</td>
<td>-6.7%</td>
<td>-6.8%</td>
<td>-7.8%</td>
</tr>
<tr>
<td>5-year annualized return</td>
<td>1.4%</td>
<td>3.2%</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

*Table 6: Median Returns Excluding Cash-Heavy Foundations by Year. 5-year annualized return for Michigan foundations is the geometric average of the median annual returns presented in the table, and does not represent the 5-year return of any specific foundation.*
Part 2: Foundation Payouts

**ACTUAL PAYOUT RATES OF PRIVATE FOUNDATIONS**

A recurring theme in philanthropy is to question the appropriateness of the mandated 5% private foundation annual payout. Observers point out that equity investments have seen above-average returns in recent years, and some observers question whether foundations are responding appropriately to community needs. Others worry that too many private foundations treat the 5% minimum payout as a ceiling, not a floor, in their annual grantmaking decisions.

On the other hand, the 5% payout threshold is by definition a minimum, and individual foundations can increase their payouts above 5% to respond to multi-year pledges or for spend-down/terminal purposes. In addition, prior research such as the Cambridge Associates studies have shown that historical investment returns do not support increasing the payout above 5% when viewed on a multi-decade or even perpetuity basis.

These discussions are not new — but they have moved to the forefront during the health, race, and equity discussions in 2020. As part of this study, CMF tasked the project team to analyze payout rates, with particular attention to how often and by how much foundations exceeded the 5% payout.

*Important note: For simplicity, this report will use the term “payouts” to refer to the foundation’s qualifying distributions, and the word “corpus” to refer to the foundation’s net value of non-charitable assets, as listed on the IRS Form 990-PF.*

**Median Payout Rates**

To the argument that foundations frequently treat the 5% payout as a ceiling not a floor, the comprehensive data has a very clear answer: Half of Michigan’s private foundations paid out 6% or more of the corpus during 2018 alone, as well as during the 2013-2018 study period. These statistics are repeated when we look at private foundations across the nation. (See Table 7 for Michigan data; see the national table in the Technical Appendix.)

![AN EVALUATION OF PRIVATE FOUNDATION MODEL PORTFOLIOS, INVESTMENT RETURNS, & PAYOUT RATES](image)
Distribution of Payout Rates

When the project team ran the original data, we noticed a material change when payout rates were sorted by percentile. At the 75th percentile, the percent of corpus paid each year jumped to nearly 90%. This means that one quarter of all foundations paid out 90% — or more — of its corpus each year, which is logically impossible on a year-to-year basis. Because the comprehensive data set includes every field on the IRS Form 990-PF, the project team was able to identify that these foundations receive massive annual contributions relative to the corpus, functioning more like an annual grant making fund than a typical endowed foundation.

The project team made two changes as a result of this finding. First, for any foundation where the payout rate was 100% or more of the corpus in a given year, we reset the payout rate calculation to make the denominator the corpus plus all contributions received during the year. (This calculation has been included in Table 7.)

Half of Michigan's private foundations paid out 6% or more of their endowment in 2018, and just over one-third paid 9% or more of their corpus. The statistics are nearly identical across the nation, as well as in each of the years included in this study, confirming that 2018 is not an anomaly. (See Table 8 for Michigan data; see the national table in the Technical Appendix.)
VARIATION BETWEEN ENDOWED AND NON-ENDOWED FOUNDATIONS

The second change made by the project team, as a result of our analysis, was creating two groups of private foundations for review:

- Foundations where contributions were 90% or more of the balance of the corpus were categorized as “non-endowed private foundations.”
- All other foundations were categorized as “endowed private foundations.”

As expected, payout rates declined for endowed private foundations, but still one quarter of endowed foundations in Michigan and across the nation paid out nearly twice the minimum requirement in each of the study years. Non-endowed foundations paid out substantially more by nature of annual incoming contributions to the foundation. (See Table 9 for selected Michigan data; see the national table in the Technical Appendix.)
Part 3: Projected Investment Returns and Payout Scenarios

To test hypotheses about investment returns and changes to the payout rate, we constructed a new baseline for comparison using historical investment returns from 1989-2019 — the internet era\(^3\) — instead of the prior periods analyzed by the Cambridge Associates reports. (See Table 10.)

<table>
<thead>
<tr>
<th>ASSET CLASS</th>
<th>NOMINAL RETURN</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td>2.5%</td>
<td>1.6%</td>
</tr>
<tr>
<td>U.S. fixed income</td>
<td>6.2%</td>
<td>4.0%</td>
</tr>
<tr>
<td>U.S. equity</td>
<td>10.6%</td>
<td>15.7%</td>
</tr>
<tr>
<td>Global equity (excluding U.S. equities)</td>
<td>5.2%</td>
<td>18.0%</td>
</tr>
</tbody>
</table>

*Table 10: Annualized Investment Return and Standard Deviation, 1989-2019 (The internet era)*

The internet era shows higher returns compared to prior study periods. Despite including both the Tech Bubble and Great Recession, returns since 1989 have been supported by relatively strong stock returns, particularly in the U.S., and a bull market in fixed income due to the decline in interest rates since the early 1980's.

Using internet-era returns as a baseline — which are generally above the long-run historical averages (see Table 11) — gives the project team an “optimistic” scenario on the prospects for investment returns in the future to exceed a 5% real return threshold.

In other words, the internet-era baseline provides a reasonable test of whether the existing 5% payout mandate could be reliably increased over the medium and long term if internet-era returns were to persist.\(^4\)

<table>
<thead>
<tr>
<th>ANNUALIZED REAL RETURN, PER STUDY PERIOD</th>
<th>35% FIXED INCOME MODEL PORTFOLIO</th>
<th>25% FIXED INCOME MODEL PORTFOLIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973 – 2002</td>
<td>5.2%</td>
<td>5.2%</td>
</tr>
<tr>
<td>1973 – 2010</td>
<td>4.8%</td>
<td>4.9%</td>
</tr>
<tr>
<td>1973 – 2014</td>
<td>5.4%</td>
<td>5.6%</td>
</tr>
<tr>
<td>1989 – 2019 (including international equities)</td>
<td>5.7%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

*Table 11: Average Annual Returns for Model Portfolios, per Study Period*

\(^3\) We selected 1989 as a demarcation line because the World Wide Web was first conceptualized at CERN in March 1989, even though commercialization of the internet would take several more years.

\(^4\) Information presented later in the report explores different scenarios using forecasted returns rather than assumptions based on internet-era data.
INTERNET-ERA BASELINE

Projected Returns
Using our assumptions based on actual investment returns during the internet era, we see that projected real returns for both model portfolios are just below 6% over longer periods of 10 or 20 years. (See Table 10 for internet-era return and standard deviation assumptions. Correlations are available in the Technical Appendix.)

<table>
<thead>
<tr>
<th>MEDIAN PROJECTED REAL RETURN USING INTERNET ERA RETURNS, PER HORIZON</th>
<th>35% FIXED INCOME MODEL PORTFOLIO</th>
<th>25% FIXED INCOME MODEL PORTFOLIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>6.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>5 years</td>
<td>5.6%</td>
<td>5.9%</td>
</tr>
<tr>
<td>10 years</td>
<td>5.8%</td>
<td>5.9%</td>
</tr>
<tr>
<td>20 years</td>
<td>5.8%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

*Table 12: Projected Returns Using Internet-Era Baseline, Model Portfolios, per Horizon*

Probability of Achieving Specific Returns
Using internet-era returns, the project team looked at how likely it would be for the model portfolios to achieve investment returns of 5% or more. Broadly speaking, the projections show that for any single year the model portfolios could reach a 5% real return roughly half of the time. Over a 10-year period, the likelihood of returning 5% or more increased to just under 60%.

When the project team increases the real return threshold to 7% a different story emerges. The likelihood of meeting a 7% return in any single year is not much different than a 5% target — roughly half of the time. However, over a 10-year horizon, the likelihood of achieving a 7% return falls to less than 40%. When the investment return target is increased to 10% the likelihood falls dramatically. Over a 10-year period, the more aggressive 25% fixed income model portfolio projects just a 15% chance of meeting the 10% annual target, while the more conservative portfolio falls to an 11% chance.

If the public policy goal is to set a payout threshold at the point where there is a 50/50 chance of investments maintaining an inflation-adjusted grant payout in perpetuity, then the existing payout rate of 5% is in line with projected investment returns based on assumptions using internet-era returns from the last 31 years. (See Table 13.)

![Probability of Achieving Annual Real Return Across a 10-Year Period](image-url)
Effects of Changes to the Payout Rate

We modeled two changes to the existing 5% mandatory payout for a 10 year horizon:

› 7% payout for 3 years, then return to 5%.
› 10% payout for 3 years, then return to 5%.

These two scenarios effectively model a policy change — for example, in reaction to the COVID-19 pandemic during 2020 — where the goal is to address an urgent or critical public need. By varying the payout rate, we can observe how future asset balances are affected during the same time period covered by the investment projections.

To demonstrate the scenarios, we created a hypothetical private foundation with a corpus balance of $1 million, paid out grants specified by each scenario, and earned the internet-era investment return, until the end of the study period. Then, to test the scenarios, the project team utilized a Monte Carlo analysis with 500 rounds to determine the median return. (See Table 14 for selected data; see the full table in the Technical Appendix.)
When represented graphically, the effect of declining corpus balances in early years — and the mathematical effect of compounding interest — is clear. The hypothetical foundation takes nearly a decade until the corpus grows back to a $1 million real value using the 7% temporary payout scenario. At the higher 10% temporary payout rate, it takes roughly 20 years to return to the start point of $1 million in assets on an inflation-adjusted basis. (See Table 15.) For simplicity of discussion, this report will present only the 35% fixed income model portfolio.

If future investment returns are similar to the internet era, median projected values indicate foundations will be able to maintain inflation-adjusted corpus balances and annual grantmaking over time at the current 5% mandated payout rate. However, this report shows that even temporary increases to the mandated payout may have a material effect on a foundation’s future grantmaking ability.

These conclusions are similar to what the prior Cambridge Associates studies observed. There is not a realistic path forward, using modeled or historical actual returns, to consistently meet a threshold much above 5% without causing the corpus to decrease in real terms in future years.
FORECASTED RETURN SCENARIO

Projected Returns
As noted above, using the internet era as a new baseline provides an “optimistic” test of the existing 5% payout mandate. The project team was curious about how the same scenarios appeared if we ran projections based on currently forecasted returns. Allowing the baseline perspective to vary is important for two reasons:

› Looking forward beyond 2020, it is likely that the era of low interest rates will lead to lower fixed income returns for at least another three years.5
› Any forecast is an approximation or estimation of the future. Therefore, to show a range of possible outcomes, we sought out different forecasts to represent different future possibilities.

Many experts believe that investment returns over the next 10 years may be lower than what investors have experienced historically. No one — including the project team — knows what future investment returns will be, but looking at a range of outcomes based on history and forecasts can provide a reasonable starting point for informed analysis.

The project team uses 10-year capital market assumptions provided by Callan LLC6 to create forecasted returns for the model portfolios. Callan is an institutional investment consulting firm that provides investment and other advisory services to foundations, pension plans, endowments, and other institutional investors.

Across a 10-year forecast, annualized returns for the 35% fixed income model portfolio drop from 5.8% (using internet-era assumptions) to 3.6% (using the updated forecast). The more aggressive 25% fixed income model portfolio fares slightly better — forecasted returns are 4.1% — but this is still well below the internet-era projection. (See Table 16.)

<table>
<thead>
<tr>
<th>REAL INVESTMENT RETURNS</th>
<th>INTERNET-ERA RETURNS</th>
<th>FORECASTED RETURNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time period</td>
<td>1 year</td>
<td>10 years</td>
</tr>
<tr>
<td>35% fixed income model portfolio</td>
<td>6.0%</td>
<td>5.8%</td>
</tr>
<tr>
<td>25% fixed income model portfolio</td>
<td>6.0%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

Table 16: Median Return Projections, Internet-Era Returns vs. Forecasted Baseline, for Model Portfolios

5 The Federal Reserve’s September 2020 policy statement announced that the Board of Governors expects to keep interest rates near zero “through at least 2023.”
6 While many institutional investors may recognize the name Callan LLC, some individual investors may be more familiar with Callan’s work as the publisher of the annual Periodic Table of Investment Returns (https://www.callan.com/periodic-table/).
Probability of Achieving Specific Returns
Using the internet-era assumptions, the probability of a 5% annualized return over a 10-year period is nearly 60%. Using the updated forecast return assumptions, the odds decrease to 42% for the 25% fixed income model portfolio and 37% for the 35% fixed income model portfolio. As expected, the probabilities fall even further for the 7% and 10% return thresholds. (See Table 17.)

Effects of Changes to the Payout Rate
With such a clear decrease in projected future year investment returns, it is not surprising that changes to the payout rate have a largely negative effect on projected asset balances.

Using the same model as before — showing how each $1 million in starting assets in the 35% fixed income model portfolio is affected by payout rates — the median projection shows that there is no payout scenario where a foundation maintains its $1 million corpus on an inflation-adjusted basis over the 10-year projection period. (See Table 18.)
If the project team could not justify increasing the 5% payout expectation using internet-era baselines, the team is even more solid in the conclusion using forecasted returns as a baseline.

**COMBINED VIEW**

Regardless of whether private foundation boards and investment officers are optimists (believing in internet-era future returns) or realists (favoring the forecasted returns), no entity has a crystal ball. The only firm conclusion the project team can make is that investment returns will continue to be volatile.

Therefore, the project team has combined the forecasts to show those ranges of outcomes (See Tables 19-21.)
Effects of Changes to the Payout Rate on Annual Grants

As a final illustration, the project team used the projections above to look at how future corpus balances could affect annual grantmaking. In other words, for each $1 million in corpus, what amount could be disbursed as grants each year based on the corpus balances illustrated in Table 21?
At a 5% payout rate, each $1 million would begin by disbursing $50,000 in grants in the first year in each of the models and payout scenarios. We then repeated this analysis for the 7% and 10% payouts for the first three years. (See the internet-era results in Table 22. For the forecast results, see the Technical Appendix.)

In both the 7% and 10% payout scenarios, the temporary increase reduces the median corpus balance in subsequent years to below the baseline $50,000 real annual grants. For example, for the 10% temporary payout, grants in real terms hover at just shy of $100,000 in each of the first three years before falling to $42,000-$44,000/year in years 4-10, respectively, using internet-era baselines.

Table 22: 35% Fixed Income Model Portfolio, Median Forecast Annual Grants, $1 Million Starting Corpus, for Payout Scenarios
Conclusions

INVESTMENT RETURNS

- The four prior studies from Cambridge Associates, as well as this updated study in 2020, all conclude that expecting annual returns in excess of 5% is not sustainable on a real basis. The probability of exceeding a 5% investment return annually is just over 50%.

- Those top line conclusions hold whether looking at actual investment returns or projecting future returns based on more recent internet-era investment results.

- The conclusions also hold regardless of whether they are applied to a 35% fixed income or a 25% fixed income model portfolio, as well as with and without the inclusion of international equities.

- Looking at the actual investment performance of an average of 47,500 entities each year across the United States, private foundations as a group fell well short of the average 5% investment returns on an annual basis from 2014-2018. This is true for Michigan's private foundations and for foundations across the nation, and there is little material variation between the Michigan and national private foundation calculated annual investment returns.

PAYOUTS

- The 2020 study can refute the argument that private foundations frequently treat the 5% payout as a ceiling, not a floor. Half of Michigan's private foundations paid out 6% or more of their corpus during 2018, as did a similar proportion of foundations across the United States.
There was a material difference in payout rates between “endowed” (approximately 90% of all private foundations) and “non-endowed” private foundations (approximately 10%). Endowed foundations paid out a median of 5.4-5.7% on an annual basis, with a quarter paying out more than 10% each year. Non-endowed foundations paid out a median of nearly 70% of their corpus each year, with a quarter paying out 90% or more each year.

**SCENARIOS**

At the heart of any discussion about increasing the payout rate — even on a temporary basis for the next three years — lies the question about the future investment returns. If payout rates were increased, it may take private foundations up to 20 years for assets to return to their starting point, even if investment returns remain above post-World War II averages. If future investment returns are below their long-run historical averages, increasing payout rates may cause private foundation assets to end 20-35% below their current inflation-adjusted balance, even after 20 years.

These projections are the difference between a private foundation maintaining annual grants of $50,000/year on an inflation-adjusted basis for 10 years, and decreasing in real terms to approximately $43,500/year by year 10.

Increasing payout rates in the short term can be the equivalent of choosing to decrease grants for 17 years (years 4-20) for the opportunity to increase grants in the first 3 years.
About the Project Partners

The Council of Michigan Foundations (CMF) leads, strengthens and supports Michigan’s community of philanthropy by emboldening and equipping Michigan philanthropy in the relentless pursuit of equitable systems, fortifying the field through public policy action, fostering the growth of current and future philanthropy leaders and advancing exemplary philanthropic practices and field expertise. www.michiganfoundations.org

Established in 1992 with support from the W.K. Kellogg Foundation and Grand Valley State University (GVSU), the Dorothy A. Johnson Center for Philanthropy is an academic center within GVSU’s College of Community and Public Service. We envision a world shaped by smart, adaptive, and effective philanthropy that helps to create strong, inclusive communities. Our mission is to be a global leader in helping to understand, strengthen, and advance philanthropy. johnsoncenter.org

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FOR MORE INFORMATION
Visit the Technical Appendix located on the CMF website at michiganfoundations.org/resources/payout-study, or contact:

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