

Duff & Phelps Recommended U.S. Equity Risk Premium
Decreased from 6.0% to 5.5%, Effective December 9, 2020

CLIENT ALERT



Executive Summary

The Equity Risk Premium (ERP) changes over time. Fluctuations in global economic and financial conditions warrant periodic reassessments of the selected ERP. Based on current market conditions, **Duff & Phelps is decreasing its U.S. Equity Risk Premium recommendation from 6.0% to 5.5%** when developing discount rates **as of December 9, 2020 and thereafter**, until further guidance is issued. This ERP recommendation is to be used in conjunction with a **normalized risk-free rate of 2.5%**, implying a “base” cost of equity capital estimate of 8.0% (2.5% + 5.5%).

The Equity Risk Premium (ERP) is a key input used to calculate the cost of capital within the context of the Capital Asset Pricing Model (CAPM) and other models. Duff & Phelps regularly reviews fluctuations in global economic and financial conditions that warrant periodic reassessments of ERP. Based on current market conditions, **we are recommending a decrease in the U.S. ERP from 6.0% to 5.5% when developing discount rates as of December 9, 2020 and thereafter, until further guidance is issued.** We will maintain our recommendation to use a 5.5% U.S. ERP when developing discount rates until such time evidence indicates equity risk in financial markets has materially changed.

The current ERP recommendation was developed in conjunction with a “normalized” **20-year yield on U.S. government bonds of 2.5% as a proxy for the risk-free rate (R_f)**, implying an 8.0% (2.5% + 5.5%) “base” U.S. cost of equity capital estimate as of December 9, 2020. Were we to use the spot yield-to-maturity on 20-year U.S. Treasuries instead, we would have to increase the ERP assumption accordingly. For illustrative purposes, one can determine the ERP inferred by D&P Recommended U.S. ERP (used in conjunction with the normalized risk-free rate) against the spot 20-year yield of 1.5% as of December 9, 2020, by using the following formula:

8.0%

U.S. Base Cost of Equity
(Normalized Risk-Free Rate
+ D&P Recommended U.S.
Equity Risk Premium)

U.S. ERP Against Spot 20-Year Yield (Inferred) =

= D&P Recommended U.S. ERP + Normalized Risk-Free Rate – Spot 20-Year U.S. Treasury Yield

= 5.5% + 2.5% – 1.5% = 6.5%

The Content in this Client Alert was written in early December 2020. Some events described as sources of uncertainty may have been resolved or shifted in different directions.

Background

Duff & Phelps last changed its U.S. ERP recommendation on March 25, 2020. On that date, our recommendation was increased to 6.0% (from 5.0%) in response to financial markets' turmoil and the uncertainty created by the decision of countries around the world to enact lockdown policies to limit the spread of the novel coronavirus (COVID-19) and corresponding impact on the global economy.

The World Health Organization (WHO) declared COVID-19 as a pandemic on March 11, 2020, which led to an unprecedented reaction in global financial markets and major disruption to the global economy. Government policies of social distancing have led to supply chain disruptions and the closure of many businesses, harming business confidence; this has led to significant job losses in several industries, in turn hurting consumer confidence. Following the COVID-19 outbreak, U.S. equity markets collapsed at a speed faster than observed during the global financial crisis of 2008 and 2009 (the "Global Financial Crisis"). Equity volatility reached record highs, while corporate credit spreads surged, plunging the U.S. economy into a recession.

The U.S. government and the Federal Reserve Bank (Fed) reacted decisively and swiftly. The U.S. government approved a sizable fiscal stimulus package to support businesses and consumers (the "CARES Act"). The Fed implemented large rounds of quantitative easing and other crisis-related measures akin to those employed during the Global Financial Crisis, and also added new programs to keep corporate credit and mutual funds markets functioning. Importantly, the Fed introduced a new corporate bond purchase program to buy investment-grade corporate bonds, as well as junk bonds issued by "fallen angels" (i.e., corporations whose debt rating had previously been classified as investment grade, but were downgraded to 'speculative' or junk due to the COVID-19 crisis), thereby contributing to a fall in corporate debt yields.

As of June 30, 2020, global equity markets had recovered substantially from their mid-March lows – benefiting from unparalleled monetary actions by central banks and fiscal stimulus packages by several governments – but several global benchmark equity indices had not yet recovered to the levels achieved in mid-February 2020 (prior to their large March declines). Equity volatility had decreased from the record highs reached in March but remained elevated. U.S. consumer confidence and business optimism had recovered slightly, but the former was still significantly lower than it was before COVID-19, and job losses in several industries (and the unemployment rate) continued to be at historic high levels. Economists had further slashed real economic growth projections for 2020, and many analysts predicted a more severe contraction of the global economy than was experienced during the Global Financial Crisis. Based on the economic and financial market conditions prevailing as of June 30, 2020, Duff & Phelps reaffirmed its U.S. ERP recommendation of 6.0% to be used in conjunction with a normalized risk-free rate. However, based on academic research pointing to lower real interest rates and declining long-term growth estimates for the U.S. economy, we lowered the U.S. normalized risk-free rate from 3.0% to 2.5%, when developing discount rates as of June 30, 2020 and thereafter until further guidance was issued.

At that time (June 30, 2020), the decision to reaffirm the U.S. ERP recommendation took into consideration the improvements seen in financial markets, but the degree of uncertainty continued to be high when it came to assessing the ultimate impact of the economic recession on companies' earnings, and the shape that the recovery would take. In addition, the U.S. presidential election on November 3, 2020 had the potential introduce even more uncertainty to the economic environment.

Anatomy of Crisis:
Background and Where
We are Today

Conditional Equity Risk Premium Update

The lockdown policies helped slow the expansion of the virus in the U.S., and the support from the U.S. government and the Fed kept businesses and consumers afloat. By the end of spring and into the summer of 2020, businesses started to reopen, and the economy started to show some signs of recovery. After collapsing 5% and 31.4% in the first and second quarters of 2020, respectively, the U.S. economy grew in *real* terms by an annualized 33.1% in the third quarter.¹ Nevertheless, by the end of the third quarter, *nominal* U.S. gross domestic product (GDP) remained at a lower level than at year-end 2019. Furthermore, real GDP is still expected to contract in 2020 by the worst percentage amount since World War II.

In the fourth quarter of 2020, U.S. equity markets reached new all-time highs, spurred by optimism about new COVID-19 vaccines and the expectation of continued support by the Fed (including ultra-low interest rates through at least 2023, and possibly longer), coupled with lower uncertainty regarding the impact of U.S. presidential elections on the economy and future corporate earnings. Equity volatility reverted to levels close to long-term averages, and corporate credit spreads have narrowed to historical averages. Consumer confidence and business optimism improved, although the former is still far below the levels observed prior to the outbreak.

Duff & Phelps goes beyond historical measures of ERP by examining approaches that are sensitive to current economic and financial market conditions. In Exhibit 1 we list the primary factors considered when arriving at the Duff & Phelps Recommended U.S. ERP. Specifically, Exhibit 1 documents the evolution of these factors from March 25, 2020 through November 30, 2020, along with the corresponding relative impact on ERP indications.

Basis for Estimating the
U.S. Equity Risk Premium
as of December 9, 2020

EXHIBIT 1: FACTORS CONSIDERED IN THE U.S. ERP RECOMMENDATION: RELATIVE CHANGE FROM MARCH TO NOVEMBER 2020

FACTOR	CHANGE	EFFECT ON ERP
U.S. Equity Markets	▲	▼
Implied Equity Volatility	▼	▼
Corporate Spreads	▼	▼
Economic Policy Uncertainty (EPU) and Equity Uncertainty Indices	▼	▼
Historical Real GDP Growth and Forecasts	▼	▲
Unemployment Environment	▼	▲
Consumer Confidence	▼	▲
Business Confidence	▲	▼
Sovereign Credit Ratings	◄►	◄►
Damodaran Implied ERP Model	▼	▼
Default Spread Model	▼	▼

¹ Source: U.S. Bureau of Economic Analysis (BEA). Information accurate as of November 30, 2020.

Currently, the U.S. is experiencing a third wave of COVID-19 cases, which is proving to be more severe than the first (in March and April) and the second one (in June and July). Daily new COVID-19 cases have reached a record high in early December 2020, and so have the daily number of deaths. This new wave could lead to a stalling of the recovery, or to another period of economic contraction, as states across the U.S. have already begun (or are considering) a new round of lockdowns until COVID-19 vaccines are more widely available.

There are still a number of risk factors and sources of uncertainty that may impact the shape of the U.S. economic recovery and the pattern of behavior by financial markets over the next few months:

- Two vaccines (one from Moderna and another from a partnership between Pfizer and BioNTech) have shown efficacy rates around 95%. Both vaccines have been submitted for emergency approval by the U.S. Food & Drug Administration (FDA), and shipments of the vaccines were expected to begin in late December. A third vaccine developed by AstraZeneca and Oxford University showed some promising but mixed results, with additional trials required before it can be considered for FDA approval.
- The rollout of the vaccines to the public is expected to initially be limited to those individuals considered to be at high risk, such as health care and other critical workers, as well as nursing home residents. Manufacturing, supply chain, and distribution challenges are anticipated to negatively impact the speed of delivery, but the vaccines are nonetheless expected to be accessible to most of the U.S. population by mid-2021. Another potential challenge is the resistance among certain pockets of the population to receive COVID-19 inoculations, which may slow the achievement of “herd” immunity.
- Until the COVID-19 health crisis is resolved, either through vaccination(s) or better treatments, the economy may be unable to fully recover. Fed chairman Jerome Powell and other members of the Federal Open Market Committee (FOMC) have stated that additional fiscal stimulus is needed to support the fragile economic recovery and prevent a possible relapse.²
- Agreement on a second major fiscal stimulus package proved to be difficult and discussions have been fraught with political division. The U.S. Congress and the White House have been unable to agree on the size and scope of a new stimulus package, but it now appears that the approval of a smaller, more limited bipartisan package may be possible before year end.
- As more states certify their U.S. presidential election results, uncertainty around the election is lessening. Financial markets appeared to initially welcome a potentially divided legislature, with Republicans in control of the U.S. Senate and Democrats controlling the House of Representatives, making it less likely that large increases in corporate and individual tax rates and other potentially business-unfriendly ideas proposed during the election campaign would be enacted. Ultimate control of the Senate will be decided in January 2021 after the Georgia run-off elections; a loss of the two Republican seats would give Democrats control of the Senate, which could lead to the enactment of business-unfriendly legislation that lowers future after-tax corporate earnings.

There are still a number of risk factors and sources of uncertainty that may impact the shape of the U.S. economic recovery

² The Fed has the responsibility for setting monetary policy in the U.S. by controlling the three tools of monetary policy: open market operations, the discount rate, and reserve requirements. The Board of Governors of the Federal Reserve System is responsible for setting the discount rate and reserve requirements, while the FOMC is the committee charged under U.S. law with overseeing the nation's open market operations (i.e., the Fed's buying and selling of U.S. Treasury securities).

Conclusion

Taken together, we find sufficient support to decrease our ERP recommendation relative to our previous recommendation, although not yet to the same level recommended at year-end 2019.³ Accordingly, Duff & Phelps recommends a **U.S. Equity Risk Premium of 5.5%** when developing discount rates as of December 9, 2020 and thereafter, until further guidance is issued. This recommendation is to be used in conjunction with a **normalized risk-free rate of 2.5%**, implying an 8.0% (2.5% + 5.5%) base cost of equity (i.e. assuming a market beta of 1.0).

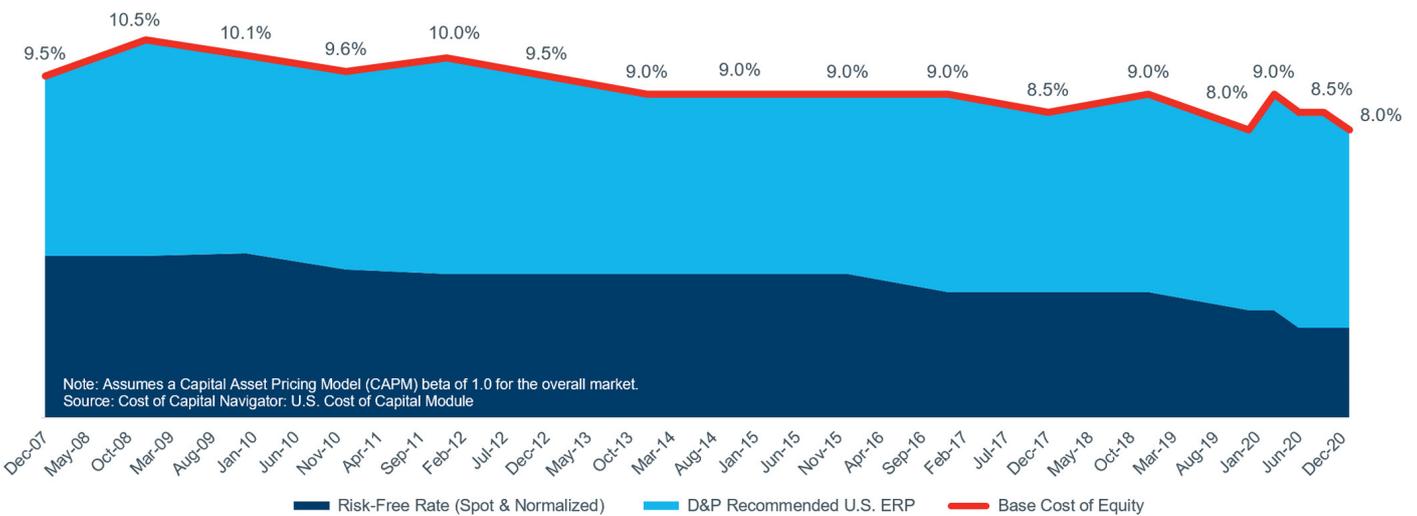
While this recommendation has an effective date of December 9, 2020, some of the factors that were considered when lowering the D&P Recommended U.S. ERP to 5.5% were already present in late November, such as positive vaccine news and the partial resolution of U.S. election results.

2.5%

Current Normalized
Risk-free Rate

5.5%

Current U.S. ERP
Recommendation



³ At year-end 2019, the Duff & Phelps' U.S. equity risk premium recommendation was 5.0%.

Authors

Carla S. Nunes, CFA
Managing Director
carla.nunes@duffandphelps.com

James P. Harington
Director
james.harington@duffandphelps.com

Contributors

Anas Aboulamer, PhD
Director
anas.aboulamer@duffandphelps.com

Kevin Madden
Vice President
kevin.madden@duffandphelps.com

Kevin Latz
Analyst
kevin.latz@duffandphelps.com

About Duff & Phelps

Duff & Phelps is the world's premier provider of governance, risk and transparency solutions. We work with clients across diverse sectors in the areas of valuation, corporate finance, disputes and investigations, cyber security, claims administration and regulatory compliance. With Kroll, the leading global provider of risk solutions, and Prime Clerk, the leader in complex business services and claims administration, our firm has nearly 4,000 professionals in 25 countries around the world. For more information, visit www.duffandphelps.com.

M&A advisory, capital raising and secondary market advisory services in the United States are provided by Duff & Phelps Securities, LLC, Member FINRA/SIPC. Pagem//Partners is a Division of Duff & Phelps Securities, LLC. M&A advisory, capital raising and secondary market advisory services in the United Kingdom are provided by Duff & Phelps Securities Ltd. (DPSL), which is authorized and regulated by the Financial Conduct Authority. Valuation Advisory Services in India are provided by Duff & Phelps India Private Limited under a category 1 merchant banker license issued by the Securities and Exchange Board.