

Valuation Insights

First Quarter 2021

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EXECUTIVE SUMMARY

Duff & Phelps, A Kroll Business, regularly reviews fluctuations in global economic and financial conditions that warrant periodic reassessments of the equity risk premium (ERP), a key input used to calculate the cost of capital. In this issue of *Valuation Insights*, we discuss the rationale behind our recent change in the Duff & Phelps recommended U.S. ERP.

In our **Technical Notes** section, we showcase our 2020 U.S. Goodwill Impairment (GWI) Study that examines general and industry GWI trends of U.S. publicly traded companies through December 2019. We also feature an article on the Public Company Accounting Oversight Board's new audit standard that highlights the need for registered investment advisers and boards of registered investment companies to reassess their fair value governance procedures.

In our **International in Focus** article, we take a closer look at the expected cessation of the London Interbank Offered Rate (LIBOR)-based suite of interest rates and how the extension of the effective date should be treated as an opportunity to further enhance transition plans.

Finally, our **Spotlight** article highlights key findings from the 2021 edition of Duff & Phelps' Global Regulatory Outlook, which examines the current and future global regulatory landscape.

In every issue of *Valuation Insights*, you will find industry market multiples that are useful for benchmark valuation purposes.

Be sure to check out our <u>library</u> of CPE-eligible virtual events and webinars, where our valuation experts discuss issues and topics that may be impacting your business.

We hope that you will find this and future issues of the newsletter informative.



Industry Market Multiples Online

Valuation Insights Industry Market Multiples are online with data back to 2010. Analyze market multiple trends over time across industries and geographies. https://multiples.duffandphelps.com/



Duff & Phelps Recommended U.S. Equity Risk Premium Decreased as COVID-19 Impact Recedes

The Equity Risk Premium (ERP) is a key input used to calculate the cost of equity capital within the context of the Capital Asset Pricing Model (CAPM) and other models. The ERP varies over time.

Based on current market conditions, **Duff & Phelps decreased its U.S. ERP recommendation from 6.0% to 5.5%** when developing discount rates **as of December 9, 2020, and thereafter**, until further guidance is issued.

The 5.5% ERP recommendation is to be used with a normalized risk-free rate of 2.5%, implying a "base" U.S. cost of equity capital estimate of 8.0% (2.5% + 5.5%).¹

If the spot yield-to-maturity on 20-year U.S. Treasuries were used instead, the ERP would have to be increased accordingly. For example, the ERP inferred by the Duff & Phelps Recommended U.S. ERP (developed in conjunction with a normalized risk-free rate) against the spot 20-year yield of 1.5% as of December 9, 2020, is:

U.S. ERP AGAINST SPOT 20-YEAR YIELD (INFERRED) =

= Duff & Phelps Recommended U.S. ERP + Normalized Risk-Free Rate - Spot 20-Year U.S. Treasury Yield

= 5.5% + 2.5% - 1.5% = 6.5%

December 9, 2020 Decrease of U.S. ERP

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 the financial markets' turmoil and the uncertainty created by the spread of COVID-19 and its corresponding negative impact on the global economy.

U.S. real GDP collapsed 5% and 31.4% in the first and second quarters of 2020, respectively, but it grew in real terms by an annualized 33.1% in the third quarter.^{2,3} In the fourth quarter, U.S. equity markets reached new all-time highs, spurred by optimism

about the new COVID-19 vaccines, the expectation of continued low interest rates through at least 2023, the resolution of the U.S. presidential election, and improved business confidence. Consumer confidence also saw some improvement since its 2020 low in April, but it remains far below the levels observed prior to the outbreak.

Exhibit 1 lists the primary factors that were considered when arriving at the Duff & Phelps Recommended U.S. ERP, effective December 9, 2020. It documents the evolution of these factors from March 25, 2020 through November 30, 2020, and their corresponding impact on the ERP.

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	A	▼
Implied Equity Volatility	▼	▼
Corporate Spreads	▼	▼
Economic Policy Uncertainty (EPU) and Equity Uncertainty Indices	•	•
Historical Real GDP Growth and Forecasts	•	A
Unemployment Environment	•	A
Consumer Confidence	▼	A
Business Confidence	A	▼
Sovereign Credit Ratings	◆ ▶	◆ ▶
Damodaran Implied ERP Model	•	•
Default Spread Model	▼	▼

As published in the Duff & Phelps Cost of Capital Navigator at dpcostofcapital.com. The Cost of Capital Navigator is an interactive, web-based platform (subscription required) that guides finance professionals through the steps of computing cost of capital taking into account best practices and the latest theory on this topic.

² Source: U.S. Bureau of Economic Analysis (BEA). Third quarter U.S. real GDP was later revised to 33.4%. See: https://www.bea.gov/news/blog/2020-12-22/gross-domestic-product-third-estimate-corporate-profits-revised-and-gdp.

³ U.S. real GDP decreased an estimated 3.5% in 2020 (compared to an increase of 2.2% in 2019). See: https://www.bea.gov/news/2021/gross-domestic-product-4th-quarter-and-year-2020-advance-estimate.



Potential Risks in 2021 Impacting ERP⁴

There are several risks that may impact the shape of the U.S. economic recovery and the pattern of behavior of financial markets in 2021, including:

- COVID-19: In mid-December, the U.S. Food and Drug Administration (FDA) issued emergency use authorizations for two COVID-19 vaccines, each with efficacy rates close to 95%.5 Both these vaccines require a two-dose regimen to achieve this level of efficacy rates. Manufacturing, supply chain and distribution challenges are anticipated to negatively impact the speed of delivery, but these (and other to-be-approved) vaccines are nonetheless expected to be accessible to most of the U.S. population by mid-2021. As of February 17, 2021, the number of administered doses in the U.S. was approaching 60 million.6
- Control of U.S. Congress: The Democratic party now controls the White House and both houses of Congress (Senate and House of Representatives). Although their majorities are slim, Democrat control could lead to the enactment of business-unfriendly legislation, such as higher corporate tax rates and increased regulations, that lower future after-tax corporate earnings.
- Size of New Stimulus Package: Agreement on a third fiscal stimulus package proved to be difficult. Ultimately, the \$1.9 trillion stimulus package proposed by congressional Democrats was passed into law in March 2021 without support from Republicans. The cumulative size of the various COVID-19 stimulus packages relative to the size of U.S. GDP is the largest among major economies. This has contributed to recent increases in inflation expectations and long-term U.S. Treasury yields.

Conclusion

Based on global economic and financial market conditions in late November and early December 2020, which took into consideration the outlook and potential risks for 2021, we found sufficient support to decrease our U.S. ERP recommendation to 5.5% as of December 9, 2020 and thereafter, until further notice.

The 5.5% ERP recommendation is to be used with a normalized risk-free rate of 2.5%, implying a "base" U.S. cost of equity capital estimate of 8.0% (2.5% + 5.5%). Exhibit 2 shows the fluctuations in the base U.S. cost of equity since year-end 2019 to the present, using the Duff & Phelps Recommended U.S. ERP and accompanying risk-free rate.

Duff & Phelps continuously monitors global economic and financial market conditions that may indicate a change in the indicated ERP and will update our guidance as frequently as warranted.

Exhibit 2: U.S. Base Cost of Equity (= U.S. Normalized Risk-Free Rate + Duff & Phelps Recommended U.S. ERP)

December 19, 2019 to the Present⁷

Current U.S.



For more information, contact:

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

James Harrington, Director james.harrington@duffandphelps.com

⁴ This section has been updated with more recent information relative to the content included in the client alert "Duff & Phelps Recommended U.S. Equity Risk Premium Decreased from 6.0% to 5.5%, Effective December 9, 2020". This client alert contains a more expanded discussion of the rationale used to support the decrease in the Duff & Phelps-recommended U.S. ERP on December 9, 2020, and is accessible here: https://www.duffandphelps.com/insights/publications/cost-of-capital/duff-and-phelpsrecommended-us-equity-risk-premium-decreased-december-2020

⁵ Source: FDA's Emergency Use Authorization information available at: https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policyframework/emergency-use-authorization#coviddrugs

⁶ Source: Centers for Disease Control and Prevention (CDC) website at: https://covid.cdc.gov/covid-data-tracker/#vaccinations

Assumes a market beta of 1.0.

DUFF&PHELPS A KROLL BUSINESS



COST OF CAPITAL NAVIGATOR

An online platform that guides you through the process of developing global cost of capital estimates, a key component of any valuation analysis. You can subscribe to any or all four cost of capital modules, each offering three annual subscription levels: Basic, Pro and Enterprise.

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Our solution is comprehensive, providing end users with multiple alternative models and corresponding required inputs as they use their professional judgement in developing their own estimates. Users can export their work or download data sets using the Cost of Capital Navigator Excel add-in directly into their own spreadsheets, saving time and ensuring a consistent, accurate analysis. Results can also be downloaded into a standard report format suitable for review by auditors and other stakeholders with inputs and assumptions clearly documented.



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- Industry Risk Premia
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- Industry leading expert guidance
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Global Cost of Capital Data



Comprehensive Solutions to Quantify Risk



Thought Leaders and **Expert Guidance**



Reliable and Accurate Data

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Goodwill Impairments Spike Projected in 2020 Filings

Duff & Phelps launched the 2020 U.S. Goodwill Impairment Study (the "2020 Study"), now in its 12th year of publication. The 2020 Study examines general and industry goodwill impairment (GWI) trends through December 2019 of over 8,800 publicly traded companies incorporated in the U.S.

Recognizing the significance of a recent global health event, this study also touches on the impact of the COVID-19 pandemic on goodwill impairments taken by U.S. based companies up to the time of writing. Times of crises and significant economic recessions always place an additional focus on impairments recorded by publicly traded companies.

Goodwill and impairment continue to be topics of interest to standard setters and stakeholders. Both the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have current projects addressing goodwill and impairment. More developments in this area are expected to take place in 2021.

Highlights of the 2020 Study

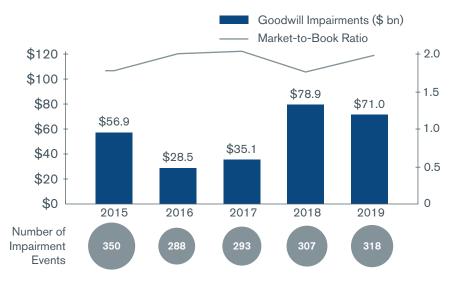
Total GWI recorded by U.S. public companies fell 10%, from \$78.9 billion (bn) in 2018 to \$71.0 bn in 2019, but this was still

the second highest level since the 2008 global financial crisis.* Moreover, the 2018 aggregate GWI amount was significantly impacted by a single GWI event of \$22.1 bn, recorded by General Electric (GE). If GE's impairment event was excluded from the 2018 totals, aggregate GWI would have risen by 25% in 2019 (from \$56.7 bn in 2018).

Additionally, the number of GWI events increased by 4%, from 307 in 2018 to 318 in 2019. The size of impairments has generally become larger, with the average GWI per event (excluding GE's 2018 impairment) rising by 21% in 2019 to \$223 million.

These elevated levels of GWI are broadly consistent with the global economic conditions experienced during 2018 and 2019. Trade tensions between the U.S. and its main trading partners (particularly China), combined with a Brexit impasse, created significant uncertainty among companies and global investors in late 2018 and early 2019. Most major economies saw growth decelerate in 2019, with U.S. real GDP moderating to 2.3%. Nevertheless, U.S. investors grew optimistic into 2019 and a "Phase 1" trade deal announced in October 2019 between the U.S. and China spurred new stock market record highs.

GOODWILL IMPAIRMENT HISTORY



^{*} The 2020 Study only captures companies that are incorporated in the U.S. Therefore, certain companies that are incorporated outside of the U.S. are excluded from our analyses, even if they are viewed as U.S. companies by financial markets. If such companies were included, total GWI in 2019 would, at a minimum, increase by Schlumberger's \$8.8 bn impairment, leading to an aggregate \$79.9 bn and thereby exceeding the 2018 GWI total amount.

5



Industry Trends

In 2019, GWI increased or remained at similar levels in seven out of ten industries analyzed, with Industrials and Consumer Discretionary being notable exceptions. The industries with the largest increase in GWI over 2018, are as follows, in order of magnitude (\$ in billions):

- Communication Services (\$8.6 to \$19.7)
- Information Technology (\$2.7 to \$8.1)
- Consumer Staples (\$9.5 to \$12.9)

Communication Services' aggregate GWI amount more than doubled from 2018 to 2019, reaching its highest level since 2007. Traditional broadband, video and voice service providers were under pressure from new entrants (vertical integration and disrupting start-ups), as well as large providers that underwent M&A consolidation.

Consumer Staples reached a new record high in aggregate GWI since we began collecting statistics in 2005. Established companies are struggling with shifting consumer tastes and competition from new brands and/or lower prices. GWI in this industry has now increased for three consecutive years.

On the Horizon

Looking at 2020, COVID-19 was the biggest challenge faced by U.S. companies, as the related economic recession is now considered the most severe since World War II. Certain companies

benefited from stay-at-home and lockdown policies, while others struggled to survive without the physical presence of consumers. Even within the same industry, there was a marked divergence in performance, depending on the business model and how quickly a company was able to adapt to the new reality.

The 2020 Study gives a preview of GWI reported by U.S. public companies for calendar-year 2020 through January 28, 2021. For purposes of this article, we have updated similar metrics through February 28. Although full 2020 calendar year-end results will not be known for some time, early reporting points to overall GWI already exceeding \$143 bn in 2020.

For perspective, in 2008, at the height of the global financial crisis, U.S. companies recorded a total GWI of \$188 bn, according to our prior studies. Should the final 2020 aggregate GWI figures remain at a level lower than that in 2008, it will be partly a reflection of the unprecedented level of support provided by both the Federal Reserve and the U.S. government in response to the COVID-19 crisis. By a wide margin, the most impacted industry so far is Energy, a reflection of the collapse in global oil prices following the classification of COVID-19 as a pandemic.

For more information, contact:

Greg Franceschi greg.franceschi@duffandphelps.com

Carla Nunes carla.nunes@duffandphelps.com





Duff & Phelps Unifies the Firm Under the Kroll Name

NEW NAME, SAME TRUSTED PARTNER.

We begin this new chapter with a fresh look and a clear and confident vision for the future. Duff & Phelps, Kroll and our family of brands have united under the Kroll brand to deliver a seamless experience across our full suite of services, with a cohesive approach to bringing tech-forward solutions to the market. Our goal is to produce greater value for our clients and partners along with compelling career opportunities for our people.

Duff & Phelps has helped clients make confident decisions in the areas of valuation, real estate, taxation and transfer pricing, disputes, M&A advisory and other corporate transactions. Built on the strength and equity of our legacy brands, we are an independent advisory firm with nearly 5,000 professionals in 30 countries and territories around the world.

Our sharp analytical skills, paired with the latest technology, allow us to give our clients clarity—not just answers—in all areas of business.





Valuation Governance – How Does the PCAOB's Recently Effective Fair Value Audit Standard Fit with the SEC's New Fair Value Rule?

In December 2018 the Public Company Accounting Oversight Board (PCAOB) released a new audit standard that applies to auditing accounting estimates including fair value measurements. The new standard, AS 2501, became effective for audits of entities with fiscal years ending on or after December 15, 2020. Also, in December 2020 the U.S. Securities and Exchange Commission (SEC) announced the adoption of a new rule focused on fund valuation practices (Rule 2a-5). Rule 2a-5 is applicable to all registered investment companies which includes mutual funds, business development companies (BDCs) and unit investment trusts (UITs), and provides insight into how the SEC is thinking about valuation governance and valuation best practice for not only registered investment companies but also for private funds managed by registered investment advisers.

PCAOB Audit Standard (AS) 2501 replaced three prior standards with a single uniform approach to auditing estimates. It emphasizes that auditors need to apply professional skepticism, including addressing potential management bias when auditing accounting estimates. Most importantly, for purposes of this discussion, the new standard provides specific direction on auditing the fair value of financial instruments that are based on information from third-party pricing sources.

Interestingly, also in December 2020, the SEC issued an administrative order and an \$8 million settlement with a pricing service that provided pricing data to clients which was deemed inconsistent with and did not reasonably reflect the value of certain securities. Both the PCAOB standard and the SEC rule specifically highlight a focus on pricing services and using broker quotes to value certain securities. When taken together these directives highlight the need for registered investment advisers and boards of registered investment companies to reassess their fair value governance procedures, especially as they relate to the use of broker quotes and other pricing data.

PCAOB Audit Standard 2501

With AS 2501 being effective at the end of 2020, auditors now have expanded responsibilities with respect to auditing fair value estimates. This article focuses on only one specific area of these responsibilities—the level of evidence needed when pricing services or brokers provide fair value information that a board or fund manager relies on when coming to their fair value determination.

AS 2501.A4 lists several factors that impact the relevance of pricing service data, including:

- a. The experience and expertise of the pricing service relative to the types of financial instruments being valued, including whether the types of financial instruments being valued are routinely priced by the pricing service;
- b. Whether the methodology used by the pricing service in determining fair value of the types of financial instruments being valued is in conformity with the applicable financial reporting framework [e.g. compliant with ASC Topic 820]; and
- c. Whether the pricing service has a relationship with the company by which company management has the ability to directly or indirectly control or significantly influence the pricing service.

Further, AS 2501.A5 lists additional factors which the auditor must consider when evaluating the information provided by a pricing service:

- a. Whether the fair values are based on quoted prices in active markets for identical financial instruments;
- b. When the fair values are based on transactions of similar financial instruments, how those transactions are identified and considered comparable to the financial instrument being valued; and



c. When no recent transactions have occurred for either the financial instrument being valued or similar financial instruments, or the price was developed using a quote from a broker or dealer, how the fair value was developed, including whether the inputs used represent the assumptions that market participants would use when pricing the financial instruments.

The newly effective PCAOB audit standard (AS 2501.A9) also focuses on broker quotes, where the relevance and reliability of the audit evidence provided is dependent upon whether:

- a. The broker or dealer is free of relationships with the company by which company management can directly or indirectly control or significantly influence the broker or dealer;
- b. The broker or dealer making the quote is a market maker that transacts in the same type of financial instrument;
- The broker quote reflects market conditions as of the financial statement date;
- d. The broker quote is binding on the broker or dealer; and
- e. There are any restrictions, limitations or disclaimers in the broker quote and, if so, their nature.

If the pricing service data or the broker quote information does not meet the criteria noted above, the auditor is required to extend their audit procedures to obtain appropriate relevant and reliable pricing information. The December 2020 SEC order and fine for deficiencies was because the pricing service used only single broker quotes and the pricing service did not reasonably reflect the value of the securities being priced.

The need to obtain relevant and reliable pricing information ties directly to the SEC's new fair value rule.

SEC Rule 2a-5, Determining Fair Value in Good Faith

Rule 2a-5 highlights that "to determine the fair value of fund investments in good faith requires a certain minimum, consistent framework for fair value and standard of baseline practices across funds..." While the new rule allows delegation of certain valuation responsibilities, a fund board or manger retains the responsibility for the good faith determination of fair value and managing and overseeing the risks in the valuation process including oversight of third-party valuation support. The rule specifically states that the board is responsible for "evaluating pricing services."

In many ways the rule codifies practices which have evolved over the past decades. Board's retain responsibility for oversight but may use advisers and other engaged valuation expertise to assist in fulfilling their fair value obligations.

Conclusion

The SEC's \$8 million fine, combined with the new audit standard now required to be applied, in the context of Rule 2a-5 highlight the need for the boards of registered investment companies and registered investment advisors to reassess the valuation governance process they have in place, specifically when using pricing services and brokers to provide valuation data. Depending on individual facts and circumstances the pendulum may swing where funds will estimate fair value using calibrated models as their primary estimation techniques and use pricing services and brokers as corroborating information. What is clear is that the pendulum has swung requiring greater valuation oversight by boards and managers especially as they respond to expanded testing by auditors and the demand for increased valuation rigor by investors.

For more information, contact:

David L. Larsen, Managing Director david.larsen@duffandphelps.com



The LIBOR Cessation Timeline Shift and What it Means for Market Participants

The now confirmed extension of certain USD LIBOR tenors alleviates near-term pressures of the transition but should also be treated as a valuable opportunity to further enhance your transition plan.

The daunting shift away from London Interbank Offered Rate (LIBOR), which has long been the primary benchmark for securities, loans and derivatives, and is embedded in many contracts, will have significant impacts on hundreds of trillions of dollars of financial instruments. While initially slated for cessation by the end of 2021, extensive consideration has led regulators to the conclusion that the markets may need more time to appropriately qualify and quantify the impacts of the proposed changes and to promptly implement effective transition plans that account for all potential components of alternative rate adaptation.

The recent announcement that the cessation of certain USD LIBOR tenors will be extended to June 2023 has indeed relieved some of the short-term pressure. However, the event, and preparation for the event, remain very much at the forefront for anyone with LIBOR exposure. Deadlines have been set by instrument type regarding when the last LIBOR-based issuance activity can occur, with the stoppage of all new issuance targeted by the end of 2021, if not sooner, and banks (one of the largest counterparties) have been encouraged to complete their transitions as soon as practicable and no later than the end of 2021.

A Migration of Epic Proportions

While the postponement of most USD LIBOR benchmarks appears to have bought the market additional time to transition, it should not be a reason for delay or, worse, a reprieve. There is a tremendous amount of work to be done to adequately prepare for the LIBOR cessation. Understanding the nature of your exposures, developing a comprehensive plan, identifying the appropriate personnel within your organization to be part of the transition team and documenting the progress will allow for a smooth transition.

There are many factors that must be considered in preparation for the transition. The process begins with developing an understanding of LIBOR exposures, in particular the contractual provisions regarding alternative reference rates, fallbacks, governing jurisdiction and amendments. Understanding the full breadth of exposure can be overwhelming, and implementing an effective plan requires a thorough review of all relevant governing documentation. This document review and data collection process must be conducted to understand the existing transition language, such as fallback terms and timing, as well as to identify responsibilities, inclusive of disclosures to counterparties and regulators alike.

Given the scale and complexity of developing a comprehensive exposure assessment and transition execution plan, several focal areas have been outlined based on recommendations from the Alternative Reference Rate Committee (ARRC), Office of Compliance Inspections and Examinations, International Swaps and Derivatives Association and the Financial Conduct Authority, to name a few. Robust governance in which senior executives direct and oversee the coordination and delivery of results in line with the institutions' objectives is critical. A smooth transition requires platform-wide integration to effectively evaluate and mitigate the potential risks associated with both existing and new exposures. To accomplish this, the appropriate key resources by functional areas throughout the organization must be identified, and proper communication channels and educational resources must be established and documented to inform internal and external stakeholders along the way, as needed. We are working with clients at varying stages of their transition planning, with some still waiting in the hopes of legislative relief, while others have transition planning teams that have already performed impact assessment analyses to guide their plan and are currently issuing non-LIBOR instruments and remediating legacy contracts as needed.

To Each Their Own—Plan Customization

As if the comprehensive exposure assessment and transition execution plan did not pose a large enough hurdle, the process is further complicated by businesses spanning multiple instrument and exposure types. At its core, the foundation of a successful LIBOR transition exercise is understanding what your exposure is, how and when each instrument is expected to transition, and what is required to ensure that you are properly positioned to handle the transition to an alternative rate. For example, have analyses been performed to understand what, if any, changes in future cash flows are expected based on the LIBOR transition provisions? Have



systems been prepared and tested to process multiple reference rates with potentially updated calculations and methodologies, as well as proper flow through to accounting, tax, valuation, treasury and risk models? Clear organization, documentation and communication with limited partners, regulators and advisors are critical to a successful transition plan.

Upon completion of the contract review process, institutions need to assess the potential impacts of the anticipated transition to better understand and inform possible remediation steps and priorities. For existing contracts and benchmarks that reference LIBOR, strategies for renegotiating and repapering to negotiate fallbacks where they do not adequately exist must be documented and approved as appropriate, considering enhanced fallbacks or amendments, along with potential refinancing or restructuring activities.

Understanding the Potential Alternative Reference Rates

While several alternative rates have been considered as potential USD replacement rates for LIBOR, secured overnight financing rate (SOFR) has been identified by the ARRC as the rate that represents the best fit for use in loans, derivatives and other financial contracts. The SOFR index is based on U.S. Treasury repurchase transactions (versus LIBOR, which was tied to unsecured interbank lending rates). While SOFR has been identified as the presumptive alternative reference rate, other indices that market participants are choosing to consider in their transition plans include Ameribor and the prime rate.^{1,2}

One of the biggest hurdles that will be faced by market participants as they migrate to an alternative reference rate will be the structure of these rates. For example, SOFR is currently a daily rate market without an active and observable derivatives market. As such, while synthetic forward curves can be constructed with available data, there are currently no objectively observable forward term rates for the SOFR market that can be used when projecting future expected rates.

The Time for Transition Preparation Is Now, Not Later

Irrespective of whether you enact a wait-and-see strategy looking to further announcements before acting or you take a more proactive stance and begin transitioning to an alternative reference rate now, preparing a comprehensive inventory that quantifies and documents your exposures is a critical initial step to a successful transition. Once the key LIBOR transition provisions are catalogued, having a detailed transition timeline and plan which identifies the key professionals throughout the institution and outside advisors that will lead the effort, will enable effective communication with regulators, investors and counterparties, and allow for a smooth transition.

It is important to note that this unprecedented and multifaceted transition does not have to be one taken alone. Duff & Phelps, a Kroll Business, has the breadth of expertise to provide a comprehensive cross-functional team able to efficiently consider all inter-dependencies in your LIBOR transition. Duff & Phelps offers customized solutions that align with your transition progress thus far, as well as the facts and circumstances of your portfolio and businesses. This support can be either through full end-to-end solutions or specific components, depending on what is prescribed. For more information on Duff & Phelps' LIBOR transition advisory services, please visit our LIBOR landing page on the Duff & Phelps website here.

For more information, contact:

Jennifer Press, Managing Director jennifer.press@duffandphelps.com

¹ Ameribor is determined based on the actual borrowing costs between the small and midsize bank institutions that are members of the American Financial Exchange.

² Prime rate, according to The Wall Street Journal, is the base rate on corporate loans posted by at least 70% of the 10 largest U.S. banks.



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MITIGATE

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The Future of Global Financial Regulation

Every year the Compliance and Regulatory Consulting practice at Duff & Phelps analyzes data from senior decision-makers in financial services to provide insights into the current and future global regulatory landscape. 2020 proved to be extraordinary and will continue to have profound repercussions for some time to come. The 2021 edition of Duff & Phelps' Global Regulatory Outlook examines the world today and offers a window into the future of global financial regulation.

Key findings include:

- Fewer than a third (31%) named London as today's world financial leader. New York continues to cement its dominance, with 60% of senior decision-makers globally now naming it the top financial center.
- · China dominates within the emerging markets this year, with almost two-thirds (64%) of respondents predicting it will be the next major financial hub.
- In 2021, almost a third (32%) of respondents predict the total cost of compliance will be greater than 5% of their revenues. Only 12% expected to see compliance costs lower than 1% of revenues.
- When asked about their firms' environmental, social and governance (ESG) policies, 48% of respondents said they already had a comprehensive ESG policy and related compliance procedures in place. Just over six out of 10 respondents (62%) said investor demand had a significant or moderate impact on developing their firm's policy.

Duff & Phelps' 2021 Global Regulatory Outlook report can be accessed here.





North American Industry Market Multiples

As of December 31, 2020

	of Eq	Market Value of Equity to Net Income MVIC to EBIT		to EBIT	MVIC to EBITDA	
Industry	U.S.	Canada	U.S.	Canada	U.S.	Canada
Energy	7.1	16.8	14.3	16.8	7.4	7.4
Energy Equipment & Services	7.7	_	18.9	_	7.3	8.3
Oil, Gas & Consumable Fuels	7.0	18.3	13.9	17.3	7.5	7.0
Materials	18.8	15.2	19.2	13.6	10.6	9.7
Chemicals	20.8	_	22.5	_	11.5	_
Containers & Packaging	22.9	_	16.9	_	10.3	_
Metals & Mining	9.1	13.6	18.9	13.7	10.7	9.7
Industrials	23.6	19.3	19.3	17.8	12.1	10.3
Aerospace & Defense	21.5	_	19.1	_	12.8	_
Building Products	23.4	_	17.4	_	11.2	_
Construction & Engineering	17.5	_	14.0	_	6.8	_
Electrical Equipment	21.7	_	16.6	_	12.8	_
Machinery	29.6	_	22.8	_	14.7	15.3
Trading Companies & Distributors	22.1	16.3	18.6	14.2	12.3	8.6
Commercial Services & Supplies	19.1	33.0	17.0	_	9.8	11.8
Professional Services	18.8	_	15.5	_	11.8	_
Road & Rail	23.6	_	21.3	_	6.9	_
Consumer Discretionary	17.4	20.7	16.9	18.3	10.5	14.2
Auto Components	26.1	_	19.8	_	10.8	_
Household Durables	10.6	_	15.3	_	10.2	_
Leisure Products	19.4	_	16.8	_	10.1	_
Textiles, Apparel & Luxury Goods	23.0	_	16.9	_	10.7	_
Hotels, Restaurants & Leisure	28.4	_	29.0	20.6	14.8	_
Diversified Consumer Services	14.7	_	16.4	_	8.3	_
Internet & Direct Marketing Retail	22.5	_	17.2	_	11.7	_
Specialty Retail	14.6	_	13.5	_	7.7	_
Consumer Staples	18.0	16.0	16.3	17.6	11.2	10.3
Food & Staples Retailing	12.5	_	15.8	15.8	8.5	8.9
Beverages	26.5	_	20.3	_	17.7	_
Food Products	17.8	_	17.3	20.6	12.4	11.6
Personal Products	15.1	_	13.1	_	9.0	_

	of Eq	et Value uity to ncome	MVIC	to EBIT	MVIC EBITI	
Industry	U.S.	Canada	U.S.	Canada	U.S.	Canada
Health Care	22.7	24.6	20.9	18.5	14.0	16.8
Health Care Equipment & Services	23.9	_	20.9	_	14.0	16.5
Health Care Providers & Services	17.3	_	15.8	_	10.1	14.6
Biotechnology	16.5	_	17.0	_	14.1	_
Pharmaceuticals	17.8	24.7	19.0	19.6	11.0	17.3
Life Sciences Tools & Services	39.0	_	34.4	_	21.1	_
Information Technology	30.3	25.8	24.1	22.0	15.2	21.1
IT Services	30.6	_	24.2	_	15.1	_
Software	35.0	30.5	25.4	_	17.4	29.5
Communications Equipment	28.9	_	28.5	_	16.1	_
Technology Hardware, Storage & Peripherals	16.7	-	22.3	_	12.7	-
Electronic Equipment, Instruments & Components	21.2	_	20.7	_	11.8	_
Semiconductors & Semiconductor Equipment	31.5	_	29.5	_	19.4	_
Communication Services	13.2	13.6	16.3	11.8	9.7	8.1
Diversified Telecommunication Services	9.0	_	13.3	_	6.9	_
Media	13.3	8.7	15.3	11.1	9.7	7.0
Entertainment	17.9	_	_	_	21.3	_
Interactive Media & Services	33.2	_	_	_	14.2	_
Utilities	19.8	16.1	22.0	19.7	12.2	12.1
Electric Utilities	19.7	_	23.1	_	11.3	_
Gas Utilities	17.3	_	18.3	_	11.4	_

	Market Value of Equity to Net Income	Market Value of Equity to Book Value
Industry	U.S. Canada	u.S. Canada
Financials	12.5 12.8	1.0 1.2
Banks	12.1 —	1.0 —
Thrifts & Mortgage Finance	11.7 12.1	0.9 —
Capital Markets	23.3 11.8	1.6 1.4
Insurance	13.6 —	0.9 1.1



Industry Market Multiples are available online! Visit https://multiples.duffandphelps.com

"An industry must have a minimum of 10 company participants to be calculated.

For all reported multiples in the U.S. and Canada, the average number of companies in the calculation sample was 72 (U.S.), and 32 (Canada); the median number of companies in the calculation sample was 35 (U.S.), and 24 (Canada)."

Sample set includes publicly-traded companies (private companies are not included). Source: Data derived from Standard & Poor's Capital IQ databases. Reported multiples are median ratios (excluding negatives or certain outliers). MVIC = Market Value of Invested Capital = Market Value of Equity plus Book Value of Debt (includes capitalized operating leases). EBIT = Earnings Before Interest and Taxes for latest 12 months (includes adjustment for operating lease interest expenses). EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization for latest 12 months (includes adjustment for operating lease expenses). Note that due to the exclusion of negative multiples from the analysis, the number of companies used in the computation of each of the three reported multiples across the same industry may differ, which may occasionally result in a counterintuitive relationship between those multiples (e.g. the MVIC-to-EBITDA multiple may exceed MVIC to EBIT).



European Industry Market Multiples

As of December 31, 2020

	Market Value of Equity to Net Income	of Equity to	
Industry	Europe	Europe	Europe
Energy	11.9	17.2	7.9
Energy Equipment & Services	12.2	18.2	9.3
Oil, Gas & Consumable Fuels	11.9	16.7	7.4
Materials	19.5	19.4	11.2
Chemicals	26.9	24.3	14.6
Containers & Packaging	21.2	18.3	10.1
Metals & Mining	14.9	13.7	9.3
Industrials	24.4	20.8	12.7
Aerospace & Defense	23.8	19.0	12.1
Building Products	32.6	23.1	12.7
Construction & Engineering	15.1	18.6	11.7
Electrical Equipment	28.4	22.7	14.3
Machinery	26.3	22.4	14.3
Trading Companies & Distributors	22.7	20.1	13.0
Commercial Services & Supplies	25.4	19.7	11.0
Professional Services	29.2	21.2	13.7
Marine	20.7	21.4	10.2
Transportation Infrastructure	19.4	18.8	11.2
Consumer Discretionary	20.8	20.5	12.9
Auto Components	20.3	21.5	13.0
Household Durables	19.2	19.0	13.4
Leisure Products	19.2	16.1	14.2
Textiles, Apparel & Luxury Goods	21.2	20.3	14.3
Hotels, Restaurants & Leisure	20.8	26.7	15.3
Internet & Direct Marketing Retail	38.9	32.0	18.2
Specialty Retail	18.5	19.2	8.3
Consumer Staples	22.6	19.6	12.2
Food & Staples Retailing	20.8	18.9	8.6
Beverages	27.6	22.5	16.2
Food Products	20.9	19.6	11.4
Personal Products	23.8	19.9	15.3

	Market Value of Equity to Net Income	MVIC to EBIT	MVIC to EBITDA
Industry	Europe	Europe	Europe
Health Care	34.1	26.8	15.8
Health Care Equipment & Supplies	42.5	29.8	22.0
Health Care Providers & Services	27.7	24.5	12.4
Health Care Technology	33.9	23.4	20.7
Biotechnology	32.3	16.8	18.9
Pharmaceuticals	23.3	18.5	14.6
Life Sciences Tools & Services	61.6	41.0	20.5
Information Technology	29.5	23.3	15.7
IT Services	26.3	21.0	13.7
Software	33.0	27.9	20.3
Communications Equipment	22.4	18.3	13.0
Technology Hardware, Storage & Peripherals	24.1	18.5	14.3
Electronic Equipment, Instruments & Components	29.1	25.6	16.5
Semiconductors & Semiconductor Equipment	48.7	33.0	17.0
Communication Services	20.1	19.6	11.7
Diversified Telecommunication Services	22.7	19.9	8.7
Media	17.7	17.8	11.2
Entertainment	33.4	23.9	19.3
Interactive Media & Services	35.8	30.2	14.3
Utilities	22.7	22.2	13.2
Independent Power and Renewable Electricity Providers	35.6	30.1	14.6

	Market Value of Equity to Net Income	Market Value of Equity to Book Value
Industry	Europe	Europe
Financials	14.1	0.9
Banks	11.3	0.6
Diversified Financial Services	13.0	1.3
Capital Markets	19.3	1.7
Insurance	13.6	1.1

An industry must have a minimum of 10 company participants to be calculated. For all reported multiples in Europe, the average number of companies in the calculation sample was 83 and the median number of companies in the calculation sample was 48.

Sample set includes publicly-traded companies (private companies are not included). Source: Data derived from Standard & Poor's Capital IQ databases. Reported multiples are median ratios (excluding negatives or certain outliers). MVIC = Market Value of Invested Capital = Market Value of Equity plus Book Value of Debt (includes capitalized operating leases). EBIT = Earnings Before Interest and Taxes for latest 12 months. EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization for latest 12 months. Note that due to the exclusion of negative multiples from the analysis, the number of companies used in the computation of each of the three reported multiples across the same industry may differ, which may occasionally result in a counterintuitive relationship between those multiples (e.g. the MVIC-to-EBITDA multiple may exceed MVIC to EBIT).

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MARCH 2021

COVID-19 and the Impact on the Real Estate Market

March 30 | 12:00 p.m. ET available on-demand

APRIL 2021

RIMS LIVE 2021 | RIMS Annual Conference

April 19-30

MAY 2021

IVSC International Valuation Webinar Series

May 18-27

Coronavirus One Year Later - Cost of Capital Considerations

in the Current Environment

May 20 | 11:30 a.m. ET

CONTRIBUTORS

Greg Franceschi

James Harrington

Nick Inman

Ken Joseph

David Larsen

Monique Melis

Carla Nunes

Jennifer Press

Gary Roland

Marianna Todorova

Jamie Warner

EDITOR

Sherri Saltzman

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