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**Thematic Investing**

**Everybody Counts! Diversity & Inclusion Primer**

**Thematic Investing**

**04 March 2021**

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**Gender, Ethnic, Racial, LGBT+, Disabilities: don’t deny D&I**

Rule 101 of investing is to diversify investment capital to maximise returns. So why don’t we do the same with human capital? It will take 257 years to close the gender economic gap at today’s rate, in 2020 there were no black senior executives in any of the FTSE 100 companies, 90% of children with disabilities in EM countries do not attend school and >75% of Nasdaq companies do not have at least 1 woman and 1 under-represented minority or LGBT+ member on the board. But the times they are a-changing with major demographic shifts. Today in the US, there are already more kids from ethnic minority backgrounds than white peers and more Spanish speakers than in Spain, while globally women are accumulating financial assets 1.5x faster than men.

**Diversity needs to diversify, inclusion needs a voice!**

From the #MeToo movement to #BlackLivesMatter, awareness of injustices faced by under-represented and marginalised groups is at an all-time high. Within corporate Diversity & Inclusion (D&I) policies, the most prevalent focus area is gender diversity at 96% of firms. However, there is a risk that other groups could fall behind, e.g. there are 4x more Google searches for gender equality than either LGBTQ or racial equality. Moreover, only 58% and 25% of firms respectively include LGBTQ and Disability groups as part of their wider D&I programs. Other D&I areas under the radar are religious minorities and intergenerational groups.

**Poor D&I costing trillions: COVID, Gen Z, ESG could help?**

D&I must go hand in hand. While public & corporate understanding of the importance of Diversity has improved in recent years, we believe Inclusion hasn’t and needs to be more widely promoted. COVID (flexible WFH arrangements, childcare support), GenZ (hashtag activism, “clicktivists”) and ESG assets (US$20tn over next 20Y) are just some of the catalysts that could change this. Meanwhile, not doing the right thing also comes with an economic cost. Continued racial inequality could cost the US economy US$1-1.5tn in lost consumption and investment over the next decade.

**$70tn economic boost if we had harnessed D&I since 1990**

While diversity is having a seat at the table, inclusion is about having a voice! With D&I as a core principle, society can build back better, fairer and richer post-COVID. Our US Economics team flags that closing the gender & race gaps would have generated US$2.6tn more in economic output in 2019, and the cumulative gains starting in 1990 would have been close to US$70tn. Furthermore, if US Latinos were a country it would be the world’s 8th largest economy, full Gender Equality could increase world GDP up to US$28tn by 2025 and the LGBTQ+ community is equivalent to the 4th largest economy in the world at US$3.9tn. All in all, our ESG team finds that S&P 500 companies with above-median gender diversity on their boards see 15% higher ROE, and for companies with ethnic and racially diversified workforce this is 8% higher. And overall more diverse companies see lower earnings risk one year out compared with less diverse peers.

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Refer to important disclosures on page 17 to 18.
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D&ID You Know?

- More than 75% of the Nasdaq’s roughly 3,200 companies do not have at least 1 woman and 1 under-represented minority or LGBTQ member on the board (source: Nasdaq, New York Times, CNBC)

- At the current rate, it will take 257 years for the economic gender gap to close, meaning full parity will only happen by 2277 (source: WEF 2020)

- Google’s AI speech recognition software is 70% more likely to understand men than women (source: Caroline Criado Perez, Invisible Women)

- Companies with the highest racial diversity were able to generate nearly 15x more sales revenue than firms with the lowest levels (source: S&P Global Ratings, Cedric Herring, University of Illinois, Chicago)

- If LGBTQ+ were a nation, it would be the 4th largest economy in the world at US$3.9 trillion (source: LGBT Capital, Nick Wolny, Entrepreneur)

- ... And if the US Latino economy were a country, it would be the 8th largest economy in the world, ahead of Brazil, Italy and South Korea (source: LDC)

- A more diverse group of traders was 58% better at setting accurate prices compared with a homogenous group (source: PwC, CTI Research, PNAS)

- A black child born in the UK has a 1 in 17 million chance of becoming Prime Minister (vs a white child at 1 in 1.4 million and a white child who went to private school at 1 in 200,000) (source: Diversify, BBC)

- For the first time in six years in 2020 there were no black chairs, chief executives or finance chiefs in the FTSE 100 (source: Green Park Consultancy, BBC)

- Only 1 company in the S&P 500 is run by a black female CEO today, and only 8 companies (<2%) have at least 50% female management teams (Bloomberg)

- Women account for only 1/3 of the world’s scientific researchers yet have been pivotal to COVID vaccine development, e.g. Katalin Karikó (BioNTech), Sarah Gilbert (Oxford/AstraZeneca) and Nita Patel (Novavax) (source: UN, Bloomberg)

- There are more men called ‘Dave’ than women managing funds in the UK, and more CEOs in Australia called ‘Andy’ than female chief executives (source: Morningstar, ABC)

- Around 70 countries continue to criminalise homosexuality (source: World Bank)

- 90% of children with disabilities in EMs do not attend school (source: World Bank)

- There are 14 million disabled people in the UK (20% of population), yet in Parliament only 5 out of 650 MPs (0.7%) are disabled representing this electorate (source: Disability Talk)

- 60% of people with learning disabilities who are able to work would like a job yet only 6% of these are gainfully employed (source: MenCap, Diversify)

- Papua New Guinea has more languages (840) than the whole of Europe combined = 12% of the world’s total (7,117) (source: Visual Capitalist)
Exhibit 1: Diversity & Inclusion in 10 Charts

Everything you wanted to know about D&I

1) From Diversity to Equity to Inclusion

The definitions of ‘D&I’

DIVERSITY, EQUITY & INCLUSION EXPLAINED

DIVERSE ASKS WHO IS THE ROOM BUT CAN’T

WHO ASKS

DIVERSITY

EQUITY

INCLUSION

ASKS

WHY

THE

ROOM

? ?

ASKS

WHO

IS

HEARD

EVERYONE

- IDEAS BEEN

4) Workforce diversity policies - disclosure by sector

% of S&P 500 companies that report having diversity and discrimination policies

<table>
<thead>
<tr>
<th>Industry</th>
<th>Diversity and Inclusion Policy</th>
<th>Diversity and Inclusion Policy</th>
<th>Diversity and Inclusion Policy</th>
<th>Diversity and Inclusion Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
<td>Veterans</td>
<td>LGBTQ</td>
</tr>
<tr>
<td>Communication</td>
<td>65%</td>
<td>69%</td>
<td>69%</td>
<td>69%</td>
</tr>
<tr>
<td>Services</td>
<td>58%</td>
<td>57%</td>
<td>52%</td>
<td>56%</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>58%</td>
<td>59%</td>
<td>49%</td>
<td>56%</td>
</tr>
<tr>
<td>Energy</td>
<td>100%</td>
<td>70%</td>
<td>43%</td>
<td>33%</td>
</tr>
<tr>
<td>Financials</td>
<td>63%</td>
<td>63%</td>
<td>53%</td>
<td>67%</td>
</tr>
<tr>
<td>Health Care</td>
<td>58%</td>
<td>60%</td>
<td>53%</td>
<td>53%</td>
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<tr>
<td>Industries</td>
<td>97%</td>
<td>99%</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Information</td>
<td>93%</td>
<td>93%</td>
<td>93%</td>
<td>93%</td>
</tr>
<tr>
<td>Technology</td>
<td>93%</td>
<td>93%</td>
<td>93%</td>
<td>93%</td>
</tr>
<tr>
<td>Materials</td>
<td>56%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
</tr>
<tr>
<td>Retail</td>
<td>54%</td>
<td>53%</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>Utilities</td>
<td>100%</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Total</td>
<td>91%</td>
<td>61%</td>
<td>53%</td>
<td>52%</td>
</tr>
</tbody>
</table>

5) US Latino economy was equivalent to the 8th largest country GDP in 2018

2018 GDP for largest countries and US Latino population

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP in Trillions of US Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>21.4</td>
</tr>
<tr>
<td>China</td>
<td>13.7</td>
</tr>
<tr>
<td>Japan</td>
<td>5.5</td>
</tr>
<tr>
<td>Germany</td>
<td>3.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.8</td>
</tr>
<tr>
<td>France</td>
<td>2.5</td>
</tr>
<tr>
<td>India</td>
<td>2.4</td>
</tr>
<tr>
<td>US Latinos</td>
<td>2.3</td>
</tr>
<tr>
<td>Italy</td>
<td>1.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.3</td>
</tr>
<tr>
<td>Korea</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: BoF Global Research, US Census Bureau, Pew Research, Refinitiv, World Bank, CFA Institute, Google Trends, WEF, Our World in Data, Diverseity Labs, LexisNexis, LDC

7) No. of years to close the economic gender gap

As of 2020, it will take 257 years

9) On demand Google Searches for “mental health services” in the US in the past 5 years

More people are looking for mental health services near them

10) Steady growth in legalization of homosexuality across the globe over the past 2 decades

Share of countries where homosexuality is legal vs illegal
Executive Summary: all together now!

Diversity is having a seat at the table, Inclusion is having a voice!
We believe Diversity & Inclusion (D&I) is leading the way to tackling the social issues of our time. From the #MeToo movement to #BlackLivesMatter, awareness of injustices faced by under-represented and marginalised groups is at an all-time high. However, there is so much to do. It will take 257 years to close the gender economic gap at today’s rate. In 2020, there were no black senior executives in any of the FTSE 100 companies. 90% of children with disabilities in EM countries do not attend school. >75% of Nasdaq companies do not have at least 1 woman and 1 under-represented minority or LGBT+ member on the board.

In this report we highlight the top points to consider for diversity and inclusion. Moreover, we believe COVID (flexible WFH arrangements, childcare support), Gen Z (hashtag activism, clicktivists) and ESG assets (US$20tn over the next 20Y) could be catalysts to boost diversity & inclusion.

Not doing the right thing has cost us $70tn since 1990
Not closing the inequality gap and a lack of D&I has an economic price tag. Gender and racial biases lead to persistent labour market disparities and limit the economy. For example, closing gender and race gaps in education and employment would have generated US$2.6tn more in economic output in 2019 and the cumulative gains from 1990 would have been c.US$70tn in 2019 dollars, all else equal. Furthermore, closing the racial earnings gap resulting from disparities in health, education, incarceration and employment opportunities would boost trend growth by 0.5%pt per year through 2050.

However, if we harness D&I fully, society can build back better, fairer and richer post-COVID. Today in the US, there are already more kids from ethnic minority backgrounds than white peers, more Spanish speakers than in Spain, while globally women are accumulating financial assets 1.5x faster than men. Full gender equality globally would increase world GDP by up to US$28tn by 2025.

Globally, the loss of human capital wealth due to gender inequality alone is estimated at US$160.2tn – World Bank

Gender diversity suffers setback year: COVID hit to women’s jobs=$1tn by 2030
The COVID crisis has deepened gender inequality. 96mn people will slide into extreme poverty in 2021, of which 47mn will be women. Women’s jobs were 19% more at risk and women took up an even greater share of childcare and unpaid labour during the pandemic. Even before COVID, the gender gap was worsening – it will take 257 years to reach economic equality.

The question remains as to whether positive lessons will be learnt and adopted longer term from the pandemic, such as greater value associated with care labour or more flexible working provisions that could aid economic empowerment for women who take on more care and unpaid labour.

Despite the challenging outlook for gender equality, there are bright spots. Women have dominated in the vaccine discovery industry this year– the mRNA approach in the Pfizer/BioNTech vaccine was pioneered by Katalin Karikó and Nita Patel is Novavax’s main researcher who leads an all-women team. Meanwhile, female-led countries, such as Germany, Norway, Denmark, Taiwan, Finland, Iceland and New Zealand seem to have managed the pandemic crisis better than their male counterparts. Indeed, countries led by women have done better in terms of total deaths per million and total COVID cases.
Hispanic: US Latino economy = 8th largest economy in 2018
By 2045, the US will be minority white, excluding Hispanic/Latino Americans, vs 59.7% in 2020. The Hispanic population will grow the most over the next four decades expanding from 18.7% in 2020 to 27.5% by 2060. This cohort will is a key economic force, already the 8th largest global economy, having averaged 2.8ppt higher labor force participation than the US population with a million Latinos reaching adulthood each year for the next 2 decades. This economy grew 72% faster than the non-Latino US GDP for 2010-2018, aided by a constantly higher entrepreneurial rate than other US groups. However, the group is still limited by a lack of inclusion, with 12.2% unbanked vs 2.5% of white Americans, less political representation and consistently lower median incomes.

Lack of African Americans on boards
The US National Urban League’s Equality Index estimates that African Americans are missing out on 43.5% of the economic pie and Hispanics on 37.9%. But the inequities felt go beyond economic. The infant mortality rate for Black Americans is 2x that of White Americans, while incarceration rates are 5.6x higher and 47% of black families are underserved by banks or unbanked. Stakeholders, management, and companies must also do better. There are now only 3 black chief executives in the Fortune 500 and no black senior executives in the FTSE 100. 30% of 1mn discrimination complaints filed with the US Equal Employment Office Commission are related to racial discrimination.

LGBTQ+: major reforms over past 30Y, but still criminalised in 1/3 countries
If LGBTQ+ were a nation, it would be the 4th largest economy in the world at US$3.9tn. Further, LGBT rights have transformed in the past 30 years: 1990 saw the UN declassify homosexuality as a mental disorder, 46 countries have decriminalised homosexuality since 1990, 28 countries have legalised gay marriage as of 2020 and in 2019 the WHO declassified identifying as transgender as a “mental disorder”. However, discrimination and exclusion still occur. 15 countries allow for death penalties or life imprisonment for homosexuality and a further 49 countries have prison sentences. Only 81 countries have some form of employment protection. Positively though, LGBTQ+ acceptance in the US is at record levels aided by growing openness and gender fluidity in younger generations.

Disabilities: affects 1/7 people, 50% in US adults experience mental illness
Disability is much more prevalent than one might think – 1 in 7 individuals globally has a disability and 2% of working age people become disabled each year. Consequently, a quarter of the global population is directly or indirectly affected by a disability. Further, mental health illnesses continue to go unnoticed, particularly in work settings. Nearly half of US adults will experience a mental illness during their lifetime but only 60% will report their health concern to their company. Mental health is only likely to grow in importance as Gen Z sees growing mental health issues.

ESG Matters: doing good means doing well, diverse companies enjoy better ROE
More diverse & inclusive companies make for better investment results. We see empirical evidence that companies with superior scores on workforce and board diversity experience higher ROEs and lower earnings risk than lower-ranked peers. Moreover, gender diversity-focused funds have generated higher risk-adjusted returns than the global equity benchmark over the past 5 years. Our ESG team found that:

- S&P 500 companies with more than 33% people of color (PoC) employees have enjoyed >1ppt higher ROE than their peers in the subsequent year on average;
- companies with above-average ethnic and racial diversity in the workforce see 8% higher ROE one year out compared with less diverse peers;
- Companies with above-median women in management see 30% higher ROE and 30% lower earnings risk over the next year vs. those with below-median; and
Companies with above-median board gender diversity see 15% higher ROE and 50% lower earnings risk one year out compared with their less diverse peers.

Exhibit 2: Gender diversity correlates with higher future ROE
Median forward 1yr ROE for % women on board & managers (2005-20)

Exhibit 3: More ethnic & racial workforce diversity = higher ROE
Median forward 1-yr ROE based on the % of people of color in the workforce for S&P 500 companies (2008-20)

*Data from 2010 on for % Women Managers Note: High (Low) % of Women on Board defined as above (below) the universe median; High (Low) % of Women Managers: above (below) 30%

Source: Refinitiv, BofA US Equity & Quant Strategy

Source: Revelio Labs, BofA US Equity & Quant Strategy Note: People of color is defined as Black, Hispanic, and Asian.
Economics of D&I: reaching full potential

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A lack of diversity and inclusion can lead to significant economic losses. Gender and racial biases lead to persistent labor market disparities in outcome and keep the economy from reaching its full potential. Recent work by San Francisco Fed President Mary Daly and her colleagues show that closing the gender and race gaps in education and employment would have generated US$2.6tn more in economic output in 2019 and the cumulative gains starting in 1990 would have been close to US$70tn in 2019 dollars, all else equal. Another study finds that closing the racial earnings gap resulting from disparities in health, education, incarceration and employment opportunities would boost trend growth by half a percent per year through 2050. In our view these estimates are likely to be an upper bound as they don’t take into account potential feedback loops (e.g. lower equilibrium wages due to higher labor supply and fewer distortions) or transition costs. Still, these estimates show that the cost of inequality is high.

600bn+ reasons to promote labor market equality

There are large gaps in the rate of employment by gender and race. After making strong progress during the women’s rights movement in the 1970s and 1980s, the US labor market still sees gender employment gaps today. The employment population ratio of prime age (25-54) women has been on average 14ppt lower than that of men since 2000 (Exhibit 4). We find persistent gaps by race as well: prime age Blacks have about a 7ppt lower employment population ratio than prime age Whites while Hispanics and Asians employment levels are 5ppt and 3ppt lower, respectively (Exhibit 5).

How much could we gain from closing the employment gap? We estimate that if prime-age women had the same employment rate as men, it would generate an additional US$600bn in labor compensation (wages + benefits) per year (or ~3% of GDP) assuming workers earned the current average wage and benefits. A similar exercise shows closing the race employment gap would provide an additional US$150bn in labor compensation per year (~1% of GDP). Since 2000, closing the gender and race employment gaps would have respectively generated an additional US$10tn and US$2.8tn in wages and benefits.

Exhibit 4: Prime age (25-54) employment population ratio by gender

Since 2000, women’s employment population ratio is about 14pp lower than men.

Exhibit 5: Prime age (25-54) employment population ratio by race

Since 2000, the Black employment population ratio is about 7pp lower, Hispanics about 5pp lower and Asians about 3pp than Whites.

These estimates are a simple illustration of the cost of the employment gap alone. Costs are likely to be greater if we consider gaps in wages and employment opportunities due to gender and racial biases, which we discuss below.

**Inequality across different margins**
Inequality exists across various margins in the labor market and appears to have a profound impact on labor market outcomes for individuals. Below we present some of the persistent disparities in labor market outcomes by gender and race in the US.

**Education**
Non-whites are less likely to have a college education than their White counterparts (Exhibit 6). This has clearly contributed to socio-economic inequalities as college educated workers are likely to earn 82% more than a high school graduate (Exhibit 7). There are also inequalities in employment opportunities within education groups. That is, women and non-whites are likely to have lower returns on education than men and Whites. For example, Daly et. al. find that eliminating the gaps in returns on measured skills, utilisation, and occupation-industry allocation would have boosted output by US$940bn in 2019. These inequalities in returns could lead to further under-investment in human capital, lowering the potential of the economy, in our view.

**Employment outcomes**
There are meaningful disparities in employment outcomes by gender and race. Women generally have a lower job finding rate (share of unemployed workers finding jobs) than men (Exhibit 8). Moreover, women are more likely to lose or leave their jobs than men, suggesting they are less secure in their jobs and the labor force (Exhibit 9). There are similar disparities across races. Black workers have a lower job finding rate than White peers, though Hispanic workers have a similar rate to White peers (Exhibit 10). Meanwhile, Black and Hispanic workers have a higher job separation rate than White workers.

Different employment outcomes can have significant impact on individual workers. Longer spells of unemployment can have a long-run negative impact on wages. One study by the BLS found that workers’ hourly wages were 9% lower than in the five years after a spell of unemployment. Consequently more frequent spells of non-employment are likely to lower lifetime earnings potential. Therefore, workers that are less attached to the labor force could experience lower earnings over time, all else equal.

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Exhibit 8: Job finding rate by gender (%), 12 month moving average
Share of unemployed workers finding jobs

Exhibit 9: Job separation rate by gender (%), 12 month moving average
Share of employed workers losing their jobs

Exhibit 10: Job finding rate by race (%), 12 month moving average
Share of unemployed workers finding jobs

Exhibit 11: Job separation rate by race (%), 12 month moving average
Share of employed workers losing their jobs

Cost of recessions
The negative impact from recessions is felt disproportionately by non-white workers. In the 6 recessions since 1973, Black and Hispanic workers experienced greater job losses adjusted for population and a higher unemployment rate and were more likely to leave the labor force during downturns than White workers (Exhibit 12). This has significant consequences for wages, as noted above, but studies also show workers that lose their jobs face a higher mortality rate. For example, Sullivan and von Wachter find that workers displaced at age 40 could see a 1-1.5-year lower life expectancy.

Exhibit 12: Average change in labor market indicators for the past 6 recessions since 1973
Downturns have disproportionately hurt non-white workers during recessions as they experience greater job loss and higher unemployment rates and are more likely to leave the labour force

<table>
<thead>
<tr>
<th></th>
<th>Employment to Population Ratio</th>
<th>Unemployment Rate</th>
<th>Labor Force Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>-1.8</td>
<td>2.6</td>
<td>-0.1</td>
</tr>
<tr>
<td>Black</td>
<td>-3.3</td>
<td>4.3</td>
<td>-0.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-2.8</td>
<td>3.8</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

Note: We calculate the change in the labor market indicators from the quarter prior to the start of the recession to the quarter after the end of the recession then take the average of the changes. We use NBER’s designation for recessions and expansions. We exclude Asians from this analysis as reliable time series is not available until 2003.

Source: Bureau of Labor Statistics

Cost of recessions

ESG Matters: want better results?
Diversify!

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D&ID You Know? (source: BofA Research, Revelio Labs, ICE)

- S&P 500 companies with more than 33% people of color (PoC) employees have enjoyed >1 ppt higher ROE than their peers in the subsequent year, on average.
- Companies with above-median women in management see 30% higher ROE and 30% lower earnings risk over the next year vs. those with below-median gender diversity.
- Companies with above-median board gender diversity see 15% higher ROE and 50% lower earnings risk one year out compared with their less diverse peers.
- Companies with above-average ethnic and racial diversity in the workforce see 8% higher ROE one year out compared with less diverse peers.
- 71% of S&P 500 Utilities companies have Diversity and Discrimination Policies related to LGBTQ, more than the S&P 500 average of ~51%.
- Only 11 companies in the S&P 500 have at least 50% female boards.
- Only 8 companies in the S&P 500 have at least 50% female management teams.
- One of six S&P 500 Financial companies have a workforce with PoC representation in line with or better than the US population average (40%).
- And only two companies in the S&P 500 have at least 40% PoC Boards.

There is a new way to think about diversification in investments – via ethnic, racial and gender categories rather than stock, sector and asset class. We see empirical evidence that companies with superior scores on workforce and board diversity experience higher ROEs and lower earnings risk than lower-ranked peers. Moreover, gender diversity-focused funds have generated higher risk-adjusted returns than the global equity benchmark over the past five years.

Gender diversity = higher ROE, lower EPS risk
Gender diversity appears to lead to better operating results and lower risk. S&P 500 companies with at least 25% female executives saw consistently higher subsequent 1-yr median ROE since 2010. Although causation is difficult to establish, the past decade indicates that gender diversity has been correlated with superior future results.
Companies with at least 30% women in management positions have also seen a bigger median improvement in annual ROEs over this period. Board diversity was an effective signal of improving ROE in almost all sectors, the exceptions being Financials and Utilities. Why these two outliers? Perhaps due to the regulatory environment – Financials underwent a transformation from unregulated to regulated early on in the time series we analysed, and S&P 500 Utilities consist of mostly government-regulated companies.

**Exhibit 13: Gender diversity correlates with higher future ROE**
Median forward 1yr ROE based on % women on board and % women managers (2005-20)

<table>
<thead>
<tr>
<th>% Women on Board</th>
<th>% Women Managers</th>
<th>Forward 1yr ROE (median)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High %</td>
<td></td>
<td>160</td>
</tr>
<tr>
<td>Low %</td>
<td></td>
<td>110</td>
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</tbody>
</table>

*Data from 2010 on for % Women Managers
Note: High (Low) % of Women on Board defined as above (below) the universe median; High (Low) % of Women Managers defined as above (below) 30%.
Source: Refinitiv, BofA US Equity & Quant Strategy

**Exhibit 14: Gender diversity correlates with improving future ROEs**
Median spread in 1yr forward ROE based on companies with >50 vs. <50 ranks on Board Diversity (2005-20)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Spread in fwd. 1yr ROE - &gt;50 vs. &lt;50 on Board Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discretionary</td>
<td>1</td>
</tr>
<tr>
<td>Industrials</td>
<td>1</td>
</tr>
<tr>
<td>Health Care</td>
<td>3</td>
</tr>
<tr>
<td>Staples</td>
<td>-1</td>
</tr>
<tr>
<td>Technology</td>
<td>-1</td>
</tr>
<tr>
<td>Comm. Svcs.</td>
<td>-1</td>
</tr>
<tr>
<td>Real Estate</td>
<td>-1</td>
</tr>
<tr>
<td>Materials</td>
<td>-1</td>
</tr>
<tr>
<td>Energy</td>
<td>-1</td>
</tr>
<tr>
<td>Utilities</td>
<td>3</td>
</tr>
<tr>
<td>Financials</td>
<td>-1</td>
</tr>
</tbody>
</table>

Based on BofA-covered US companies. See Appendix for full methodology.
Source: Refinitiv, BofA US Equity & Quant Strategy

Can gender diversity lower earnings risk? On all three relevant sub-pillar scores we analysed from Refinitiv (board diversity, company policies on diversity/inclusion, and women in management), companies with high ESG scores had lower earnings volatility than those with low ESG scores on these metrics.

**Exhibit 15: Gender diversity signalled lower earnings risk**
Median forward 3yr EPS volatility based on ESG scores (annually, 2005-16) for Board Diversity (Governance), Diversity & Opportunity Processes (Social), and % Women Managers (Social)

<table>
<thead>
<tr>
<th>% Women on Board</th>
<th>Diversity &amp; Opportunity Processes</th>
<th>% Women Managers</th>
<th>Forward 3yr EPS volatility (median)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High %</td>
<td></td>
<td></td>
<td>0.80</td>
</tr>
<tr>
<td>Low %</td>
<td></td>
<td></td>
<td>0.40</td>
</tr>
</tbody>
</table>

*Data from 2010 on for % Women Managers.
Note: High ESG score based on >50 score on Board Diversity, Yes on Diversity and Opportunity Processes, and >30% women in management. Low ESG score based on <50 score on Board Diversity, No on Diversity and Opportunity Processes, and <30% women in management. Based on volatility in quarterly EPS over the subsequent three years.
Source: Refinitiv, BofA US Equity & Quant Strategy
Exhibit 16: Inclusion Country Index
Canada tops the Kantar Inclusion Index

Diversity & Inclusion 101

Diversity is being invited to the party. Inclusion is being asked to dance – Vema Myers, Netflix D&I

Diversity is having a seat at the table, Inclusion is having a voice – Liz Fosslien

Diversity in the modern world is more than just skin colour – it’s gender, age, disability, sexual orientation, social background – and most important of all diversity of thought – Idris Elba

There’s a dream, so rare yet so real. Every creed, every colour, once joined, never apart – World in Union, Rugby World Cup Official Theme Song

The most innovative company must also be the most diverse – Apple

Injustice anywhere is a threat to justice everywhere - Martin Luther King Jr

Men of quality respect women’s equality – Jeremiah Say

For most of history, anonymous was a woman – Virginia Woolf

Hope will never be silent – Harvey Milk

Do we always have to know who’s gay & straight? – Ellen DeGeneres

D&I 101: now a business imperative to take it seriously
While diversity and inclusion (D&I) has been recognised as a critical component of corporate culture for decades, it’s only within the past few years that society has seen heightened awareness of the topic. Traditionally, diversity or sensitivity training programs have been seen as a reactive policy to negative behaviour. However, organisations are now starting to take a more proactive stance and prioritising diversity and inclusion as part of a more holistic strategy. This is not just because of changing demographics. There is now a workforce expectation and, more importantly, a business imperative to promote diversity and inclusion (Source: Deloitte)
By definition, diversity is the variety of people and ideas within a company, e.g. employing workers from a wide range of backgrounds. And inclusion is the creation of an environment in which people feel a sense of respect, belonging, safety, and authenticity, e.g. being able to voice their opinion. There is also a 3rd element to D&I which is ‘equity’, where the central tenet is equality of opportunity to prevent discrimination against people of different backgrounds, thus creating the acronym ‘DEI’.

A range of factors however can pose a risk of exclusion, preferential treatment or discrimination, thereby preventing Diversity & Inclusion. These include age and generation; gender and gender expression; sexual orientation; mental and physical abilities; level of health; personality traits and behaviours; race, ethnicity and religion; language and nationality; location (such as rural and urban); social origin and parental background; poverty, income, education and socio-economic status; and appearance (source: WEF).

### Exhibit 17: From Diversity to Equity to Inclusion

**The definitions of ‘DEI’**

**DIVERSITY, EQUITY & INCLUSION EXPLAINED**

**DIVERSITY**
- is the representation of various identities and differences

**EQUITY**
- focuses on fair treatment, equal opportunity and equal access to resources

**INCLUSION**
- is the active engagement of the contributions and participation of all people

**DIVERSITY ASKS**
- WHO IS IN THE ROOM

**EQUITY ASKS**
- WHO IS TRYING TO GET IN THE ROOM BUT CAN’T

**INCLUSION ASKS**
- HAVE EVERYONE’S IDEAS BEEN HEARD

**Source:** BofA Global Research, Diversity Labs

**Science: academic studies behind Diversity & Inclusion**

Research Affiliates point out the growing body of academic evidence that highlights the benefits of diversity on decision-making and innovation continues to build. The most reliable results come from the social sciences and behavioural economics fields that can isolate the specific elements of how humans interact and make decisions. In these studies, researchers show that randomly selected groups of people perform better than the single most-intelligent person (as measured by intelligence quotient or IQ). In fact, such randomly selected groups outperform collectives of highly intelligent individuals, including experts, when the latter do not interact with each other to solve problems.

In many ways, the benefits of diversity in decision-making are analogous to the benefits of diversification in investment strategies. Two people, whose views are not perfectly correlated, will consider more (and different) facts and perspectives than either one would on their own. Assuming mutual respect and curiosity, their dialogue should lead to a more comprehensive assessment than would otherwise be the case. For instance, consider the number of times a reader finds typos in another’s document when that
A person could not see the obvious after having spent hours with the material. Adding more points of view, if different from the existing perspectives (that is, less than perfectly correlated), can continue to improve decision-making, up to the point of diminishing returns when the "cost" of including another person in the deliberations outweighs the benefit of adding another point of view (Source: Research Affiliates).

Exhibit 18: What does the term "living in an inclusive society" mean to you?
Word cloud for the term 'inclusion'

Investment case on D&I
According to Research Affiliates, academic research and anecdotal experience indicate that the business case for corporate diversity is compelling as a result of higher collective intelligence. However, testing the investment case for greater diversity faces 2 major challenges: insufficient historical data and difficulty in measuring whether the culture is one that embraces dissenting views among the team.

To achieve better corporate outcomes (distinct from better investment outcomes), a firm needs both cognitive diversity among its ranks and a culture that embraces dissent, candour, and respect for other viewpoints i.e. an inclusive culture that is open to all sorts of different opinions rather than groupthink.

Empirical studies of the impact of board diversity on firm performance show mixed results. Several researchers, such as Singh et al (2001), Nguyen & Faff (2007), Campbell & Miguez-Vera (2010), and Hunt et al (2015), have found that firms with greater female board representation tend to be more profitable and/or to elicit positive stock market reactions. Others, such as Bohren & Strom (2010) and Darmadi (2011), have found that greater board diversity tends to be associated with lower accounting performance and to be less attractive to investors.

Much of the variability in results may be caused by factors distinct from the gender attributes of corporate boards. For instance, the literature reveals that female board members tend to have more limited business backgrounds and less CEO experience, and be younger and more likely hold advanced degrees, meaning it is difficult to make direct comparisons (e.g., Carter et al., 2010, and Hillman et al 2002). Ahern & Dittmar (2012), for example, show that the resulting negative impact on firm value from the Norwegian mandate on gender representation could be explained by younger ages and less managerial work experience, rather than the gender of the new board members.

Post & Byron (2015) reconcile many of the conflicting findings by addressing a crucial shortcoming in the existing literature, namely that the external environment matters to the results. They find that a positive link between board diversity and firm performance
exists in countries which exhibit stronger shareholder protections and greater gender diversity, while the opposite tends to be true in countries with weaker shareholder protections and lower gender parity. In other words, firm culture matters in deriving the benefits of diversity (Source: Research Affiliates).

Furthermore a study by sociologist Cedric Herring from the University of Illinois, Chicago, found that companies with the highest racial diversity were able to generate nearly 15x more sales revenue than firms with the lowest levels of racial diversity. Herring suggests that racial diversity is the most important predictor of a company’s competitive positioning, and a better indicator of sales revenue and customer attainment than a company’s size, years in business, and overall employee headcount. Diversity has also been linked to increased innovation potential. Studies show that diversity supports enhanced creativity, more informed decision-making, increased capacity for innovation, improved customer acquisition, stronger revenue-generating potential, and better talent management. (Source: S&P Global Ratings)

Exhibit 19: Academic Survey Participants responses on different areas of Inclusivity
Majority respondents agree that inclusive society promotes different ways of thinking and creates an open learning culture.

- 92% think it promotes different ways of thinking
- 90% think it creates an open learning culture
- 85% think it has a positive effect on productivity
- 81% think it makes a more motivated workforce
- 80% think it has an economic benefit
- 13% do not think that an inclusive society provides any noticeable benefits

Source: Emerald Publishing

From Science to Conscience: public demanding more Diversity & Inclusion
Regardless of the academic studies, the past few years have seen a significant shift in the public mood and understanding on Diversity & Inclusion. From the #MeToo movement to the re-emergence of #BlackLivesMatter as the biggest civil rights movement in a generation, awareness of the injustices faced by under-represented and marginalised groups is at an all-time high. We believe the increasing shift in focus from the E(nvironmental) to S(ocial) factors within ESG investing post-COVID will accelerate this trend as people push the envelope on these issues.

Exhibit 20: Number of News Articles mentioning ‘Diversity and Inclusion’
Number has consistently increased since 2004.

Exhibit 21: Number of News Articles mentioning ‘Social Justice’
Number has drastically increased since 2014.
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