

Thematic Investing

Womentum!

Thematic Investing

The \$28tn opportunity. So much potential, so much to do!

The theme of this year's International Women's Day is "I am Generation Equality". The potential gains from gender parity are huge: full economic equality could increase global GDP by up to US\$28tn, or by 31%, by 2025 – equivalent to the current GDP of the US and China combined. But progress is glacial at best. At the current rate, it will take 257 years to close the economic gap, up 55 years from estimates last year. The greatest opportunities lie in wealth management: women's accumulated financial assets are rising 1.5x faster than men's and could reach US\$110tn by 2025. But only 1-3.5% of wealth managers are women. And overall workforce participation has stagnated at 55%.

US: Increasing focus but progress hits a glass ceiling

Gender diversity in Corporate America has improved from a decade ago, but progress has stalled despite the increasing focus on gender diversity. The average S&P 500 board still only seats four men for every woman, while just 5% of companies have a woman at the helm. Executive committees were also less gender diverse in 2019 than in 2018. Smaller companies lag behind large companies here, though saw improvement across metrics in 2019. Incentives to close the gender gap are evident: our work suggests that companies focused on gender diversity at a board, C-suite and firm level have consistently achieved higher ROE and lower earnings risk. Moreover, companies focused on diversity have generally traded at premia to more homogenous counterparts.

Europe: milestones in female empowerment

The European Union noted two milestone events last year in terms of female empowerment: Ursula von der Leyen becoming the European Commission's first female president and Christine Lagarde becoming the ECB's first female governor. The majority of countries now have mandatory quotas for the % of women on boards, with France leading in this space. Utilities and Autos, despite being male-dominated, have equal shares of women employees and women in management on average, while Travel & Leisure and Insurance see the largest discrepancies. European companies are rarely involved in controversies over diversity and opportunity.

APAC: up to US\$4.5tn potential

Women comprise 49% of Asia's pop., 36% of GDP, 20% of senior leadership positions, 12% of Board seats and just 3% of CEO positions. BofA's proprietary database shows that 66% of Asian companies have less than 2 female on the Board, 3pp improvement y/y. The lack of gender diversity is most acute in Info Tech, Industrials and Consumer Discretionary. However, Asia Pac stocks with at least two female Board members have exhibited a P/E premium, higher net profit margins (+3%) and higher DY. A tremendous amount of work remains to be done to close the gender gap but progress is being made in tertiary education and laws to support equal pay and govt. supported childcare. Industry sources value the potential uplift at \$3.2tn to \$4.5tn of incremental GDP.

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Refer to important disclosures on page 16 to 17.

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Did you know?

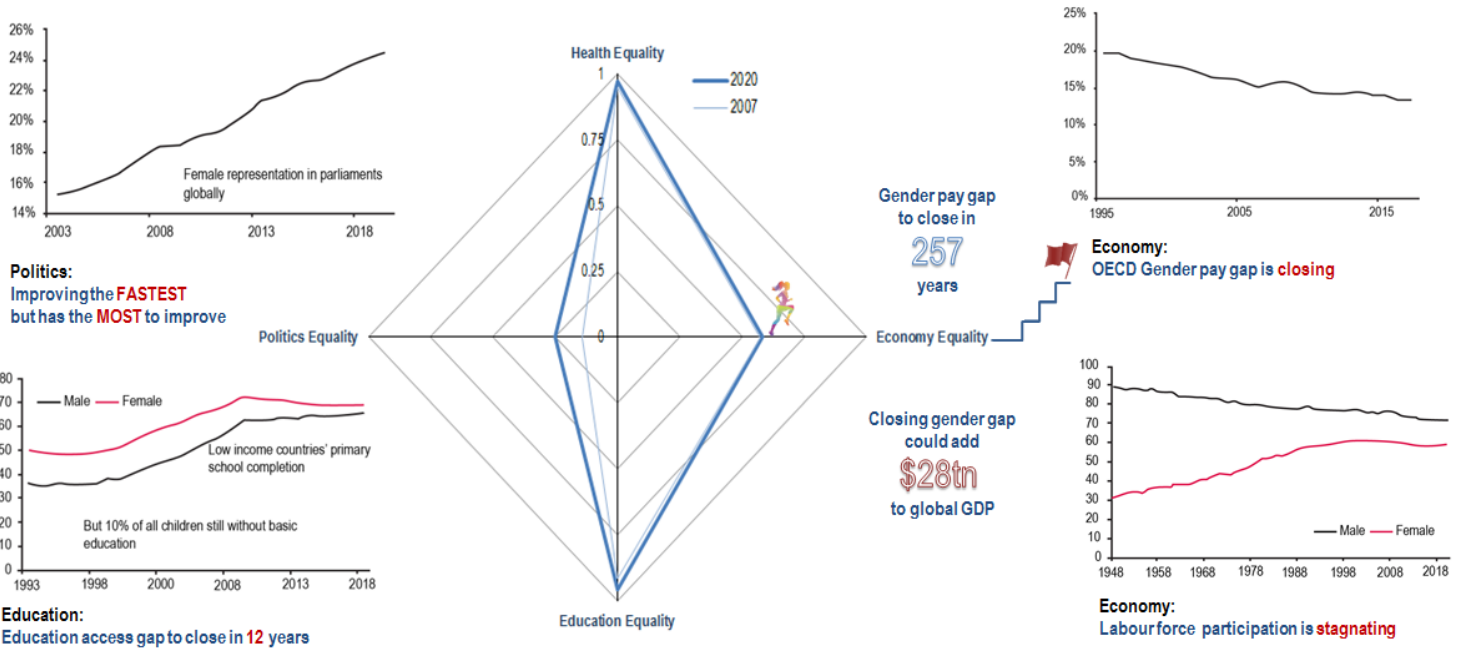
- 2277 is the year that women economic gap will be finally closed, i.e. we still have 257 years to wait¹
- The rate at which the economic gender gap is closing is slowing! last estimate was 202 years²
- Women are accumulating financial assets 1.5x faster than men. By 2025 they could hold US\$110tn in financial assets, 3.3x 2010 levels...³
-yet they still manage only 1-3.5% of AUM⁴
- Fewer women managed open-ended funds in the UK than men called "Dave" or "David"⁵
- US\$12-28tn could be added to global GDP by 2025 by advancing women's equality. At the high end, this is US + China GDP combined⁶
- In the OECD alone, gender equality could boost GDP by US\$6tn (or by 10%)⁷
- Labour force participation rates have stalled at 55% for women⁸
-but only 22% of AI professionals are women⁹ – female participation in the tech industry is 20%, less than half of the overall rate¹⁰
- Only 8 countries have given men and women equal legal work rights⁹
- Women in rural Africa spend 40 billion hours a year collecting water¹³
- Women place greater importance on ESG factors than men when making investment decisions (64% vs. 46%)¹¹
- The motherhood penalty: in the 12 years after having her first child, a woman's hourly pay rate falls steadily to 33% behind a man's¹²
- Investing in programmes to improve income-generating activities for women can return US\$7 for every dollar spent¹⁴
- Millennial women still do twice as much housework as Millennial men in the UK¹⁵
- Women are expected to inherit two-thirds of the projected ~US\$30tn Great Wealth Transfer in the next 40 years¹⁶

Source: ¹WEF 2019, ²WEF 2018, ³BCG, ⁴WEF, Harvard Business Review, ⁵McKinsey, ⁶Morningstar, ⁷McKinsey, PwC, ⁸WEF 2019, ⁹World Bank 2018, ¹⁰WEF Frost And Sullivan, ¹¹BofA US Trust Survey, ²¹IFS 2016, ¹³UNDP 2011, ¹⁴UN, ¹⁵UK ONS 2016, ¹⁶Investopedia 2019 & MarketWatch 2017,



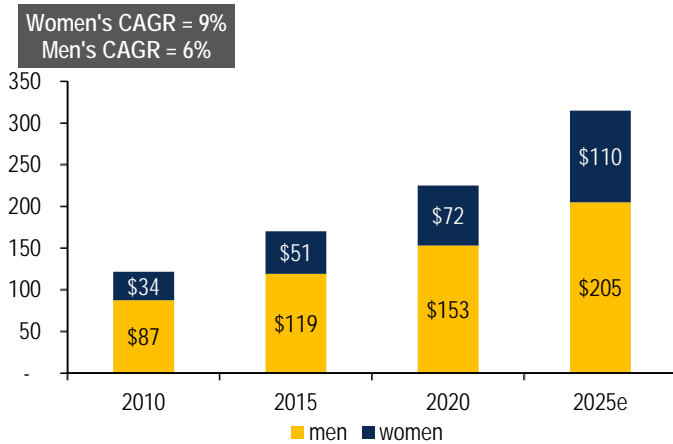
Gender gap in pictures

Exhibit 1: Capturing the gender gap



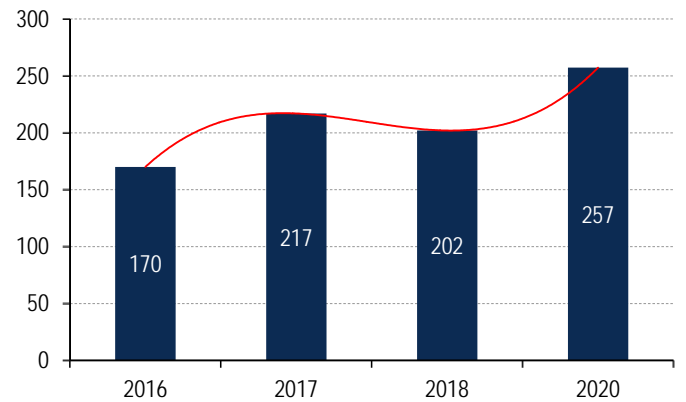
Source: OECD, Bureau of Labour Statistics, WEF, IPU, World Bank, McKinsey, BofA Global Research

Chart 1: Women today holds US\$72tn of private wealth, expecting to grow, 1.5x faster than men to US\$110tn by 2025



Source: BCG, BofA Global Research

Chart 2: No. of years to close the economic gender gap



Source: WEF



The gender gap – we should all care!

The gender gap leads to lower GDP, less innovation, and skewed demographics. But closing the gap can turn these negatives into tailwinds. It's not just women who benefit from erasing this inequality, but all of society and the global economy. As such, even the brazenly self-interested should be motivated to want to close this gap:

Investors and corporates: As ESG increasingly drives investments and company ratings, metrics on women will gain prominence, as they partly drive these scores (e.g. governance, equal pay). Importantly, companies where women were more involved in innovation during 2011-15 (e.g. share of patent filings) outperformed in terms of shareholder returns in 2016-20 (source: CGD, Bloomberg). The bigger carrot for investors is that closing the gender gap could boost global GDP by >10%, while for companies, the women's economy represents a major market, bigger than any country.

Countries & policymakers: Countries with the lowest gender gaps are also the most innovative and vice versa. ESG looks set to become an important factor for capital flows, so countries that fail to close their gender gap could miss out. Also, investments in women and gender equality can yield huge returns – in poorer countries women could have fewer children and better incomes, while in richer countries birth rates could start rising – much-needed with an ageing population. But change won't happen without regulation – at the current rate, the gender economic gap won't close until 2277. Policymakers need to proactively balance laws on maternity/paternity and equal pay.

Society: Society's attitude towards gender equality needs to change, too, as many biases are ingrained. For example, women still contribute disproportionately to childcare, eldercare and unpaid housework, which can hold them back and impact all of society. Activism and more female leaders could accelerate this change.

Exhibit 2: Why the gender gap matters?



Source: BofA Global Research

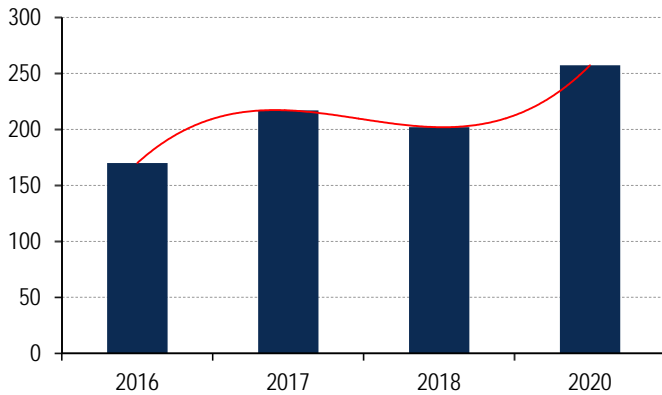


Current situation: regression

The bad news: the gender gap is going from bad to worse: 257 years to reach gender economic equality

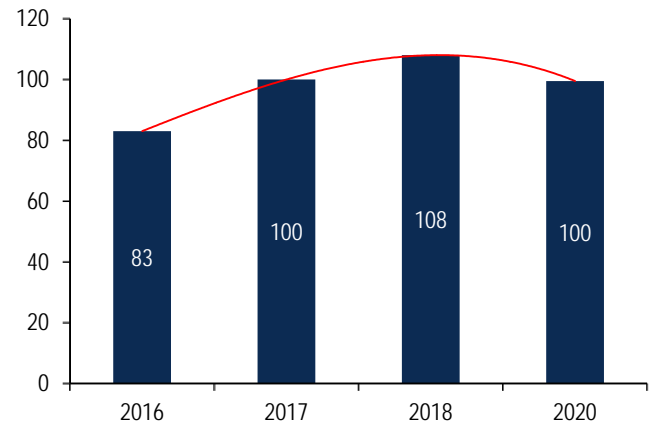
Recently, gender gaps on labour force participation and economic participation have stagnated or even increased, meaning that women are only set to reach equal economic participation in 257 years. Pay gaps are exacerbated by an unequal share of unpaid domestic work and childcare, which has seen limited transferral to men. Governments and companies are now experimenting with solutions from 'use-it-or-lose-it' paternity leave to egg-freezing benefits for female employees.

Chart 3: No. of years to close the economic gender gap



Source: WEF

Chart 4: No. of years to close the overall gender gap



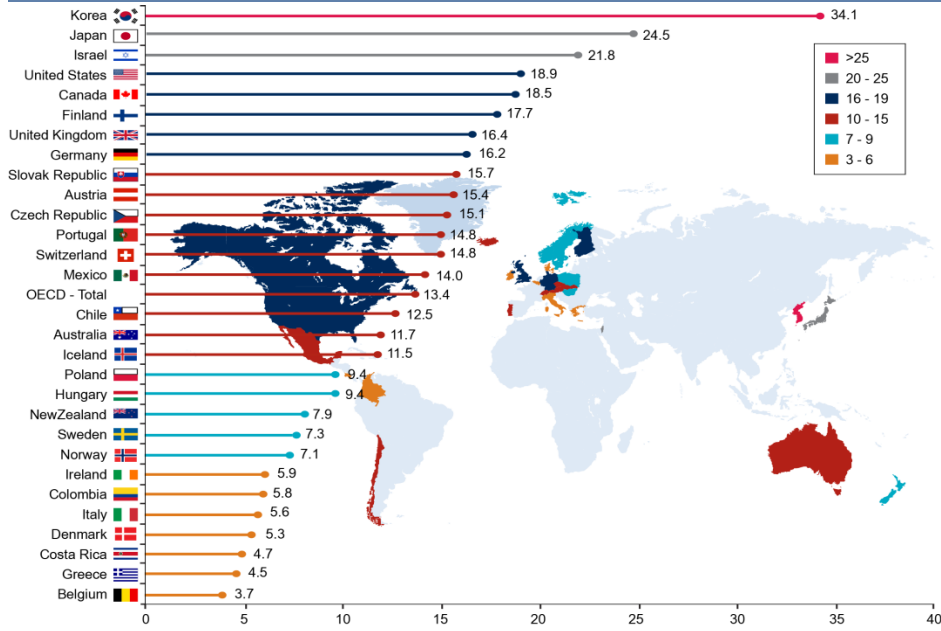
Source: WEF

Work: stagnating participation, no change in pay gap

Women's labour force participation rates have moved closer to men's rates over the past few decades, but in every OECD country women are still less likely than men to engage in paid work. When women do work, they are more likely to do it on a part-time basis, are less likely to advance to management positions, are more likely to face discrimination, and they earn less than men. The median female worker earns almost 15% less than her male counterpart, on average, across the OECD – a rate that has barely changed since 2010. Reducing the gender gap in labour force participation by 25% by 2025, as agreed by G20 leaders, could add 1 percentage point of growth to projected baseline GDP growth across the OECD over 2013-25, and almost 2.5 percentage points if gender participation gaps were halved by 2025 (source: OECD).

Working women in the United States are paid, on average, more than US\$11,000 less per year than men. That's the equivalent of 89 weeks of food expenses or more than one year of rent (source: National Partnership for Women & Families 2018)

Exhibit 3: Worst & best wages for women in OECD countries (% difference vs. men)

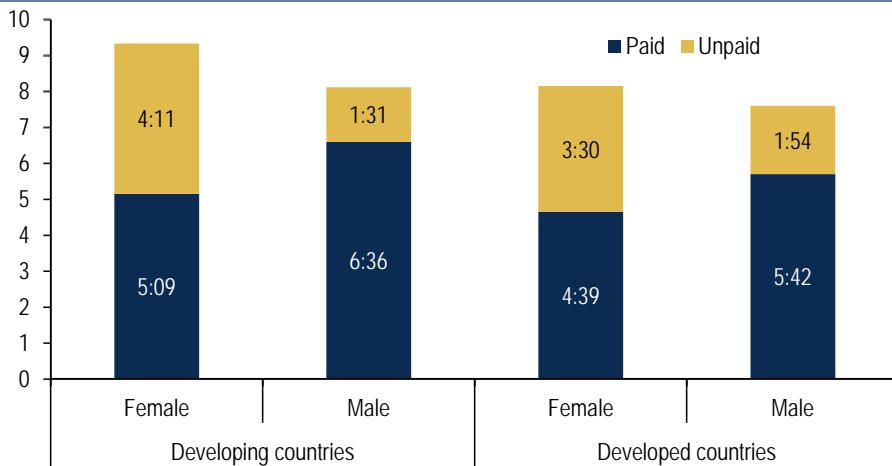


Source: OECD 2020

It's not just the participation, it's the payment, and nature

Despite the headline statistic that fewer women than men participate in the labour force, women carry out at least 2.5 times more unpaid care and household work (source: UN, ILO 2016). In Asia and the Pacific, women do 4 times more care work, while across the globe they spend 200mn hours finding and collecting water every day (source: ILO 2018, water.org). Even in the US, women spend 2x more time on unpaid domestic work (source: WEF 2019). While the unequal share of housework has been falling, the rate of improvement has slowed significantly since the 1980s (source: Altintas, Sullivan, Demographic Research 2016). Taking a larger share of domestic and caring work leaves less time for women to participate in the traditional paid labour force.

Chart 5: Women do at least 2.5 times the unpaid work of men



Source: UN, ILO 2018

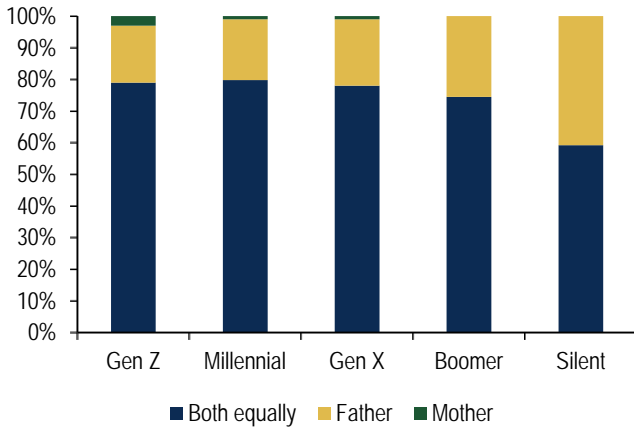
Even younger women continue to do more unpaid work than men

Over three-quarters of younger generations (Gen Z, Millennials, and Gen X) in the US agree that both mothers and fathers should be equally responsible for financially providing for families (source: Pew Research, 2019). However, these attitudes on gender equality have not translated into equal sharing of domestic work. Women



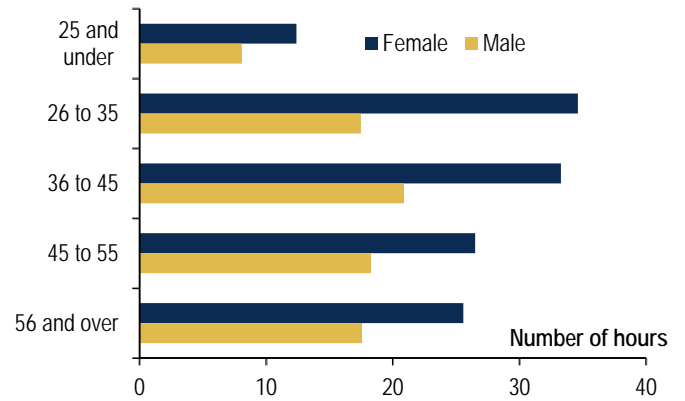
between 26 and 35 still spend as much as twice the time on unpaid work as men (source: UK Office for National Statistics 2017).

Chart 6: Men are no longer expected to be the sole/major breadwinner
 % saying who should be mostly responsible for family financing in households



Source: Pew Research Surveys of 10,682 U.S. adults ages 18+ Sept.24-Oct.7.2018, 920 U.S. teens ages 13 to 17 Sept. 17-Nov.25.2018.

Chart 7: Younger women continue to perform more unpaid work
 Average hours of unpaid work per week in each age category for men and women, UK, 2015

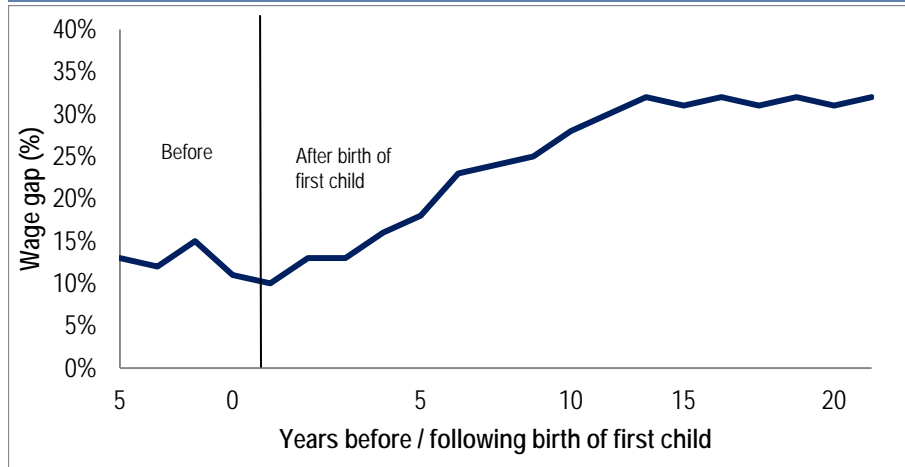


Source: UK Office for National Statistics

“Motherhood penalty”: lifetime of reduced earnings after firstborn

The other side of the childcare equation is foregone earnings, with an increasing gender wage gap after the birth of a woman’s first child. A study by the Institute for Fiscal Studies (IFS) showed that the gap between the earning power of men and women returning to work after having a child widens steadily – in the 12-year period after having her first child, a woman’s hourly pay rate falls 33% behind a man’s.

Chart 8: How the wage gap between men and women increases after having a child



Source: IFS

Parental leave policies can be make or break for equal childcare

Parental leave enables women to stay in employment, but the uneven allocation between mothers and fathers means that women end up taking on more childcare for years. This has a negative impact on their earnings potential and career trajectory, as they take time out that new fathers do not. The UK introduced shared parental leave five years ago to tackle gender inequality in pay and childcare, but only 1% of eligible parents shared any leave (source: The Guardian, 2019). Scandinavian countries are now introducing non-transferrable ‘use-it-or-lose-it’ paternity leave, resulting in much higher uptake of leave by men (c.90% in Sweden and Iceland).

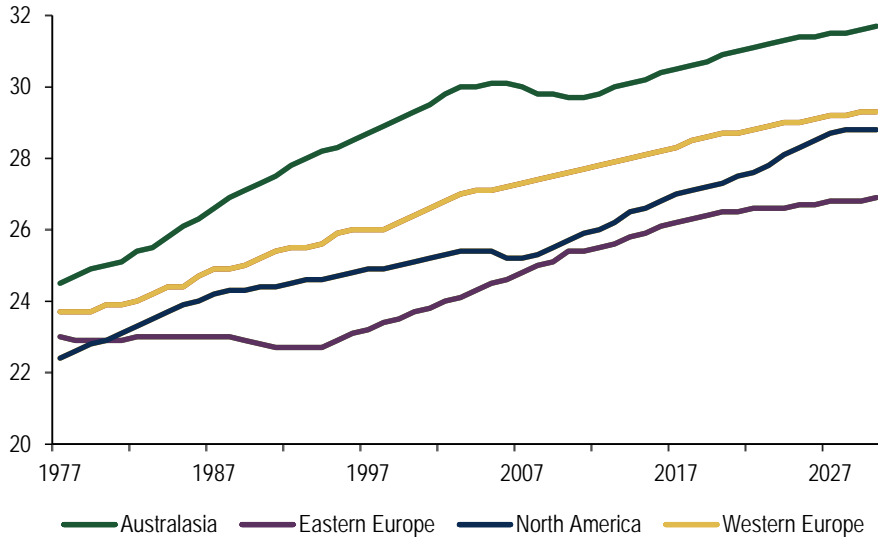


Women in developed markets continue to delay parenthood

With more women in the labour force, the average age of women at the birth of their first child has continued to rise in developed markets. In North America, women today on average have their first child at 27.2 years of age, versus 25.7 a decade ago. However, this trend has not been witnessed in other regions, such as Asia Pacific, where women have not meaningfully delayed childbirth over the past four decades (North American women have delayed the birth of their first child by five years on average in that time).

Chart 9: Women in DMs are delaying motherhood

Average age of women at birth of first child by region



Source: Euromonitor 2020

Women represent half of the world's population of 7.7bn, and therefore also half of its potential. Yet the World Bank estimates that women account for only 38% of human capital wealth, and that approx. US\$12tn–28tn could be added to global GDP by 2025 (c.13-31% of GDP) by advancing their equality (McKinsey). At the same time, the World Bank calculates that, globally, not to close the gender earning gap leads to a loss of c.US\$160tn in countries' wealth (141 countries surveyed), or 2x global GDP. (source: World Bank 2018)

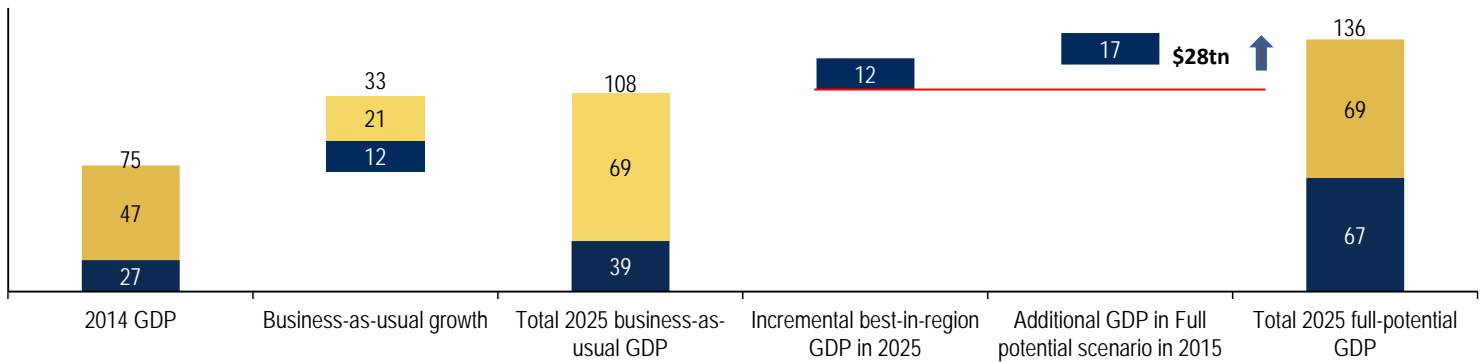


Gender equality = up to a 31% GDP boost

Gender is an important factor in inequality. Women represent half of the world's population of 7.7bn, and therefore also half of its potential. Yet the World Bank estimates that women account for only 38% of human capital wealth, and that approx. US\$12tn – US\$28tn could be added to global GDP by 2025 (c.13-31% of GDP) by advancing their equality (McKinsey). This equates to roughly twice the likely growth in global GDP contributed by female workers between 2014 and 2025 in a business-as-usual scenario. At the same time, the World Bank calculates that human capital wealth inequality costs countries c.US\$160bn (141 countries surveyed), or 2x global GDP. (Human capital wealth = present value of future earnings of the labour force; i.e. two-thirds of the world's wealth.)

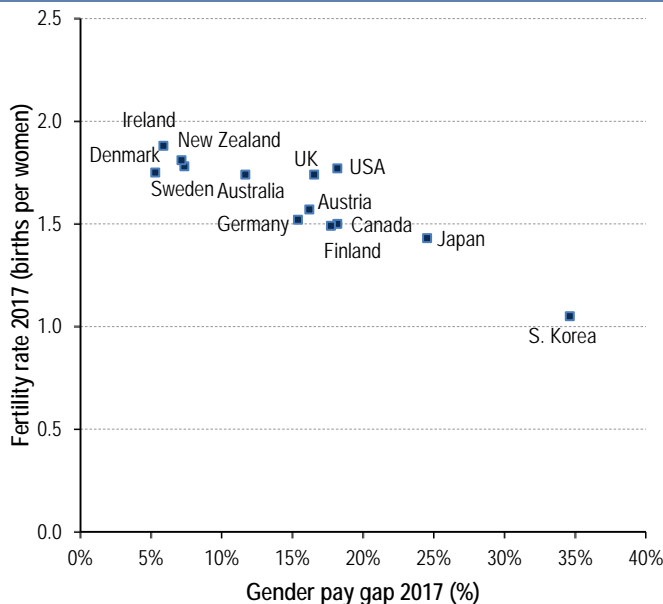
Chart 10: Closing the global gender gap could deliver up to US\$28tn of additional GDP in 2025

Global GDP opportunity (2014) in US\$tn – blue bars denote women and yellow bars men



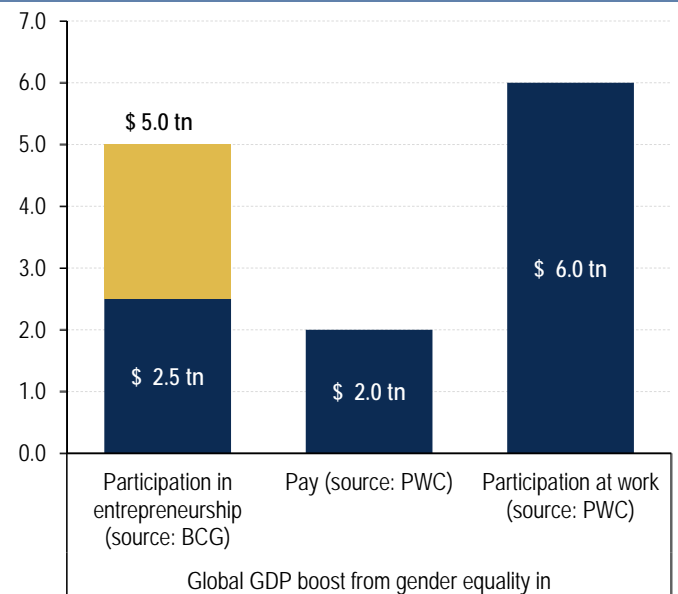
Source: McKinsey, 'Best in region' – countries match the rate of improvement of the fastest improving country in their region, 'full potential' – women play an identical role in labour markets to that of men

Chart 11: Worse gender pay gaps overlap with low fertility rates even in some richer advanced countries



Source: Our World in Data, BofA Global Research

Chart 12: Gender equality can boost GDP materially



Source: BCG (Boston Consulting Group), PWC (PricewaterhouseCoopers), BofA Global Research

Policymakers should be incentivised to prioritise gender equality for the potential GDP boost alone, if for no other reason. As per the Boston Consulting Group (BCG), if women and men participated equally as entrepreneurs, global GDP could rise by approximately 3-6%, boosting the global economy by US\$2.5 trillion to US\$5 trillion. As per PWC,



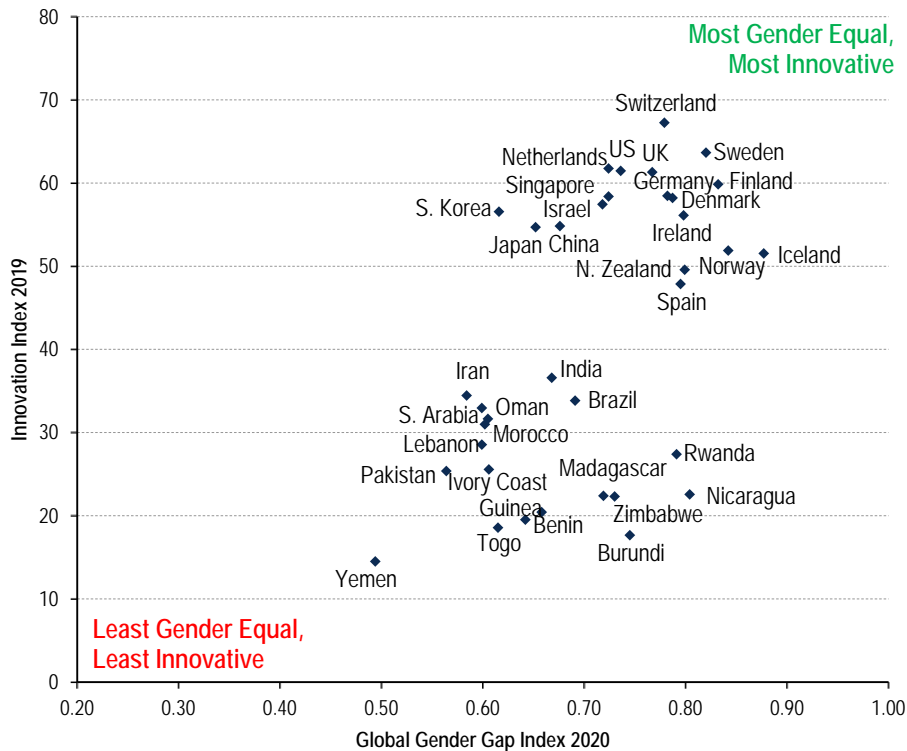
improving female participation in work across the OECD could boost OECD GDP by US\$6tn, while closing the gender pay gap alone could boost GDP by US\$2tn.

31x return from female empowerment: The pathways project by the Bill & Melinda Gates Foundation generated US\$158m worth of benefits for communities in Ghana, Malawi and Mali, by focusing on female empowerment, equating to US\$31 benefit for every US\$ spent. (source: apolitical)

Gender gap and innovation go hand in hand

There is notable overlap between the top 10-15 most innovative (source: WIPO) and gender-equal (source: WEF) countries, and vice versa. Other factors could also be at play, such as GDP, but the overlap between innovation and the gender pay gap ties in with other research (e.g. the most innovative firms have much more female involvement in innovation). Even among richer/bigger economies, those with worse gender gaps (e.g. South East Asian countries) fare worse on innovation versus more innovative countries in the West.

Chart 13: The most gender-equal countries also score highly on innovation; the least typically score poorly on innovation



Source: WEF 2020 Gender Gap Scores (World Economic Forum), WIPO 2019 Innovation Index (World Intellectual Property Organisation), NB: Using scores for top and bottom 10-15 ranked countries for both gender equality and innovation, also including Japan, China, India and Brazil given share of global GDP and importance

Big returns from female empowerment investments, GDP expansion potential

According to McKinsey, closing the gender gap could boost global GDP by >10%. At the same time, investments in female empowerment can yield big returns, especially in poorer countries. Thus it would seem to be a no-brainer for most countries to tackle the gender gap.



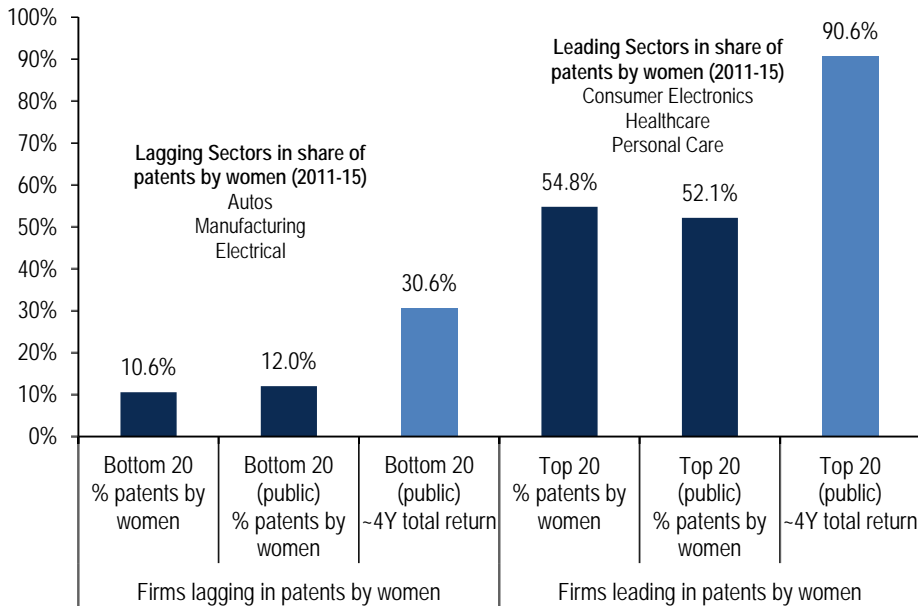
And it also boosts shareholder returns

More women in innovation leads to greater shareholder returns

A study by the Center for Global Development (CGD) looked at 100 global firms with the most patent filings during 2011-15. It found that companies that lag on women's share of patent filings (~10% share) in sectors like autos and manufacturing were nearly 5 times behind those of the leading companies on this measure (~50% share of patent filings) in sectors such as consumer technology or healthcare. More importantly, our analysis shows that the subsequent period shareholder total returns (TR) since 1-Jan-2016 of the top 20 publicly listed companies with a high female share of patents was ~3x that of the bottom 20 (~90% TR vs. ~30% TR).

Chart 14: Companies where women innovate materially more (patents' share ~5x) outperformed the laggards by ~3x on shareholder returns

Data of 100 most active firms in patents during the period 2011-15



Source: Patent data from Center for Global Development, Performance data from Bloomberg (for top and bottom publicly listed names from the 100 firms in study), BofA Global Research, NB: Total return since 01-Jan-2016 (i.e. subsequent to 2011-15 patent data period)

ESG: companies with a poor track record on women could see less inflows

We believe corporates that fail to improve their metrics on female empowerment in areas such as management representation, equal pay and policies will find their ESG scores affected. Gender diversity and pay metrics are key factors in these scores, even if the methodologies differ by rating agency. And the whole ESG revolution is only just starting (only 7% of European funds were ESG but this could rise to >30%) and investments in ESG scoring are ramping up quickly, whether at independent agencies, banks or asset managers. Without a good ESG score, where improving women metrics can help, companies could face headwinds in valuation and financing, we believe.

The women's economy is the biggest in the world and female managers can help

The women's economy is valued at c. US\$30tn (based on 37% of global GDP, source: McKinsey), bigger than any country in the world. Furthermore, GDP expansion due to female empowerment will boost the women's economy and new areas such as FemTech are particularly interesting. As the women's economy grows in size and importance, it would be prudent for companies to enhance their share of female managers across all levels to better address the needs of this market. And this would be a win-win, given the positive impacts on ESG and innovation.



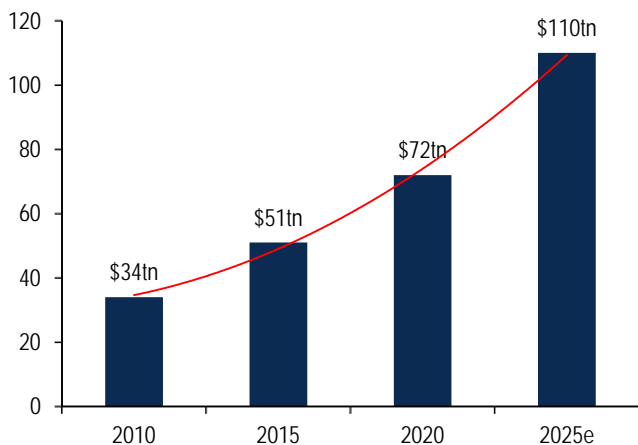
Financial wealth – live long and prosper

The fastest-growing cohort in investments: women already own 32% of net wealth, will hold c. US\$110tn by 2025, and the rate of growth is 1.5x faster than for men (BCG). Saying that, despite them holding 32% of financial wealth, in the UK less women managed open-ended funds in the UK than men called "Dave" or "David" (Morningstar)

Gender gap in private wealth to narrow as women’s wealth grows faster

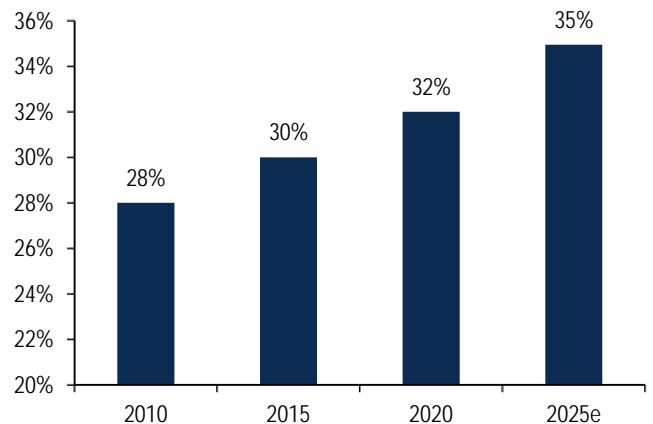
As per BCG, women accounted for 32% of global financial assets as of 2018 (US\$72tn), up from 28% in 2010. And women enjoyed a 1.5x faster growth rate in wealth (9% CAGR since 2010) vs. men (6% CAGR). But women manage only 1-3.5% of these AUM (source: WEF, HBR) and fewer women managed open-ended funds in the UK than men called Dave or David (source: Morningstar). Nevertheless, the private wealth of women could reach US\$110tn if BCG’s 2010-20 CAGRs hold to 2025, with women controlling ~35% of global financial assets by then. In 2014, women in the US controlled ~US\$14tn of assets (source: BofA Wealth Management, equal to GDP of China+India) and this could reach US\$22tn by 2020 (source: VisualCapitalist 2019).

Chart 15: Total private wealth held by women (US\$tn)



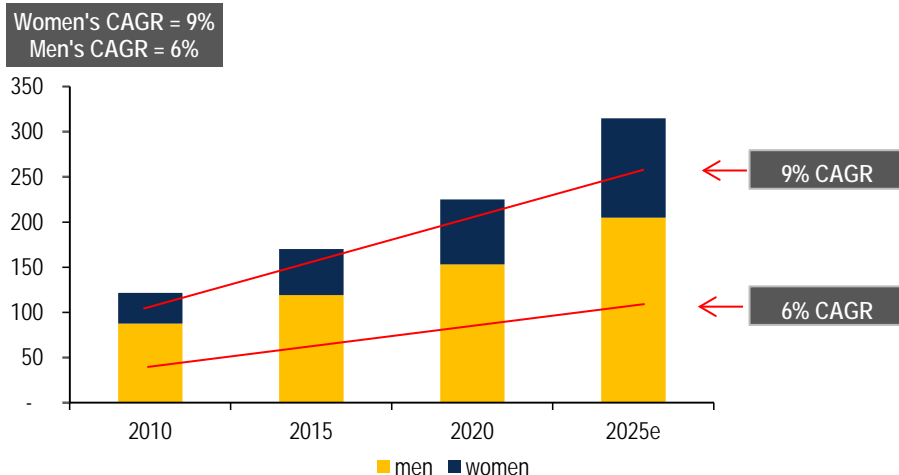
Source: BCG, BofA Global Research Estimates

Chart 16: Total private wealth held by women, as % of total



Source: BCG, BofA Global Research Estimates

Chart 17: Total private wealth held by gender (US\$tn)



Source: BCG, BofA Global Research Estimates

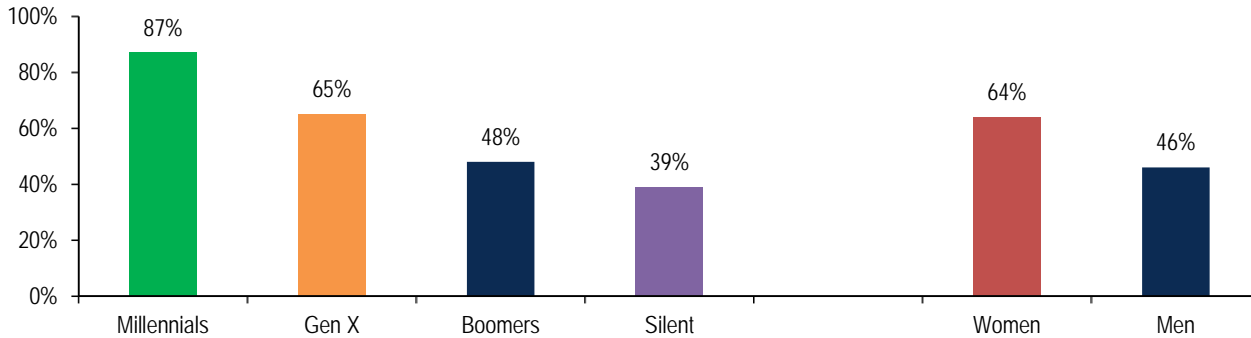


And women care about ESG investing much more than men

Women place greater importance on ESG factors than men when making investment decisions (64% vs. 46%), as per the BofA US Trust Survey, so rising women’s wealth could further accelerate the trend towards ESG investing.

Chart 18: ESG is important to Millennials and women in their investment decisions

Percentage who agree on the importance of ESG in their investment process



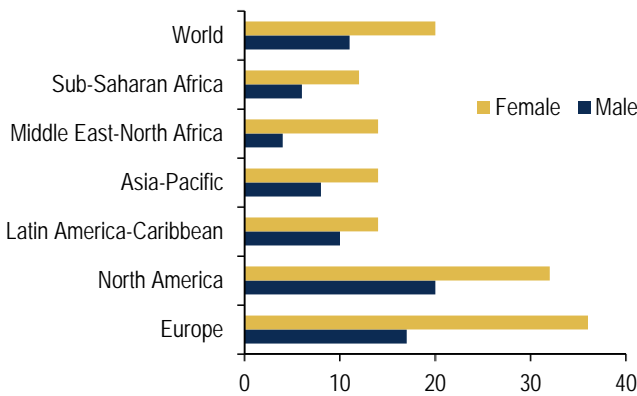
Source: U.S. Trust Wealthy and Worth Survey 2018

Live long & prosper – longevity is a major source of wealth for women

Across the world, women live 6-8 years longer than men (source: WHO 2020). As a result, they are expected to inherit two-thirds of the projected US\$30tn from the Great Wealth Transfer in the next 40 years (source: Investopedia 2019, MarketWatch 2017). As women typically outlive men, 9% more 60+ year-old women live in solo households (source: Pew Research 2020) and are therefore likely to be sole decision-makers when it comes to investments. In 2018, there were 80 men per 100 women in the 65+ age group (source: UN 2019).

Chart 19: More older women live alone than older men

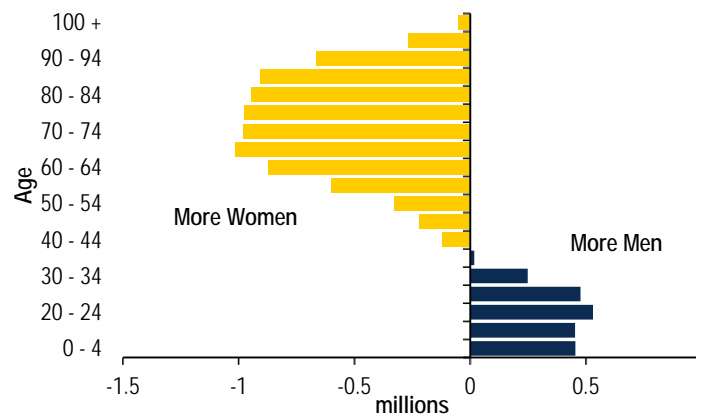
% of individuals aged 60+ in solo households



Source: Pew Research

Chart 20: Women outlive men

Difference in female and male population by age in the US



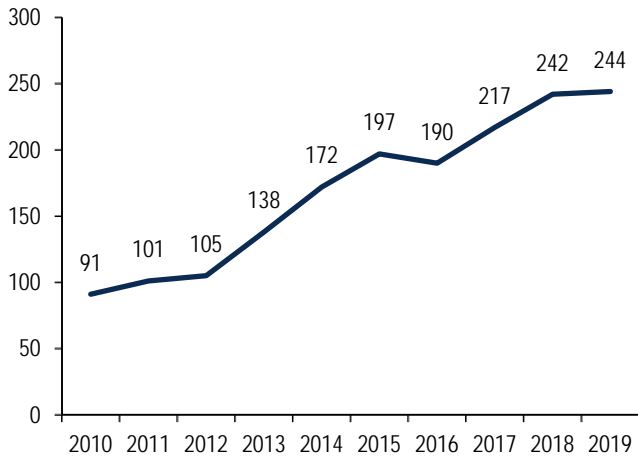
Source: UN 2018

Rise of female billionaires could drive female entrepreneurship & engagement

Globally, female billionaires are also on the rise. In 2000, only four women were on the Forbes list of the world’s 100 richest individuals, but by 2019 this figure had risen fivefold to 21 (source: Forbes 2020). This increase in female billionaires reflects a growing share of women who have accumulated their wealth from inheritance and self-creation, which could drive greater engagement in female entrepreneurship.

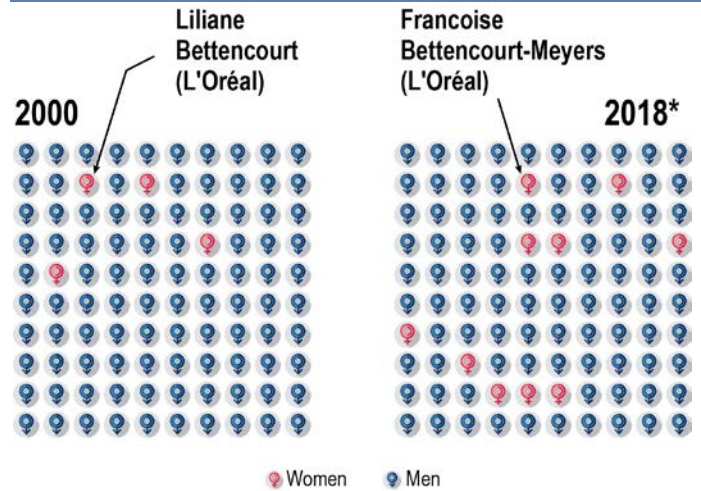


Chart 21: The number of female billionaires is growing



Source: Forbes 2020

Exhibit 4: 100 richest individuals by gender



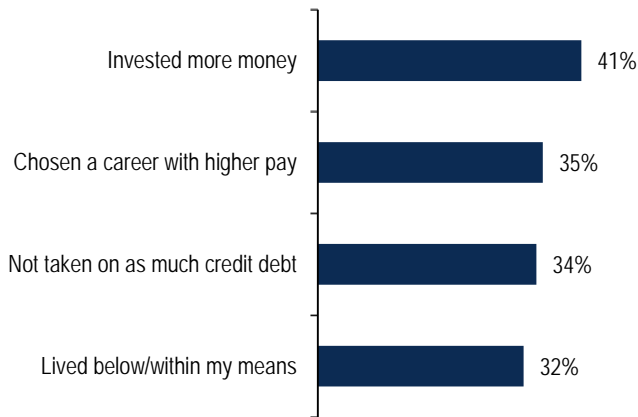
Source: economist, Forbes, BCG
* As of march 2018

What to do with the wealth? Invest!

In a survey of 3,700 Americans, 41% of women said their biggest regret in financial decisions was not investing more, implying a potentially huge market for female wealth. However, there is a mis-match between supply and demand. Only 52% of women, vs 68% of men, felt confident making investment decisions. There are some social barriers to women entering financial markets, for example 70% of women say there are no adequate financial services designed for them (source: Bank of America 2019).

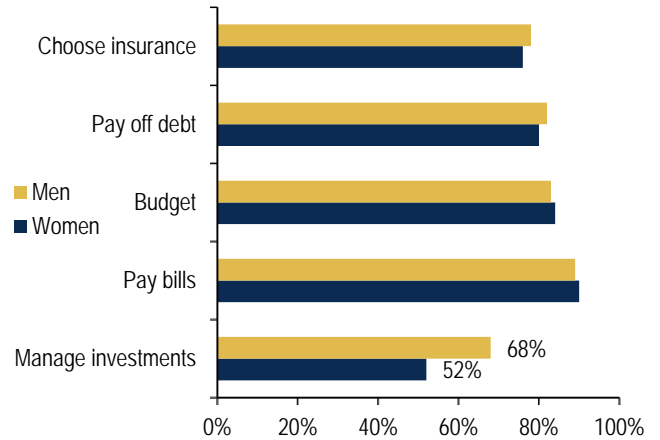
Chart 22: % of women who wish themselves had done below differently

Bank of America survey of women aged 18+



Source: Bank of America

Chart 23: % of women and men surveyed who say they feel confident at financial tasks



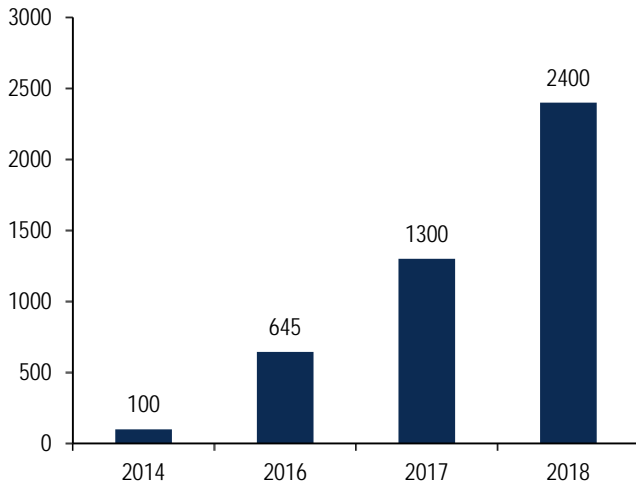
Source: Bank of America 2017, 3,707 respondents over 18 years old across the U.S.

Gender Lens Investing is a strongly growing trend

Since 2009, various investment firms have started Gender Lens Investing (GLI), focusing on investments that support gender equality such as women in leadership, women employees, and products or services that directly benefit women. According to Veris Wealth Partners (2018), since 2014 assets under management (AUM) following GLI strategies rose from just US\$0.1bn to US\$2.4bn in public markets (fixed income and equity) amid rising investment options.

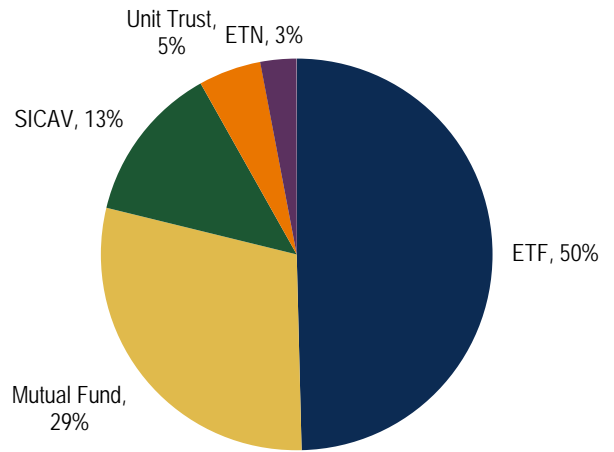


Chart 24: Public market GLI strategies AUM (US\$/m)



Source: Veris Wealth Partners, BofA Global Research

Chart 25: GLI equity strategies by category, Q1 2019

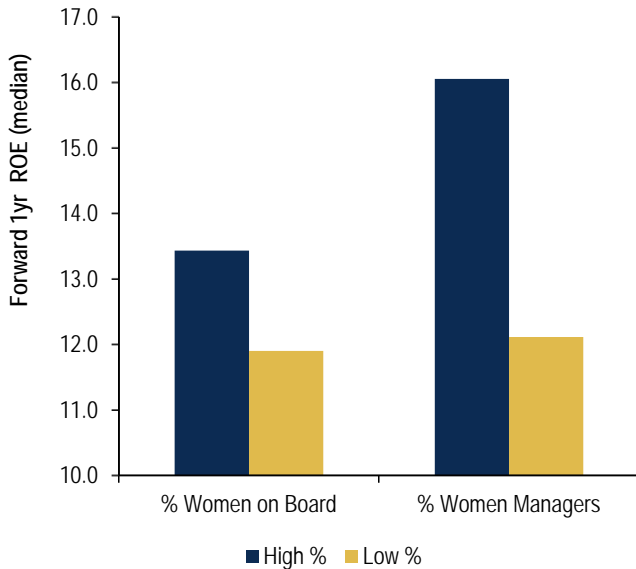


Source: CFA Institute, BofA Global Research

Alpha can be generated from gender diversity

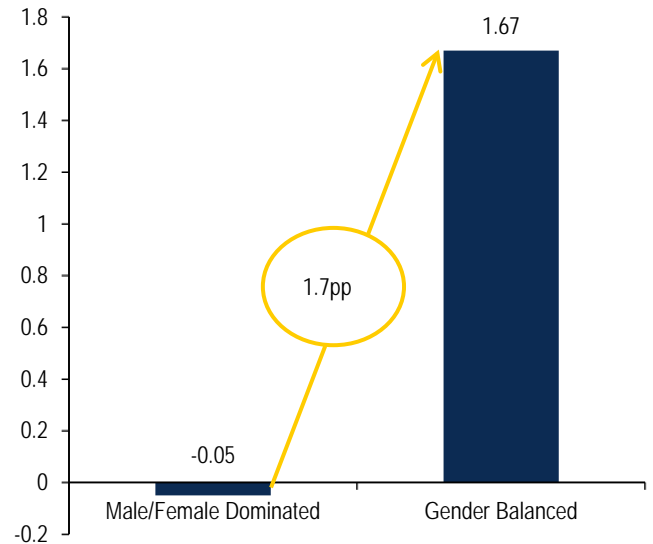
In both public and private markets, strong correlations exist between women in the workplace and investment returns. In public markets, while performance results fluctuate over time, higher ESG scores on board diversity and % of women managers signal higher forward 1yr ROE for companies. Similarly, in private markets, gender-balanced funds (i.e. % of women at 30-70%) have 20% higher net IRR than male or female-dominated funds in emerging markets (source: IFC 2019).

Chart 26: Gender diversity signals higher ROE



Source: T. Reuters, BofA US Equity & US Quant Strategy

Chart 27: Gender-balanced funds have excess Net IRR in EM



Source: IFC, BofA Global Research



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