Impacts of the Inevitable Policy Response across asset classes

April 2020

INEVITABLE POLICY RESPONSE

Contents

Consortium

This report was prepared by Vivid Economics and Energy Transition Advisors, who bear sole responsibility for any views expressed, which do not necessarily reflect those of the sponsors or other consortium members. The authors are solely responsible for any errors.

This project was commissioned by the PRI with support from:

Corporate bond results (Vivid Economics)

INEVITABLE POLICY RESPONSE

Key Findings: Corporate debt impacts are modest as most issued bonds mature before the FPS kicks in, which presents a realignment opportunity for investors

Overall impacts for corporate debt are modest with the bonds currently issued by companies in the iShares MSCI ACWI **falling only 0.03% in value under FPS**

This is significantly less than the 3.1% impact on the iShares MSCI ACWI equity index.

-0.03%

Maturity of bonds

The **median time to maturity** of bonds issued by iShares MSCI ACWI companies **is 5 years** and **most of current exposures** are therefore **paid out before the FPS** comes in post 2025.

However, **value impacts increase with maturity** so longer dated bonds are exposed

Sectoral variation

As with equities, **there is within and across sector variation** for corporate bonds.

However, **impacts and hence across sector variation is muted** due to the relatively secured gradual payout structure of bonds

Variation by Rating

High rated bonds have modest impacts under the FPS as policy is unlikely to tip them into bankruptcy.

However, low rated bonds can be very exposed to the FPS as policy can push them into insolvency.

Investor implications

Current holdings

Investors should conduct additional **due diligence** on **longer dated and low rated bonds** to assess their climate exposure

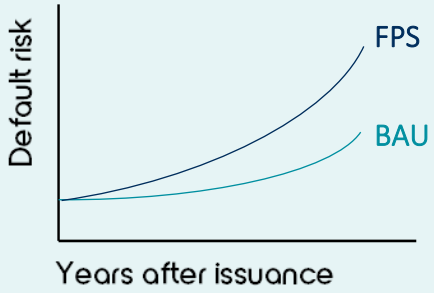
Future bond issuance

Investors should gradually **reduce their exposure to "dirty" sectors and companies** by not buying their newly issued bonds

INEVITABLE POLICY RESPONSE

Changes in company fundamentals arising from the FPS affect default risk and as a result corporate bond valuations

Changes in cash flows impact default risk, as companies ability to service their debt change



Cash flow changes

FPS decarbonization policies impact company performance as outlined in the equities analysis

Effects vary across companies depending on characteristics such as sectors

Default risk

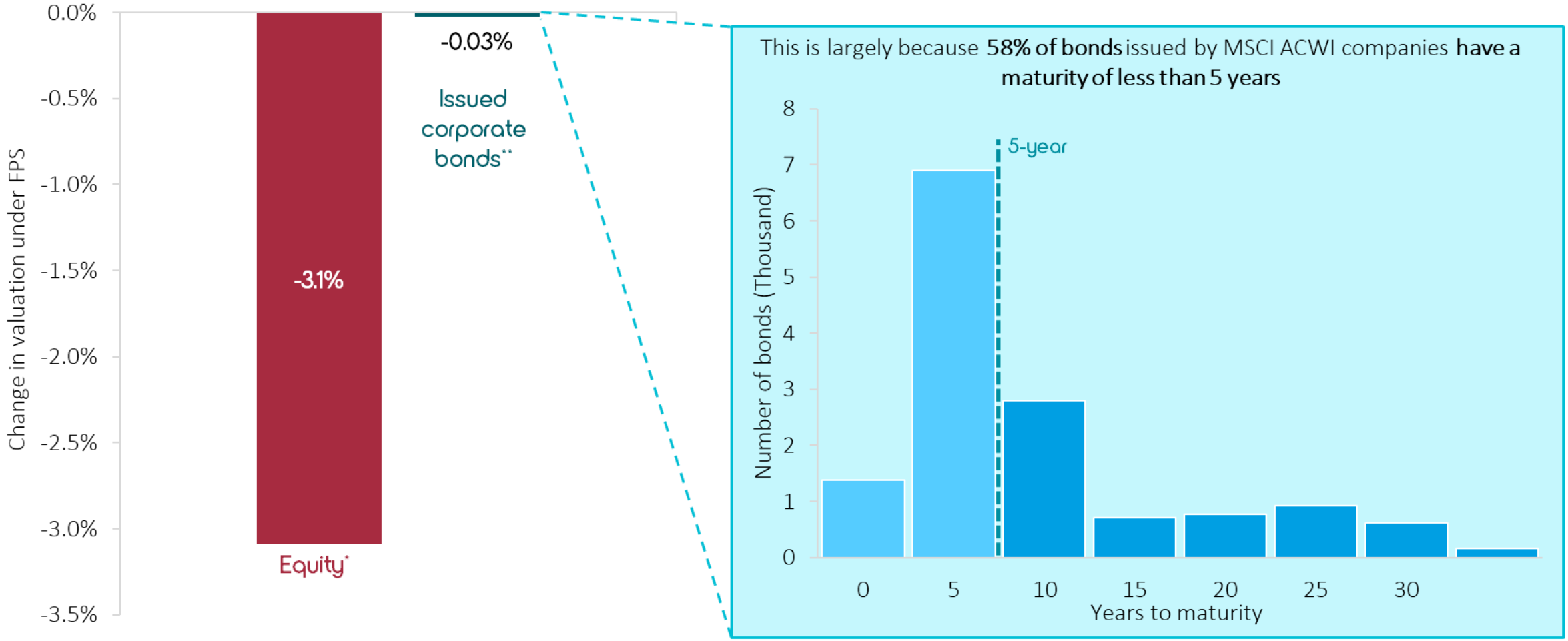
Changes in default risk are translated into adjusted bond prices, using standard fixed income security valuation techniques

Bond valuation

Impacts differ depending on current **credit ratings** (default probabilities) and **duration** (time to maturity and payout structure)

INEVITABLE POLICY RESPONSE

Overall impacts are modest relative to equities as most issued bonds pay out before impacts kick in – the majority of analysed bonds have a maturity under 5 years

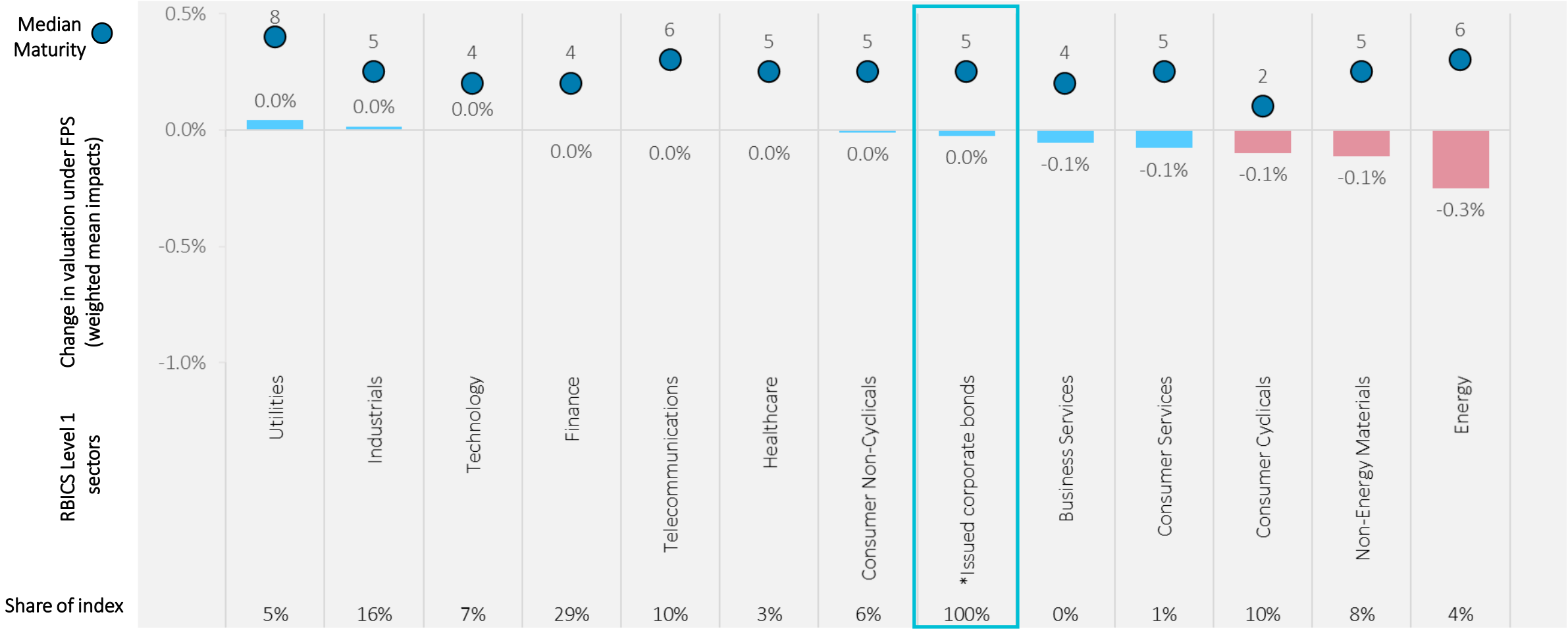


INEVITABLE POLICY RESPONSE

*Equity is based on the iShares MSCI ACWI ETF, Issued corporate bonds** represents bonds issued by companies within the iShares MSCI ACWI ETF

Source: Vivid Economics (Net-zero toolkit)

Impacts are small across sectors, as short maturities prevail across all major sectors

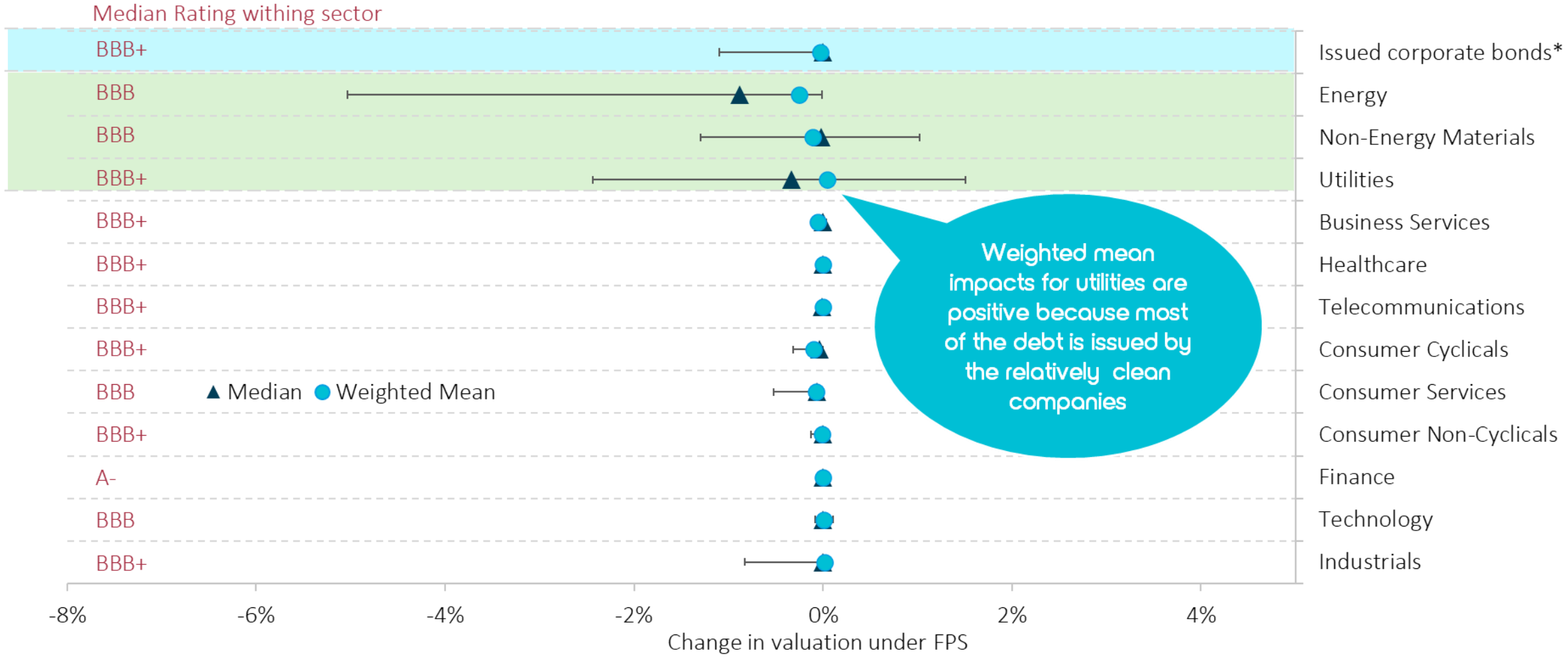


INEVITABLE POLICY RESPONSE

Issued corporate bonds* represents bonds issued by companies within the iShares MSCI ACWI ETF

Source: Vivid Economics (Net-Zero Toolkit)

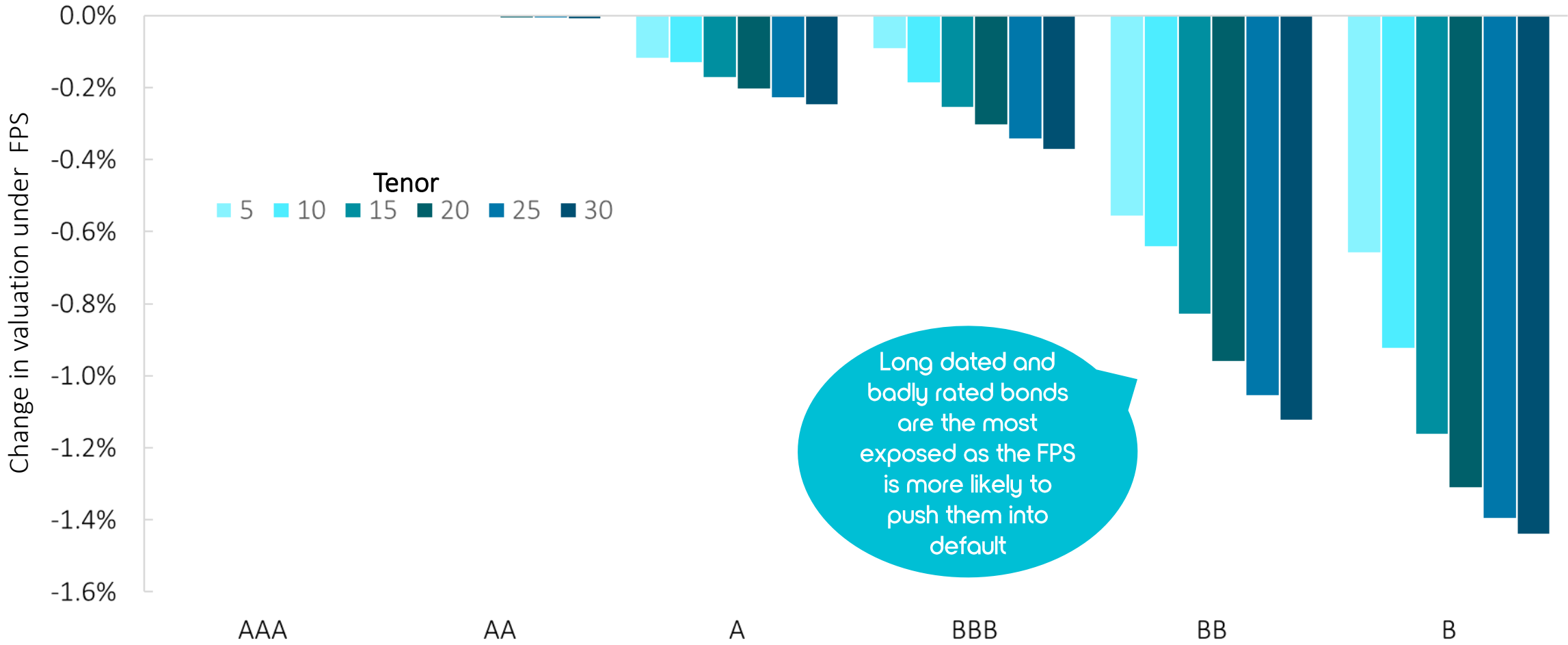
However, as with equities, within-sector variation can be significant, particularly for: energy, non-energy Materials and utilities



INEVITABLE POLICY RESPONSE

Notes: Error bars indicate the 10th and 90th percentiles of impact within each sector. Sectors: RBICS level 1.
Issued corporate bonds* represents bonds issued by companies within the iShares MSCI ACWI ETF
Source: Vivid Economics (Net-Zero Toolkit)

Beyond company fundamental, discussed in the equities release, variation in impacts can be explained by differences credit ratings and maturities*

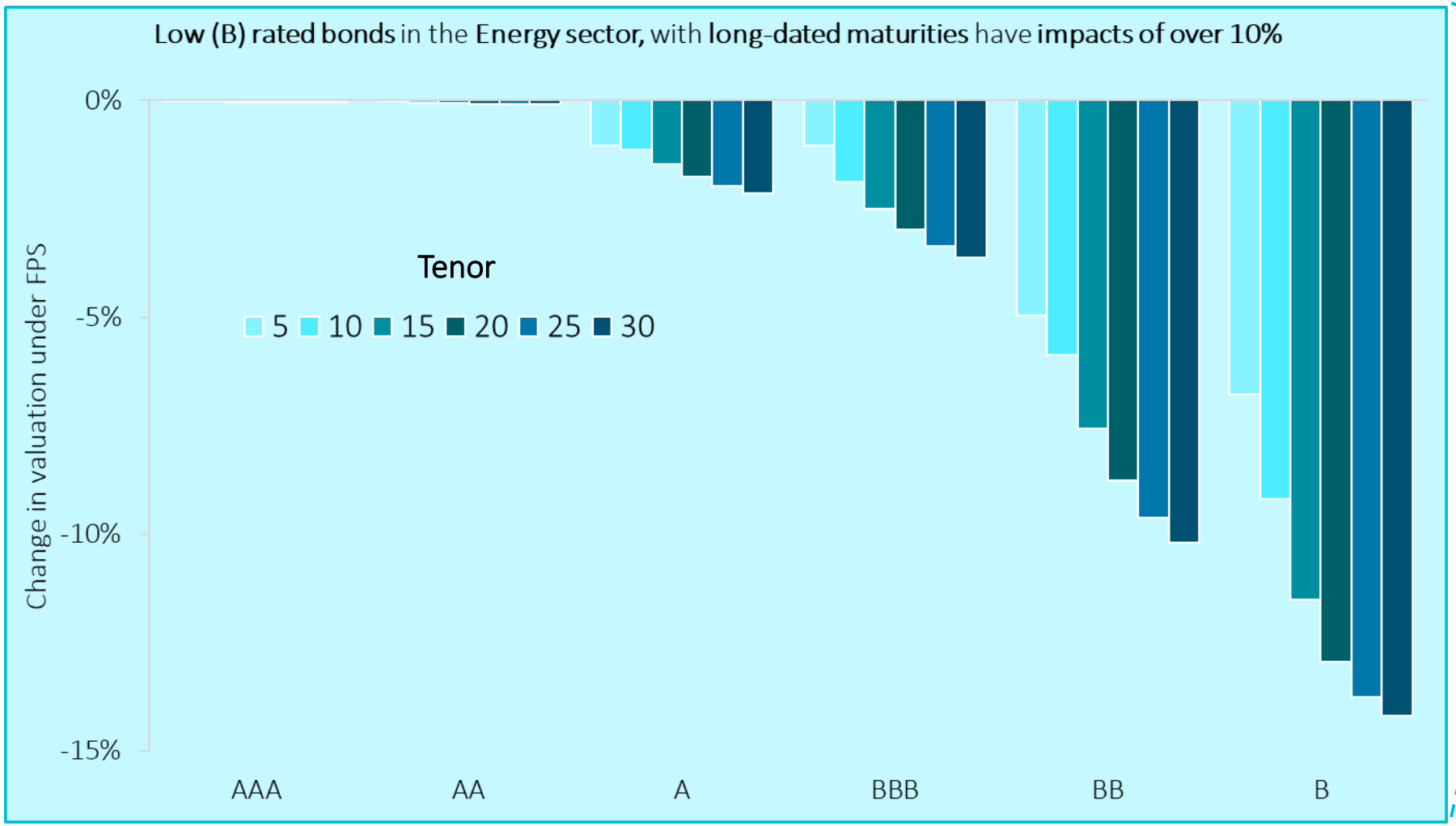


INEVITABLE POLICY RESPONSE

*Due to the lack of availability of long dated corporate bonds >10y the impacts on 30y debt is assessed through "hypothetical" bonds. Overall market oh corporate bonds >10y is very small.

Source: Vivid Economics (Net-Zero Toolkit)

Although current bond portfolios face small risks, low rated bonds in exposed sectors, can be very exposed and extra due diligence is thus needed around new issuance



Note: Average rating of bonds issued in the Energy sector is BBB
Issued corporate bonds* represents bonds issued by companies within the iShares MSCI ACWI ETF
Source: Vivid Economics (Net-Zero Toolkit)

Sovereign debt results (Vivid Economics)

INEVITABLE POLICY RESPONSE

Key Findings: Sovereign bonds tend to rally under the FPS as increases in risk premia are offset by central banks cutting interest rates in response to the policy shock

Sovereign bonds rally for most countries under the FPS as increases in credit risk are dominated by lower interest rates

For example, **an average tenor US bond*** is expected to **increase in price** by **0.01% under the FPS**

Interest rate impact

Interest rates fall as central banks respond to a growing output gap driven by the FPS

Inflation rise but the decrease in real interest rates dominates

Time to Maturity

Bonds with longer maturity experience larger price changes as coupon payments occur further into the FPS

Debt/GDP impact

Increasing debt issuance drives up debt/GDP ratios and therefore credit risk premia

In most cases the **fall in nominal risk-free interest rates dominates** causing bond yields to fall except for countries already running large debt/GDP, for example, Canada

Investor implications

Central bank response is critical
Value adjustments depend heavily on how central banks respond to the FPS and investors should monitor how this develops

Reduce exposure to some countries
Investors should **reduce exposure to longer dated bonds** issued by **fossil fuel exporting countries** with **high debt/GDP ratios**

INEVITABLE POLICY RESPONSE

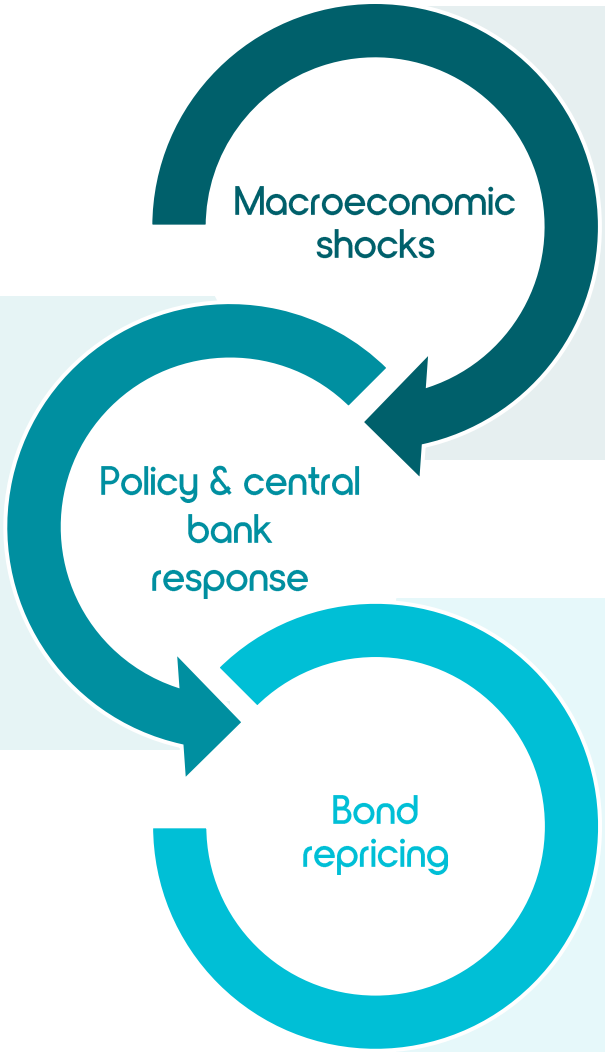
The analysis done on sovereign bond issuance assumes locally issued debt
*Average tenor US bond is 6 years to maturity

Macroeconomic shocks and policy responses change nominal interest rates and credit risk premia which lead to a repricing of sovereign bonds

FPS decarbonisation policies tend to:

- **increase inflation** as carbon costs drive up consumer prices
- **reduce GDP** relative to BAU as investment and consumption fall

Effects vary across countries depending on national characteristics such as sector split



Policy makers respond to macroeconomic shocks:

- **central banks adjust interest rates** based on the trade-off between growth and inflation
- **governments** change fiscal policies and might therefore **take on more debt**

Again, responses differ depending national characteristics such as exchange rate regime

Markets reprice sovereign bonds as:

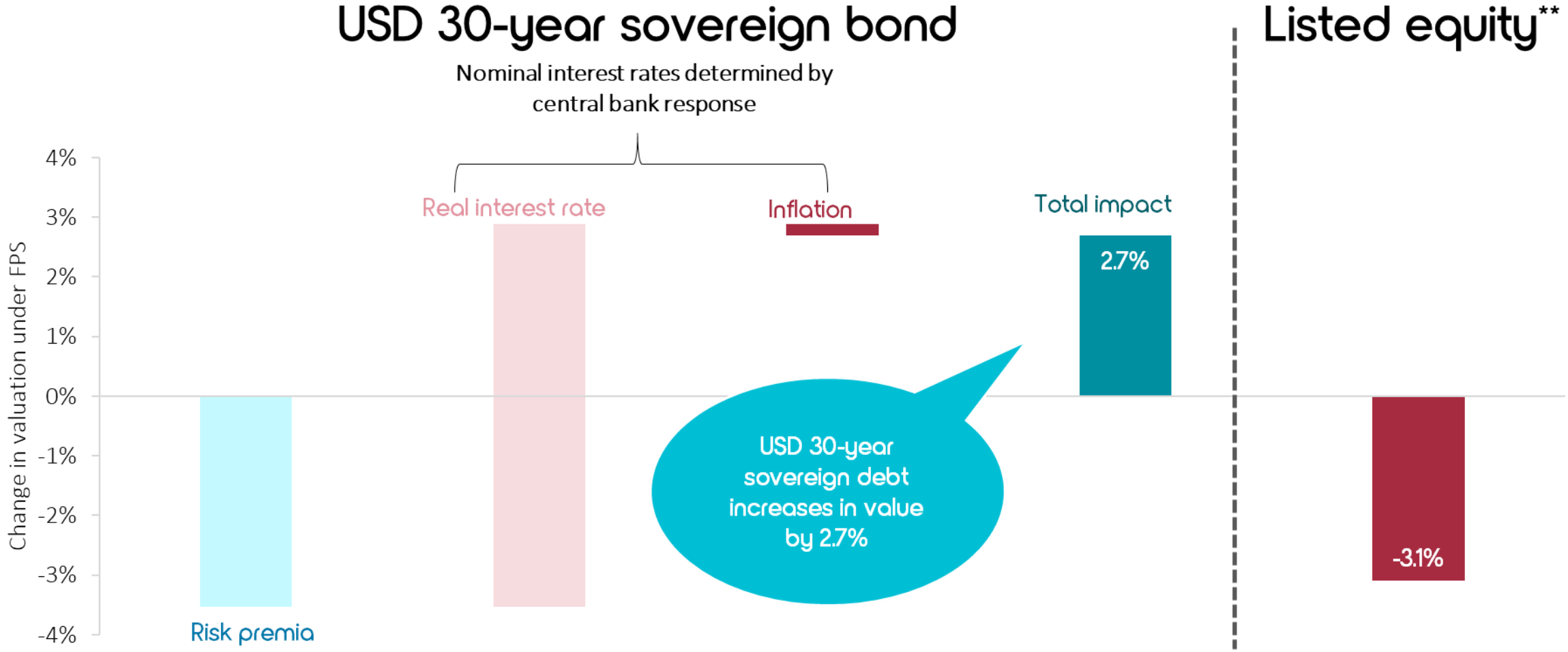
- **credit risk premia change** as governments take on more debt
- **nominal interest rates change** as inflation and monetary policy adjust

Repricing differ depending on duration and starting point

INEVITABLE POLICY RESPONSE

Macroeconomic modelling for the IPR FPS was conducted using G-Cubed, a multi-country, multi-sector intertemporal general equilibrium model of the global economy

United States 30-year bond prices increase significantly due to expectations of lower future real interest rates



**listed equity based on MSCI ACWI ETF

Source: Vivid Economics (Net-Zero Toolkit)

INEVITABLE POLICY RESPONSE

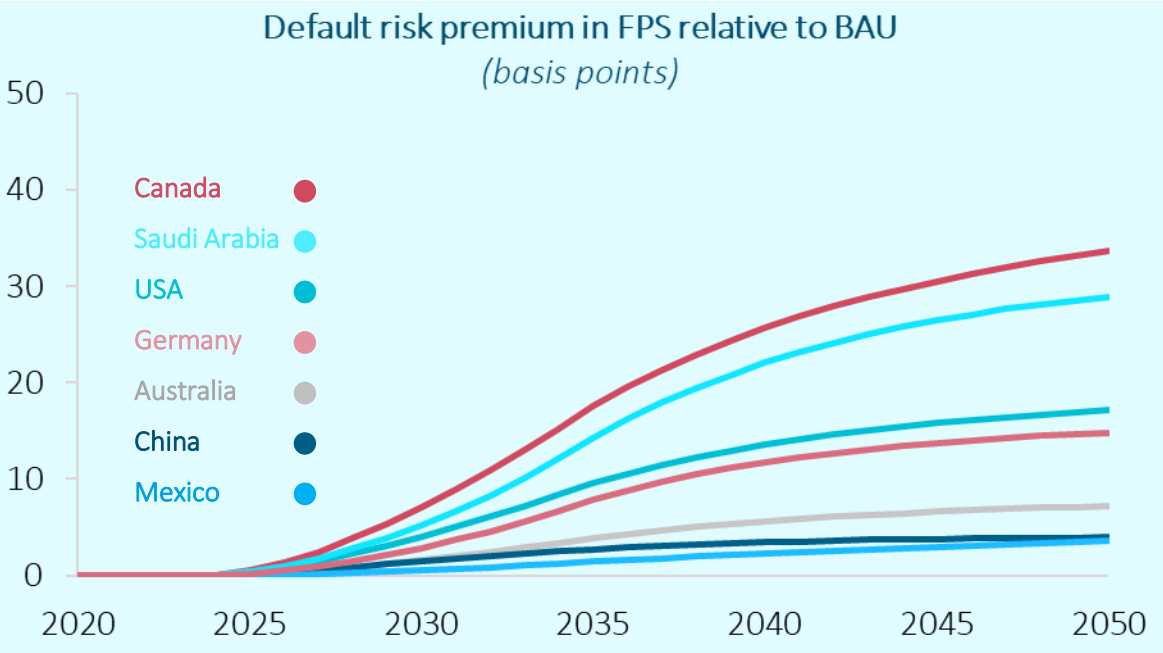
Financial markets price in higher sovereign credit risk, while central banks cut rates in response to the FPS

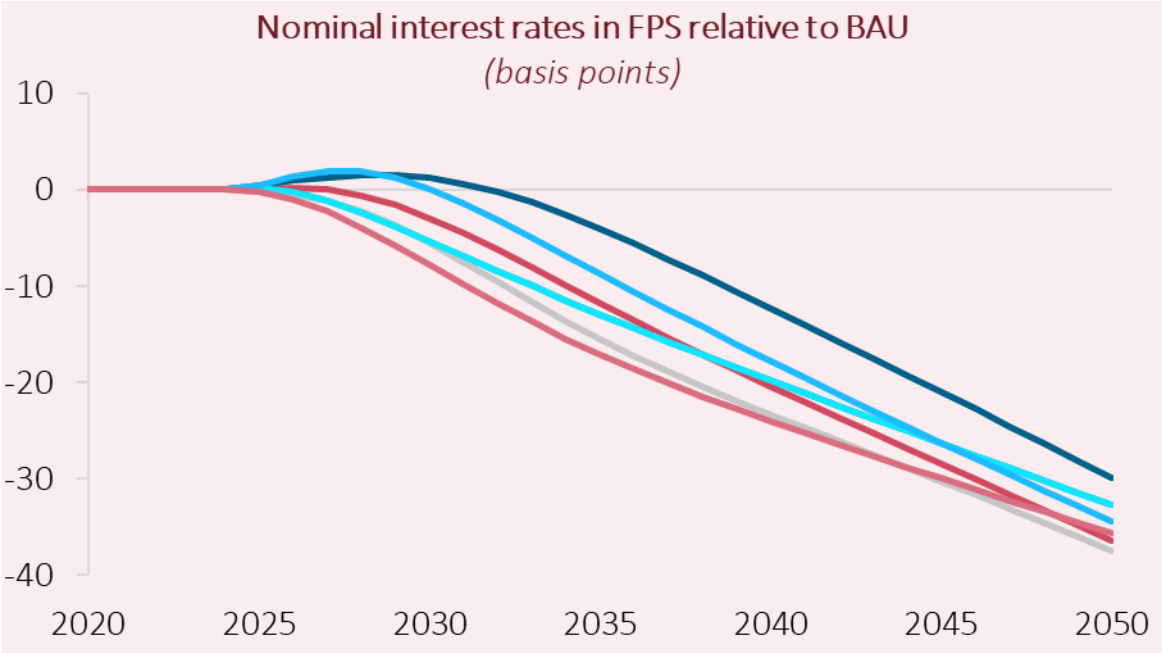
Risk premia rise (first order effect)

- Lower growth and fiscal expansion leads to an increase in debt/GDP ratios and as a result higher default probability
- Markets reprice based risk premia on sovereign bonds rise

Interest rates fall (second order effect)

- Faced by a GDP output gap and increasing inflation, central banks chose to cut interest rates to stimulate growth
- This response is **highly dependent on the response of monetary authorities**, the FPS follows a classic Taylor rule



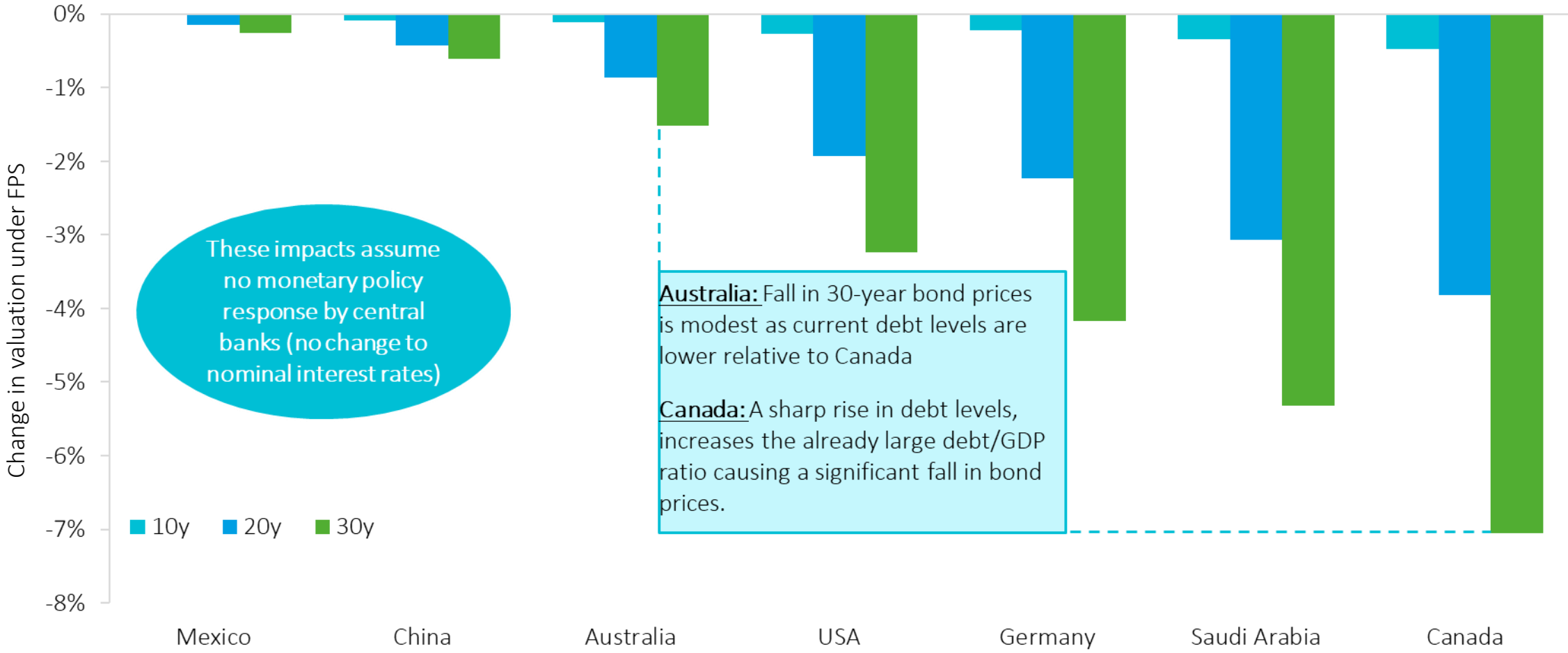


INEVITABLE POLICY RESPONSE

The curves represent *spot* rates i.e. the single discount rate at time (t) that is used to discount cash flows at time (t). Spot rate is equal to yield to maturity for zero-coupon bonds. **Nominal rates for Saudi Arabia and the USA move in line to account for interest rate parity as the USDSAR peg is assumed to hold**

Source: Vivid Economics (Net-Zero Toolkit)

In isolation, bond prices can fall significantly from rising debt/GDP as the sovereign default risk premia increases



Source: Vivid Economics (Net-Zero Toolkit)

However, combining risk premia and nominal interest rate changes into spot rates show that interest rate falls tend to dominate risk premia increases

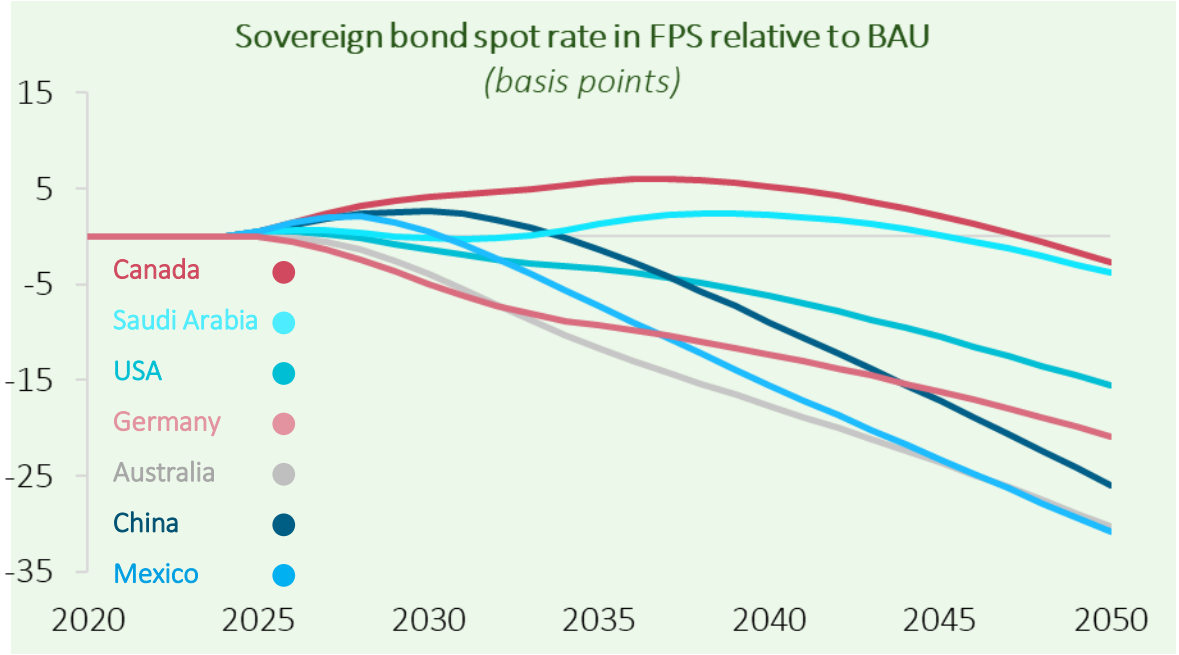
Risk premia rise

+

Interest rates fall

=

Spot rate changes



Technical detail on spot rate calculation

'Baseline' spot rate are estimated using market data on sovereign bond yield curves:

- Current sovereign bond yield to maturities are converted into spot rates through bootstrapping (equating discounted cashflows based on spot rates and YTMs)
- The change in spot rates under FPS and BAU spot rates are used to estimate **FPS spot rates**
- **These spot rates are then used to value bonds under the FPS**

Findings

- **Spot curves are flatter** (for most countries) as spot rates in longer dated tenors fall more
- **Canada and Saudi's spot curve is higher for shorter maturities and lower for longer maturities** – as the change in default risk premia dominates nominal interest rate up to 2045.
- **Australia's spot curve is lower by ~30bps** in the 30 year tenor driven by a large decrease in nominal interest rates.

INEVITABLE POLICY RESPONSE

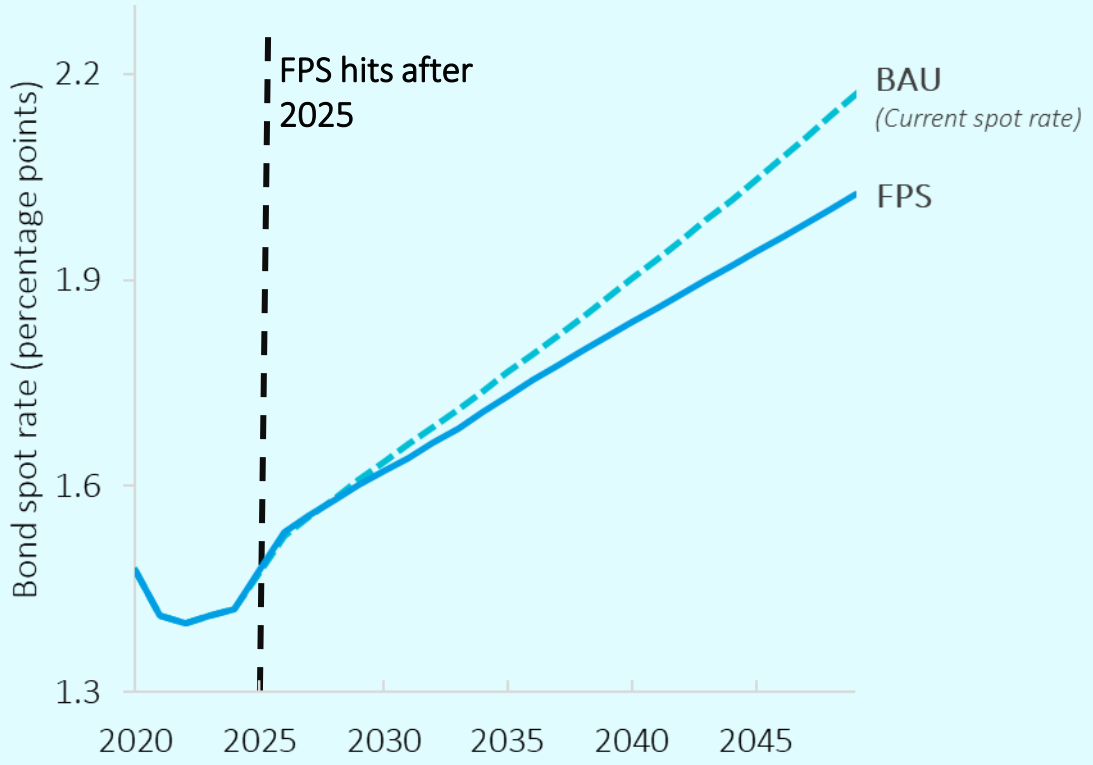
The curves represent *spot* rates i.e. the single discount rate at time (t) that is used to discount cash flows at time (t). Spot rate is equal to yield to maturity for zero-coupon bonds

Source: Vivid Economics (Net-Zero Toolkit)

Combined impacts can be illustrated by 30-year US-treasury bonds for which increases in default premia are offset by lower interest rates

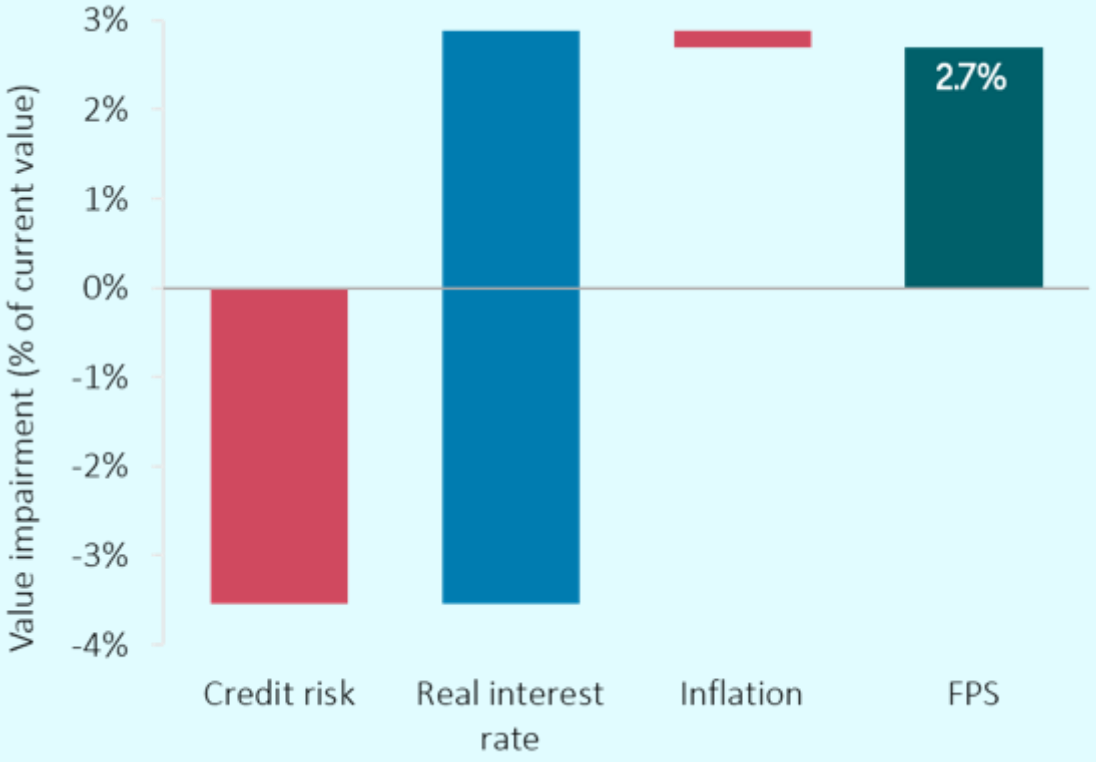
US-treasury spot curve

The US treasury spot curve flattens as markets price in the expected reduction in central bank interest rates under the FPS



Bond valuation impacts

Real interest rates falls dominate the effect of increasing risk premia and inflation for 30-year US government bonds

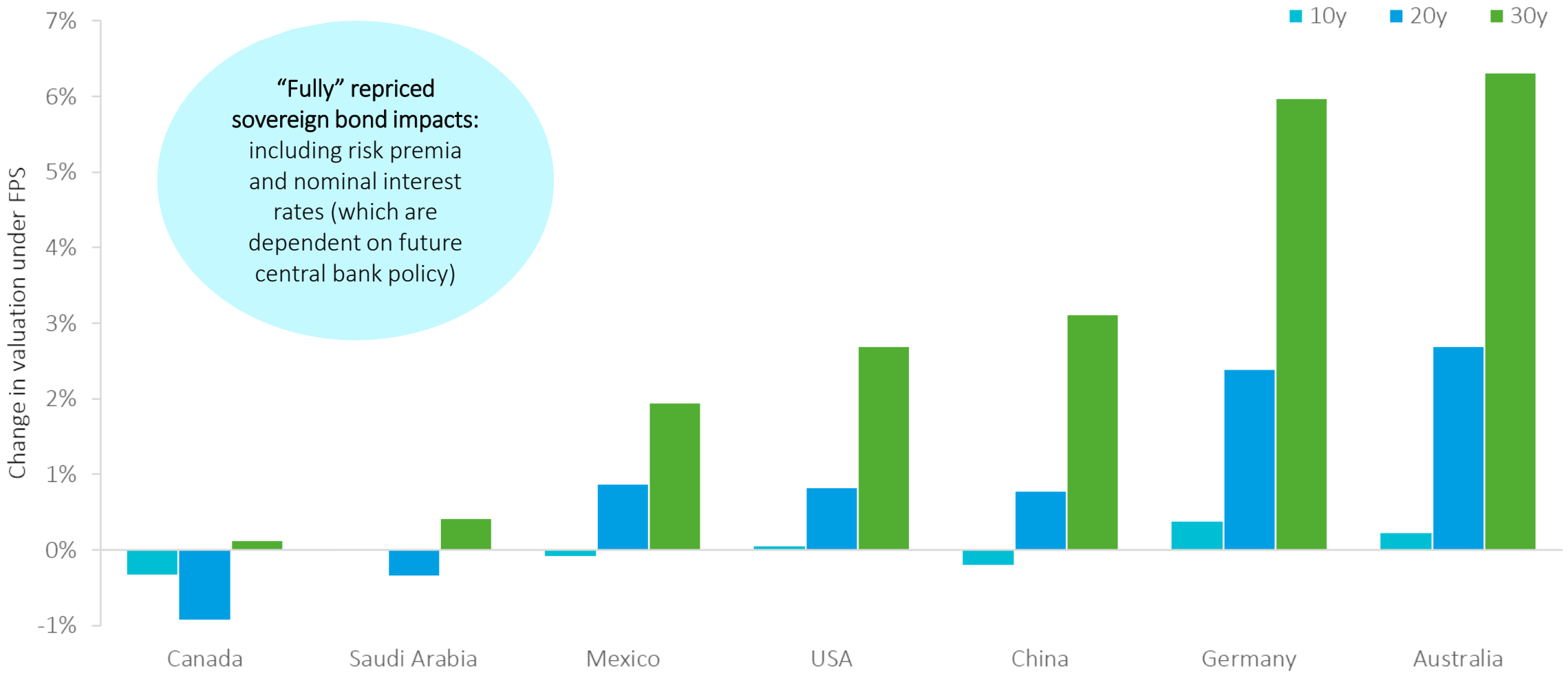


The curve above represents the *spot curve* and prices impacts are for debt maturing in 30 years time

Bond price impacts assume debt is currently being traded at par and with a face value of 100. The translation from bond yield to price changes is non-linear and follows conventional bond pricing

Source: Vivid Economics (Net-Zero Toolkit)

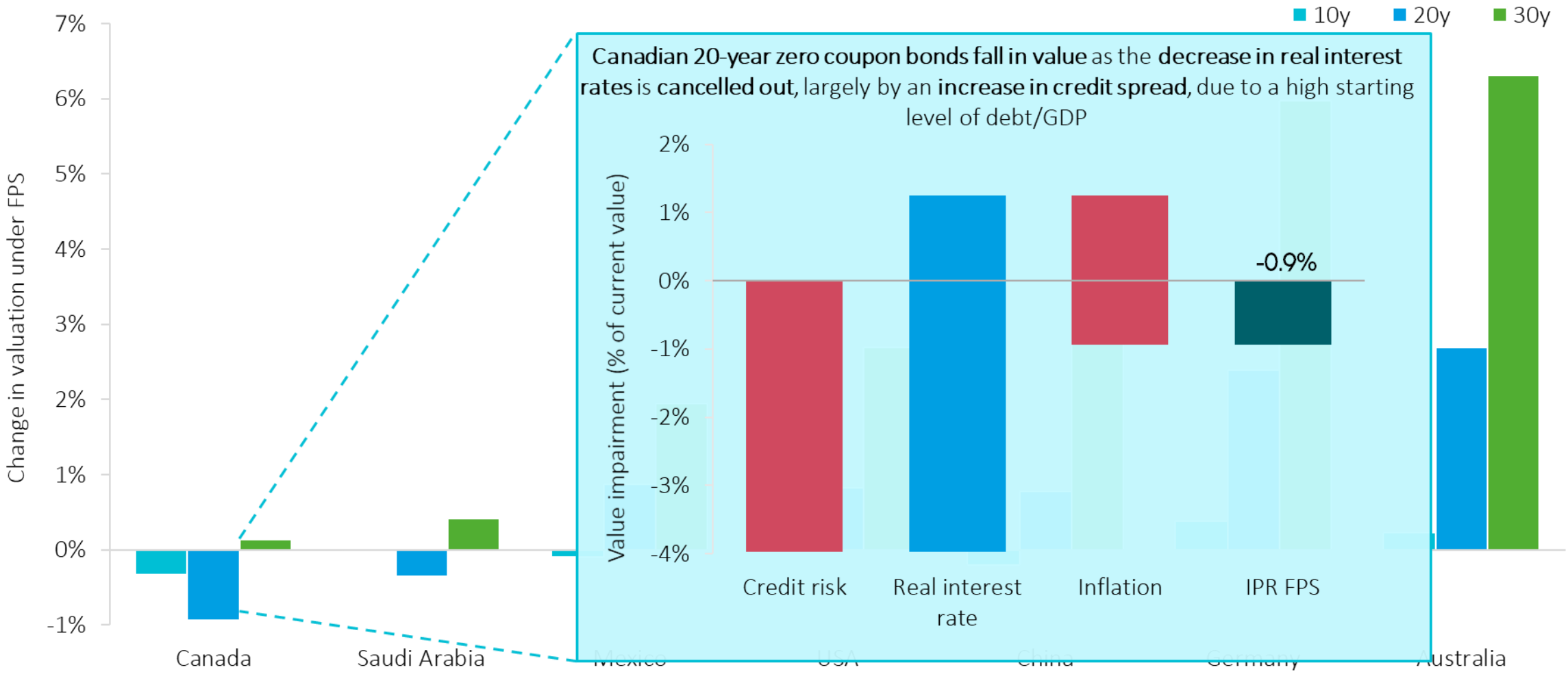
Full valuation impacts vary significantly across countries and by maturity, with longer-dated bonds having larger impacts, but most bonds rally under FPS



INEVITABLE POLICY RESPONSE

For bonds with tenors of 5 years or less, there is no impact as FPS scenario impacts materialise after 2025
Current (04/02/2020) yields are taken from Thomson Reuters
Source: Vivid Economics (Net-Zero Toolkit)

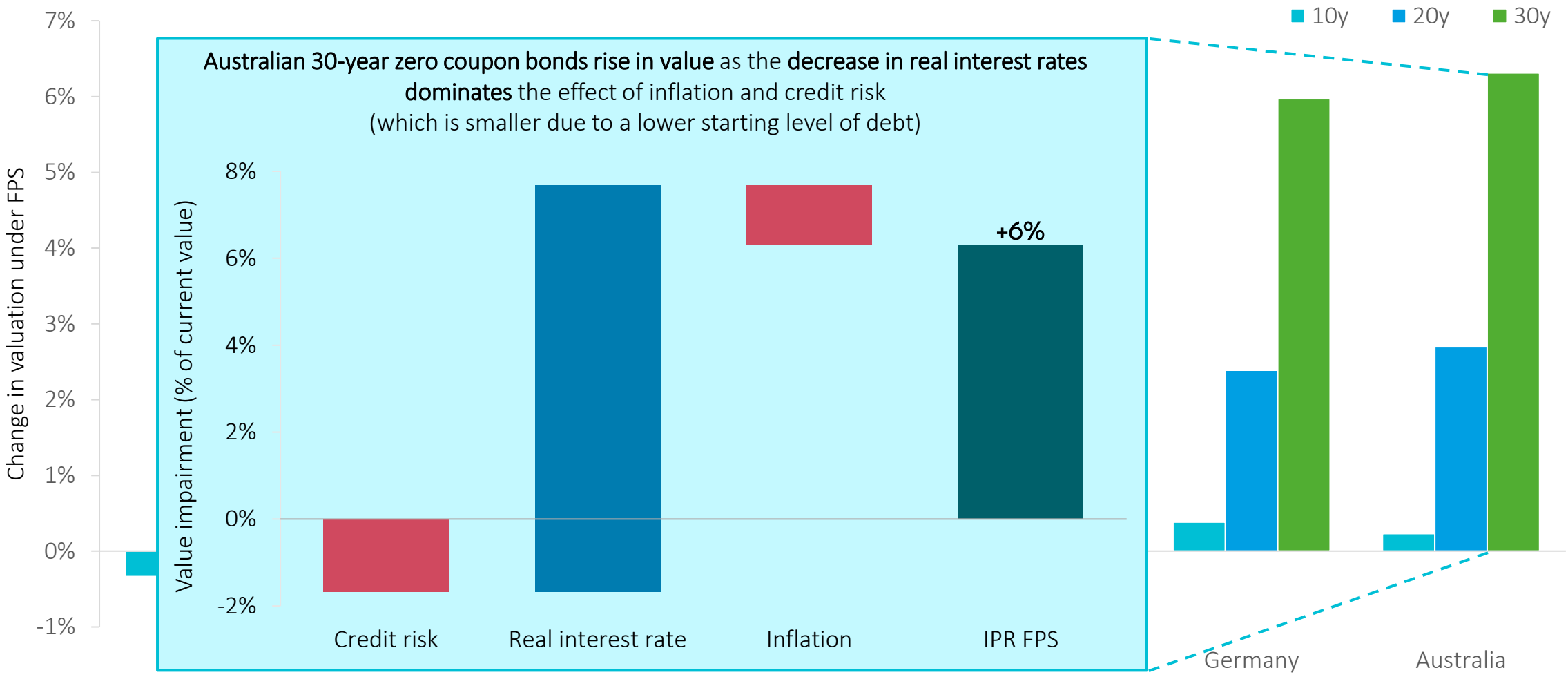
Higher credit risk can drive bond value reductions, but this is only for a small subset of highly exposed and leveraged countries such as Canada



INEVITABLE POLICY RESPONSE

For bonds with tenors of 5 years or less, there is no impact as FPS scenario impacts materialise after 2025
Current (04/02/2020) yields are taken from Thomson Reuters
Source: Vivid Economics (Net-Zero Toolkit)

For most countries, including Australia, increases in credit risk are so small that they are offset by the fall in interest rates



INEVITABLE POLICY RESPONSE

For bonds with tenors of 5 years or less, there is no impact as FPS scenario impacts materialise after 2025
Current (04/02/2020) yields are taken from Thomson Reuters
Source: Vivid Economics (Net-Zero Toolkit)

Sovereign debt impacts of the FPS are sensitive to assumptions around central bank response functions, and the relationship between debt-to-GDP and credit risk

- The macroeconomic analysis of the FPS assumes that **central banks respond to changes in GDP and inflation based on the Taylor rule**
- The **effect of increasing debt-to-GDP on default risk premia** is accounted for based on statistical relationships at the global-level
  - The **econometric specification** accounts for different starting points of debt-to-GDP, and uses a non-linear specification to account for the increasing marginal impact of debt-to-GDP on default risk premia
  - Sovereign credit risk is influenced by a range of other market and fundamental factors which are not accounted for in this analysis
  - Sensitivity analysis was done using different econometric specifications, to assure for robustness of results
- The Appendix shows how the bond valuation impacts of the FPS can be decomposed by risk factor (real interest rates, inflation and credit risk)
- **Under the FPS, interest rates do not change up to 2025, the year in which policy disruption begins** – this means that all bonds with a maturity of 5-years or less are unaffected
- Vivid's bond pricing methodology uses the change in 1-year forward credit spreads and nominal interest rates, to calculate the change in spot rates over time.
  - Current (as of 4th February 2020) yield to maturities are obtained from Thompson Reuters which are converted to spot rates using a bootstrapping routine
  - The curves illustrated in this deck are spot curves i.e. each point on the curve represents the spot rate for that tenor
- For Eurozone countries, macroeconomic impacts are modeled at the Eurozone-level, with relevant outputs then downscaled to the country-level
- Saudi Arabia's pegged exchange rate regime against the US dollar is assumed to hold

Real estate results (Vivid Economics)

INEVITABLE POLICY RESPONSE

Key Findings: Real estate is almost as exposed as equities with impacts concentrated in commercial real estate and regions with high emissions intensity

The impairment for investable real estate is 2.5% of current value under the FPS - equivalent to $2.8 tn.

This is smaller than the expected **3.1% reduction in equity values**

Regions & sectors

Risks are concentrated in **commercial real estate**, where energy use is higher per dollar invested leading to **7.5% global impact**, relative to **1.1% in the residential sector**

Regions with **low emissions efficiency and low property values** are most impacted

Net exposure

The impacts above assume 100% of the cost burden is on property owners. the value impairment is much smaller at **0.3%** if energy costs are passed through to tenants.

Investor implications

Reduce exposure

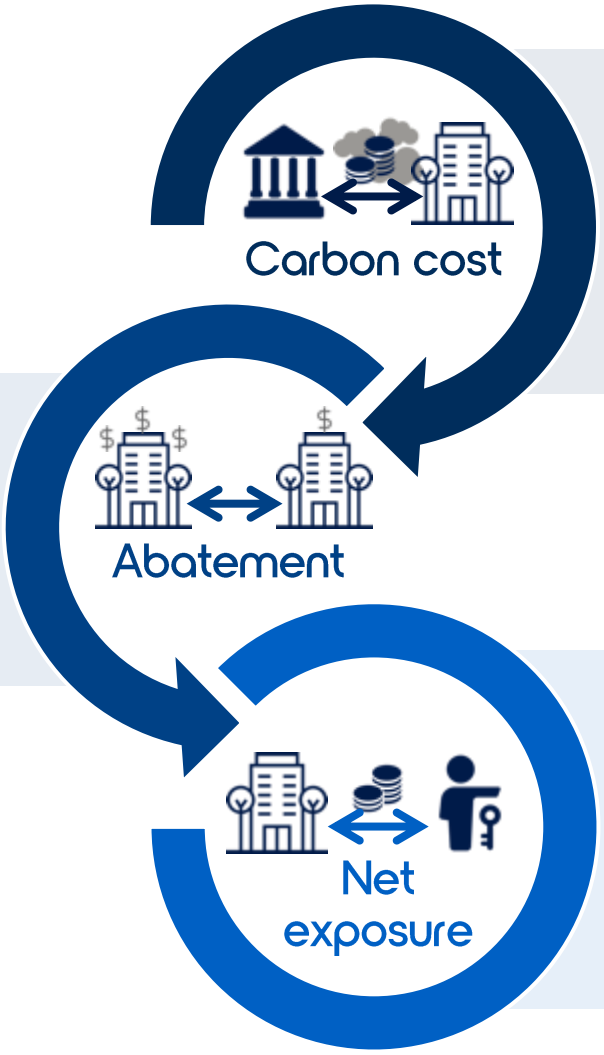
Investors should **reduce exposure to lower value properties with bad energy performance** as these will require significant abatement investment which can undermine their value proposition

Seek the opportunities

Developing or acquiring low-carbon real estate, especially in in markets with currently high emissions intensity, is likely to offer higher returns as climate policy is implemented

INEVITABLE POLICY RESPONSE

The real estate model distributes the cost impact from carbon pricing between owners and tenants to estimate changes in property valuation



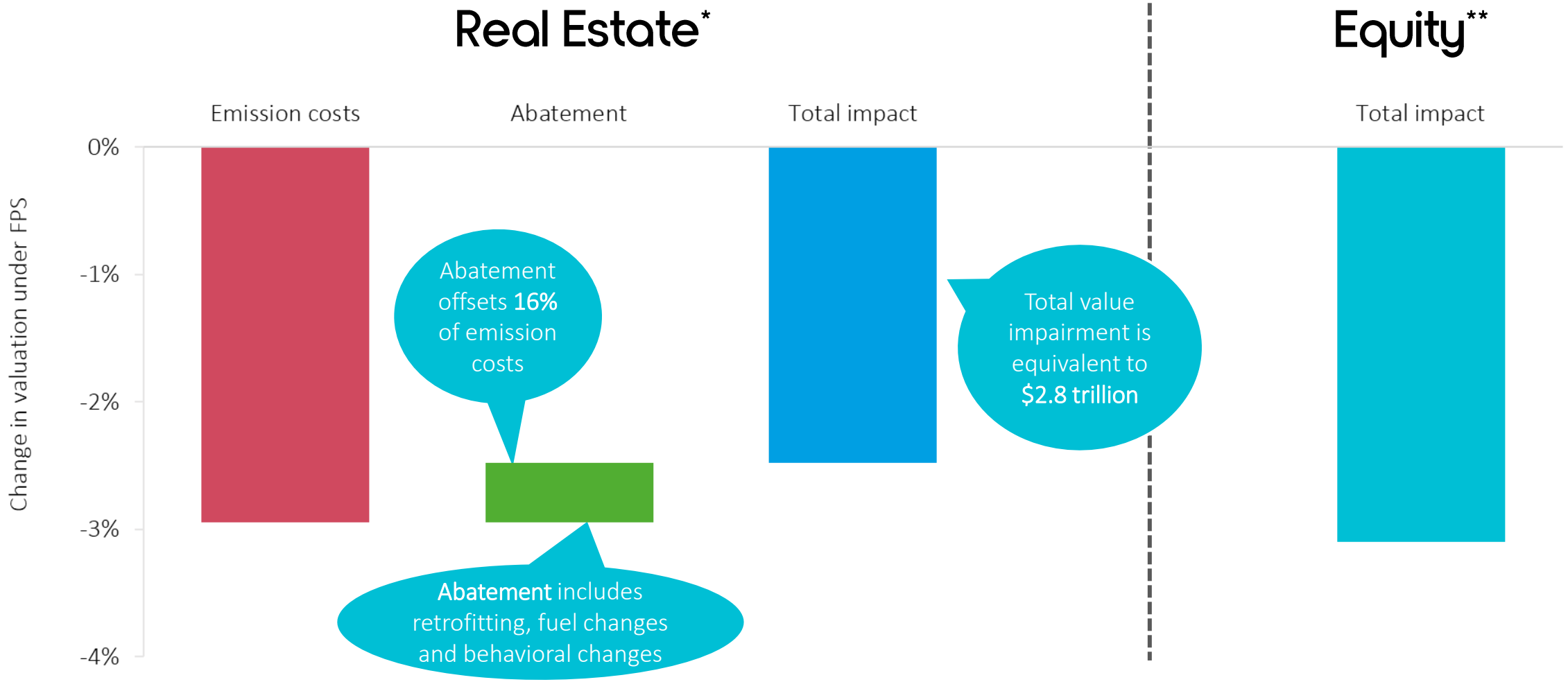
Local **carbon prices** impose costs on all real estate assets consuming energy, with less **energy efficient** assets facing relatively higher costs

Property owners can take action to reduce the overall cost burden attributed to climate policy through energy efficiency investments and retrofitting

Changes in **value** are calculated by discounting **future costs (both increased energy expenditure and abatement cost)** from existing buildings to arrive at a new market valuation.

INEVITABLE POLICY RESPONSE

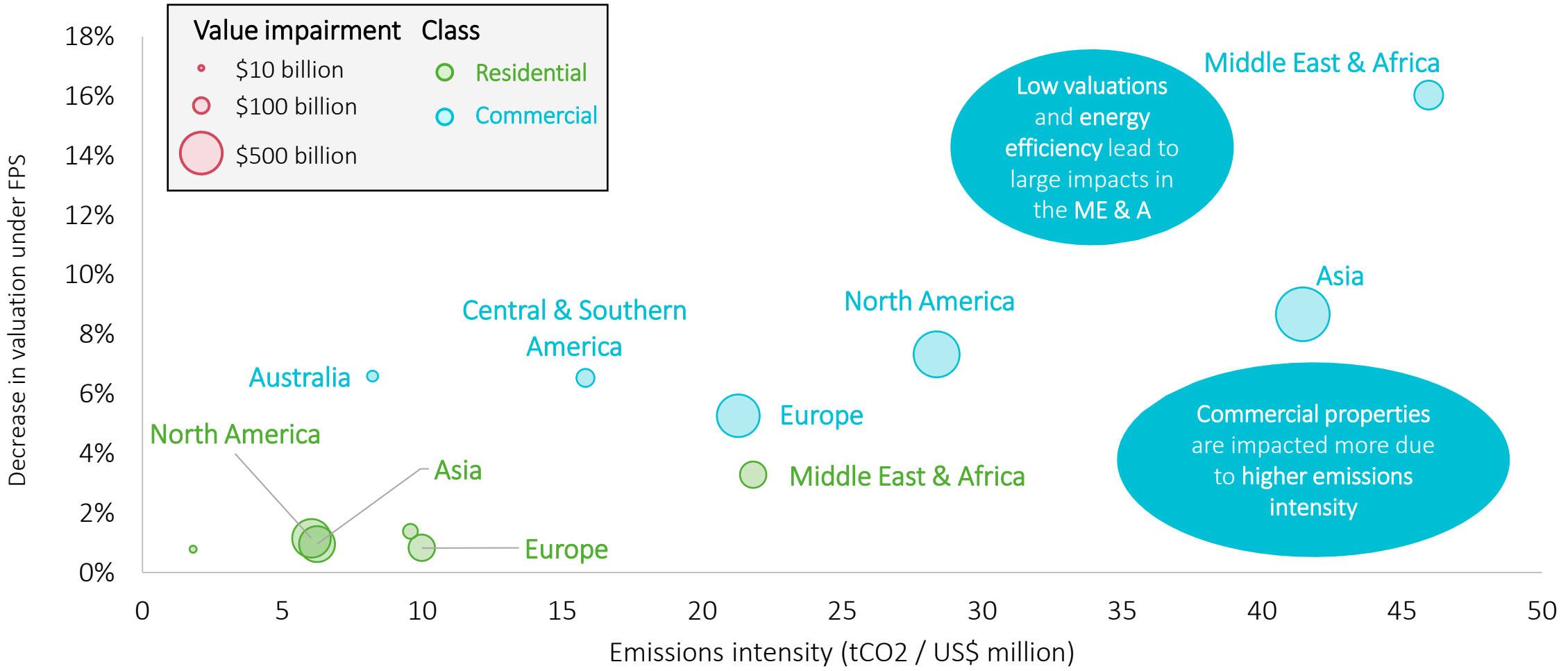
The value of investable real estate falls by US$2.8 trillion under the FPS, 2.5% of its current value which is slightly less than the estimated impact on equities



INEVITABLE POLICY RESPONSE

* the global share of investable property by value is 34% in the residential sector and 67% in the commercial sector. As a result, $114.5 trillion of the $254 trillion global real estate market is included in this analysis. Savills (2017): https://www.savills.co.uk/blog/article/216300/residential-property/how-much-is-the-world-worth.aspx
** equity results are based on the MSCI ACWI: https://www.msci.com/acwi

Impacts are concentrated in commercial property, with high energy intensity to value increasing severity of regional impacts in both property classes



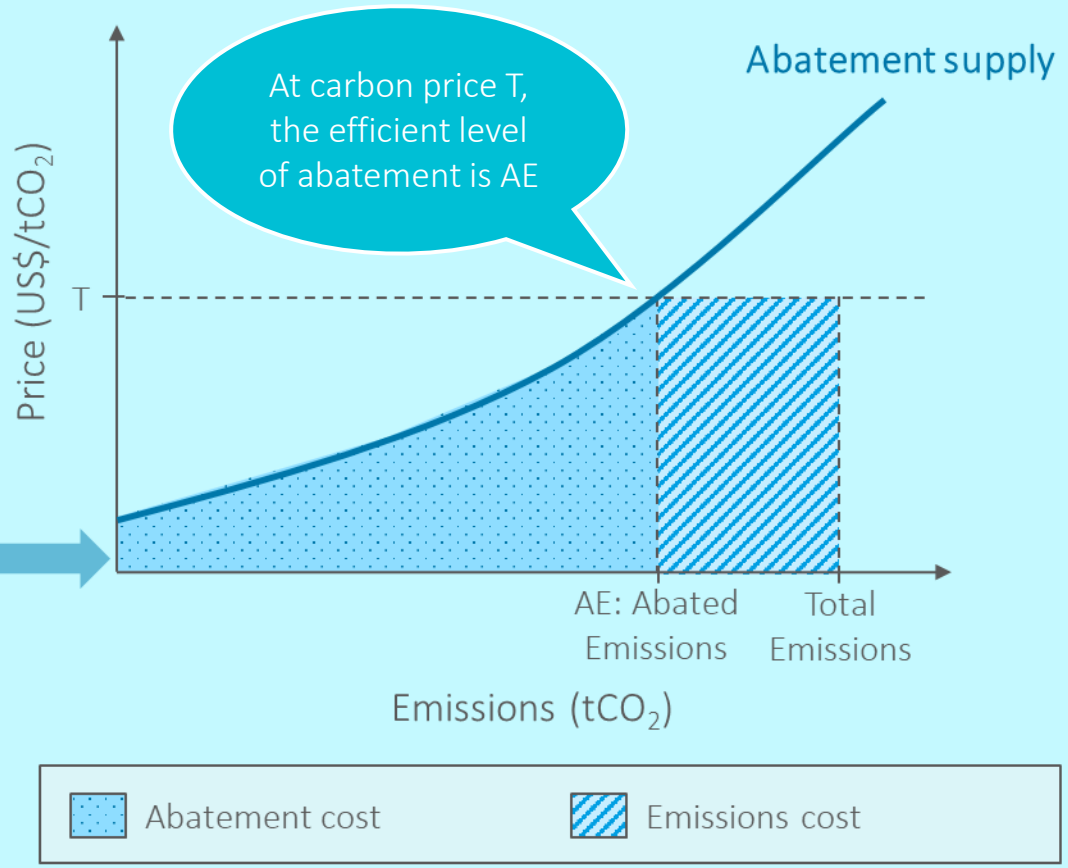
Note: **property level impacts** are not captured in IPR analysis due to data limitations, but are crucial for individual investment decisions

Increasing coverage and stringency of energy efficiency policies will lead to large-scale abatement activities

Under the FPS, mandatory energy efficiency measures lead to efficient levels of abatement in global real estate.

- In 2018, **mandatory energy efficiency measures** covered 32% of the global residential stock and 43% of the commercial building stock.
- These shares are expected to **increase significantly to 2050**, along with continued increases in policy stringency.
- These policies will drive building owners to implement **widespread abatement** activity despite the split incentives* in the rental sector.

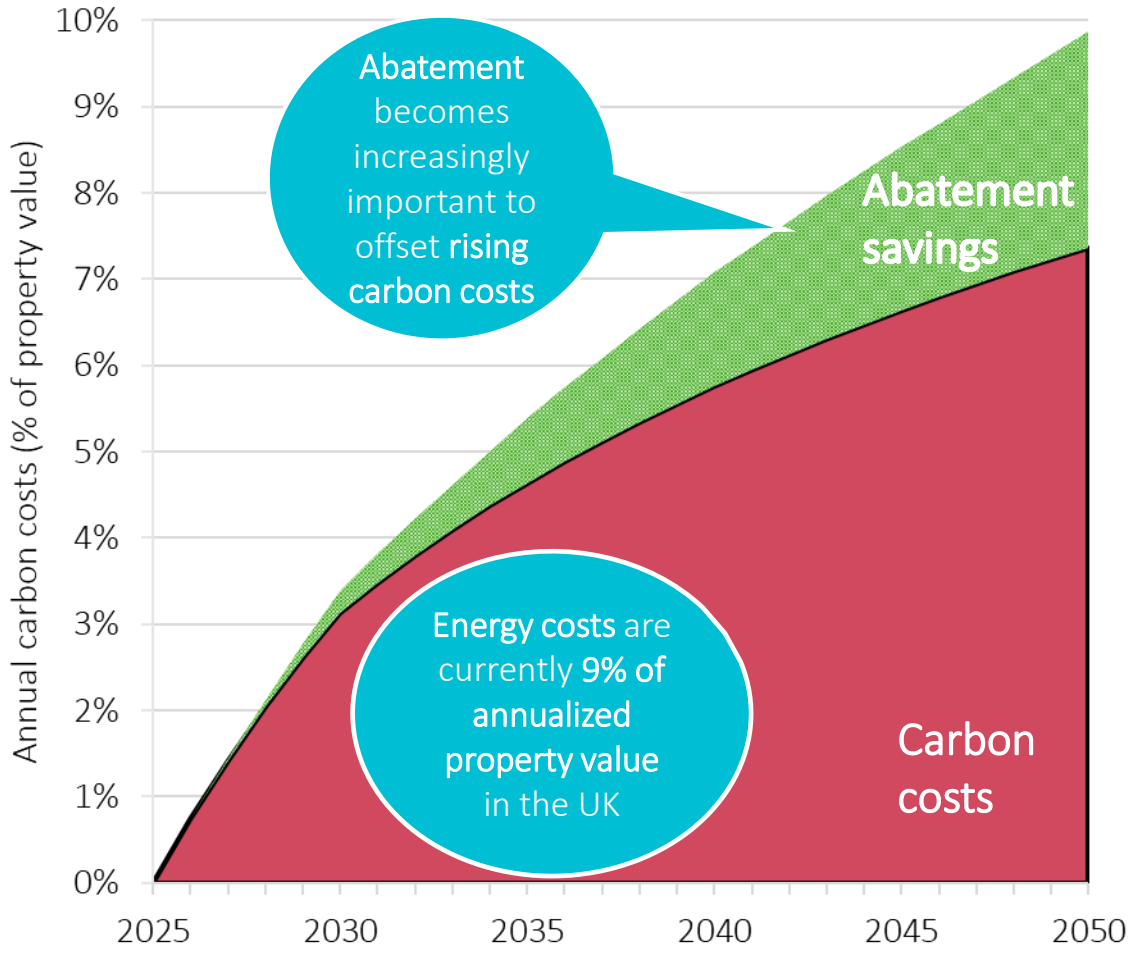
Due to increasing emissions costs, properties with lower emission intensities will become increasingly attractive for tenants.



INEVITABLE POLICY RESPONSE

* Split incentives refer to the fact that benefits from energy efficiency measures don't accrue solely to the implementor but are split amongst owners and tenants, leading to under-investment in rental properties.

Low-emission properties become increasingly attractive under the FPS as carbon pricing increases energy bills



As energy costs rise, differentiating factors will become increasingly important for individual investors. Factors which will affect property level impacts include:

- Physical characteristics: e.g. age, location, energy consumption by source, historic energy efficiency refurbishment expenditure*
- Sensitivity of demand to price changes (by building type)
- Building-level market value (current), discount rates used in current valuations

INEVITABLE POLICY RESPONSE

Note: figures assume constant scope 2 emissions intensity – any reduction in scope 2 emissions intensity will reduce carbon costs.
*If none of the above: average CO_2 emissions (by building type)

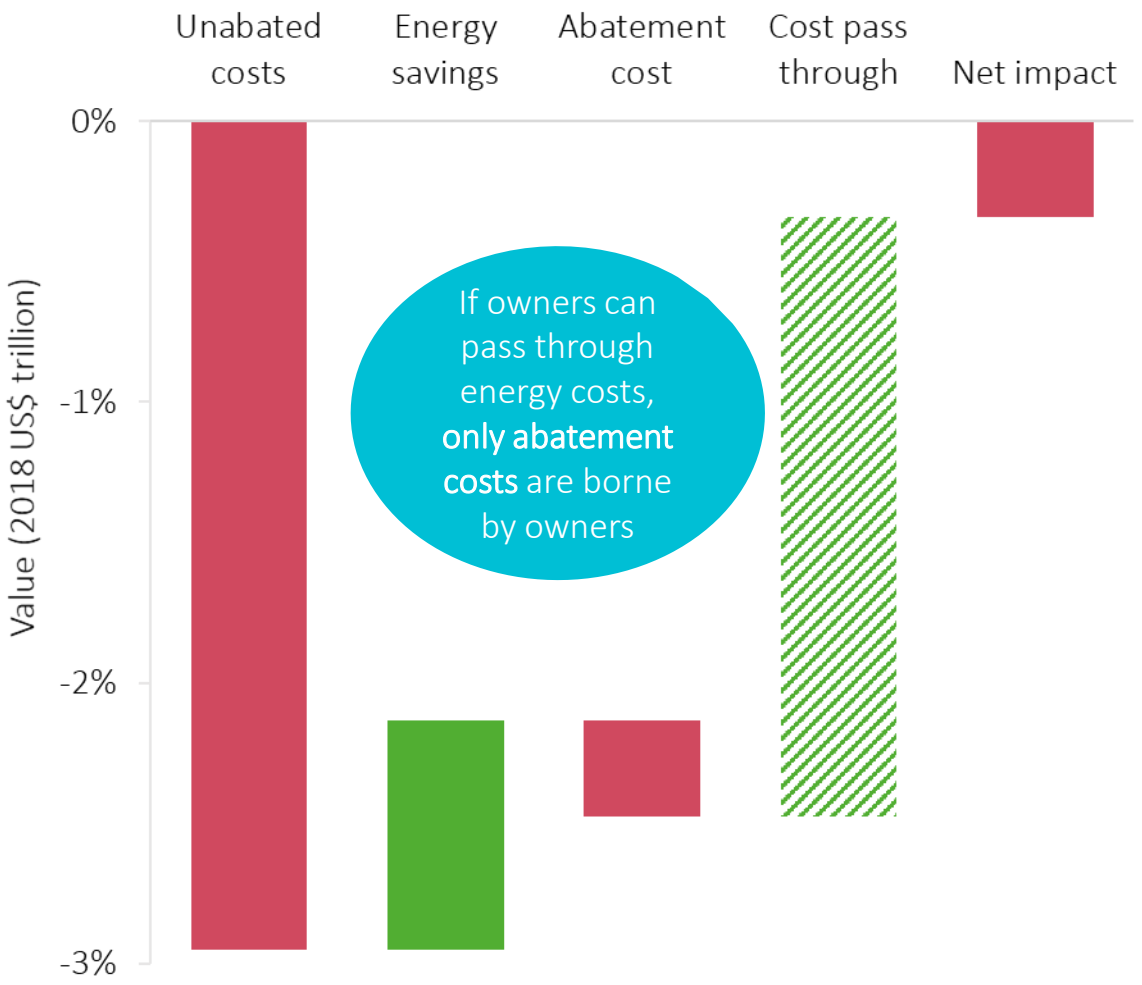
Cost pass through to tenants has the potential to reduce value impairments but depend on the regulatory and market context

These results assume that owners face 100% of the cost burden. If some of these costs is passed on to tenants, value impairments will be reduced.

The figure illustrates the scenario where energy costs are passed through to tenants completely, with owners bearing only the abatement costs. In this case valuation impairment is 0.3%, down from 2.5% without pass through.*

The extent of cost pass through depends on factors such as:

1) **Cost incidence –** typically tenants bear energy costs, while owners face refurbishment costs. Deviations will affect where the initial burden is placed.
2) **Regulation (e.g. rent controls) –** regulation may prevent owners from passing on abatement costs to tenants.
3) **Market dynamics -** the presence of low-carbon buildings will reduce the ability of other buildings to increase their costs.



INEVITABLE POLICY RESPONSE

*Note this implies a cost-pass through of 86%, consistent with the sectoral average of equity results (85%).

Infrastructure

INEVITABLE POLICY RESPONSE

Key Findings: Large parts of global infrastructure is built for the high carbon economy and therefore exposed to the FPS

The iShares Global Infrastructure index falls by -11% , which is significantly larger than the impact to listed equity of -3.1%
Infrastructure assets are typically investor specific but broad exposure can be understood through proxy infrastructure equity indices

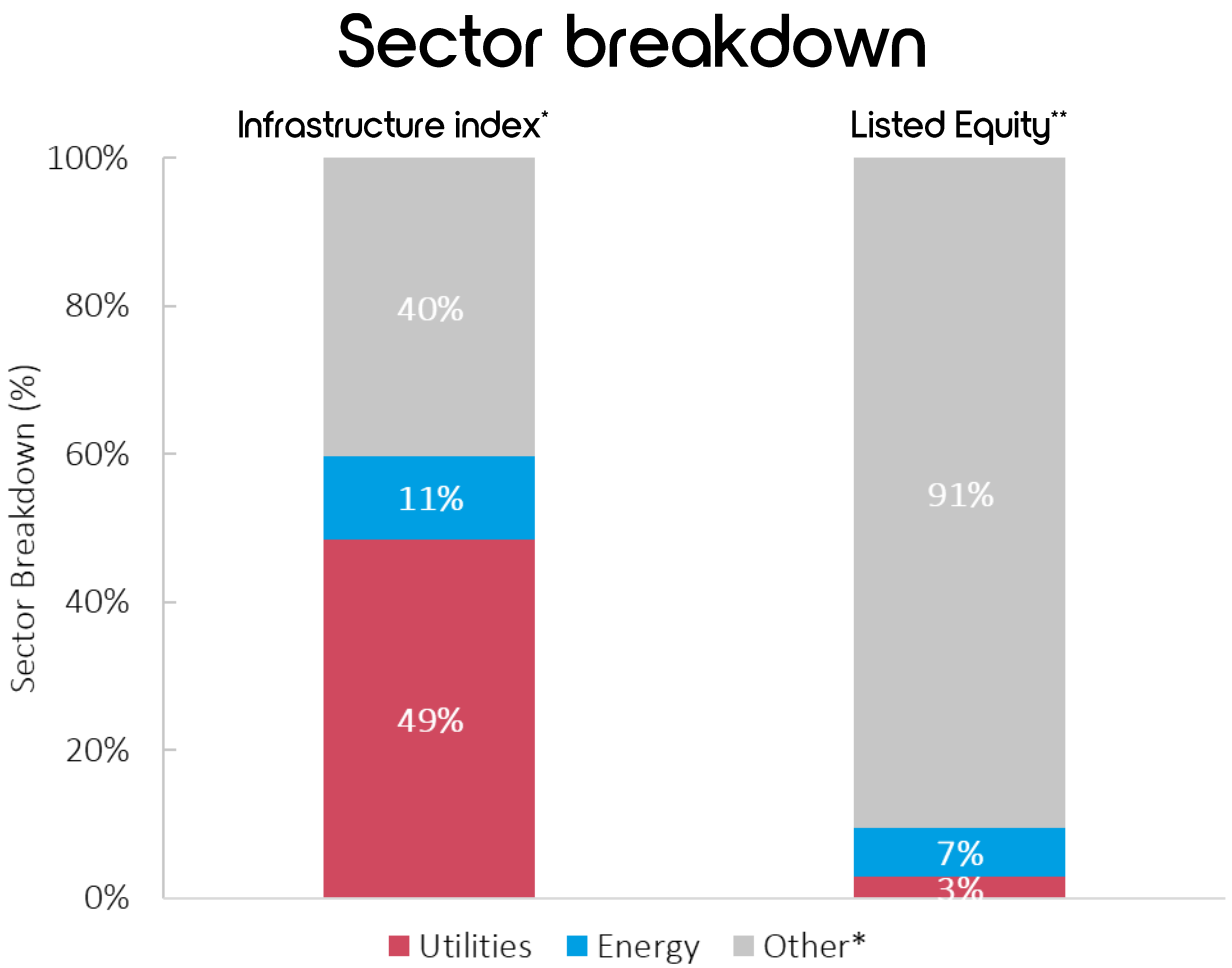
Infrastructure impacts are large as the asset class is **more exposed to sectors that are significantly impacted from the FPS**, for example Utilities (-14%) and Energy (-29%). However cleaner infrastructure assets provide potentially large opportunities for targeted investors.

Investor implications

Large potential benefits by tilting to cleaner infrastructure. There is also need for **increased due diligence** on existing holdings particularly within sectors that are exposed to the FPS, for example Energy.

INEVITABLE POLICY RESPONSE

Infrastructure, as proxied by the iShares Global Infrastructure Index, is significantly more exposed to Utilities and Energy than listed equity overall



Infrastructure is an asset class that is owner specific there is there is limited data available

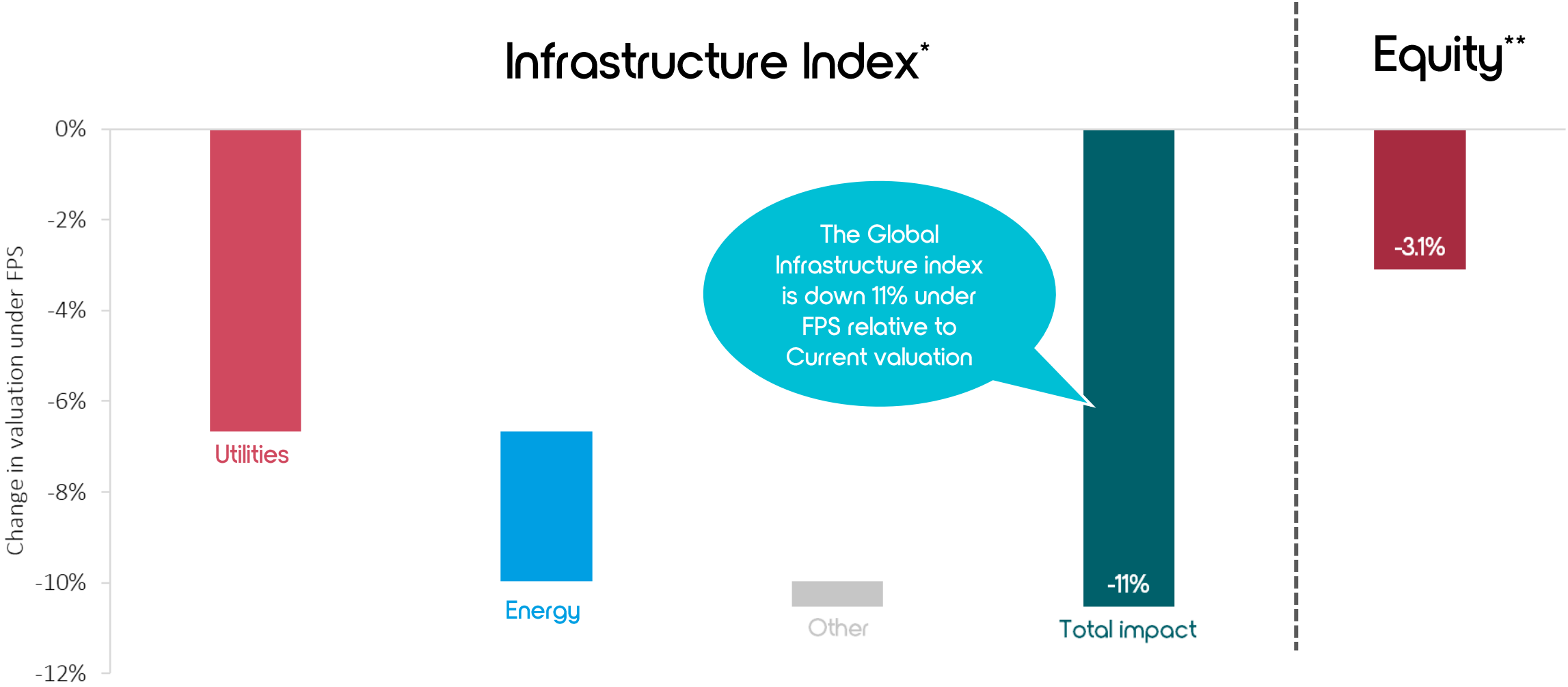
This analysis makes use of the iShares Global Infrastructure index, which tracks the performance of global listed infrastructure companies

The Global Infrastructure index is significantly more exposed to utilities and the energy sectors than the MSCI ACWI equity index

INEVITABLE POLICY RESPONSE

Infrastructure based on the iShares MSCI infrastructure index**listed equity based on MSCI ACWI ETF
Other*: Includes other RBICS level 1 sectors i.e. Consumer services, Finance, Industrials, Telecommunications, Business Services, Consumer Cyclicals, Healthcare, Non-Energy Materials, Consumer Non-Cyclicals, Technology
Source: Vivid Economics (Net-Zero Toolkit)

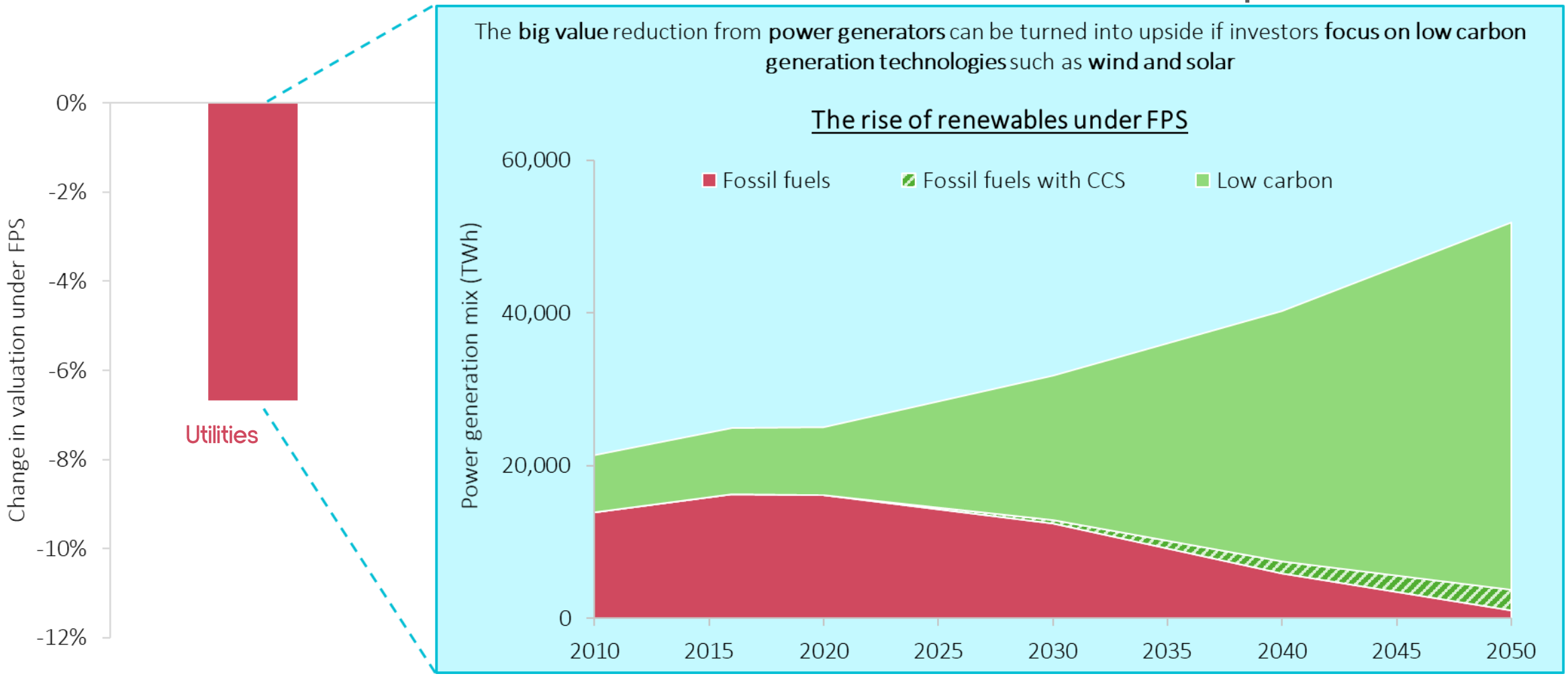
Awareness of risks posed by emissions-intensive utilities and energy companies in infrastructure portfolios is key, as current portfolios may contain high exposure



INEVITABLE POLICY RESPONSE

Infrastructure based on the iShares Global Infrastructure UCITS ETF; **Listed equity based on the iShares MSCI ACWI UCITS ETF
Other: includes roads, airports, rail, ports etc.

Investors who transition to low-carbon infrastructure such as renewable generation assets could turn downside into significant upside under the FPS



Infrastructure based on the iShares MSCI infrastructure index**listed equity based on MSCI ACWI ETF
Other: includes roads, airports, rail, ports etc.

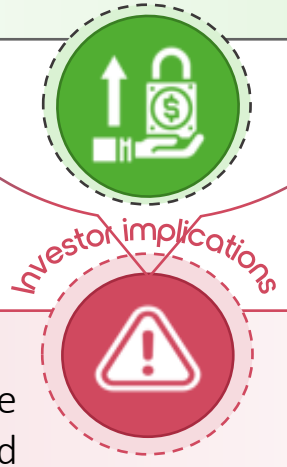
Private Equity

INEVITABLE POLICY RESPONSE

Key Findings: Private equity is likely to capture more green upside through smaller cleantech companies

The impact to a proxy **private equity portfolio based on a representative portfolio of small and mid-cap** listed equities **is -0.7%** which is smaller than the impact to listed equity of -3.1%
Private equity assets are investor specific but broad exposure can be understood through the use of small and mid-caps as proxies

Private equity impacts are **relatively small at the asset class level**. The **asset class is more exposed to cleantech companies in the industrials sector (relative to MSCI ACWI),** which shows modest gains these are cancelled out by losses in energy.



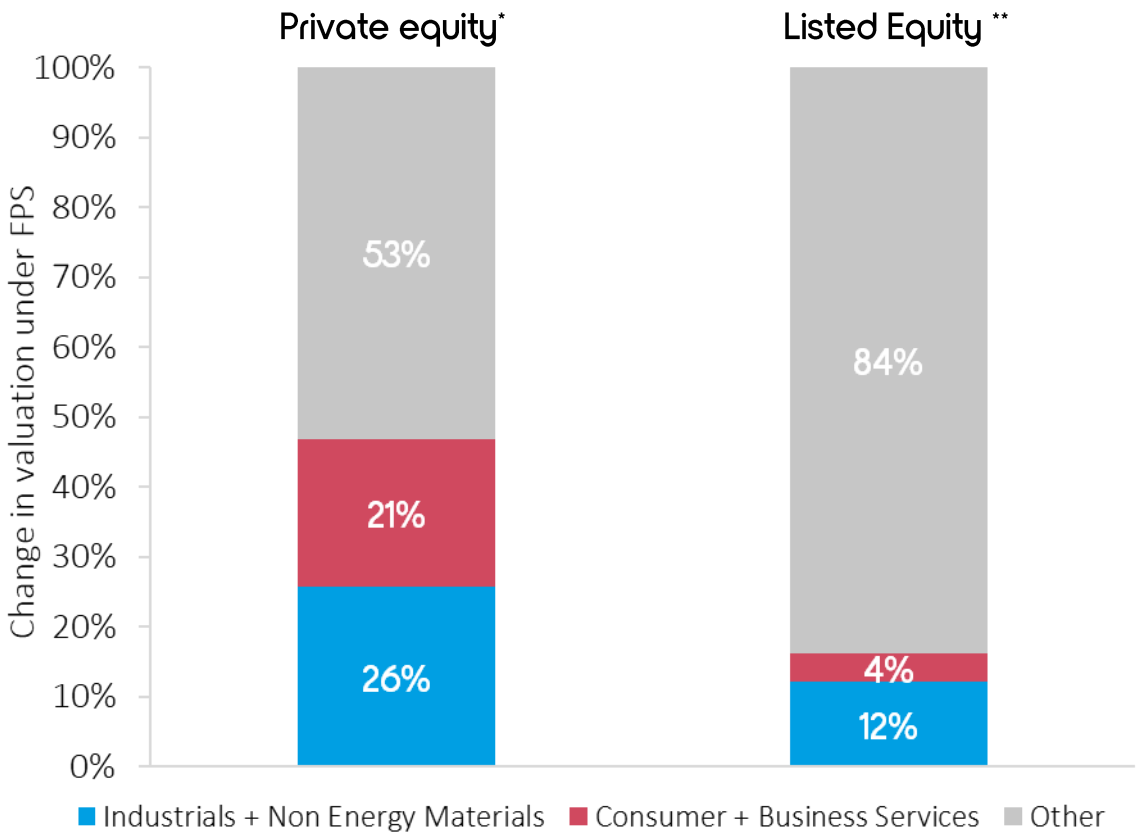
Large potential upside by investing in growing cleantech companies that have not matured to listed indexes that tend to contain more established firms.

Investors also need to be cautious of "dirty" energy firms in the sector which experience losses.

INEVITABLE POLICY RESPONSE

Private equity investment is disproportionately higher in industrial sectors which are more likely to benefit from cleantech growth, leading to a small overall impact

Sector breakdown



As private equity is owner specific, there is limited data available.

This analysis **constructs a private equity portfolio based on a representative portfolio of small and mid-cap** listed equities, with firm size and sector exposure based on the average private equity holdings***

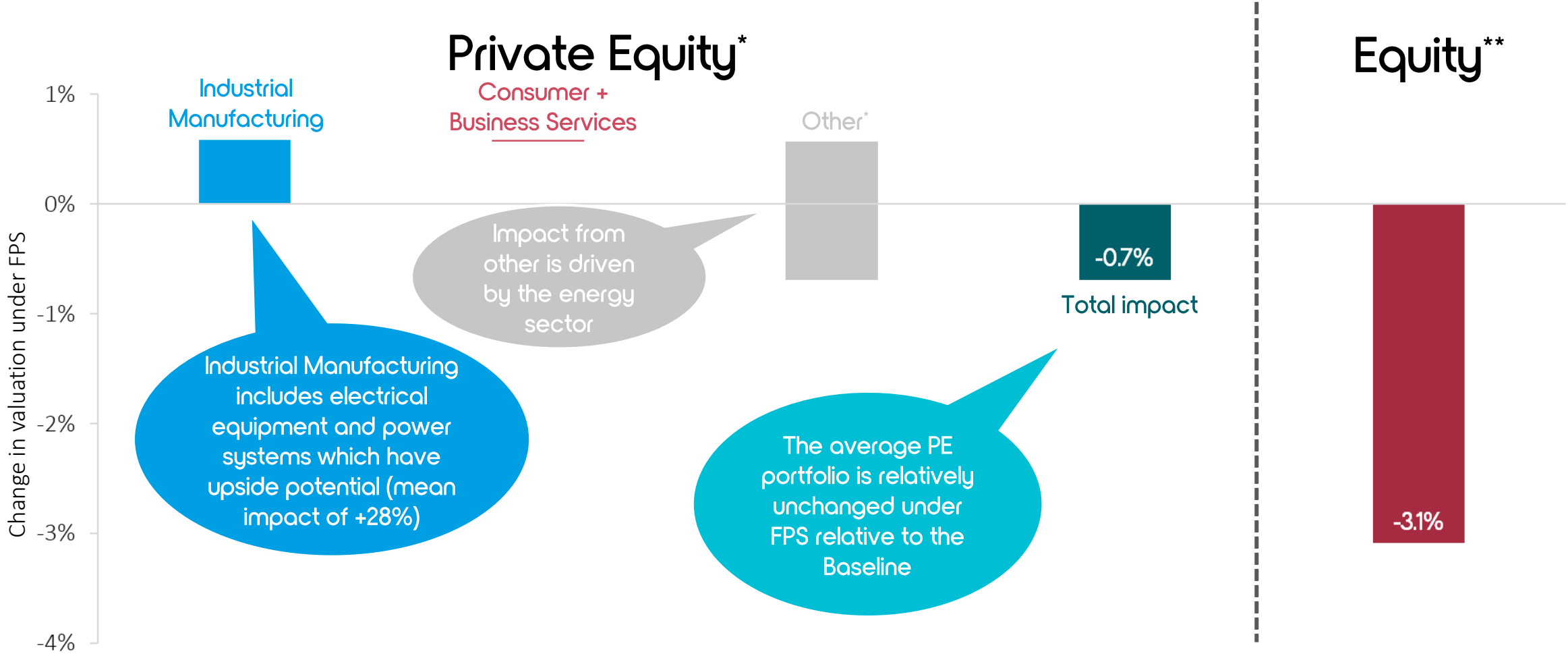
The private equity portfolio **is more exposed to smaller cleantech companies'** in the industrials sector. **Private equity is also more exposed to "cleaner" sectors** for example consumer and business services (10%), relative to listed equity

INEVITABLE POLICY RESPONSE

Other* includes technology, healthcare, consumer products, business services, financial services, leisure services, real estate, transport, construction, defence and agriculture

Notes: **listed equity based on MSCI ACWI ETF *PE portfolio based on a representative portfolio of small and mid-cap listed equities, with firm size and sector exposure based on https://www.pwc.de/en/private-equity/private-equity-trend-report-2020.html

Private equity investors can turn risks into opportunity by focusing on growing cleantech companies that have not yet matured to listed indexes



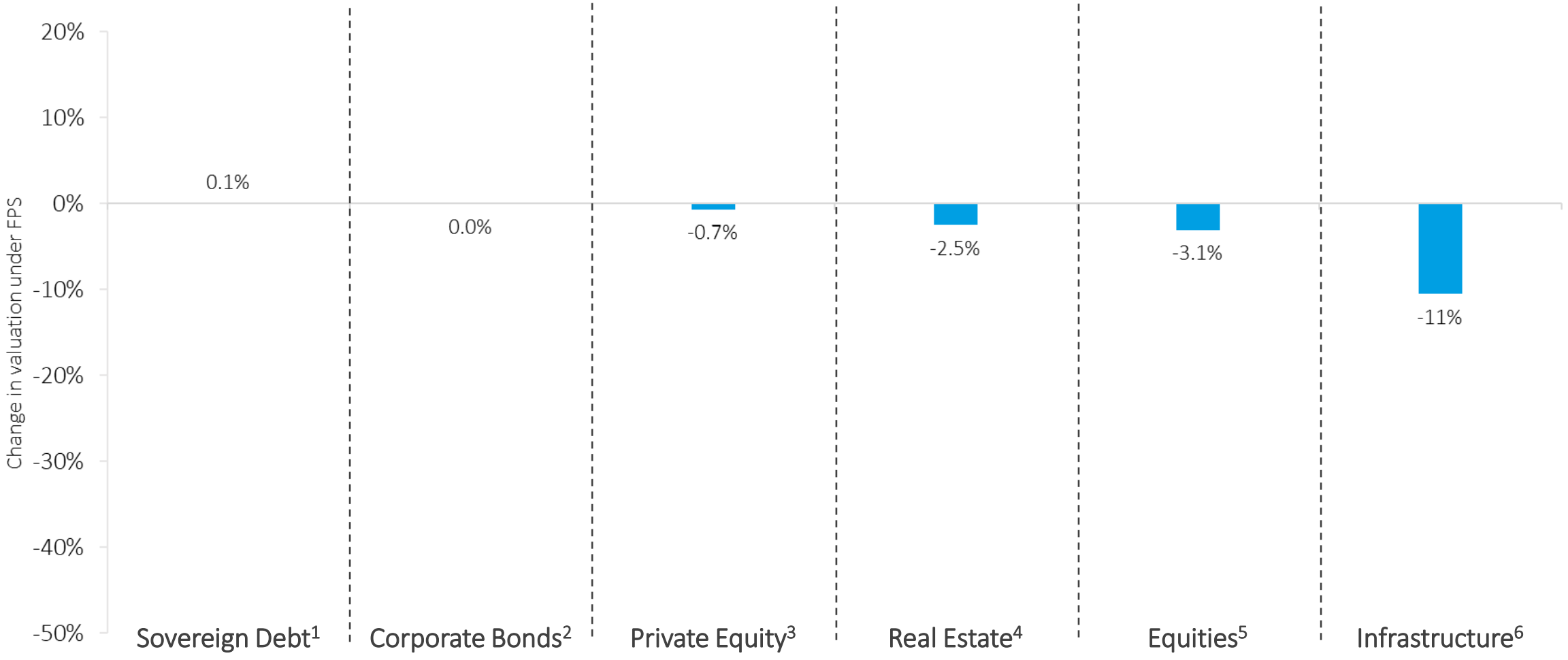
INEVITABLE POLICY RESPONSE

Notes:*PE portfolio based on a representative portfolio of listed equities, with firm size and sector exposure based on https://www.pwc.de/en/private-equity/private-equity-trend-report-2020.html
Other* includes Energy , Finance, Healthcare, Consumer non-cyclicals, Technology, Telecommunications, Utilities Equity** based on MSCI ACWI ETF

Strategic Asset Allocation (Vivid Economics)

INEVITABLE POLICY RESPONSE

Strategic Asset Allocation: Investors can reduce exposure by focusing on safer bond investments

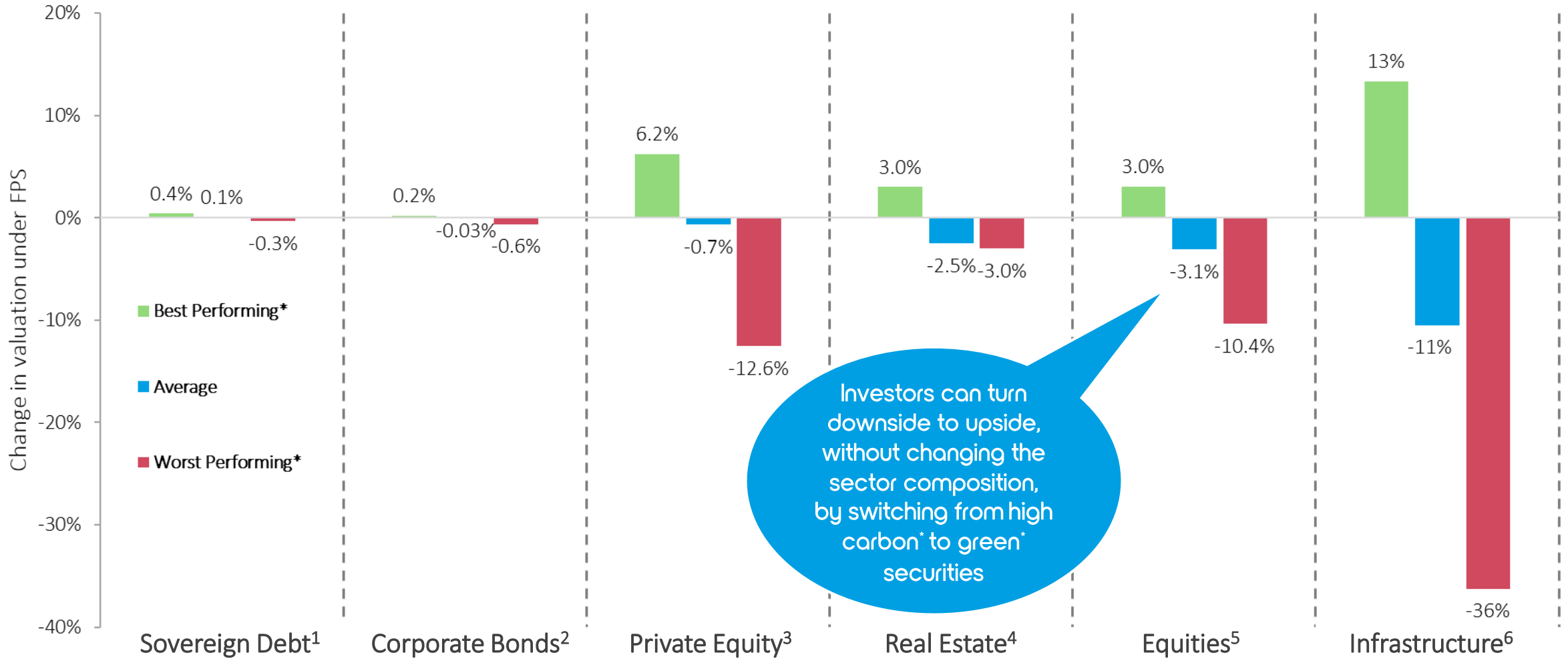


INEVITABLE POLICY RESPONSE

1 Sovereign Debt: USD 6-year (average tenor for USD debt), 2) Corporate Bonds based on bonds issued by companies within the iShares MSCI ACWI ETF, 3) Private Equity details on portfolio in PE slide, 4) Real Estate details on portfolio in Real estate section, 5) Equities is based on the MSCI ACWI ETF , 6) Infrastructure is based on iShares MSCI Infrastructure index

Source: Vivid Economics (Net-Zero Toolkit)

Strategic Asset Allocation: However, the big opportunities are by tilting portfolios towards greener options within asset classes – especially in green infrastructure



INEVITABLE POLICY RESPONSE

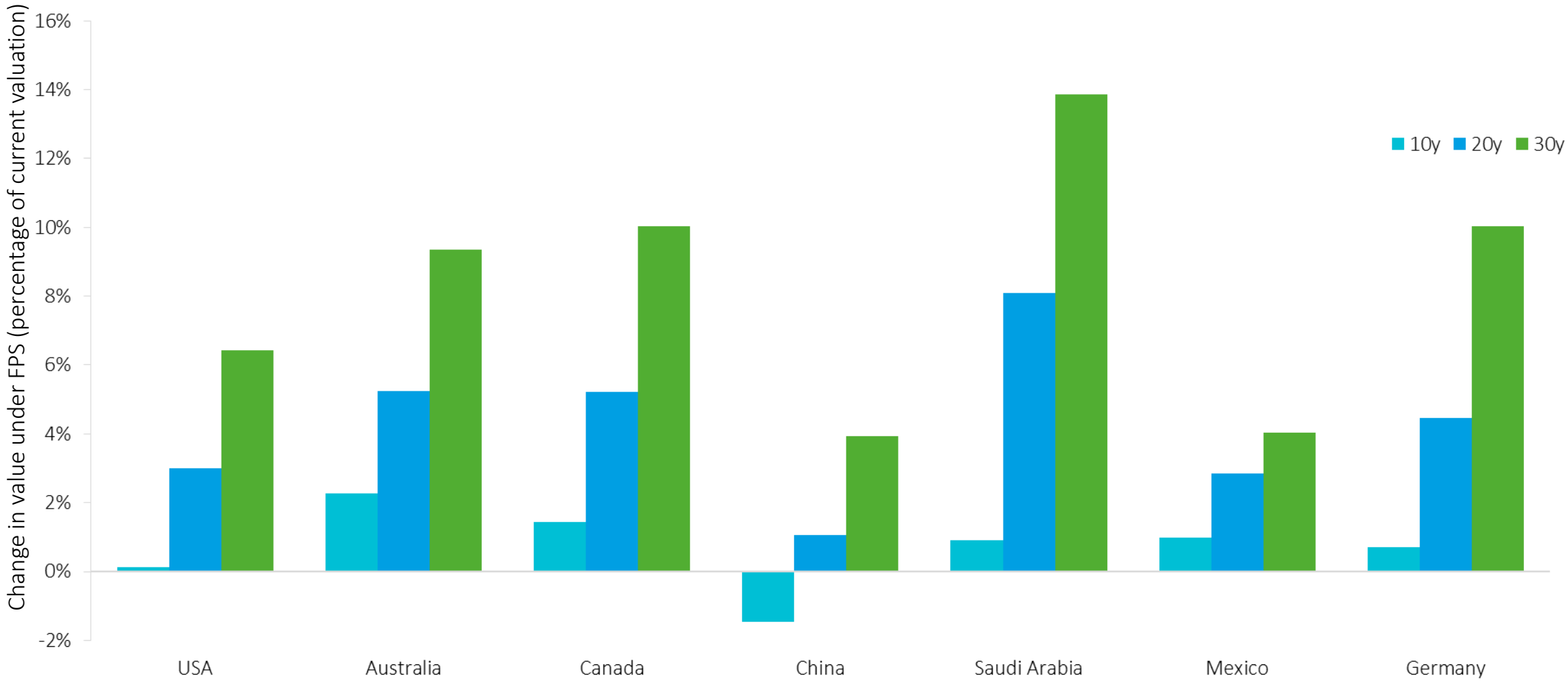
Green* and high carbon* indices for Corporate Bonds, Private equity, Read Estate, Equities, and Infrastructure are constructed by applying sector weights to the 90th and 10th percentile of companies (in terms of valuation change in FPS). Sovereign debt Green / high carbon impacts are from 10Y debt from Canada and the Netherlands. Real Estate Green assumes carbon neutral building with no carbon costs, whereas high carbon is average buildings with no abatement.

Legal disclaimer

The information contained in this report is meant for the purposes of information only and is not intended to be investment, legal, tax or other advice, nor is it intended to be relied upon in making an investment or other decision. This report is provided with the understanding that the authors and publishers are not providing advice on legal, economic, investment or other professional issues and services. Unless expressly stated otherwise, the opinions, recommendations, findings, interpretations and conclusions expressed in this report are those of the various contributors to the report and do not necessarily represent the views of PRI Association or the signatories to the Principles for Responsible Investment. The inclusion of company examples does not in any way constitute an endorsement of these organisations by PRI Association or the signatories to the Principles for Responsible Investment. While we have endeavoured to ensure that the information contained in this report has been obtained from reliable and up-to-date sources, the changing nature of statistics, laws, rules and regulations may result in delays, omissions or inaccuracies in information contained in this report. PRI Association is not responsible for any errors or omissions, or for any decision made or action taken based on information contained in this report or for any loss or damage arising from or caused by such decision or action. All information in this report is provided “as-is”, with no guarantee of completeness, accuracy, timeliness or of the results obtained from the use of this information, and without warranty of any kind, expressed or implied.

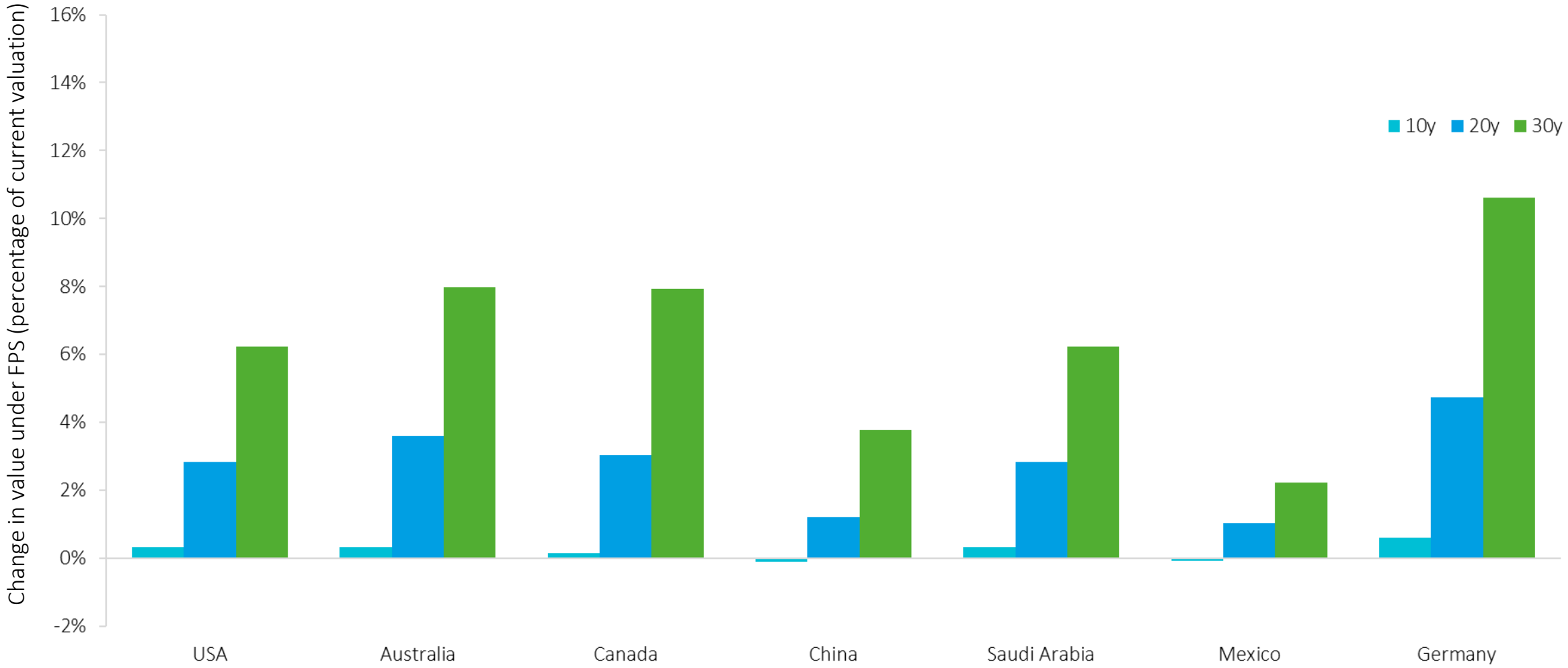
Vivid Economics and Energy Transition Advisors are not investment advisers and makes no representation regarding the advisability of investing in any particular company, investment fund or other vehicle. The information contained in this research report does not constitute an offer to sell securities or the solicitation of an offer to buy, or recommendation for investment in, any securities within the United States or any other jurisdiction. This research report provides general information only. The information is not intended as financial advice, and decisions to invest should not be made in reliance on any of the statements set forth in this document. Vivid Economics and Energy Transition Advisors shall not be liable for any claims or losses of any nature in connection with information contained in this document, including but not limited to, lost profits or punitive or consequential damages. The information and opinions in this report constitute a judgement as at the date indicated and are subject to change without notice. The information may therefore not be accurate or current. The information and opinions contained in this report have been compiled or arrived at from sources believed to be reliable in good faith, but no representation or warranty, express or implied, is made by Vivid Economics or Energy Transition Advisors as to their accuracy, completeness or correctness and Vivid Economics and Energy Transition Advisors do also not warrant that the information is up to date.

Appendix: sovereign bond price change from change in real interest rates



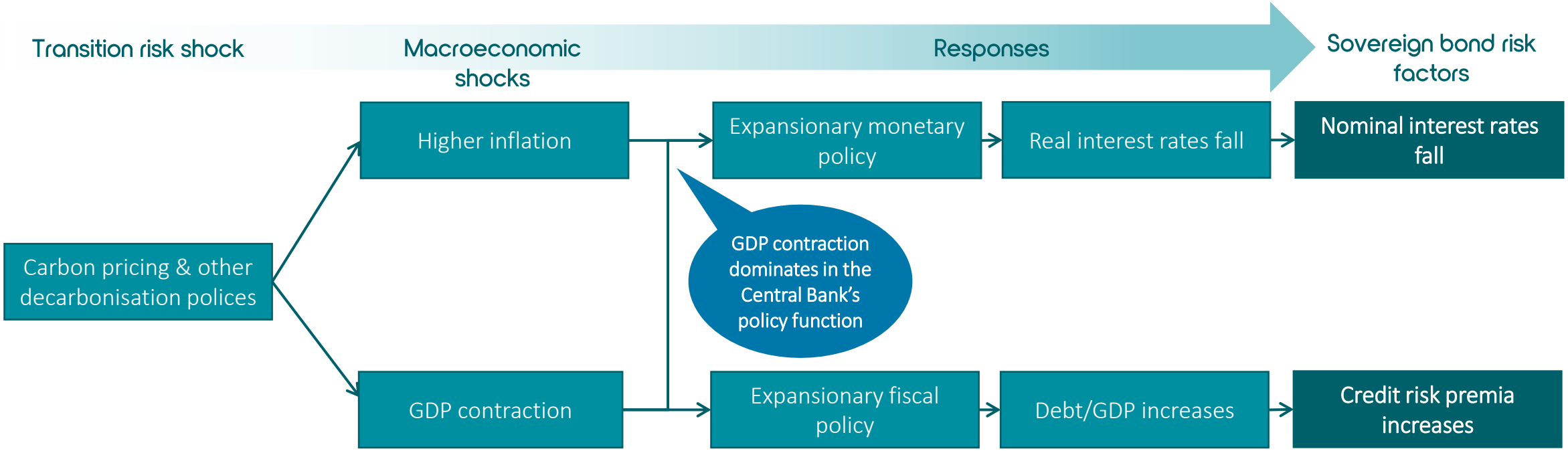
INEVITABLE POLICY RESPONSE

Appendix: sovereign bond price change from change in nominal interest rates



INEVITABLE POLICY RESPONSE

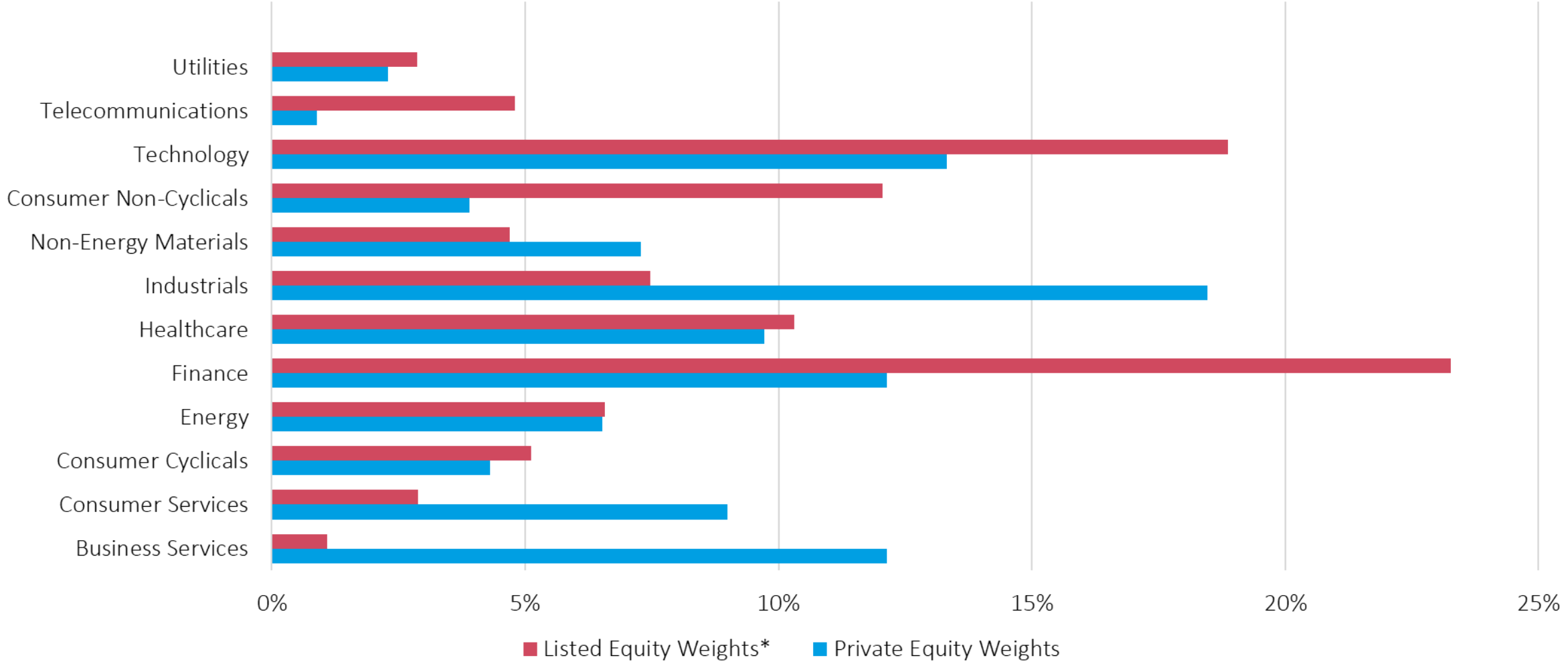
The sovereign bond methodology captures the dynamics of transition, by modelling changes bond risk factors through changes in macroeconomic variables and policy



- **The Taylor rule in the macroeconomic model (G-Cubed)** used in this analysis leads to lower interest rates as central banks optimise over lower output vs higher inflation, induced by carbon pricing policies.
- **The diagram above depicts the *generic* impacts of the FPS on sovereign bond risk factors, but these vary by country.**
  - ◊ Current macroeconomic conditions and FPS impacts differ by country, therefore policy response (fiscal and monetary) differ by country as well.

INEVITABLE POLICY RESPONSE

Private equity is disproportionately in industrial sectors which are more likely to benefit from cleantech growth, leading to a positive impact overall



Notes:*Listed equity weights are based on MSCI ACWI ETF
Sector level granularity is RBICS Level 1