

BAI-Webinar „Timberland and Farmland – Alternative and Sustainable Investment Choices“

Speakers:

Hancock Natural Resource Group – a Manulife Investment Management Company:

Keith Balter: Managing Director, Head of Economic Research

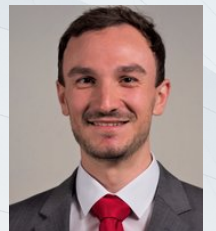
Michael Strzelecki, CFA: Managing Director, Senior Portfolio Manager

June 22, 2021

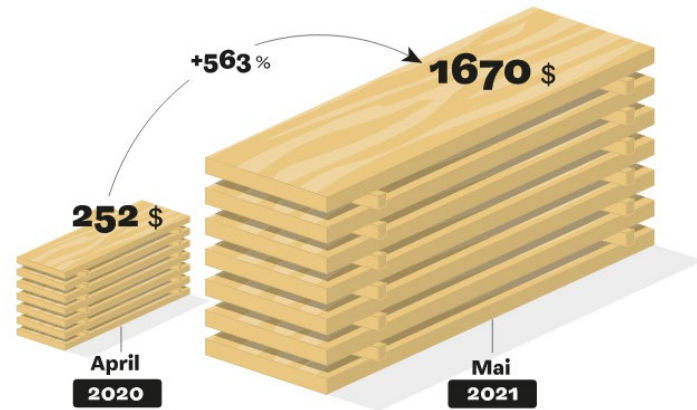
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What's moving markets?



36 000 \$

mehr als vor einem Jahr kostet der Bau eines durchschnittlichen Einfamilienhauses in den USA allein wegen des Preisanstiegs für Bauholz.



Survey (1/2)

Are you invested in Timberland and/or Farmland?

0 2 2

A. Yes

18 %

B. No

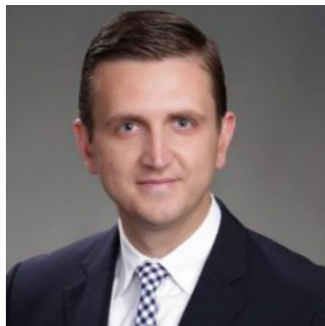
82 %

Manulife Asset Management™



Keith Balter is responsible for the market analysis supporting investment and operational planning and decision making for the Hancock Natural Resource Group (HNRG), a Manulife Investment Management Company.

Keith's team maintains informational databases and produces analytical studies and publications addressing trends in timber and agricultural commodity markets as well as the role of timberlands and farmlands in institutional investment. Before joining HNRG in 2012, Keith was Senior Economist with Forest Capital Partners LLC, a company investing and managing commercial timberland for institutional investors, where he was responsible for market analysis, business development and investor support. Prior to his time at Forest Capital Partners, Keith was a principal at RISI, a provider of information services and analysis to the global forest products sector. Keith holds an MFS in Forest Economics from Yale, and an MBA from the University of Chicago.



Michael Strzelecki is responsible for business development activities, specifically focused on capital formation for Hancock Natural Resource Group (HNRG), a Manulife Investment Management Company, across North America, South America and Europe.

In addition, he manages a number of investment portfolios and large institutional client relationships. Prior to joining HNRG in 2017, Michael worked at Global Forest Partners, where he was directly involved in portfolio management, valuation analysis, and investment research. Before GFP, Michael was an equity research analyst at Merrill Lynch, covering the forest products sector. He holds a B.S. in Finance from the Pennsylvania State University and is a CFA® charterholder.

Timberland & Farmland – Alternative and Sustainable Investment Choices

Hancock Natural Resource Group (HNRG), a Manulife
Investment Management Company

Keith Balter
Michael Strzelecki

June 2021

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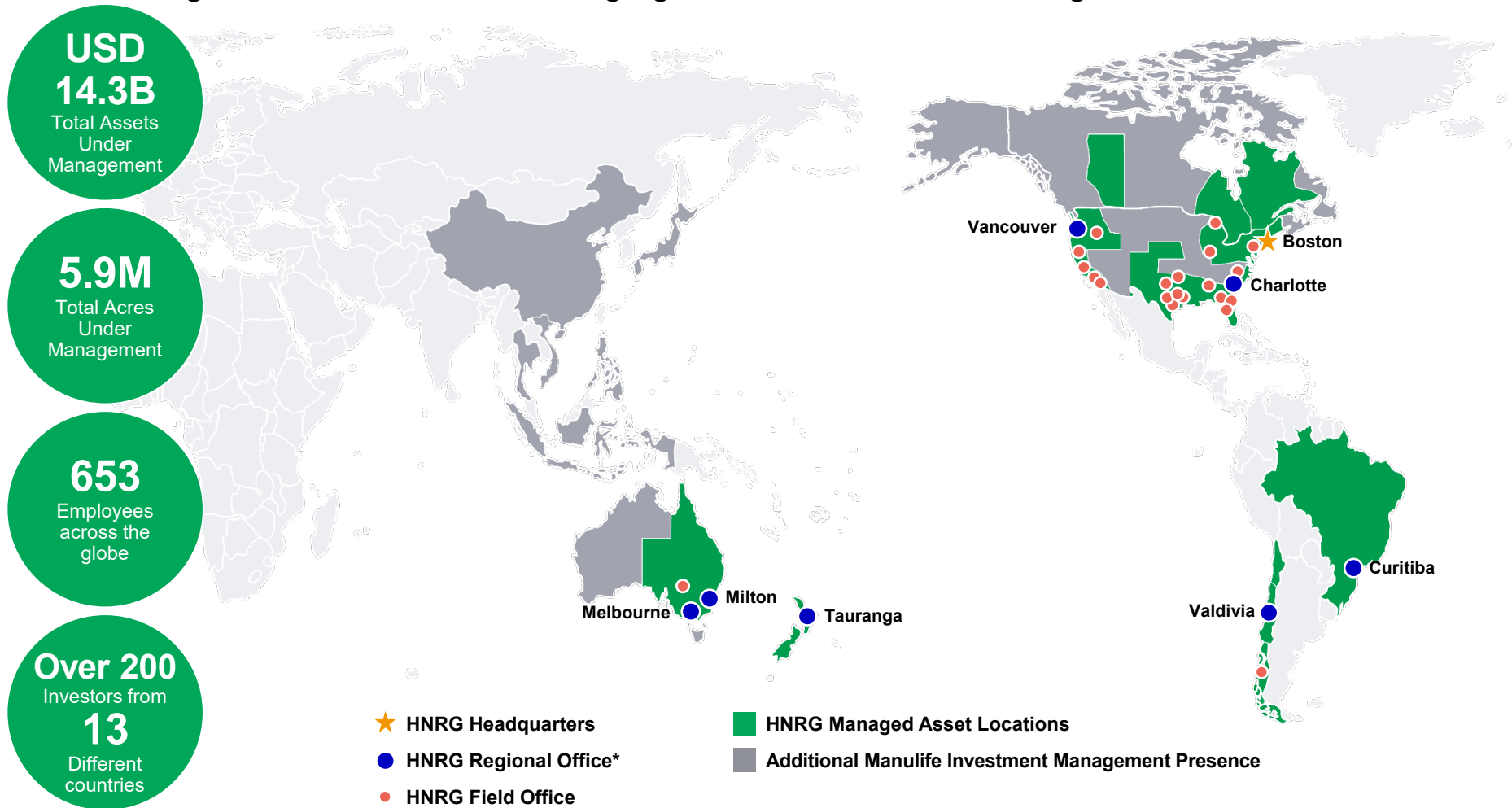
Agenda

- Attributes of the asset classes
- Sustainability & climate benefits
- Resilience during COVID-19
- Current market environment and outlook



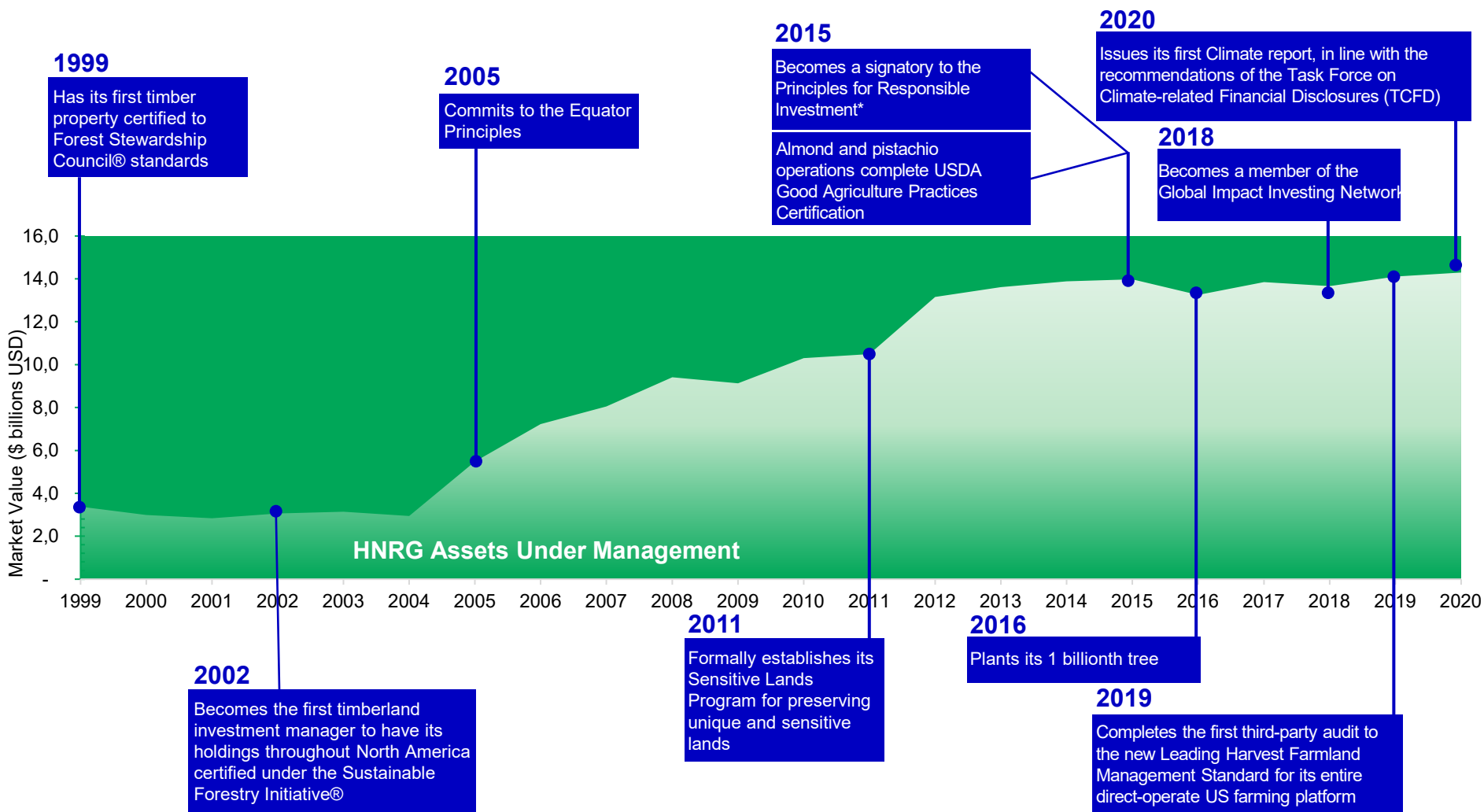
Global, Integrated, Sustainable Timber & Agriculture Investments

Hancock Natural Resource Group, a Manulife Investment Management company, is the world's largest timberland¹ and leading agriculture investment manager



Long History of Stewardship, Sustainability & Responsible Investing

Sustainability & stewardship have been essential strategies to maximize value since inception

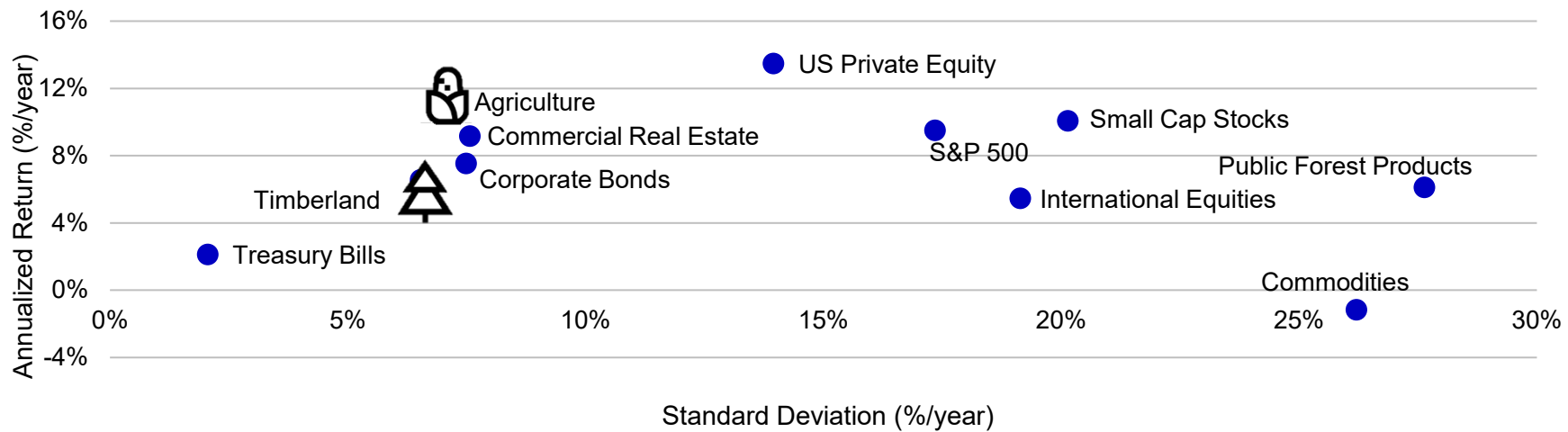


Attributes of Timberland and Farmland

Why Timberland and Farmland?

Investments in timberland and farmland have historically experienced low volatility and attractive risk adjusted returns

U.S. Historical Return and Standard Deviation (1996-2020)



Attractive Risk/Return Characteristics

May provide stable total returns and moderate unlevered income with relatively low volatility

Favorable Market Fundamentals

Increasing consumption trends via global population and income growth

Create Long-Term Value

Long-lived assets with appreciation potential can match long-term investment horizons and provide current income

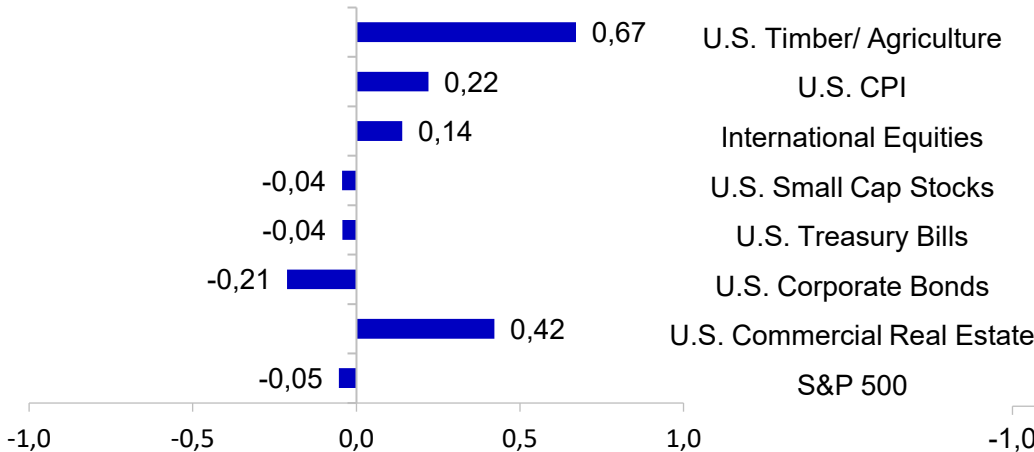
Can Deliver Performance Sustainably

Sustainability and responsible investing can enhance value and deliver market rate returns

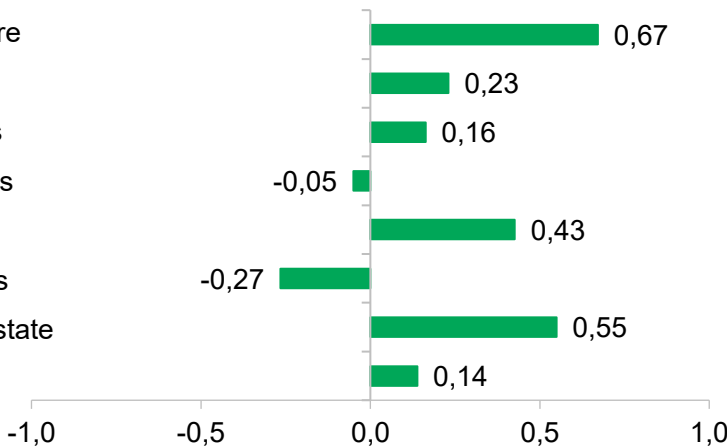
Why Timberland and Farmland?

Low correlation with traditional assets and moderate inflation protection in an institutional portfolio

Historical USD Correlations with Agriculture (1996-2020)



Historical USD Correlations with Timber (1996-2020)



Can Provide Diversification Benefits to a Portfolio Generally uncorrelated with major asset classes	May Help Preserve Value in a Portfolio May provide inflation protection, particularly in periods of relatively high inflation	Timber and Agriculture Have Exhibited Moderate Correlation Lack of complete correlation can provide additional diversification benefits and an expanded opportunity set within a portfolio
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Attractive Nominal Total Returns

Acquire and manage timber and agriculture investments to maximize risk-adjusted total return, generate income, preserve capital investment and realize long-term appreciation

Appreciation

Real crop and timber price changes

Biological growth

Gains in productivity

Change in land values

Current Income

Rental income from land leases

Revenue from crop and timber sales

Carbon and/or wetland mitigation banking credits

Realizing conservation or higher and better use values

Expected Nominal Total Returns



**Permanent
crops**

9-11%



**Row
crops**

6-10%



Timber 6-10%

For illustrative purposes only. Forecasts are not meant as predictions for any particular asset class, fund or investment vehicle. All expected returns refer to a five+ year horizon and are presented on a nominal basis, unlevered, gross of investment management fees and do not guarantee future results. Actual returns may vary. Potential for profit as well as for loss exists.

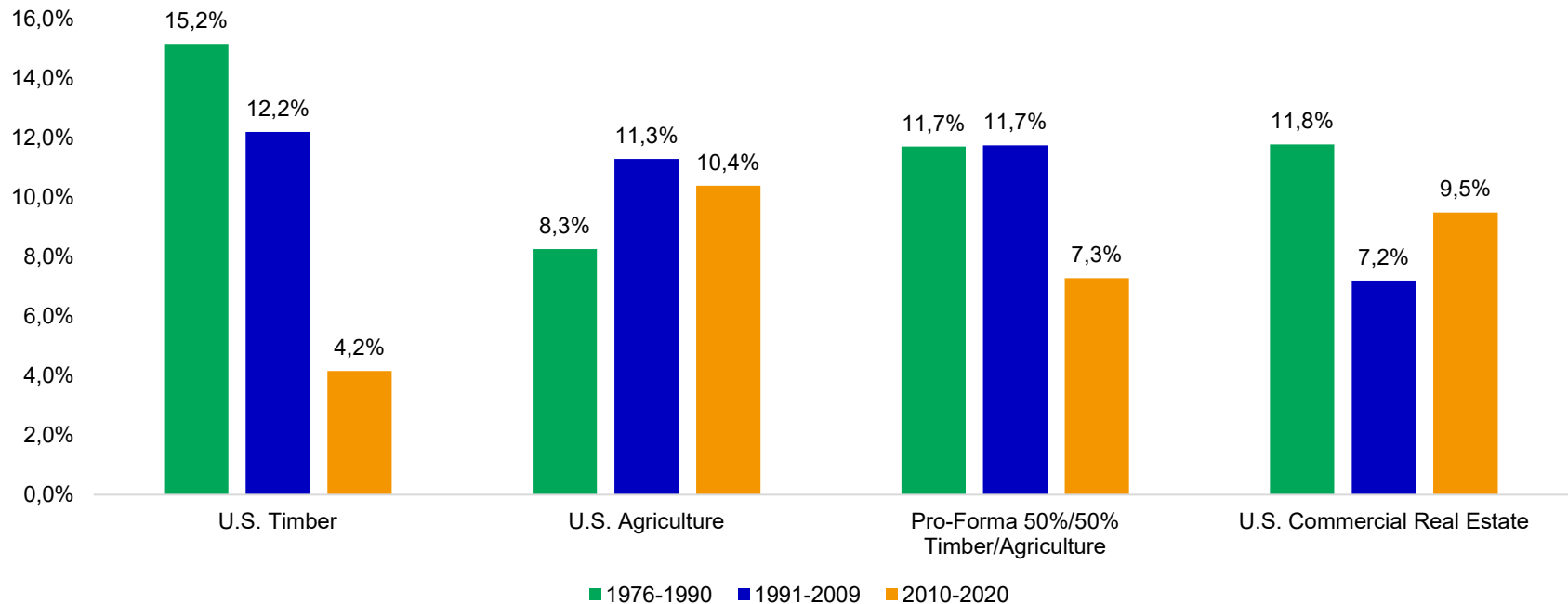
Source: Forecast from HNRG Research as of December 2020

A Hypothetical Combined Timberland and Farmland Portfolio Has Shown Consistent Return Performance Between 7-11% Over Long Periods of Time

Timberland and farmland tend to perform differently under specific economic and policy conditions

Offsetting each other's weak performance periods, the simulated blended portfolio produced an average total return over the three periods of 10.6%

U.S. Real Assets Average Historical Returns



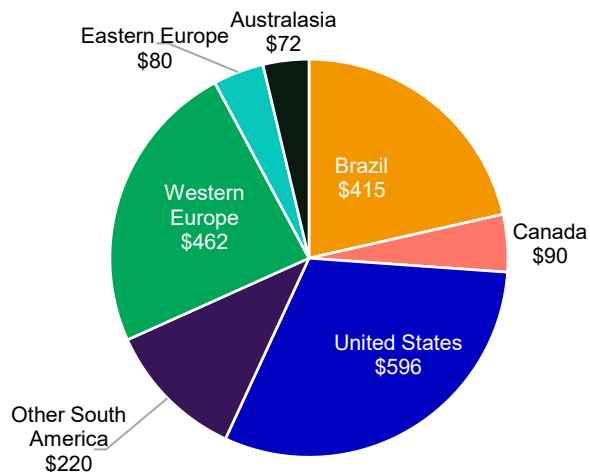
The simulation above is theoretical and presented for informational purposes only. The results above are not based on the performance of actual portfolios and do not represent returns any investor actually attained. Simulated performance is not an indicator of future actual results. Index data may be indicative of a broad asset class' historical performance but is not representative of the investment team's methodology or performance.

Source: Historical annual total return performance for private farmland, timberland and commercial real estate is sourced from the NCREIF property-level indices for U.S. commercial real estate, U.S. farmland, and U.S. timberland. Historical timberland performance from 1976 to 1986 is sourced from the Hancock Timber Resource Group ("HTRG") synthetic indices Hancock Timber Index. Historical farmland performance from 1976 to 1986 is constructed and sourced from Morningstar/Ibbotson Associates.

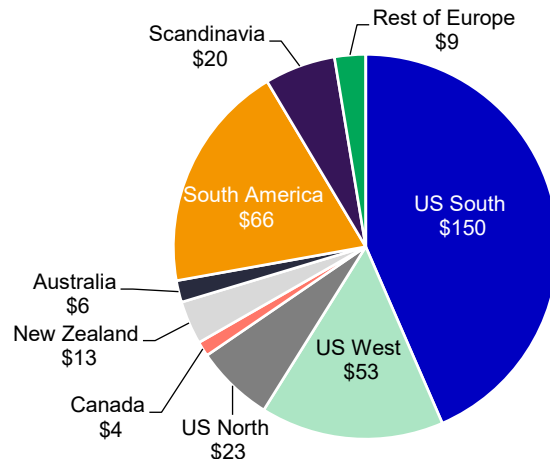
Pro forma Farmland/Timberland performance is based on aggregate farmland and aggregate timberland assets each representing 50% of the combined portfolio during the entire reported period, and it does not include any allocation for "plus" investment-type assets.

An Integrated Timberland and Farmland Investment Strategy Expands the Institutional Investable Universe

**Market Value of Investable Core Farmland
USD1,936 B¹**



**Market Value of Investable Core Timberland
USD344 B²**



- A combined global investment approach allows greater flexibility in investing capital by taking advantage of differences in regional market dynamics
- Regional overlap between the investable universes for timberland and farmland may promote greater regional scale, operational, administrative and governance efficiencies
- Uncorrelated markets in expanded investable universe may provide diversification benefits

¹ Sources: HNRG Research as of March 2021 United States: Agriculture Census 2017, USDA Land Values 2020, NCREIF 2020, Canada: Agriculture Census 2016, 2018 Statistics Canada, Australia: ABARES, HNRG 2018, Western and Eastern Europe: Agriculture Census 2017, Eurostat 2019, Brazil: Agriculture Census 2017, Secretary of Agriculture and Supply 2020, Argentina Agriculture Census 2018, Savills Global Farmland Index, Uruguay: Agriculture Statistics 2020, New Zealand: Agriculture Census 2017, Reinz January 2021, Stats NZ 2017 Chile: Annual Statistics 2019/20, GPS Property 2019, HAIG 2020, ODEPA 2019/2020

Australasia includes: Australia, New Zealand; Other South America includes: Argentina, Chile, Uruguay; Western Europe includes: Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom; Eastern Europe includes: Bulgaria, Czech Republic, Poland, Romania

² Source: HNRG Research as of September 2017. "Rest of Europe" includes Baltics, England, Ireland and Poland. "South America" includes Brazil, Chile and Uruguay. "Scandinavia" includes Finland, Sweden and Norway. "U.S. West" includes U.S. West Coast, West Inland and California. "U.S. North" includes U.S. Northeast and U.S. Lake States.

Diversifying Portfolios Can Improve Risk Efficiency








Seek to mitigate risk with an investment strategy focused on building sustainable, diversified portfolios

Risks	Mitigating Factors
Timber and agriculture commodity price volatility	Portfolio diversification, active management
Harvest volume (fire, disease, pest)	Modern silviculture/farming techniques, species and crop type diversification
Property value/liquidity	Disciplined underwriting and comprehensive due diligence
Water availability	Extensive due diligence on water quality and quantity, access to surface and subsurface water, asset selection, geographic diversification
Weather	Diversification, modern silviculture/farming techniques and technology
Credit default/lease collection	Extensive tenant due diligence, required rental pre-payment, letters of credit



Sustainability and Responsible Investing

Managing natural resources allows us to focus on areas where meeting environmental and/or social needs can offer commercial growth opportunities

Products	Process
 <p>Sustainable Food</p> <p>We produce healthy nutritious foods such as nuts, fruit, and vegetables consistent with planetary health¹</p>	<div data-bbox="653 394 1257 586">  <p>Climate Stability</p> <ul style="list-style-type: none"> • Create carbon sequestration opportunities • Invest in renewables and energy efficiency • Sponsor climate change research through MIT² </div> <div data-bbox="1277 394 1856 586">  <p>People Empowerment</p> <ul style="list-style-type: none"> • Create jobs in rural communities • Promote safe and healthy working and living environments • Promote diversity, equity, and inclusion (DE&I) </div>
 <p>Sustainable Fiber</p> <p>We produce sawtimber used in housing and pulpwood used in paper & hygiene products</p>	<div data-bbox="653 701 1257 893">  <p>Ecosystem Resiliency</p> <ul style="list-style-type: none"> • Protect sensitive lands, biodiversity, threatened & endangered species • Create conservation easements • Sponsor working lands conservation organizations </div> <div data-bbox="1277 701 1856 893">  <p>Community Prosperity</p> <ul style="list-style-type: none"> • Promote community engagement through volunteering and matching employee donations • Offer recreational land use • Implement vendor code of conduct and human rights focus </div>
	 <p>Watershed Protection</p> <ul style="list-style-type: none"> • Implement water use efficiency practices • Utilize ground storage to capture rain and flood waters • Healthy forests maintain and may improve water quality

As of December 31, 2019

Source: United Nations Department of Public Information Sustainable Development Knowledge Platform, <https://sustainabledevelopment.un.org>

¹ https://eatforum.org/content/uploads/2019/01/EAT-Lancet_Commission_Summary_Report.pdf

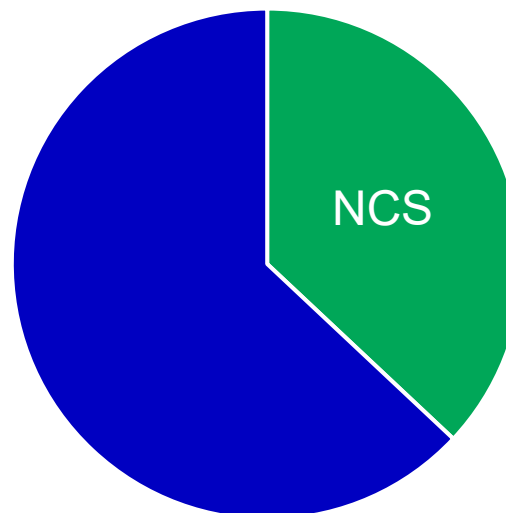
² <https://globalchange.mit.edu/sponsors/current>

Natural Climate Solutions are critical to achieving net zero goals

Contribution of natural climate solutions (NCS) to stabilizing warming to below 2 °C.

- Annual reductions of 15 gigatons or 7.6% every year to meet a 1.5 °C goal¹
- As a comparison, global emissions during the pandemic fell by 6.4%²

Total CO2 Mitigation Needed to Stabilize Global Warming



Natural climate solutions can provide 37% of cost-effective CO2 mitigation needed through 2030

Sources:

<https://www.wbcsd.org/Programs/Climate-and-Energy/Climate/Natural-Climate-Solutions>

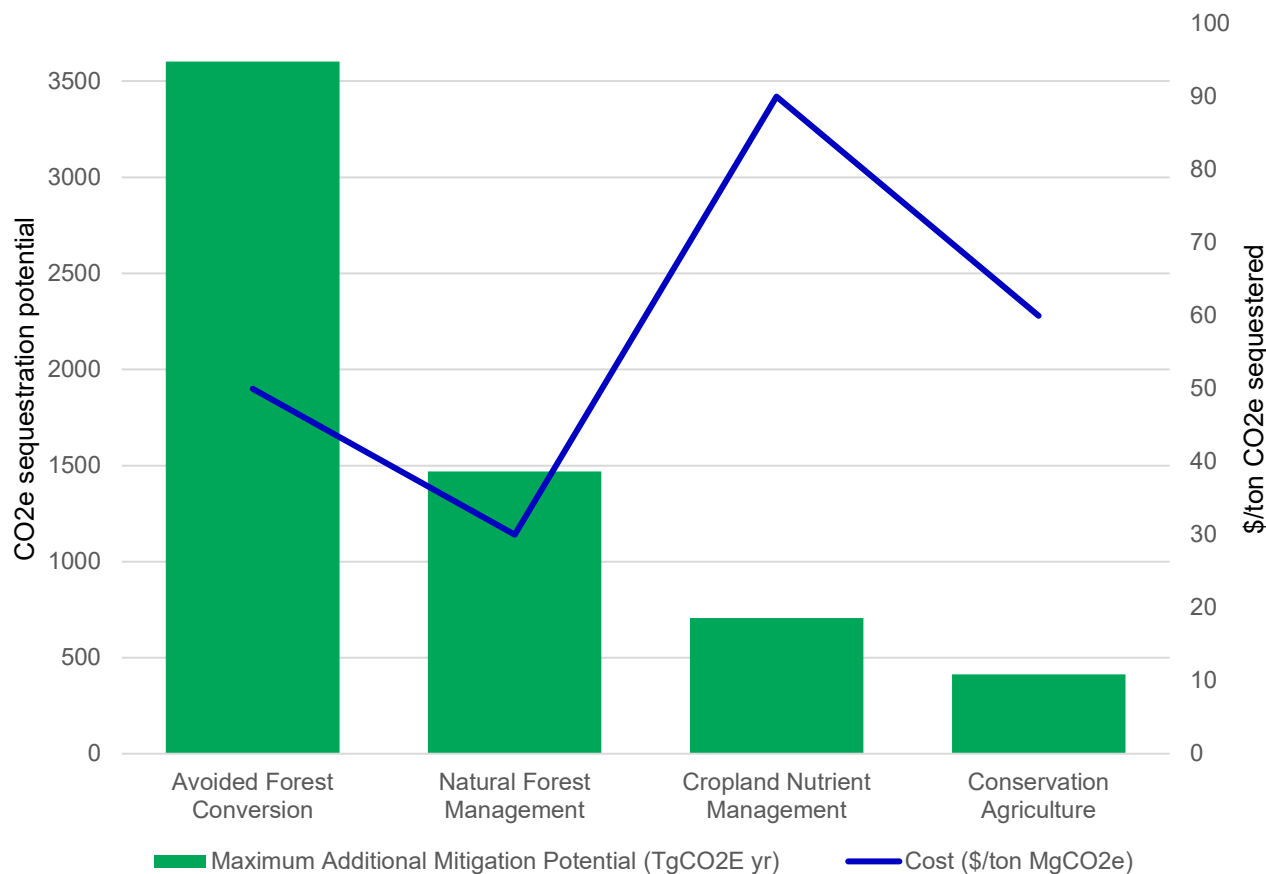
¹ <https://unfccc.int/news/cut-global-emissions-by-76-percent-every-year-for-next-decade-to-meet-15degc-paris-target-un-report#:~:text=On%20an%20annual%20basis%2C%20this,the%202%C2%B0C%20goal.>

² <https://www.nature.com/articles/d41586-021-00090-3>

Low-cost climate change solution

Forest carbon and agriculture removals occupy lowest end of carbon sequestration cost curve

Carbon sequestration cost curve (US\$/ton MgCO₂e) and the GHG emissions abatement potential (TgCO₂e/yr)



Market Outlook

Economic Backdrop

Revived Economic Growth Boosts Commodity Demand, but Rasies Inflation Concerns

U.S. economy remains on track for robust 2021

- Successful vaccine roll-out, easing of restrictions and revival of service economy
- Monetary and fiscal policy remain strongly supportive
- Rising employment and Covid-boosted savings
- 6.4% (annual rate) GDP growth in Q1

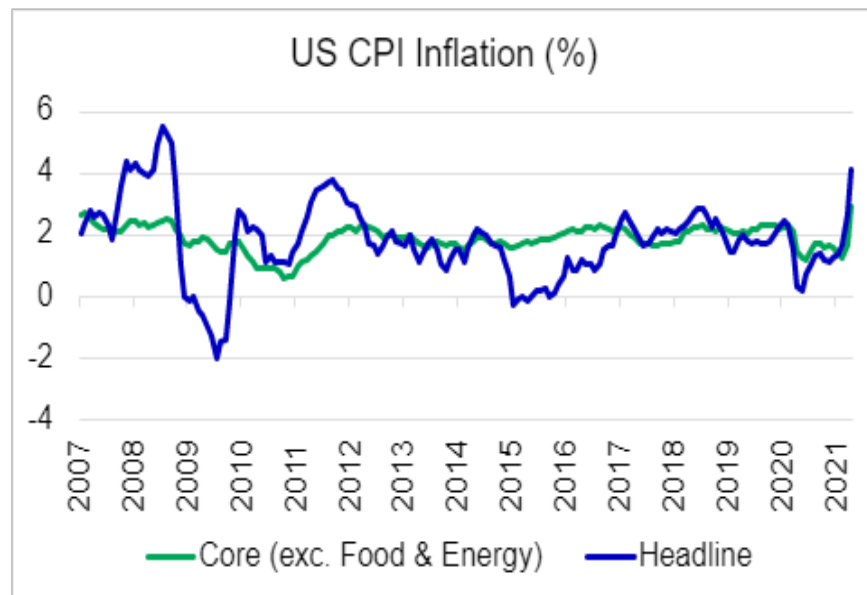
Global growth prospects moderated by:

- Vaccination rates lagging the U.S.
- Depleted supply chains and logistical bottlenecks
- China's economic recovery decelerates

U.S. April CPI (4.1% y-o-y), highest since GFC

- Pent-up, stimulus-enabled demand
- Gaps in supply chains
- Tight job markets and rising wages
- Weakening USD

US experiences a surge in Inflation 2021 Q1



Source: US Bureau of Labor Statistics

Farmland Snapshot

After strong gains in Q1 2021, prices ease:

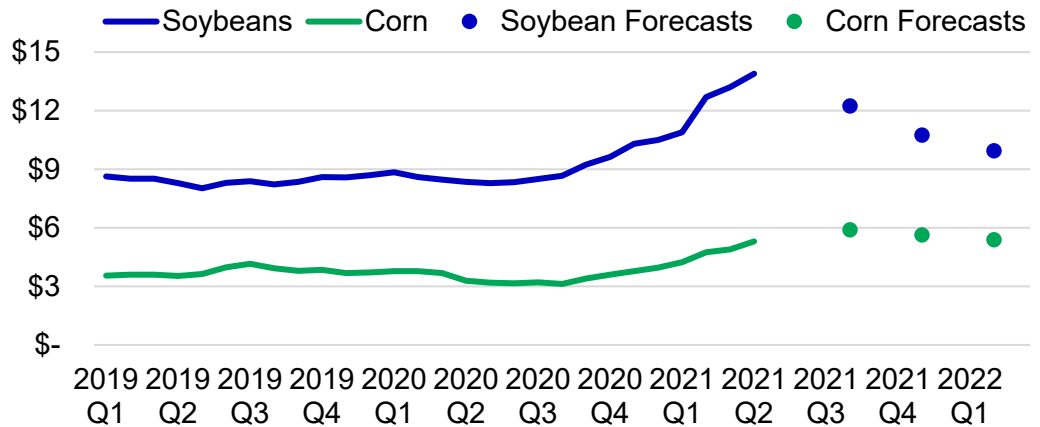
Expanded planting, good weather conditions, record soybean harvest in Brazil

Recovery in gasoline demand and prices translate into support for corn demand and price in 2021-2022

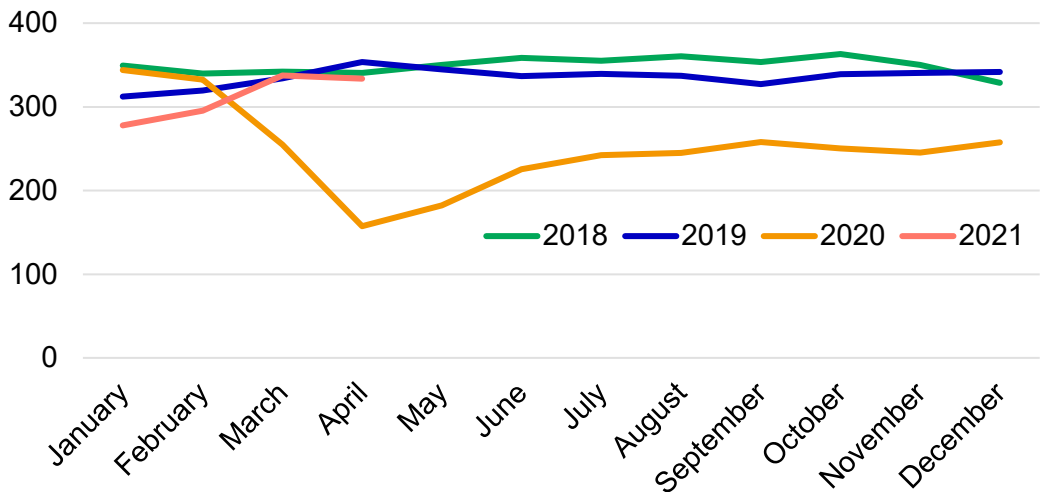
Broadening improvement in global economic conditions in 2022-2023 will support healthy demand for ag products

Global demand should remain strong, despite higher prices

U.S. On-Farm Prices (USD per Bushel)



U.S. Gasoline Consumption (Billion USD)



Sources: USDA NASS April 2021, USDA Bureau of Economic Analysis April 2021, Price forecasts are from Capital Economics and as of May 2021

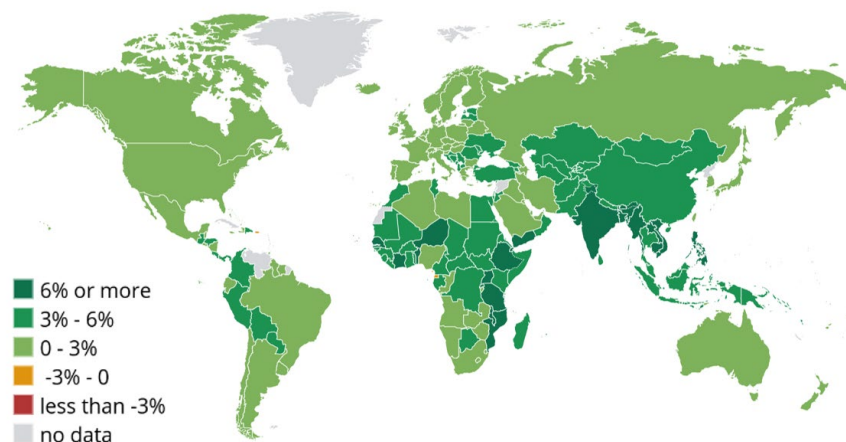
Drivers of Agriculture Investment in Current Climate

Agriculture and food sectors poised for robust growth post-COVID

Tailwinds

- Overall demand for food products will benefit from strong post-COVID economic recovery
- Global GDP per capita and per capita income to regain forward momentum
 - Stronger GDP and income drive improved and more sophisticated diets
- Limitations on land available for cultivation and water resources
- Sustainable agricultural management provides additional incentives for investors

Real Per Capita GDP Growth – Annual % Change to 2025¹



Headwinds

- Global production expansion intensifies exports market competition
- Sporadic African Swine Fever outbreaks clouds China's growing demand for feed crops

Timberland Fundamentals Remain Strong

Surge in Construction Activity Encounters Bumpss in Q2

High prices, limited availability and delayed delivery of building materials and appliances; labor shortages; cost-push adding to rising new home prices

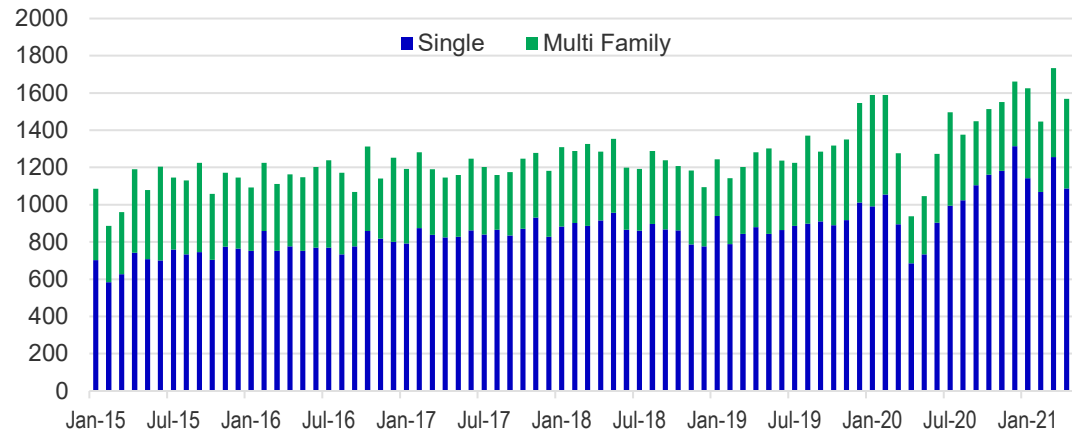
Forest Product Prices Remain Near All Time Highs

Strong profit margins trigger another round of investment in U.S. South lumber mills

Impact of Strong Forest Product Prices on Timber Values Delayed

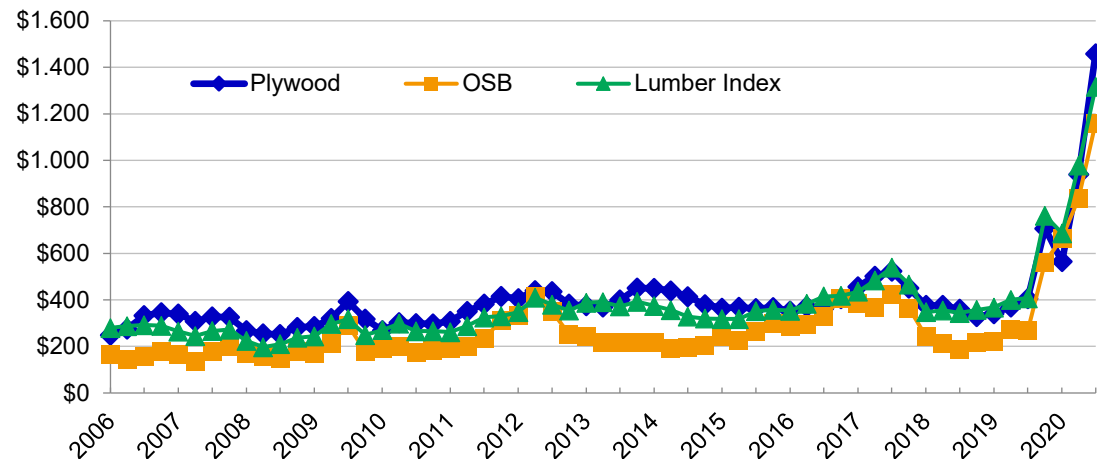
Limits on regional mill capacity and ample timber supplies moderate 2020 timber price increases

Monthly Total US Housing Starts (SAAR millions)



Source: US Census Bureau as of April 2021

Prices – U.S. Solid Wood Products



Source: Source: Random Lengths – Lumber Index = RL composite lumber index. \$/MBF
Southern Plywood = CDX/S.W. 15/32 3ply R/L, \$/MSF
OSB = N. Central 7/16 R/L, \$/MSF
Data as of 5/20/2021

Drivers of Timber Investment in Current Climate

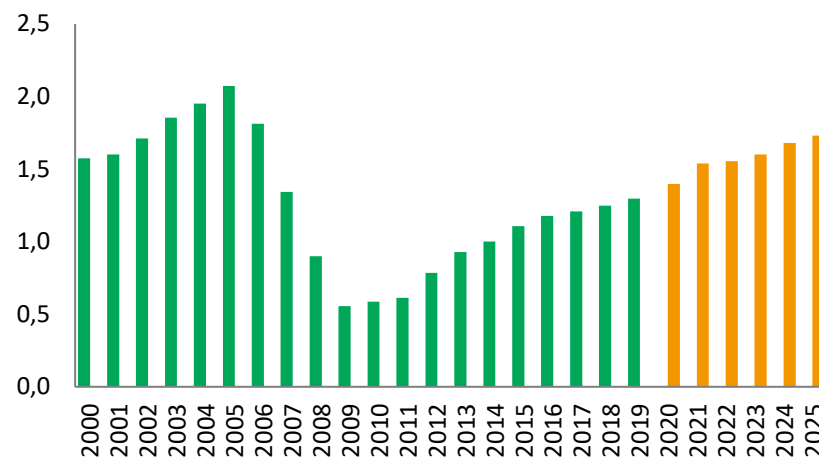
Timber and forest products less exposed than other sectors to COVID-19 economic down-turn

Tailwinds

- COVID motivated shift to Working From Home boosts demand for expanded/reconfigured living-space, particularly in the U.S., resulting in rising demand for lumber, wood panels and timber
- Record wood product prices, boost profitability for producers of building products and trigger investments in expanded mill capacity
- Efforts to reduce greenhouse gas emissions favor new wood-based building systems for multi-story construction

U.S. Housing Markets Poised for a Multi-Year Boom¹

(SAAR new residential construction in the U.S., millions)



Headwinds

- Large inventory of saw log timber in U.S. South
- Spruce-beetle infestation in Europe and associated salvage harvests continue to elevate regional supply level



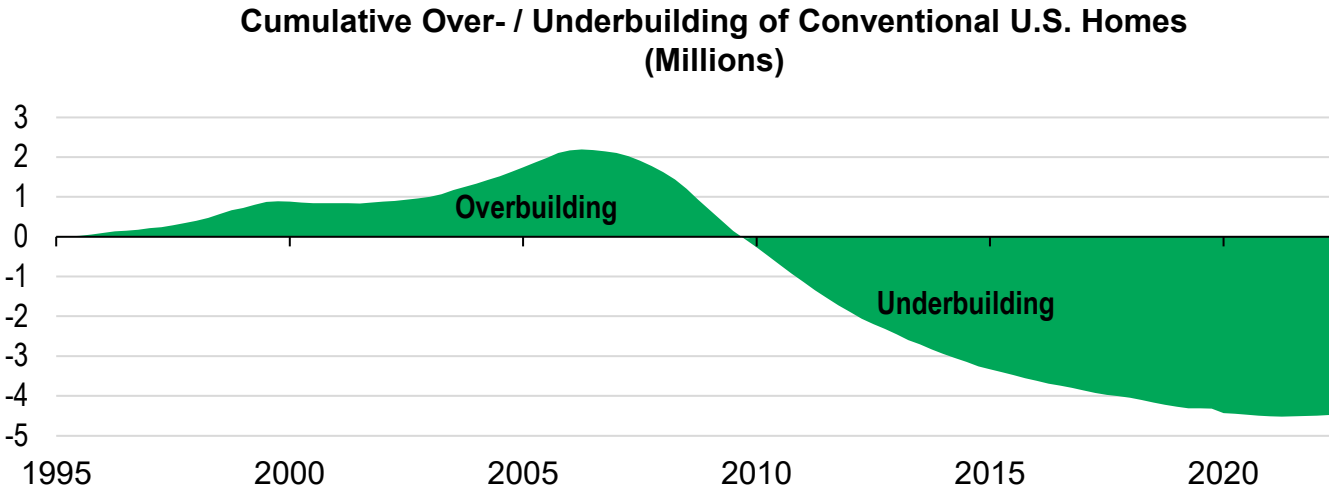
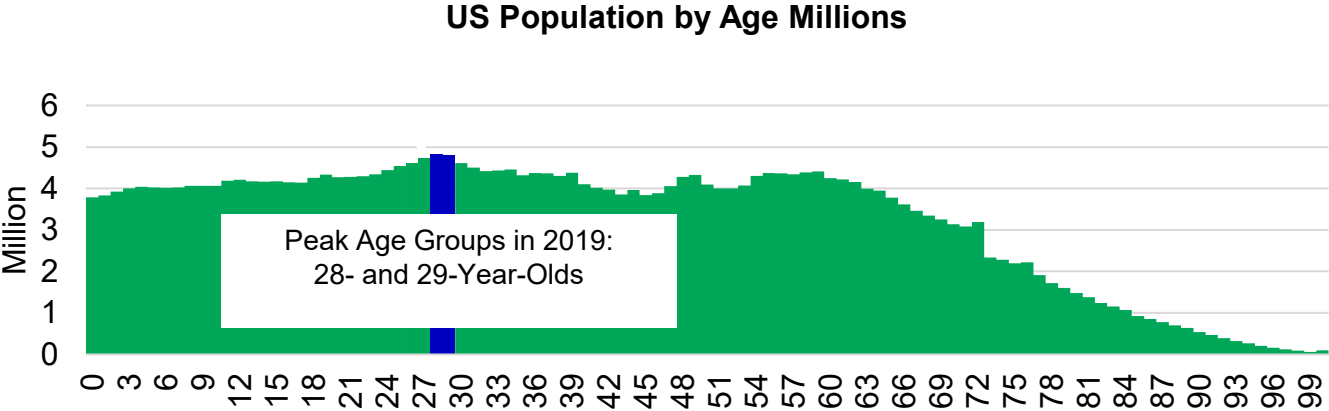
Manulife

¹ Source: Forest Economic Advisors, End Use Quarterly Forecast, Feb 2021

² Source: Random Lengths – Lumber Index = RL composite lumber index. Jan 2021

Strong Fundamentals for U.S. Housing Extend into the 2020s

Demographics and Housing Deficit



Medium and Longer-Term Trends Support Timberland and Farmland

Positive economic fundamentals and shift to a decarbonized world

Return to Global Economic Expansion

- Rising per capita income in developing and emerging economies supports expanded demand for higher value, healthier foods
- Strong fundamentals for U.S. housing based on demographics and deficient stock of housing

Climate Change Mitigation and Adaptation

- Significant opportunities to achieve reduced agricultural greenhouse gas emissions and more efficient use of limited resources (energy, land, water) by deployment of ag tech, genetics and improved crop management
- Timberland and Farmland can contribute to climate-change mitigation with carbon capture and storage in forests, wood-products, and farmland soils.
- Innovative wood-based construction systems open new tiers of demand for wood products, multi-story residential and non-residential buildings, and provide a low-carbon alternative to steel/concrete

Thank You!

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Notes

Sources

Slide 6 Sources: Data for Timberland refer to the NCREIF Timberland Index as of 12/31/20. Data for Farmland refer to the NCREIF Farmland Index as of 12/31/20. Data for Commercial Real Estate refer to the NCREIF Property Index as of 12/31/20. Data for Small Cap Equities refer to the Ibbotson series IA SBBI U.S. Small Stock TR USD as of 12/31/20. Data for Non U.S. Equities refer to the MSCI/EAFE International Equities Index as of 12/31/20. Data for Corporate Bonds refer to the Ibbotson series IA SBBI U.S. LT Corp TR USD as of 12/31/20. Data for U.S. Treasury Bills refer to the Ibbotson series IA SBBI U.S. 30 Day Tbill TR USD as of 12/31/20. Data for the CPI refer to the U.S. Bureau of Labor Statistics as of 12/31/20. The S&P 500 series is from Standard & Poor's Financial Services LLC as of 12/31/20. Data for U.S. Private Equity refers to the Cambridge Associates Private Equity Index as of 12/31/19. Data for U.S. Forest Products refer to the S&P Composite 1500 Paper and Forest Products series as of 12/31/2020.

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