T. ROWE PRICE INSIGHTS

ON EMERGING MARKETS



Is the Value Rally in Emerging Markets Sustainable?

Value investing is coming in from the cold.

August 2021

KEY INSIGHTS

- Our EM "Discovery" thesis seeks to invest in forgotten stocks about to experience fundamental change. The transition to green energy provides one such opportunity.
- The way EM governments employ fiscal stimulus has changed to targeting the consumer directly. This is another fundamental change that we intend to capture.
- With a capex-depreciation ratio around 1.0, nonfinancial EM companies have been underinvesting. This is poised to change, bringing new investment opportunities.



Portfolio Manager, Emerging Markets
Discovery Equity Strategy

fter a decade of strong value outperformance in emerging market equities from 2001 to 2010 came a decade of sustained underperformance. In 2020, the value/ growth divergence in EM reached an extreme not seen before, driven by the deep recession created by the global coronavirus pandemic (Figure 1). Before examining the disappointing performance of EM value since 2010, we should first ask ourselves "What drove value's outperformance between 2000 and 2010?" We believe there were two key factors at work. First, there was the Chinese economic supercycle as China spent a staggering USD 12 trillion on infrastructure and industrial capacity over this period. This benefited "old economy" sectors globally, such as steel, cement, nonferrous metals, industrial machinery, and energy. Second, the world was starting to recover following a number of EM shocks (1994 Latin American tequila crisis, 1997-1998 Asian financial crisis, 1998 Russian crisis) during which a large

amount of capex and many banks had been destroyed.

Is This Episode Relevant to Investors Today?

We believe that it is, since although history does not repeat itself, it very often rhymes! We are of the view that the goal of carbon neutrality by 2050 (2060 for China) will boost many traditional or old economy industries during the long transition period. To meet green energy and carbon emission targets, the world will need to spend heavily on traditional industrial sectors during the transition years.

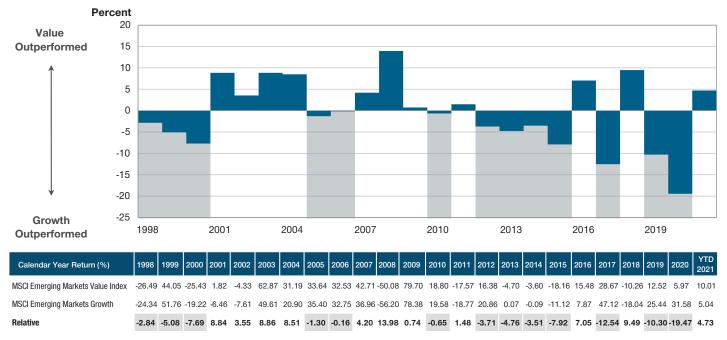
The massive USD 12 trillion of infrastructure spending in China between 2000 and 2010 was one factor contributing to a decade of outperformance for global value investors. Today, China is projected to need to spend around USD 10–15 trillion to transition to a more energy-efficient economy with zero net carbon emissions

China is projected to need to spend around USD 10–15 trillion to transition to a more energy-efficient economy with zero net carbon emissions by 2060....

EM Style Divergence Has Been Retreating From Extreme Levels

(Fig. 1) Annual value-growth divergence for MSCI EM indices (%).

Calendar Year Value-Growth Divergence (%)



Past performance is not a reliable indicator of future performance.

As at June 30, 2021.

Source: Financial data and analytics provider FactSet. Copyright 2021 FactSet. All Rights Reserved. See Additional Disclosures.

The post-COVID-19 energy transition is the type of external fundamental change that we seek to leverage...

by 2060 that do not rely on fossil fuels (Figure 2). This is a sum not very different in magnitude to what China spent on infrastructure and industrialization over 2000–2010. The G10 group of industrialized economies may also need to spend a roughly similar amount on their own green energy transition programs to achieve carbon neutrality in 2050.

Energy Transition Is Commodity Intensive

During the transition to clean energy, the world will likely need to spend heavily on commodities like copper, nickel, lithium, aluminum, and natural gas as alternative energy and electric vehicles are metals-intensive. While a more controversial issue in developed markets, there are also few alternatives to natural gas, the cleanest of the fossil fuels, for EM during the early stages of their fossil fuel transition. In an EM context, this makes sense from an ESG

perspective, since gas is less polluting than other carbon-based fuels and hospitals, schools, fire stations, etc., all need power. Renewable energy is not readily available in most EMs, and we believe natural gas will play an important role in the early stages of their transition to cleaner energy.

Investment Must Rise to Reach Net Carbon Targets

The post-COVID-19 energy transition is the type of external fundamental change that we seek to leverage under our EM "Discovery" investment thesis. It is a theme that Portfolio Managers Ernest Yeung and Haider Ali have spent a good deal of time analyzing. The world has badly underinvested in this area, and countries will likely need to ramp up capital expenditure quickly if net carbon reduction targets in 2050 are to be met.

China Supercycle vs. Post-COVID-19 Energy Transition

(Fig. 2) To meet green targets, the world needs to spend.



As of December 31, 2020.

Sources: Haver Analytics/China National Bureau of Statistics, UBS Investment Bank and Goldman Sachs & Company.

Actual future outcomes may differ materially.

Following a successful vaccine rollout and strong global economic recovery, value investing has staged an impressive rebound in 2021.

Figure 3 shows that the MSCI AC World CAPEX to depreciation ratio (ex-financials) is currently hovering around 1.0, pointing to the fact that companies in recent years have mostly been spending on maintenance capex, investing "for balance sheet rather than for growth." This time there was no financial crisis—rather, the underinvestment was caused by:

- 1 China overspending on industrial capex after the global financial crisis—we have spent 10 years digesting that excess capacity.
- 2 The massive performance divergence between growth and value sectors in stock market terms meant that capital exited the old economy sectors and flowed into the new economy.

We believe this will all have to change as the switch to green energy begins to gather pace and capital is required to flow back to the old economy. The share of investment spending in gross domestic product (GDP) will need to rise, becoming a new driver for economic growth during the green energy transition.

Following a successful vaccine rollout and strong global economic recovery, value investing has staged an impressive rebound in 2021. While this has been welcomed, investors in EM value funds are naturally asking whether the outperformance of value can be sustained. We believe that it can. For one thing, we believe that the way governments supported their economies with fiscal and monetary stimulus during the coronavirus pandemic marks a fundamental change from previous recessions.

Post-COVID-19 Stimulus Targets Consumers and Green Infrastructure

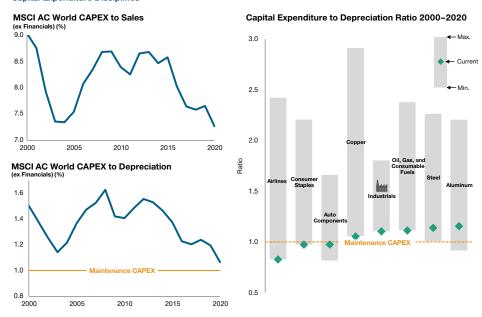
Stimulus is now being targeted primarily at helping the consumer and boosting green infrastructure rather than being deployed toward supporting corporate and bank balance sheets, as was the case following the collapse of Lehman Brothers in 2008 that triggered the global financial crisis (GFC) and Great Recession. Empirical studies show that fiscal stimulus measures in the U.S. and

other developed economies to support the consumer are working as intended and are having a significant multiplier effect on economies. This in turn is leading to a significantly faster economic recovery from the pandemic than was seen in 2009 after the GFC. A faster global economic recovery, in turn, can be expected to provide underlying support for the value style of investing (see Figure 4).

Current Corporate Capex Is Maintenance Only

(Fig. 3) Emission targets require a major boost in net investment.

Capital Expenditure Disciplines



Past performance is not a reliable indicator of future performance.

As of December 31, 2020.

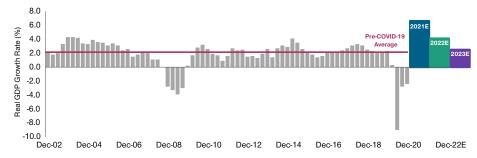
Sources: Bloomberg Finance L.P. Financial data and analytics provider FactSet. Copyright 2021 FactSet. All Rights Reserved. See Additional Disclosures.

Note: The CAPEX to Depreciation ratio divides a company's capital expenditures by its depreciation. A ratio above 1.0 indicates that the company's asset base is growing over time.

U.S. Real GDP Forecast to Grow Strongly Over 2021–2023

(Fig. 4) Above-trend GDP growth should be value-supportive.

U.S. Real GDP Growth Rate (%) YOY



Sources: Bloomberg Finance L.P. CBO Economic Forecast for the U.S. Economy, June 9, 2021 (2023 estimate=2.5%). See Additional Disclosures.

There is no guarantee that any forecasts made will come to pass.

E=Estimate

...some believe the acceleration of new technologies triggered by the pandemic could usher in a period of higher productivity.

For example, by March 2021, U.S. consumer goods spending (almost one-third of the global total) had risen to a level 9% above its pre-COVID-19 trend, a big enough shock to drive a global recovery in demand. In that month, U.S. households saw their biggest ever increase in average monthly incomes (21%) as they received their USD 1,400 bank checks under President Joe Biden's American Rescue Plan. In the past year, U.S. households have accumulated an estimated USD 2 trillion of excess savings, some of which is very likely to be spent during the next year or two.

Besides fiscal stimulus, post-COVID-19 recoveries are also supported by the extremely accommodative monetary policies implemented by major central banks. For the first time since quantitative easing (QE) began, we are seeing strong real growth rates in M2-or broad money supply—in the U.S., Europe, and Japan. In our view, the emerging markets are well positioned to benefit as global growth picks up in response to such strong policy stimulus. China, in particular, has been a big beneficiary of the stimulus-related increase in U.S. consumer goods spending, reflected in merchandise exports from China that are currently around 20% above their pre-COVID-19 levels.

Stars Appear Aligned for Value Investors

Looking at the way in which the global economic environment is currently

changing, there are a number of conditions today that would appear to favor a further rotation toward value. Historically, periods of larger fiscal deficits and strong real GDP growth have often been associated with periods of value outperformance. Earnings per share (EPS) growth is another key factor for value versus growth, with the growth style of investing naturally doing better in periods when earnings were scarce. Currently, the consensus bottom-up forecasts for emerging markets EPS growth in 2021 and 2022 are 50.1% and 10.2% (MSCI EM Free Index, as at July 5, 2021), respectively, indicating that we have entered an "earnings rich" environment that ought to favor value over growth.

Interest rates are another factor to consider. Historically, real rates have shown an inverse relationship with value versus growth. As monetary policy in the U.S. and other countries begins to normalize next year, many analysts expect real interest rates to rise, which should also favor value. Lastly, some believe the acceleration of new technologies triggered by the pandemic could usher in a period of higher productivity. Such periods have tended to favor value rather than growth, as higher productivity, in turn, can be expected to result in stronger growth in earnings.

General Portfolio Risks

Capital risk—the value of your investment will vary and is not guaranteed. It will be affected by changes in the exchange rate between the base currency of the portfolio and the currency in which you subscribed, if different.

ESG and Sustainability risk—may result in a material negative impact on the value of an investment and performance of the portfolio.

Equity risk—in general, equities involve higher risks than bonds or money market instruments.

Geographic concentration risk—to the extent that a portfolio invests a large portion of its assets in a particular geographic area, its performance will be more strongly affected by events within that area.

Hedging risk—a portfolio's attempts to reduce or eliminate certain risks through hedging may not work as intended.

Investment portfolio risk—investing in portfolios involves certain risks an investor would not face if investing in markets directly.

Management risk—the investment manager or its designees may at times find their obligations to a portfolio to be in conflict with their obligations to other investment portfolios they manage (although in such cases, all portfolios will be dealt with equitably).

Operational risk—operational failures could lead to disruptions of portfolio operations or financial losses.

Additional Disclosures

Bloomberg Index Services Limited. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). BARCLAYS® is a trademark and service mark of Barclays Bank Plc (collectively with its affiliates, "Barclays"), used under license. Bloomberg or Bloomberg's licensors, including Barclays, own all proprietary rights in the Bloomberg Barclays Indices. Neither Bloomberg nor Barclays approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

Financial data and analytics provider FactSet. Copyright 2021 FactSet. All Rights Reserved.

MSCI and its affiliates and third party sources and providers (collectively, "MSCI") makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed, or produced by MSCI. Historical MSCI data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. None of the MSCI data is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such.

INVEST WITH CONFIDENCES

T.RowePrice®

T. Rowe Price focuses on delivering investment management excellence that investors can rely on—now and over the long term.

Important Information

This material is being furnished for general informational and/or marketing purposes only. The material does not constitute or undertake to give advice of any nature, including fiduciary investment advice, nor is it intended to serve as the primary basis for an investment decision. Prospective investors are recommended to seek independent legal, financial and tax advice before making any investment decision. T. Rowe Price group of companies including T. Rowe Price Associates, Inc. and/or its affiliates receive revenue from T. Rowe Price investment products and services. Past performance is not a reliable indicator of future performance. The value of an investment and any income from it can go down as well as up. Investors may get back less than the amount invested.

The material does not constitute a distribution, an offer, an invitation, a personal or general recommendation or solicitation to sell or buy any securities in any jurisdiction or to conduct any particular investment activity. The material has not been reviewed by any regulatory authority in any jurisdiction.

Information and opinions presented have been obtained or derived from sources believed to be reliable and current; however, we cannot guarantee the sources' accuracy or completeness. There is no guarantee that any forecasts made will come to pass. The views contained herein are as of the date written and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates. Under no circumstances should the material, in whole or in part, be copied or redistributed without consent from T. Rowe Price.

The material is not intended for use by persons in jurisdictions which prohibit or restrict the distribution of the material and in certain countries the material is provided upon specific request. It is not intended for distribution to retail investors in any jurisdiction.

Australia—Issued in Australia by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. For Wholesale Clients only.

Brunei—This material can only be delivered to certain specific institutional investors for informational purpose upon request only. The strategy and/or any products associated with the strategy has not been authorised for distribution in Brunei. No distribution of this material to any member of the public in Brunei is permitted.

Canada—Issued in Canada by T. Rowe Price (Canada), Inc. T. Rowe Price (Canada), Inc.'s investment management services are only available to Accredited Investors as defined under National Instrument 45-106. T. Rowe Price (Canada), Inc. enters into written delegation agreements with affiliates to provide investment management services.

China—This material is provided to specific qualified domestic institutional investor or sovereign wealth fund on a one-on-one basis. No invitation to offer, or offer for, or sale of, the shares will be made in the People's Republic of China ("PRC") (which, for such purpose, does not include the Hong Kong or Macau Special Administrative Regions or Taiwan) or by any means that would be deemed public under the laws of the PRC. The information relating to the strategy contained in this material has not been submitted to or approved by the China Securities Regulatory Commission or any other relevant governmental authority in the PRC. The strategy and/or any product associated with the strategy may only be offered or sold to investors in the PRC that are expressly authorized under the laws and regulations of the PRC to buy and sell securities denominated in a currency other than the Renminbi (or RMB), which is the official currency of the PRC. Potential investors who are resident in the PRC are responsible for obtaining the required approvals from all relevant government authorities in the PRC, including, but not limited to, the State Administration of Foreign Exchange, before purchasing the shares. This document further does not constitute any securities or investment advice to citizens of the PRC, or nationals with permanent residence in the PRC, or to any corporation, partnership, or other entity incorporated or established in the PRC.

DIFC—Issued in the Dubai International Financial Centre by T. Rowe Price International Ltd. This material is communicated on behalf of T. Rowe Price International Ltd. by its representative office which is regulated by the Dubai Financial Services Authority. For Professional Clients only.

EEA ex-UK—Unless indicated otherwise this material is issued and approved by T. Rowe Price (Luxembourg) Management S.à r.I. 35 Boulevard du Prince Henri L-1724 Luxembourg which is authorised and regulated by the Luxembourg Commission de Surveillance du Secteur Financier. For Professional Clients only.

Hong Kong—Issued in Hong Kong by T. Rowe Price Hong Kong Limited, 6/F, Chater House, 8 Connaught Road Central, Hong Kong. T. Rowe Price Hong Kong Limited is licensed and regulated by the Securities & Futures Commission. For Professional Investors only.

Indonesia—This material is intended to be used only by the designated recipient to whom T. Rowe Price delivered; it is for institutional use only. Under no circumstances should the material, in whole or in part, be copied, redistributed or shared, in any medium, without prior written consent from T. Rowe Price. No distribution of this material to members of the public in any jurisdiction is permitted.

Korea—This material is intended only to Qualified Professional Investors upon specific and unsolicited request and may not be reproduced in whole or in part nor can they be transmitted to any other person in the Republic of Korea.

Malaysia—This material can only be delivered to specific institutional investor upon specific and unsolicited request. The strategy and/or any products associated with the strategy has not been authorised for distribution in Malaysia. This material is solely for institutional use and for informational purposes only. This material does not provide investment advice or an offering to make, or an inducement or attempted inducement of any person to enter into or to offer to enter into, an agreement for or with a view to acquiring, disposing of, subscribing for or underwriting securities. Nothing in this material shall be considered a making available of, solicitation to buy, an offering for subscription or purchase or an invitation to subscribe for or purchase any securities, or any other product or service, to any person in any jurisdiction where such offer, solicitation, purchase or sale would be unlawful under the laws of Malaysia.

New Zealand—Issued in New Zealand by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. No Interests are offered to the public. Accordingly, the Interests may not, directly or indirectly, be offered, sold or delivered in New Zealand, nor may any offering document or advertisement in relation to any offer of the Interests be distributed in New Zealand, other than in circumstances where there is no contravention of the Financial Markets Conduct Act 2013.

Philippines—THE STRATEGY AND/ OR ANY SECURITIES ASSOCIATED WITH THE STRATEGY BEING OFFERED OR SOLD HEREIN HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES REGULATION CODE. ANY FUTURE OFFER OR SALE OF THE STRATEGY AND/ OR ANY SECURITIES IS SUBJECT TO REGISTRATION REQUIREMENTS UNDER THE CODE, UNLESS SUCH OFFER OR SALE QUALIFIES AS AN EXEMPT TRANSACTION.

Singapore—Issued in Singapore by T. Rowe Price Singapore Private Ltd., No. 501 Orchard Rd, #10-02 Wheelock Place, Singapore 238880. T. Rowe Price Singapore Private Ltd. is licensed and regulated by the Monetary Authority of Singapore. For Institutional and Accredited Investors only.

South Africa—T. Rowe Price International Ltd ("TRPIL") is an authorised financial services provider under the Financial Advisory and Intermediary Services Act, 2002 (FSP Licence Number 31935), authorised to provide "intermediary services" to South African investors.

Switzerland—Issued in Switzerland by T. Rowe Price (Switzerland) GmbH, Talstrasse 65, 6th Floor, 8001 Zurich, Switzerland. For Qualified Investors only.

Taiwan—This does not provide investment advice or recommendations. Nothing in this material shall be considered a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person in the Republic of China.

Thailand—This material has not been and will not be filed with or approved by the Securities Exchange Commission of Thailand or any other regulatory authority in Thailand. The material is provided solely to "institutional investors" as defined under relevant Thai laws and regulations. No distribution of this material to any member of the public in Thailand is permitted. Nothing in this material shall be considered a provision of service, or a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person where such provision, offer, solicitation, purchase or sale would be unlawful under relevant Thai laws and regulations.

UK—This material is issued and approved by T. Rowe Price International Ltd, 60 Queen Victoria Street, London, EC4N 4TZ which is authorised and regulated by the UK Financial Conduct Authority. For Professional Clients only.

USA—Issued in the USA by T. Rowe Price Associates, Inc., 100 East Pratt Street, Baltimore, MD, 21202, which is regulated by the U.S. Securities and Exchange Commission. For Institutional Investors only.

© 2021 T. Rowe Price. All Rights Reserved. T. ROWE PRICE, INVEST WITH CONFIDENCE, and the Bighorn Sheep design are, collectively and/or apart, trademarks of T. Rowe Price Group, Inc.