PAX
Pax World Investments | For Tomorrow®

Investing in Resource Optimization Stocks

A diversifier to global equity

by Impax Asset Management

COMPELLING LONG TERM DRIVERS OF CHANGE

The long term trends around resource supply and consumption can be described through four investment themes:

Rapidly growing demand for resources
Driven by an expanding global population and rising standards of living and urbanization, particularly in (populous) developing markets.

Limitations to cost-effective resource supply
Higher marginal costs of production for many key resources, e.g., oil, rare earth minerals.

Inadequate infrastructure
Greater demand for new infrastructure in developing economies alongside repair and replacement in developed economies.

Environmental constraints
Limits on clean water availability, rising exposure to flooding, contaminated air, soil pollution, and growing impacts from climate change against a backdrop of ever stricter environmental policy around the world.

A SIGNIFICANT UNIVERSE OF DIFFERENTIATED STOCKS WITH SUPERIOR GROWTH POTENTIAL

Over the last decade we have witnessed the rapid emergence of a large universe of listed companies that are focused on Resource Optimization. The RO universe (as defined by the Financial Times Stock Exchange (FTSE)) currently comprises approximately 1500 stocks and has an aggregate market capitalization in the region of $4 trillion[1] (see Figure A).

The RO universe demonstrates superior growth potential. Over the next 3 to 5 years, RO stocks are, on average, expected to grow revenues by 6.1% annually (compared to 5.6% annually for the

CONTINUED

KEY TAKEAWAYS

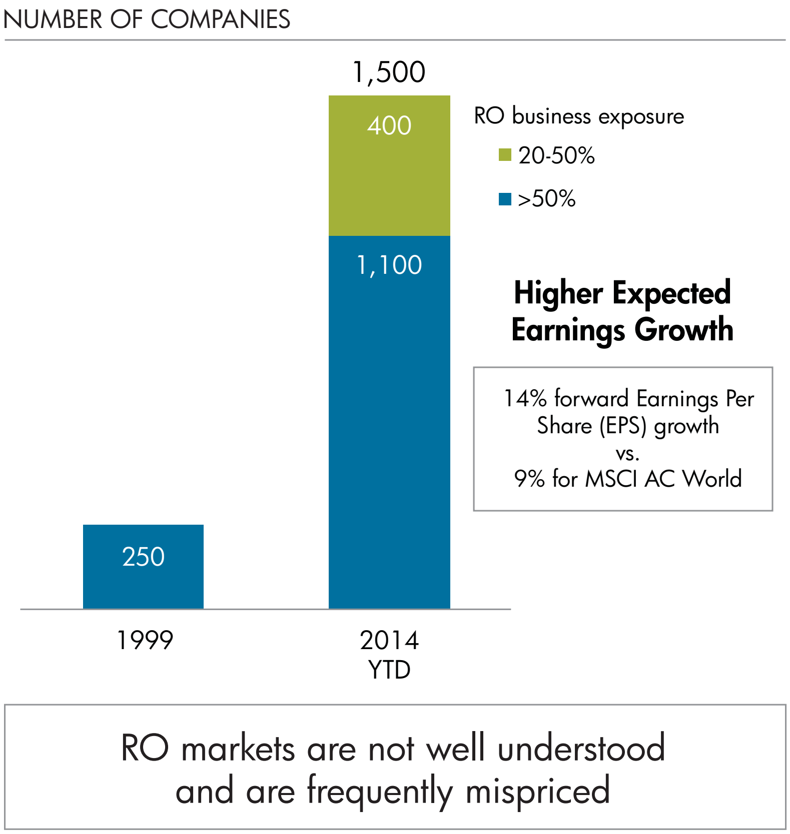
- Resource supply and consumption drives four investment themes: 1) rapidly growing demand, 2) limited cost-effective resource supplies, 3) inadequate infrastructure, and 4) environmental constraints.
- Over the last decade, a large universe of listed companies focused on Resource Optimization has emerged.
- In addition to superior growth potential and limited overlap with mainstream stock indices, Resource Optimization stocks may offer a hedge against today's emerging systemic risks.
- The inexorable trend of rising resource demand amidst resource constraints provides the backdrop to a compelling investment case for an actively managed allocation to Resource Optimization stocks, where many investors are under-allocated.

[1] Factset, Impax Asset Management Universe as of March 31, 2014.

MSCI ACWI[2])[3] and earnings by 14.6% annually (compared to 11.8% for the MSCI ACWI); in contrast, the equivalent forecast for the oil and gas sector is 8.3%[4].

Additionally, there is limited overlap between the RO universe and mainstream indices, e.g. as of the end of March 2014 the overlap between the RO universe and the MSCI All Country World Index ("ACWI") was less than 6%[5]. Other considerations include that RO stocks tend to have low leverage. The Debt/Equity ratio of the RO universe is today 47% vs. 74%[6] for the MSCI ACWI. RO stocks are also not well covered by sell-side analysts, providing many opportunities for specialist managers to add value.

Figure A: Impax Investment Universe is Growing Rapidly



Based on Impax's proprietary environmental markets database.
This database is used to help construct the FTSE Environmental Markets Index Series[7].
Source: FactSet, as of March 31, 2014. Forward EPS growth data for FTSE Environmental Opportunities All Share Index (EOAS) as a proxy for the resource optimization sector.

CONTINUED

[2] The MSCI All Country World Index (ex-U.S.) is a free float-adjusted, market-capitalization-weighted index designed to provide a broad measure of stock performance in developed and emerging markets throughout the world, with the exception of U.S.-based companies. There are 46 countries in the Index. One cannot invest directly in an index.
[3] Factset, FTSE Environmental Opportunities All Share and MSCI All Country World as of March 31, 2014.
[4] Factset, MSCI All Country World as of March 31, 2014.
[5] Factset, MSCI All Country World vs. FTSE Environmental Opportunities All Share as of March 31, 2014. The FTSE Environmental Opportunities All Shares Index measures the performance of global companies that have significant involvement in environmental business activities, including renewable and alternative energy, energy efficiency, water technology and waste and pollution control. Forming part of the overall FTSE Environmental Markets Index Series, the FTSE Environmental Opportunities Index Series requires companies to have at least 20% of their business derived from environmental markets and technologies (as opposed to at least 50% for the FTSE Environmental Technology Index Series). The FTSE Environmental Opportunities Index Series is published by a joint venture of Impax Asset Management, Ltd. (Impax) with FTSE International. Impax is also the sub-adviser to the Pax World Global Environmental Markets Fund. One cannot invest directly in an index.
[6] Factset, FTSE Environmental Opportunities All Share as of March 31, 2014.
[7] The FTSE Group launched the FTSE Environmental Markets Index Series in collaboration with the environmental technology specialist, Impax Asset Management, to provide two new environmental index solutions: the FTSE Environmental Technology Index Series and the FTSE Environmental Opportunities Index Series. Developed under the direction of the independent FTSE Environmental Markets Committee, the indexes further enhance FTSE's suite of Responsible Investment indexes and provide investors with an increasing set of robust responsible investment tools.

A HEDGE AGAINST EMERGING SYSTEMIC RISKS

As many investors experienced during the recent financial crisis, systemic risks (such as the collapse of the housing market) build slowly and can be hard to protect against. Unfortunately, many investors may not appreciate and/or may be under-protected against today's emerging systemic risks, some of which are likely to be high magnitude. As summarized in Figure B, a Resource Optimization portfolio can provide a hedge against a number of such emerging risks, for example:

Water supply
Water availability has evolved from a location specific issue to a structural/strategic challenge. For example, the current drought in California is the worst in history, with an economic impact estimated to be around $2.2 billion, mainly in agriculture[8]. ***Investment in stocks that provide civil engineering, water treatment, and related services in the water sector can hedge this agriculture resource risk.***

Policy to limit location-specific pollution
With rising population levels, urbanization and wealth, pollution is becoming a global concern, and regulations to constrain or ban emissions to air, water and/or soil are becoming tighter and more widespread. For example, recent regulations limiting emissions from coal-fired power stations have contributed to U.S. coal stocks under-performing a basket of U.S. energy stocks by 70 percentage points since 2011[9]. ***Investment in pollution control and hazardous waste management stocks can offset this risk.***

Policy to address climate change
Climate change, principally from burning fossil fuels, is an increasing concern globally. A typical investor's equity portfolio has 7 to 10% exposure to fossil fuel companies, which may suffer value destruction as regulators impose charges or limitations on fossil fuel combustion, thereby both raising the price of energy to consumers and lowering the price of energy received by producers. ***A portfolio of energy efficiency and renewable energy stocks offers a counterweight to this risk.***

Extreme weather
Incidence of severe weather events is rising, e.g. flooding in Europe and Canada in 2013 caused ~$20bn of damage[10], while the insured losses from Hurricane Sandy are expected to reach $35bn[11]. ***Companies that provide flood prevention infrastructure and environmental monitoring systems are set to benefit from investments to mitigate the impact of extreme weather.***

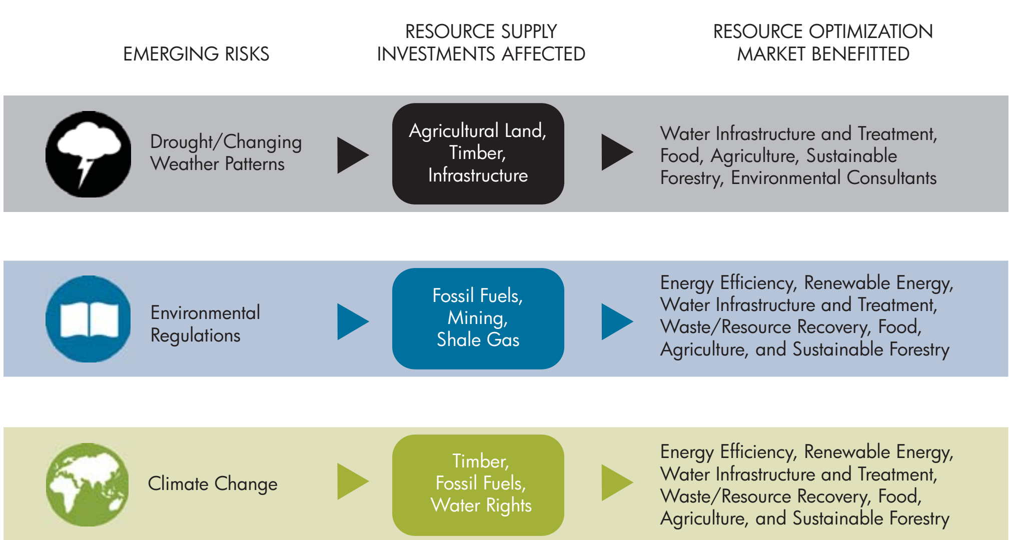
CONTINUED

[8] AgFunder News, "5 Things You Should Know About the California Drought", as of July 18, 2014 - taken from http://agfundernews.com/5-things-know-californias-record-drought.html
[9] Factset as of April 2014.
[10] Canadian Underwriter.ca, "Flooding drives nat cat insured losses globally in first half of 2013: Swiss Re," as of August 21, 2013 taken from http://www.canadianunderwriter.ca/news/flooding-drives-nat-cat-insured-losses-globally-in-first-half-of-2013-swiss-re/1002544016/?&er=NA
[11] Continuity, "The Magazine of the Business Continuity Institute" Q2 2013, p16, taken from http://www.bcifiles.com/Q2_online.pdf

Technology substitution

Incentivized by higher energy prices and/or policies, ***companies rolling out new, proven energy efficiency technology can accelerate obsolescence in other areas.*** For example, LED-based lighting is expected to grow from 15% (in 2013) to 45% of the global lighting market by 2016[12], replacing conventional lighting.

Figure B: Hedging Risks to Resource Supply Investments



Source: "Expect the Unexpected: Building business value in a changing world," KPMG report 2012.

ACTIVE MANAGEMENT OF LISTED EQUITIES BEATS PASSIVE STRATEGIES AND VENTURE CAPITAL

Impax has been researching the investment opportunities available to investors seeking Resource Optimization equity exposure for 16 years. Our research has shown that active management of listed equities is optimal for four reasons:

Inherent pricing inefficiency

RO markets are highly complex with materially higher exposure to technology developments, regulatory change and corporate activity than is found in the broader economy. These complexities lead to frequent mis-pricings in the stocks of RO companies from which a specialist manager can benefit.

CONTINUED

[12] Philips Lighting global market study 2013.

Under-researched companies

The median number of analysts covering RO stocks is 13, while the corresponding number for stocks in the MSCI ACWI is 20[13]. Accordingly, an experienced specialist investment team should be well placed to develop profitable insights into less covered companies.

Broad scope for portfolio construction

The RO universe comprises a wide range of liquid cyclical and defensive stocks, providing the active investor with scope to tailor an RO portfolio to suit a variety of market conditions across the short, medium and long-term.

More favorable risk/return characteristics than venture capital

Market and technology complexity means venture investments have particularly high, security-specific risks. Our analysis indicates that the poor returns from most venture capital investments in the RO sector over the past decade can be explained by the impact on relatively concentrated portfolios of adverse policy and regulatory changes, for example China's decision to dominate the market in solar panels drove down prices by ~ 80%[14] in five years and destroyed the business models of many venture backed entrants.

RECOMMENDED PORTFOLIO POSITIONING

For a variety of reasons, many investors have historically allocated Resource Optimization stocks to their environmentally focused environmental, social and governance (ESG) or socially responsible investing (SRI) baskets. Some will continue to do so but the appeal of RO investing is now much broader. As shown in Figure C, we believe that institutional and other investors should consider the role of a portfolio of actively managed RO stocks to be:

A diversifier to global equity

Providing growth opportunities through exposure to a universe of stocks that are not commonly found elsewhere in a typical global equity portfolio.

A hedge for natural resources or fossil energy exposure

Broadening resource oriented portfolios to RO investments with similar commodity factor exposure and natural hedges against emerging "fat-tail" risks ; or

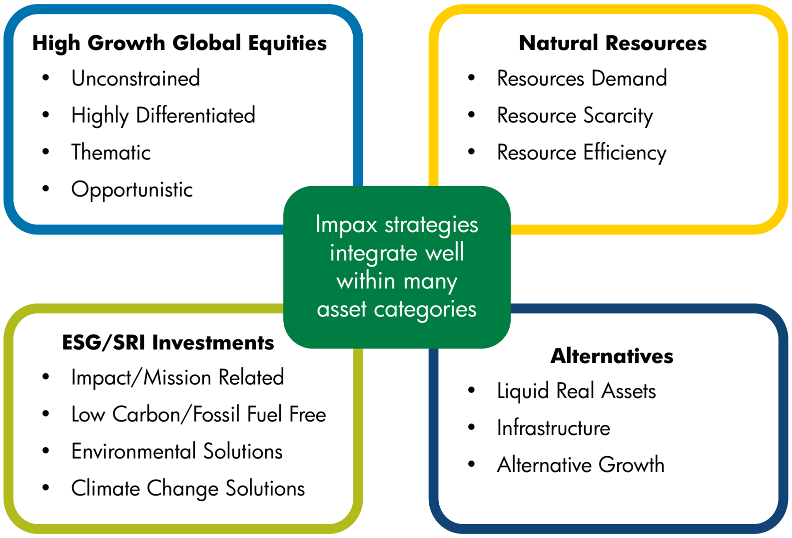
A complement to liquid real assets

RO portfolios typically have a high exposure to infrastructure and related markets, and so may complement other public and private markets approaches.

CONTINUED

[13] Factset and Impax internal sources.
[14] The Wall Street Journal Business (or WSJ.com), "EU to Investigate Chinese Solar-Panel Markets" as of September 6, 2012 taken from http://online.wsj.com/news/articles/SB10000872396390443819404577634862332187148

Figure C: Where Does Resource Optimization Belong in a Portfolio?



CONCLUSION

Globally, we believe economic growth looks set to maintain an upward trend over the next few years but is likely to be geographically patchy. Investors seeking higher, long-term returns need to examine carefully how they are positioning their portfolios for emerging growth opportunities and for emerging risks.

The inexorable trend of rising resource demand amidst resource constraints provides the backdrop to a compelling investment case for Resource Optimization, where many investors are under-allocated. There is strong evidence that a portfolio of RO securities can complement and enhance a typical global equity portfolio. The rapid pace of change in technology, regulations and policy, combined with low levels of analyst coverage lead to a prevalence of mis-pricing in these markets, underpinning the need for active investment management.

Pax World Management LLC

Pax World is a leader in sustainable investing, the full integration of environmental, social and governance (ESG) factors into investment analysis, security selection, portfolio construction and risk management. Pax World combines rigorous ESG analysis with equally rigorous financial analysis in seeking to identify better-managed, industry leading companies that meet positive corporate responsibility standards, have a clear vision for managing risk, and are focused on delivering long-term value to shareholders. Pax World launched the first socially responsible mutual fund in 1971 and today offers a family of seven mutual funds, ESG Managers® Portfolios, multimanager asset allocation portfolios powered by Morningstar Associates, LLC, and separately managed accounts. For more information, visit paxworld.com.

Impax Asset Management

Impax Asset Management Ltd, sub-adviser to the Pax World Global Environmental Markets Fund, is a leading global equity specialist, investing in companies active in the rapidly growing and inefficiently priced resource optimization markets. Impax has been researching and managing portfolios of publically traded stocks and private equity in this space for over 15 years, with 30 investment team members. Impax has offices in London, New York, Portland, OR and Hong Kong.

You should consider a fund's investment objectives, risks, and charges and expenses carefully before investing. For this and other important information, please obtain a fund prospectus by calling 800.767.1729 or visiting www.paxworld.com. Please read it carefully before investing. An investment in the Pax World Funds involves risk, including loss of principal.

Risk: Equity investments are subject to market fluctuations, the fund's share price can fall because of weakness in the broad market, a particular industry, or specific holdings. Emerging market and international investments involve risk of capital loss from unfavorable fluctuations in currency values, differences in generally accepted accounting principles, economic or political instability in other nations or increased volatility and lower trading volume.

Past performance does not guarantee future results.

Separately managed accounts and related advisory services are provided by Pax World Management LLC, a federally registered investment adviser. ALPS Distributors, Inc. is not the distributor for Pax World's separately managed accounts.

Pax World Investments

Pax World Investments
30 Penhallow Street, Suite 400
Portsmouth, NH 03801
800.372.7827
info@paxworld.com
www.paxworld.com