

# Investmentfocus

*February 2009*

## The Infrastructure Opportunity: Repair, Build and Stimulate

### Executive Summary

Infrastructure is the foundation of a society's economy and a determining factor in its ability to compete in a changing world. In developed countries, aging infrastructure is sorely in need of replacement, upgrade or repair. In emerging markets, demand is even greater for new infrastructure development, as countries seek to compete in an increasingly globalized marketplace, to facilitate the migration from rural to urban life and to improve domestic living standards. Today, an estimated two percent of global gross domestic product is spent annually on infrastructure investment and maintenance—the equivalent of approximately \$1 trillion. By 2030, it is estimated that a cumulative \$41 trillion is needed to build and repair infrastructure globally to meet expanding demand, suggesting that the current pace of spending may have to be increased in the coming decades.<sup>1</sup>

As economic slowdowns and recession spread across the globe, government spending on infrastructure has become headline news. As the United States did with Franklin D. Roosevelt's New Deal public works plan during the Great Depression, countries are looking once again to infrastructure spending to stimulate economic growth. In late 2008, the United States, China, Australia and Brazil, among others, announced bold plans to increase infrastructure expenditure to kick start their economies. However, over the longer term, governments will need to rely on the private sector to play a more important role as their own abilities to raise the enormous amount of capital required to fund such projects are stretched thin.

Accelerated spending in the short term—combined with the secular demand for infrastructure development and repair over the long term—support the investment opportunity in infrastructure, either through private equity or publicly traded companies.

Governments are putting forward large amounts of infrastructure spending to help global economic recovery; we believe this spending will offset some of the headwinds experienced in 2008, when the difficulty in accessing funding led to stalled and cancelled projects. Furthermore, infrastructure spending will need to remain a priority over the longer term as the demand for new and modernized infrastructure continues to expand on a global scale. Infrastructure stocks therefore may serve as an important source of risk-adjusted returns to a diversified portfolio.

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<sup>1</sup> Booz Allen Hamilton, Lights! Water! Motion!, 2007.

## Infrastructure Defined

Infrastructure comprises the vast physical assets that help support everyday life and allow a country to operate efficiently, grow and prosper. It includes all the elements of a country’s physical foundation: roads, railways, bridges, airports, waterways, utilities and essential services, such as water, electricity, sewage disposal and energy storage; communication networks of towers and wires that facilitate wired and wireless communications; and public universities, hospitals and other social services facilities.

Infrastructure assets share certain common attributes: They are generally expensive to construct and to maintain, and they often function as monopolies because barriers to competitive entry are high. Infrastructure assets tend to operate under the jurisdiction of government regulators and, once up and running, tend to be rather immune to normal business cycles since demand for their services is inelastic. Thus, direct investments in infrastructure tend to generate predictable, stable cash flows. In addition, these unique characteristics may benefit the public companies engaged in infrastructure projects.

*Display 1* shows the different asset types under the infrastructure umbrella.

### Display 1: Infrastructure encompasses many different types of investment possibilities

Energy	• Oil and gas transportation	• Alternative energy
Transportation	• Toll roads, tunnels, bridges • Railroads, mass transit • Parking facilities	• Ports • Airports
Utilities	• Electricity • Water	• Gas
Telecommunications	• Wireless networks	• Cable systems
Other	• Health-care facilities	• Education facilities

Source: Morgan Stanley Investment Management

A variety of companies are involved in an infrastructure project at different stages of its life cycle: financing, construction, execution and operation. There are varying degrees of risk associated with each stage, with significant risk at the outset of a project due to the intrinsic capital intensity. Pension funds, investment funds and banks participate in the financing cycle. Construction, engineering, materials and heavy equipment companies participate in the planning and execution of the project. Finally, companies that specialize in operation and maintenance become involved once the project is completed.

## Secular Demand for Global Infrastructure Investment

The pressing need to address failing infrastructure in the United States, Europe and other regions of the developed world and to build infrastructure in emerging market countries, such as China, India and Latin America, will demand substantial investment over the next 20 years.

In the developed world, infrastructure is in dire need of repair and modernization. Investment has not kept pace with the need to upgrade existing infrastructure. An estimated 28% of bridges in the United States are deemed in poor condition.<sup>2</sup> In 2006, London experienced the worst drought in a century caused by the City’s old, leaking pipes. That same year, an electrical blackout paralyzed the people of Queens, a borough of New York City. Infrastructure is the key to maintaining competitiveness, making the need to build and upgrade infrastructure vital.

In emerging market countries, crowded roadways, over-utilized transportation systems, inadequate water and sanitation services, and a lack of affordable housing is straining economies as people move to cities to find opportunity. Approximately 1.6 billion people—a quarter of the world’s population—remain without electricity and for those who do have access, supply is often irregular and expensive. An estimated 1.1 billion people do not have access to safe drinking water, while 2.6 billion lack basic sanitation, according to the World Bank.<sup>3</sup> The strain that urban infrastructure systems are currently experiencing is not going away any time soon. In fact, United Nations’ estimates show that the global urban population has risen from 730 million in 1950 to more than 2.3 billion people in 1990. In its latest projections, the UN expects a further 1.5 billion people to live in cities by 2015, for a total urban population of 3.8 billion. As *Display 2* illustrates, the vast majority of that growing urban population will be in the emerging world.

<sup>2</sup>American Society of Civil Engineers

<sup>3</sup>Morgan Stanley Research: EM Infrastructure Just Getting Started. March 2008.

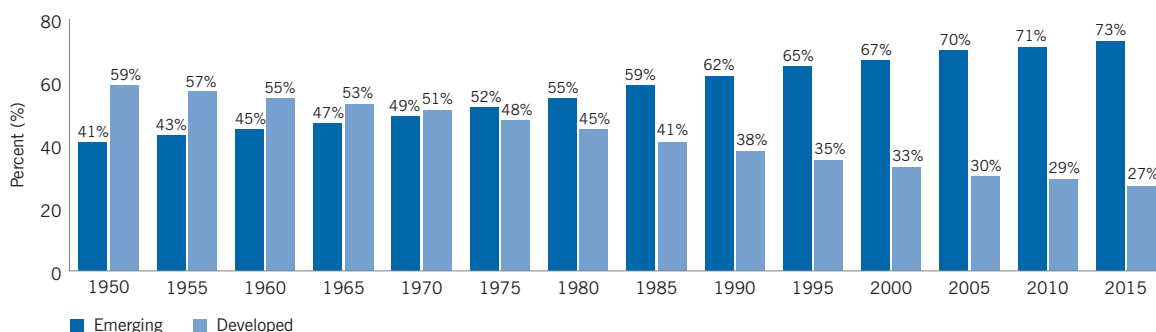
Globalization is also an important factor driving the growing demand for infrastructure development. As markets become more global, improved railway, port, airport and other transportation services are needed for business and trade.

These factors translate into the need for substantial investment—estimated at \$41 trillion and as high as \$65 trillion—in infrastructure expenditure globally over the next 20 years.<sup>4</sup> *Display 3* demonstrates the global magnitude of infrastructure investment needs by region and sector. As governments attempt to stave off prolonged recessions, they have announced plans to accelerate this spending through forthcoming stimulus packages.

The following sections of this paper outline these plans by looking at the infrastructure condition of specific countries.

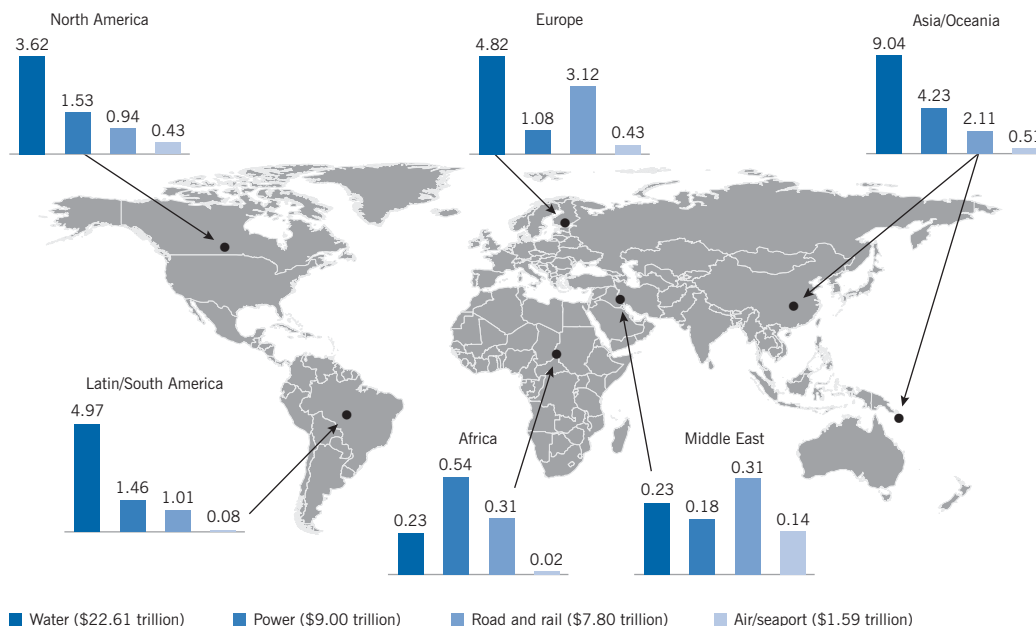
### Display 2: Emerging markets will account for nearly three quarters of the world’s urban population by 2015

Breakdown of global urban population 1950–2015



Source: United Nations World Population Prospects 2005 Revision and Morgan Stanley Research

### Display 3: The \$41 trillion infrastructure challenge—projected infrastructure spending (2005–2030)



Source: Booz Allen Hamilton, Global Infrastructure Partners, World Energy Outlook, Organisation for Economic Co-operation and Development (OECD), Boeing, Drewry Shipping Consultants, U.S. Department of Transportation

All forecasts are subject to change at any time and may not come to pass due to changes in market or economic conditions.

<sup>4</sup>Booz Allen Hamilton, Lights! Water! Motion!, 2007 and OECD Infrastructure to 2030 Report, January 2008.

## United States

In a statement to the U.S. Senate Committee on Finance on July 10, 2008, the Congressional Budget Office reported that the United States currently invests \$400 billion per year on infrastructure—approximately 2.4% of GDP. While this is a significant figure, it has proven inadequate to meet current needs. Increased congestion within the nation’s transportation network challenges economic productivity by lengthening commutes and delaying the shipment of goods. For example, an estimated \$15 billion of productivity is lost annually due to flight delays, while road congestion costs \$78 billion a year in lost time and wasted fuel. Failures within key systems, such as the weakened levy system in New Orleans, or the danger posed by structurally dangerous or obsolete structures, such as the I-35W Minneapolis bridge over the Mississippi, are examples of how underinvestment in infrastructure has become an issue of national safety.

In 2005, the United States received a “D” grade from the American Society of Civil Engineers assessing the current condition of aviation, bridges, waterways and other basic services (*Display 4*). Spending needs to increase to \$1.6 trillion annually over the next five years simply to repair existing infrastructure.<sup>5</sup> This investment is critical to strengthen user safety, bolster long-term competitiveness and to ensure economic growth.

An economic downturn in the United States has accelerated plans for expenditures to rebuild national infrastructure that has been neglected for decades. In December 2008, then President-Elect Obama announced a comprehensive infrastructure plan to help spur economic growth in the United States—the largest national investment in infrastructure since the 1950s. The plan calls for between \$600 billion and \$1 trillion in spending with a large part planned for five broad categories: transportation and traditional infrastructure, school construction, energy efficiency, broadband internet access and health-care information technology.

Public spending on infrastructure is recognized as one of the most effective ways to counter an economic slowdown because it has the advantage of directly creating more jobs and generating a healthy multiplier effect throughout the economy by creating demand for materials and services. The U.S. Department of Transportation estimates that every dollar in federal highway investment creates \$6.20 in economic activity. By comparison, a \$1 tax cut is estimated to produce only 67 cents. The current proposed endeavors are expected to create more than two million jobs and stimulate approximately \$35 billion per year in new economic activity.<sup>6</sup>

President Obama’s plan also includes the creation of a National Infrastructure Reinvestment Bank to expand and enhance existing federal transportation investments. The bank will receive an infusion of federal money—\$60 billion over 10 years—to finance transportation infrastructure projects across the country.

While stimulus spending would provide some immediate relief for infrastructure needs, it does not fully address the long-term needs posed by the nation’s population and traffic growth. Spending will need to remain a priority well beyond the government stimulus plans.

### Display 4: U.S. infrastructure needs upgrading

U.S. infrastructure grades

Sector	2005 grade*
Aviation	D+
Bridges	C
Dams	D
Drinking Water	D-
Energy (national power grid)	D
Navigable waterways	D
Rail	D
Roads	D
Transit	D+
Wastewater	D
<b>U.S.’s Infrastructure G.P.A.</b>	<b>D</b>

Source: American Society of Civil Engineers (ASCE); <http://www.asce.org/reportcard/2005/index.cfm>

\*The ASCE has released the 2009 overall grade for U.S. infrastructure, and it has remained a D. A full updated breakdown of sectors, however, will not be available until March 2009.

<sup>5</sup>American Society of Civil Engineers

<sup>6</sup>New America Foundation, Redressing America’s Public Infrastructure Deficit, Testimony before the House Committee on Transportation and Infrastructure, June 19, 2008.

## Europe

Like the United States, European countries must focus on the maintenance of their existing infrastructure. However, in order to compete successfully in the global marketplace, they also need to support new development efforts. The European Union (EU) has committed to enhancing its economic efficiency by promoting a series of infrastructure projects designed to foster cohesion and growth. To this end, it is allocating more than \$900 billion to transportation projects, which include rail corridors to connect seaports, airports and major cities, and also to introduce high-speed trains between major cities and a single European satellite-tracking freight rail system. By 2020, the EU expects to have a cross-continental rail, road and waterway network with a proportional increase in the number of seaports and airports in the region.<sup>7</sup>

Energy-related infrastructure is also expected to garner significant investments in Europe. In particular, environmental legislation in Germany, Denmark, Spain and the Netherlands has stimulated investment in renewable energy.

The economic recovery plan in Europe aimed partly at infrastructure, green technology and energy efficiency investments combines national action with EU policy. In November 2008, the European Commission proposed a stimulus package totaling €200 billion that would be sourced both from national and EU budgets to bolster growth and employment within its 27 member countries. Many EU countries such as the UK, Germany and France have already announced country specific measures.<sup>8</sup>

## China

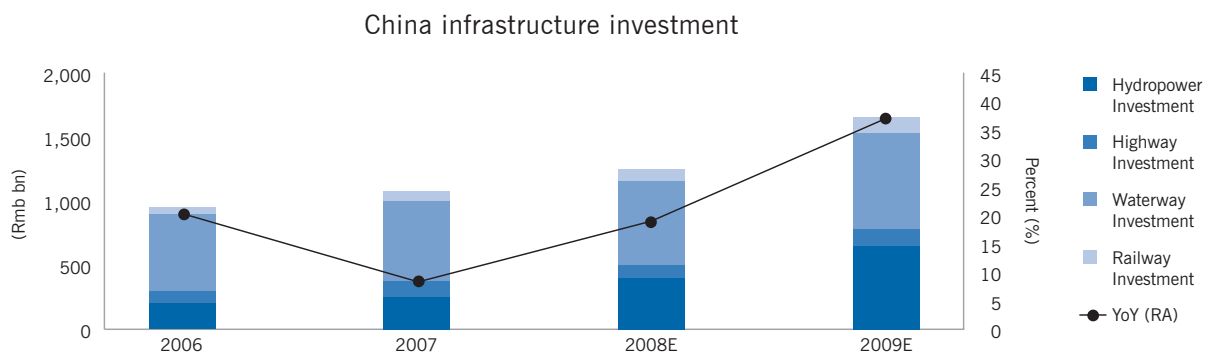
In China, infrastructure demand has been driven by urbanization, the development of a market economy and the need for more capacity to transport exports. China's aggressive infrastructure spending—growing by 20% annually—has been designed to accomplish in two decades what the U.S. accomplished in half a century. This strategy has proven successful in stimulating its explosive growth rate, making China one of the world's fastest-growing economy. China is expected to account for approximately 80% of total infrastructure spending in the East Asia region from 2006 to 2010, which translates into approximately nine percent of its GDP—or nearly \$350 billion annually.<sup>9</sup>

Spending on energy will account for a significant portion of infrastructure expenditure. Along with India, China is expected to account for 50% of the world's increase in energy demand over the next two decades. According to the World Energy Outlook 2007, published by the International Energy Association, China must install more power-generating capacity over the next 20 years than is currently installed in the United States.

However, China has not been immune to the global slowdown. In November, China unveiled a \$586 billion stimulus package that would both help sustain its long record of economic expansion and rising prosperity and drive infrastructure development to new heights. Much of the spending will be related to transportation, going toward building highways, railroads and airports.

According to Morgan Stanley Research, railway infrastructure investment is expected to surge 88% year-over-year, while total highway investment will rise 25%. Total waterway investment is expected to remain at 8.9% year-over-year (*Display 5*).<sup>10</sup> China's government has pledged to revamp its railway network and lay new lines between Beijing and Shanghai, as well as five inter-city railways.

### Display 5: China investments in infrastructure expected to surge



Source: MoC and MoR and Morgan Stanley Research; E denotes Morgan Stanley estimate

All forecasts are subject to change at any time and may not come to pass due to changes in market or economic conditions.

<sup>7</sup>Infrastructure 2008: A Competitive Advantage. Urban Land Institute and Ernst &Young, 2007.

<sup>8</sup>[http://ec.europa.eu/news/economy/081127\\_1\\_en.htm](http://ec.europa.eu/news/economy/081127_1_en.htm)

<sup>9</sup><http://siteresources.worldbank.org/INTEAPINFRASTRUC/Resources/855084-1137106254308/ResourceRequirements.pdf>

<sup>10</sup>Morgan Stanley Research, December 2008.

## India

Failure to spend adequately on infrastructure improvements could jeopardize India's long-term prospects. After five years of nine percent economic growth, nearly on par with China, India's network of highways and power plants are overwhelmed. Daily traffic jams and power blackouts have hurt both consumers and corporations. Approximately 45% of Indian households are without power, and many local water systems remain unreliable. India's Finance Minister estimates that a lack of infrastructure spending has been a drag on economic growth of one to two percentage points annually. India's planning commission estimates the country will need to invest \$500 billion from 2008 to 2012, up from the \$21 billion currently spent annually.<sup>11</sup>

To make matters worse, India was especially hard hit by the credit crisis as private investment was expected to fund around half of the projects planned to improve the nation's infrastructure. To help prop up its economy and push forward much needed infrastructure projects the Indian government announced, in December 2008, plans to spend an incremental \$3 billion on infrastructure projects including roads, ports and power plants.

## Latin America

Latin America's population is growing faster than its rate of infrastructure development. Its countries are building from the ground up in an attempt to propel economies and improve productivity.

In 2008, Mexico budgeted \$2.7 billion to build out its road system. Even this substantial infusion would leave more than half of its 213,000-mile road system unpaved. To address this deficiency, Mexico announced a plan to invest \$250 billion over the next five years in transportation infrastructure projects, specifically for road and rail system upgrades.<sup>12</sup>

Brazil has historically underinvested in infrastructure. To remain competitive, it now faces the challenge of both repairing and expanding existing infrastructure. In Brazil, only 12% of roads are paved.<sup>13</sup> Yet, the road system is not Brazil's primary infrastructure concern: Ports take priority because of their direct effect on the country's export market. For Brazil and other coastal countries in Latin America, 40% of transport costs are related to the quality of domestic infrastructure. If Brazil increased the efficiency of its ports to the standard of those of European nations, transport costs are estimated to decrease by 15%.<sup>14</sup> In December 2008, Brazil announced plans to increase infrastructure spending by 34%.

Other countries in Latin America, also impacted by the global economic slowdown, have announced plans to increase infrastructure investment. For example, Argentina announced an expanded public works plan and approximately \$31 billion has been budgeted, or a record 5% of gross domestic product.

## Sources of Funding

Traditionally, governments have shouldered the entire responsibility for investing, building and maintaining infrastructure projects. However, as needs have expanded, costs have increased and budgets have contracted, governments have turned to the private sector for funding either through direct ownership of infrastructure assets or through public-private partnerships (PPPs), which are structured to allow for long-term private financing and operation of publicly-owned assets. Private investors may offer valuable administrative and operational skills, and may improve project efficiency due to the natural incentive to control costs and maximize value when private funds are at risk.

Internationally, private capital has been employed for public services for decades. Today, an estimated 10% to 15% of total annual spending on infrastructure projects worldwide comes from private investors, and more than 100 countries have utilized privatization for infrastructure development.<sup>15</sup>

The United States has been slower to adopt the idea of privatization. In New Jersey, the legislature recently turned down a proposal to sell the Garden State Parkway and the New Jersey Turnpike, two major toll roads. However, the PPP model has recently gained acceptance in Chicago with the recent lease to operate the Chicago Skyway Toll Road, downtown parking garages and the Midway Airport. In addition, Indiana succeeded in privatizing the operation of a toll road, and the San Diego South Bay Expressway was the first road in California to be built as a PPP.

Privatization should continue to play a larger role in infrastructure spending and in bridging the infrastructure-investment gap. However, 2008 proved a difficult year as infrastructure projects faced headwinds from tighter financing, which increased the number of cancelled projects. Governments in both developed and emerging markets have announced billions of dollars in infrastructure spending to help bridge the gap and to stimulate growth in a challenging economic environment.

<sup>11</sup>Infrastructure 2008: A Competitive Advantage. Urban Land Institute and Ernst &Young. 2007.

<sup>12</sup>Ibid.

<sup>13</sup>Ibid.

<sup>14</sup>Latin American Economic Outlook 2008. Organisation for Economic Co-operation and Development. 2007.

<sup>15</sup>Ernst & Young, Investing in Global Infrastructure: An Emerging Asset Class.

**Display 6: Large Fiscal Stimulus Plans Announced in 2008**

	Size of Stimulus Package
United States	\$600 billion–\$1 trillion
China	\$589 billion
Europe	\$268 billion
Brazil	\$254 billion
Japan	\$250 billion
Australia	\$27.2 billion
South Korea	\$11 billion
India	\$3 billion

**Investing in Infrastructure—Private Equity vs. Publicly-Traded Securities**

There are two primary ways for investors to gain exposure to infrastructure in their portfolios: through a private equity fund or the public equity markets.

**Private Equity**

Unlisted equity holdings, usually accessed through private equity funds, have historically been the preferred vehicle for infrastructure investment. Unlisted or private infrastructure funds invest directly in assets or operating companies, offering higher risk-adjusted returns due to lower volatility. Like other private equity funds, private infrastructure funds require large minimum investments and involve lock-up periods of several years, reducing liquidity. According to Private Equity Intelligence, unlisted infrastructure funds raised \$34.9 billion in 2007, up 429% since 2005.

Private infrastructure investment has become increasingly popular among institutional investors. For example, California's Public Employees' Retirement System earmarked \$7 billion for infrastructure investments through 2010, and Washington State's investment board has allocated 5% of its fund to infrastructure investment.<sup>16</sup>

**Publicly-Traded Securities**

Publicly-traded infrastructure companies worldwide offer the largest investment opportunity in infrastructure and, because of their wider scope, represent companies that benefit regardless of whether spending is initiated by the public or private sector. Listed infrastructure assets include toll roads and bridge operators, airport and port operators, utility companies, and companies involved in natural gas or petroleum transportation.

An increase in the number of infrastructure indices testifies to the listed infrastructure assets' burgeoning popularity. These infrastructure-oriented indices have typically outperformed the broader equity market. The market capitalization of the S&P Global Infrastructure Index, which is approximately \$1.7 trillion (as of December 2008), illustrates the magnitude of the opportunity.

<sup>16</sup>Wall Street Journal, August, 2008.

## Display 7: Private and public infrastructure investing have distinguishing characteristics

	Private Equity Fund	Publicly listed Companies
Access	Invest in private equity fund with other investments	Invest in traded equities
Investor Eligibility	Qualified investors and institutional investors only	Available for purchase on open exchanges
Diversification	Low	High
Time to Invest	Over three years	Immediate
Liquidity	Ten-year lock-up period	Daily
Minimum Investment	High	Low
Potential advantages	Illiquidity return premium Smooth return profile Ownership of assets	Easy access Full diversification Daily liquidity
Potential disadvantage	High specific investment risk Low transparency Illiquidity	Correlation to listed equity markets

Source: Morgan Stanley Investment Management

### Infrastructure and Its Role in a Diversified Portfolio

Because publicly traded companies offer liquidity, low capital requirements and reporting transparency, they are an easy way for investors to gain access to the growing investment opportunity in infrastructure. In fact, listed infrastructure assets can be an important growth oriented component in a well-diversified portfolio. Companies that provide construction, engineering, building materials and financing for infrastructure projects stand to benefit from the necessary worldwide surge in spending.

Listed infrastructure, represented by the S&P Global Infrastructure Index, is a diversified universe of infrastructure companies that cover multiple sectors and both developed and emerging markets. The S&P Global Infrastructure Index, as shown in *Display 8*, has provided greater returns than broader equity markets with a similar volatility level, resulting in greater risk-adjusted returns.

Although infrastructure stocks are subject to the overall risk of equities as an asset class, they possess unique characteristics that provide diversification benefits. The S&P Global Infrastructure Index has a beta of 0.79 to the S&P 500 while international, global and emerging market indices all have a beta of greater than 1.00 to the S&P 500 (*Display 8*).

As a result, S&P Global Infrastructure stocks may offer not only potential for attractive risk-adjusted returns, but also may provide diversification benefits to the equity component of a portfolio.

Correspondingly, portfolio efficiency rises when infrastructure is added to the equity portion of a portfolio divided 60/40 between stocks and bonds (as demonstrated in *Display 9*), raising the return per unit of risk taken, or Sharpe ratio. In fact, over the past 7 years, holding 5%-20% of listed infrastructure stocks in a portfolio helped move the Sharpe ratio into positive territory.

**Display 8: Investing in infrastructure offers significant diversification potential**

Nov 30, 2001–Dec 31, 2008

	Average Annual Return (%)	Annual Standard Deviation (%)	Sharpe Ratio	Beta vs. S&P 500
S&P Global Infrastructure	11.79	15.15	0.61	0.79
S&P 500	(1.39)	14.26	(0.28)	1.00
MSCI World	1.14	15.20	(0.10)	1.03
MSCI EAFE	3.89	16.77	0.08	1.04
MSCI Emerging Markets	12.69	23.56	0.43	1.32

Source: Zephyr StyleAdvisor as of 12/31/08.

Past performance is no guarantee of future results. The index performance above is not intended to predict the performance of any specific investment.

Investors cannot invest in an index. See definitions on page 11.

Diversification does not insure against market loss.

**Display 9: Exposure to infrastructure may improve portfolios risk/return potential**

Infrastructure allocation analysis

Nov 30, 2001–Dec 31, 2008

	% in S&P Global Infrastructure Index				
	60/40%	5%	10%	15%	20%
Annualized Return	1.56	2.37	3.15	3.89	4.60
Standard Deviation	8.07	8.25	8.47	8.71	8.98
Sharpe Ratio	(0.13)	(0.03)	0.06	0.15	0.22

Source: Zephyr StyleAdvisor as of 12/31/08.

Past performance is no guarantee of future results. The 60/40% Portfolio consists of a 60% S&amp;P 500 and a 40% Barclays Capital U.S. Aggregate allocation.

Blended portfolios are rebalanced annually.

The value of equity investments are more volatile than the bonds which can pay interest and return principal. Foreign stocks are generally riskier than U.S. stocks.

Infrastructure stocks can be more volatile than investing in a more diversified portfolio.

**Conclusion**

Over the next 20 years, a total of \$41 trillion will be needed to build new infrastructure in emerging markets and repair ailing infrastructure in developed markets. In the short term, governments are accelerating spending on infrastructure to address the impact of slower economic growth. Over the longer term, most governments will need to secure additional funding in the private sector, through public/private partnerships, to meet the substantial demands for infrastructure spending.

The need to spend on infrastructure creates opportunities for investors. Publicly listed securities offer an easy way for investors to gain access to this growing investment opportunity. Adding infrastructure to a portfolio can enhance diversification and the potential for attractive risk-adjusted returns.

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1
2
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(Extremely helpful)

# Morgan Stanley Investment Management Publications

Following are recent thought-leadership papers covering a range of investment issues.

## **Portfolio Choices for Oil Based Sovereign Wealth Funds**

January 2009—Financial management of resources generated by oil sales has gained momentum recently in light of the growing endowment of oil-rich countries' sovereign wealth funds (SWF). This paper outlines a framework investors can use to address some of these issues, proposing that the optimal asset allocation for a SWF should take into consideration both speculative and hedging demand.

## **Portfolio Liquidity**

January 2009—The deterioration in asset values during 2008 unveiled a host of new liquidity problems for many diversified portfolios. Portfolio managers need cash-like assets to fulfill immediate funding requirements, yet they must also maintain low concentrations of illiquid assets in their portfolios, sustain returns, and preserve beta sensitivity. In this paper, we set forth a basic framework for addressing the highly complex liquidity problem.

## **Global Recovery Post Bubble**

January 2009—While the worst of the global downturn may run its course by late 2009, the risk is that any rebound in 2010 will be anemic and fragile. In this article, Stephen Roach, Chairman of Morgan Stanley Asia, shares his views on the striking asymmetry of economic forces leading up to a global rebalancing.

## **An Opportunistic Approach to Hedge Fund Investing In the New Market Landscape**

January 2009—In this paper, we examine some of the primary causes of the industry's recent underperformance for hedge fund managers. We also look at a likely consequence of the growing pressure on managers—a consolidation that will put a premium on large, diversified hedge fund providers with institutional-quality operations. Within this context, we identify several market dislocations and distressed pricing opportunities that we believe hedge funds are well positioned to exploit.

## **Private Equity Outlook: Evaluating Opportunities and Allocations amid the Credit Crunch**

January 2009—While private equity is not impervious to the volatility inherent in the economic and business cycles, we anticipate that compelling investment opportunities will continue to surface.

Our research shows that these opportunities will be characterized by attractive valuations and conservative leverage, and entail the acquisition of businesses that can be enhanced through operational/strategic changes and operate in niche markets. In the current environment, we believe that the middle market is more likely to offer prospects of this nature than the mega leveraged-buyout arena.

## **An Analytical View of President-Elect Obama's Policies**

November 2008—Senator Barack Obama's electoral victory, complete with expanded majorities in the House and Senate, gives the Democrats control over the legislative and administrative processes for the first time since 1994. In this article, the Morgan Stanley Government Relations team analyzes the significant ramifications of the election results for the new Administration's policies to deal with the economic crisis, as well as domestic priorities on taxes, health care, energy, the environment, labor relations and trade.

## **The 111th Congress**

November 2008—In this article, the Morgan Stanley Government Relations team reviews the composition of the new US Congress, and analyzes how the latest election portends significant policy changes for 2009 and beyond.

## **Public Fund CIO Survey: Optimizing Resources to Meet Evolving Demands**

November 2008—Morgan Stanley Investment Management's Public Fund CIO Survey provides a detailed look into the most pressing challenges facing chief investment officers at a time of unprecedented market volatility and evolving investment options. The survey results show that CIOs are addressing these challenges by seeking external providers for investment advice, pursuing strategic partnerships, shifting allocations to alternatives and enhancing risk management.

## **Bullish on Equities, with a Focus on the U.S.**

October 2008—The massive recent global equity-market selloff has left many investors wondering what to do next—should one stay the course, and keep one's equity exposure; or should one jump to the sidelines and hoard cash? According to Abhijit Chakraborti, head of U.S. Equity Research at Morgan Stanley, the equity market—especially after the recent correction—presents attractive opportunities, particularly in the United States.

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**Infrastructure Companies.** Infrastructure businesses include the risks of the potential for realized revenue volumes to be significantly lower than those projected and/or cost overruns; the risk that the nature of the concession fundamentally changes during the life of the project (e.g. the state sponsor alters the terms); and macroeconomic factors such as low GDP growth or high nominal rates raising the average cost of funding, government regulation which may affect rates charged to customers, government budgetary constraints, the imposition of special tariffs and changes in tax laws, regulatory policies and accounting standards. Other risks include environmental damage due to a company's operations or an accident, changes in market sentiment towards infrastructure, and terrorist acts. **Foreign and Emerging Markets.** Investments in foreign and emerging markets entail special risks such as currency, political, economic and market risks. **Utilities Industry.** Because the fund invests in the utilities industry, the fund is susceptible to economic, political or regulatory (or deregulatory) risks or other occurrences associated with the utilities industry.

#### Definitions

**Standard and Poor's 500 Index** (S&P 500 Index) is generally representative of the U.S. stock market. **Morgan Stanley Capital International World Index** (MSCI World) is a generally accepted index that measures performance from a diverse range of global stock markets, including securities representative of the market structure of 22 developed market countries in North America, Europe, and the Asia/Pacific region. **MSCI EAFE Index** is an unmanaged index of common stocks in Europe, Australia and the Far East (includes dividends net of withholding taxes). EAFE countries include Japan, most nations in Western Europe, Australia, New Zealand, Hong Kong and Singapore. The **S&P Global Infrastructure Index** includes 75 large, liquid infrastructure stocks from around the world. **Barclays Capital U.S. Aggregate** (formerly Lehman U.S. Aggregate) is an index comprised of approximately 6,000 publicly traded bonds including U.S. government, mortgage-backed, corporate and Yankee bonds with an average maturity of approximately 10 years. **MSCI Emerging Markets:** The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. **Standard deviation** is a measure of risk that represents the degree to which an investment's performance has varied from its average performance over a particular period. A higher standard deviation indicates higher risk. **Beta** is a measure of a fund's sensitivity to market movements. **Sharpe Ratio** is a measure of the excess return (or Risk Premium) per unit of risk in an investment asset

**Please consider the investment objectives, risks, charges and expenses of the fund carefully before investing. The prospectus contains this and other information about the fund. To obtain a prospectus, contact your Financial advisor, or download one at [morganstanley.com/msim](http://morganstanley.com/msim). Please read the prospectus carefully before investing.**

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