From Headlines to Trendlines
Long-term Investing for Wealth Expansion

THOMAS M. HAINLIN, CFA — NATIONAL INVESTMENT STRATEGIST
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For many investors, meeting basic financial needs like security and annual lifestyle expenses can engage their full investable resources. For other investors, wealth transcends the basic expenses of life. After primary needs are met “excess wealth” may be deployed to pursue other purposes. These may include personal interests such as affecting positive social change (through social impact investing or philanthropy) or pursuing personal or shared family interests (such as fine art, classic cars or other collectibles). Another purpose may be a longer-term goal of growing wealth through time and across generations. We refer to this investment objective as wealth expansion.

WEALTH EXPANSION

A wealth expansion portfolio allows investors who have “excess wealth” the opportunity to position a part of their overall investment portfolio today toward a vision or a view of the world of tomorrow. When immediate financial priorities are generally met with other, shorter-term investments, a wealth expansion portfolio can be treated as long-term, “patient” money, with less sensitivity to the potential volatility triggered by daily headlines and the unpredictability of shorter-term market cycles. For example, while patient money portfolios were probably impacted by shorter-term events and dislocations of the last decade (Argentina’s default, the events of September 11, 2001, the bursting of the dot-com bubble, the Lehman Brothers bankruptcy and resulting financial crisis, and the bursting of the housing bubble), they may have also taken advantage of the decade-long rise in the price of gold (up more than 400 percent), emerging markets equities (up nearly 350 percent in U.S. dollars), and oil (up nearly 250 percent).

A wealth expansion portfolio is focused on identifying how to capitalize on medium-term dislocations and opportunities, as well as longer-term economic, social and geopolitical trends and themes. The focus of a wealth expansion portfolio is on identifying how to capitalize on medium-term dislocations and opportunities, as well as longer-term economic, social and geopolitical trends and themes.
INDUSTRY TRANSFORMATION: Kodak/Instagram

The history of Kodak and Instagram offers an insight into how transformational change can disrupt an industry, creating both opportunity and risk. The film and camera company today known as Eastman Kodak was founded in 1881 by George Eastman. After 100 years, Kodak reached $10 billion in annual sales. At its peak, Kodak employed over 150,000 people worldwide, including 60,000 in Rochester, New York alone, accounting for 15 percent of that city’s entire workforce. Kodak invented the digital camera in 1975 and yet, despite nearly every smartphone and tablet having at least one if not two digital cameras today, Kodak filed for bankruptcy protection in January of 2012.2 Meanwhile in October 2010, two Stanford University graduates, Kevin Systrom and Mike Krieger, came up with a way to share digital photos over smartphones. Their company was called Instagram and employed just 13 people. Currently, Instagram has 150 million active users sharing more than 50 million photos per day. In April 2012, just a year and a half after the company’s inception and only three months after Kodak, the inventor of the digital camera, filed for bankruptcy, Instagram was sold to Facebook for $1 billion.3

THEME INVESTING

Theme investing involves the process of effectively identifying the catalysts or causes for long-term, transformative change. These changes can impact an individual business or an entire industry, and can even transform an individual country or the entire global economy. These catalysts may not be directly related to specific government policies, how fast or how slow the economy is growing, how many or how few jobs are being created, or whether inflation is around the corner or far out on the horizon. Rather, we believe the catalysts are more likely to be related to the effects of political, social, environmental, demographic or technological developments.

Investors with a wealth expansion portfolio should think about stepping away from the microscope and peering through the telescope. They should consider looking to the distant future for opportunities, and ask, “Will the trends and themes of the past repeat themselves in the future, or will the future witness new regimes, new winners (and new losers)?” In other words, “Is my portfolio positioned for where the world has been…or where the world is going?” Thus, for long-term, patient investors, we believe the focus should be less on today’s headlines and more on tomorrow’s trendlines.

THE MEGATRENDS OF THE LAST 25 YEARS

In “Capitalism 4.0,” author Anatole Kaletsky identifies “vast and irreversible changes” that have transformed the world politically, economically and technologically and whose effects have reverberated across the capital markets.4 These include:

- The fall of the Berlin Wall in 1989, which symbolized the end of communism, opened up the so-called “Second World” (the Soviet Union, its allies and satellites), spread to areas such as India, Southern Africa and Turkey, and provided the major world powers with a “peace dividend” (substantially reduced defense spending)5
- The subsequent end (or pause?) of the Cold War between the Soviet Union and the United States, which opened up the so-called “Third World,” put an end to proxy wars, and led to political liberalization and economic development across Southeast Asia and Latin America
- The opening of China, capped by China’s entry into the World Trade Organization (WTO) in 2001
- A technological revolution that dramatically increased the speed and lowered the cost of communications, computing, data storage and air and sea transportation

Important disclosures provided on page 38.
Together, these developments led to a long-term (possibly permanent) shift in the world’s economies and capital markets. The “closed” economy of the First World (with a combined population of 800 million in 1989) became a global economy with billions of new workers, consumers, producers and savers.6 Manufacturing industries moved from advanced economies to the developing world, helping to create over 525 million jobs worldwide since 2000.7 Put into perspective, this equates to the addition of more than three times the size of the entire U.S. labor force to the global economy.8

The combination of urbanization and rising employment in the developing world has led to rising standards of living and a commensurate rise out of poverty. In East and Southeast Asia, 350 million workers have risen above the poverty level (defined as earning $2 or less per day) since 2000, creating a new global consumer class.9

In addition, lower tariffs, free-trade agreements and technological advances, such as containerized shipping, drove a sharp rise in global and intra-regional trade. In the three decades prior to 2000, total world merchandise trade grew by an average of $370 billion annually. Following China’s entry into the WTO in 2001, growth in world merchandise trade accelerated to average $1.4 trillion annually in the decade of the 2000s and to over $3 trillion so far in the decade of the 2010s.10 Globalization led to the disaggregation of the manufacturing process based on the principles of specialization and comparative advantage, driving global productivity growth and wealth creation.
World trade has accelerated since China joined the World Trade Organization in 2001.

Average annual growth in total global trade by decade

<table>
<thead>
<tr>
<th>Decade</th>
<th>U.S. dollars (in trillions)</th>
</tr>
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<tbody>
<tr>
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</tr>
<tr>
<td>1960s</td>
<td>$0.0</td>
</tr>
<tr>
<td>1970s</td>
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<td>$2.0</td>
</tr>
<tr>
<td>2010s*</td>
<td>$3.0</td>
</tr>
</tbody>
</table>

Source: World Trade Organization 2010s as of year-end 2013; Trade as measured by total merchandise trade

We believe these political, economic and technological “megatrends” of the last 25 years will continue to exert influence on economies and capital markets into the future. The global economy continues to become more open. Global trade continues to grow, particularly in trade among developing economies (often called the “south-south” trade). Myanmar is another example of a former “pariah” country beginning to enact political reforms in order to join the global economy.

THREE THEMES THAT DEFINED THE DECADE PAST

Within the 25-year megatrends, the last decade witnessed many trends that influenced and shaped the performance of global capital markets. Three events in particular, at the beginning of the decade, stand out:

United States – Twin deficits and a declining dollar

In 2001, the United States had just enjoyed three consecutive years of budget surpluses. The Congressional Budget Office (CBO) estimated that if policies continued, the entire net debt of the U.S. Treasury would be eliminated by 2009. Unfortunately, by 2002 anticipated future budget surpluses had already turned to deficit, and by 2010 the annual federal deficit had reached nearly $1.5 trillion. Rather than being eliminated, marketable debt held by the public mushroomed to nearly $9 trillion by 2010. Meanwhile, the trade deficit, which averaged $100 billion annually from 1984-1997, soared to over $700 billion annually from 2005-2008. The decade of rising “twin deficits” (fiscal and trade) saw the real trade-weighted value of the U.S. dollar fall by nearly a quarter against other major currencies, while over the same period U.S. equities generated an annualized rate of return of just over 1 percent.
Europe – One currency, many distortions

With the introduction of a common currency in the euro area, 17 countries shared a single exchange rate. Interest rates across the euro area converged toward the low rates of “core” nations, such as Germany. Lower interest rates in “peripheral” nations provided consumers in countries such as Ireland and Spain access to more affordable mortgages, leading to an overheated real estate market. Lower interest rates also allowed governments in France, Italy, Portugal, and Greece to increase debt issuance and European banks and insurance companies proved to be eager and willing buyers for government debt. When world capital markets began assessing each of the 17 countries as separate and distinct borrowers rather than as a united Europe, a sovereign debt crisis ensued and European banks and insurance companies were caught in the crossfire. During the first decade of the new euro, European stocks generated an annualized rate of return of less than 1 percent (in local currency).16

China – Labor shock, infrastructure awe

The dominant trend of the last decade was the rapid urbanization and industrialization of China. China joined the WTO in 2001, bringing hundreds of millions of workers into the global labor force. Access to abundant and low-cost labor, combined with advantageous exchange rates (enforced by strict capital controls), provided a comparative advantage and facilitated a migration in manufacturing from developed economies to Asia. The combination of export profits and “captured” domestic savings (via low or negative real savings rates, so-called “financial repression”) financed an infrastructure boom, supporting the migration of hundreds of millions of workers from rural areas to the cities. This migration has been dubbed “the largest peacetime movement of people in history.”17 Rapid urbanization fueled soaring consumption of commodities, particularly industrial metals. In 1995, China consumed less than 10 percent of the world’s nickel, copper, and aluminum. By the end of 2010, China alone accounted for more than one-third of the world’s nickel and nearly 40 percent of the world’s copper and aluminum consumption.18 The decade saw copper prices rise by more than four-fold, oil prices more than double, and broader emerging market equities generate a 15 percent annual rate of return (in local currency) for investors.19

Will these three events from the last decade continue to influence the markets?
China’s rapid urbanization and industrialization was the dominant theme of the last decade.

**FIVE INVESTMENT THEMES FOR THE DECADE AHEAD**

With the dramatic geopolitical and economic changes in the world, critical questions for long-term investors are: Will these three events that helped define the last decade continue to influence and impact the markets in the decade ahead or are we at an inflection point? Have these past trends run their course? What are the emerging trends that will define the decade ahead?

Within the context of the ongoing political, economic and technological megatrends described by Kaletsky and an examination of outcomes of the events of the past decade, we believe that we are indeed at an inflection point. We have identified a number of seismic shifts occurring around the world that are likely to lead to different outcomes for industries, for countries and for the global economy. We anticipate the impact of these changes will be reflected in the performance of the capital markets in the decade ahead. It is from this perspective that we derive a list of the following five themes that we believe have potential investable implications for long-term wealth expansion investors.
Investment Theme #1 — The U.S. energy revolution: a global game changer

Overview
In the last decade, lower labor costs were a comparative advantage that helped facilitate a shift in global manufacturing from developed economies to emerging ones. Today, we believe a combination of three forces may offset that shift:

• Converging costs of production as workers in emerging economies demand higher wages and better workplace conditions, and rising middle class populations in emerging market countries demand a greater focus on environmental issues such as air and water pollution and food quality

• The pursuit of divergent energy policies and investments by the world’s major industrial economies that led to differing outcomes: nuclear (Japan and France), wind (Germany, Spain and the United Kingdom), coal (China), and natural gas (United States)

• Recent technological advancements in energy production that have created a domestic energy boom through the combination of horizontal drilling and hydraulic fracturing techniques to access previously inaccessible oil and natural gas in shale rock formations

Access to abundant and low-cost energy may offset the impact of cheaper labor and become the comparative advantage for manufacturing in the decade ahead. If so, U.S. industrial companies may be uniquely positioned to benefit from this shift.

In addition to technological advancements, rising domestic oil production in the United States has led to a decline in oil imports, while increased use of domestically produced natural gas to generate electricity allowed for greater exports of coal. If fiscal deficits are also reduced, a decline in the U.S. “twin deficits” (fiscal and trade) would mark a shift from the past trend and could conceivably lead to a stronger dollar in the decade ahead, making U.S. assets more attractive to both domestic and foreign investors.

Key points
The ongoing “mega-trend” of the last 25 years continues—globalization and a manufacturing process ordered by specialization and comparative advantage. Three primary production factors go into finished goods and services: land (real estate), labor (workers) and capital (money and machines). Other secondary production factors include commodities such as oil, natural gas and industrial metals.

The last decade was marked by a global labor “shock” as China joined the WTO and access to abundant and low-cost labor became a comparative production advantage that helped facilitate a shift in global manufacturing from developed countries to emerging economies. Today, manufacturing costs in China are rising. In addition, social pressures are rising as China’s burgeoning middle class is demanding a greater focus on environmental issues such as addressing air and water pollution and food quality concerns.
Meanwhile, energy costs around the world have diverged due to different energy policies pursued by the world’s major industrial powers, United States, Europe and Japan:

- After the oil supply shock in the 1970s, France and Japan made significant investments in nuclear energy. However, after the Fukushima Daiichi nuclear disaster of 2011, Japan announced that it would join Germany and other countries in shutting down its nuclear plants to pursue alternative energy sources. France announced a goal to reduce dependence on nuclear energy from 75 percent to 50 percent by 2025.20

- Major investments in renewable wind energy by Germany and Spain (also in Italy and the United Kingdom to a lesser degree) have not been supported by realized performance in wind farms.21 Meanwhile, taxes on fossil fuels to subsidize renewable energy sources have resulted in significant increases in electricity costs for Germany, hurting export competitiveness.22

- The United States may be in a position to benefit from recent technological advancements in energy production, namely the combination of horizontal drilling and hydraulic fracturing techniques to access oil and natural gas from previously inaccessible shale rock formations.

Energy costs have diverged for the world’s major industrial powers.

Sources: Bloomberg, Korea Energy Economics Institute; Data as of December 2013
Access to abundant and low-cost energy may ultimately provide U.S. industrial companies with a comparative advantage (a global energy “shock”) in global manufacturing in the decade ahead, more than offsetting comparatively higher labor costs. Lower natural gas prices help provide a benefit to U.S. companies in two ways: through primary consumption of natural gas (particularly in industries such as petrochemicals and fertilizer) and through the continued shift of electricity generation from coal to abundant and low-priced natural gas.

Two-thirds of U.S. industrial energy comes through direct or primary sources of energy such as coal, natural gas, petroleum and renewable energy, with natural gas being the largest single source. The remaining one-third of U.S. industrial energy comes indirectly from electricity. Natural gas, as a share of electrical power generation, has steadily risen from an average of 17 percent in the 1990s, 22 percent in the 2000s, and 32 percent so far in the 2010s.23

An increase in consumption of domestically produced natural gas for electricity production means that the United States has “excess” coal that can be exported to other nations. In 2012, the United States exported a record 126 million short tons of coal.24 In addition, the United States has reversed a 25-year trend of declining domestic oil production and rising oil imports. In 1985, the United States produced nearly three-quarters of the oil it required. By 1994, oil imports outpaced domestic production. By 2006, the United States imported two-thirds of its required oil. The application of new technologies has led to a dramatic increase in domestic oil production. North Dakota more than quadrupled its production from 2008-2013 and the state is now the country’s second largest oil producer (behind Texas), having passed both California and Alaska in 2012.25
U.S. oil “jaws” are set to close.

As a result, imports of oil have declined for the first time in 25 years and the United States is exporting refined gasoline for the first time in 50 years. Falling oil imports, coupled with rising coal and refined gasoline exports have already led to a drop in the U.S. trade deficit (approximately one-half is due to oil imports). If this trend continues and the U.S. fiscal deficit also continues to fall, the dollar may strengthen in the decade ahead, making U.S. assets more attractive to domestic and foreign investors.

Finally, a diminishing reliance on imported oil may lead to a shift in U.S. strategic interests, with resulting geopolitical implications. The recent U.S. “pivot” to Asia may be seen in this light.

Potential beneficiaries:
- U.S. manufacturing
- U.S. energy infrastructure expenditures
  - Midstream, refining, exporting
  - Services
  - Steel for piping
- Other U.S. industries with direct natural gas energy input
  - Electrical power generation
  - Petrochemicals
  - Fertilizer
- Possible future beneficiaries
  - Transportation and transportation infrastructure—conversion of fleets, automobiles from gasoline to natural gas
  - Residential and commercial construction—conversion of residential heating from heating oil to natural gas
Investment Theme #2 — China: growing up to economic adulthood

Overview

In the last decade, China’s “adolescent” economy grew primarily through the rapid accumulation of production factors: land, labor and capital. Hundreds of millions of workers migrated from agricultural regions to urban areas.

Evidence suggests China now faces a turning point, when production costs may rise faster than productivity gains from ever increasing investment. In addition, social pressures are rising, with China’s burgeoning middle class demanding that the government begin to address China’s growing environmental concerns.

If true, the primary driver of China’s economic growth in the decade ahead is likely to shift away from investment and rapid accumulation of capital and toward consumption and more productive use of capital. The economic policies that support China’s “economic adulthood” phase of increased efficiency and productivity may likely be in contrast (in some cases, sharp contrast) to those that supported the country’s “old normal” phase of rapid capital accumulation.

Potential investments for consideration:

• U.S. energy infrastructure
• U.S. industrial/utility sectors with significant natural gas input (manufacturing, chemicals)
• U.S. investments focused on conversion of transportation or residential heating to natural gas
• U.S. dollar and dollar-denominated assets (particularly for foreign investors)

Potential risks to outlook:

• Adoption of similar energy production techniques in other countries with previously inaccessible shale oil and gas that offsets the U.S. energy advantage
• Environmental disaster or negative environmental side effects related to horizontal drilling and hydraulic fracturing techniques that restricts or prohibits the use of those techniques
• U.S. energy policies that slow or restrict overall domestic oil and gas exploration and production
• Regulations that restrict exports of domestically produced coal or use of imported U.S. coal by energy-dependent nations
• More rapid substitution of alternative or renewable energy sources (such as wind, solar or hydropower) for domestically produced oil and natural gas
• Slower-than-expected growth in U.S. oil and natural gas production due to wells depleting faster than anticipated
“New normal” policies may support:

- Increased domestic consumption through higher wages paid to urban workers, higher real interest rates on domestic savings and diminished controls on movement of capital
- Increased competition for “old normal” state-owned enterprises (SOEs) from the “new normal” private sector to drive improvements in productivity through deregulation of natural resources, electricity, land and access to capital
- Increased use of China’s renminbi in intra-regional trade through growth in the offshore (or “dim sum”) bond market and a greater role of markets in determining currency exchange rates

This suggests that the future beneficiaries of China’s “new normal” policies may be materially different than those that benefitted from the “old normal” growth model of the past.

**Key points**

China’s “old normal” was marked by the parallel developments of rapid urbanization and industrialization. China’s rural population peaked at 859 million in 1995 and represented more than 70 percent of the country’s total population. From 1995 to 2012, China’s rate of urbanization accelerated as the urban population doubled while the rural population declined by nearly 220 million. By 2011, China had reached a developmental milestone: urban population exceeded its rural population for the first time.27

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**China’s urban population exceeded its rural population in 2011.**

![China total urban and rural population chart](image-url)
In China’s “adolescent” economic phase, economic efficiency and productivity was of secondary importance to rapid economic growth. The mobilization of a seemingly unlimited supply of migrant workers from farming to higher-value-added manufacturing and service sector industries (the global labor “shock”) generated incredible economic growth that more than overcame any resulting inefficiencies.

Rapid industrialization and urbanization (on a scale never before seen) necessitated the accumulation of enormous quantities of commodities, particularly industrial metals. As previously stated, in 1995, China consumed less than 10 percent of the world’s nickel, copper, and aluminum. As of 2013, China was consuming more than one-half of the world’s nickel and nearly one-half of the world’s copper and aluminum. China's “economic adolescence” was characterized by political and economic policies that supported rapid urbanization and industrialization, including a rapid accumulation of production factors, such as:

- Low (or negative) real interest rates in order to “capture” domestic savings (a policy known as “financial repression”)
- Advantageous exchange rates (supported by strict capital controls) in order to support manufacturing competitiveness and thereby “capture” export profits
- State control of critical industries (banking, utilities, resources)
- Preferred/exclusive access to domestic capital and resources for SOEs to facilitate credit creation and mobilize a rapid build-out of infrastructure
- Urban hukou (China's system of household registration) suppressing migrant labor costs by limiting or preventing access to urban social benefits and public services such as healthcare, utilities subsidies, housing benefits

Key beneficiaries of China’s “economic adolescence” phase included Chinese SOEs that took advantage of preferred/exclusive access to domestic capital and resources and firms in commodity-producing nations (often state-owned or state-sponsored in other developing economies) that could mobilize vast amounts of natural resources to meet China’s insatiable demand. Successful investors in China’s “old normal” focused on China’s absolute level of gross domestic product (GDP) growth and policies in support of that growth, namely bank reserve requirements, credit growth and infrastructure spending.

At some point during a country’s development, however, production costs begin to rise faster than the rate of productivity growth. This is known as a Lewis Turning Point, named after economist Sir Arthur Lewis. Rapidly accumulating production factors becomes counter-productive and from that point forward, efficiency and productivity become the drivers of economic growth.
China may have already reached such a turning point. Workers are demanding higher wages and better workplace conditions, suggesting China’s supply of “unlimited” migrant labor may be nearing or at an end due to a diminishing supply of young or skilled agricultural workers. In addition, social pressures are rising, as China’s burgeoning middle class is demanding that more attention be paid to environmental issues such as addressing air and water pollution and food quality concerns.

If this is the case, the primary driver of economic growth in China’s transition to “economic adulthood” shifts from investment and rapid accumulation of capital to consumption and more productive use of capital. Policies in support of greater consumption and productive use of capital may likely be in contrast (in some cases, sharp contrast) to those that supported the country’s “old normal” phase, such as:

- Higher wages paid to urban workers and higher real interest rates paid on domestic savings in order to boost household financial income and increase consumer spending
- Deregulating production factors (natural resources, land, electricity) and broadening access to capital for smaller public and private companies, which generate higher return on assets than SOEs in order to drive competition and increase efficiency and productivity
- Hukou reform, which would provide subsidized housing to migrant workers and expanded access to social services in order to spur greater consumption of urban goods and services

**Source:** Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2013), “The Next Generation of the Penn World Table” available for download at www.ggdc.net/pwt; Gavekal Dragonomics, Gavekal Ltd.
China’s urbanization and industrialization has not completely run its course. China still has nearly 50 percent of its population living in rural areas, which is in contrast with other emerging market nations such as Brazil (15 percent) and South Korea (17 percent).\textsuperscript{31} China still has significant needs for additional urban housing (particularly low-cost housing for migrant workers) and for continued infrastructure development.

However, China’s next phase of “economic adulthood” may see a marked deceleration in the absolute level of economic growth if the deceleration in capital spending growth is faster than the acceleration in the growth in the private and household sectors.

Thus, more balanced policies emphasizing efficiency and productivity may cause investors to shift their focus from the absolute rate of GDP growth to the sources of that growth, sources that we believe may include:

- Higher real interest rates, more market-determined prices of production factors and broader access to financing should increase private sector competition for SOEs
- Increased private sector competition may lead to reforms of SOEs, unlocking the potential for significant productivity gains
- Relaxation of capital controls may allow for greater market determination of currency exchange rates and expanding offshore (dim sum) bond market, enabling the renminbi to potentially become more active in international trade

Increasing use of China’s renminbi in international trade could boost intra-regional infrastructure investment across Southeast Asia, potentially benefiting Chinese exports of higher-value-added heavy machinery and technology, and spurring the economic development of its trade partners.\textsuperscript{32}

Finally, an economically “adult” China would likely be more active geopolitically, potentially leading to an increase in tensions with regional neighbors. Recent events such as the establishment of an East China Sea Air Defense Identification Zone and positioning an oil rig in disputed waters near Vietnam may be seen as indications of an increasingly active and “adult” China.

**Potential beneficiaries:**

- China household income, spending and investment
- Smaller public and private Chinese companies that compete with SOEs
- Chinese exports of higher-value-added heavy machinery and technology
- Subsidized housing construction
- Urban spending on goods and services
- Southeast Asian economies that stand to benefit from additional source of trade finance (renminbi) and Chinese investment

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An economically “adult” China would likely be more active geopolitically.
Insights
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The combination of urbanization and rising employment in emerging economies has led to rising standards of living.

Potential investments for consideration:
• Providers of goods and services that benefit from increased income and spending among Chinese households
• Small- and medium-sized public and private companies based in China
• Heavy equipment and technology companies based in China
• Southeast Asian economies

Potential risks to outlook:
• China's new leadership slows or reverses reforms
• Social unrest results in a political crackdown
• Development of an offshore (dim sum) bond market fails to materialize
• Costs of hukou reform (providing migrant workers with social services) proves too fiscally expensive
• Escalation in regional political tensions with Japan, Korea, or Southeast Asian nations disrupts intra-regional trade and development

Investment Theme #3 — The rising global middle class

Overview
The emerging market consumer has truly started to "emerge." Total household consumption expenditures in emerging market economies have now surpassed those in the United States. Behind this development has been an increase in national income levels as emerging market economies have grown.

While the last decade has seen a significant increase in the size of the "global middle class," the trend is far from over. Consumer spending in emerging market economies is likely to continue to accelerate into the decades ahead, led by growth in Asia.

A number of countries look poised to "graduate" to higher per capita GDP levels. And as incomes in these countries continue to rise, spending will become increasingly more discretionary, toward personal and other household goods and services.

However, domestic consumption patterns are influenced by other factors beyond growth in per capita GDP. We believe investors may also want to consider the policies and population characteristics of individual countries as their economies tend to develop at different rates.

Key points
The megatrends of the last 25 years (political, economic and technological transformation of the world) have given rise to a global economy with billions of new workers, consumers, producers and savers. Manufacturing industries have moved from advanced economies to the developing world, helping to create over 525 million jobs worldwide since 2000.33
The combination of urbanization and rising employment in emerging economies has led to rising standards of living and a commensurate rise out of poverty. In East and Southeast Asia, 350 million workers have risen above the poverty level (defined as earning $2 or less per day) since 2000. The term “middle class” can be loosely applied to individuals who can enjoy “stable housing, healthcare and educational opportunities (including college) for their children, reasonable retirement and job security, and discretionary income that can be spent on vacation and leisure pursuits.” Consumption of discretionary goods and services, product differentiation, name brands and status goods are important features of a middle class. The rise of the global middle class has occurred rapidly. From 2002 to 2012, household consumption expenditures in emerging market economies tripled, surpassing those in the United States in 2008. This is just the beginning. The acceleration of consumer spending in emerging market economies is likely to continue for decades, led by growth in Asia. It is estimated that by 2020 Asia will be home to more than one-half of the world’s middle class population and by 2030 Asia’s middle class population is projected to exceed 3.2 billion.

The rise in spending by emerging market consumers is an outgrowth of increasing income levels in emerging market economies. In the last decade, countries representing almost one-half of the world’s population saw national incomes (GDP) rise above $2,500 per capita. In 2000, there were more than 4.3 billion people living in countries with GDP per capita below $2,500. As of 2013, that number has shrunk to under 1 billion. This represents the first stage (emergence) in the evolution of the global middle class.

By 2020, Asia is projected to be home to a majority of the world’s middle class.
Per capita GDP of below $2,500 limits consumer spending to only the basic needs (food, clothing, shelter), certain “white goods” (major appliances such as washing machines and refrigerators) and color televisions. Today, nearly two-thirds of the world’s population (nearly 4.5 billion people) lives in countries with national incomes between $2,500 and $15,000 per capita. Per capita GDP of greater than $2,500 is associated with increasing levels of discretionary spending beyond basic goods toward personal and other household goods and services. This represents the second stage (acceleration) of the global middle class.

### THE “ACCELERATION EFFECT”

A prime example of this can be found in the evolution of air conditioner sales in China. In the 1990s, air conditioners were considered a discretionary “white good” consumer item. In 1990, China’s GDP per capita was around $800. Fewer than one-half of 1 percent of urban households in China owned an air conditioner. From 1990-1995, China’s GDP per capita nearly doubled to $1,500. Ownership of air conditioners grew to 8 percent of urban households, an increase of nearly seven and one-half units for every 100 urban households. In the next five years, from 1995 to 2000, per capita GDP rose to $2,500. Ownership of air conditioners accelerated to 31 percent of urban households, an increase of 23 units for every 100 households. Finally, in the five-year period from 2000 to 2005, China’s per capita GDP reached $4,000. Purchases of air conditioners continued to accelerate with ownership rising to 81 percent, an increase of nearly 50 units for every 100 households.

In this example, during the 15-year period of 1990-2005, penetration of air conditioners in China’s urban households rose from less than 1% to 81%.

### Rising national incomes are associated with increasing levels of discretionary consumer spending

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<th>$5,000-7,499</th>
<th>$7,500-9,999</th>
<th>$10,000-14,999</th>
<th>$15,000-19,999</th>
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<td>India, Nigeria</td>
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<td>China, Thailand</td>
<td>Colombia, Peru, Brazil</td>
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<td>Total world population</td>
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<td>1.9 billion</td>
<td>540 million</td>
<td>1.5 billion</td>
<td>533 million</td>
<td>454 million</td>
</tr>
<tr>
<td>Representative consumer goods/services</td>
<td>Color TVs, refrigerators, washing machines</td>
<td>Air conditioners, microwave ovens, mobile phones</td>
<td>Automobiles, cosmetics, dishwashers, game consoles, tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: International Monetary Fund, World Economic Outlook Database, April 2014; Estimates as of 2013

GDP Per Capita in Purchasing Power Parity (PPP)

Consumer spending on goods and services in emerging economies does not typically exhibit a linear growth pattern. A key moment for consumer products occurs when the majority of a country’s population can afford the good or service. At that moment, consumption of those products rapidly accelerates.
than one-half of 1 percent to more than 80 percent. However, the rise was not linear. Rather, consumption accelerated as China's per capita GDP rose beyond $2,500, the dividing line between spending only on basic needs or expanding spending to include more discretionary items. In the case of air conditioners in China's urban households, consumption accelerated from seven and one-half units per 100 households in the first five-year period to 23 units in the second five-year period to 50 units in the third five-year period.

Serially, this "acceleration effect" in consumer spending occurs at different income levels for different consumer products and services. In China, washing machines, color TVs and refrigerators were the first to reach 40 percent penetration of urban households. Later, as national income rose, household consumption shifted to other major appliances such as air conditioners and water heaters along with personal goods such as mobile phones. Most recently, consumption has accelerated for computers and microwave ovens.

China is already the world's largest market for automobiles, with sales having surpassed both the United States in 2009 and Europe in 2010. Yet as of 2012, less than one-quarter of urban households owned an automobile. With China's per capita GDP set to rise above $10,000, automobile sales should continue to accelerate and may likely surpass those in the United States and Europe combined in the decade ahead.

With the potential for billions more to rise out of poverty and join the middle class in the decade ahead, consumer spending in emerging economies will likely become increasingly discretionary, toward personal and household goods and services, and other items a middle class society demands: quality housing, educational opportunities for children and, as we are already witnessing in China, a greater focus on environmental issues such as addressing air and water pollution and food quality concerns.

Household consumption patterns in economies are heavily influenced by factors beyond growth in GDP per capita, however. Two serious considerations are income inequality (how broadly economic growth benefits the total population) and household indebtedness (current level of debt and overall access to credit).
The world’s population is aging, with population growth increasingly occurring among older age groups.

Because individual countries progress economically at different speeds due to differing policies and population characteristics, we believe investors looking to participate in the rising global middle class will need to consider that some countries will graduate to higher income levels faster than others.

**Potential beneficiaries:**
- Multinational corporations domiciled in developed economies that provide goods, services, technology and infrastructure consistent with the consumption patterns in emerging economies as income levels rise
- Local affiliates of multinational corporations that trade on local exchanges
- Locally based providers of consumer goods and services in emerging market economies

**Potential investments for consideration:**
- Global and local consumer product and service companies at various stages of a country’s economic development and income thresholds (basic goods, discretionary household and personal goods, services, luxury goods)

**Potential risks to outlook:**
- An overall global economic slowdown
- A rise in protectionism (that slows down or reverses growth in global trade)
- A regional or global conflict or pandemic that inhibits development of emerging market economies
- Policies in individual countries that hamper economic development and growth

**Theme #4 — The aging of the world’s population**

**Overview**

While the world’s population continues to grow, the rate of global population growth is slowing down rapidly. In the 20th century, world population doubled nearly twice, rising from an estimated 1.6 billion in 1900 to more than 6 billion in 2000. But population growth is leveling off. One reason for the slowing rate of growth is the changing composition of the world’s population due to two colliding forces. The first is that the oldest members of the so-called “baby boom” generation in the United States and Europe began turning 65 in 2011. The second is a trend toward rising life expectancies and falling birth rates in high-population emerging market countries as their populations rise above poverty and more residents attain middle class status. The world’s population is aging, with population growth increasingly occurring among older age groups.
Population dynamics are causing a divergence in age structures between developed and emerging market economies. The United States, Europe and Japan are experiencing a demographic “tax,” which is signified by a decline in the number of working age adults (“producers”) relative to the number of children and the elderly (“consumers”). Meanwhile, the emerging markets are enjoying a demographic “dividend,” a period of rapid growth of youth and middle age adults relative to children and the elderly. This divergence in population dynamics helps explain the differentiation in economic growth between developed and emerging market economies.

One of the likely consequences of an aging global population is that healthcare and other entitlement spending will consume greater economic resources for all countries, potentially generating significant strains on government finances. Also, aging developed economies are likely to see an increase in the age that people retire, either through workers voluntarily working into later years or because of mandatory increases in the age when retirement benefits become available. An older workforce will likely exhibit consumption patterns related to the effects of aging, such as demand for various goods and services, as well as real estate preferences.

Key points

Although still on the rise, the rate of global population growth has leveled off. In 1972, annual world population growth was 2 percent. By 1992 it had slowed to just above 1.5 percent per year. In 2012, it was less than 1.25 percent.\(^{46}\) In the 20th century, world population doubled nearly twice, rising from an estimated 1.6 billion in 1900 to more than 6 billion in 2000. If current projections for future slowing population growth rates are accurate, the world’s population won’t double even once in the 21st century.\(^{47}\)

Related to the slowing rate of growth is the changing composition of the world’s population due to two colliding forces:

- The first of the so-called “baby boom” generation in the United States and Europe began turning 65 in 2011
- Life expectancies are rising and birth rates are declining in high-population emerging market countries as their populations rise above poverty and attain middle class status

Studies suggest that economic developments such as urbanization and rising levels of education, employment and household incomes may correlate to declining birth rates.\(^{48}\) In a rural economy, additional children provide additional labor for a family and greater local support for parents in their old age. In an urban economy, the costs of housing and education of children are significant and fewer children may equate to higher family income and living standards.

Declining birth rates are reflected in the ongoing changing composition of the world’s population. In the last 15 years, the number of children (under 14 years of age) has increased by only 10 million, barely enough to keep up with infant and child mortality rates (which are also in decline) and to replace those who have grown to older age groups.\(^{49}\)
Meanwhile, over that same 15-year time frame, the world population of aged 65 and over increased by more than 150 million. Europe and Japan are now home to more people 65 and over than children under the age of 14. And this is occurring just as the first of the baby boom generation in the United States and Europe began reaching what is considered a traditional retirement age of 65. There are now more than 900 million people in the world between the age of 50 and 64.50

Increasingly, population growth rates are becoming skewed, with the fastest growth occurring on the older side as life expectancies continue to increase. The fastest growing age group in the world is age 70 and above.51

We believe these demographic trends have two potentially significant implications for long-term investors in the decade ahead:

- Diverging age structures between the developed economies of the United States, Europe and Japan and those in the emerging economies
- Healthcare spending, entitlements and government finances, retirement age and increased life expectancy beyond retirement, and consumption patterns that correspond to an aging population

Population dynamics are an important demographic factor affecting economic growth, household consumption patterns and inter-generational transfers of resources. The 15-64 age group typically forms the labor force, a key building block for economic growth and the primary source of tax revenues to fund entitlement programs for retirees. By examining the growth trends of this age group, the fiscal challenges facing Japan and Europe can be seen more clearly: Japan's 15-64 population peaked in 1995 and has declined every year since, while annual growth in Europe's working-age population slowed to zero in 2010.52
Within the adult labor force (ages 15-64), there are two key subgroups:

- The 20-34 age group, which represents peak household formation ages
- The 35-54 age group, which represents peak earning ages, generating the greatest surplus of production relative to consumption

Thus, the potential for a positive demographic “dividend” is related to a positive long-term change in age structures within an economy. Due to a decline in birth rates, there is “a transitional period of slow growth (or decline) in the number of children and relatively rapid growth of youth and middle-age adults.”53

This period is defined by positive growth in the number of “workers” (working-age adults) per “consumer” (children and the elderly). This positive growth generates “surplus” resources that can be used to increase current consumption or to invest in future productivity and help boost the standard of living.54 When a positive demographic “dividend” is combined with access to education, employment opportunities, policies to reduce inequalities of income, and investment in technological and social infrastructure, the result is often a rise in wages, living standards, household consumption and economic growth.

Today, emerging market economies are enjoying a positive demographic “dividend,” though many have passed peak years and the positive contribution to economic growth from changing age structure is already in decline.55

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**GDP per capita of selected countries**

Source: Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2013), “The Next Generation of the Penn World Table” available for download at www.ggdc.net/pwt

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**Will China follow Taiwan and South Korea to wealthy nation status?**
ECONOMIC GROWTH GOES BEYOND POSITIVE DEMOGRAPHICS

A positive demographic “dividend” in and of itself is not a guarantee of future economic success. Without necessary investments and policies, the positive growth in the number of young adults relative to children and elderly may instead lead to increasing youth unemployment, rising social disorder and stagnant economic growth.

South Korea and Taiwan offer two historical examples of countries that successfully took advantage of a past positive demographic “dividend” (both are in decline now) through policies and investments that led to decades of strong economic growth and achievement of high-income status. They became the only countries in “recorded human history” to achieve five consecutive decades of greater than 5 percent annual economic growth.66 Today, more than 94 percent of South Koreans are considered to be part of the middle class or above.57

The decade ahead may see further differentiation among emerging market economies due to diverging policies, investment and distribution of resources. Investors need to consider that

In contrast to emerging economies, the developed economies of the United States, Europe and Japan are experiencing a negative demographic trend, what could be referred to as a demographic “tax” related to its changing in age structures.

This period is defined by a decline in the number of “workers” (working-age adults) per “consumer” (children and the elderly) due to an aging population and low birth rates. This “deficit” of production versus consumption (such as financing retirement and healthcare benefits for retirees) creates a negative demographic drag on economic growth, all other things being equal.

As examples:

- The growth rate of 35-54 year olds (peak earnings ages) has slowed to zero in the United States, Europe and Japan
- Europe and Japan are home to more people over the age of 64 than children under the age of 14
- In Japan, the population of the 15-64 age group (the labor force) has declined for 15 consecutive years58

As a result, the emerging market economies are expected to continue to reap the rewards of a demographic dividend in the form of increases in labor forces, living standards, household consumption and resulting economic growth. Meanwhile, much of the developed world will continue to experience the potentially painful effects of a demographic tax, which include strains on government finances from entitlement spending and sluggish economic growth (or contraction) due to slower growth or even an outright decline in the labor force.
A second important implication of global demographic trends relates to healthcare spending, entitlements and government finances, retirement age and increased life expectancy after retirement, and consumption patterns that correspond to an aging population. As the world’s population continues to age, healthcare spending will consume greater economic resources for all countries, particularly in developed economies. By 2040, the age 65 and over population is expected to make up 25 percent of Europe’s population and 20 percent of the populations of both the United States and China. Healthcare spending as a percentage of GDP is projected to double in the United States to more than 30 percent in the next 30 years. Brazil, China, Russia and India will likely not be far behind.\textsuperscript{59}

Entitlements will continue to put a significant strain on government finances in developed economies that are experiencing a demographic “tax.” In the United States, Social Security and Medicare are the two largest federal programs, accounting for 45 percent of federal expenditures in 2013.\textsuperscript{60} Enrollment in Medicare is projected to rise from nearly 48 million in 2010 to more than 81 million by 2030.\textsuperscript{61} Across all developed economies, life expectancy after pensionable age has increased by nearly 50 percent, from 13½ years in 1958 to 18 years in 2010.\textsuperscript{62}

To resolve these challenges, developed countries are likely to see an increase in retirement age, either as aging members of the labor force voluntarily work into later years or through increases in the mandatory retirement age. While Japan’s working age (15-64) population declined by 6 percent, or 4.8 million,
from 2000-2010, Japan’s labor force declined by only 2 percent as more women and older citizens entered or remained in the work force.63 Australia, the Czech Republic, Denmark, Germany, Greece, Hungary, Italy, South Korea, Spain and the United Kingdom have all instituted increases in retirement ages between 2010 and 2050.64

For investors, an aging population and an older workforce would be expected to consume goods and services that address the effects of aging, such as cosmetics and regenerative/rejuvenating products, services and procedures. Financial services for an aging population would address increased life expectancy after retirement. Investments in infrastructure would be needed to support an aging population, with urban real estate possibly in greater demand, particularly in the United States, as an older workforce may desire to be physically closer to employment, shopping and medical care rather than commute into work from far-flung suburbs.

**Potential beneficiaries:**
- Emerging market economies, particularly those pursuing policies and investments intending to “harvest” a current demographic dividend for long-term economic growth
- Healthcare spending, both in developed as well as emerging economies
- Spending on consumer products and services that addresses the effects of aging and increased life expectancy
- Infrastructure investments in support of an aging population
- Urban real estate (commercial, retail, residential), particularly in the United States

**Potential investments for consideration:**
- Individual emerging market economies
- Healthcare related to aging and increased life expectancy
- Consumer products and services that address the effects of aging (cosmetics, rejuvenation, lifestyle)
- Life insurance
- Infrastructure necessary to support an aging population
- Urban real estate

**Potential risks to outlook:**
- A pandemic or global conflict that suddenly shifts global demographics
- A shift in immigration policies in advanced economies (that leads to a migration of population from developing economies to advanced economies)
- Another “baby boom” in advanced economies
Theme #5 — Re-urbanization of America

Overview

For the first time since the 1920s, city populations in major U.S. metropolitan areas are growing faster than their respective suburban populations, reversing a 90-year trend of suburbanization. Driving this development is a combination of social, technological, demographic and economic forces.

In the post-World War II era, cheap gas and affordable housing led to suburban sprawl. Baby boomers were attracted to single-family homes on relatively large suburban lots in communities that were deemed to have good educational opportunities for their children. Businesses followed the population movement. Today, rising energy prices and lengthening commutes have potentially made suburban living less attractive relative to urban living. Technological advancements have also influenced daily lifestyles, facilitating online access to education, entertainment and shopping, and further reducing the advantages of suburban living.

In addition, the social preferences exhibited by the “millennial” generation as they reach family formation ages appear significantly different from those of previous generations. More than any other generation, millennials appear to value access to public transportation, desire short distances or walking distance to school or work, and prefer to live in large urban areas or urban-like areas in high population suburbs.

A reversal of “suburban sprawl” and a return to city urbanization may have significant implications for investors, particularly real estate investors looking for positive trends in residential, office and retail dynamics.

Key points

After World War II, the combination of low gasoline prices and affordable single-family homes and automobiles led to rapid suburbanization in the United States. As the baby boom generation reached family formation ages, they exhibited a preference for single family homes on relatively large suburban lots in communities that were deemed to have good educational opportunities for their children. According to one measure, by 2010 more than one-half of the U.S. population lived in the suburbs.

Businesses followed this migration, with suburbs gaining an ever greater share of retail and office space. In the 22-year period from 1955 to 1977, an estimated 15,000 regional shopping centers were built in the United States, all of which were located in the suburbs. Downtowns saw their share of regional office space decline from 70 percent in 1970 to 30 percent by 2000, and as of 2009, 45 percent of employees in the top 98 metropolitan areas worked at least 10 miles away from historic city centers. Urban centers were often defined by single-use office buildings (empty after dark), falling real estate values, declining populations and rising crime.
However, beginning in 2011, city population in major metropolitan areas (defined as having greater than one million in population) grew faster than their respective combined suburban population for the first time since the 1920s, reversing a 90-year trend of suburbanization. A combination of social, technological, demographic and economic forces are likely behind this development.

City populations are now growing faster than their respective suburbs.

Today, nearly 200 of the Fortune 500 companies are headquartered in the 50 largest metropolitan areas. An increase in the pool of educated, skilled workers in urban areas is creating a powerful incentive for firms to locate or relocate to metropolitan centers, creating a virtuous circle of available employers and workers. Increasingly, businesses are finding potential employees and consumers in higher density urban centers, and workers and consumers are increasingly finding employment opportunities and access to desired amenities there as well. Population density in urban centers is far greater than in suburbs, creating a potential "critical mass where inventors, entrepreneurs, investors, talented workers, and customers intermingle to create opportunity and growth."
Rising energy prices and lengthening commutes have made suburban living less attractive relative to urban living. From 2001 to 2012, gasoline prices increased more than two and a half times greater than the overall rate of inflation. Total vehicle miles driven per person in the United States peaked in 2004, suggesting that suburban “sprawl” may have reached its outer limit.\(^7\)

In addition, technological advancements have also influenced daily lifestyles, facilitating online access to education, entertainment and shopping (Internet powerhouse Amazon.com as a competitor to strip malls), further reducing the advantages of suburban living. Already, nearly 13 million people in the United States live in so-called “live-work” environments, defined as being within one mile of a major employment center.\(^7\)

Demographic and social forces in the United States also look positive for urbanization trends. The increasingly empty nest “baby boom” generation and coming of age “millennial” generations are equal in size, each representing 77 million in population and together amount to one-half of the total population of the United States.\(^7\)

The leading edge of the baby boom generation in the United States is beginning to leave the work force. As empty nesters, both retiring and even still working boomers may be looking to downsize from relatively large suburban homes in order to reduce both the cost and effort of upkeep to maintain their homes and large suburban lots.

The millennial generation is continuing a decades-long upward trend in ages of first marriage and first child birth. The median age of first marriage in the United States stands at more than age 28 for men and 26 for women.\(^7\) Meanwhile, the median age of women giving birth to their first child has also continued to rise to nearly 28.\(^7\)
Millennials are continuing the trend of waiting longer to get married.

Urban centers may prove to be more attractive than suburban living for single young adults, young married couples without children and baby boomers (both retired and still employed) who do not require access to primary or secondary education for their children and desire to be closer to work, shopping and other amenities. In addition, the social preferences exhibited by the millennial generation as they reach family formation ages appear significantly different from those of previous generations. More than any other generation, millennials appear to value access to public transportation, desire short distances or walking distance to school or work, and prefer to live in large urban areas or urban-like areas in high population suburbs.75

**Desired attributes of community by U.S. generation**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Millennials</th>
<th>Gen X</th>
<th>Boomers</th>
</tr>
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<tbody>
<tr>
<td>Public transportation</td>
<td>57%</td>
<td>50%</td>
<td>45%</td>
</tr>
<tr>
<td>Distance from work/school</td>
<td>82%</td>
<td>67%</td>
<td>71%</td>
</tr>
<tr>
<td>Medium/big city</td>
<td>40%</td>
<td>22%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Sources: Belden, Russonello Strategists; LLC, “Americans’ Views on their Communities; Housing and Transportation,” Analysis of a national survey of 1,202 adults; for the Urban Land Institute, March 2013
This preference for living in closer-knit urban and urban-like areas in high-population suburbs may already be seen in the housing data. From 1994 to 2007, permits to build single-family residences averaged a fairly steady 75 percent of all housing units in the United States, while structures of five or more units accounted for just 20 percent of housing permits. From 2008 to 2011, permits for structures with five or more units rose to over 25 percent, and from 2012 through the first four months of 2014 have risen again to 35 percent of all housing permits.76

Percentage of annual U.S. housing permits by housing type

Source: U.S. Census Bureau, U.S. Department of Commerce; Data: 2013

Meanwhile, U.S. cities have been taking active steps to improve economic and cultural diversity in order to attract and retain young adults, families, professionals and aging empty nest baby boomers. As a result, businesses are following this migration back to urban cores. Urban land use is increasingly diversifying away from single-use offices that are empty after dark to include arts and sports, hospitality and leisure, shopping and dining, and educational and medical research and facilities.77

A reversal of “suburban sprawl” and a return to city urbanization has significant implications, most notably for real estate investors looking for positive trends in residential, office and retail dynamics. A reversal of the 90-year trend of suburbanization may be disruptive to the supply and demand balance for housing. As the aging, 77-million-strong “boomer” generation looks to sell single-family homes in sprawling suburban communities, they may find that natural potential buyers, the also 77-million-strong “millennial” generation, are more interested in living in higher density urban and urban-like high-population suburban centers. This may result in an increase in volatility and variability of home prices due to an imbalance of current and future demand in the existing supply of homes.
Potential beneficiaries:

- Cities able to attract urban residents with diverse employment opportunities, education and cultural amenities (dining, shopping, arts and sports, hospitality and leisure)
- Urban residential and commercial (retail, office) real estate (both existing and new construction)
- Urban infrastructure spending (public transportation, walkways/bike paths, technology, utilities)
- Consumer spending in urban areas

Potential investments for consideration:

- Urban real estate (residential, office, retail, mixed-use)
- Firms that provide goods and services specific to urban residents (education, shopping and dining, hospitality and leisure)
- Firms that specialize in design and construction of urban structures (smaller shopping stores, mixed-use buildings)
- Firms that specialize in multi-family or “right-sized” single family home design and construction

Potential risks to outlook:

- Rapid, long-term drop in gasoline prices (below the rate of overall inflation or wages) that increases competitiveness of suburban versus urban living
- Investments in transportation infrastructure (highways, mass transit) that significantly reduces commute times from the suburbs
- Price inflation in urban real estate (above the rate of overall inflation or wages) that “crowds out” prospective urban residents (young single adults, young married adults without children, “empty-nest” baby boomers)
- Lack of investment/development or poor planning in urban areas that fails to meet the needs of employers and residents
- Competitive tax policies that encourage prospective employers to locate/move back to the suburbs
- Rising crime in urban areas

Millennials exhibit a greater desire for urban living than previous generations.

Potential investments for consideration:

- Urban real estate (residential, office, retail, mixed-use)
- Firms that provide goods and services specific to urban residents (education, shopping and dining, hospitality and leisure)
- Firms that specialize in design and construction of urban structures (smaller shopping stores, mixed-use buildings)
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- Lack of investment/development or poor planning in urban areas that fails to meet the needs of employers and residents
- Competitive tax policies that encourage prospective employers to locate/move back to the suburbs
- Rising crime in urban areas
OTHER POTENTIAL INVESTMENT THEMES

While we have focused on the five investment themes outlined in this paper, there are a number of other potential developments we have identified that could have an impact on investment results over the next decade. These include:

- Automation and robotics
- Digitization (especially in healthcare)
- Distributed education, problem solving, research and development (R&D)
- Innovation and productivity
- Income inequality/"stars and superstars"
- Digital currencies/Internet commerce, security and terrorism
- Rise of the mega-cities
- Shifting global balance of power/rising geopolitical event risk/end of major power peace dividend
- Shia-Sunni conflict, the end of Sykes-Picot and the new Middle East
- Korean re-unification
CONCLUSION

A logical approach to wealth expansion with investment dollars that are committed over an extended period of time is to try to capitalize on global economic trends that create favorable investment opportunities. We believe these include generational trends that have been in place for a quarter century or more, including economic liberalization and globalization. We anticipate these broad trends may persist in the years to come. At the same time, we have identified a number of emerging trends that may represent a seismic shift in the direction of the global economy and should be considered in an investor’s long-term wealth expansion strategy. These include:

- The energy revolution in the United States
- The maturation of China’s economy
- The rise of a global middle class
- The impact of an aging world population
- Renewed urbanization in the United States

Successful investors are those who are able to anticipate opportunities on the horizon. This is why we believe incorporating these important trends into a long-term investment plan is so important. Factors that may have driven investment performance in the past decade are not likely to be as prevalent in the decade ahead and should not be the focus of a forward-looking investment strategy. Rather, we believe the key trends we’ve identified will be drivers of market opportunity in the years ahead.

How can you act on these opportunities? An important step is to pursue active portfolio management that can seek out these secular opportunities within the broader market. Passive approaches such as index funds may not be able to capture the full potential that is likely to emerge from the trends described in this paper. Any investments they make related to these opportunities may be diluted by dollars that are invested in other, less promising sectors of the market. Investors should consider targeted investments that can include:

- Opportunities within specific geographic regions or countries
- Asset classes within certain industry sectors that are positioned to benefit from the key underlying trends

As is always the case, not all investments within these broad categories will perform well and selectivity is important. A diversified approach is also critical as investors want to guard against the risk of allocating too many dollars toward a single investment or sector. Yet we believe an investment strategy that incorporates the key trends we’ve identified may create favorable opportunities for investors to accumulate wealth in the decade ahead.
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76. U.S. Census Bureau, U.S. Department of Commerce.
77. Levy and Gilchrest, “Downtown Rebirth.”
IMPORTANT DISCLOSURES

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