

# LOTUS NATION

SUSTAINING VIETNAM'S IMPRESSIVE GAINS IN  
WELL-BEING



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The lotus flower—a symbol of beauty, commitment, health, honor, and knowledge—is the national flower of Vietnam. Lotus flowers grow from muddy ponds toward the sun, which represents the purity of the spirit.

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SUSTAINING VIETNAM'S IMPRESSIVE GAINS IN WELL-BEING

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# EXECUTIVE SUMMARY

**V**IETNAM IS A COUNTRY transformed. Over the past two decades, it has moved from a largely agrarian economy to one powered by manufacturing. But although the economic growth of the country is well publicized, less attention has focused on what that growth means for the people of Vietnam.

To explore that question, we used The Boston Consulting Group's Sustainable Economic Development Assessment (SEDA), a powerful diagnostic tool designed to provide government leaders with a perspective on the well-being of citizens, including how effectively their countries convert wealth, as measured by income levels, into well-being. Our analysis reveals that Vietnam is among the top performers globally when it comes to converting wealth into well-being.

Vietnam's government continues to set ambitious goals, including more than doubling GDP per capita by 2020. At the heart of those goals is a plan to move Vietnam from an industrial economy based on low-cost labor to a modern knowledge-based economy. However, our research reveals three key areas the government must first address: strengthening the links between the labor market and the education system, upgrading the country's infrastructure, and improving governance.

**SEDA defines well-being through three fundamental elements that comprise ten dimensions.**

- The first two elements are *economics*—which comprises the income, economic stability, and employment dimensions—and *investments*, which includes the dimensions that account for a large portion of national budgets: health, education, and infrastructure. The third element, *sustainability*, includes the income equality, civil society, governance, and environment dimensions.
- For each country in our analysis, we looked not only at the *current level* of well-being but also at *recent progress*—that is, how well-

being had changed in recent years. We conducted the analysis on a relative basis, comparing each country with the others in our data set. Our data set includes 148 countries plus Hong Kong, which is a special administrative region of China. (For the sake of simplicity, we refer to all entities as “countries.”)

- We also examined how well each country converted wealth and economic growth into well-being by considering the country’s current level of well-being relative to its income and by examining recent progress relative to GDP growth, using the global average as a reference point.

**Vietnam is making significant progress in boosting the well-being of its citizens and is among the top performers when it comes to converting wealth into well-being.**

- Vietnam’s current-level SEDA score is in the middle of the pack, but the country’s recent-progress score, which measures relative improvement in well-being from 2006 to 2013, is in the top quintile.
- Vietnam is among the top 10% globally in the ability to convert wealth into well-being. Put another way, with GDP per capita (on a purchasing-power-parity basis) of just over \$5,000, Vietnam has well-being levels that would be expected of a country with GDP per capita of more than \$10,000.
- Vietnam is also above average in converting economic growth into well-being improvements. This is particularly noteworthy given the country’s remarkable pace of economic growth—about 7.1% annually from 2006 to 2013 (based on nominal GDP per capita, adjusted for PPP).

**Vietnam is generally competitive with peers in the Association of Southeast Asian Nations (ASEAN) but has room for improvement in several key areas.**

- Vietnam’s current-level SEDA score of 42.4 exceeds the 40.2 average of the other ASEAN countries in our analysis, excluding Singapore. (The ten ASEAN nations are Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. The 2015 SEDA analysis excluded Brunei and Myanmar, owing to the difficulty of accessing reliable data. We excluded Singapore from the ASEAN group in our comparisons because it is a high-income nation, and the other ASEAN countries in our analysis have low to upper-middle income levels.)
- Vietnam’s recent-progress score is 74.8, just a bit off the 76.6 average of the other ASEAN nations—a solid accomplishment given that the scores in this group were among the highest of the countries we assessed.
- Relative to four ASEAN nations that, like Vietnam, have midlevel incomes—Indonesia, Malaysia, the Philippines, and Thailand—a

group we dub the ASEAN 4, there is a different pattern. (We excluded Myanmar, a midlevel-income country, owing to a lack of data.) Vietnam's current-level SEDA score is a bit below the ASEAN 4 average of 45.2, but its recent-progress score surpasses the 69.6 average for the group.

- Examining Vietnam's performance along SEDA's ten dimensions reveals several core challenges. The country ranks near the bottom of the ASEAN 4 peer group in infrastructure and governance. The significant gap between Vietnam and its peers in governance in particular indicates the depth and complexity of the country's challenges. In addition, while Vietnam's score in the employment dimension is in line with the scores of its ASEAN 4 peers, the country faces a number of significant issues in the labor market—including high youth unemployment—that could create challenges for its development.

**Although Vietnam's gains over the past 20-plus years have been impressive, the country's aims for the coming years are even more ambitious.**

- The government's primary economic goal is to hit \$8,000 to \$9,000 in GDP per capita (on a PPP basis) by 2020, roughly 2.5 times the 2010 level. The government also aims to derive 85% of GDP from the industrial and service sectors, and plans for high-value-added industries to constitute about 45% of GDP.
- In terms of socially oriented goals, Vietnam hopes to maintain an unemployment rate of about 3% and to build a workforce in which 70% of workers are trained (including postsecondary and vocational training) and 55% of those individuals have received vocational training.

**A successful transition to a modern knowledge-based economy will require action on several fronts. One of the most critical: upgrading the workforce.**

- Relative to many peer countries, Vietnam has significantly lower labor productivity and a much smaller base of skilled workers.
- Evidence of labor market issues abounds. Although overall unemployment is low—approximately 3%—youth unemployment is double that rate. Unemployment among university-trained graduates aged 20 to 24 years old is higher still—roughly 20%. At the same time, multinational corporations, frustrated by the dearth of skilled workers, have been forced to develop programs to retrain workers.
- Upgrading the workforce in the near term will require improving the links between industry and the providers of training and education, and steering young people toward the sectors where demand is high. In the longer term, Vietnam should institute a robust performance-management system for the country's educational institutions.

**Vietnam’s development will also hinge in part on the ability to improve infrastructure.**

- Although Vietnam’s recent-progress SEDA score in infrastructure is among the top 10%, the country still lags considerably behind peers, including the ASEAN 4, in areas such as electricity supply and the quality of the rail and road networks.
- Estimates show that Vietnam will need to invest anywhere from \$113 billion to more than \$140 billion by 2020 in infrastructure—but public funding is likely to cover only 50% to 60% of the cost.
- To bridge the funding gap, Vietnam should draw in more private-sector investment by improving the way it plans and executes public-private partnerships in infrastructure.
- Vietnam should also learn from countries such as South Korea that have been successfully managing special economic-development zones. If designed and managed correctly, such zones can amplify the economic impact of infrastructure investments.

**Vietnam will have no choice but to address its significant under-performance in the governance dimension. A key reason: foreign investors will be unlikely to put their money to work in Vietnam if they do not have confidence in the country’s governance.**

- Vietnam’s current-level SEDA score in governance is well below the scores of its ASEAN 4 peers. The country is battling the perception that operating in Vietnam means grappling with government bureaucracy and corruption. Roughly 66% of companies in a recent government survey indicated that “they have to pay informal charges” when doing business in Vietnam, and nearly one-fifth of those companies indicated that the charges amount to more than 10% of revenue.
- A key step in improving governance is to upgrade public-service talent. Vietnam would do well to model itself on Singapore, where talent management strategies—including a rigorous performance-measurement system—are a powerful means of attracting and retaining high-quality public servants.
- Vietnam should also embrace digital tools as a way to improve transparency.
- Progress in governance can pave the way for advances in other areas, including the environment.

# A NEW ERA

**A** BUSINESSWOMAN RETURNING TO HO Chi Minh City for the first time in two decades would scarcely recognize the city today. Gone are the quaint bicycles and women dressed in the elegant *ao dai* of yesteryear, replaced by the motorcycles, automobiles, and business suits of a modern metropolis. Nowhere is this rapid transformation more evident than in the city's dramatic skyline. From the observation deck on the 49th floor of the iconic Bitexco Financial Tower, a visitor can stare in amazement at the scene below. But when gazing down on the arteries clogged with traffic, it's hard not to wonder if Vietnam's economic development is sustainable.

That question is particularly pressing now. Vietnam's government has set ambitious targets, aiming to transform the country's industrial-based economy into a modern knowledge-based one in the coming years. But although the country's progress is undeniably impressive—food is more plentiful, health care more accessible, schooling more affordable, and disposable incomes higher than ever—Vietnam faces significant challenges in moving to the next stage in its development.

To understand how far Vietnam has come—and to gain insight on the opportunities for improvement—we used The Boston Consulting Group's Sustainable Economic Develop-

ment Assessment (SEDA). SEDA is a powerful diagnostic tool that evaluates the well-being of a country's citizens and how effectively a country converts wealth, as measured by income levels, into well-being.<sup>1</sup> We measure well-being along ten dimensions, such as health, education, and infrastructure. SEDA also identifies where a country is lagging behind the rest of the world or a specific peer group, shining light on issues that may warrant priority attention.

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Vietnam's well-being level is comparable to that of a country with twice the GDP per capita.

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Our analysis found that Vietnam has one of the best track records globally for converting wealth into well-being. In fact, Vietnam's overall well-being level is comparable to that of a country with twice its GDP per capita. Given that strong foundation, the expectations of citizens, stakeholders, and investors have never been higher.

Several obstacles, however, could make it difficult for the Vietnamese government to achieve its goals. On the basis of our insights from SEDA, as well as our years of experience

working with companies and public-sector leaders in Vietnam, we have identified three areas the government must address:

1. The weak link between education and the labor market, which has limited the supply of highly skilled workers
2. The country's strained infrastructure
3. Public services and governance

Concerted action on all three fronts will help Vietnam emerge as a world-class economy. And it will put to rest the very real worry that the country's progress cannot be sustained.

NOTE

1. Income levels are based on GDP per capita measured in terms of purchasing-power parity.

# VIETNAM AND WELL-BEING

**T**O UNDERSTAND WHERE VIETNAM should be heading in the coming years, it is critical to appreciate just how much progress the country has achieved in a very short time. The SEDA diagnostic reveals that Vietnam has made substantial advances in recent years and is a global leader in converting wealth into well-being for its citizens.

## Measuring Performance Through SEDA

Since launching SEDA in 2012, BCG has used it to assess the relative performance and progress of many countries around the world. The data set for our 2015 analysis included 148 countries plus Hong Kong.<sup>1</sup>

SEDA is based on the premise that the purpose of economic development is to improve the overall standard of living—the well-being—of a nation’s population. (See *Why Well-Being Should Drive Growth Strategies*, BCG report, May 2015.) SEDA is a comprehensive, fact-based diagnostic tool that measures relative well-being using economic and noneconomic factors.

SEDA defines well-being through three fundamental elements that comprise ten dimensions. (See Exhibit 1.)

- *Economics*, which includes income, economic stability, and employment

- *Investments*, which includes education, health, and infrastructure
- *Sustainability*, which includes environment, income equality, civil society, and governance

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SEDA measures relative well-being using economic and noneconomic factors.

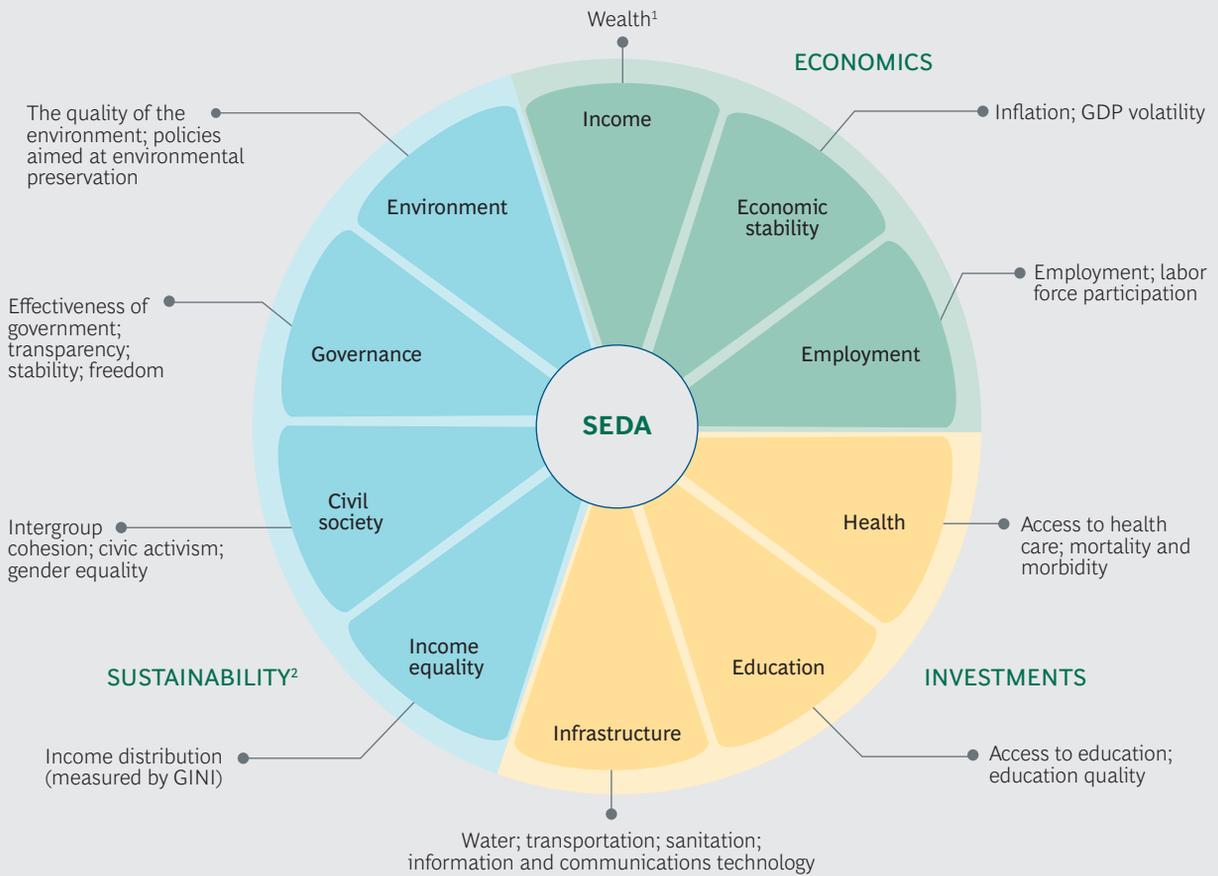
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We examine relative well-being along two time frames:

- The *current-level* score is a static measure that shows how well a country is performing on the ten dimensions according to the most recent available data. The current level of a nation’s well-being is the cumulative effect of historical developments, policies and events, and national priorities.
- The *recent-progress* score is a measure of change on the ten dimensions during the most recent seven-year period for which data is available.

Of course, wealth has a direct bearing on well-being. SEDA examines this connection

## EXHIBIT 1 | SEDA's Ten Dimensions of Well-Being



Source: BCG analysis.

<sup>1</sup>Wealth is measured as GDP per capita, which, in turn, is measured in terms of purchasing-power parity in constant dollars (2011).

<sup>2</sup>Sustainability includes environment and social inclusion. Social inclusion comprises governance, civil society, and income equality.

by looking at a country's current level of well-being relative to income levels and at recent changes in well-being relative to economic growth. Those relationships are reflected through two metrics:

- The *wealth-to-well-being coefficient* compares a country's current-level SEDA score with the score that would be expected given its GDP per capita. The coefficient is based on the average worldwide relationship between current-level scores and GDP per capita based on purchasing-power parity (PPP). Countries with coefficients greater than 1.0 have higher levels of well-being than would be expected given their GDP; those with coefficients less than 1.0 have levels that are lower than expected.
- The *growth-to-well-being coefficient* compares a country's recent-progress SEDA score

with the score that would be expected given its GDP growth rate. This coefficient is based on the average worldwide relationship between recent-progress scores and GDP growth rates during the same period. As with the wealth-to-well-being coefficient, countries with coefficients greater than 1.0 are producing improvements in well-being beyond what would be expected given their GDP growth rate; those with coefficients less than 1.0 are producing well-being gains below the expected level.

Whereas the wealth-to-well-being coefficient reveals how effectively a country converts wealth into well-being, the growth-to-well-being coefficient shows the conversion of economic growth into well-being *improvements*. Together, the four SEDA metrics provide a lens for examining not only where a

nation stands relative to others but also how it is progressing and how well it is harnessing its resources. (See Exhibit 2.) (For more on our SEDA methodology, see the Appendix.)

## Vietnam’s Success Story

Vietnam has come a long way in a short time. Although the country is not in the top tier according to current well-being, it has made substantial progress in recent years and is a leader in the conversion of wealth into well-being.

**Impressive Progress in Well-Being.** Vietnam’s current-level SEDA score of 42.4 places the country in the middle—number 79—of the 149 countries we assessed. Not surprisingly, wealthy nations such as the US, Japan, Norway, Germany, and Singapore come out ahead of Vietnam, with current-level scores of 80 or above. Their performance reflects at least half a century—and often much more—during which they accumulated wealth and invested in areas such as infrastructure and education.

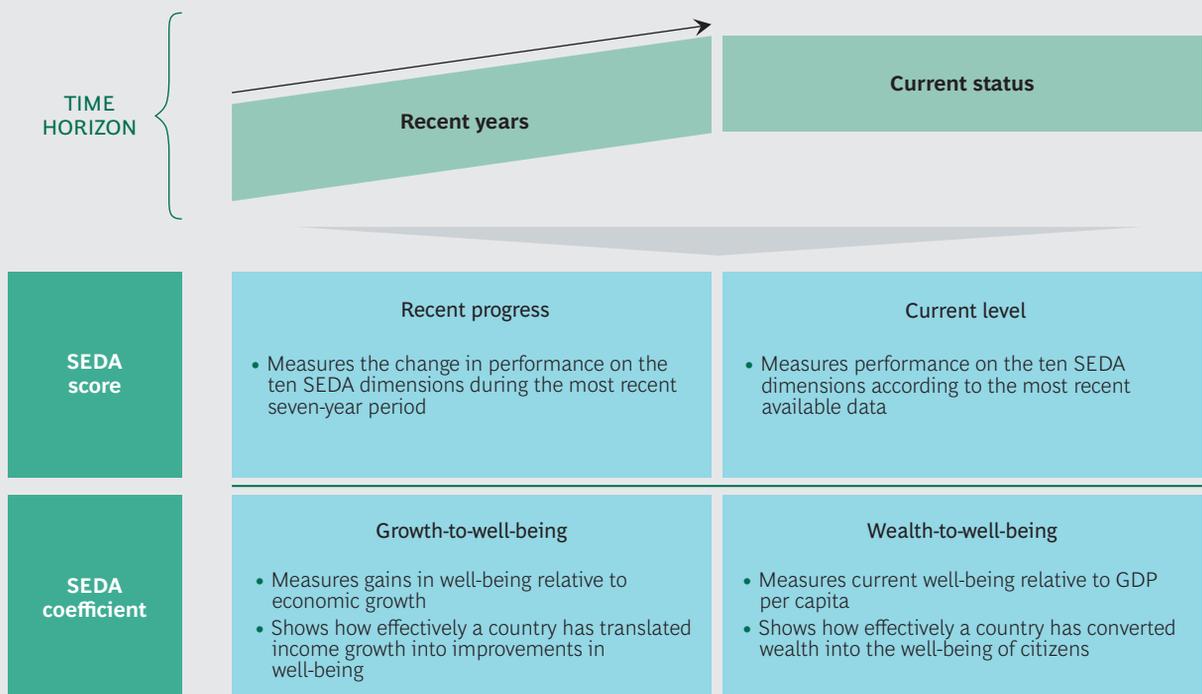
When it comes to progress over the seven-year period from 2006 to 2013, however, Viet-

nam is in the top quintile. With a recent-progress score of 74.8, Vietnam is in the company of countries with notable achievements in the past decade, including Poland, Indonesia, China, Brazil, Ecuador, and Morocco. Vietnam’s well-being improvement is especially impressive in light of the 2008–2009 global financial crisis.

**A Leader in Converting Wealth and Growth into Well-Being.** Countries that improve their citizens’ quality of life despite limited resources deserve special recognition. From that perspective, Vietnam is a standout. The country is among the top 10% globally in the ability to convert wealth into well-being, with a wealth-to-well-being coefficient of 1.48. (See Exhibit 3.) Put another way, Vietnam, with GDP per capita based on PPP of about \$5,200, has a well-being level that would be expected of a country with GDP per capita of more than \$10,000.

Vietnam’s performance far exceeds that of other countries with similar income levels, such as the Philippines (with GDP per capita of about \$6,300), and of wealthier countries such as China and Thailand. In fact, well-

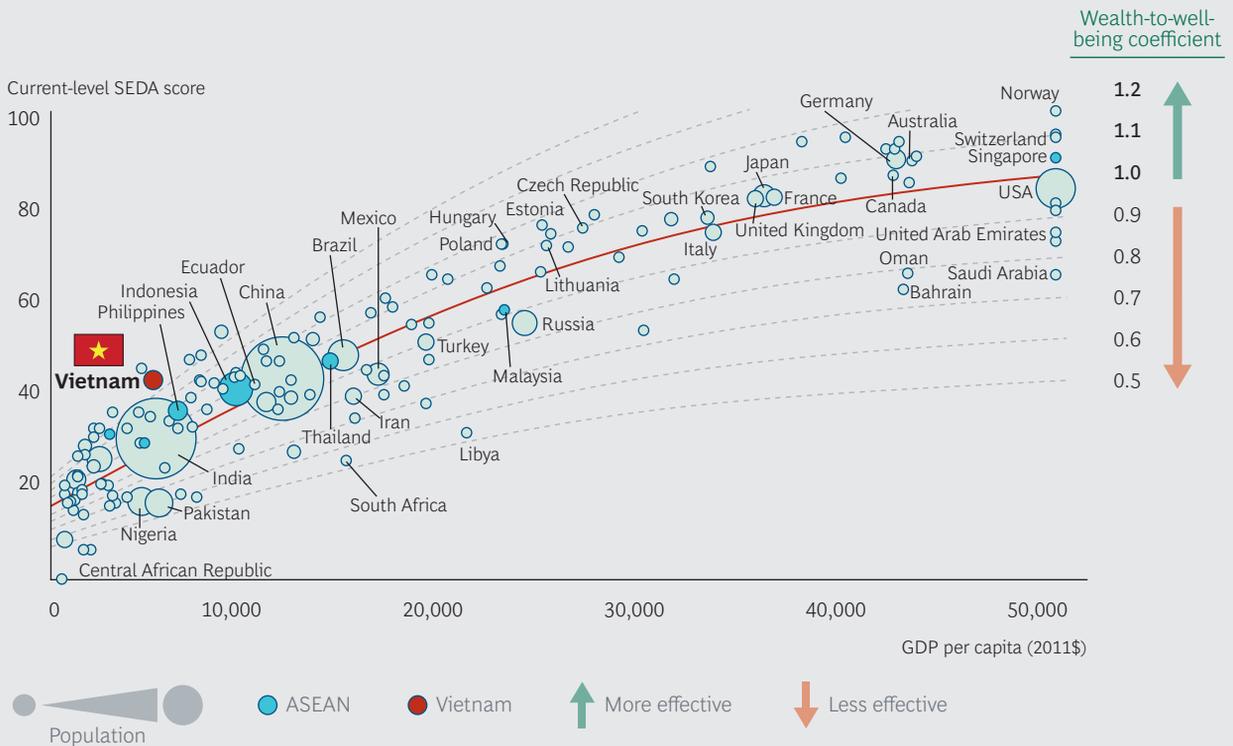
**EXHIBIT 2 | SEDA Examines Two Time Horizons Using Four Metrics**



Source: BCG analysis.

### EXHIBIT 3 | Vietnam Is a Top Performer in Converting Wealth into Well-Being

#### GDP PER CAPITA VERSUS CURRENT-LEVEL SEDA SCORE



Source: BCG analysis.

Note: Data is from SEDA 2015. The solid line is based on regression (polynomial 2nd order). Per capita GDPs of Kuwait (\$84,188), Qatar (\$127,562), Luxembourg (\$86,442), Singapore (\$76,236), Norway (\$62,448), Saudi Arabia (\$52,067), Switzerland (\$51,733), UAE (\$57,044), US (\$51,450), and Hong Kong (\$51,509) were adjusted to the maximum value of the matrix (\$50,000).

being levels in Vietnam are about the same as those in China—even though China’s GDP per capita is roughly double Vietnam’s. (See the sidebar “The China-Vietnam Comparison.”) (Recently, China’s government has begun pushing reforms to drive sustainable development and to improve the well-being of citizens.) Vietnam’s strong track record in converting wealth into well-being reflects the impact of government policies that look beyond economic development to focus on other drivers of well-being, such as access to education and health care.

Vietnam’s performance in converting economic growth into well-being improvements is also strong. Vietnam’s growth-to-well-being coefficient is 1.04. Although not quite as impressive as the wealth-to-well-being coefficient, it is an indication that the country has generated well-being improvements moderately above average for its growth rate. (See Exhibit 4.)

This achievement is particularly noteworthy given Vietnam’s remarkable pace of economic growth—about 7.1% annually from 2006 to 2013.<sup>2</sup> Our analysis shows that nations with fast-growing economies often find it difficult to produce above-average gains in well-being. China, for example, grew 12% to 13% annually during the same seven-year period and has a growth-to-well-being coefficient of 1.0. India grew about 8% annually during that period and has a coefficient of 0.9.

To put Vietnam’s performance in perspective, only 48 other countries in our 2015 analysis have wealth-to-well-being and growth-to-well-being coefficients above 1.0. Others in this category are Cambodia, Indonesia, and Poland. Among high-income countries, only a few, including Singapore and Germany, have such impressive scores, highlighting Vietnam’s success in harnessing its limited resources for the good of citizens.

## THE CHINA-VIETNAM COMPARISON

China and Vietnam are neighboring countries with significant historical ties and similarities in culture and socioeconomic development. It's natural, then, to compare the two. How does Vietnam's SEDA performance stack up to China's?

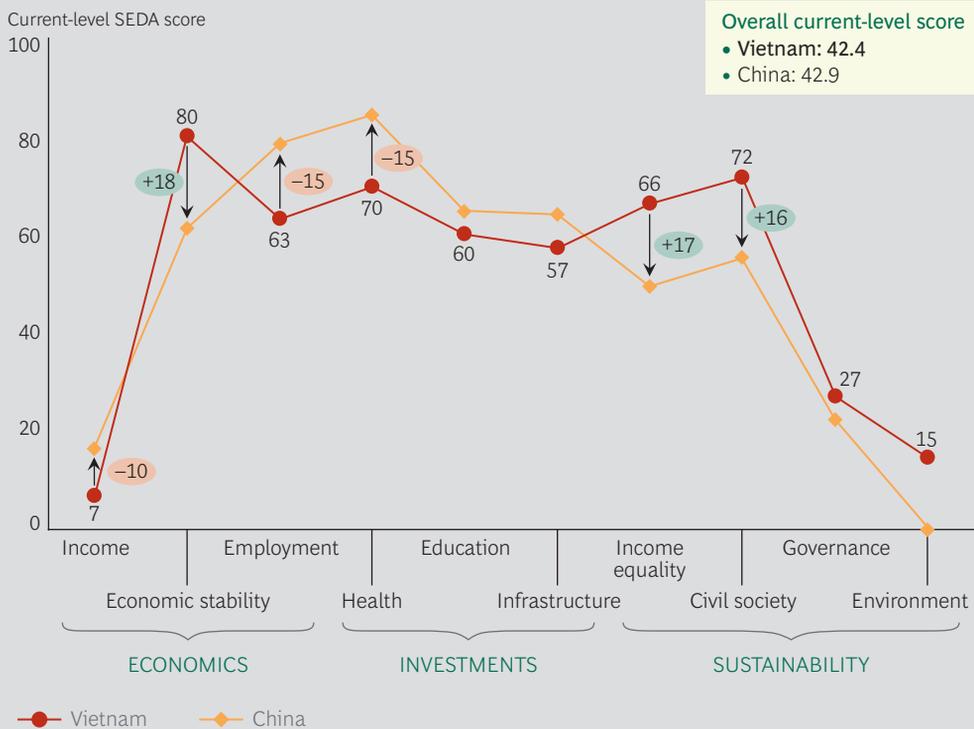
The short answer is that Vietnam has outperformed its larger competitor in the key metric of the wealth-to-well-being coefficient, meaning that Vietnam has done a better job of converting wealth into well-being for citizens. As a result, although China's GDP per capita (based on PPP) is about \$11,700 and Vietnam's is about \$5,200, the two countries have nearly identical scores in current levels of well-being.

In terms of recent progress, both Vietnam and China are among the top quintile globally. This stems largely from their booming economies, which have enabled

significant investments in infrastructure, health care, and education.

The analysis of SEDA's ten dimensions for each country shows distinct differences. Vietnam is lagging behind China in most economic and investment dimensions, such as income, employment, and health. But it outperforms China in all measures of sustainability: income equality, civil society, governance, and environment. (See the exhibit.)

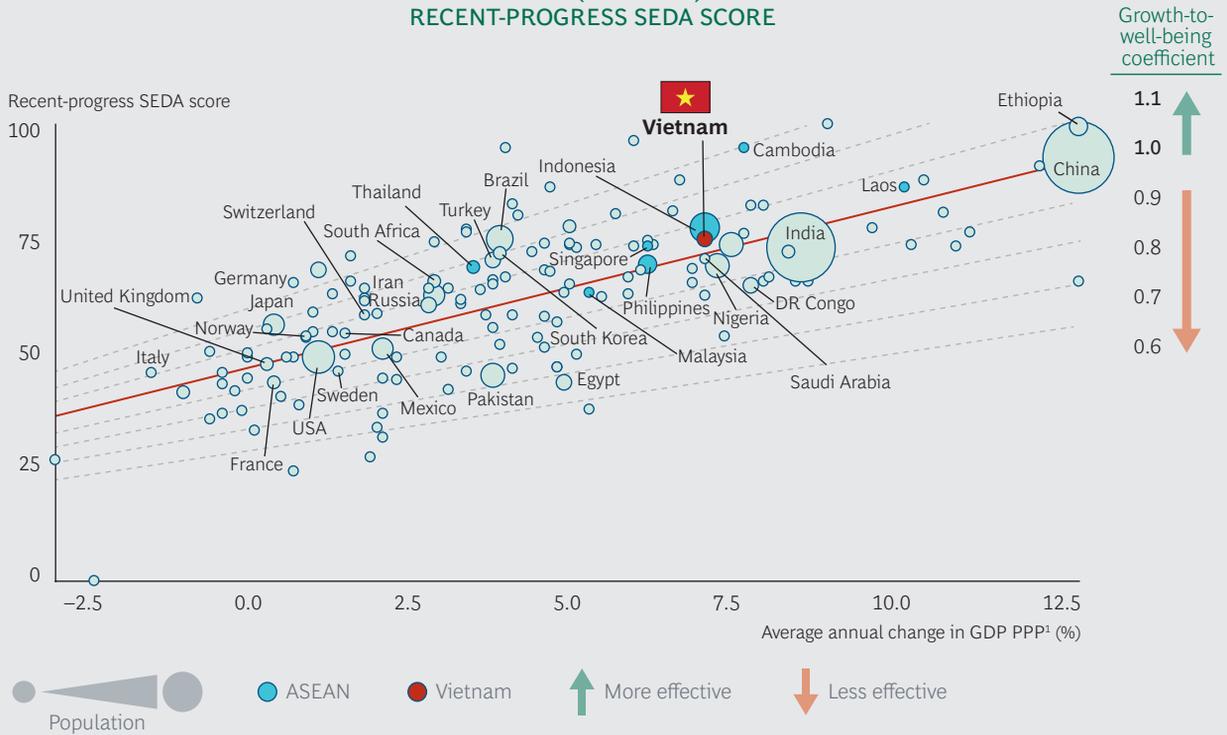
### VIETNAM UNDERPERFORMS China in Most Economic and Investment Areas but Outperforms in Sustainability



Source: BCG analysis.

## EXHIBIT 4 | Vietnam Is Above Average in Converting GDP Growth into Well-Being Improvements

### CHANGE IN GDP (2006–2013) VERSUS RECENT-PROGRESS SEDA SCORE



Source: BCG analysis.

Note: Data is from SEDA 2015. The solid line is based on a linear regression.

<sup>1</sup>Outliers more than 2.5 times the standard deviation were limited to these maximum values; reflects average annual change in GDP PPP (constant \$billions, 2011) from 2006 to 2013.

### Performance Relative to ASEAN Peers

Vietnam is one of ten countries in the Association of Southeast Asian Nations (ASEAN), a group that is among the world's most economically dynamic. ASEAN countries boast a total population of about 600 million and a combined economy that grew at an average annual rate of 8.2% (based on GDP per capita in PPP terms) from 2006 to 2013—well above the global average despite the worldwide economic downturn.

Vietnam's current-level SEDA score of 42.4 exceeds the 40.2 average of the other ASEAN countries excluding Singapore. (We excluded Singapore from the ASEAN group in our comparisons because it is a high-income nation, and the other ASEAN countries in the analysis have low to upper-middle income levels.)<sup>3</sup>

Vietnam's recent-progress SEDA score, 74.8, is just a bit off the average of 76.6 of the other ASEAN nations. This is a solid accomplish-

ment given that the ASEAN countries' recent-progress scores are among the highest we assessed.

We also evaluated Vietnam's performance against four ASEAN nations—Indonesia, Malaysia, the Philippines, and Thailand—that, like Vietnam, have midlevel incomes. (Myanmar, also in the midlevel-income category, was excluded owing to a lack of reliable data.) Those countries, which we dub the ASEAN 4, will not only be crucial partners for Vietnam in the 21st century but will also continue to be key competitors in attracting foreign direct investment as many multinational companies shift some types of manufacturing away from China. Vietnam's current-level score is a bit below the ASEAN 4 average of 45.2, but its recent-progress score surpasses the 69.6 average of the group.

Digging into Vietnam's performance on the ten SEDA dimensions reveals where Vietnam is leading and where there is room for im-

provement. We benchmarked Vietnam against the ASEAN 4 as a whole and against the leader in each dimension. (See Exhibit 5.) Vietnam matches or exceeds the ASEAN 4 in several dimensions, including economic stability and civil society. The country's performance in the latter area stems in part from strength in gender equality. The rate of participation of women in Vietnam's labor market, for example, is 73%—among the highest globally.

In a number of areas, however, Vietnam lags behind the ASEAN 4. The country's overall income level is relatively low, owing in large part to the heavy reliance on low-value agriculture. Whereas 2013 GDP per capita based on PPP was about \$5,200 in Vietnam, for the ASEAN 4 it ranged from about \$6,500 in the Philippines to about \$22,000 in Malaysia. The country also ranks near the bottom relative to the ASEAN 4 in infrastructure and governance. The significant gap between Vietnam and its peers in governance in particular indicates the depth and complexity of the country's challenges and contributes to its weak

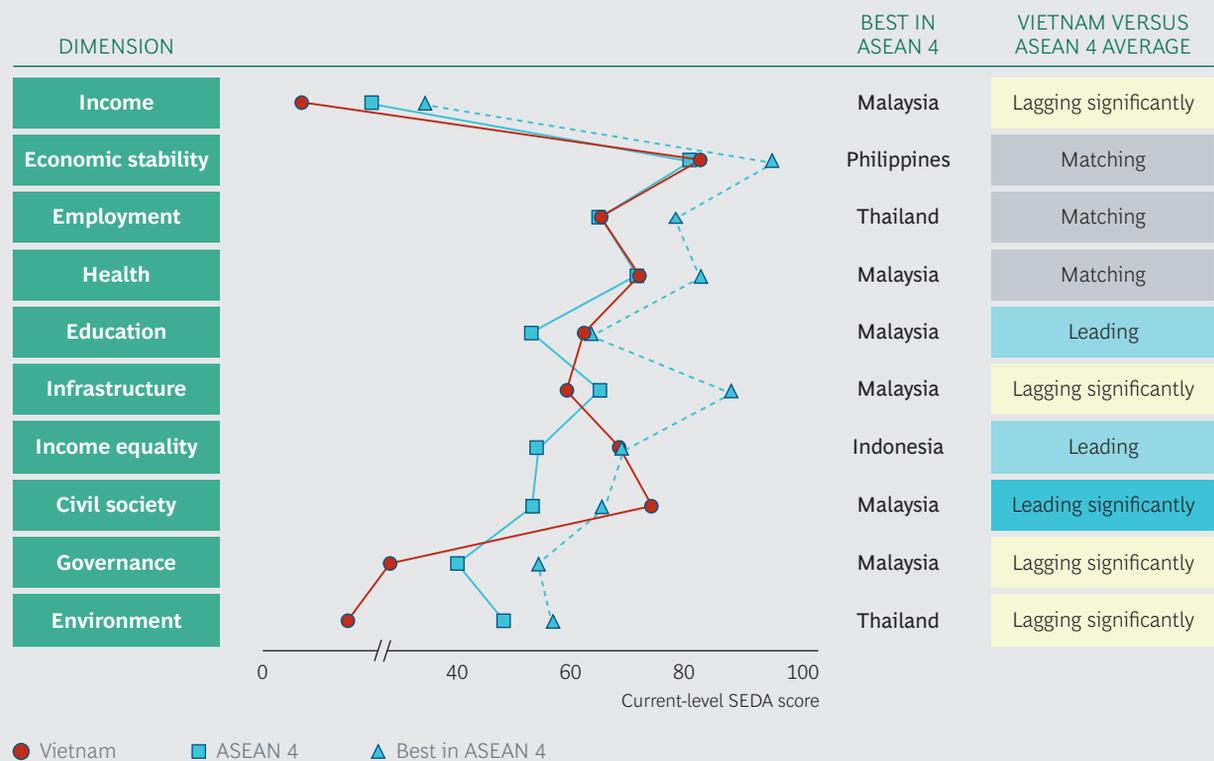
rating in the environment dimension. In addition, while Vietnam's performance in employment is in line with that of its ASEAN 4 peers, the country faces a number of labor market issues, including high youth unemployment, that could impede the next phase of its development.

### Vietnam's Next Chapter

Although Vietnam's gains over the past 20-plus years are impressive, the country's leaders have aims for the years ahead that are even more ambitious. The goal: to transform Vietnam from an industrial economy based on low-cost labor to a modern knowledge-based economy. That shift is driven by the Socio-Economic Development Strategy (SEDS) for 2011 to 2020, which aims to bring Vietnam into a new era.

The government's primary economic goal is to increase GDP per capita to \$8,000 to \$9,000 (on a PPP basis) by 2020, roughly 2.5 times the 2010 level.<sup>4</sup> This would raise Viet-

**EXHIBIT 5 | Vietnam Lags Behind Peers in Income, Infrastructure, Governance, and the Environment**



Source: BCG analysis.

Note: Data is from SEDA 2015. Used average score for ASEAN 4 countries (Indonesia, Malaysia, Philippines, and Thailand).

nam's national wealth to the current level of Indonesia's and well above the level today in the Philippines. At the same time, the government aims to transform the structure of Vietnam's economy so that 85% of GDP is derived from the industrial and service sectors, with high-value-added industries accounting for about 45% of GDP.

In terms of socially oriented goals, Vietnam hopes to maintain an unemployment rate of around 3% and to build a workforce in which 70% of workers are trained (including post secondary and vocational training) and about 55% of those individuals receive vocational training. The government reached one of its goals early, in 2010, when life expectancy rose to 75 years.

Achieving those ambitious objectives would fundamentally transform Vietnam's economy and allow the country to shed its developing-nation status. To reach these targets while sustaining progress in overall well-being, however, Vietnam must couple economic-development efforts with actions to address key gaps relative to more-developed peers in the region. There is

no simple formula or silver bullet. Rather, Vietnam must develop a comprehensive roadmap for building links between education and labor demand in the market, improving the country's infrastructure, and upgrading governance. The government must also develop a plan for mitigating the negative environmental consequences of growth. (See the sidebar "An Environmental Warning.")

#### NOTES

1. Hong Kong is a special administrative region of China. For the sake of simplicity, we refer to all 149 entities (including Hong Kong) as "countries" in this report.
2. This figure is based on nominal GDP per capita (PPP adjusted).
3. The ASEAN countries include Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. The 2015 SEDA analysis excluded Brunei and Myanmar, owing to the difficulty of accessing reliable data.
4. The goal for 2020 is the equivalent of ~\$3,000 GDP per capita (not adjusted for PPP).

## AN ENVIRONMENTAL WARNING

Government action is among the most effective forces for managing the adverse environmental consequences of economic development. The enforcement of environmental regulations and policies plays a key role in preventing companies from putting bottom-line performance ahead of other concerns.

When government does not play this role effectively, the costs are clear. China has become the manufacturing center of the world—but has seen an exponential increase in pollution. Major cities such as Beijing have become almost uninhabitable because of the quality of the air and water. Over the long term, unchecked environmental degradation will yield very real economic consequences as polluted areas become desolate and unproductive. China, recognizing its issues in this area, has recently taken some steps to address them.

Vietnam's breakneck pace of growth has created a major environmental challenge. Although the country has a wide range of protections in place, many are not implemented and enforced effectively. As a result, Vietnam's current-level SEDA score for the environment dimension is just 15, placing the country in the bottom 20% of the 149 countries we assessed.

No doubt, pressure to address environmental issues will mount as living standards and income in the country rise and people demand cleaner water and air. That's another reason Vietnam's government would do well to heed the painful lessons other countries have learned about putting economic success ahead of environmental stewardship.

# THE LABOR MARKET

## BUILDING CRITICAL LINKS BETWEEN SUPPLY AND DEMAND

**V**IETNAM HAS A SOUND record in education. The country's current education system, however, will not be sufficient for the next phase of economic development, because it is not aligned with the needs of the labor market. But while the challenges are real, there are reasons to believe that Vietnam can make substantial progress in addressing them. Tried and tested solutions can be found in places such as Penang, Malaysia. And many of the solutions require new policies and incentives rather than large financial investments. Progress in this area will not only create jobs but also increase social stability.

### The Workforce of the Future

Historically, Vietnam's primary and secondary education have been strong, and significant investments have allowed broad access to schooling. Government spending on education is about 20% of total annual expenditures, putting Vietnam in the top 20% of countries and ahead of most OECD countries in education investments. About 95% of the population in Vietnam is literate, female participation in education is high—from 2007 to 2011, more women than men had completed tertiary education—and the results of the Programme for International Student Assessment (PISA, administered by the OECD) show that Vietnam's math and science scores are comparable to those of many wealthier

OECD countries. It's no surprise, then, that Vietnam's current-level SEDA score in education is above the average of the ASEAN 4.

**Two Major Deficits.** The strong commitment to education has enabled the transition from an agricultural to an industrial workforce over the past 20-plus years. But we believe the next shift—to a workforce that can meet the demands of a knowledge-based economy—will be even more challenging, because of two fundamental problems (See Exhibit 6):

- Labor productivity in Vietnam is lower than in many peer countries. Output per worker in Vietnam was about \$5,300 in 2012, roughly 18 times lower than in Singapore and about 60% lower than in the Philippines.<sup>1</sup> This stems not only from a manufacturing system that is heavily weighted toward lower-value-added products but also from a less efficient workforce. Low productivity will remain a significant problem in the face of intensifying competition from cheap and abundant labor in countries such as Bangladesh, Cambodia, India, and Laos.
- Vietnam's base of skilled workers is relatively small. For instance, 6.9% of workers in Vietnam have completed tertiary education, compared with 12.6% in Thailand and 16.4% in Malaysia. And only 25.4% of the workforce has complet-

## EXHIBIT 6 | Vietnam's Workforce Has Low Levels of Productivity and Education



Sources: World Bank Barro-Lee Educational Dataset; ILO statistics database.

Note: Data on worker productivity in Myanmar was not available.

<sup>1</sup>Calculated using 2005 GDP (based on PPP) and exchange rates.

<sup>2</sup>Data is from 2010 or most recent available year.

ed secondary education, about half of Malaysia's 50.9% and below Thailand's 27.8%. As a result, the country lacks highly trained craftsmen, professional services workers, engineers, and technicians, creating a skills gap in sectors such as electronics manufacturing services, professional services, and information and communications technology (ICT).<sup>2</sup> Consequently, multinational corporations (MNCs) operating in Vietnam, such as Samsung, Nokia, and Intel, struggle to find skilled workers there.

Two main factors account for Vietnam's workforce issues. First, the country's approach to labor market management lacks robustness and flexibility. For example, the ten-

year plan for Vietnam's labor market published in mid-2011, the government's most comprehensive effort to date, focuses on targets rather than on concrete solutions. So while the country aims to train close to 1 million workers in ICT and more than 3 million in finance and banking, the plan lacks specific steps for reaching those goals. And there is no mechanism for adjusting the targets if economic conditions change.

Most newly established universities, for example, produce significant numbers of graduates in finance, banking, and accounting. But when a financial and real estate crisis hit Vietnam in 2011, creating major economic headwinds—particularly in finance and banking—the universities made few adjust-

ments. As a result, the supply of people trained in finance, banking, and accounting substantially exceeded demand.

The second reason for Vietnam’s workforce problems is a major disconnect between industry—both MNCs and state-owned and private enterprises—and the country’s training and education systems. Although Vietnam boasts 460 universities and colleges (there are universities in 62 out of 63 provinces), programs at those institutions often don’t focus on practical skills. A 2014 study by the World Bank shows that Vietnam’s education system is not sufficiently teaching the critical-thinking skills that workers need in a modern market-based economy.<sup>3</sup> The 130-plus surveys and interviews we conducted with industry leaders in Vietnam echo that finding.

**The Cost of Vietnam’s Workforce Challenges.** The poor management of the labor market and the weak links between industry and educational institutions come at a steep price. Although the overall unemployment rate is about 3%, youth unemployment is double that rate. And the unemployment rate among university-trained graduates between the ages of 20 and 24 is higher still—roughly 20%.<sup>4</sup> At the same time, the World Bank found that a large percentage of employers report that

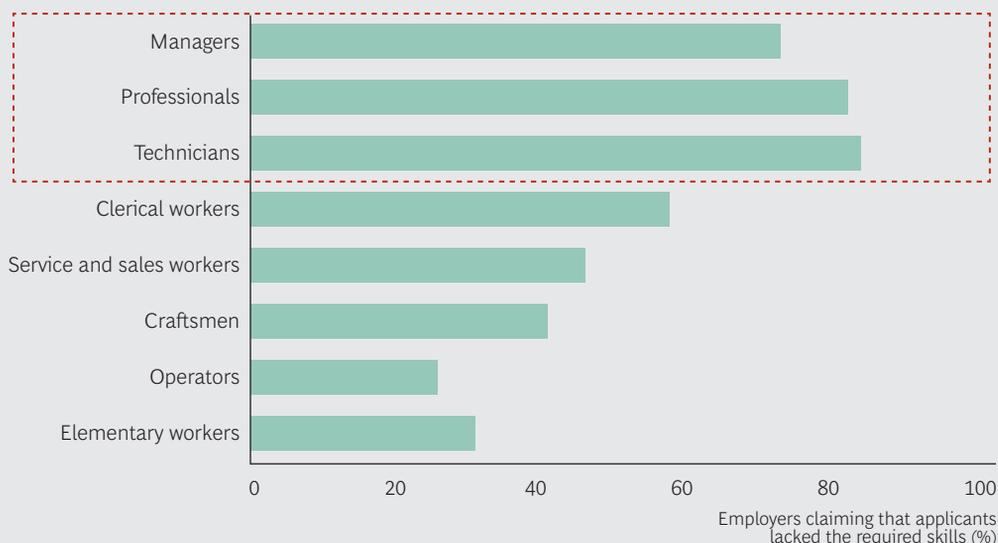
applicants—particularly those seeking positions as managers, technicians, and professionals such as engineers and physicians—do not have the right skills. (See Exhibit 7.) Many MNCs, frustrated by the dearth of qualified workers, have been forced to develop their own retraining programs. This significant cost to companies threatens to erode the low-cost labor advantage Vietnam currently enjoys.

### Short- and Long-Term Steps

Upgrading the workforce in Vietnam demands action on several fronts. In the near term, it will require developing education and training programs geared toward producing the workers that employers need and creating a system for sharing information that will steer young people toward high-demand sectors. Longer term, it will be critical to improve the planning and oversight of the country’s labor market and to institute a robust performance-management system for the country’s educational institutions.

**Improving Labor Market Links and Outreach Efforts.** The benefits of improving the links between industry and universities and vocational institutions will be sizable, including the retention of large MNCs that have

**EXHIBIT 7 | Job Applicants in Vietnam Often Lack the Skills They Need**



**Source:** World Bank, *Skilling Up Vietnam: Preparing the Workforce for a Modern Market Economy*, 2014.

**Note:** According to the ILO, operators include machine operators and assembly line workers; elementary workers include people in jobs that require no training, such as janitors.

already invested in operations in Vietnam and the development of a better and higher-paid workforce.

A model for upgrading the workforce can be found in Penang, Malaysia, where the creation of an industry-tied vocational training institution has allowed the state to move up the value chain toward high-value manufacturing. (See the sidebar “Penang’s Leap in Manufacturing.”) That shift, in turn, has increased workers’ pay: Penang’s GDP per capita is among the highest in Malaysia, behind only Kuala Lumpur’s and the nation’s oil and gas hubs in Labuan and Sarawak. In strengthening the workforce, there may also be a role for accelerator services that provide intensive training to help recent graduates develop employable skills.

As Vietnam upgrades workers’ skills, it must also improve how it communicates with parents and students about future workforce needs. Currently, the country lacks such an outreach mechanism. Vietnam needs to increase the availability and accessibility of information that could guide students, in particular, toward the sectors that will have the greatest need for skilled workers.

Such an effort is likely to help address a key issue: the lack of interest among students and their parents in vocational training. The skills

that many employers—such as electronics manufacturing services companies—are struggling to find are typically taught in vocational schools, but our interviews found that many students in vocational institutions in provinces such as Quang Ninh, Hai Duong, and Hanoi view vocational training as a last resort. In general, students prefer to take the traditional university route, despite the high unemployment rate among university graduates.

This attitude underscores the need for a shift in the mind-set of both students and parents to one based on a realistic view of the labor market and of career options. Social media could help. More than 95% of Vietnam’s youth have access to the Internet, and most of the 30 million active social-media users in Vietnam are young people. Moreover, in 2015, there were 140 mobile phones for every 100 people in the country. With so many of Vietnam’s youth easily reachable through mobile technology, government, training providers, and employers need to launch a concerted social-media campaign to promote the benefits of vocational training.

**Overhauling Labor Market Planning.** In the longer term, Vietnam needs to revamp its workforce planning system by developing a robust process for forecasting and monitoring labor supply and demand. This will help the

## PENANG’S LEAP IN MANUFACTURING

Over the course of more than 20 years, the state of Penang in Malaysia has successfully moved up the value chain from simple assembly lines to advanced hardware manufacturing. A key driver of that shift has been the education and training offered through the innovative Penang Skills Development Centre.

PSDC brings together resources from industry, academia, and government to deliver cutting-edge education and training to workers. With partners such as Intel, IBM, National Instruments, Braun, Bosch, Motorola, Sony, Dell, and Honeywell, PSDC has helped train the highly skilled employ-

ees those companies need, allowing Penang to emerge as a high-tech manufacturing hub. Other states have followed Penang’s lead—11 similar centers now operate in Malaysia.

The development of a skilled labor pool has insulated Penang somewhat from the shift of basic manufacturing to lower-cost locations such as Vietnam, Cambodia, and Bangladesh. And the state is hoping to build on its success and attract companies in other high-tech sectors, including those that make LEDs, solar panels, and aviation components.

country establish effective labor plans and allow for the flexibility of those plans amid constantly changing economic conditions.

At the same time, the government should establish a system to assess how stakeholders such as universities and vocational institutions are faring in producing skilled and employable workers. Careful performance measurement will help improve the quality of training, promote competition and the adoption of best practices, increase accountability, and help the government direct its resources to high-performing institutions.

#### NOTES

1. This figure is based on PPP.
2. World Bank, *Skilling Up Vietnam: Preparing the Workforce for a Modern Market Economy*, 2014.
3. World Bank, *Skilling Up Vietnam: Preparing the Workforce for a Modern Market Economy*, 2014.
4. *Vietnam Labor Force Survey*, 2014.

# INFRASTRUCTURE

## BRIDGING THE INVESTMENT GAP

**V**IETNAM HAS INVESTED SUBSTANTIALLY to strengthen its infrastructure, as demonstrated by its recent-progress SEDA score in infrastructure, which is among the top 10%. But according to research by the World Economic Forum, the country's infrastructure quality score remains low.<sup>1</sup> That research also shows a direct correlation between infrastructure and the WEF's Global Competitiveness Index, which ranks country competitiveness on the basis of factors such as the strength of public and private institutions and the stability of the nation's macroeconomic framework. (See Exhibit 8.)

### A Need for Massive Investment

Vietnam's high recent-progress SEDA score in infrastructure reflects significant investment by the government and additional capital from international donors. Vietnam, which is among the recipients of the largest amounts of overseas development assistance, gets about \$5 billion annually from Japan, the World Bank, and other international lenders. Much of that funding has been directed toward upgrades in water supply, waste treatment, and road and rail transportation. Such investments have major ripple effects. Improved infrastructure, for example, can boost the already significant foreign direct investment that flows into Vietnam as MNCs, amid rising costs in China, adjust their manufacturing footprint for products with

relatively little value added or a high labor component.

There is, however, much to be done. The components of the SEDA infrastructure dimension reveal that Vietnam still lags behind its peers considerably in areas such as electricity supply and the quality of the rail and road networks. (See Exhibit 9.)

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Public funds will probably cover 50% to 60% of needed infrastructure investment.

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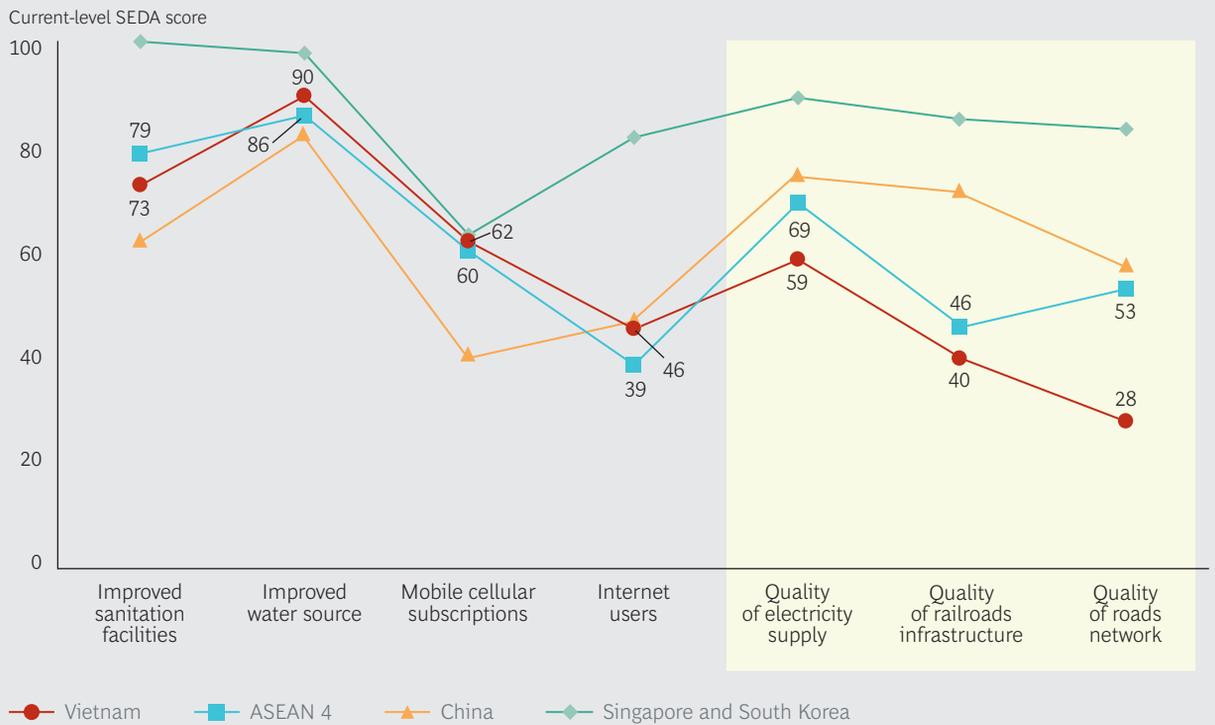
Projections of the amount required to address the country's infrastructure needs vary. We estimate that in order to sustain economic growth and remain competitive in the region, Vietnam must invest \$113 billion to \$143 billion in infrastructure from 2014 to 2020.<sup>2</sup> According to a BCG analysis of the government's master plans for all infrastructure categories, the Vietnamese government itself estimates a required investment of about 2,900 trillion VND—roughly \$140 billion. Whether the actual amount is at the high or low end, public capital is likely to cover only 50% to 60% of the sum—making it critical for Vietnam to come up with innovative ways to narrow and manage the funding gap. (See Exhibit 10.)

### EXHIBIT 8 | A Strong Correlation Between the Quality of a Country's Infrastructure and Its Competitiveness



Source: World Economic Forum, *The Global Competitiveness Report 2013–2014*.

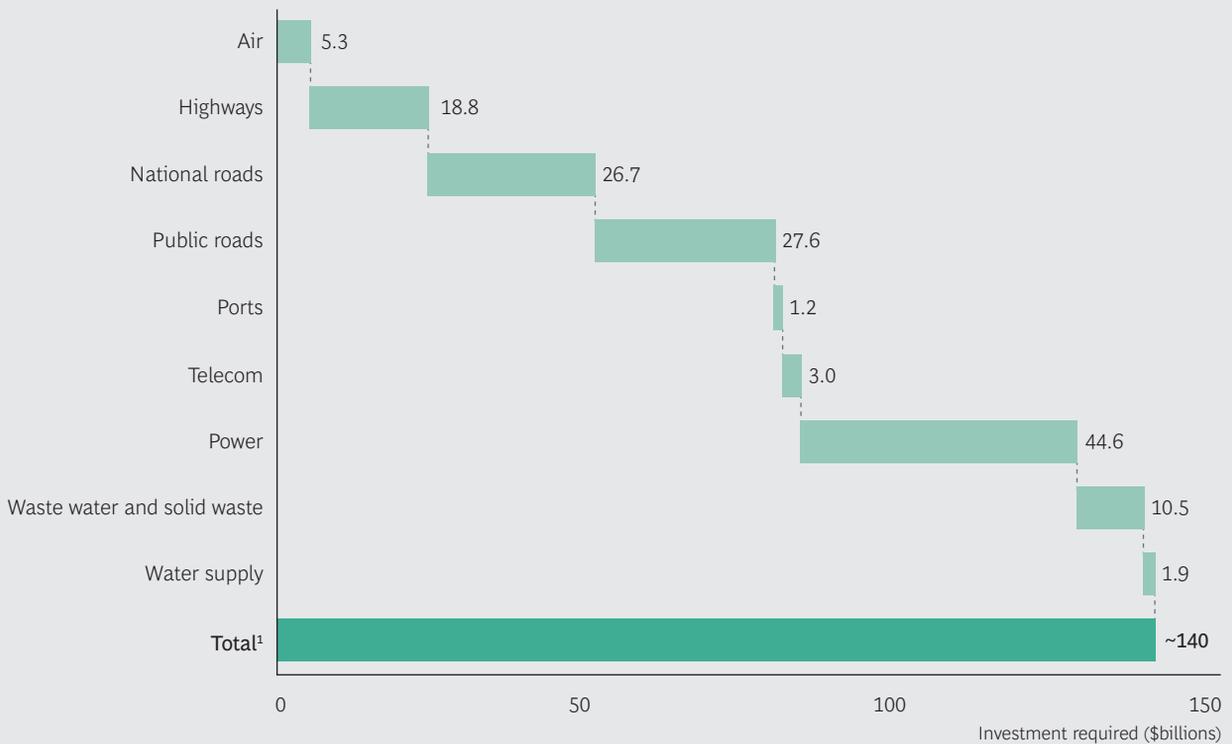
### EXHIBIT 9 | Vietnam Lags Behind Peers in the Quality of Its Electricity Supply and Rail and Road Networks



Source: BCG analysis

Note: Data is from SEDA 2015. Used average score for ASEAN 4. The seven indicators, which constitute SEDA's infrastructure dimension, are from the World Bank and the World Economic Forum.

## EXHIBIT 10 | Vietnam Needs Huge Investments in Infrastructure



Source: 2012 Vietnamese government master plans (abridged versions are available at [www.thuvienphapluat.vn](http://www.thuvienphapluat.vn)).

<sup>1</sup>Equals ~2,900 trillion VND using the 2012 exchange rate from the State Bank of Vietnam.

### Partnerships and Smart Investments

Two powerful levers can help Vietnam address its infrastructure challenges. The first is expanding public-private partnerships (PPPs) in infrastructure projects. Certainly, improvements in governance in Vietnam will be helpful in this regard, increasing private investors' confidence in the fairness of the country's legal and regulatory systems. But Vietnam must also improve both infrastructure planning and the execution of PPP projects. The second lever is maximizing infrastructure investments by creating special economic zones.

**Harnessing Public-Private Partnerships.** PPPs represent a major opportunity to attract much-needed funds for infrastructure. The benefits of PPPs, however, extend well beyond their ability to supplement public-sector investment: PPPs can also produce infrastructure projects that are more cost efficient and serve users better than those driven exclusively by the public sector. In addition, PPPs reduce the government's

exposure by spreading risk (and return) across public and private investors.

Vietnam, however, has done little to make infrastructure investment attractive to the private sector. And all too often, missteps result in projects that are delayed, over budget, inefficiently run, and financially unviable. To change that, the government must improve infrastructure planning in general and ensure that teams comprising both public- and private-sector players have the capabilities to execute complex projects.

The government process for overseeing and managing PPPs is still in its infancy and is often flawed. The regulatory framework for PPPs in Vietnam, for example, is not yet fully developed. So while roles and responsibilities for various government agencies are mapped out, the current regulatory framework does not have mechanisms to ensure strong cross-agency collaboration and consistent oversight of projects from planning to execution. Case in point: the Ministry of Finance allocates money for infrastructure projects but has little

role in planning and overseeing them. In addition, changes in government leadership often result in new policies that are not favorable to private-sector investors and could therefore dampen their appetite for PPP projects.

The expertise needed to execute a PPP in both the public and private sectors in Vietnam is still limited. The government recently took some steps to address this deficit, issuing decrees that provide guidelines for PPP implementation.<sup>3</sup> However, the country has not established a toolkit for public agencies and private-sector investors. India, meanwhile, has developed a Web-based toolkit and has seen private participation in infrastructure projects increase substantially. (See the sidebar “India’s Winning Partnership Strategy.”)

**The Power of Special Economic Zones.** In addition to PPPs, Vietnam should create special economic zones (SEZs) in order to get the most out of its infrastructure investments by focusing them in key regions. This makes more sense than trying to upgrade infrastructure throughout the country in a relatively short period. Creating such zones also allows the government to experiment with new policies and regulations before rolling them out nationwide.

The creation and management of SEZs, of course, must be handled carefully. After all, for every successful SEZ—such as the ones in Shenzhen, China, in Gujarat, India, and in

Incheon, South Korea—there are many painful failures. Sub-Saharan Africa, for example, boasts more than 100 SEZs, many of which have not attracted investment.

What distinguishes the hits from the misses? Failure is not necessarily due to a lack of resources or government incentives, or weak investor interest. Rather, it typically results from unclear rules, poor planning, a lack of government commitment to the program—or even a complete policy reversal. In some cases, for example, bureaucratic or opaque procedures can prevent investors from getting access to government incentives. In other instances, an SEZ in an area that is too remote or not well connected to other regions of the country never reaches critical mass. Successes in India, China, and South Korea show that consistent policies and a focus on building SEZs as a supportive ecosystem closely linked with the country’s agenda—not as a separate economic entity—are critical. (See the sidebar “A Dynamic Ecosystem in South Korea’s Incheon Free Economic Zone.”)

#### NOTES

1. World Economic Forum, *The Global Competitiveness Report 2013–2014*.
2. This top-down estimate is based on infrastructure investment of about 9% to 10% of GDP under three growth scenarios (5%, 6%, and 8%) from 2014 to 2020.
3. Decrees 15 and 30 issued by the Vietnamese government in 2015 contain these guidelines.

## INDIA’S WINNING PARTNERSHIP STRATEGY

The Indian government learned the hard way just how difficult public-private partnerships can be. In the past, the country often struggled to implement PPPs, and those that did make it across the finish line were in many cases disappointments.

In response, the Indian government set out to increase its expertise in PPPs. Central to this effort was the development of a Web-based toolkit to improve the selection and execution of infrastructure PPPs. The toolkit offers materials to help in all stages of the PPP process, including

background information and resources tailored to the specific issues associated with each infrastructure type. Uniform project-analysis guidelines ensure that all government agencies involved in PPPs are on the same page in terms of how projects are planned.

The Indian government’s efforts, particularly the establishment of the PPP toolkit, have been a major success: from 2009 to 2012, India saw a 57% yearly increase, on average, in private-sector participation in transportation projects.

## A DYNAMIC ECOSYSTEM IN SOUTH KOREA'S INCHEON FREE ECONOMIC ZONE

As in real estate, a key factor in the success of a special economic zone is location, location, location. South Korea's Incheon Free Economic Zone (FEZ) is a powerful illustration.

Incheon FEZ not only is situated close to the center of Seoul but also encompasses the Port of Incheon, the country's second largest, and the Incheon International Airport. The airport, among the fastest-growing in the world, has seen traffic increase from 28 million passengers in 2009 (when the airport ranked 41st globally) to 45 million passengers in 2014 (when it ranked 24th). The growth in airport activity in particular gives the region an economic boost and reinforces the view of Incheon as a major business hub.

Incheon FEZ's location has allowed the development of an ecosystem of interdepen-

dent industries in three separate but well-connected regions. Songdo, in the south, is a high-tech hub. The Yeongjong area to the west is a major tourist destination. And Cheongna, in the north, is an international finance and entertainment center.

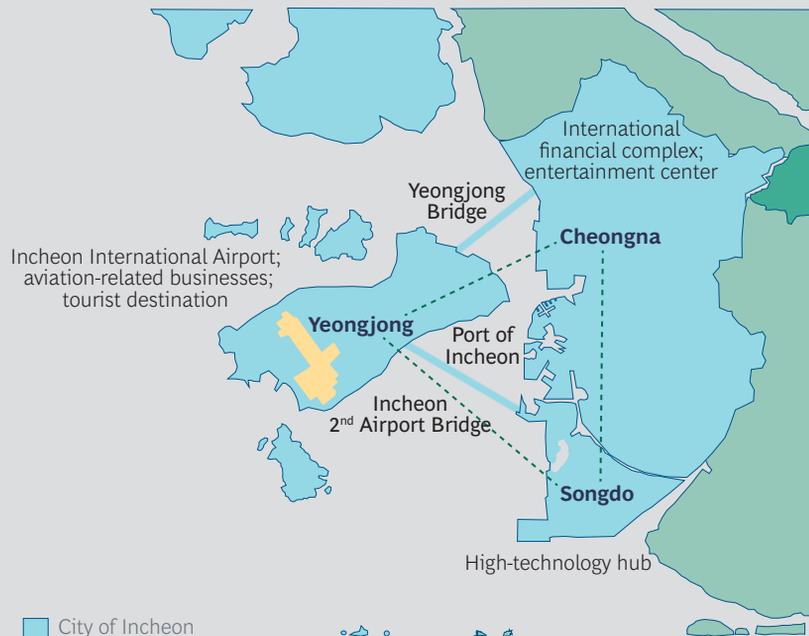
The result: Incheon FEZ has emerged as a key driver of South Korea's growth over the past few years. And the city of Incheon has been among the top gainers recently in Citibank's global city competitive assessment, now ranking 43rd globally thanks to improvements in infrastructure, the economy, and cultural vibrancy.<sup>1</sup>

### NOTE

1. Economist Intelligence Unit, *Hot Spots 2025: Benchmarking the Future Competitiveness of Cities*, 2013.

### INCHEON FREE Economic Zone Has Become an Ecosystem of Industries in Three Areas

INCHEON FEZ INCLUDES YEONGJONG, CHEONGNA, AND SONGDO, AS WELL AS INCHEON INTERNATIONAL AIRPORT AND THE PORT OF INCHEON.



**Source:** Ministry of Finance and Economy, Republic of Korea, *Free Economic Zones in Korea: The Future of Northeast Asia*, September 2003.

# GOVERNANCE

## UPGRADING TALENT AND EMBRACING TRANSPARENCY

**V**IETNAM'S CURRENT-LEVEL SEDA SCORE in governance is well below the scores of its peers. Moreover, rankings from the World Economic Forum place the country relatively low in the categories of governance and economic institutions.

The country will have no choice but to address its governance issues. A key reason: foreign investors will be unlikely to put their money to work in Vietnam if they do not have confidence in how the country is run.

### Battling Perceptions

Vietnam's leaders have taken steps to improve the delivery of services to the public and to businesses. Recent government initiatives, for example, have reduced bureaucracy in tax, customs, and administrative procedures. And Vietnam is among the first countries in the world to establish its own Provincial Competitiveness Index (PCI), in cooperation with the US Agency for International Development (USAID), to assess and benchmark the performance of local authorities.

Despite such efforts, significant challenges remain. For one thing, governments are increasingly competing with private companies, including large MNCs, for talented workers. But the Vietnamese government's traditional value proposition—including job security and a

steady promotion track—is no longer enough to remain competitive.

Furthermore, the government scholarship system, historically a strong lure for potential employees, is old and poorly managed. As a result, many recipients of those funds end up leaving government service. Singapore, in contrast, has established a successful process for developing and retaining high-potential employees. (See the sidebar “How Singapore Is Winning the Talent War.”)

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Foreign investors are unlikely to put money into Vietnam if they have no confidence in its governance.

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Vietnam is also battling the perception that operating there means grappling with bureaucracy and corruption. Roughly 66% of companies in the PCI indicated that “they have to pay informal charges” when doing business, and nearly one-fifth indicated that the charges amount to more than 10% of revenue. Two-thirds of businesses also cited issues with bureaucracy.<sup>1</sup> These problems increase the costs of operating in Vietnam—and can diminish economic opportunity and discourage investment.

## HOW SINGAPORE IS WINNING THE TALENT WAR

Singapore's government earns high marks in both transparency and effectiveness, making it the envy of many countries around the world. The ability to attract and retain top public-sector talent is a key reason for that success.

Singapore's stellar record in talent management stems in large part from the highly successful Management Associate Programme (MAP). The government-run program offered scholarships to promising individuals and provided them with attractive public-sector job opportunities, which included an accelerated path to

leadership, job rotations, and competitive compensation. By 2013, 17 out of 22 permanent secretaries (high-level civil servants) were MAP veterans.

But Singapore has not been content to rest on this success. In 2013, the government refined its approach, replacing the MAP with the Public Service Leadership Programme, which focuses on cultivating talent across a number of critical areas, including management of the economy, infrastructure and the environment, and national security.

### Two Actions for Improving Governance

To improve public services and governance, Vietnam needs to take action in two areas. First, the country should adopt a system for rewarding and promoting high-performing government workers. Second, it should roll out digital tools in order to increase government transparency.

Enhancing Vietnam's public service and governance is essential for the transition to a modern economy and will allow the government to address urgent issues, such as environmental challenges, more effectively.

**Rewarding High Performers.** The value of an objective performance-measurement system has been demonstrated in countries around the world. In Indonesia, public servants are now systematically graded and rewarded on the basis of their performance. The government in Singapore has established a rigorous system that links up to 40% of the salaries of senior officials to performance. In Vietnam, this sort of approach would be a powerful mechanism for attracting and retaining qualified workers.

**Embracing Digital Government.** Efforts to strengthen the government workforce must be coupled with aggressive steps to address bureaucracy and the perception of corruption. Vietnam's government rates low in

transparency and relatively high in the perception of corruption.<sup>2</sup> (See Exhibit 11.)

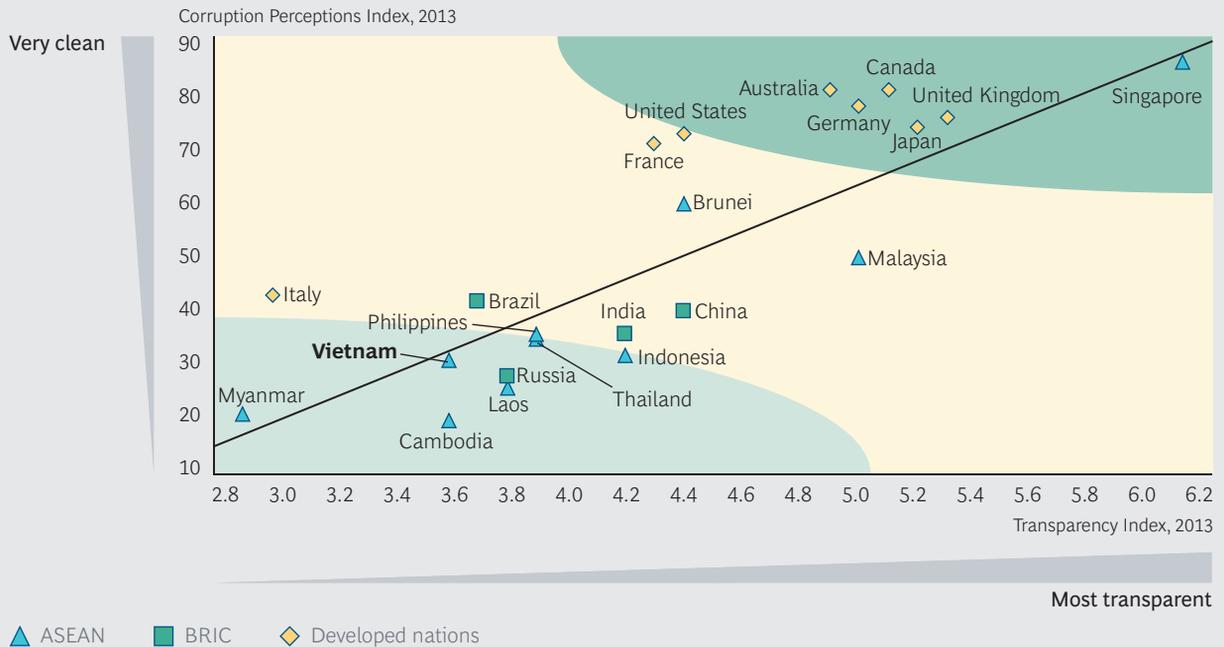
Digital tools can be a powerful lever for change. Establishing standardized procedures and digitizing key government services can improve transparency and reduce the need for face-to-face interaction with government. That, in turn, minimizes bureaucracy and eliminates opportunities for inappropriate payments and corruption.

Indeed, countries that score very high on the E-Government Development Index (EGDI), an indicator developed by the United Nations to rank countries on digital expertise, tend to fall in the top bracket in transparency and at the low end in the perception of corruption.<sup>3</sup>

The United States, Canada, Japan, Germany, and the UK are among the top 25 performers on the EGDI and post high scores on transparency and low scores on corruption. Australia and Singapore, which have both made major leaps on the index—Australia moved from 12th place in 2012 to 2nd in 2014, and Singapore jumped from 10th place to 3rd—also rank high in transparency and low in corruption. (See the sidebar “Singapore and Australia Demonstrate the Promise of E-Government.”)

The situation in Vietnam can certainly be reversed. As Internet and mobile-phone use

## EXHIBIT 11 | A Lack of Transparency and the Perception of Corruption in Vietnam



**Sources:** Transparency International, *Corruption Perceptions Index 2013*; World Economic Forum, *The Global Competitiveness Report 2013–2014*.  
**Note:** The solid line represents the average relationship between transparency and the perception of corruption.

soar among businesses and individuals, the time is right for a push to digital government. To tap that opportunity, however, the Vietnamese government must address a key obstacle: while digitized services must be based on clear and unambiguous rules, Vietnam’s legal code remains unclear in many areas.

### NOTES

1. Vietnam Chamber of Commerce and Industry and USAID, *Vietnam Provincial Competitiveness Index 2014*.
2. According to the World Economic Forum’s Transparency Index and Transparency International’s Corruption Perceptions Index.
3. Vietnam ranks 99th out of 193 countries in the E-Government Development Index in the United Nations’ *E-Government Survey 2014*.

## SINGAPORE AND AUSTRALIA DEMONSTRATE THE PROMISE OF E-GOVERNMENT

People want to do business with the government as seamlessly as they buy a book on Amazon. When it comes to the rollout of e-government platforms that can make that possible, Singapore and Australia are leading the way.

Both countries have migrated their government services online and made them easy to access. In Singapore, the government portal for these services is e-Citizen; in Australia, it is myGov.au. Australia also has platforms such as data.gov.au for publishing government data. Not surprisingly, both countries score high on

government transparency and low on corruption.

In Australia, citizens can use myGov.au to handle many transactions, such as filing taxes and accessing health, welfare, and disability services. Over 7 million people do business through the platform, and more than 2 million people use the government apps on their smartphones. But the benefits of digital government go beyond convenience for Australian citizens. Among the most impressive: the digital shift is saving the government hundreds of millions of dollars annually.

# SETTING PRIORITIES AND DRIVING CHANGE

**H**ISTORY SHOWS THAT WHEN it comes to sustainable development, successful countries do a few things very well. They prioritize aggressively, make smart investments in high-impact projects and initiatives, and ensure that government is a leader—not a follower—on economic and sustainability issues.

Those are powerful insights, particularly for a country such as Vietnam, which is on the cusp of the next stage of its development. By targeting the right areas—including education and employment, infrastructure, and governance—Vietnam can achieve real economic gains and enhance the well-being of its citizens.

As the journey continues, benchmarking tools such as SEDA can provide an objective measure of Vietnam’s progress relative to other nations in the region and the world. But the focus should be on the country’s achievements rather than on the higher levels of well-being, greater wealth, better roads, or improved access to top-tier education that other nations may have achieved.

The people of Vietnam should celebrate the leaps they have made with the resources at hand, identify where more work needs to be done, and demand action in those areas from both the government and the nation as a whole.

# APPENDIX

SEDA's measure of well-being is based on three elements that comprise ten dimensions with 43 indicators gleaned from publicly available sources. The data set covers 148 countries plus Hong Kong, which is an administrative region of China. (For the sake of simplicity, we refer to all entities in our data set as "countries.") It contains a total of nearly 50,000 data points.<sup>1</sup> The choice of indicators was not intended to provide a comprehensive coverage of issues in each dimension; that would have required many more indicators, with large overlaps and correlations. Rather, the goal was to include enough indicators to characterize the dimension and capture differences across countries.

The first element, *economics*, comprises three dimensions that include seven indicators. The second element, *investments*, comprises three dimensions that include 21 indicators. The third element, *sustainability*, comprises four dimensions that include 15 indicators. (See Table 1.)

## Normalization

As a result of differences in the scales used in the original sources, we needed to normalize the data before feeding it into the SEDA model. Individual indicators are made comparable, while preserving the relative distance among the original data values, with a min-max normalization approach, which subtracts

the minimum value of an indicator's raw data set from each country's value in a particular year. The result is then divided by the range of the indicator (maximum value minus minimum value in the data set). That result is then converted into a scale of 0 to 100, where 100 is always the best possible score.

Some of the raw data that we used contained outliers—that is, data whose values lie beyond a defined point from other values. In order to avoid an outlier bias in the overall SEDA scores, we adjusted the model so that none of the values would exceed a limit of  $\pm 2.5$  standard deviations to the mean.

As a result, SEDA scores for a particular country—whether overall or for a dimension—are always relative to those of other countries. For example, if the current level of well-being in a country is ranked zero, that does not mean that there is no well-being in the country. Rather, it means that the country is the worst performer compared with the other 148 countries.

## Weighting

Reflecting that not all dimensions of well-being are equally important, the SEDA model utilizes a simple weighting approach: income, health, education, and governance dimensions were assigned a weighting factor of 2; infrastructure, income equality, civil society,

**TABLE 1 | Indicators for SEDA's Elements and Dimensions**

<b>Economics</b>		
<b>Dimension</b>	<b>Indicators</b>	<b>Primary data sources</b>
Income	GDP per capita, purchasing-power parity (constant dollars, 2011)	World Bank, World DataBank
Economic stability	Inflation, average consumer prices (absolute percentage change)	International Monetary Fund, World Economic Outlook database
	Inflation-rate volatility (log standard deviation) <sup>1</sup>	International Monetary Fund, World Economic Outlook database; BCG analysis
	GDP growth volatility (log standard deviation) <sup>1</sup>	International Monetary Fund, World Economic Outlook database; BCG analysis
Employment	Unemployment, total (% total labor force)	World Bank, World DataBank; International Monetary Fund, World Economic Outlook database
	Employment rate, population ages 15–64 (%)	World Bank, World DataBank; BCG analysis
	Self-employment rate (% total labor force)	International Labour Organization, Key Indicators of the Labour Market
<b>Investments</b>		
<b>Dimension</b>	<b>Indicators</b>	<b>Primary data sources</b>
Health	Life expectancy at birth, total (years)*	World Bank, World DataBank
	Mortality rate, under age 5 (per 1,000 live births)*	World Bank, World DataBank
	Prevalence of HIV, total (% of population, ages 15–49)	World Bank, World DataBank
	Incidence of tuberculosis (per 100,000 people)	World Bank, World DataBank
	Prevalence of undernourishment (% of population) <sup>2</sup>	World Bank, World DataBank
	Population obesity (% BMI > 30, age-standardized estimate) <sup>2</sup>	World Health Organization, WHO Global InfoBase
	Immunization, diphtheria, pertussis, and tetanus (% of children ages 12–23 months) <sup>3</sup>	World Bank, World DataBank
	Immunization, measles (% of children ages 12–23 months) <sup>3</sup>	World Bank, World DataBank
	Number of physicians (per 1,000 people)	World Bank, World DataBank
	Number of hospital beds (per 1,000 people)	World Bank, World DataBank
Education	School enrollment, tertiary (% gross)	World Bank, World DataBank
	Years of schooling, primary to tertiary (years)	World Bank, World DataBank
	Teacher-to-pupil ratio, primary	World Bank, World DataBank
	Average of math and science scores	OECD, Programme for International Student Assessment, Trends in International Mathematics and Science Study

## Investments

Dimension	Indicators	Primary data sources
Infrastructure	Internet users (per 100 people)	World Bank, World DataBank
	Mobile cellular subscriptions (per 100 people)	World Bank, World DataBank
	Quality of roads network (1–7)	World Economic Forum Global Competitiveness reports
	Quality of railroads infrastructure (1–7)	World Economic Forum, Global Competitiveness reports
	Improved water source (% of population with access)	World Bank, World DataBank
	Improved sanitation facilities (% of population with access)	World Bank, World DataBank
	Quality of electricity supply (1–7)	World Economic Forum, Global Competitiveness reports

## Sustainability

Dimension	Indicators	Primary data sources
Income equality	Gini index (0–100)	World Bank, World DataBank; Eurostat
Civil society	Level of civic activism (0–1)	Indices of Social Development
	Interpersonal safety and trust index (0–1)	Indices of Social Development
	Intergroup cohesion measure (0–1)	Indices of Social Development
	Level of gender equality (0–1)	Indices of Social Development
Governance	Control of corruption (–2.5 to 2.5) <sup>4</sup>	Worldwide Governance Indicators
	Rule of law (–2.5 to 2.5) <sup>4</sup>	Worldwide Governance Indicators
	Political stability and absence of violence and terrorism (–2.5 to 2.5)	Worldwide Governance Indicators
	Voice and accountability (–2.5 to 2.5) <sup>5</sup>	Worldwide Governance Indicators
	Press freedom (0–100) <sup>5</sup>	Freedom House, Freedom of the Press
	Property rights index (0–100)	Heritage Foundation, Index of Economic Freedom
Environment	Air pollution, effects on human health (0–100)*	Environmental Performance Index (Yale University)
	Carbon dioxide intensity (kg per kg of oil-equivalent energy use)*	World Bank, World DataBank
	Terrestrial and marine protected areas (% total territorial area)	World Bank, World DataBank
	Electricity generation from renewable sources, excluding hydro (% of total electricity generated)	U.S. Energy Information Administration, International Energy Statistics; BCG analysis

Source: BCG analysis.

Note: All indicators within the same dimension were given equal weights except for those marked with an asterisk (\*), which were assigned double the weight.

<sup>1</sup>Calculation based on IMF World Economic Outlook database indicators. The volatility formula has been updated.

<sup>2</sup>The SEDA model uses a composite of the undernourished-population and the obese-population indicators.

<sup>3</sup>The SEDA model uses a composite of the indicators for immunization against measles and for immunization against diphtheria, pertussis, and tetanus.

<sup>4</sup>The SEDA model uses a composite of the indicators for corruption and for the rule of law.

<sup>5</sup>The SEDA model uses a composite of the indicators for voice and accountability and for press freedom.

and environment dimensions were assigned a factor of 1; economic stability and employment dimensions were assigned a factor of 0.5.

We applied a similar approach at the indicator level, but with only two factors: 2 or 1. All indicators within a dimension were given equal weights except for those marked with an asterisk, which were assigned double the weight.

## Aggregation

To aggregate the normalized data into a composite score, both at the dimension and overall index level, we used linear rescaling with linear-arithmetic averaging. In previous years, we had rescaled individual indicators linearly (on a scale of 1 to 100), then combined them geometrically. Shifting to arithmetic averaging avoids amplifying extreme values and should make the scores less prone to undue instability when updated.

## Current Level and Recent Progress

We analyzed overall well-being and each of the ten dimensions along two time horizons:

- *Current level* is a snapshot resulting from the normalization and weighting process described above, using the most recent data available.
- *Recent progress* measures the change in current-level data for the most recent seven-year period for which data is available. For most indicators, the time frame we analyzed to measure recent progress is 2006 to 2013. We calculated recent progress through a least-squares, best-fit approach. This produces more stable estimates than our previous approach, which had relied on comparing two data points five years apart.
- In the assessments of both the current level and recent progress, we used all the same indicators except for the dimension of health, where HIV prevalence and incidence of tuberculosis were excluded because of a lack of historical data.

## Median Scores

Consistent with our normalization approach, we have used median scores—rather than averages. There are significant differences in the median scores across dimensions and between current-level scores and recent-progress scores—reflecting the different nature of the indicators and their ranges. (See Table 2.)

## Coefficients for Wealth to Well-Being and Growth to Well-Being

The wealth-to-well-being coefficient compares a country's current-level SEDA score with the score that would be expected given its per capita GDP as measured by purchasing-power parity. The "expected" score reflects the average worldwide relationship between current-level scores of well-being and per capita GDP as estimated by the best-fit regression line, in this case a second-order polynomial regression. Countries with a coefficient greater than 1.0 deliver higher levels of well-being than would be expected given their GDP levels, while those with coefficients less than 1.0 deliver lower levels of well-being than would be expected.

The growth-to-well-being coefficient compares a country's recent-progress score with the score that would be expected given its GDP growth rate. We use real GDP as the best comparable measure of economic expansion and calculate growth rates from the slope of the least-squares, best-fit line for the seven-year period in the recent-progress analysis. The "expected" score reflects the average worldwide relationship between recent-progress scores in well-being and GDP growth rates as estimated by the best-fit line, in this case a simple linear regression. Again, countries that have a coefficient greater than 1.0 are producing improvements in well-being beyond what would be expected given their GDP growth rate over the seven-year study period. (See Table 3 and Table 4.)

### NOTE

1. This includes a small number of imputations to fill in the 5.8% data gaps in the original sources.

**TABLE 2 | Median SEDA Scores Overall, by Elements, and by Dimensions**

	Current-level median	Recent-progress median
<b>Overall SEDA score</b>	43.1	63.2
<b>Economics</b>	49.7	46.6
Income	17.2	49.8
Economic stability	76.1	44.7
Employment	63.0	43.8
<b>Investments</b>	62.4	47.8
Health	73.7	29.1
Education	51.2	67.7
Infrastructure	59.4	43.2
<b>Sustainability</b>	48.1	51.9
Income equality	64.8	46.3
Civil society	49.6	58.8
Governance	40.1	57.7
Environment	54.3	40.8

Source: BCG analysis.

**TABLE 3 | Overall Country-Specific SEDA Scores and Coefficients**

Country <sup>1</sup>	Current-level score	Recent-progress score	Wealth-to-well-being coefficient	Growth-to-well-being coefficient
Albania	49.1	82.5	1.21	1.34
Algeria	39.3	49.0	0.87	0.85
Angola	17.6	77.2	0.52	0.95
Argentina	51.4	62.2	1.03	0.94
Armenia	47.8	76.8	1.40	1.30
Australia	89.5	64.0	1.07	1.11
Austria	90.2	58.8	1.08	1.17
Azerbaijan	43.4	73.4	0.83	0.88
Bahrain	61.9	37.6	0.74	0.57
Bangladesh	25.5	73.4	1.14	1.00
Belarus	58.0	80.4	1.09	1.20
Belgium	85.7	49.0	1.05	0.99
Belize	42.0	49.0	1.18	0.89
Benin	26.6	46.9	1.30	0.74
Bhutan	42.4	80.6	1.25	0.95
Bolivia	33.6	62.7	1.10	0.93
Bosnia and Herzegovina	44.0	71.2	1.17	1.36
Botswana	34.4	57.7	0.69	0.91
Brazil	47.7	74.9	0.98	1.24
Bulgaria	56.9	49.6	1.11	0.95
Burkina Faso	19.2	68.2	0.96	0.96
Burundi	18.2	56.7	1.02	0.89
Cambodia	30.9	94.8	1.32	1.28
Cameroon	20.2	58.1	0.89	0.95
Canada	86.4	54.1	1.04	1.04
Central African Republic	0.0	45.5	0.00	1.09
Chad	6.1	73.2	0.29	1.07
Chile	62.3	68.0	1.02	1.08
China	42.9	92.5	1.01	1.00
Colombia	38.8	77.6	0.89	1.20
Costa Rica	55.9	72.1	1.20	1.15
Côte d'Ivoire	20.1	63.6	0.86	1.07
Croatia	64.0	61.9	1.11	1.40
Cuba	54.8	65.8	0.98	1.09
Cyprus	68.6	32.9	0.98	0.70
Czech Republic	75.1	53.3	1.11	1.06
Democratic Republic of the Congo	8.3	64.5	0.46	0.87

Country <sup>1</sup>	Current-level score	Recent-progress score	Wealth-to-well-being coefficient	Growth-to-well-being coefficient
Denmark	92.0	36.7	1.11	0.80
Dominican Republic	36.1	73.5	0.86	1.07
Ecuador	41.5	86.0	1.04	1.36
Egypt	37.7	43.4	0.92	0.68
El Salvador	42.2	54.4	1.24	1.05
Eritrea	14.8	44.2	0.78	0.82
Estonia	75.6	48.9	1.16	1.00
Ethiopia	21.1	99.4	1.09	1.08
Finland	93.3	44.3	1.17	0.94
France	81.6	43.4	1.04	0.90
Gabon	37.5	51.1	0.67	0.81
Georgia	46.8	73.6	1.43	1.12
Germany	89.8	68.0	1.08	1.34
Ghana	32.3	87.7	1.26	1.04
Greece	65.5	26.5	1.01	0.73
Guatemala	32.6	55.3	0.99	0.92
Guinea	16.8	74.2	0.88	1.30
Guyana	32.1	60.5	1.02	1.03
Haiti	6.3	36.6	0.31	0.67
Honduras	29.0	45.9	1.07	0.78
Hong Kong	80.4	76.2	0.92	1.29
Hungary	71.6	35.3	1.15	0.79
Iceland	94.4	40.3	1.16	0.83
India	30.0	72.8	1.04	0.94
Indonesia	40.7	77.3	1.08	1.07
Iran	39.2	60.2	0.79	1.06
Iraq	25.4	53.6	0.52	0.73
Ireland	84.6	43.0	1.01	0.95
Israel	64.1	46.7	0.87	0.73
Italy	74.0	41.1	0.98	0.95
Jamaica	40.6	41.5	1.11	0.90
Japan	81.9	55.9	1.05	1.16
Jordan	46.7	49.5	1.10	0.76
Kazakhstan	56.5	81.0	0.91	1.16
Kenya	24.1	65.0	1.12	1.01
Kuwait	72.3	27.0	0.86	0.51
Kyrgyzstan	35.7	66.6	1.50	0.99

**TABLE 3 | Overall Country-Specific SEDA Scores and Coefficients**  
(continued)

Country <sup>1</sup>	Current-level score	Recent-progress score	Wealth-to-well-being coefficient	Growth-to-well-being coefficient
Laos	29.2	86.3	1.06	1.05
Latvia	67.0	37.2	1.08	0.80
Lebanon	39.3	62.4	0.75	0.87
Lesotho	20.3	96.3	0.91	1.41
Libya	31.1	0.0	0.52	0.00
Lithuania	71.3	65.4	1.09	1.25
Luxembourg	94.9	54.6	1.12	1.08
Macedonia	42.5	63.9	0.98	1.12
Madagascar	22.1	31.3	1.14	0.58
Malawi	20.0	75.9	1.11	1.03
Malaysia	57.6	63.2	0.92	0.96
Mali	18.0	64.9	0.90	1.08
Malta	74.4	44.0	1.04	0.80
Mauritania	15.7	46.5	0.67	0.76
Mauritius	60.0	67.6	1.14	1.07
Mexico	43.6	50.9	0.84	0.94
Moldova	44.9	80.1	1.65	1.30
Mongolia	43.1	90.9	1.15	1.01
Morocco	38.8	73.8	1.18	1.17
Mozambique	16.7	65.6	0.90	0.85
Namibia	27.7	73.0	0.73	1.13
Nepal	32.1	73.7	1.49	1.14
Netherlands	91.8	55.1	1.10	1.15
New Zealand	88.1	61.7	1.17	1.16
Nicaragua	35.5	58.0	1.32	0.97
Niger	16.4	74.5	0.90	1.09
Nigeria	16.1	68.9	0.55	0.95
Norway	100.0	53.6	1.16	1.07
Oman	65.2	65.2	0.78	0.92
Pakistan	16.7	44.8	0.61	0.75
Panama	47.0	76.3	0.84	0.89
Paraguay	36.2	67.9	1.04	1.00
Peru	40.0	82.1	0.94	1.10
Philippines	36.0	69.1	1.15	1.01
Poland	71.6	94.8	1.15	1.55
Portugal	73.9	50.2	1.12	1.13
Qatar	78.6	65.5	0.93	0.71

Country <sup>1</sup>	Current-level score	Recent-progress score	Wealth-to-well-being coefficient	Growth-to-well-being coefficient
Republic of the Congo	23.7	73.4	0.79	1.14
Romania	54.5	61.3	1.00	1.15
Russia	54.7	62.6	0.86	1.10
Rwanda	26.4	100.0	1.35	1.27
Saudi Arabia	65.0	70.4	0.75	0.98
Senegal	30.4	66.4	1.41	1.09
Serbia	51.5	62.8	1.18	1.22
Singapore	89.9	73.3	1.07	1.07
Slovakia	70.9	61.6	1.06	1.06
Slovenia	77.8	49.7	1.13	1.06
South Africa	27.2	65.4	0.62	1.15
South Korea	77.1	71.6	1.02	1.18
Spain	77.0	45.4	1.05	1.00
Sri Lanka	43.5	82.3	1.14	1.10
Sudan	16.3	48.8	0.68	1.04
Suriname	44.8	63.1	0.88	0.98
Swaziland	18.1	58.4	0.57	1.09
Sweden	93.3	45.7	1.12	0.88
Switzerland	94.4	58.1	1.08	1.10
Tajikistan	32.1	65.4	1.45	0.85
Tanzania	28.5	72.1	1.40	0.94
Thailand	46.6	68.7	0.98	1.16
Togo	22.0	53.1	1.13	0.85
Trinidad and Tobago	53.0	38.4	0.74	0.78
Tunisia	46.5	51.6	1.13	0.85
Turkey	50.5	70.3	0.90	1.17
Uganda	18.3	65.4	0.94	0.87
Ukraine	52.8	65.3	1.46	1.32
United Arab Emirates	74.1	33.4	0.85	0.62
United Kingdom	81.1	47.3	1.04	0.99
United States	83.5	49.0	0.96	0.96
Uruguay	64.9	87.8	1.15	1.24
Uzbekistan	34.7	73.1	1.23	0.85
Venezuela	41.4	41.7	0.77	0.72
Vietnam	42.4	74.8	1.48	1.04
Yemen	17.6	23.9	0.69	0.49
Zambia	17.9	66.5	0.75	0.88
Zimbabwe	13.9	64.1	0.69	1.21

Source: BCG analysis.

<sup>1</sup>Our data set includes 148 countries plus Hong Kong, which is a special administrative region of China. For the sake of simplicity, we refer to all those entities as “countries.”

**TABLE 4 | Country-Specific SEDA Scores by Element**

Country <sup>1</sup>	Current-level score			Recent-progress score		
	Economics	Investments	Sustainability	Economics	Investments	Sustainability
Albania	43.7	65.4	53.7	65.6	63.8	51.4
Algeria	46.9	56.7	41.1	43.7	40.0	40.7
Angola	29.8	20.4	38.6	53.6	69.0	41.6
Argentina	52.3	70.0	50.2	60.1	43.9	53.1
Armenia	28.3	66.8	57.2	69.6	59.6	57.6
Australia	84.2	90.2	77.6	43.7	45.2	58.0
Austria	80.7	91.3	81.3	40.1	49.5	54.5
Azerbaijan	35.4	63.0	44.8	80.0	53.6	44.7
Bahrain	75.5	77.2	45.2	46.1	51.1	32.7
Bangladesh	56.9	38.6	30.9	53.5	57.5	38.9
Belarus	45.5	80.2	56.1	50.2	49.9	61.0
Belgium	71.3	88.7	78.7	35.3	29.2	61.2
Belize	48.8	56.8	48.1	47.7	47.1	49.8
Benin	56.9	26.3	45.4	45.4	52.7	31.8
Bhutan	47.0	51.2	51.0	52.2	61.3	41.7
Bolivia	48.6	47.6	42.6	56.6	38.7	72.2
Bosnia and Herzegovina	27.2	68.7	43.4	45.9	60.9	61.5
Botswana	44.4	33.1	48.6	49.6	35.0	54.5
Brazil	60.8	60.2	50.6	62.1	48.4	60.2
Bulgaria	50.5	73.4	58.0	53.7	41.9	49.0
Burkina Faso	38.6	20.3	41.5	44.5	57.1	50.8
Burundi	45.2	23.3	37.0	46.6	58.0	39.6
Cambodia	41.0	37.1	50.7	64.5	74.4	55.5
Cameroon	45.3	25.4	38.2	48.8	56.5	38.5
Canada	81.6	85.0	79.9	41.7	34.1	61.7
Central African Republic	30.2	6.9	22.0	29.1	51.2	40.0
Chad	37.6	7.1	27.7	40.7	62.7	44.3
Chile	61.7	72.6	58.2	56.9	49.8	48.2
China	52.1	71.1	31.9	63.6	66.3	50.5
Colombia	51.1	56.9	38.6	50.7	43.2	67.9
Costa Rica	53.3	67.0	61.6	46.3	54.9	58.7
Côte d'Ivoire	51.7	24.8	38.9	46.1	45.3	52.4
Croatia	49.8	80.1	62.3	33.0	46.6	68.2
Cuba	57.7	73.7	48.5	53.5	41.4	49.8
Cyprus	58.9	76.3	65.9	24.0	40.4	43.2
Czech Republic	65.2	83.1	72.5	40.8	35.6	63.9
Democratic Republic of the Congo	43.1	14.2	28.0	66.4	48.3	39.6

Country <sup>1</sup>	Current-level score			Recent-progress score		
	Economics	Investments	Sustainability	Economics	Investments	Sustainability
Denmark	80.9	90.1	87.4	26.8	28.3	55.9
Dominican Republic	41.8	46.0	47.3	50.0	53.2	54.9
Ecuador	53.7	59.1	46.2	49.1	68.0	69.1
Egypt	40.9	57.0	41.5	45.9	35.2	41.3
El Salvador	49.7	55.3	52.4	42.6	49.4	51.9
Eritrea	42.6	14.9	41.6	44.8	38.6	47.2
Estonia	54.8	84.9	73.6	33.2	37.4	56.3
Ethiopia	47.3	21.8	44.7	63.7	77.1	43.2
Finland	69.8	94.8	91.9	30.3	33.1	61.9
France	71.5	85.7	79.5	34.4	29.6	58.7
Gabon	44.1	41.2	49.5	44.6	35.6	54.9
Georgia	26.9	71.9	47.0	50.1	53.7	53.1
Germany	80.5	91.1	82.8	48.6	40.6	64.1
Ghana	38.3	35.2	51.7	56.0	63.4	53.9
Greece	29.1	88.2	57.4	6.1	54.4	38.3
Guatemala	55.4	46.7	42.7	39.9	44.5	56.5
Guinea	47.0	16.6	40.6	46.3	49.5	65.6
Guyana	37.8	46.6	41.1	57.9	43.5	53.3
Haiti	41.5	13.4	22.7	46.6	29.2	47.9
Honduras	46.8	47.3	34.5	39.5	40.2	48.2
Hong Kong	69.0	92.9	56.9	41.6	59.2	59.7
Hungary	60.0	83.2	69.8	34.6	34.9	54.9
Iceland	75.7	91.0	95.9	26.6	28.5	61.1
India	36.8	41.6	37.1	50.1	61.0	37.6
Indonesia	49.1	52.8	48.7	69.3	67.7	38.3
Iran	25.3	64.6	39.9	33.6	59.7	42.9
Iraq	13.6	45.2	29.3	55.6	23.2	55.1
Ireland	68.0	84.4	79.3	19.1	46.1	57.9
Israel	68.8	81.6	45.8	55.1	30.7	45.8
Italy	63.4	85.4	67.0	28.3	41.0	57.3
Jamaica	39.9	54.1	47.8	29.2	37.8	50.4
Japan	76.1	89.9	71.5	43.8	35.5	57.9
Jordan	32.9	65.8	49.0	42.1	39.7	43.5
Kazakhstan	62.3	73.0	54.2	72.9	59.3	60.0
Kenya	45.9	30.4	43.4	45.3	66.3	42.7
Kuwait	89.1	72.9	49.5	25.1	54.1	32.5
Kyrgyzstan	38.0	54.2	45.4	64.1	44.1	50.2

**TABLE 4 | Country-Specific SEDA Scores by Element**  
(continued)

Country <sup>1</sup>	Current-level score			Recent-progress score		
	Economics	Investments	Sustainability	Economics	Investments	Sustainability
Laos	54.9	39.7	39.7	54.9	61.4	48.6
Latvia	46.9	78.6	69.0	27.9	29.0	55.8
Lebanon	37.5	63.7	31.3	53.2	49.7	37.8
Lesotho	35.3	19.7	44.0	59.1	67.2	65.0
Libya	34.2	41.7	43.8	14.9	18.6	37.7
Lithuania	53.6	84.2	68.4	34.0	39.8	68.0
Luxembourg	85.7	85.2	82.4	30.8	42.7	65.7
Macedonia	24.2	67.7	38.2	54.8	45.7	55.1
Madagascar	56.5	21.6	40.3	44.8	45.5	35.5
Malawi	38.8	21.8	40.1	46.3	62.6	48.6
Malaysia	64.0	75.6	50.5	47.9	43.3	52.5
Mali	30.6	22.3	41.1	60.6	65.9	48.9
Malta	69.0	78.3	70.9	42.9	46.4	36.0
Mauritania	26.7	20.8	36.6	43.7	50.2	37.4
Mauritius	58.6	69.1	62.5	51.9	46.7	49.4
Mexico	60.6	58.4	42.3	44.4	51.5	45.3
Moldova	34.6	60.0	56.3	59.4	52.1	67.9
Mongolia	35.7	55.5	49.7	65.2	64.8	52.8
Morocco	44.1	55.4	48.1	54.7	57.7	57.5
Mozambique	52.6	9.8	44.3	59.7	48.0	43.9
Namibia	38.3	33.1	43.7	41.3	55.7	58.2
Nepal	57.8	42.1	41.4	47.9	63.8	43.2
Netherlands	79.9	92.5	83.8	33.5	33.1	69.2
New Zealand	76.3	85.3	89.4	39.0	43.4	63.3
Nicaragua	42.1	49.9	48.6	42.3	62.3	42.9
Niger	40.1	12.5	42.5	43.6	62.8	49.9
Nigeria	43.8	21.3	33.1	51.2	57.3	46.1
Norway	94.1	85.7	91.9	36.2	29.7	65.6
Oman	74.5	70.3	59.9	53.5	63.2	56.3
Pakistan	37.6	28.8	27.3	40.1	40.2	35.2
Panama	58.8	62.6	46.0	59.5	55.0	48.7
Paraguay	48.2	50.7	43.8	49.7	52.3	54.3
Peru	56.1	54.5	41.2	66.3	53.5	54.7
Philippines	51.7	49.3	45.6	53.2	53.0	50.1
Poland	61.2	82.5	66.8	57.6	51.9	79.6
Portugal	47.2	85.9	74.2	20.0	42.2	62.4
Qatar	83.9	77.0	58.6	53.0	59.0	42.9

Country <sup>1</sup>	Current-level score			Recent-progress score		
	Economics	Investments	Sustainability	Economics	Investments	Sustainability
Republic of the Congo	53.2	26.9	42.9	52.1	53.5	58.0
Romania	53.4	65.3	56.0	47.3	41.6	60.8
Russia	63.7	75.1	47.0	56.5	45.7	56.6
Rwanda	59.2	36.4	36.4	68.6	66.8	65.1
Saudi Arabia	68.7	75.3	50.0	53.6	57.9	40.6
Senegal	50.4	32.5	50.8	45.9	63.7	50.0
Serbia	35.8	69.8	52.6	45.1	41.7	65.1
Singapore	87.8	88.1	70.1	47.7	43.0	63.1
Slovakia	55.0	79.8	72.1	38.2	39.5	62.3
Slovenia	62.1	83.9	79.7	26.8	36.1	71.0
South Africa	35.5	38.3	34.9	36.7	65.5	46.7
South Korea	74.4	92.1	60.6	53.5	46.3	55.3
Spain	49.8	89.3	75.0	18.3	47.5	58.0
Sri Lanka	48.0	61.9	47.0	61.2	57.3	55.2
Sudan	19.9	31.9	31.8	50.0	41.6	37.1
Suriname	43.9	62.4	41.4	60.8	47.7	46.2
Swaziland	33.1	26.2	33.2	39.2	60.0	47.5
Sweden	74.5	89.0	93.5	36.1	25.9	58.5
Switzerland	84.6	91.0	84.7	38.0	35.8	64.6
Tajikistan	41.6	46.1	47.4	71.3	50.0	42.2
Tanzania	57.2	24.4	53.4	48.3	55.6	48.4
Thailand	48.3	66.9	44.1	47.1	39.8	60.2
Togo	42.4	25.5	42.8	55.6	45.1	41.3
Trinidad and Tobago	61.4	59.2	52.9	38.3	40.4	41.1
Tunisia	41.4	64.7	50.7	39.6	41.9	44.1
Turkey	47.4	70.4	45.0	53.9	64.9	43.3
Uganda	42.2	24.4	34.4	45.5	63.6	41.6
Ukraine	39.8	73.1	58.0	55.2	45.8	67.9
United Arab Emirates	80.8	77.4	59.0	27.4	43.5	45.1
United Kingdom	74.2	83.0	78.6	29.1	36.1	61.4
United States	80.1	84.7	70.0	28.8	33.8	61.0
Uruguay	62.6	73.0	65.9	67.4	45.4	65.6
Uzbekistan	44.8	57.9	39.2	68.8	47.8	42.4
Venezuela	36.2	62.7	42.6	30.1	36.3	50.4
Vietnam	50.0	62.4	45.0	55.5	63.5	46.4
Yemen	23.3	29.9	32.5	34.8	41.2	29.8
Zambia	47.4	16.5	41.1	59.6	61.9	33.4
Zimbabwe	35.8	23.6	33.0	45.6	50.1	47.7

Source: BCG analysis.

<sup>1</sup>Our data set includes 148 countries plus Hong Kong, which is a special administrative region of China. For the sake of simplicity, we refer to all those entities as “countries.”

# FOR FURTHER READING

The Boston Consulting Group has published several other reports based on the Sustainable Economic Development Assessment that may be of interest to senior executives. Examples include the following.

**Four Priorities Requiring Leadership for South Africa's Future**

A report by The Boston Consulting Group, May 2015

**Why Well-Being Should Drive Growth Strategies: The 2015 Sustainable Economic Development Assessment**

A report by The Boston Consulting Group, May 2015

**Building Well-Being into National Strategies: The 2014 Sustainable Economic Development Assessment**

A Focus by The Boston Consulting Group, February 2014

**The New Prosperity: Strategies for Improving Well-Being in Sub-Saharan Africa**

A Focus by The Boston Consulting Group, May 2013

**From Wealth to Well-Being: Introducing the BCG Sustainable Economic Development Assessment**

A report by The Boston Consulting Group, November 2012

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