

# REPORT

A 2010 VALUE CREATORS REPORT

## Swimming Against the Tide

How Technology, Media, and Telecommunications  
Companies Can Prosper in the New Economic Reality



THE BOSTON CONSULTING GROUP

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The financial analyses in this report are based on public data and forecasts that have not been verified by BCG and on assumptions that are subject to uncertainty and change. The analyses are intended only for general comparisons across companies and industries and should not be used to support any individual investment decision.

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# Executive Summary

**T**his report builds on the twelfth annual report in the Value Creators series published by The Boston Consulting Group. It provides detailed empirical rankings of the stock market performance of the world's top technology, media, and telecommunications companies and distills managerial lessons from their success. We also describe key trends in the global economy and world capital markets and how these trends are likely to shape future priorities for value creation. Finally, we share our latest analytical tools and client experiences to help companies better manage value creation. This report addresses the challenges that technology, media, and telecom companies face in delivering above-average shareholder returns in a global economy marked by below-average growth.

**Despite the strong rebound in equity values, global capital markets are still laboring under the shadow of the worldwide financial crisis that began in 2008.**

- ◇ Global market indexes were up roughly 30 percent in 2009 but have largely moved sideways through the first three quarters of 2010.
- ◇ The weighted-average annual total shareholder return (TSR) for the 2010 Value Creators database, which covers the five years from 2005 through 2009, is 6.6 percent. That is considerably below the historical average of roughly 10 percent.

**The technology, media, and telecommunications sectors finished in the middle to lower tiers of performance among all industries.**

- ◇ The five-year TSRs for the technology and telecom sectors are in the middle of the pack relative to other industries, at 6.2 percent and 5.3 percent, respectively.

- ◇ The five-year TSR for media companies ranks near the bottom, at 2.5 percent.
- ◇ Companies can chart their own destinies, however. The average five-year annual return for the top ten performers in each of the three sectors was between 22 percent and 26 percent.

**The likelihood of slow growth in developed economies has vast implications for value creation.**

- ◇ Growth will be constrained in developed nations owing to high consumer-debt burdens, limited credit, and the winding down of many government stimulus programs.
- ◇ Economies such as Brazil, China, and India are growing rapidly but are not yet large enough to carry the global economy.
- ◇ Lower revenue growth and pressure on margins will likely lead to a decline in valuation multiples and capital gains.
- ◇ Increasingly, dividends and stock repurchases will be larger contributors to TSR.
- ◇ The best performers will find ways to combine increased cash payouts with above-average profitable growth in a more competitive environment. Rogers Communications of Canada, for example, has managed to increase sales, improve margins, and manage debt.

**Sales growth drove 70 to 80 percent of the TSR of superior performers in all three sectors—but other TSR drivers varied by sector.**

- ◇ Technology companies demonstrated low growth in margins (with Apple and Hewlett-Packard being notable exceptions) and low cash-flow contribution.
- ◇ The media sector's sales growth was driven almost exclusively by the focused Internet players; the sector also had moderate cash-flow contribution.
- ◇ The telecom sector had high cash-flow contribution but shrinking margins.

**Companies from emerging economies were big winners across all three sectors.**

- ◇ Seven of the top ten telecom performers, five of the top ten media performers, and four of the top ten technology performers are based in emerging economies.
- ◇ Companies from developing markets are playing increasingly larger roles on the global stage.
- ◇ While Indian IT players are well known for their international ambitions, telecom players are also spreading their wings. For instance, Bharti Airtel's recent purchase of Kuwait-based Zain Telecom's African business made Bharti the world's fifth-largest mobile company.

**The digital revolution has affected all three sectors, for better and worse.**

- ◇ In the media sector, many of the big winners, such as Google and Tencent Holdings, are new entrants that embraced the power of the Internet to aggregate and distribute content.
- ◇ A few established media players, such as Pearson, have thrived by shifting their business lines to digital models—but most have struggled to adapt.
- ◇ Media companies might find new growth through consumers' rapid adoption of tablets and e-readers.
- ◇ Telecom companies are trying to reorient their strategies and operations to accommodate the rapid growth of mobile data. Some will successfully turn mobile data into a new source of growth.
- ◇ For both technology and telecom companies, cloud computing may offer a chance for superior growth.

**The ability of technology, media, and telecom companies to develop innovative products and business models will play a critical role in creating shareholder value.**

- ◇ Taiwan-based MediaTek has thrived by building good-enough chipsets for inexpensive mobile phones.
- ◇ Apple has succeeded not just with well-designed gadgets but also with an ecosystem of audio and video content and applications that lock in customers and enable premium pricing.
- ◇ The business model of traditional, integrated telecom carriers is breaking down. Operators need to develop new strengths in order to succeed.

**The future success of these three industries will depend on adaptive strategies that can anticipate, absorb, and exploit the fast-moving market.**

- ◇ Scale, size, and market position matter less than they once did.
- ◇ Experimentation and the ability to recognize and capitalize on opportunities matter more than ever.

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# The 2010 Technology, Media, and Telecommunications Value Creators

The 2010 Value Creators rankings cover shareholder performance from 2005 through 2009. We analyzed 126 companies across three sectors: 36 technology companies, 52 media companies, and 38 telecommunications companies. We also analyzed the performance of each sector relative to other sectors and ranked the top ten companies within each of the three sectors.

All three sectors posted returns below the global average five-year annual return of 6.6 percent. The technology and telecom sectors returned 6.2 percent and 5.3 percent, respectively, while the media sector returned only 2.5 percent. (See Exhibit 1.) This relatively poor performance reflects the steep global decline in stock prices in late 2008. The market only partly rebounded in 2009. (Historically, TSR across all industries has averaged about 10 percent.)

**Exhibit 1. Technology, Media, and Telecom Were Middling Performers**

|  | Value creation       | Fundamental value |                   | Valuation multiple               | Cash flow contribution |                  |                     |
|--|----------------------|-------------------|-------------------|----------------------------------|------------------------|------------------|---------------------|
|  | TSR <sup>1</sup> (%) | Sales growth (%)  | Margin change (%) | Multiple change <sup>2</sup> (%) | Dividend yield (%)     | Share change (%) | Net debt change (%) |
| Mining and materials                   | 18.0                 | 10                | -4                | 11                               | 3                      | -3               | 1                   |
| Chemicals                              | 12.0                 | 6                 | -1                | 5                                | 3                      | 0                | 0                   |
| Machinery and construction             | 11.7                 | 9                 | 3                 | -1                               | 2                      | -1               | 0                   |
| Consumer goods                         | 9.5                  | 6                 | 1                 | 1                                | 3                      | 0                | -1                  |
| Utilities                              | 8.6                  | 9                 | -4                | 2                                | 4                      | -2               | 0                   |
| Technology                             | 6.2                  | 8                 | -1                | -3                               | 1                      | 1                | 0                   |
| Telecommunications                     | 5.3                  | 5                 | -1                | -2                               | 4                      | 1                | -1                  |
| Retail                                 | 4.2                  | 8                 | 0                 | -5                               | 2                      | 0                | -1                  |
| Automotive and supply                  | 3.9                  | 1                 | -6                | 10                               | 2                      | -3               | 0                   |
| Transportation and logistics           | 3.8                  | 5                 | -1                | -1                               | 2                      | -2               | 0                   |
| Pharmaceuticals and medical technology | 3.5                  | 9                 | 1                 | -6                               | 2                      | -1               | -1                  |
| Media                                  | 2.5                  | 5                 | 1                 | -5                               | 3                      | 0                | 0                   |
| Multibusiness                          | 0.3                  | 7                 | -2                | -4                               | 3                      | -1               | -2                  |
| Travel and tourism                     | -0.7                 | 5                 | -2                | -1                               | 2                      | -4               | -2                  |
| Pulp and paper                         | -1.7                 | -1                | -1                | 0                                | 3                      | -2               | -1                  |

Sources: Thomson Reuters Datastream; Thomson Reuters Worldscope; Bloomberg; annual reports; BCG analysis.

Note: Decomposition is shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

<sup>1</sup>Five-year average annual TSR (2005–2009) for the weighted average of the respective industry sample.

<sup>2</sup>Change in EBITDA multiple.

The technology, media, and telecommunications sectors are among the most unpredictable and fast-moving of all industries. (See Exhibit 2.) Still, individual companies can escape the tyranny of averages and outperform their industry. Over the past five years, for example, the top ten technology firms posted an average annual return of 23.3 percent; the top ten media performers, 26.2 percent; and the top ten telecom performers, 22.9 percent.

Companies from developing economies dominate the technology, media, and telecom rankings. Of the 126 companies analyzed, 81 are based in emerging markets—64 percent of the total. Seven of the top ten telecom performers, five of the top ten media performers, and four of the top ten technology performers are based in emerging economies.

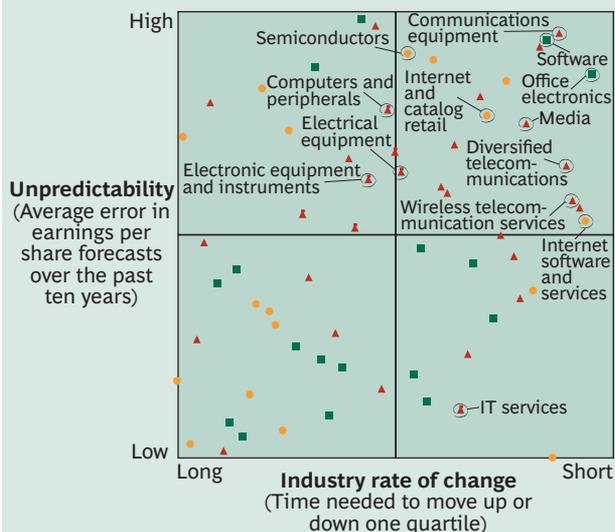
To arrive at the sample of 126 companies, we required companies to be publicly listed for all five years, with at least 25 percent of their shares public traded. We also set a minimum market-capitalization floor for each sector

(\$2 billion for media companies and \$12 billion for technology and telecommunications companies).

The overall rankings track performance from 2005 through 2009, but we also show returns for the first three quarters of 2010. In addition, we break down TSR into its six component parts to show their relative contribution to stock returns and assess how a company is creating value. (See Exhibit 3.) The first two elements—revenue growth and changes in profit margins—reflect a company’s change in fundamental value. Combining these with the third element—the valuation multiple—establishes the change in a company’s market capitalization. The last three elements—cash dividends, share repurchases, and debt repayments—track the distribution of free cash flow to investors and debt holders and determine its contribution to a company’s TSR.

The next three sections of this report explore the performance of the technology, media, and telecom sectors in more depth.

### Exhibit 2. The Technology, Media, and Telecom Sectors Are Unpredictable and Fast-Moving



**The cost of being wrong**

(Difference in gross margin between 10th- and 25th-percentile performers)

▲ High ● Medium ■ Low

Sources: Thomson Reuters Datastream; Thomson Reuters Worldscope; Bloomberg; annual reports; BCG analysis.

Note: Based on ordinal rankings along each dimension; does not include marine, transportation infrastructure, or water utilities industries.

### Exhibit 3. BCG’s Model Allows a Company to Identify the Sources of Its TSR

**Fundamental Value**

|                |       |
|----------------|-------|
| Revenue growth | 3.8%  |
| Margin change  | -0.5% |
| <hr/>          |       |
| Profit growth  | 3.3%  |

+ Change in valuation multiple 3.2%

= Gain in market cap 6.5%

**Cash payouts**

|                 |       |
|-----------------|-------|
| Dividend yield  | 3.4%  |
| Share change    | 2.3%  |
| Net debt change | -2.3% |
| <hr/>           |       |

+ Free-cash-flow yield 3.4%

= **TSR 9.9%**

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: This calculation is based on an actual company example; the contribution of each factor is shown in percentage points of average annual TSR.



# Technology

## A Sharper Focus on Growth and Margins

**T**he technology sector is diverse—covering everything from semiconductors, handsets, and PCs to software and IT services—and historically, companies in this sector have generated shareholder value through growth. Over the past five years, 17 percentage points (70 percent) of the 23.3 percent total return of the top ten technology firms came from revenue growth. (See Exhibit 4.)

This year's top-ten group is truly global. Six Asian companies made the list. Three of these are Indian IT-service companies, propelled by the use of outsourcing.

But while the top ten technology companies excelled, the rest of the pack fared much worse. Several factors accounted for the middling 6.2 percent return of the technology sector overall, which ranked sixth of the 15 industries analyzed. Companies below the top ten were much less successful at generating revenue growth. Their margins and price-to-earnings (P/E) multiples also declined, reflecting heightened price competition and investors' dim view of future growth prospects.

In the future, as in the past, revenue growth will drive shareholder value in the technology sector. The cornerstones of that growth will likely be innovation, developing markets, and emerging technologies such as cloud computing. Improving margins will play a supporting role.

### The Innovation Cycle

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For decades, revenue growth in the technology sector has depended largely on successive waves of innovation, from the minicomputer to the PC to the mobile phone, spurred

by ever-more-versatile software running on ever-more-powerful chipsets. In *Innovation 2010: A Return to Prominence—and the Emergence of a New World Order*, a BCG report based on a global survey of global executives, four of the top five most innovative companies are technology firms: Apple, Google, Microsoft, and IBM. (See the sidebar “Innovation: A Return to Prominence.”)

In the future, innovation-led growth may be harder to find. Consumers and businesses alike are more reluctant to spend on the latest hardware and software, in part because they've been able to live and work just fine with existing technology. A few new products, such as Apple's iPad, may hit a sweet spot, but the environment is generally inhospitable, especially for large companies that need massive markets, not niches, to fuel double-digit growth.

At the high end of the market, successful innovation will likely depend not just on great products but also on new business models—what we call *business model innovation*. Apple, the leading technology value creator, with a total five-year annual return of 45.6 percent, has innovated on both fronts. Its well-designed gadgets and elegant interfaces are legendary. But its iTunes and App Store ecosystems lock customers in to Apple products and allow the manufacturer to charge premium prices. Apple's strong five-year showing was built around both superior revenue growth and margin expansion.

At the low end, innovation will likely be aimed at achieving cost and scale advantage. Taiwan-based MediaTek, the second-leading technology value creator, with a five-year annualized return of 32.0 percent, manufactures “good enough” chipsets. Its rapid product cycles have historically allowed MediaTek to stay ahead of the pack.

## Exhibit 4. The Top Ten Technology Performers, 2005–2009

| #                            | Company                                      | Location      | Industry             | TSR <sup>2</sup><br>(%) | Market value <sup>3</sup><br>(\$billions) | TSR Decomposition <sup>1</sup> |                      |                                     |                       |                     |                        | 2010<br>TSR <sup>5</sup><br>(%) |
|------------------------------|--|---------------|----------------------|-------------------------|---|--------------------------------|----------------------|-------------------------------------|-----------------------|---------------------|------------------------|---------------------------------|
|                              |  |               |                      |                         |   | Sales growth<br>(%)            | Margin change<br>(%) | Multiple change <sup>4</sup><br>(%) | Dividend yield<br>(%) | Share change<br>(%) | Net debt change<br>(%) |                                 |
| 1                            | Apple  | United States | Computer hardware    | 45.6                    | 189.6                                     | 37                             | 35                   | -21                                 | 0                     | -3                  | -2                     | 34.6                            |
| 2                            | MediaTek                                     | Taiwan        | Semiconductors       | 32.0                    | 19.0                                      | 24                             | -1                   | 8                                   | 5                     | -2                  | -1                     | -16.5                           |
| 3                            | Infosys Technologies                         | India         | Computer services    | 21.2                    | 32.6                                      | 32                             | 0                    | -11                                 | 2                     | -2                  | 1                      | 17.4                            |
| 4                            | Hewlett-Packard                              | United States | Computer hardware    | 20.8                    | 121.8                                     | 8                              | 12                   | -2                                  | 1                     | 4                   | -2                     | -17.9                           |
| 5                            | Hon Hai Precision Industry Company (Foxconn) | Taiwan        | Electrical equipment | 20.2                    | 40.9                                      | 28                             | -5                   | -1                                  | 2                     | -3                  | 0                      | -11.8                           |
| 6                            | Tata Consultancy Services                    | India         | Computer services    | 18.9                    | 32.1                                      | 28                             | -2                   | -10                                 | 2                     | 0                   | 1                      | 25.9                            |
| 7                            | Research In Motion                           | Canada        | Telecom equipment    | 16.6                    | 38.8                                      | 60                             | 3                    | -46                                 | 0                     | -1                  | -1                     | -29.5                           |
| 8                            | Cognizant Technology Solutions               | United States | Computer services    | 16.5                    | 13.5                                      | 36                             | -1                   | -17                                 | 0                     | -2                  | 1                      | 42.2                            |
| 9                            | Samsung Electronics                          | South Korea   | Semiconductors       | 13.3                    | 91.2                                      | 11                             | -5                   | 2                                   | 1                     | 1                   | 3                      | -2.1                            |
| 10                           | Wipro  | India         | Computer services    | 12.9                    | 21.8                                      | 30                             | -1                   | -16                                 | 1                     | -1                  | -1                     | 10.6                            |
| Top ten average <sup>6</sup> |  |               |                      | 23.3                    |   | 17                             | 4                    | 2                                   | 1                     | -1                  | 0                      | 7.4                             |

**Sources:** Thomson Reuters Datastream; Thomson Reuters Worldscope; Bloomberg; annual reports; BCG analysis.

**Note:** Sample included 36 companies.

<sup>1</sup>Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

<sup>2</sup>Average annual TSR, 2005–2009.

<sup>3</sup>As of December 31, 2009.

<sup>4</sup>Change in EBITDA multiple.

<sup>5</sup>As of September 30, 2010.

<sup>6</sup>Weighted-average TSR for the ten companies listed.

## Innovation

### A Return to Prominence

Innovation is back. In BCG's April 2010 report, *Innovation 2010: A Return to Prominence—and the Emergence of a New World Order*, 72 percent of all survey respondents (71 percent of respondents in the technology and telecom sectors) said that innovation was a top-three priority at their company, compared with 64 percent in 2009. That is the highest reading in the survey's seven-year history.

Innovation pays off. The TSR of the most innovative companies, as identified by survey respondents, was 12.4 percentage points higher than that of their industry peers for the three-year period ending in 2009. Over ten years, the margin was 2 percentage points.

The two greatest barriers to innovation, according to survey respondents, are a risk-averse corporate culture and lengthy development times. Few respondents identified a shortage of great ideas as a major hurdle.

Technology companies should be placing part of their innovation bets in developing markets, which offer talent, growth, dynamism, and increasingly demanding consumers.

Innovation, however, is tough to institutionalize over several economic or product life cycles. In 2010, for example, MediaTek began facing stiff competition from Qualcomm, Spreadtrum, and other chipset producers. Its revenue and TSR declined over the first three quarters of 2010.

## The Surge in Developing Markets

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The importance of developing markets is readily apparent in the ranking of top technology value creators. Three of the top ten firms are India-based IT service providers riding the wave of outsourcing: Infosys Technologies, Tata Consultancy Services, and Cognizant Technology Solutions. More important, they have built global operations, created world-class hiring and training systems, and demonstrated an ability to quickly enter new businesses.

Their success shows that many developing markets are moving beyond their status as primarily a source of cheap labor. Increasingly, the BRICI nations (Brazil, Russia, India, China, and Indonesia), the Middle East, and other regions have become important markets in their own right. In 2009, the BRICI countries represented about 45 percent of the world's population and about 15 percent of global GDP, and had some 610 million Internet users. By 2015, these countries will have more than 1.2 billion Internet users—well over three times the number of Internet users in Japan and the United States combined. (See *The Internet's New Billion: Digital Consumers in Brazil, Russia, India, China, and Indonesia*, BCG report, September 2010.)

Some rapidly developing regions have become important centers of technical innovation. India and China, for instance, produce huge numbers of engineering and computer science college graduates who earn less than their Western counterparts. This combination of rising local demand and a steady supply of technical talent has led many larger technology companies to establish R&D centers in developing markets.

In BCG's *Innovation 2010* report, for example, 54 percent of survey respondents at technology and telecommunications companies said that they would increase their investments in China. Across all industries, 62 percent of

respondents planned to increase their product-development investments in developing markets.

## Bright Clouds on the Horizon

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One budding trend that could create or destroy value for technology companies is the rise of cloud computing—on-demand access to a shared pool of computing resources. Most organizations are just starting to exploit the opportunities afforded by the cloud to reduce costs, make business processes more efficient, and accelerate time to market.

The cloud could reshape entire industries, just as the Web did in the 1990s. For instance, the cloud can knit together multiparty ecosystems, as Apple and Google have been doing to upend the media industry. It can also facilitate asset-light business models: in India, dozens of community banks rely on Tata Consultancy Services' "bank in a box" cloud offering to automate deposit and loan processing.

The implications for various IT providers are profound. The revenue models of software companies could move from licensing and service contracts to monthly pay-as-you-go arrangements. Subscale IT-services companies may have trouble competing against Google, Amazon, and Microsoft, which are investing billions of dollars in data centers.

Because of the uncertainty about how cloud computing will play out, many technology companies are hedging their bets by moving into several layers of the cloud stack—infrastructure, platforms, applications, and so on—often through acquisitions. (See the sidebar "A Quick Guide to the Cloud.")

## A Renewed Focus on Margins

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Improving margins is a potential source of value creation for technology companies. Margins declined an average of 1 percent annually over the five-year period for the 36 technology companies in the Value Creators database, as the recession took its toll on profits. Most other industries experienced similar declines.

## A Quick Guide to the Cloud

The cloud provides opportunities for value creation at three levels in large enterprises: the utility level, the process transformation level, and the business model innovation level. (See the exhibit below.)

**Utility.** CIOs see tangible opportunities to save 10 to 50 percent in costs and to go to market more quickly with new applications and upgrades. Most organizations are currently focused on infrastructure and are moving standard applications, such as e-mail and other productivity tools, to the cloud.

**Process Transformation.** The primary benefits here are higher efficiency, closer collaboration, and superior integration and coordination across processes. Avon Products, for example, is starting to rely on the cloud to coordinate communications with its sales leaders.

**Business Model Innovation.** At this emergent level, the cloud can power new strategies built around ecosystems and supported by massive computing power and scale.

### Cloud Computing Offers Three Levels of Value

|   | Description  | Select opportunity areas   |
|---|--|--|
|  <p><b>Utility</b></p>                    | <p>Lowers costs and increases agility through elastic computing resources and pay-per-use models</p>                     | <ul style="list-style-type: none"> <li>◇ Utilization of equipment and facilities</li> <li>◇ Self-serviceability</li> <li>◇ Scale</li> <li>◇ Agility</li> </ul>   |
|  <p><b>Process transformation</b></p>    | <p>Improves integration and collaboration by leveraging common assets</p>  | <ul style="list-style-type: none"> <li>◇ Process standardization and composition</li> <li>◇ Streamlined handoffs and integration</li> <li>◇ New insights from data intensity and data sharing</li> <li>◇ Enhanced virtual teaming around specific processes</li> </ul>   |
|  <p><b>Business model innovation</b></p> | <p>Creates new business models and ecosystems through linking, sharing, and combining capabilities among enterprises</p> | <ul style="list-style-type: none"> <li>◇ New services through integration across customers, partners, and suppliers</li> <li>◇ New insights through data analytics by integrating and aggregating data across channels and enterprises</li> <li>◇ New asset-light business models that can be rapidly scaled to meet market needs</li> </ul> |

Source: BCG analysis.

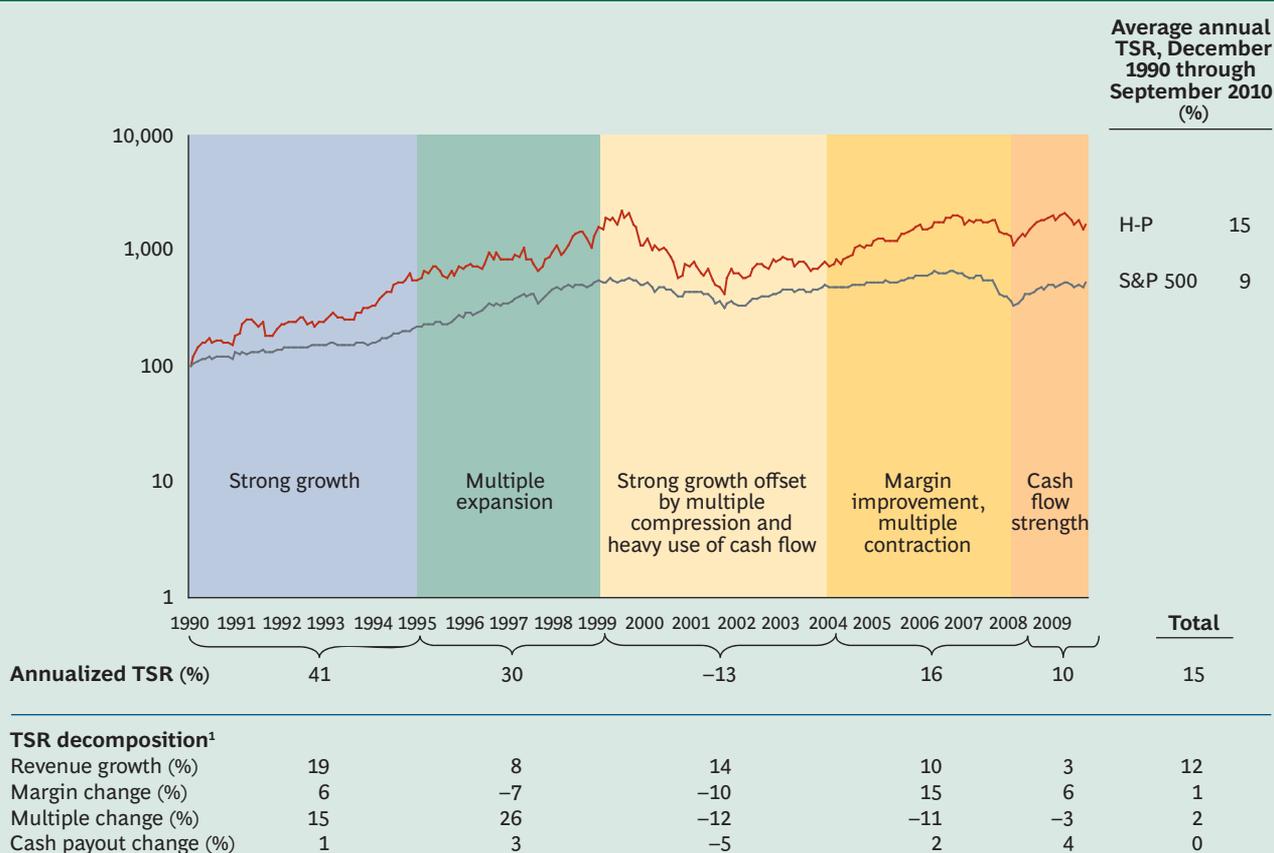
Even among top performers, margins came under pressure. Among the top ten technology performers, margins rose by an average of 4 percent per year, but most of that increase came from Apple (through premium pricing) and Hewlett-Packard (through astute cost management of acquisitions and ongoing operations).

H-P's journey shows how a company can create value in several ways. In the early 1990s, the company achieved most of its returns through growth; in the late 1990s, through multiple expansion. (See Exhibit 5.) In the first few years of the 2000s, growth remained strong but margins narrowed and cash payouts fell. Investors punished

the company with lower multiples. In the middle of the decade, the company's margins began to improve even while multiples continued to contract. In 2009, cash payouts also became an important part of total return.

There are limits, however, to the punch that margin enhancement can provide. It typically runs its course after several years, and companies have to reposition themselves for new growth. Finding growth in the face of uncertainty and disruption is the central challenge for technology companies. The group of top TSR performers could look very different in five years.

## Exhibit 5. Hewlett-Packard Has Moved Through Different Phases to Deliver TSR



Sources: Compustat; Bloomberg; BCG ValueScience Center; BCG analysis.

Note: Indexed to 100 on December 31, 1990; the y-axis is in log scale.

<sup>1</sup>Contribution of each factor shown in percentage points; any apparent discrepancies in TSR totals are due to rounding.



# Media

## Digital Disruption Continues Its March

**T**he media sector's average 2.5 percent TSR over five years was among the worst of all industries and would have been worse still without the strong showing of a handful of companies. The sector ranges from newspapers to music labels, television networks, movie studios, Internet search engines and portals, and business and educational publishing.

Most of these companies have fallen out of favor among investors. If investors had stayed neutral on the sector and awarded it the same multiple as five years ago, the sector would have reported a more respectable 7.7 percent TSR. A slight increase in revenues and dividend yield accounted for the sector's modest improvement in TSR.

The performance of the media sector is a tale of two segments: traditional companies and relatively new Internet players. Many of the big winners among the top ten performers are new entrants, such as Google and Tencent Holdings, that developed Internet businesses aggregating and distributing content. Tencent's QQ instant-messaging platform in China, for example, offers games, virtual pets, ringtones, and other forms of entertainment. The top ten performers posted an overall average TSR of 26.2 percent, the strongest of the three sectors. (See Exhibit 6.)

### Successive Waves of Disruption

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Long-brewing digital developments and the global economic downturn created a perfect storm for the media sector. For the past decade, the Internet has been eroding the power of media companies to generate adequate returns from content. Disruption moved in successive waves through different corners of the media sector.

Music piracy has weakened the willingness of consumers to pay for digital content, and the inertia of content owners contributed to the decline of businesses that were once highly profitable. Record labels have allowed Apple to define the pricing, usage rules, and economics of the digital-music business. Newspapers have allowed aggregators such as Google and Yahoo! and bloggers such as Huffington Post to break apart their content and weaken their business models. Internet companies are now disrupting the television, movie, and book industries by selling online works at discounts to their offline counterparts, and relative newcomers such as Facebook are pushing the boundaries even further by blending user-created and professional content.

Many media companies are still struggling to adjust to these new realities. The movie studio Metro-Goldwyn-Mayer, for example, recently filed for bankruptcy protection, wounded by slowing growth of DVD sales and the rise of online streaming of video content.

The recession magnified these longer-term trends for media companies, which rely heavily on advertising. Ad spending has historically tracked GDP, but it has become decoupled from the broader economy since the end of the recession. Many companies are permanently shifting marketing dollars "below the line" and away from traditional media outlets. They are maintaining their own Web sites and engaging in both offline and online promotional activities.

Media companies willing to make a break from the past and fundamentally shift their business models have a fighting chance to succeed, but they must act both decisively and experimentally. (See the sidebar "Tablets and E-Readers: Another Chance to Master Digital Content.")

## Exhibit 6. The Top Ten Media and Publishing Performers, 2005–2009

| #                            | Company                     | Location       | Industry                       | TSR <sup>2</sup><br>(%) | Market<br>value <sup>3</sup><br>(\$billions) | TSR Decomposition <sup>1</sup> |                         |  |                          |                        |                           | 2010<br>TSR <sup>5</sup><br>(%) |
|------------------------------|-----------------------------|----------------|--------------------------------|-------------------------|--|--------------------------------|-------------------------|--|--------------------------|------------------------|---------------------------|---------------------------------|
|                              |                             |                |                                |                         |  | Sales<br>growth<br>(%)         | Margin<br>change<br>(%) | Multiple<br>change <sup>4</sup><br>(%) | Dividend<br>yield<br>(%) | Share<br>change<br>(%) | Net debt<br>change<br>(%) |                                 |
| 1                            | Tencent Holdings            | Hong Kong      | Internet                       | 106.3                   | 39.5   | 70                             | 4                       | 37                                     | 1                        | -1                     | -6                        | 0.9                             |
| 2                            | Naspers                     | South Africa   | Broadcasting and entertainment | 33.3                    | 15.1   | 16                             | 4                       | 19                                     | 1                        | -7                     | -1                        | 14.5                            |
| 3                            | Net Serviços de Comunicação | Brazil         | Broadcasting and entertainment | 30.3                    | 4.7  | 27                             | 0                       | 3                                      | 0                        | -11                    | 12                        | -7.9                            |
| 4                            | Google                      | United States  | Internet                       | 26.3                    | 197.0  | 44                             | 5                       | -21                                    | 0                        | -4                     | 2                         | -15.2                           |
| 5                            | Modern Times Group          | Sweden         | Broadcasting and entertainment | 17.8                    | 3.3  | 16                             | 4                       | -2                                     | 2                        | 0                      | -2                        | 43.0                            |
| 6                            | Shaw Communications         | Canada         | Broadcasting and entertainment | 17.7                    | 9.0  | 11                             | -1                      | 0                                      | 3                        | 2                      | 3                         | 8.0                             |
| 7                            | SES                         | Luxembourg     | Broadcasting and entertainment | 13.5                    | 10.7   | 9                              | -1                      | 0                                      | 4                        | 4                      | -3                        | 21.1                            |
| 8                            | Grupo Televisa              | Mexico         | Broadcasting and entertainment | 12.8                    | 11.9   | 10                             | 1                       | 4                                      | 3                        | -5                     | -1                        | -7.7                            |
| 9                            | Beijing Gehua CATV Network  | China          | Broadcasting and entertainment | 12.5                    | 2.2  | 16                             | -4                      | 3                                      | 1                        | -3                     | -1                        | -4.5                            |
| 10                           | Pearson                     | United Kingdom | Publishing                     | 11.8                    | 11.4   | 9                              | 4                       | -7                                     | 5                        | 0                      | 1                         | 14.7                            |
| Top ten average <sup>6</sup> |                             |                |                                | 26.2                    |  | 22                             | 4                       | -2                                     | 2                        | -2                     | 2                         | -7.4                            |

**Sources:** Thomson Reuters Datastream; Thomson Reuters Worldscope; Bloomberg; annual reports; BCG analysis.

**Note:** Sample includes 52 companies, including Internet content providers.

<sup>1</sup>Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

<sup>2</sup>Average annual TSR, 2005–2009.

<sup>3</sup>As of December 31, 2009.

<sup>4</sup>Change in EBITDA multiple.

<sup>5</sup>As of September 30, 2010.

<sup>6</sup>Weighted-average TSR for the ten companies listed.

### Embracing the Digital World: Naspers and Pearson

A few traditional media companies are making strong moves to protect their core businesses while building successful digital franchises. Let's look briefly at Naspers, the second-leading media company at creating shareholder value over the past five years, and Pearson, the tenth-leading media value creator. Both companies have thoughtfully expanded into developing markets and built digital businesses, while also—at least in the case of Pearson—making tough choices about shedding lower-potential businesses.

**Naspers: An Expanding Footprint.** Naspers has evolved from a traditional newspaper and magazine publisher based in South Africa to a leading electronic-media company in many developing markets. Since 2001, Naspers has acquired Internet and mobile-content companies in

Africa, Brazil, China, Central and Eastern Europe, India, Russia, and Thailand—locations frequently overlooked by media giants.

Naspers developed expertise in choosing the right players in local markets and in helping them to become even more successful. It recognized that strong niche operators in regional markets can build protective barriers. Among its successful acquisitions are Allegro—an e-commerce, classified ad, and price comparison portal in Eastern Europe—and Sanook!, the leading local portal in Thailand. In 2001, Naspers had the foresight to acquire a 46.5 percent stake in Tencent Holdings, the leading media value creator.

Naspers has also taken a gradual approach to expansion. For example, it has invested in e-commerce and transaction platforms to monetize new offerings. It has also converted existing TV customers to digital services in order

## Tablets and E-Readers

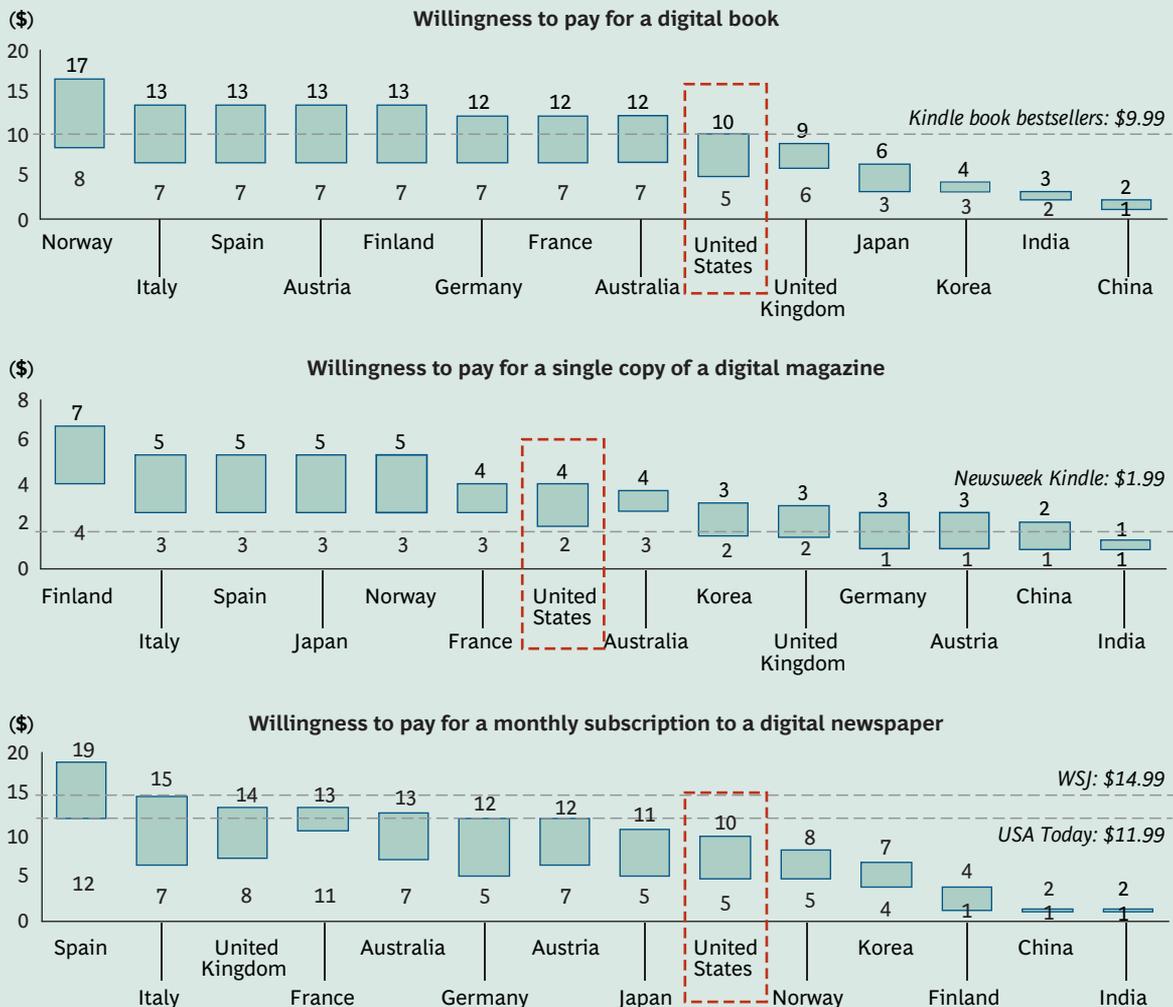
### Another Chance to Master Digital Content

Tablets and e-readers, spurred by the successful launch of Apple's iPad and Amazon's Kindle, are poised to become as popular as VCRs and portable audio players were in the 1980s or digital audio players in the early 2000s. A recent BCG survey of nearly 13,000 consumers in 14 countries revealed remarkable underlying demand: 28 percent of all respondents plan to purchase an e-reader or tablet in the next year; over three years, 49 percent plan to do so. While intent always overstates actual penetration, BCG projects that 25 percent of U.S. consumers

who read print publications will own tablets within three years, assuming that prices decline to the \$130–\$200 range, far less than the current low-end model of the iPad, which retails for \$499.

The survey offers guarded good news for content providers. (See the exhibit below.) In the United States, for example, consumers appear willing to pay \$2 to \$4 for a single issue of an online, interactive magazine—comparable to the cost of a print version—and \$5 to \$10 for a

### Consumers Will Pay for Content on E-Readers and Tablets



Sources: BCG survey of 12,717 consumers; BCG analysis.

Note: Respondents currently own a tablet or e-reader or are interested in purchasing one within three years. Van Westendorp's Price Sensitivity Meter method was used to calculate the optimal price.

## Tablets and E-Readers (continued)

monthly online newspaper subscription. Although this amount is less than the cost of a print subscription, a digital version is cheaper to produce—and, of course, the price is much higher than the free versions that most consumers now read.

It is likely that one of three scenarios will unfold in this market:

- ◇ *A single closed ecosystem*, such as iTunes in the United States, could take root. Content creators would be forced to sell to a single buyer that has an extremely strong position. The experience for consumers would be a mixed bag, as they would have a unique, easy experience but less choice. While Apple has set the bar high, it is unlikely that the tablet market will benefit from the tight integration of device, software platform, and aggregation that characterized the success of iTunes. Too many other companies have a stake in seeing a more open system, which is also what consumers want.
- ◇ *Several ecosystems* with a few large players could create their own rules and offerings to attract different consumer segments, as demonstrated by Microsoft, Nintendo, and Sony in the game console market. For digital content, Apple and Google are already starting to define ecosystems, and the emergence of a third or fourth large

player in the market is conceivable. Media companies would have multiple buyers for their content, which would encourage innovation in products, pricing, and business models.

- ◇ *An open market* would be competitive but not necessarily comfortable. Consumers would be able to buy content from multiple retailers whose products are in standard content formats. Media companies would have a wide range of outlets for their digital content and a high degree of pricing freedom. This explosion of choice might be a mixed blessing for consumers who have grown accustomed to one-click purchasing.

No matter how the market evolves, media companies will need to make deals with device makers to protect their assets—something that music labels and newspapers, in particular, did not do effectively during the past decade. They must also build business models and standards that meet the unique characteristics of the digital environment and are thoughtfully positioned relative to their analog, Web, and mobile businesses. These new business models will almost certainly challenge key beliefs about how value is created in their traditional businesses and require working together with a wide set of partners. In other words, companies will need to become digital natives.

to sell premium programming. When entering new markets, whether by acquisition or organically, Naspers has maintained a local approach in its content, management, and partnerships.

**Pearson: Old-School Panache in New Worlds.** Pearson, the London-based owner of such venerable brands as the *Financial Times* and Penguin Books, and half owner of the *Economist*, has an old-school pedigree. But it has been anything but fusty in its willingness to go digital and to pursue global expansion. Since 2001, the company has radically overhauled its portfolio by making \$6.3 billion in acquisitions, often in digital businesses, and by disposing of \$4.1 billion in legacy assets, such as *Les Échos* in France.

Pearson may be the most successful of the traditional publishers in migrating to digital services. It has built successful business lines in market intelligence, valuations, and market indices targeted to premium business cus-

tomers. Its FT Group subsidiary generated 73 percent of revenues from digital sources in 2009, up from 28 percent in 2000. This expansion has more than offset the decline in advertising-driven revenues. Across all of Pearson's businesses, revenues from digital sources reached 31 percent in 2009, up from 21 percent in 2005.

Educational products and services in North America remain Pearson's largest business. Sales and profits have grown 8 percent annually over the past five years. Pearson achieved this growth by branching out from its roots as a publisher of educational materials and a provider of assessment services to invest heavily in digital learning. By combining online-education modules with existing print content, Pearson has outperformed the generally flat educational-publishing market. For example, Pearson's market-leading engineering-mechanics textbook, *Statics and Dynamics*, 12th edition, by Russell C. Hibbeler, gained four percentage points of market share in 2009 on the strength of a new digital-learning and assessment product.

Pearson has leveraged its strength in North America to become the global leader in education publishing and related services. International education is the company's fastest-growing business segment, with sales increasing 17 percent annually over the past five years. It has grown both organically and through acquisitions. For example, it absorbed Wall Street English, a chain of premium English-language training centers in China, in 2009.

Unusual among media companies, Pearson has posted strong revenue growth while maintaining margins and

dividends. At Penguin Group, despite a restructuring and annual revenue growth of just 2 percent over the past five years, profits have improved an average of 5 percent annually. Pearson has also increased its dividend nearly 6 percent annually since 2000.

The experiences of Naspers and Pearson show that venerable media companies can reinvent themselves by finding pockets of customers willing to pay for digital information that is useful and timely and through thoughtful and determined expansion into high-growth segments.



# Telecommunications

## Searching for Growth

**T**he telecom sector's 5.3 percent TSR over the past five years puts it firmly in the middle of the pack among industries. Sales growth contributed 5 percentage points and dividends contributed 4 percentage points to the industry's overall return, with falling margins and weakening multiples pulling down the final result.

Seven of the top ten telecom performers are from emerging markets, where strong growth helped power TSR. Of the top ten's 22.9 percent TSR, sales growth contributed 17 percentage points. (See Exhibit 7.) Within the full sample, telecom companies operating mostly in developed economies generated a meager 2 percent TSR, while those operating in developing companies generated an impressive 21 percent TSR.

The telecom world, however, is not so easy to divide into developing markets characterized by growth and opportunity and developed markets where carriers are focused on cutting costs. There are at least four layers of complexity in today's telecom market.

- ◇ Profits remain elusive for many carriers in developing markets, where competition can drive prices down to rock bottom, as it has in India and Indonesia.
- ◇ Mobile data will change the nature of the game. Data traffic now exceeds voice traffic in many markets and is expected to continue rising sharply, spurred by strong demand for smartphones and Internet services. As companies such as Apple and Google solidify their hold in the telecom market, operators in all markets must reassess their strengths and weaknesses.

- ◇ Cost discipline and margin maintenance are increasingly important in all markets, not just mature ones.
- ◇ The traditional model of an integrated, monolithic, all-segments-all-activities carrier is becoming obsolete, as suggested by the presence on our top-ten list of American Tower, the owner and operator of wireless and broadcast towers.

Let's look at each of these developments in more detail.

### The Developing Markets: Telecom's Next Billion

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Telecom in many developing economies has experienced strong, steady growth, especially in mobile services, which have attracted hundreds of millions of new subscribers each year. This growth has helped produce total returns exceeding 25 percent for América Móvil, China Mobile, and Bharti Airtel, the top three telecom performers.

Consumers in developing markets have quickly embraced mobile phones for communication and entertainment. There are currently about 1.8 billion mobile-phone subscriptions in the BRICI countries, compared with fewer than 400 million in the United States and Japan. (See Exhibit 8.) Among these countries, Russia has the highest mobile-penetration rate, followed by Brazil, Indonesia, China, and India, which still have plenty of room to grow.

Affordability and availability are driving adoption in the BRICI countries, especially in India. Rates for voice calls are currently as low as \$0.006 per minute in India, and price promotions are abundant. Not surprisingly, the margins of Indian operators are under pressure.

## Exhibit 7. The Top Ten Telecommunications Performers, 2005–2009

| #                                  | Company                             | Location      | Industry           | TSR <sup>2</sup><br>(%) | Market<br>value <sup>3</sup><br>(\$billions) | TSR Decomposition <sup>1</sup> |                         |  |                          |                        |                           | 2010<br>TSR <sup>5</sup><br>(%) |
|------------------------------------|-------------------------------------|---------------|--------------------|-------------------------|--|--------------------------------|-------------------------|--|--------------------------|------------------------|---------------------------|---------------------------------|
|                                    |                                     |               |                    |                         |  | Sales<br>growth<br>(%)         | Margin<br>change<br>(%) | Multiple<br>change <sup>4</sup><br>(%) | Dividend<br>yield<br>(%) | Share<br>change<br>(%) | Net debt<br>change<br>(%) |                                 |
| 1                                  | América Móvil                       | Mexico        | Mobile telecom     | 27.1                    | 75.6   | 22                             | 5                       | -5                                     | 1                        | 3                      | 1                         | 11.2                            |
| 2                                  | China Mobile                        | Hong Kong     | Mobile telecom     | 26.0                    | 188.5  | 19                             | -3                      | 3                                      | 4                        | 0                      | 3                         | 13.2                            |
| 3                                  | Bharti Airtel                       | India         | Mobile telecom     | 25.6                    | 27.3   | 44                             | -1                      | -18                                    | 0                        | -1                     | 1                         | 11.6                            |
| 4                                  | MTN Group                           | South Africa  | Mobile telecom     | 23.6                    | 29.3   | 34                             | 2                       | -10                                    | 2                        | -2                     | -1                        | 10.0                            |
| 5                                  | China United Network Communications | China         | Mobile telecom     | 20.4                    | 22.6   | 17                             | -4                      | 7                                      | 2                        | 0                      | -2                        | -29.6                           |
| 6                                  | Telekomunikasi                      | Indonesia     | Fixed-line telecom | 18.6                    | 20.3   | 14                             | -2                      | 1                                      | 4                        | 0                      | 1                         | 0.6                             |
| 7                                  | American Tower                      | United States | Telecom equipment  | 18.6                    | 17.4   | 19                             | 1                       | 3                                      | 0                        | -11                    | 7                         | 18.6                            |
| 8                                  | Rogers Communications               | Canada        | Mobile telecom     | 17.6                    | 18.7   | 16                             | 4                       | -9                                     | 2                        | -1                     | 7                         | 21.0                            |
| 9                                  | Koninklijke KPN                     | Netherlands   | Fixed-line telecom | 17.1                    | 28.0   | 3                              | -1                      | 3                                      | 6                        | 7                      | -1                        | 2.2                             |
| 10                                 | Turkcell İletişim Hizmet            | Turkey        | Mobile telecom     | 15.1                    | 16.1   | 12                             | -1                      | -3                                     | 4                        | 0                      | 2                         | -3.7                            |
| <b>Top ten average<sup>6</sup></b> |                                     |               |                    | <b>22.9</b>             |  | <b>17</b>                      | <b>-1</b>               | <b>1</b>                               | <b>2</b>                 | <b>1</b>               | <b>2</b>                  | <b>9.0</b>                      |

**Sources:** Thomson Reuters Datastream; Thomson Reuters Worldscope; Bloomberg; annual reports; BCG analysis.

**Note:** Sample includes 38 companies.

<sup>1</sup>Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

<sup>2</sup>Average annual TSR, 2005–2009.

<sup>3</sup>As of December 31, 2009.

<sup>4</sup>Change in EBITDA multiple.

<sup>5</sup>As of September 30, 2010.

<sup>6</sup>Weighted-average TSR for the ten companies listed.

Several Western European carriers have begun to invest in developing markets, but their success has been mixed. Telefónica, with its strong position in Brazil and Argentina, has done well, but others carriers have struggled to adapt their businesses to a very different environment.

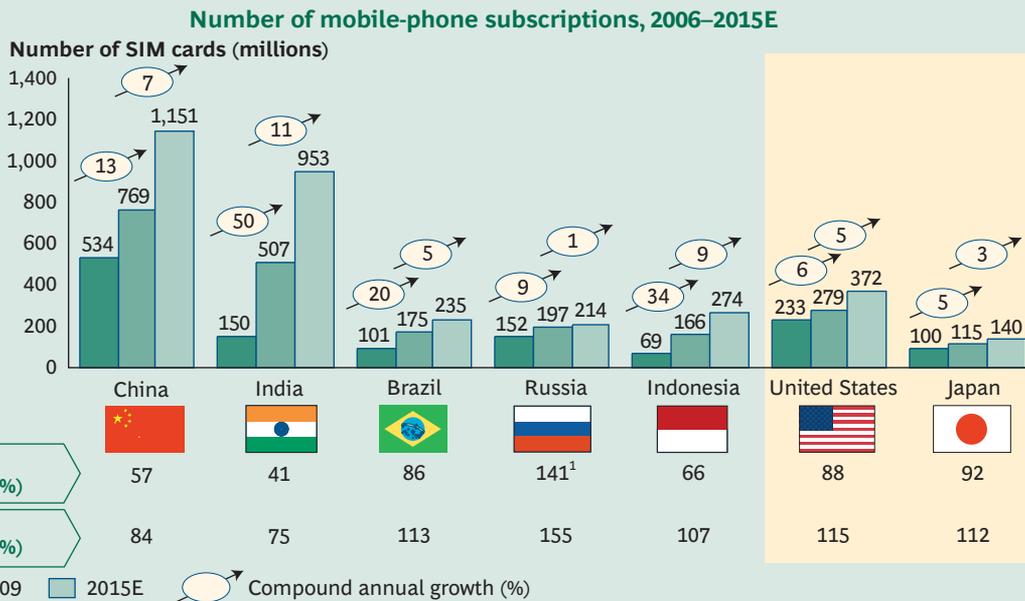
On the flip side, several companies from developing markets have started to expand abroad. Early in 2010, India's Bharti Airtel acquired most of Kuwait-based Zain Telecom's African business for \$10.7 billion. The deal has made Bharti the world's fifth-largest mobile operator with operations across 18 countries. In late 2010, Russia's VimpelCom, which is partly owned by Norway's Telenor, and Weather Investments, the majority owner of Egypt-based Orascom Telecom, announced a \$6.5 billion merger that would create one of the largest mobile-telecom operators.

Scale is less important than skill and knowledge in entering developing markets. Bharti Airtel and other tele-

com players that are based in developing markets understand the challenges of operating in prepaid, low-tariff markets. But these markets may be harder to enter in the future as prices decline and penetration increases. In 2009, India added 200 million mobile subscriptions—some of them undoubtedly second or third phones—but mobile revenues grew by just 2 percent. Being even the fourth or fifth carrier in a market such as India's will be challenging, let alone the eighth or ninth.

Price competition is a benefit for consumers in the short term but not necessarily in the long term if it prevents telecom operators from investing in future technologies, quality of service, or customer relationships. Given the importance of telecom operators to the economic growth and social development of many countries, governments will be under pressure to play a larger role in establishing regulations that ensure adequate returns and affordability.

## Exhibit 8. BRICI Mobile-Phone Subscriptions Vastly Outnumber Those in the United States and Japan



Sources: Economist Intelligence Unit; CIA World Factbook; BCG analysis.

Note: Mobile-phone penetration is the number of SIM card subscriptions divided by the population.

<sup>1</sup>Mobile-phone penetration in Russia is believed to be less than 100 percent; there is a tendency for users to own multiple SIM cards, a large number of which are inactive.

### The Internet Goes Mobile

Faced with a dramatic reduction in average revenue per user (ARPU) from voice traffic and tariffs, operators need to find new sources of growth in order to generate higher shareholder returns. One way is to encourage customers to sign up for mobile-data services. Even in the BRICI markets, consumers are increasingly accessing the Internet through their handsets, especially when fixed-broadband costs are high or availability is limited.

Bharti Airtel, for instance, has publicly said that it aspires to become a “lifestyle enablement company.” It recently was granted the first license to offer mobile-payment services in India. Safaricom has moved beyond traditional communication services in Kenya through its M-Pesa mobile-banking service. Vodafone, a part-owner of Safaricom, has introduced similar services in Afghanistan and Tanzania.

In many markets, revenues from mobile-data services are growing rapidly, spurred by the spread of mobile-broadband services, smartphones, and the availability of appli-

cations. Many operators, especially in the United States, have managed to offset the decline in voice revenue through mobile data. Creating long-term shareholder value through mobile data, however, may be challenging unless operators can wean their customers away from unlimited-data plans.

In South Korea and Japan, for example, carriers pioneered innovative services such as mobile banking and payments, winning global accolades for the innovation. They have been less successful, however, in creating shareholder value. Intense price competition, open platforms, and regulatory policies have created a challenging environment.

In other developed markets, mobile broadband is attracting powerful players—notably Apple and Google—from other industries. Google is building an ecosystem around its Android mobile-phone platform, developing enhancements to its Google Voice offerings, and investing in data centers for its cloud services. As Google, Apple, and other prominent brands expand into telecom markets, carriers need to carve out distinct roles that will allow them to create and capture value.

## Cost Management and Cash Distribution

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In the face of all these challenges, operators in mature markets are understandably pulling levers other than growth to maximize shareholder return. They have several options. They can reduce churn and take other steps to manage the customer base in order to maintain revenues or at least slow the decline of voice ARPU. They can aggressively reduce costs by sharing networks with competitors and deploying low-cost technologies. They can also improve cash flow in order to increase cash distributions to shareholders. These levers represent a continuous-improvement approach that is consistent with many business models.

Koninklijke KPN and Rogers Communications have each generated substantial value despite operating in developed markets. KPN, the leading provider of telecom services in the Netherlands, also serves mobile subscribers in Germany and Belgium and provides business network services and data transport throughout Western Europe. It ranked ninth among telecom firms in shareholder return by taking a disciplined approach to costs and cash management. Most of KPN's 17.1 percent TSR came from share buybacks (7 percentage points) and dividend distributions (6 percentage points).

Rogers Communications, a diversified communications and media company in Canada, has managed both to grow and to adroitly manage cash. Sales growth contributed 16 percentage points of Rogers's 17.6 percent total return for an eighth-place ranking among telecom players. As a cable provider, Rogers is not saddled with the universal service and other regulations borne by traditional telecom carriers. Still, the company's early investments in mobile and a high-speed network have paid off.

At the same time, Rogers has increased its focus on managing costs and margins. Its change in profit margins contributed 4 percentage points to total return, and lowering its debt load contributed 7 percentage points. (A narrowing of its multiple, however, subtracted 9 percentage points.)

América Móvil, the top-performing telecom company, with a total return of 27.1 percent, also has successfully focused on growth and cost discipline. From its base in Mexico, it has built a portfolio of companies across Latin America and the Caribbean—and it has entered the Unit-

ed States with its TracFone prepaid-mobile-phone subsidiary.

América Móvil has benefited from population growth in Latin America and a strong presence in Mexico, a country with high tariffs. But chairman and major shareholder Carlos Slim has also earned a reputation for tight financial management. Margin change contributed 5 percentage points, the highest among the top telecom performers.

## Deconstruction Ahead

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Since deregulation in the 1980s and the emergence of the commercial Internet in the 1990s, the telecommunications industry has faced a rolling set of disruptions. The stock market has punished most large carriers while richly rewarding companies in competition with telcos. Since its IPO in 2004, Google's market capitalization has risen to almost \$200 billion, while the value of most operators in developed markets has fallen. The U.S. telecom industry has lost more than 100,000 jobs in the past five years and more than 400,000 in the last decade.

Cost cutting alone, however, will not be enough for carriers to compete when game-changing forces—such as cloud computing and “voice for free” services—are warping the industry.

As demonstrated by the successes of Google, Apple, and others, tremendous opportunities abound in the broader technology and telecom space. In order to capture these opportunities, carriers need to make hard choices about strategy and business models. Most, however, are suffering from the “curse of the conglomerate”: when their wireline business went into decline, they were able to turn first to mobile voice and then to mobile data, but now they have run out of businesses that can generate adequate returns. With no more cash cows left to milk, carriers must build new sources of competitive advantage. (See the sidebar “Five Ways to Play the Telecom Breakup.”)

The pace of change in telecom technologies is accelerating, but despite the wealth of opportunities in developing markets and in mobile broadband, only a few telecom operators have successfully generated long-term shareholder value. To win in the future, operators will need to choose their business models, offerings, regional markets, and customer segments carefully.

## Five Ways to Play the Telecom Breakup

Because of the turmoil in telecom, the business model of traditional carriers is breaking apart. In this deconstructed world, operators will need to be both selective and aggressive in building businesses out of the fragments of their former selves. Five strategic options are likely to emerge, of which operators can probably pursue two or three simultaneously. (See the exhibit below.)

**One-Stop Shop.** Many consumers and small enterprises are looking for trusted sources to help them sort through new services and products. Operators could become their partner of choice through enhanced retail capabilities and a broader footprint.

**Best-Practice Network Operator.** Carriers could sell their network-operations capabilities to other operators. Bharti Airtel, for example, has partnered with equipment maker Ericsson to manage parts of its mobile network in India. Such arrangements could serve as models for larger-scale developments that take advantage of scale, standardization, and offshore operations.

**Global End-User Service Provider.** Operators could develop global services such as salesforce.com, a cloud-based

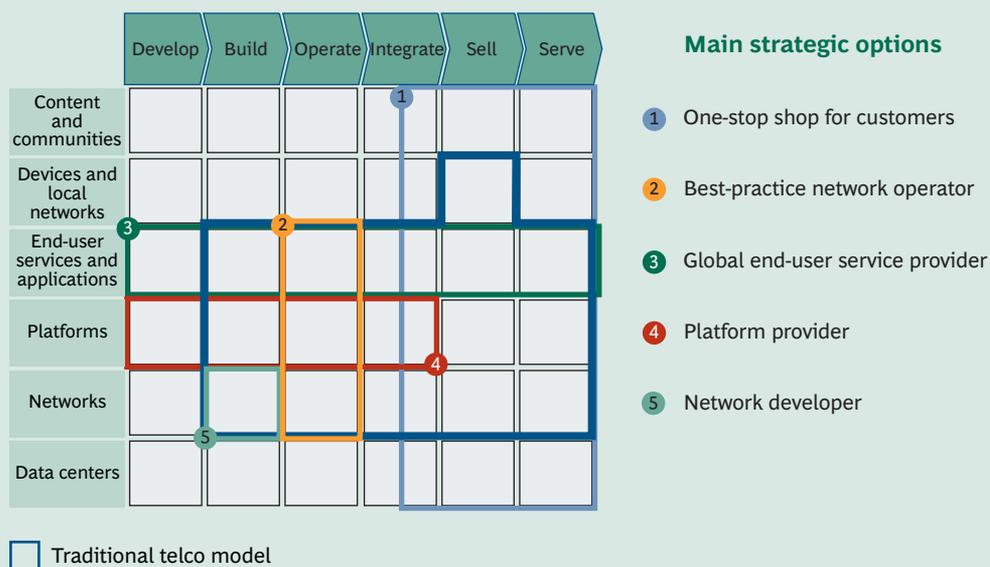
customer-relationship-management (CRM) service. To pursue this approach, operators would need a strong innovation pipeline.

**Platform Provider.** Platform providers could supply specific functionalities to other companies. Amdocs Limited provides CRM, billing, and operations support for mobile operators. To pursue this model, carriers would need to develop efficient state-of-the-art global operations.

**Network Developer.** Operators could choose to build network infrastructure for other operators, as ReggeFiber is doing in the Netherlands. This model would require strong project-management skills and a knowledge of local markets and municipalities.

To thrive in the next phase of telecom markets, carriers need to focus on those businesses that create value and excise those that do not. And because today's innovative services are developed at warp speed and exist in "perpetual beta" while the kinks are worked out, they will have to introduce Silicon Valley-type development capabilities.

### Operators Can Choose a Combination of Strategic Options



Source: BCG analysis.



# Value Creation in Low-Growth Environments

**D**espite signs of recovery, developed economies remain under significant pressure—most recently from the sovereign-debt crises in Europe. It is likely that the developed world is entering an extended period of below-average growth, with profound implications for how companies create value.

The debt overhang of U.S. consumers, the reduced availability of credit, and the winding down of government stimulus programs will brake the global economy. The International Monetary Fund projects that global economic growth will have slowed in the second half of 2010. In the two-speed world now in operation, the IMF forecasts that developing economies will grow by 2.2 percent in 2011, while developed economies will surge ahead by 6.4 percent. Overall global growth will settle at 4.2 percent for the year.

What characterizes value creation in low-growth environments? Two broad trends and a paradox. Their implications for any individual company will depend, of course, on the particular situation.

## The Growing Importance of Cash Payouts

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Using BCG's model for quantifying the relative contribution of the various sources of TSR, executives can analyze how their company created value and—on the basis of internal plans—how it might create value in the future. For example, lower global economic growth will mean not only lower sales growth for many companies but also lower profit growth, as profit margins come under pressure from increased competition. When investors factor

the declining growth rate of profits into a company's stock price, its valuation ratio will likely drop as well.

These changes will cut significantly into a company's ability to deliver capital gains. At first glance, this might seem to imply that overall TSR will be lower as well; however, the inherently dynamic nature of TSR changes the equation.

In the medium term, cash payouts can help offset lower growth as a contributor to shareholder return. As investors reset their expectations about future growth and reduce valuation ratios, they are implicitly increasing the value of what we call a company's free-cash-flow yield—the return that investors and debt holders get from cash distributions by companies. By way of a simple illustration, if a company pays out 50 percent of its net income and its P/E ratio is 20, then its free-cash-flow yield contributes 2.5 percentage points of TSR; if the company's P/E drops to 10, the same cash payout yields 5 percentage points of TSR.

As this illustration demonstrates, lower valuation multiples increase future free-cash-flow yields. This dynamic tends to counteract the parallel drop in net income growth, resulting in an average TSR closer to the historical level.

The cash accumulated during the downturn, along with currently high levels of free cash flow generated from cost cutting, has given many companies the opportunity to improve their free-cash-flow yield dramatically.

For some companies, a value creation strategy that emphasizes cash payouts and a strong free-cash-flow yield may be a sensible approach in a low-growth environ-

ment. This is especially true for companies in mature markets that have high returns on invested capital and are generating far more cash than they can invest in profitable growth.

Some technology companies, which have tended to avoid paying dividends in order to preserve the ability to fund growth, are taking this approach. Microsoft recently announced a 23 percent dividend increase, and Cisco recently announced that it will start paying a regular dividend in 2011 in addition to increasing its program of stock repurchases. Oracle began paying dividends in mid-2009, supported by \$8 billion in annual free cash flow.

There are three important caveats to this strategy. First, it is unclear how long the current high levels of free cash flow will last. As governments around the world cope with growing deficits and anemic tax revenues, cash-rich corporations will become a tempting new revenue source.

Second, investor expectations should be carefully managed, especially those of growth investors. It is not neces-

sarily easy to shift the mix of investors from those pursuing growth to those pursuing value. There must be a deliberate strategy to understand the composition of the investor base and to communicate accordingly.

Third, although a value creation strategy emphasizing free-cash-flow yield can occasionally generate superior TSR, it is extremely difficult to sustain that performance. Most companies will eventually need to find a way to grow. To understand why requires grasping a phenomenon that we call the growth paradox.

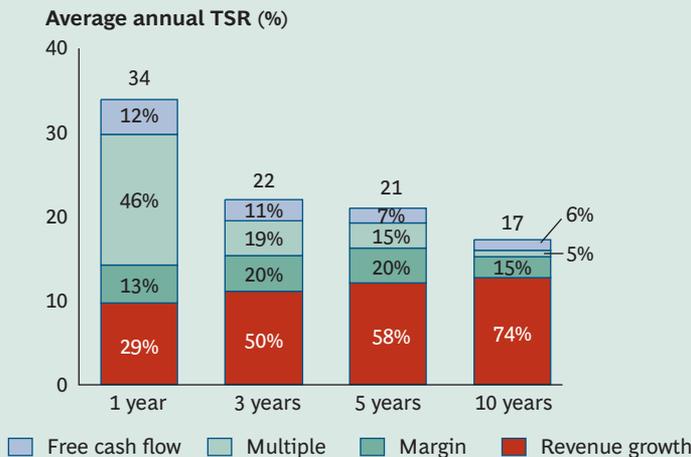
## The Growth Paradox

Revenue growth is the greatest contributor to value creation for top performers across all industries. It is responsible for nearly three-quarters of average annual TSR for top-quartile performers over rolling ten-year periods from 1990 through 2009. (See Exhibit 9.) Indeed, most of the top-ten companies in our rankings for the technology, media, and telecom sectors have double-digit revenue growth rates.

### Exhibit 9. The Growth Paradox

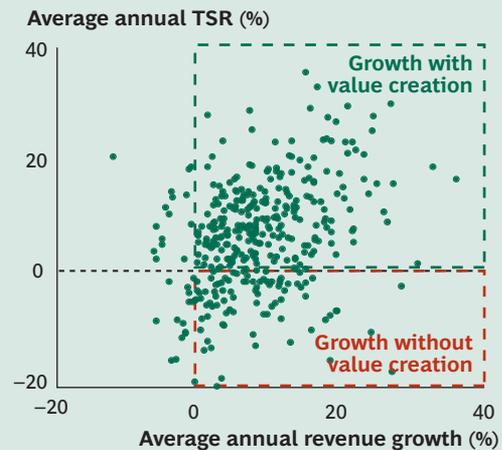
For top performers, growth is the single most important source of TSR over the long term...

Sources of TSR for top-quartile performers (S&P 500, 1990–2009)



...but not all companies with above-average growth necessarily create value

Correlation of revenue growth and TSR (S&P 500, 1990–2009)



Source: BCG analysis.

Note: Each bar shows the average annual TSR for a given time period; the shaded sections of each bar show the percentage of TSR from each source.

But growth alone does not create above-average TSR. The right-hand chart in Exhibit 9 shows that many companies grow without creating value. Their growth comes at the expense of other contributors to value, such as margins and multiples.

A slow-growth economy exacerbates this paradox. Over the long term, companies' ability to generate above-average sales growth separates winners from losers. Companies cannot become so reconciled to the lack of growth opportunities that they focus exclusively on cost cutting and cash payouts.

At the same time, companies that are flush with cash have to be careful to avoid the opposite problem: growth without value. Companies with large cash reserves as a result of cost cutting may be tempted to overcommit to growth. As more companies compete for fewer growth

opportunities, it becomes harder to successfully generate shareholder return through profitable growth.

How can companies thread this needle? By developing an explicit strategy for value creation marked by three characteristics:

- ◇ Creativity in identifying new ways and new areas in which to invest in profitable growth
- ◇ Discipline to invest only in those growth initiatives that will truly be value creating—and to return excess cash to investors once the necessary investments to pursue those opportunities have been made
- ◇ A long-term focus on sustainable value creation over three to five years, rather than trying to maximize short-term gains in EPS



# A Fresh Look at Value Creation Strategy

**I**n a low-growth economy, there will be more competition—especially from companies in the fast-growing emerging economies. As everyone competes for relatively fewer growth opportunities, margins will be under threat.

Coping with these challenges will require discipline. Companies will need to take a tough look at existing business plans in order to weed out those growth investments that do not create value and to focus on those that do—and they will have to be far more systematic in finding new ways and new places to grow.

Given the likelihood of increased competition, companies should start by making any investments necessary to build a competitive moat around the core business. Competitors will be coming after that business, so it is critical to preserve and protect existing sources of competitive advantage.

As a company develops its growth strategy, it must also be especially alert to the impact of growth on margins. There may be situations in which it is necessary to accept lower margins in order to remain competitive. But companies should avoid simply chasing share based on a weak competitive position.

Once vulnerabilities in the core business have been addressed, a company can begin thinking about new opportunities for growth. For example, is there some way to exploit the two-speed economy by expanding in emerging markets? And if so, what is the best approach—organic growth, M&A, or partnerships?

When a company has few opportunities for organic growth, growing through acquisitions can be an effective

way to create value. Acquisitions that consolidate an industry can be a good way to preserve a company's competitive advantage and protect margins. Similarly, buying businesses with strong future growth prospects can be a way to expand growth opportunities and build new growth platforms for the future. But investments in M&A tend to be riskier than equivalent investments in organic growth, so a company needs to assess its opportunities carefully and be realistic about its capabilities, both for doing deals and for the subsequent postmerger integration.

When it comes to M&A, the main shift companies need to make is to think less about whether a particular deal is EPS accretive in the short term and more about whether it is actually going to create shareholder value in the long term. A deal may appear to be “cheap” and deliver one-time EPS gains without necessarily improving a company's TSR. For example, when a company that is trading at a P/E ratio of 20 acquires a company with a P/E ratio of 10, whatever benefit is obtained from combining the earnings of the two companies can be undermined by declines in the acquirer's valuation multiple.

By the same token, deals that dilute EPS in the near term can improve TSR over the long term. Indeed, in a low-growth economy, some of the most value-creating acquisitions—those of companies with a higher growth rate than that of the acquirer—will initially dilute EPS because the target will likely be trading at a higher multiple than the acquirer. Over time, however, such an acquisition will lead to higher revenue growth and a higher overall multiple.

Last but not least, no company should be thinking about where to grow without at the same time thinking about where *not* to—whether because it lacks advantage, is not

producing returns above the cost of capital, or faces an industry environment that makes a cash payout strategy preferable.

## Balanced Capital Deployment

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Many companies will have more cash flow than they can effectively reinvest in profitable growth. The worst outcome would be to waste that cash by pursuing value-destroying growth or to fail to exploit the value-creating potential of that cash by simply leaving it on the balance sheet. Rather, executives should ask how best to deploy cash in order to create shareholder value.

Getting to the right answer will require challenging some legacy assumptions. The first is the lingering belief that dividends are to be avoided because they signal to investors that a company has few growth prospects. Increasingly, investors see a strong dividend as a sign not of stagnation but of financial discipline—and preferable to share repurchases.

A related assumption worth challenging is the management preference for share repurchases over dividends as the best means to return cash to shareholders. Many executives prefer share buybacks because, unlike dividends, buybacks boost EPS. And their incentive compensation is often tied directly to EPS growth and the appreciation in stock price, not to overall shareholder return.

BCG's research demonstrates that dividends have a far more positive impact on a company's valuation multiple than share repurchases do. Indeed, in many cases, buybacks can actually reduce a company's multiple in the near term.

At the same time, companies need to be deliberate about making this shift. Share repurchases are generally episodic rather than consistent. A policy of paying dividends needs to be long term. Companies cannot stop and start dividend payouts without damaging their credibility with investors.

A third assumption to rethink has to do with the desirability of leverage. In a low-growth economy, investors will be

looking for quality and sustainability. Some companies may want to retire debt in order to become a "safer," less risky stock. Others may want to preserve current levels of leverage because interest rates are so low and because it may be difficult to take on new debt in the future. But whatever a company's situation, it would be prudent to assume that the company will need to fund future strategies out of its ongoing operating free cash flow.

Investors see a strong dividend as a sign not of stagnation but of financial discipline.

## Scenario-Based Strategic Planning

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A comprehensive approach to value creation cannot take place within the normal strategic-planning process. As strategic planning exists at most companies today, business units develop plans that are then aggregated into an overall corporate strategy. Rethinking value creation strategy requires a top-down overlay to that process, led actively by the CEO and involving the board. (See "Rethinking Scenarios: What a Difference a Day Makes," BCG Perspectives, September 2010.)

One approach that helps sharpen the tradeoffs a company faces is to create alternative future scenarios that emphasize significantly different uses of capital. What is the differential impact of each of these scenarios on TSR? What are the associated risks given the company's starting position, organizational capabilities, and investor base?

The point of this exercise is not necessarily for any one scenario to be the winner. It is likely that the final strategy will include elements drawn from each scenario, perhaps with different moves playing a more central role at different moments in time. But developing multiple scenarios can surface unanticipated opportunities, sharpen choices and tradeoffs, and force a tough, realistic assessment of what the company can actually achieve.

As a company develops and evaluates these different scenarios, it should consider their impact on its investor base and, therefore, on its valuation multiple. This will be especially important in an environment in which multiples, on average, will be declining.

BCG's research shows that it is possible to identify and actively manage the factors that determine approximately 80 percent of the differences in valuation multiples

across an industry. The key questions are: What are the specific drivers of differences in valuation multiples within a company's industry? What are the likely impacts of the company's business strategy, financial policies, and investor messaging on its valuation multiple?

Companies that have traditionally been viewed as growth stocks need to be especially careful about making large unexpected shifts to a more value-oriented approach. Companies can make the transition but need to articulate their logic and story, recruit new investors to replace those likely to sell, and be consistent in their new approach. Companies cannot easily change back and forth from growth to value.

Another way to gauge investor reactions to a company's plans is by conducting a detailed investor segmentation to determine who the company's dominant investors are and to identify their key priorities for the company. Having this kind of detailed information is important in any situation—but it is especially important today, when many companies have experienced significant churn in

their investor base and when investor priorities themselves have been evolving.

Once a company has identified its dominant investors, it should bring their perspectives into the planning process. Only by talking directly to investors, asking probing questions, and carefully listening to and interpreting their responses can a company's management gain a clear view of the expectations and priorities of the company's investor base. The point is not to do precisely what investors want in every situation but to understand how investors are likely to respond to a company's strategic moves. In some cases, in-depth interaction with leading investors can go a long way toward helping a company clarify the most sustainable path for value creation in the future.

By focusing on value-creating growth, optimizing the tradeoffs among various uses of capital, and taking a scenario-based approach to strategic planning, companies will be in good shape to address the challenges of value creation in a low-growth economy.



# Ten Questions That Every CEO Should Be Addressing

In conclusion, we offer ten questions about value creation that every CEO should know how to answer—and that will help guide strategy, especially in a low-growth economy.

1. *Do you know where and how your businesses are creating value?* By business unit, by product category, by customer segment?
2. *Do you have a process in place for discovering new ways to deliver value-creating growth?* Are you investing to create long-term sustainable TSR or merely managing the business to maximize your short-term EPS?
3. *Are you emphasizing shareholder value performance over relatively long time horizons (three to five years), rather than quarterly or annual EPS?*
4. *Are you evaluating future acquisitions by their long-term value-creation potential, not by whether the deals would happen to accrete or dilute EPS in the short term?*
5. *Do you know what drives differences in valuation multiples in your peer group?*
6. *Do you know the segmentation of investors who own your stock?* Which types of investors dominate? Are they the right ones given your value-creation strategy? Are you engaged in an active dialogue with your core investors in order to understand their objectives and priorities?
7. *Are your financial policies—such as the debt-to-capital ratio and dividend payout—likely to appeal to your target investors in a low-growth environment?*
8. *Are your management processes—for example, planning, budgeting, and capital allocation—aligned with the goal of increasing shareholder value over the long term?*
9. *Are you rethinking your executive-compensation system for an environment in which capital gains will be a less important contributor to TSR?* Does your system require that senior executives have substantial “skin in the game” in the form of long-term direct equity exposure (not stock options)?
10. *Have you thoroughly explored different scenarios for creating value in the future?* Do you know the different benefits and risks of emphasizing organic growth, M&A, or cash payouts?



# For Further Reading

The Boston Consulting Group publishes many reports and articles on corporate development, value creation, and the technology, media, and telecom sectors that may be of interest to senior executives. Examples include the following:

**Lean Advantage in Media: Rethinking Operations and Building New Business Models**

A BCG White Paper, December 2010

**The CMO's Imperative: Tackling New Digital Realities**

A report by The Boston Consulting Group, November 2010

**Why Companies Should Prepare for Inflation**

BCG White Paper, November 2010

**The Connected Kingdom: How the Internet Is Transforming the U.K. Economy**

A report by The Boston Consulting Group, October 2010

**Cloud Computing in Large Enterprises: Questions for the C-Suite**

A BCG White Paper, September 2010

**The Internet's New Billion: Digital Consumers in Brazil, Russia, India, China, and Indonesia**

A report by The Boston Consulting Group, September 2010

**Threading the Needle: Value Creation in a Low-Growth Economy**

The BCG 2010 Value Creators Report, September 2010

**The Future of Telecommunications: As Wireless Earnings Wane, Carriers Confront Hard Choices**

BCG White Paper, August 2010

**Tablets and E-Readers: The Last, Best Chance for Digital Content?**

BCG article, August 2010

**Investors' Priorities in the Postdownturn Economy**

BCG article, July 2010

**Lean Advantage in Telcos: Reducing Complexity and Transforming Culture**

BCG White Paper, July 2010

**Accelerating Out of the Great Recession: Seize the Opportunities in M&A**

A report by The Boston Consulting Group, June 2010

**China's Digital Generations 2.0: Digital Media and Commerce Go Mainstream**

A report by The Boston Consulting Group, May 2010

**Megatrends: Tailwinds for Growth in a Low-Growth Environment**

A Focus by The Boston Consulting Group, May 2010

**Innovation 2010: A Return to Prominence—and the Emergence of a New World Order**

A report by The Boston Consulting Group, April 2010

**Capturing the Value of Cloud Computing: How Enterprises Can Chart Their Course to the Next Level**

BCG White Paper, November 2009

**Searching for Sustainability: Value Creation in an Era of Diminished Expectations**

The BCG 2009 Value Creators Report, October 2009

**The Customer Value Challenge: Managing the Commercial Investments of Telecoms in Europe**

A Focus by The Boston Consulting Group, February 2009



# Note to the Reader

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