



Photograph by Vern Evans

Eurosclerosis Revisited

The productivity boom benefits the U.S. more than Europe. Five reports explore why.

Knowledge Review
by Diane Coyle

The Atlantic has grown wider during the past few years, and not just because of the well-aided diplomatic differences between the Old and New Worlds.

There is also a yawning transatlantic chasm between the United States and Europe in economic growth and in business performance.

The divergence in economic growth rates is not a recent development, of course. It's been more than 20 years since the term *Eurosclerosis* was coined to describe the furring of Europe's economic arteries. Moreover, the average growth rate in European countries has slowed each decade since the 1970s, falling well behind U.S. growth. By the second half of the 1990s, Europe averaged annual growth of 2.6 percent, compared with 4.1 percent in the United States, which only encouraged more breathless millennial hype about America's New Economy — the shorthand for technology-driven, turbocharged growth without inflation.

The bursting of the dot-com bubble and the U.S. recession in 2001 seemed to put an end to the New Economy mania, and these

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events were greeted by some Europeans with a sense of relief. For them, surely this also meant an end to harangues about “why can’t Europe be more like America and share in the productivity miracle being brought about by computers?” The respite was only temporary, it turns out. While Americans may be haranguing their European compatriots less these days, the competitiveness gap remains. Europe is still struggling economically, with the biggest continental economies — France, Germany, and Italy — continuing to stagnate. Meanwhile, the U.S. economy has bounced back and, what’s more, has seen consistently impressive productivity growth.

Several recent research papers and books from both sides of the Atlantic offer compelling statistics and explore the reasons for America’s continuing economic advantage, which have as much to do with trends in corporate organization and political choices as with investment in new technologies. They suggest the United States’ growth will continue to outpace Europe’s unless European businesspeople and political leaders accept the need for workplace change. But the research

also examines why reform is so hard in Europe, where many people resist the darker side of the New Economy: rising income inequality.

A research report published in December 2004 by the Federal Reserve Bank of New York, which took the lead in documenting the effects of new information and communications technologies (ICTs) on productivity, confirms that America’s productivity growth is accelerating despite all the turmoil since early 2001. Between 1995 and 2003, the growth in this measure of the economy’s potential was more than twice the average growth of earlier decades. In “Will the U.S. Productivity Resurgence Continue?” economists Dale W. Jorgenson, Mun S. Ho, and Kevin Stiroh even raised their earlier estimate of the rate at which private-sector output per worker can grow, from 2.2 to 2.6 percent a year.

About half of the improvement is attributable to business investment in new high-tech computer equipment, as well as non-IT equipment. Still, almost as much can be explained by improvements in the efficiency with which businesses use *all* their inputs, whether that’s additional employees or other new

investment. Economists call this “total factor productivity.” It includes the effect of technological progress, such as faster semiconductor speeds reflecting Moore’s Law (the doubling of computer power, and halving of its cost, roughly every 18 to 24 months). It also includes other sources of improvement in business efficiency such as better organization and management, developed in response to greater competitive pressures.

This makes intuitive sense. Information technology can only affect productivity if companies use it effectively after the technology is installed. This takes time, however. For many years, New Economy skeptics spoke of the “productivity paradox.” American businesses spent millions of dollars on computers during the 1980s, but there was no sign of a pickup in productivity in the economy until the mid-1990s. Yet, eventually, competitive markets provided the external pressure for businesses to make organizational changes; these were the internal mechanisms by which the adaptation finally occurred.

But what does that abstraction — *organizational change* — mean in practice? It often means a transfor-

mation of the work people do every day; among the most dramatic examples was the introduction of the assembly line and its transformation of work in the early part of the 20th century.

Economists Frank Levy and Richard J. Murnane explore the effect new technologies are having in the 21st-century workplace in their recent book, *The New Division of Labor: How Computers Are Creating the Next Job Market*. Using many concrete examples, and drawing on psychological research as well as economics, they put flesh on the statistical evidence that new technologies raise productivity through the reorganization of work. Computers are good at the fast and efficient repetition of either simple manual tasks or routine cognitive work, but they are bad at tasks that require flexibility, accumulated expertise, and judgment.

Thus the beneficial use of ICTs requires a shift: People should be moved from routine work to work that uses their uniquely human intellectual capabilities. Computers and people then complement each other. The authors give as one example the reorganization of tasks performed by clerks in a New England bank. Traditionally each clerk had specialized in a narrow task such as verifying signatures or processing overdrafts. Reorganizing the work by customer account allowed 530 workers to do what 650 had done previously. Introducing scanning of paper checks so they could be accessed on a screen subsequently reduced the number needed to 470.

This analysis of computerization, of course, emphasizes the efficiency gained by transitioning such “piece” work from people to com-

puters, and exposes the short-term downside — the displacement of workers. But in the longer term, this shift is beneficial not only for the bank, but also for the employees. What had been a boring, repetitive job — such as comparing signatures on checks with the records all day, every day — became a more satisfying one involving greater variety, responsibility, and intellectual stimulation. For this work, employees must be more skilled, but they are also better compensated. This is the theme of the second part of the Levy and Murnane book. They note that American workers who use computers command a wage premium of about 15 percent over workers who do not. This is not merely due to their computer skills. The book also cites a German study that found that workers in Germany who use *pencils* also earn wages higher than workers who do not. It is not the ability to operate the technology per se that brings the rewards, but the other skills being applied by those people, such as expert knowledge, the capability to engage in sustained reasoning, and the ability to communicate complex ideas.

The problem, however, is that too few people are acquiring the educational skills employers need. And while the pay of more-skilled knowledge workers has risen, earnings of the less-skilled workers have fallen. As a result, earnings inequality has increased dramatically in the United States during the past 20 years, with a decline during that period in the real incomes of those people with no or low qualifications. This issue, Messrs. Levy and Murnane conclude, is a far more challenging by-product of computerization of work processes than downsizing. “Sustained shifts in the

demand for labor lack the drama of mass unemployment. But these shifts, if ignored, can lead to extraordinary pain for many workers and ultimately threaten the fabric of our society,” they write.

This conclusion is one that worries many on the Old World side of the Atlantic. Europeans tend to place more value than Americans on equality, or what is often in Europe called “social cohesion.” Many Europeans believe the merit of faster growth in the New Economy is simply outweighed by the consequent increase in earnings inequality. They see it as valid to choose a different political trade-off, which means they will resist changes in the organization of work even when it would boost investment spending and growth.

Michael J. Mandel, chief economist at *Business Week*, agrees that the tension between faster growth and greater income inequality puts politics at the heart of the New Economy debate. In *Rational Exuberance: Silencing the Enemies of Growth and Why the Future Is Better Than You Think*, he notes: “There’s a strong liberal antipathy to exuberant growth, which can be summarized by a simple syllogism.

Resources on Transatlantic Economic Trends

Works mentioned in this review.

Dale W. Jorgenson, Mun S. Ho, and Kevin Stiroh, "Will the U.S. Productivity Resurgence Continue?" New York Federal Reserve, *Current Issues*, December 2004, Volume 10, Number 13; www.newyorkfed.org/research/current_issues/ci10-13.html

Frank Levy and Richard J. Murnane, *The New Division of Labor: How Computers Are Creating the Next Job Market* (Princeton University Press, 2004), 200 pages, \$24.95

Michael J. Mandel, *Rational Exuberance: Silencing the Enemies of Growth and Why the Future Is Better Than You Think* (HarperBusiness, 2004), 224 pages, \$24.95

André Sapir, Philippe Aghion, Giuseppe Bertola, Martin Hellwig, Jean Pisani-Ferry, Dariusz Rosati, Jose Vinals, and Helen Wallace, *An Agenda for a Growing Europe: The Sapir Report* (Oxford University Press, 2004), 208 pages, \$95.00

Organization for Economic Cooperation and Development, *ICT and Economic Growth: Evidence from OECD Countries, Industries and Firms* (2003), 104 pages, free; www.oecdbookshop.org

Technological change increases income inequality, increases insecurity, and erodes the power of skilled labor by automating or 'deskilling' jobs. Income inequality and insecurity are bad, and so is reducing worker power. Therefore technological change is bad." Mr. Mandel also recognizes that the wage gap between the college-educated and the rest of the population has widened: "As information technology has pushed into the workplace over the past decade, it's put a premium on people who are quickly able to learn new skills and figure out new ways to use the technology," he writes. (For a complete review of Mr. Mandel's book, see "Best Business Books 2004," *s+b*, Winter 2004.)

If the politics of jobs disruption is difficult in the United States, it's all the harder in sclerotic — and socially cohesive — Old Europe. However, the balance of political opinion in Europe may be shifting in favor of economic reforms that strengthen European competitiveness, including promotion of ICT as a basis for growth. In theory, the EU has been pushing for high-tech growth since the Lisbon Summit in 2000. But the so-called Lisbon

Agenda suffered from having so many policy "priorities," from more jobs to a cleaner environment, that it allowed politicians to describe virtually anything they did (including nothing) as economic reform. Nearly halfway through the 10-year strategy, the Lisbon Agenda is widely recognized as a dead duck — and not just by European businesspeople chafing against the many public intrusions on private enterprise, but by politicians, too.

One signal of the shift in opinion toward a more growth-oriented agenda was the publication in mid-2003 of a significant report entitled *An Agenda for a Growing Europe: The Sapir Report*, commissioned by Romano Prodi, the former president of the European Commission.

The group of experts he assembled, led by French economist André Sapir, were up-front about the problem others have cited: Europe has been growing more slowly than the U.S. because of much slower adoption of ICTs. If one combines this problem with the aging EU population and the effect of a shrinking work force on potential growth, the report argues, European leaders have no choice but to move beyond rhetoric declaring that "growth must become Europe's number one priority."

In that vein, the report is bold in giving short shrift to the widespread notion in Europe that the gap in economic performance reflects a preference for a different social model. Still, it recognizes the

Workers in Germany who use pencils earn wages higher than workers who do not.

central political dilemma: the long-term benefits of technology-driven growth, including higher standards of living, will come only at the short-term cost of disruption in jobs.

The transatlantic gap in the adoption of information and communication technologies has been thoroughly documented by the Organization for Economic Cooperation and Development. A summary of its extensive research titled *ICT and Economic Growth: Evidence from OECD Countries, Industries, and Firms* was published in August 2003, although the group's Web site has a number of more recent working papers. One indicator used in the report — the adoption rates of new technologies — shows how much businesses spend on new technologies. Between 1980 and 2000, the share accounted for by ICTs increased to 28 percent from 14 percent of total investment spending in the U.S. The U.K. saw an even bigger jump, to 22 percent from 5 percent of total annual business investment. But this contrasts sharply with Germany, where the proportion of investment spending on new technology rose a mere 5 percent, from

12 to 17 percent, and with France, where it rose from 6 percent to a paltry 13 percent share.

What might explain these large differences in technology adoption rates among these countries? The OECD finds that several factors contribute. The costs of the technologies and telecommunications, for example, differ among countries depending on the degree of competition in each market. The costs that firms incur in making new technologies effective in the workplace also vary. These include the regulatory burden, the ease with which businesses can start up and shut down, and the cost of raising funds. But the employment system matters even more in explaining the U.S.–E.U. competitive divide, precisely because the successful adoption of new technologies is so disruptive to patterns of work. According to the OECD's economists, there is a strong negative correlation between the level of employment protection in a country and the extent to which its businesses have invested in ICTs. The U.S. and U.K. are at one end of the diagonal, and France, Germany, and Italy are at the other.

The quality of management

also plays a key part in the degree to which companies achieve productivity improvements from their ICT investments. In an echo of the New York Fed's research, the OECD report says firms that get the most out of their investment in ICT were already making big gains in productivity and market share growth. What's the source of their momentum? According to the report, it is innovative management and organizational adaptability. In contrast, firms that were less innovative and adaptable but invested just as much in ICT received low returns or no returns at all, because they were "attempting to compensate for poor overall performance."

More business investment and better business organization and management may be the keys to New Economy-style economic growth. But savvy political management of job loss and income inequality is central to economic prospects — on both sides of the Atlantic. Although Europe certainly needs to catch up on growth, America needs to do more to ensure that as many people as possible benefit from the potential of the New Economy. +

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**You're in Charge — Now What?
The 8-Point Plan**

By Thomas J. Neff and
James M. Citrin
Crown Business, 2005
320 pages, \$25.00

You never get a second chance to make a first impression, and nothing could be more important for an incoming CEO. In *You're in Charge*, Thomas J. Neff and James M. Citrin, senior partners in the U.S. executive search firm Spencer Stuart, outline an eight-point plan for newly appointed organizational leaders. With a special emphasis on building credibility in the critical first 100 days (one CEO likens it to working with quick-drying cement), they lay out a plan of action for the next 100 days, and the periods beyond. Their conclusions are drawn from an in-depth study of 100 recent leadership transitions.

The authors' "what to do" list sounds relatively simple: prepare during the "countdown" period, set and align expectations, shape the management team, craft a strategic agenda, start changing the culture, manage the board/boss, communicate well, and avoid major pitfalls. The challenge is that all these agen-

da items must be pursued at the same time. Thus, the "how-tos" in each of these areas, which depend entirely on the organization's context, are complex to explain. The authors tackle this complexity by telling a number of stories featuring several new CEOs, including prominent executives like Jeffrey R. Immelt (GE) and James M. Kilts (Gillette), and describing the different ways they went about accomplishing key tasks.

The authors emphasize the need for new leaders to come into the organization with a strategic *process* rather than a strategic *plan*. They encourage leaders to listen rather than proclaim, and to focus on building the preconditions for change rather than trying to force change at a speedy pace. The pitfalls for CEOs of any tenure are well known, but the authors' advice is especially applicable to new leaders. They warn: Don't set unrealistic expectations, tardy decisions are as dangerous as premature ones, don't be a know-it-all, don't stick to past formulas that have worked for you, don't surround yourself with yes-men or stifle dissent, don't imagine that you are the lone savior of the business, don't misread the true

sources of power or pick the wrong battles, and never, ever disparage your predecessor.

**Joy at Work: A Revolutionary
Approach to Fun on the Job**

By Dennis W. Bakke
PVG, 2005
336 pages, \$24.95

Joy at Work is the passionate autobiography of Dennis Bakke, former CEO of the global energy company AES. Until the energy industry was shaken up by the collapse of Enron, AES had been something of a corporate "poster company" for management writers — a company with a unique values-driven management style that had stellar financial results. Alas, such companies have the nasty habit of imploding just as their hagiographies are being written, and AES was no exception. It was sucked into the downdraft created by the Enron debacle; the stock price is still at levels last seen in the early 1990s.

Mr. Bakke makes clear, however, that his views on the role of values in management are independent of the corporation's stock price. The benefits of his approach, he argues, accrue to the community

Successful retailing sells experiences. Experiences come from core values and purposes.

as a whole, not necessarily to the organization that practices them. The values he espouses are those of servant leadership — humility, courage, love, passion, and integrity. They spring from his deep Christian convictions, but he makes a powerful argument, supported by the responses of AES employees around the world, that these are in fact universal human values. For management, the implication of this approach is a radical decentralization of decision making accompanied by the wide distribution of the information necessary for workers to make sound decisions at the lowest possible levels of the organization. Mr. Bakke's ideal model is that of the self-regulating beehive, where individuals behave adaptively without reference to any central authority.

The challenge of living one's values in every context is that it can make for rocky relationships with more pragmatic people, especially when the going gets rough. Every time AES suffered a setback, Mr. Bakke had to deal with directors and commentators who argued that it was the decentralized management approach that was responsible for the problems. In this respect, it

would have been interesting to hear more about his working relationship with Roger Sant, with whom he cofounded AES in 1982. In the aftermath of Enron's collapse, Mr. Bakke makes a spirited defense of his approach at AES, contending that it was three specific strategic decisions, not his management philosophy, that aggravated the company's troubles. But, whatever the reasons, the "100-year flood" (his characterization of AES's difficulties) cost him the confidence of his board and led to Mr. Bakke's decision to retire from AES. Some might say he was a martyr for his cause.

Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant

By W. Chan Kim and Renée Mauborgne

Harvard Business School Press, 2005
272 pages, \$27.95

Can a business masterpiece be created using a paint-by-numbers kit? The answer provided by INSEAD professors W. Chan Kim and Renée Mauborgne in *Blue Ocean Strategy* is "yes." The authors set out to provide practical frameworks and analytics

for the systematic pursuit and capture of value in the emergent markets they call "blue oceans." These are markets where demand is untapped and competition does not yet exist, whose pristine beauty is displayed in stark contrast to the murk and stagnation of their crowded red counterparts.

Although the blue ocean metaphor is evocative, the arguments in the book are less compelling. The authors examine the histories of the corporations they use as examples as if these organizations were themselves strategic actors. Thus the wildly successful entertainment company Cirque du Soleil is portrayed as analyzing, planning, deciding, and acting as if the company were an individual. This is harmless shorthand for casual discussion, but it is a hindrance to understanding the causal connections involved in navigating uncharted oceans. Could the Cirque really have substituted the systematic development and execution of strategy for the passionate, gloriously messy learning process it actually went through?

Such judgment generally surfaces retrospectively. As the Cirque's creative director once said, "We

intend to look back over the last 10 years to find where we are headed.” One questions whether the lessons to be drawn from this example, or the authors’ other ones, are really about strategizing, or whether they are more about learning and the evolution of successful ventures. In short, some readers may be concerned that the authors have confounded the question of *why* some enterprises succeed with the question of how they are created.

But although *Blue Ocean Strategy* may not help managers find truly undiscovered opportunities, the authors’ “strategic canvas” offers both a diagnostic framework and an action plan that invites managers to challenge the boundaries of their existing definitions of *industries*, *customers*, and *markets* by a combination of eliminating, reducing, raising, and creating the various ingredients that comprise a successful venture: the authors call the resulting profile a “value curve.”

Although they separate strategy formulation from implementation in the structure of the book, the authors warn against this split in practice, arguing that it leads to a lack of trust, commitment, and cooperation among employees. They

outline a “fair process” of strategy formulation that calls for extensive field exploration and early involvement of those who will be implementing the strategy. In this way, a strong basis for effective execution is built in from the start.

Built for Growth: Expanding Your Business Around the Corner or Across the Globe

By Arthur Rubinfeld and Collins Hemingway
Wharton School Publishing, 2005
368 pages, \$25.95

If you’ve ever considered opening or investing in a retail startup, you really should take a look at *Built for Growth*. Author Arthur Rubinfeld is a consultant who was formerly executive vice president of store development at Starbucks. Under his guidance, the coffee chain grew from 100 stores to nearly 4,000 worldwide. He has used his considerable expertise to create an excellent handbook for retail store development, aided by an expert writer, Collins Hemingway (coauthor of Bill Gates’s *Business @ the Speed of Thought*).

The authors structure their discussion around familiar aspects

of retailing — planning, execution, location, and innovation. Although most of the concepts in the book are not particularly new, what is impressive is the in-depth discussion and integration of these elements, which can come only from people with true expertise. The authors suggest that today there are only three viable positions for retailers: exclusive specialty retailers such as Williams-Sonoma and Tiffany & Company; targeted lifestyle retailers like Starbucks and Banana Republic, and price/value retailers such as Wal-Mart and Costco.

Once you have chosen a position, the authors maintain, successful retailing has more to do with selling experiences than products, and the touchstones for powerful experiences come from the core values and purposes of the venture. These values and purposes are derived from the repeated distillation of the firm’s mission until the essences — things that are special and specific about the firm’s offerings — appear. These essences must then be expressed in every aspect of what the firm does: location, design, presentation, decor, merchandising, and so on.

If the intention is to grow the

concept, this is the time when modularity must be built in — plug-and-play designs that can be used to express the essences in a wide variety of physical situations. Mr. Rubinfeld describes how he created a multifunctional “skunkworks” at Starbucks to create in-house store prototypes that embodied the coffee vendor’s touchstones of earth, fire, water, and air.

In addition to stressing the theatricality and sensuality critical to powerful experiences, the authors devote considerable time to the nuts and bolts of selecting real estate, negotiating with landlords, and other nitty-gritty details of retailing. Like a fine retail store, the book is a meticulous blend of conceptual clarity and bone-deep experience.

Deep Smarts: How to Cultivate and Transfer Enduring Business Wisdom

By Dorothy Leonard and
Walter Swap

Harvard Business School Press, 2005
288 pages, \$29.95

Dorothy Leonard is the William J. Abernathy Professor of Business Administration emerita at the Harvard Business School and Walter Swap is professor of psychology emeritus at Tufts University. In *Deep Smarts*, this wife-and-husband team examine the way experienced entrepreneurs succeed in transferring “deep smarts” (known formally as tacit knowledge) to business neophytes. They were studying startup companies in Silicon Valley and other entrepreneurial hot spots in 2000–2001 when the dot-com bust gave them a natural before-and-after situation as they tried to assess whether, and if so how, business novices could acquire the expertise

to become apprentices, journeymen, and — ultimately — masters of their craft.

The book is built on an academic 2x2 matrix: One axis distinguishes between the acquisition of deep smarts and the shaping of that intelligence; the other axis contrasts the internal and external influences on intelligence. The nine chapters take the reader on a circular journey, from building of knowledge to its framing and filtering, and finally to transferring that knowledge from expert to novices so that they can achieve mastery.

Deep smarts are acquired through experience rather than formal teaching, and in any complex field it can take as long as 10 years to develop an expert. The challenge for both managers and teachers of business is how to accelerate this process. Many try to do so by using simulations to compress both space and time and to allow safe experimentation. But good simulations are hard to find and often omit crucial dimensions — car designers still build clay models despite the advances in computer-assisted design, because nothing but clay supplies that sensual relationship between designer and car. If only we had “clay models” of organizations to augment our business cases.

Rigorous academic frameworks that allow broad generalizations are usually hostile to the narrative structures that best convey the content-specific advice desired by managers. Although the authors try to address this problem with short sections on the “Implications for Managers,” and summary bullets at the end of every chapter, *Deep Smarts* is not a smooth read. Perhaps this is the fate of any book that extols the value of learning through experience! +