

Improving European Competitiveness: MGI Perspective

McKinsey Global Institute (MGI)

The McKinsey Global Institute is McKinsey & Company's economic think tank. Founded in 1990, its mission is to offer insights into economic issues of relevance to global corporate and policy leaders. The Institute combines the rigor of world-class economic analysis with the depth of real business management experience unique to McKinsey & Company. Its conclusions reflect intensive analysis and active dialogue with industry experts and executives. Our results are fully syndicated by Academic Advisory Boards composed of leading academic thinkers.

The McKinsey Global Institute's research is independent and is not commissioned or sponsored by any business, government or other institution.

McKinsey & Company, Inc.

McKinsey & Company is one of the largest and most influential global management consulting firms. Since our founding in 1926, McKinsey's primary mission has been to help our clients achieve distinctive, substantial and lasting improvements in their performance. With more than 7,000 consultants deployed from 84 offices in 43 countries, McKinsey advises leading companies on strategic, operational, organizational and technological issues. We also advise a diverse group of governments, public sector institutions, and non-profit organizations on management and policy challenges.

www.mckinsey.com

FOREWORD

"Improving European Competitiveness: MGI Perspective" distills insights from several McKinsey Global Institute in-depth research projects on European nations conducted over the past decade. Our conclusions from these studies were published in separate reports, which are publicly available on our Web site or can be obtained by contacting us directly.

Reaching Higher Productivity Growth in France and Germany, 2002

Poland's Economic Performance, 2000

Removing Barriers to Growth and Employment in France and Germany, 1997

Driving Productivity and Growth in the U.K. Economy, 1998

Boosting Dutch Economic Performance, 1997

Sweden's Economic Performance, 1995

Through our research and direct work with clients, we observe the huge potential that can be tapped in order to boost productivity performance. It is our hope that our conclusions will help policy makers and business leaders unlock this potential by providing them with an objective and fact-based perspective.

Diana Farrell
Director of the McKinsey
Global Institute
July 2003

www.mckinsey.com/knowledge/mgi

McKinsey Global Institute
555 California Street
San Francisco, CA 94104
(415) 318-5415

McKinsey Global Institute
600 14th Street, NW
Washington, D.C. 20005
(202) 662-3141

Improving European Competitiveness: MGI Perspective

Diana Farrell, McKinsey Global Institute

Europe comprises a disparate group of economies that have followed individual development paths. Not surprisingly, the differences in economic performance over time are wide: the relative economic standing of Sweden and Ireland in terms of GDP per capita has actually flipped in the past decade (Chart 1). Generalizations about Europe at the macroeconomic level are thus unlikely to provide convincing explanations of the causes of this variation in performance.

CHART 1

During the 1990s Sweden lost ground while Ireland gained

Ranking among OECD countries*

Ranking 1970	Ranking 1980	Ranking 1990	Ranking 1995	Ranking 2001
1 Switzerland	1 United States	1 Luxembourg	1 Luxembourg	1 Luxembourg
2 United States	2 Switzerland	2 United States	2 United States	2 Norway
3 Luxembourg	3 Luxembourg	3 Switzerland	3 Switzerland	3 United States
4 Sweden	4 Canada	4 Canada	4 Norway	4 Ireland
5 Australia	5 Sweden	5 Japan	5 Japan	5 Switzerland
6 Canada	6 Australia	6 Sweden	6 Canada	6 Denmark
7 Denmark	7 France	7 Norway	7 Denmark	7 Netherlands
8 France	8 Iceland	8 Iceland	8 Iceland	8 Canada
9 Netherlands	9 Norway	9 France	9 Iceland	9 Iceland
10 New Zealand	10 Belgium	10 Denmark	10 Australia	10 Austria
11 Belgium	11 Denmark	11 Austria	11 Austria	11 Belgium
12 United Kingdom	12 Netherlands	12 Belgium	12 Germany	12 Australia
13 Germany	13 Austria	13 Australia	13 Netherlands	13 Japan
14 Austria	14 Italy	14 Netherlands	14 Sweden	14 Finland
15 Italy	15 Japan	15 Finland	15 France	15 France
16 Norway	16 Germany	16 Italy	16 Italy	16 United Kingdom
17 Finland	17 Finland	17 Germany	17 United Kingdom	17 Kingdom
18 Japan	18 United Kingdom	18 United Kingdom	18 Kingdom	18 Germany
19 Iceland	19 New Zealand	19 New Zealand	19 Ireland	19 Sweden
20 Spain	20 Spain	20 Spain	20 New Zealand	20 Spain
21 Ireland	21 Ireland	21 Ireland	21 Spain	21 New Zealand
22 Greece	22 Greece	22 Czech Republic	22 Portugal	22 Portugal
23 Portugal	23 Portugal	23 Portugal	23 Greece	23 Greece
24 Mexico	24 Mexico	23 Portugal	24 Czech Republic	24 Korea
25 Turkey	25 Korea	24 Greece	25 Korea	25 Czech Republic

* Based on GDP per capita at current prices and current PPPs
Source: OECD National accounts 1970-2002

We believe that the approach followed by the McKinsey Global Institute (MGI), in focusing on productivity at the sector level in each country, can play a valuable role in illuminating the underlying opportunities for improvement. The focus on productivity is apposite, as productivity gains are core to economic growth – they generate the surplus that can then be reinvested, paid out in wages or distributed as consumer value (charts 2 and 3).

Over time, international competitive forces tend to drive companies operating in the same sector, wherever they might be located, toward similar or converging productivity levels. However, comparisons of the

CHART 2

Productivity growth is the engine of economic growth

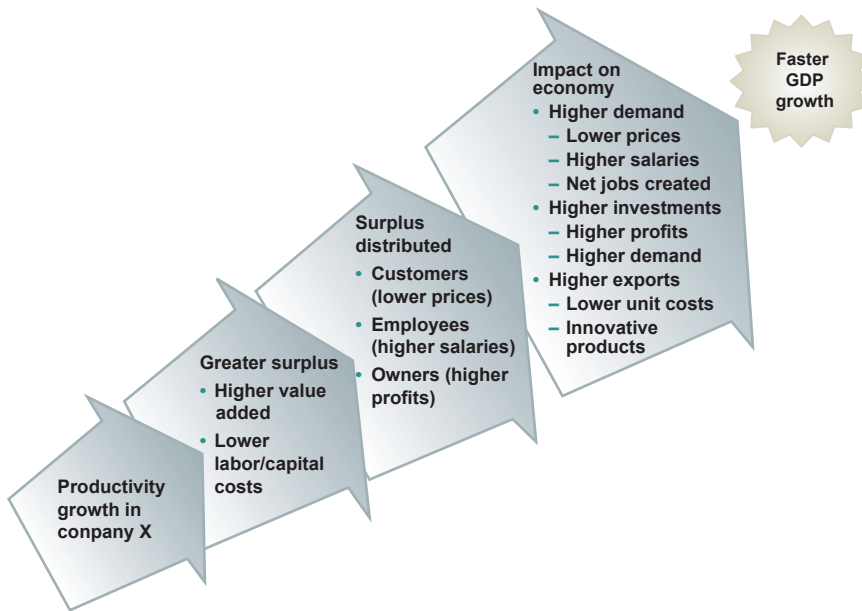
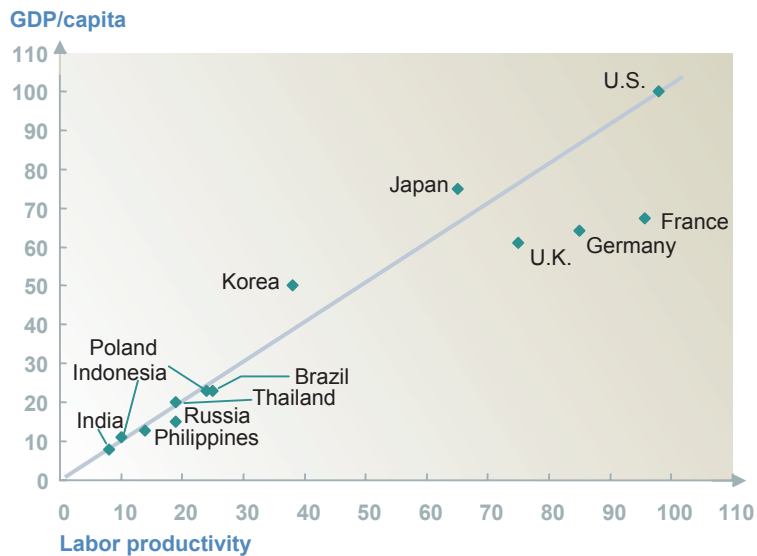


CHART 3

Empirically, higher productivity equals higher GDP

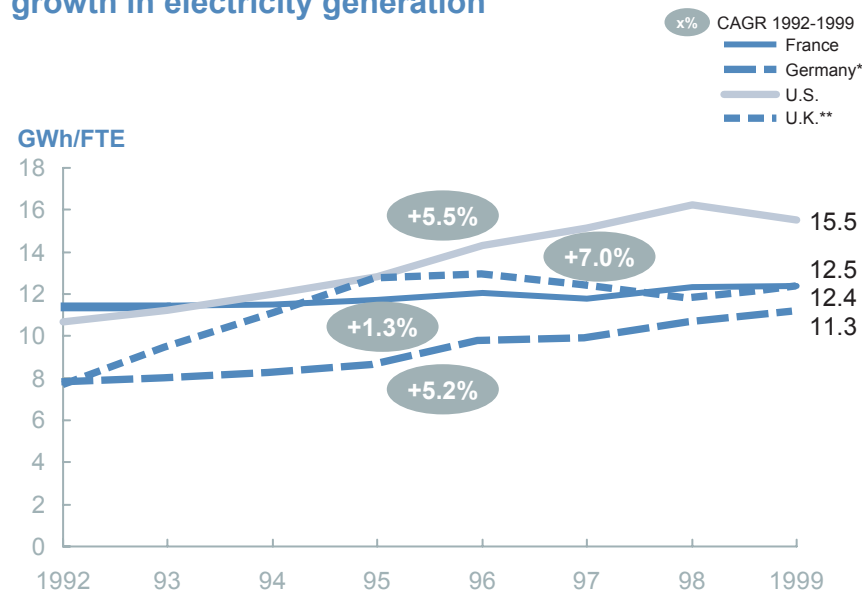
Indexed to the U.S. = 100 at PPP in 2001



same sector across countries can reveal stark differences in performance at any one time. These differences help provide insight into an economy's underlying strengths or weaknesses. For example, over the past decade the French automotive industry made substantial gains in productivity, as compared to the German automotive industry, which has started to fall behind in comparison to the United States. In contrast, the German fixed telecommunications sector performed more strongly than its French counterpart. And whereas overall manufacturing productivity in the United Kingdom stagnated, productivity in electricity generation grew more rapidly than its French and German counterparts (Chart 4). There are lessons to be learned in each case.

CHART 4

U.K. liberalization led to high labor productivity growth in electricity generation



* Excluding industrial power production
 ** England and Wales
 Source: MGI analysis

In the future, productivity gains will play an even more important role in determining growth in Europe. Demographic shifts in years to come towards an older population and a much smaller working-age share will result in fewer people participating the work force and more people dependent on those few. In order to maintain Europe's wealth, even greater productivity gains will be required from those who do work (Chart 5). Though a better educated work force provide certain productivity advantages, it also presents its own challenges. Sweden shows that education is pursued later in life can also substantially reduce the size of the labor pool (Chart 6).

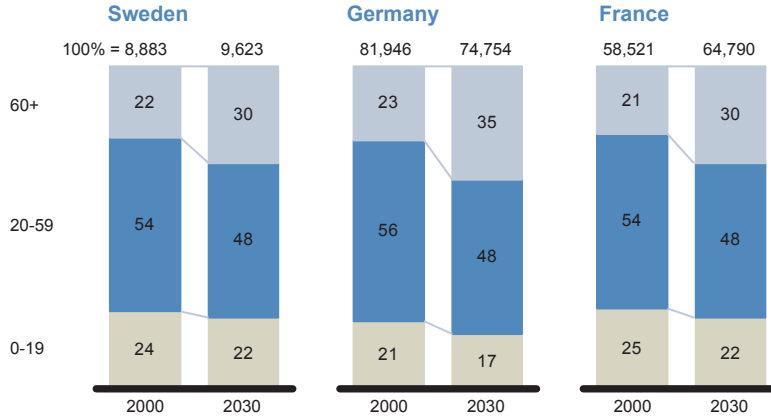
CHART 5

The aging of the population is a challenge for several European countries

EXAMPLE

Population per age group, thousands/percent

Population 20-59 years (de facto working age)

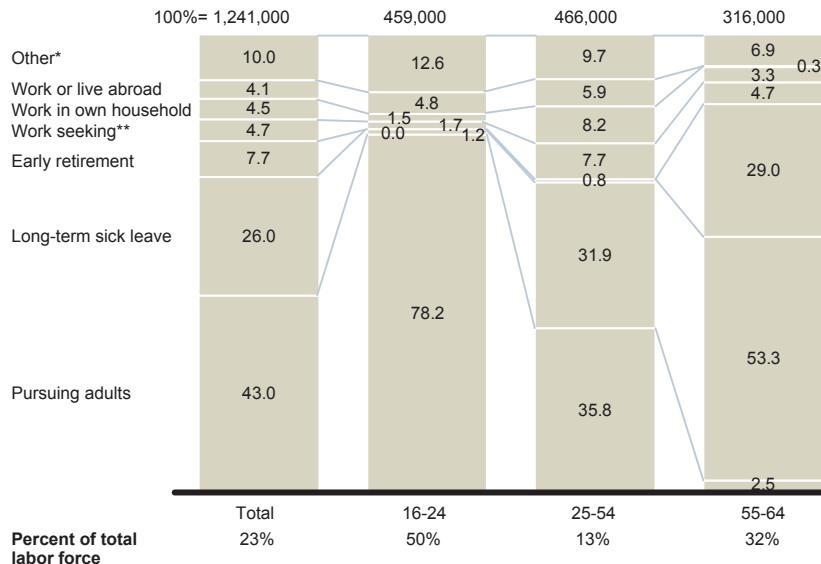


Source: Statistical Yearbook for Sweden 2002; Statistisches Bundesamt; INSEE

CHART 6

Sweden's shrinking labor force is further reduced by adult education

Persons not in the 2000 labor force, by age and cause



* For example, doing military service, having time off, other reasons
 ** Consider themselves work seeking, but do not fulfill criteria for being "unemployed"
 Source: AKU2000; Statistics Sweden

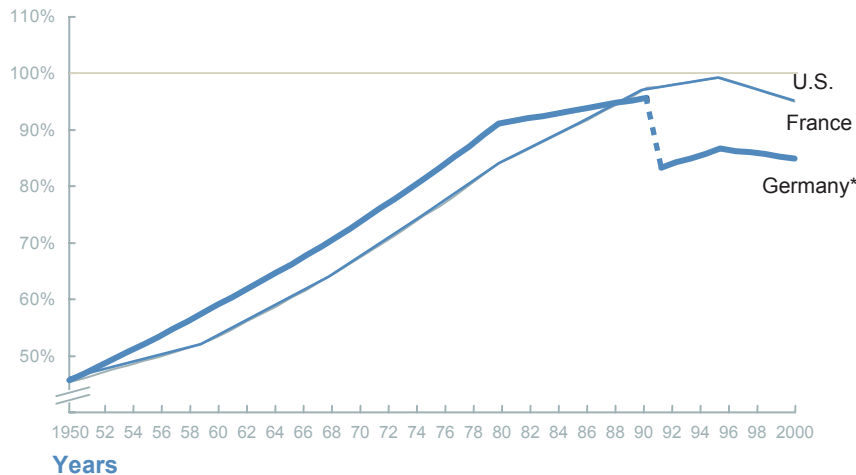
While the most meaningful comparisons may be cross-Europe, it is important to note that U.S. productivity levels are substantially ahead of

Europe in most sectors and that U.S. productivity remains ahead of Europe overall. For much of the past 50 years, Europe has been narrowing this productivity gap. Somewhat worrying for Europe, perhaps, is that the recent period has been the big exception to this trend, and the gap has started to grow once again (Chart 7).

CHART 7

European private sector productivity is no longer gaining ground

Indexed to U.S.

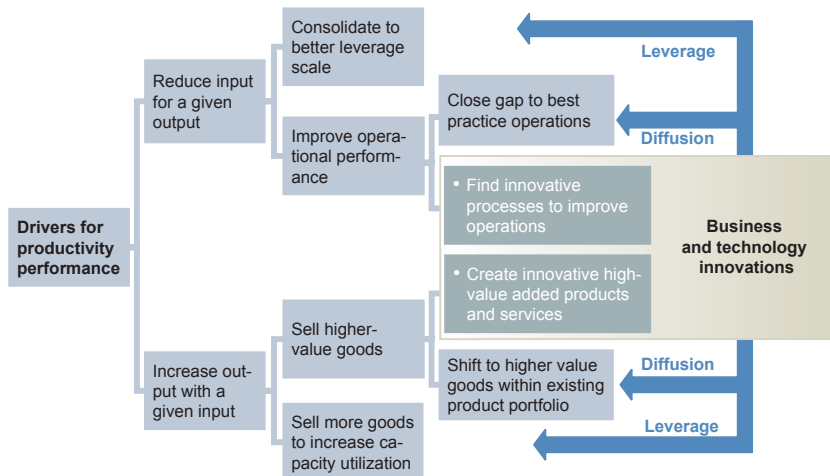


* West Germany until 1989 and total Germany thereafter

Source: University of Groningen and The Conference Board; GGDC Total Economy Database, 2002, <http://www.eco.rug.nl/ggdc>; OECD; BLS; INSEE; MGI analysis

MGI studies of productivity across 15 countries and more than 20 industry sectors indicate that the key to productivity gains at the sector level is the successful development, diffusion, and leverage of business and technology innovation (Chart 8). MGI's research in Europe, including in-depth country studies of France, Germany, the United Kingdom, the Netherlands, Sweden, and Poland, highlight the importance of each of these elements of the innovation cycle to European productivity. As the specific sector cases illustrate, insufficient competition, poor regulation of complex sectors, the presence of obstacles to new business development, the constraints and distortions caused by zoning and development regulations, and weak corporate governance are among the leading culprits limiting innovation across

Innovations play a major role in driving productivity performance



Source: MGI

Europe.

Innovation development

The contribution of innovation to productivity improvement is made startlingly clear in the telecommunications industry. In both France and Germany productivity in the sector grew dramatically during the 1990s, rising at a compound annual rate of 17.7 percent in France and 19.4 percent in Germany (Chart 9). Technology-related improvements accounted for 89 percent of the total telecommunications productivity growth in France and 91 percent in Germany.

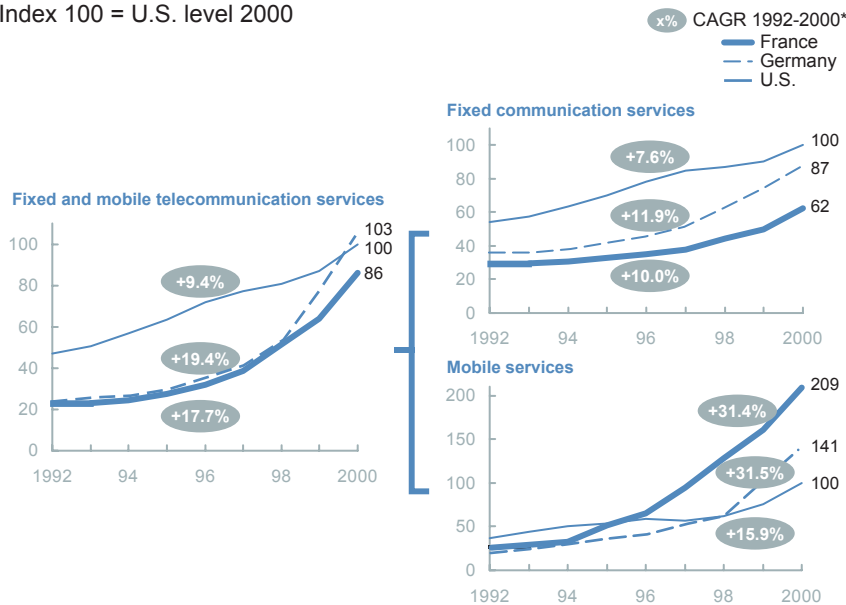
The largest segment of improvement came from innovations in operational support systems and digital technology in mobile services. The mobile services segment grew at an impressive compound annual rate of 27.5 percent in France and 26.5 percent in Germany. The mobile services contribution to telecommunications revenues rose from a fairly insignificant level at the start of this period to account for a third of total revenues by 2000.

IT innovation also played an important role in improving labor productivity in fixed-line services through the introduction of improved order handling, fault management, network inventory and work force management systems. The development of data communication, ISDN services, and Internet dial-up traffic played a significant role in productivity improvement, particularly in Germany.

CHART 9

Mobile telecom innovation led to dramatic gains

Index 100 = U.S. level 2000



* 1992-2000 CAGR, but 1996-2000 in mobile services

Source: FCC; NECA; CTIA; RegTP; ART; ITU; OECD; Gartner/Dataquest; annual reports; operators, Web sites; MGI analysis

Few industries are in the fortunate position of having a major technology innovation lead productivity improvements right across the industry. More often than not, improvements are less general. The role innovation played in the retail banking industry in France is probably more typical, in that improvements were gained through a variety of innovations, such as back-office automation using scanning and image processing and in business innovations in call centers and Internet banking. These innovations were also focused on taking advantage of increased customer demand by offering innovative products and better services (Chart 10). In contrast, in the Netherlands, which has a highly efficient retail banking sector overall, there is much less innovation in personal financial services. This is reflected in the very limited range of investment products on offer. Nationally, there are approximately 200 different funds; this compares with more than 1,000 offered by Schwab alone in the United States. As a result, such investment products represent only 33 percent of the total financial services market in the Netherlands, compared to 42 percent in the United Kingdom and 69 percent in the United States.

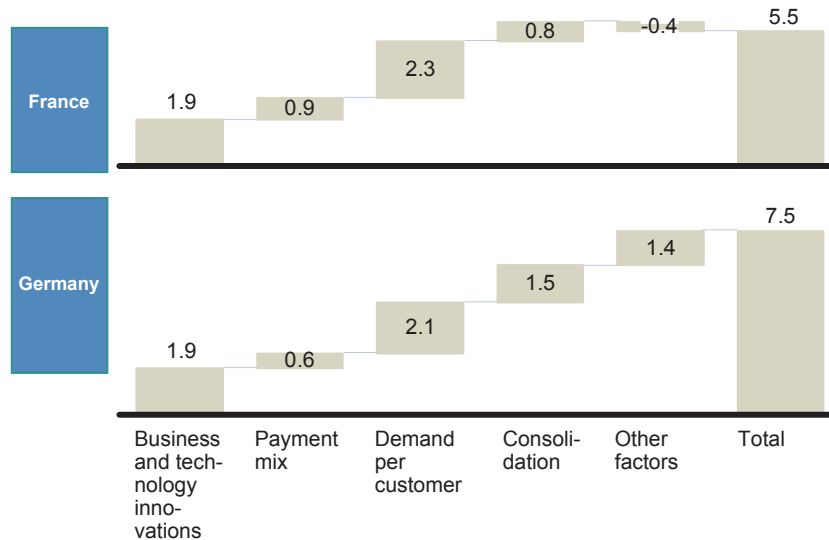
The challenge for Europe is to ensure that it is equipped to repeat the successes seen in mobile telecommunications, in which innovations lead to the development of a completely new sector that can play a critical role in economic growth. The United States has been effective in generating such innovation on a broader basis, where the three leading

CHART 10

Business and technology innovations played a key role in retail banking

ESTIMATES

Percent CAGR 1994-2000



Source: MGI analysis

high-tech sectors in the United States – telecommunications, computer assembly, and semiconductors – contributed 70 percent of the total productivity gains while representing only 8 percent of the GDP. In contrast, the United Kingdom's software development in the 1990s was actively constrained by planning regulations and consequent constraints on infrastructure development, which, when combined with insufficient local demand for new products, slowed and in some cases prevented the beneficial clustering of businesses around natural centers of innovation, such as Cambridge. Such failures can have significant consequences. The lack of flexibility in the Swedish labor market, reinforced by restrictive regulation, helped constrain growth in the services sector in the period 1990 to 1997, at a time when the manufacturing sector was restructuring in the wake of increased globalization (Chart 11). By the time Sweden had begun to compensate for such problems, it had lost substantial ground compared to other advanced economies.

Diffusion

At the business level, productivity improvement does not just arise from innovation but also from the adoption of best practices – in other words, from the replication of other people's innovations. We refer to this as diffusion. Most companies in any given sector are in the position of playing catch-up for much of the time. At the national level, this requires the majority, if not all businesses in the sector, to adopt such

CHART 11

The Swedish service sector had a negative net job creation in contrast to other European countries

Net job creation (civilian employment) per thousand working age population



* Adjusted for growth in working-age population

** Including both private and public sector

Source: OECD Labor Force Statistics, 1981-2001

productivity-enhancing innovations. This process of diffusion can be helped – or hampered – by what impact the regulatory environment has on competitive pressures.

The French automotive industry, for example, earlier lagged behind most of its major competitors. In the late 1990s it took advantage of practices developed earlier primarily in Japan, including lean manufacturing, improved purchasing systems and simplified design processes. These practices helped boost productivity by 15 percent a year (Chart 12). So whereas at the beginning of the decade the German automotive industry had a 30 percent advantage over that of France, by the end of this period the German industry trailed by 4 percent (Chart 13). The stimulus for this change was the threat to French markets of Japanese, German, and Korean competitors posed by proposed regulatory changes. Because the German automotive market did not face the same pressures, there was less incentive to follow the same course of action.

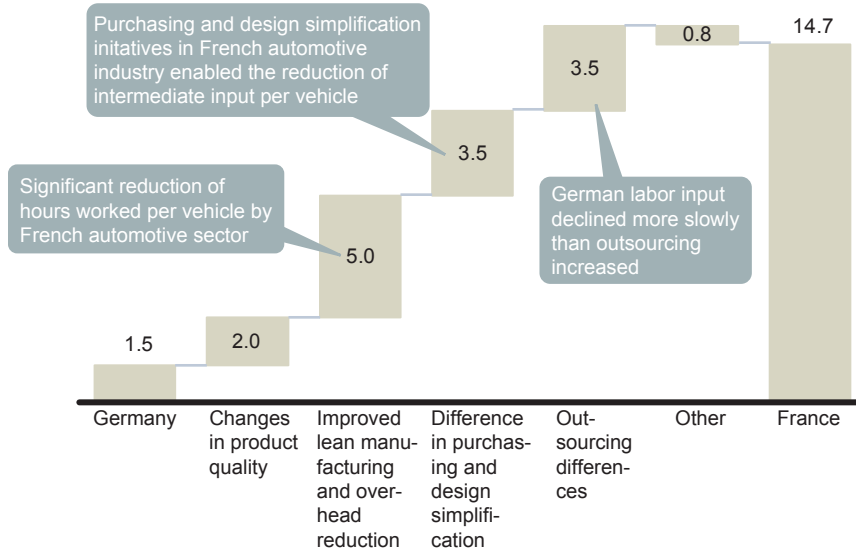
The European automotive industry faces even greater challenges in the components procurement sub-sector. Here, best practice procurement systems rely on just-in-time inventory control and data exchange to build strong relationships with suppliers. Currently, productivity in this sub-sector is well below that in assembly, Portugal providing a stark example, where it achieves productivity 59 percent lower than France (Chart 14).

CHART 12

Innovation led to higher labor productivity growth in the French automotive industry

ESTIMATES

CAGR 1996-99

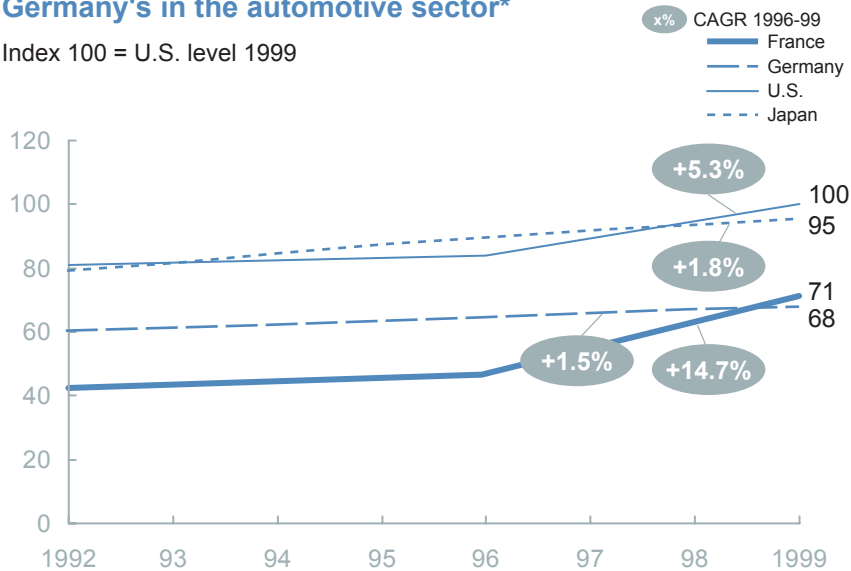


Source: INSEE; Statistisches Bundesamt; MGI analysis

CHART 13

As a result, France's labor productivity has overtaken Germany's in the automotive sector*

Index 100 = U.S. level 1999



* Years between 1992, 1996, and 1999 interpolated

Source: INSEE; Statistisches Bundesamt; U.S. Census Bureau; Census of Manufacturers Japan; MGI analysis

The impact of adopting best practice innovations can also be seen in the

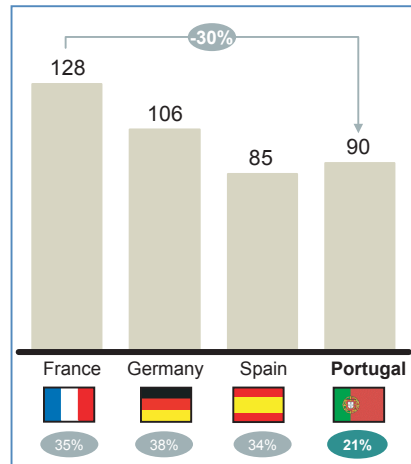
CHART 14

Portugal's productivity gap in automotive components is much larger than that in assembly

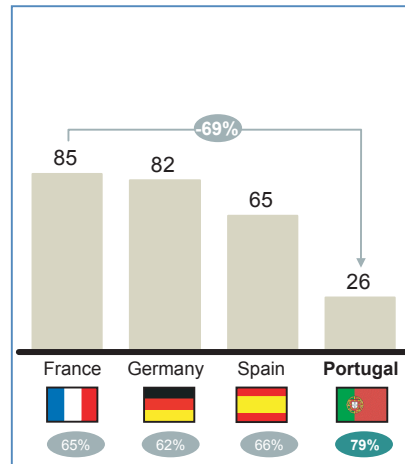
100 = France's automotive sector productivity in 2000

● % of employment

Labor productivity in the Assembly sub-sector



Labor productivity in the Components sub-sector



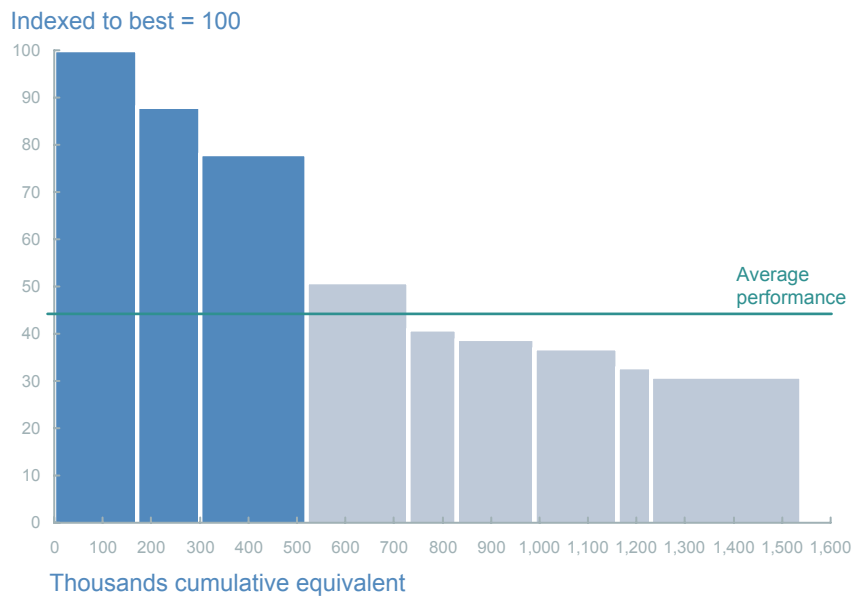
Source: National statistics offices; VDA; AFIA; FIEV; McKinsey research; team analysis

traditionally moribund U.K. automotive industry. Whereas the average productivity of a U.K. manufacturing plant was less than half that of its Japanese counterparts, Japanese manufacturers were able to transfer lean manufacturing techniques to their U.K. plants and achieve similar productivity levels to those seen in Japan (Chart 15).

Other industries have yet to learn these lessons and have failed to adopt innovative techniques that have been applied elsewhere. That they fail to do so, is often due to the unexpected consequences of legislation. In retail banking, for example, France has yet to adopt Germany's more efficient electronic payment methods because payment by check is protected by laws that ensure that all checks are free to bank customers. In the U.S. retail industry, collaborative supplier relations are facilitated by collecting point-of-sale data on individual products in combination with the use of data warehouses and forecasting tools. In France, in contrast, zoning laws protect the dominant position of the incumbent hypermarkets, thereby giving them little reason to adopt such techniques, so supplier relations tend to be less collaborative. The impact of planning restrictions on U.K. labor productivity is even more stark, as the average store size is just two-thirds that of France, preventing stores from reaching the necessary scale for optimal operations while simultaneously increasing the throughput. Moreover, onerous labor laws discourage the

CHART 15

Japanese automotive companies used U.K.-style lean manufacturing processes to raise productivity to international levels



* Represents 90% U.K. production
Source: EIU data; company accounts; DRI data

use of additional low value-added workers, such as "baggers" at check-out desks. The advantages of large store size is also readily apparent in Poland, where the new hypermarkets that have entered the country since 1995 have achieved productivity levels 75 percent of those seen in the United States – some three times the level of traditional domestic formats. However, as in the United Kingdom, land restrictions are hampering the expansion of this format.

Leverage

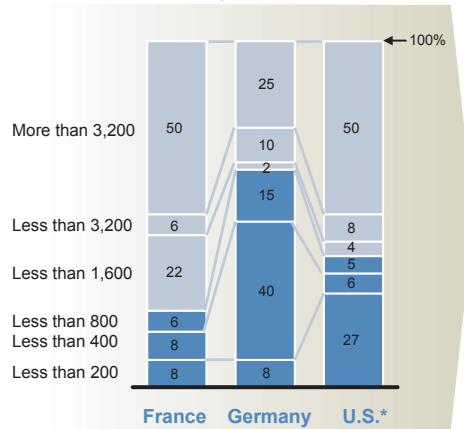
Sometimes European industries are not in a position to adopt innovative technologies, services, and processes because they have insufficient scale or demand to do so. The ability to leverage innovations to optimal scale is often critical to productivity performance. This is true, for instance, of the German retail banking industry, which has a productivity level 18 percent lower than that in France. The majority of this difference is accounted for by the lack of consolidation in the German banking industry, whose current ownership structure restricts the opportunity for consolidation. As a result, the numerous small banks are not in a position to fully leverage the advantages of IT-led productivity enhancements, such as back-office automation, so productivity remains relatively low (Chart 16).

CHART 16

Bank size affects German bank productivity ■ Small banks

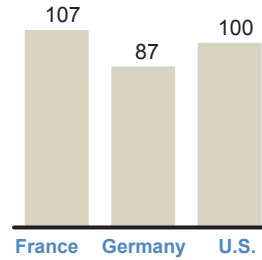
Banking structure 2000

Percent, number of employees



Impact of bank size on productivity (all other factors being equal)

Index 100 = U.S. level 2000



* 1997

Source: National bank associations; BLS; MGI analysis

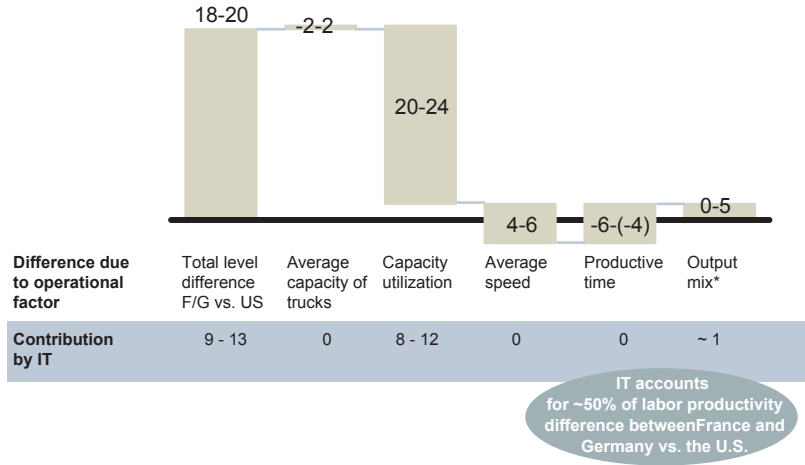
A similar challenge currently confronts the road freight industry in both France and Germany. Having shown strong productivity growth of approximately 5 percent per year during the 1990s, French and German road freight productivity is now at approximately 80 percent the U.S. level. The major portion of the remaining gap is accounted for by lower capacity utilization. In order to bridge this gap, bar coding, network optimization and dispatching technologies will need to diffuse throughout the industry (charts 17 and 18). However, despite the consolidation of the 1990s, the top six companies still only account for 8 to 9 percent of revenues, the sector landscape being completed by thousands of small companies. Further consolidation, therefore, is likely to be necessary before the sector can fully leverage the current technologies.

CHART 17

European capacity utilization is a key challenge for road freight productivity

ESTIMATE

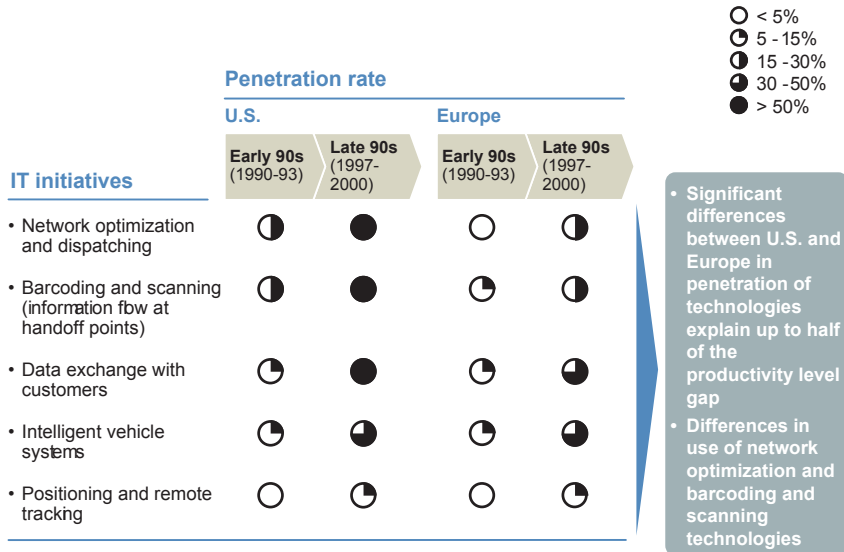
Percent of U.S. 2000 level



* Difference in share of time-definite and expedited shipments
Source: MGI analysis

CHART 18

Europe lags in adopting new technology in road freight



Source: ATA; expert interviews; MGI analysis

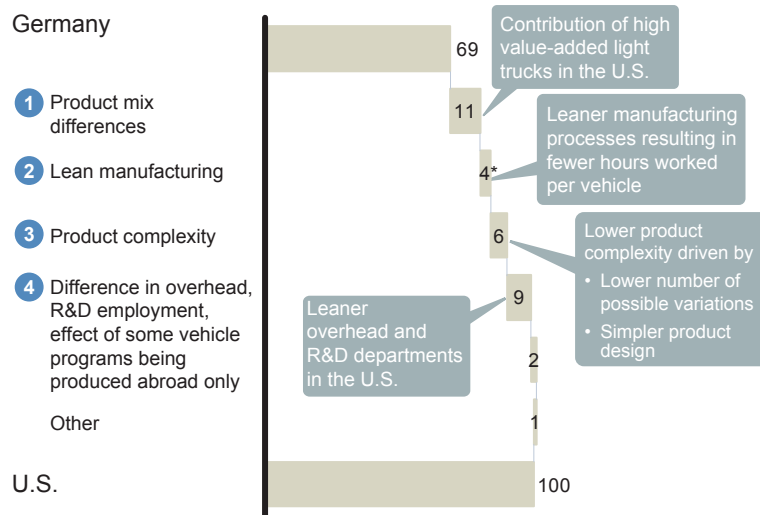
Differences in demand patterns can also prevent leverage of productivity improvement opportunities. For example, one of the key differences between the French and German automotive markets and that of the United States is in the demand for light trucks (SUVs) (Chart 19). Whereas there is little demand for such vehicles in Europe, this high value-added segment accounts for 50 percent of all vehicles sold in the United States and single-handedly gives the United States an 11 percent productivity advantage.

CHART 19

The impact of demand differences in U.S. vs. German automotive industry

ESTIMATE

Index 100 = U.S. level 1999



* Expert estimate
Source: Statistisches Bundesamt; U.S. Census Bureau; MGI analysis

* * *

This brief summary shows the vital role innovation development, diffusion and leverage plays in driving productivity improvement in Europe. It also serves to highlight the substantial differences in performance between countries at the sector level, which are often disguised at the aggregate level, and the important role legislation plays in facilitating or hampering such improvements. In the long run, improving European competitiveness will hinge on how well the regulatory and demand environment enables companies to develop, diffuse and leverage business and technology innovations – their own, or those of their competitors. Thus, continued economic reform is essential to improving European competitiveness.

