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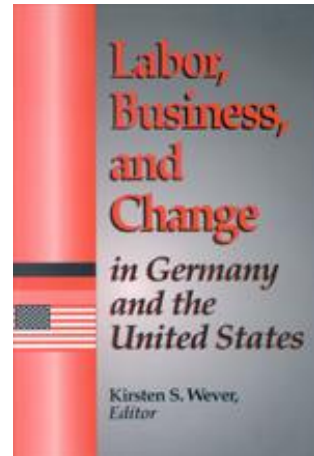
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# Institutional Effects on Skill Creation and Management Development in the United States and Germany

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# 3

## **Institutional Effects on Skill Creation and Management Development in the United States and Germany**

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Political economists are devoting greater attention to issues of skill development and corporate restructuring (Streeck 1989; Finegold and Soskice 1988). The shift from a focus on inflation and the welfare state to education, training, and economic competitiveness reflects the profound shifts that have taken place in the global economy in the last decade. The combination of the growing interdependence of national economies, the emergence of new, low-cost but relatively high-quality competitors, and rapid technological change has led many to conclude that the only way for the advanced industrial countries to maintain or improve their standard of living is to raise the skill levels of their citizens (Reich 1991). Likewise, education and training are seen as one of the main solutions to the growth in wage inequality that characterized many of the developed economies in the 1980s and early 1990s (OECD 1994).

Most of the comparative work by new institutionalists on skill issues has focused on the relative success of different national or regional vocational education and training systems in producing craft and technical skills (e.g., Ryan 1991; Finegold and Mason 1996). These intermediate skills are seen as an essential component for introducing flexible production regimes (e.g., Streeck 1989; Finegold and Wagner 1997). Interestingly, there has been relatively little compara-

tive institutional research on the skills of the individuals responsible for designing and implementing workplace restructuring, i.e., company managers. This chapter is an attempt to start filling that gap, focusing on how national institutional structures shape different models of management development in the United States and Germany. It compares and contrasts the roles of the state, intermediary institutions, the market, and firms in each setting in developing managerial skills.

We adopted a broad definition of *management development* for the study. By *manager* we mean any individual who oversees other employees, from frontline supervisors to chief executives, while *skill development* includes activities beyond formal education and training, such as planned job rotation. Our focus is thus broader than most previous comparative studies of management development, which have tended to confine themselves to top managers and the university programs they attend (e.g., Commonwealth of Australia 1982; Handy 1987). For example, we include the major contribution that two-year colleges and firm-based training make to management development in our analysis.

We conducted semistructured interviews with the main providers of management development in each nation: education and training institutions (both public and private) and companies. For the companies in each country, we identified a sample that met the following criteria: 1) participates in the global economy (including through exports or servicing international customers; 2) is a mixture of large and small (fewer than 100 employees) operations; 3) represents best practices in management development (as identified by peers or our review of the management literature); 4) represents one of three manufacturing (food processing, precision engineering, and electronics) or three service (hotels, banks, and business services) sector enterprises. We also interviewed relevant professional organizations, policymakers, and experts in management development.

Within each organization, we tried to interview more than one individual to get different perspectives (i.e., human resource and production managers, professors, and deans) on the issues of management development. In all, we conducted 50 interviews in the United States (29 with education providers and 21 with company managers) and 39 interviews in Germany (21 with education providers and management experts and 18 with firm managers). We supplemented the interviews

with reviews of the relevant literature and the national and international data available on management development.

Our interviews confirmed that major changes under way in the world economy—increased competition, globalization, pressures for customization and enhanced quality, technological change, and shifts toward flatter, more team-based organizations—are forcing institutions involved in management development in both countries to develop a broad range of new capabilities for their management workforce (e.g., Lawler 1996). At the same time, however, managers continue to need strong technical and interpersonal skills to help them act as organizational leaders. Chief among the new demands is the need to combine analytic and interpersonal skills earlier in a manager's career. With firms reducing management layers and relying more on teams to customize output, a growing number of managers need both "hard" and "soft" skills right from the outset if they are to function effectively. Among these soft skills, firms in both countries are placing a growing emphasis on interpersonal management skills, such as the ability to facilitate group work.

A second new skill demand is the capacity of managers to become effective lifelong learners. As companies remove layers from managerial hierarchies, more managers face career paths that are horizontal across a number of different functions in the organization or across several companies, rather than a more vertical ("stovepiped") progression within a single field of expertise (Kiechel 1994). To cope with this uncertain environment, managers need both a broad initial education and continuing opportunities to update or alter their skills. As one American woman who had successfully progressed from a clerical worker to a middle manager while acquiring two degrees part time put it: "What you really need is your own personal career counselor. But since the company isn't going to provide that, you need to take ownership over your own career development." In addition, managers need to develop the capabilities to learn from different experiences, a set of attributes that recent research has shown to be a strong predictor of successful international executives (Spreitzer, McCall, and Mahoney 1997).

A third related emerging skill need is that of developing global capabilities. With the continued internationalization of all aspects of the world economy (goods and services, information, capital and

labor), both organizations and individuals need to enhance their ability to operate effectively across national, institutional, and cultural boundaries (Finegold 1997). Firms need managers who can coordinate design and production on a worldwide basis (Sabbagh 1996) as well as establish new markets in other nations and lead or participate effectively in transnational teams (Snow, Snell, and Davison 1996).

Our study focused on the different institutional arrangements for management development in the United States and Germany and how well they are coping with these new demands. To summarize our main findings, the strengths and weaknesses of the two countries' systems in preparing managers for both traditional and emerging skill needs are essentially mirror images of each other. Germany's strong employer organizations and quasi-public institutions have contributed to broad initial skill development and strong technical skills, but the overregulation and heavy dependence of universities on state funding has discouraged the innovation in management education needed to keep pace of the international shifts in the global economy. The organization of skill development within firms, moreover, has made it difficult to develop many managers' cross-functional skills. In contrast, intense competition among public and private business schools in the United States has produced global leadership in graduate management education and research. Also, the flexible internal structures of leading U.S. corporations have enabled them to adapt training programs to more decentralized, leaner organizations by promoting cross-functional skills among all managers. The reliance on the market, however, has led to greater variation in the quality and quantity of technical and organizational training for supervisors and managers in small firms. Some states are experimenting with creative new institutional arrangements for developing the capabilities of individuals and smaller firms that otherwise do not invest heavily in management training.

## CONCEPTUAL FRAMEWORK

Four main types of institutional arrangements govern economic activity generally and the development of managerial skills in particular: the market, internal firm hierarchies, intermediate organizations

(such as employer associations) and the state (see Hollingsworth, Schmitter, and Streeck 1994; Crouch, Finegold, and Sako, 1999). All countries will have a mix of these different institutional mechanisms, or what we call “models of management development.” How effective each combination of models is in the United States and Germany depends, to a large extent, on the fit between the kinds of skills required and the type of model being used to develop them.

Human capital theory suggests that the market should produce an optimum level of skill investment. The theory has traditionally distinguished between two types of skills, general and firm-specific (Becker 1975). General skills, which can be transferred easily from one firm to another, will (according to the theory) be financed by individuals who can then recoup the investment through higher wages. Many managerial competencies fall into this category, for example, good communication skills, problem-solving abilities, and leadership. Because there is a high private rate of return to those who possess these competencies (Finegold and Brewer 1996), individuals should be willing to undertake and finance education or training experiences that help develop these skills.

Firms will, along with their employees, cover the costs of developing skills that are specific to their enterprise, such as an understanding of a particular corporate culture or mastery of a set of internal practices required for the organization to operate effectively. Unlike the predictions of human capital theory, however, which treat the firm as a black box, institutional and management research shows that there are significant differences in the structure of firms among countries, and these differences in turn have a major impact on the skill requirements and development of managers. Large Japanese firms, for example, with strong internal labor markets and consequently low turnover rates, use systematic job rotation and ongoing training programs to invest in developing a set of general managerial competencies, an undertaking that most U.S. companies would not be willing to support (Dore and Sako 1988).

Stevens (1996) has shown that there is a large intermediate category of “transferable skills,” like the understanding of a new computer technology or of a retail distribution system, that are best created primarily under one employer but are potentially useful to a group of companies within a sector. She also showed that market failures for

transferable skills can easily arise because firms are unwilling to invest in these skills for fear their employees will be “poached” by competitors. Stevens’ third observation is that individuals may be unable to make this investment because of capital constraints, the risks associated with an investment in sector-specific skills that they may lose if they lose their job, and the need to have the cooperation of their firms. Where such market failures exist, one possible solution is for intermediate institutions, such as employer organizations, to bring private sector actors together to form a “club” (in the economist’s sense of the term). A *club* is a voluntary association of actors (in this case, firms) who develop a means of restricting access to an otherwise public good, such as a professional association that holds meetings and provides services only to its members. While in free labor markets it is not possible for some firms to restrict the access of others to their employees skills, Olson (1971) has shown how clubs can potentially overcome this barrier to collective action by generating secondary benefits—linked to the provision of transferable skills—that are consumable individually and on a basis of some exclusion, thus giving them some leverage over members (see Crouch, Finegold, and Sako 1999 for a fuller discussion of club theory applied to skill creation). Thus, for example, German chambers of commerce exercise both formal and informal pressure on member firms that are not perceived to be providing their share of places in the apprenticeship system (Streeck 1987; Soskice 1991). Such intermediate institutions are given added legitimacy, and thus hold a greater attraction for potential members, where they are included in corporatist policymaking and given public resources to help attain policy objectives (e.g., Hall 1986).

The alternative solution to market failure problems is for the state to play a role in the development of managers. The state has several theoretical justifications for supporting the development of general managerial skills (particularly in areas where there is a strong public good component to the skills): to ensure individuals have equal access to this important determinant of future life success, to increase the societal stock of knowledge and skills in order to foster economic growth, and to promote a more enlightened citizenry. In reality, however, in both countries the state has taken a major role in the education and training of managers more from historical accident than any strong case of market failure or public good. Publicly funded colleges and

universities are the principal providers of higher education in these countries, like the rest of the Organisation for Economic Co-operation and Development (OECD). As the demand for management education from individuals and companies grew following World War II, public colleges and universities responded by developing a variety of courses ranging from undergraduate diplomas and degrees to executive MBAs and short, noncredit modules tailored to specific skill needs.

Given this large existing state role, one of our study's most striking findings was the near universal opposition to any direct state role in management development. While this opposition might have been expected from company managers and individuals in the United States (where government has traditionally been distant from the private sector), more surprising was the equally strong hostility to state intervention in Germany, where over 90 percent of respondents to our interviews did not see a role for the state in the initial or further training of managers. The most frequently cited reasons for why the state is not the most effective provider of management development were 1) public institutions are slow to adapt; 2) companies are in the best position to determine new managerial demands and train for them; 3) managers learn best in "real world" situations; and 4) the returns to management development accrue to the firm and the individual, and therefore it should be financed by them, not the taxpayer. Some respondents went further, arguing that government involvement in management development could actually be counterproductive, because subsidies for public institutions could discourage the development of private providers, while individuals who do not have to pay for management education (as is the case in many publicly funded higher education systems) may not treat it as an investment nor be sufficiently motivated.

Beneath the broad antagonism to direct government involvement in management development, however, was a recognition by interviewees that there are a number of indirect, yet important, ways in which the state contributes to the education and training of managers. Most notable is providing individuals who may eventually become managers with a solid educational foundation on which to build more specific and ever-changing skills. Nearly every respondent indicated that, given limited resources, government's first priority should be ensuring a high-quality basic education for all citizens.



## INSTITUTIONAL ARRANGEMENTS FOR MANAGEMENT DEVELOPMENT

### Germany

The 90 government-run universities and 125 *Fachhochschulen* (technical colleges) act as the main training ground for future German managers (Table 1). The educational task facing these institutions is simplified by the high-quality general education and demanding entrance exams that all individuals qualifying for higher education must pass so that they can receive a state-funded place that covers tuition and living expenses.

With their extensive and academically oriented coursework, the universities are the traditional pillars of the German higher education system. Courses at the university can theoretically be completed in four to five years, but overcrowding in these institutions has made this difficult in practice. Overcrowding has been caused by a substantial increase in the number of young people qualifying for places over the last two decades (with approximately 30 percent of each cohort now going on to higher education) without a substantial increase in the physical capacity of universities. The result has been an oversubscription of many courses and a lengthening of the average time to graduation to 6.5 years.

**Table 1 German Graduates by Academic Discipline, 1991 (in thousands)**

Discipline	University	<i>Fachhochschule</i>	Total
Language, cultural studies, sport	13.2	1.0	14.2
Law, economics, and social sciences	22.7	26.5	49.2
Mathematics and natural sciences	17.2	2.9	20.1
Engineering	11.8	24.5	36.3
Medicine	11.8	—	11.8
Agricultural	2.5	2.2	4.7
Arts	3.7	1.8	5.5
Total	83.0	58.9	141.9

SOURCE: Bundesministerium für Bildung und Wissenschaft, Grund- und Struktur Daten, 1993–1994.

The active role that the German government plays in regulating higher education was cited by many respondents as the major weakness in the German system of management development. Said one interviewee, "The system [of higher education] puts professors first, students a distant second, and ignores the needs of industry altogether. It needs to be changed to put students in the role of consumers of professional skills and professors in the position of providing a service." Three factors were cited as helping to create a "bureaucratic mentality" and inhibiting innovation among providers of higher education. The first is the way in which curricula are determined. Reorganizing an existing course or introducing a new course at either type of public institution requires several levels of deliberation and consultation, both inside the institution itself and with local educational authorities. The effect is to discourage new ideas. The second factor cited as inhibiting innovation is the professors' status as civil servants with lifetime appointments, which effectively insulates them from having to respond to those who demand marketable skills, e.g., students and firms. A final factor cited as discouraging innovation is disincentives to be active in the area of further training and customized courses in management. Money earned from offering further training courses goes not to the professor, the professor's faculty, or to the university or *Fachhochschule* itself, but rather straight to the state. By removing the financial incentives for involvement in further training, the state has stemmed the flow of ideas between industry and higher education which normally arise from this activity. The result has been to discourage the public institutions of higher education from keeping pace with market developments.

The *Fachhochschulen* were established in the 1960s to accommodate the growing numbers of students going on to higher education and to provide a more relevant course for managers entering industry. As an alternative to the more academic university education, courses at the *Fachhochschulen* are shorter and more vocationally oriented. Course-work is normally completed in three to four years of full-time study, and the average graduation age is a correspondingly younger 24–25. Nearly three-quarters of the students graduate in engineering or business administration, showing the heavily professional orientation of these technical colleges.

The vocational orientation of the *Fachhochschulen* is reinforced through close contact to industry. Fully two-thirds of students at the *Fachhochschulen*, but only one-third of those studying at a university, complete an apprenticeship before going on to higher education.<sup>1</sup> Company-based internships are, moreover, an integral element of the educational experience, with one or more internships of several months required during the period of study. A balance between theory and practice is also institutionalized in instruction. Professors as a rule have several years of hands-on experience in either industry or law, and recruiting visiting professors and guest lecturers from firms is common practice.

Together, graduates of the universities and *Fachhochschulen* hold the majority of management positions at all levels, but with clear variation in the type of position held. While *Fachhochschule* graduates outnumber their university counterparts in the lower levels of management, accounting for 31 percent (compared with 21 percent) of department heads, they are relatively underrepresented in the ranks of top management. More than half of managing director positions are held by university graduates, with only 20 percent of these positions falling to those from the *Fachhochschulen* (Table 2).

In recruiting from the university and *Fachhochschule*, German firms favor graduates with technical as opposed to liberal arts education. Graduates in engineering, economics, and business administration are among the most highly recruited groups. Those students who combine university and traditional apprenticeship are highly sought after by companies for their mix of theoretical and practical training (Table 3). There is a prestige gap between the universities and *Fachhochschulen*, reflected in differences in pay and career prospects for the faculty and graduates of these institutions. This gap may be narrowing, however, as there is a broadly held perception among both policymakers and business people, exemplified by several managers we interviewed, that “university instruction is too long and theoretical and [that] university students are squandering educational resources.” This puts the *Fachhochschulen*, with their short, industry-oriented courses, in an increasingly favorable light. The trend in educational policies of several of the large German states was to increase resources for the *Fachhochschulen*, with the goal of changing the student ratio from 70:30 in favor of the universities to 50:50 by the year 2000.

**Table 2 Educational Qualifications of German Managers, 1990 (%)**

	Managing directors	First level (division head)	Second level (department head)
University	52 <sup>a</sup>	33	21
Polytechnic (economic studies)	7	8	8
Polytechnic (technical studies)	13	18	23
<i>Abitur</i> (upper secondary certificate)	9	8	5
Middle exam	10	20	21
Other	9	13	22

SOURCE: Kienbaum und Partner, compensation survey, 1990.

<sup>a</sup> Sixteen percent of managing directors have a doctorate in addition to their university degree.

**Table 3 Academic Disciplines of Employed University and Polytechnic Graduates (%)**

	1983	1993 <sup>a</sup>	Managing directors
Engineering	43	43	35
Economics/business administration	35	38	44
Natural sciences	11	12	10
Other	11	7	11

SOURCE: Institut der deutschen Wirtschaft/Firm Questionnaire 1982; Kienbaum Compensation Survey 1993.

<sup>a</sup> Projections to 1993.

The importance of educational attainment for a management career varies considerably according to firm size and among economic sectors. Among the largest and most internationally active German companies, there is great respect for academic attainment. Over half of the managing directors of the largest 100 German firms possess a doctorate in engineering, science, or law. Recruits from universities are also more likely than *Fachhochschule* graduates to find their way into large companies' "high-potential" management training programs.

*Fachhochschule* graduates are, on the other hand, coveted by firms in the German *Mittelstand*, the small- and medium-sized manufacturing enterprises that have accounted for much of the nation's export success. Typically operating on a tight budget, these firms do not have the time nor the internal resources to bring the "high-potential" university graduates up to speed. The *Fachhochschule*-trained engineers or economists are attractive to small- or medium-sized enterprises (SMEs) because their more practical education allows them to dive right into work.

An equally pronounced split in patterns of management, recruiting, and promotion is found between firms in the manufacturing and service sectors and those in the services. Whereas in the traditional strongholds of German industry (e.g., chemicals, auto) reaching top management is very difficult without a university degree (and in some cases a doctorate) in services, only a few sectors, such as large consulting firms, recruit managers and professionals exclusively from the ranks of university graduates. Finding individuals in most service firms with the *Fachwirt* or *Fachkaufleute* (advanced and vocational certificates, respectively) as their highest level of educational attainment in the ranks of top management is quite normal. The large banks are the service sector firms most thoroughly infiltrated by university graduates and yet only 25 percent of the managerial workforce and 50 percent of top managers are graduates, although they are now recruiting more university graduates as the number of young people participating in higher education has increased. In the hotel and retail sectors, the number of graduates in the ranks of management is considerably smaller (e.g., approximately 10 and 5 percent, respectively).

### **The United States**

In contrast to the situation in Germany, the U.S. federal government has been a relatively minor player in education generally and management development in particular, with the primary responsibility resting with state and local governments and private actors (individuals and firms). The federal government accounts for under 8 percent of total spending on compulsory education, and, unlike most other advanced industrial countries, has no national standards for education.<sup>2</sup> Federal funding for higher education has been more substantial and

helped the United States construct the world's first mass higher education system. A combination of means-tested federal grants and loans to individuals, private scholarships, and funding for large public universities has helped make some form of higher education an affordable option for the majority of Americans. But in contrast to Germany, this funding comes with relatively minimal regulation of institutions or qualifications, allowing universities virtually complete freedom to design courses and compete for students in the higher education marketplace.

The result of this decentralized system has been that the quantity of education in the United States is impressive, even if the quality of some educational programs (notably the high school diploma) is highly variable compared with that of other nations (Handy 1987). International comparisons of educational attainment of both high school students and adults in the workplace find that mean U.S. scores rank in the middle of the pack, but the United States has the widest dispersion of any of the advanced industrial countries, with some of the best and worst performing individuals (Colvin and Shorgren 1997; OECD 1996). More than 80 percent of the adult population aged 25–64 has a high school diploma or equivalent certificate, and nearly two-thirds of young adults aged 20–24 in the United States enroll in a community college, college, or university (International Institute for Management Development 1993). The high levels of education of the U.S. population compared with those of other industrialized countries are presented in Table 4.

Eighty-five percent of all U.S. employees have at least a high school diploma, and among the ranks of persons who classify themselves as managers and professionals, 96 percent have high school diplomas and 47 percent have at least undergraduate degrees (data from U.S. Current Population Survey 1990). Table 5 presents the percentages of managers, professionals, and general employees who have achieved the highest levels of education across all industries. There is wide variation among business sectors. For example, in financial services, 52 percent of managers have college degrees, whereas in the construction sector, only 26 percent of managers have degrees. Among U.S. college students, business administration remains the most popular subject concentration; nearly one quarter of all students major in business, an option which grew in popularity throughout the 1980s

**Table 4 Population Percentage Completing Different Levels of Education (%)**

	United States	OECD average
Early childhood (K–8)	17	45
Upper secondary (9–12; high school)	47	36
Higher education (university and other)	36	19
Total	100	100

SOURCE: OECD 1993.

**Table 5 Percentage of All U.S. Workers and Managers Completing Various Levels of Education (%)**

	High school dropout	High school graduate	Some college	College graduate	Post-graduate	All levels
Managerial/professional	4	26	23	30	17	100
All others	17	47	22	10	4	100
Total workforce	15	44	22	13	6	100

SOURCE: Current Population Survey 1991.

<sup>a</sup> Managers and professionals represent 17 percent of the total working population.

(National Center for Education Statistics 1995). U.S. young people, who have to self-finance a larger portion of their higher education than do their European counterparts, place an emphasis on acquiring practical, marketable skills while in college. As one career placement officer explained, “The kids now are already thinking about finding jobs when they graduate. If it isn’t going to help them get and keep a good job, they don’t want to bother, and they switch or leave.”

Outside of formal education, the state has not historically supported professional development within U.S. firms, other than allowing companies to deduct training costs from operating expenses before taxes. The Clinton administration launched a network of Manufacturing Technology and Extension Centers, similar to the Rationalization Committee of German Industry (RKW) though more limited in scope, which help small firms improve their product and process technology

(Finegold et al. 1994). Much of the service these centers provide is essentially management development for SMEs, enabling them to redesign their organizations and upskill their workforces.

State governments have played a more direct role in management development and worker training. The level and type of government support varies widely across the 50 states (Batt and Osterman 1993). The growth in state-subsidized customized training is part of a general trend toward integration of education and training and economic development at the state level. North and South Carolina, for example, have used training packages provided by their technical colleges to become leaders in attracting new businesses. Iowa and Oklahoma have programs that allow eligible firms to fund their training expenses through the issuance of bonds that are underwritten by the state. The funds can be used to train new workers or retrain existing workers, with community colleges and private consultants usually providing the training. If, after the training, the firm shows an increase in profits, some or all of the interest and principal payments are forgiven by the state. The reasoning is that effective training should have a positive effect on the bottom-line financial results of the company, and if this happens, the firm is contributing more in state taxes, which thus allows the training to effectively pay for itself.

Likewise, Arizona recently enacted state support for professional development as an incentive for companies to create new jobs. A fund of \$3 million is set aside each year which corporations can apply for if they are expanding their Arizona operation or relocating to the state. In either case, they must be adding new jobs. Twenty percent of the pool has been set aside each year to assist small companies (less than 100 total employees). A common aspect to all the programs described is that although the government provides funding and clear guidelines for eligibility and repayment, it does not directly provide the retraining. Firms are free to contract with education providers, both public and private, to design and build the courses they deem the most worthwhile. These state and federal initiatives, while growing, are still relatively minor in the context of overall U.S. management development.



## German Intermediate Institutions

Though university and *Fachhochschule* graduates account for the majority of German managers, there is a sizable minority who have not been through higher education. A look back at Table 2 shows nongraduates to be well represented at all levels of management, accounting for half of the department heads, over 40 percent of the division heads, and some 30 percent of the managing directors. For the nongraduates, entry into management is normally contingent upon achieving a second level of vocational qualification. These qualifications build on the completion of an apprenticeship and a minimum of 3–5 years of work experience, and, like apprenticeships, this route into management is made possible by strong employer organizations (such as the 83 chambers of commerce and industry which all German employers are required to join). The chambers oversee these courses and administer the final certifying exam, ensuring the relevance of course content to employer needs and a consistent quality standard across the country.

Referred to as *Aufstiegsweiterbildung* (literally, promotion-oriented further training), this second level of vocational qualification is represented by the *Meister* (master craftsman or supervisor) certificate in industry and the *Fachwirt* or *Fachkaufleute* certificates in services. Every year thousands of individuals complete *Meister*, *Fachwirt*, and *Fachkaufleute* courses and the associated exams in a broad range of disciplines across all industrial and commercial sectors (see Table 4). For each type of further training, classroom instruction is offered in the evenings or on weekends and is meant to accompany continued work, with the goal of achieving a tight integration of theory and practice. The courses involve between 500–900 hours of classroom-based instruction, spread out over a two- to three-year period, and costs range from DM 2500–6000 (\$1,500–3,500), which in some cases are paid by the employing firm.

Despite these similarities, each course plays a different role in Germany's system of management education. Of the three, it is *Fachwirt* courses that have the strongest claim to being management education. While the *Fachkaufleute* certificate is designed to deepen the skills and knowledge of lower- and middle-level managers in the administrative function, the *Fachwirt* is often considered a prerequisite for those without a university degree to move into management, especially in larger

service firms. After successfully completing the *Fachwirt* exam, individuals typically take over responsibility for a small business unit within a larger commercial firm, e.g., a bank's branch office or the purchasing group within a department store. Later, opportunities for movement into higher levels of management for *Fachwirt* graduates, including top management, are also abundant.

The analog to the *Fachwirt* in industry, the *Meister* courses, are designed to prepare the skilled manufacturing worker to take over a leadership position in production. Just over half of instruction is devoted to deepening technical knowledge and understanding of manufacturing processes. Technical training is complemented with courses in business administration, along with instruction in pedagogical and organizational issues. *Meister* certificate holders not only supervise other employees and organize production but also play a critical role in continuous skill formation on the shop floor. It is these individuals who oversee the training of apprentices.

With the move toward flatter, more team-based organizations, the traditional role of the supervisor—to maintain control over production—declines in importance (Mason 1996), but this has not decreased German firms' need for individuals with *Meister* qualifications (Finegold and Wagner 1997). They continue to encourage skilled workers to pursue the *Meister* qualification as the demand increases for persons doing more long-range technical and organizational planning activities: design and monitoring of quality control systems (e.g., obtaining and requalifying for ISO 9001); leading continuous improvement efforts; acting as a representative of manufacturing on integrated product teams (IPTs); serving as programmers; or working as a technical expert within the team. To better equip *Meister* holders for the new work environment, the standards and curriculum for their courses have been reformed with further emphasis on communication, cooperation, planning, technical, and coaching skills (Scholz 1996).

For those who have successfully completed a *Meister* course, opportunities for upward mobility are considerably more limited than for their counterparts in services. Among large manufacturers, *Meister* holders have traditionally been unable to rise above the level of supervisor. However, while in the relatively flat employment hierarchy of the small- or medium-sized firm, the *Meister* is on the same level of the employment hierarchy as the managers of other functional departments

(sales, personnel, or quality control), many of whom are graduates of a university or *Fachhochschule*. As larger firms downsize, the *Meister* holders who remain are often the only management layer between the plant manager and the shopfloor.

In addition to the role that chambers of commerce play in supporting further training, there is another quasi-public organization active in the field of management development—the Rationalization Committee of German Industry (RKW)—from which German SMEs also derive considerable benefits. Since its founding in 1923, the RKW has focused on assisting economic rationalization and structural adjustment in the German economy, with particular attention to the needs of small- and medium-sized manufacturing firms. Through its central office in Frankfurt and regional offices in each of the federal states, the RKW offers a range of services oriented toward supporting innovative management in the German *Mittelstand*. One service is delivering ongoing training courses in management education. A second is on-site consulting in organization flexibility, implementing new technology, and controlling budgets. In 1992, the RKW logged some 43,500 days of consulting work in just over 6,000 different firms (RKW 1992). A final service offered by the RKW is the publication of books and expert reports on themes related to innovation management. Drawing on the expertise of business practitioners, university professors, and other management experts, the RKW produces 25–30 publications each year covering innovations in technology, organization, and personnel development.

The benefits of the chambers' and the RKW's activities to the SMEs are twofold. The most obvious is the increased availability of management training and consulting. Because of public subsidies to both types of organizations, these services can be obtained by the SME at a price as much as one-third below market value. Less obvious, but perhaps more important, is the role both organizations play in diffusing innovative management techniques (Wever 1995). For the RKW, extensive involvement with small business enterprises permits a steady accumulation of knowledge about evolving management practices, knowledge which in turn can be diffused through consulting and publishing activities. The chambers' involvement in *Aufstiegsweiterbildung* leads to extensive interaction with both large and small firms, con-

tact which allows for the accumulation of expertise that again can be diffused.

Employers' organizations also play a role in supporting the management development efforts of SMEs through networks of private training providers. These providers are of two sorts. One called the Training Center of German Industry resembles the RKW in organizational form. It operates through regional administrative bodies in each of the federal states. The second type of private provider with strong links to employers' organizations is professional associations. These are organized on an industry basis and include the Association for Professional Education in Banking, the Institute for Professional Education in Retail Trade, and the Training Guild for Metalworkers.

### **U.S. Intermediate Institutions**

The United States has numerous employer and professional organizations, but in comparison with Germany's, these intermediate institutions are relatively weak. They lack the compulsory membership or regulatory supports that allow their German counterparts to act as strategic players in the corporatist policy formulation, which helps overcome public goods problems (see Crouch, Finegold, and Sako 1999); instead, they typically play two roles: providing services, such as management development in competition with other providers in the marketplace, and lobbying for their members in policy debates.

The American Management Association (AMA) provides an example of a large U.S. labor market intermediary. It is the largest and one of the oldest private providers of management seminars in the world. Founded in 1923, the AMA has over 70,000 members, including many in Europe, most of whom are business managers. The AMA offers two types of short seminars, three- to five-day courses for mid-level managers and one- to two-day courses for office administrators and supervisors. The AMA contracts with independent consultants to teach the courses. The breadth of subjects offered in AMA seminars covers every area of management, both general and industry-specific, as well as technical and "soft" subjects. Among the most popular current offerings are courses on implementing information technology, ISO 9000 quality standards, workforce diversity, power speaking, inventory management, and increasing customer satisfaction.

Although the AMA fulfills a role similar to that of the RKW, it is a nonprofit educational institution that funds itself strictly through course fees and sales of journals and books it publishes. The president of the AMA states the reasons for this: “We not only don’t seek government assistance, we don’t accept it when offered. If we can’t run our own business successfully, how can we expect to help our members and clients run theirs?” Reflecting this private-sector orientation, there appears to be a strong preference in AMA courses for business practitioners rather than academics to serve as faculty.

## **THE GERMAN MARKET FOR MANAGEMENT DEVELOPMENT**

The strong role of the state and employer organizations in Germany has had many beneficial effects, most notably ensuring that individuals and firms, regardless of their financial resources, have access to management development. As noted, however, the entrenched higher education bureaucracy lacks market-like mechanisms that can stimulate innovation and responsiveness to customer demands in the public sector. A good example of the negative impact that the state has had on the potential market for management development is the Master of Business Administration (MBA). Despite significant demand, an MBA was still not an officially recognized educational degree in the Federal Republic at the end of the 1980s, and thus no German educational institution offered the degree. In the 1990s, however, public and private universities found ways around this lack of recognition, awarding MBAs in conjunction with a sister school abroad or by renaming MBA-style courses (i.e., those with case studies, team projects, and company internships) with such titles as Master in International Business. There are now close to 15 German institutions offering one- to two-year MBA-style programs, and between 600–800 German students take the MBA degree each year, with approximately half of those degrees earned abroad (Haller 1993). The international orientation of the degree is a key to explaining the rapid growth in interest in the MBA (Schneider 1993). International management topics and opportunities to study at sister schools abroad form core elements of most

German MBA programs and set the MBA apart from the normal business administration courses found at the universities and *Fachhochschulen*.

A few select, private universities are most highly regarded for their instruction in this area. The Koblenz School of Corporate Management, the European School of Management in Berlin, and the European Business School in Oestrich-Winkel are similar to their public counterparts in offering a number of different final degrees in the area of business administration. Their business administration courses are developed in the context of international business, with topics like international marketing, finance, and personnel management making up the core elements of instruction. Coursework on international business themes is also complemented with periods spent studying and completing company-based internships abroad.

There are a few other private management training providers in Germany, but those with close ties to employers' associations are certainly the most important. One factor that has stifled the creation of a more active market for management development is the lack of demand from firms. Small firms, as noted above, rely heavily on quasi-public institutions and the chambers for assistance, while large firms typically outsource far less management development than their U.S. counterparts; large German companies keep 90 percent of ongoing training internal, using external providers for specialty classes, particularly in the area of information technology. In contrast, large U.S. companies typically spend more than 60 percent of their development expenditure on outside experts (Weiss 1994; Bassi and Cheney 1996).

## **THE U.S. MARKET FOR MANAGEMENT DEVELOPMENT**

Unlike Germany, the United States has a thriving market for further management development, epitomized by its business schools that attract students from all over the world to obtain the highly prized MBA (Finegold and Brewer 1996). In U.S. business, demonstrated ability counts for more than academic credentials, but increasingly, U.S. managers believe the two are connected. Thus, almost all U.S. managers in large organizations now start their careers with a degree

(usually business or technical) that they later augment with further management study and/or an MBA. Of the six sectors studied, only hotel managers did not think a university degree was an important entry characteristic or a prerequisite for promotion beyond a certain level. The other exception to the rule of degreed managers is at start-up firms, where entrepreneurs often see little or no payoff from formal higher education.

While only 10–12 percent of all managers in business have MBAs, 35 percent of chief executives of America's largest 500 companies possess them. The MBA originated in the United States in the late nineteenth century (Porter and McKibbin 1985). Until the Wharton School of Business was founded at the University of Pennsylvania in 1881, business education in the United States had been the province of technical schools and commercial colleges. The MBA gained in prestige in the early twentieth century as world-renowned institutions such as Harvard and Stanford added graduate business schools. By the mid twentieth century, the classic MBA—with its full-time, two-year curriculum of management, accounting, finance, and operations, and an emphasis on quantitative analysis—was well established. The average student worked 2–3 years before seeking an MBA, and the goal of the MBA was to produce a new breed of general manager, educated to a graduate level in all aspects of running a business. Still, MBAs were relatively rare, with only 4,500 awarded in 1956 and just nine schools accounting for more than half of all the degrees awarded. The growth in the popularity of MBAs since then has been explosive, particularly throughout the 1970s and 1980s. In 1991, over 78,000 MBAs were awarded by over 700 American business schools.

The recession of the early 1990s slowed the growth in MBAs for the first time, with the number of persons taking the Graduate Management Admissions Test (GMAT), which is the standard entrance exam for MBA applicants, declining from 1990–1993. Much of the decline was cyclical, reflecting the substantial downsizing of many large U.S. corporations, including the reduction in layers of management (Lawler, Mohrman, and Ledford 1995), but complaints from companies about the usefulness of MBAs were also increasing. Until fairly recently, “classic” American business education emphasized analytics and finance and was U.S.-centric in its focus. This traditional education has been criticized as being shortsighted and inadequate to meet the

increased pressures on businesses today. A new set of business competencies is augmenting (but not replacing) the old: foreign language skills, familiarity with other cultures, Internet literacy, and firm-based team projects, for example. These important additions to business school curricula are a reaction to critics who charged that business schools were not adapting quickly enough to changes in the duties and career structures of managers (Haynes 1991).

A sign of the market responsiveness of U.S. business schools was that as soon as demand for their educational products began to slacken, institutions adopted major reforms. Most of the top-tier MBA programs have reengineered themselves in the last 5–10 years. While many of these reforms are still in their early phases, the more prominent changes include a greater emphasis on teamwork and firm-based learning, greater international experience, and use of new technologies. The contrast between the elements of the traditional MBA model and the new model, which the top-tier business schools are adopting, is shown in Table 6 (see Finegold et al. 1994 for fuller discussion). The reforms, along with the turnaround of the U.S. economy, have helped produce a resurgence in demand for MBAs, with applications and starting salaries at record levels (Lord 1997).

Another factor driving changes in MBA programs has been the shifting demographics of the customer base. The average starting age

**Table 6 Changes under Way in U.S. MBA Programs**

Traditional model	New model
Few courses	Diversify provision
Classroom-based	Apprenticeship
Theoretical	Real-world cases
Finance, quantitative focus	Analytic and soft (“people”) skills
Functional separation	Cross-functional
Faculty focus on research	Balance research & teaching emphasis
U.S.-centric	International
Individualistic/competitive	Group/cooperative
Male-dominated student body	Diverse (women, minorities) student body
Early in career	Lifelong learning
Traditional lectures	Use of new technologies



for full-time MBA students was 24–25 ten years ago; now it is 27. Business school officials and firms we interviewed agreed that more work experience (and greater maturity) make the MBA a more valuable academic experience. Most business schools have developed new course options—part-time MBAs, FMBA (fully employed MBA), and EMBA (executive MBA)—to cater to students who are already in the workplace. These programs offer similar coursework to the full-time programs but are structured to accommodate students' work schedules. Students meet nights and weekends for their classes while working during the week. Unlike full-time MBAs, firms, rather than the individuals themselves, often pay the tuition and related costs.

Another sign of the ways in which business schools and other U.S. providers of management development have responded to changes in demand is the dramatic growth in customized training. This firm-specific training uses the business problems faced by the company as course material and incorporates the firm's business requirements and strategy, rather than focusing on the general development of the individual. The growth in customized training occurred when companies began to question the economic returns to the company from costly executive education or other general-audience short courses. While it "may pay off for the individual participant, there is little evidence of how such education has increased the value of the business corporations," according to Finegold et al. (1994). "Companies are using executive education," they continue, "to meet specific strategic goals or transform corporate culture; organizational transformation is replacing a focus on personal development."

In custom courses, the education provider—usually business school executive education departments, community college professional development centers, or private providers—tailors coursework to the business needs of individual companies and teaches only selected managers and professionals from that company, often onsite. The courses may be only a few days or part of an ongoing partnership between the provider and the firm. The educator may access proprietary information that requires confidentiality agreements or similar guarantees. In the past, leading business schools have resisted customizing courses, but that now appears to be changing. At many schools, customized courses have increased from 10 to 40 percent of the execu-

tive education department's revenues over the past three years and demand is still growing.

Smaller companies and companies seeking to retrain large segments of their workforce are more likely to seek their customized training from more affordable and accessible community colleges, which provide a state-subsidized service somewhat similar to the RKW in Germany. One of the community colleges in our sample had a professional development center that had trained individuals in hundreds of SMEs. Most of the training is customized total quality management (TQM) and statistical process control (SPC) courses, which the college provided on the firm's premises after performing an analysis of the company's specific business needs. The companies often use the training to initiate an effort to transform the business processes and culture of their organizations. Participants in the initial training cohort are purposely selected to represent a cross-section of all the major business functions and levels within the organization; for example, trainees may include the head of accounting, a mid-level operations professional, and someone from marketing. When the class is over, the skills acquired can be utilized on the job and shared with other co-workers, who may become part of a later training cohort.

Private providers, such as the AMA and Globecon, have also added or increased the customized component of their training. At the AMA, the newest division, AMA On-Site, is the fastest growing. AMA On-Site provides week-long courses at the customer's own facility that are tailored versions of AMA's general seminars. Globecon has carved a successful niche by combining consulting and education services to "solve a bank's overall business problems, rather than just their training needs," according to its president. While this plethora of U.S. providers creates a wide array of options for individuals and firms who want to purchase management development in the marketplace, it can also create problems. The lack of standards and rapid rate of change led many of the managers we interviewed to complain about the difficulty of determining the quality and relevance of the many courses that are offered.

## GERMAN FIRMS

Compared with the system of initial management education, firm-based management development in Germany can only be described as weak. German firms rely on hiring already qualified individuals from universities and *Aufstiegsweiterbildung* courses and then do relatively little to train them further. As one management recruiter said, “We expect [applicants] to bring their certificates with them . . . [and] possession of these certificates attained through a long course of training will allow them to get on with the job.”

What this means for the great majority of German managers is that further development efforts are minimal. One survey of over 800 large- and medium-sized firms estimated that German managers spend three to five days per year on further training in courses mainly devoted to “soft” management themes like motivation and communication (Gaugler and Witz 1993). The survey of European Union (EU) member states also found that German enterprises were the least likely in the EU to use systematic job rotation or periods spent abroad as tools of management development. A mere 7 percent of German firms used employment abroad as part of their personnel development, putting German industry last in the EU and considerably below the EU average of 17 percent. Only 12 percent of German firm respondents had job rotation programs, again a figure well below the EU average of 25 percent.

Alongside the lack of investment in ongoing management development are structural features of German firms that may hinder their transition to more team-oriented forms of work and the accompanying development of new managerial capabilities (Wever 1995; Herrigel 1996). There are two reasons for expecting difficulties. The first is the residual hierarchy of German industry. This manifests itself in a preoccupation with certifying and ranking skill levels, e.g., the university over the *Fachhochschule*, and the *Meister* certificate over the skilled worker. It also appears in the emphasis German managers at all levels place on technical expertise as the basis for their authority. These ways of ranking skill levels make the transition to fluid organizational structures difficult to implement. A second barrier to creating teams is the minimal use of job rotation by German firms for the purposes of per-

sonnel development. Because most managers, unlike apprentices, do not have opportunities to cultivate their skills in different functional areas, they may be less adequately prepared to organize and lead teams of functional experts.

The comparative neglect of management development by German industry is confirmed by other studies (Wever 1995). One survey of German and British middle managers showed a strong pattern of functional management in German firms. Of the 30 German managers surveyed, all but one had stayed in the same functional area during the entire period with his present employer. Twenty of these managers had been in the same position for more than 5 years, and 12 of them more than 10 years. Another comparison of the career patterns of German and Japanese managers suggested that 10 times as many Japanese managers had made rotations through Germany as German managers through Japan.<sup>3</sup>

Opportunities for sustained investment in management development are, in fact, open to only a small and elite group of the managerial workforce in large German firms. These programs identify "high-potential" management candidates and intensively cultivate the next generation of top managers. As one executive stated, "It is these individuals who will make the organization prosper, and so cultivating their leadership and business skills is the highest priority." High-potential programs typically consist of two elements. The first is job rotation through different functional departments, product divisions, and international operations. Switching employment positions relatively frequently (e.g., two- to five-year rotations) allows the "top manager in training" not only to develop a sense for the company's overall business but also to demonstrate a high level of initiative and commitment to the firm. Among the managers we interviewed, periods spent working abroad were considered particularly critical to developing the skills and flexibility needed for leadership positions.

Further training complements job rotation for this elite group. "The purpose of further training," said one developer, "is to take the normal manager and turn him into an entrepreneur and business leader." It is typically only the high-potential candidates who attend training seminars in subjects like entrepreneurship and strategic management, as well as international marketing and personnel management, at such notable providers as the German *Universitätsseminar der*

*Wirtschaft* (USW). Europe's top-rated business school, the European Institute of Business Administration (INSEAD) at Fontainebleau, and the Harvard Business School also play a role in further training top managers. For some firms, the external seminars are considered very important; they are expected to stimulate creativity by giving top managers distance from the organization and putting them in contact with other business leaders. Most organizations, however, consider external seminars too highly priced to be cost-effective and, as noted earlier, German companies typically outsource far less management development than their U.S. counterparts.

In size and degree of formalization, the high-potential programs vary somewhat from industry to industry. We found that the largest number of managers designated as "high potential" worked in large banks and high-technology manufacturing. They represented close to 10 percent of all managers. These firms also had a relatively high degree of structure in their further training, with clearly laid-out training programs accompanying upward mobility. Among hotels and lower-tech manufacturers (e.g., food processing), the development programs were less formal and smaller, including only 1–3 percent of the management workforce.

## **U.S. FIRMS**

In-company training, both formal and especially informal, is the most common mode of management development in the United States. It is also considered most practical because new competencies can be developed as necessary. U.S. employers spend over \$40 billion each year on additional training, with a high percentage spent on management training in particular (Fuchsberg 1993). Lillard and Tan (1986) showed that the likelihood of getting formal on-the-job training and the amount of that training rise with the level of schooling.

Formal training is most common at the onset of employment in a large firm. At this time, a high-potential new recruit is likely to enter a management development program that includes some classwork and systematic job rotations. After formal initiation, which lasts anywhere from six months to two years, in-company training becomes less pro-

grammatic and more individualized. Large companies increasingly include in their annual personnel performance assessments a section where the individual and his or her supervisors can decide what skills the employee needs to develop and how best to develop them. The individual development plan resulting from this process may include specific new responsibilities, course attendance, and rotations in different departments or divisions. Also, the provision of certain seminars or courses is often standard when a manager reaches certain levels or is assigned to certain departments.

A growing number of large U.S. firms have formalized in-company training and extended it to all the employees of the firm and its suppliers by establishing corporate universities. Firms such as Motorola, General Electric, and Xerox have developed autonomous business units whose primary function is to meet their company's ambitious continuous education requirements. These corporate universities combine the use of education to meet specific strategic goals or achieve organizational transformation with a strong, ongoing commitment to professional development. Because of the level of resources required to set up these universities, they tend to be limited to very large companies.

Motorola University (MU), arguably the most well-known company university, is more of a planner and contractor than a training provider. The mission of MU is to provide the means by which Motorola's 120,000 employees, worldwide, can continuously upgrade their skills. To accomplish this mission, MU has units at the main Motorola facilities, including in China, sometimes forming partnerships with local colleges to deliver courses. For example, classes at MU's western division are administered by Mesa Community College, which screens and hires course instructors, provides classrooms and support services, and administers course registration. By charter, MU only develops its own courses if the subject is not obtainable through a local college or private provider or if it requires discussion of proprietary information.

Motorola finds that the benefits provided by MU far outweigh its costs, despite spending over \$100 million annually on training in 1992. First, MU courses provide the opportunity continually to restate strategic objectives such as quality improvement, cycle time reduction, and technology leadership, aimed at achieving total customer satisfaction. Second, MU can respond to changing objectives much more quickly

and cohesively than outside educational providers. Arnie Sabel, manager of MU West, estimates that about 70 percent of the courses changed in the program's first eight years. The slower pace at which many universities worldwide have responded to the changing business environment is thus notably absent in corporate universities such as MU.

However, for Americans who are not working in the relatively small group of large companies that are leading providers of management development, the United States does not have a highly structured system of training for entry-level managers equivalent to the German *Aufstiegsweiterbildung*. The quantity and quality of management development for this group is thus far more variable, with some individuals receiving no formal management development, while others undertake extensive, ongoing training. The most common approach to further training for supervisors is informal on-the-job training supplemented by short, externally provided courses that individuals or firms purchase in the training marketplace when they have a perceived skill need (Mason and Finegold 1997; Mason 1996). Each course usually focuses on a particular issue or skill set. Some may be industry-specific, such as short courses for bankers on subjects such as credit analysis and securities-backed financing. Other courses, such as those in presentation skills and quality assurance, may be applicable across industries.

Courses last anywhere from a day to two weeks, with costs ranging from \$100 for a day-long community college seminar to \$15,000 for an executive seminar offered through a business school. To help individuals who take these courses in their own time, a large number of U.S. employers, including many small firms, now offer some form of tuition reimbursement to their employees (Finegold and Mason 1996). In the public transportation industry, for example, 61 percent of all agencies offer tuition reimbursement to supervisors and 55 percent offer it to mechanics (Finegold et al. 1996).

## CONCLUSIONS AND POLICY IMPLICATIONS

Our comparison of management development in the United States and Germany reveals a number of conclusions about the role of national institutional structures in the skill-creation process. First, it confirms the findings of earlier international comparisons focused on lower-level skills by showing the important role that different institutional arrangements play in determining the level, type, and effectiveness of skill investment in different countries. Americans and Germans generally learn the skills they need to manage in quite distinct ways, and the choices they and their firms make about what skills to develop and how to develop them are shaped by the incentives, information, and developmental routes created by the national institutional environment.

Second, our research suggests that for a complex set of competencies like those required by modern-day managers, it is wrong to think of a country as having a single or dominant institutional model of skill development, such as the dual system for apprentices or state-based compulsory education. Rather, managers in both countries acquire their skills through a combination of four different institutional arrangements: the state, the market, internal firm hierarchies, and employer or professional organizations. Third, the particular mix of institutional arrangements for management development found in each country is not the result of a market generating the theoretically optimum skill outcome. Neither is it a carefully crafted solution by public policymakers to the challenges facing managers entering the twenty-first century. Instead, the current institutional arrangements demonstrate the strong influence of history or the path-dependent nature of institutional development. Most notably, the large role that the state plays in initial management development, particularly in Germany, is a by-product of the evolution of a government-dominated higher education system.

Finally, it is the fit between the historical mix of institutional arrangements in each country and the types of skills required in the workplace that appears to explain the relative effectiveness of the United States and German systems. Several features of managerial competencies suggest that a combination of individuals investing in



their own skills in the marketplace and internal firm development provides the most efficient means of managerial development. The characteristics that appear to favor market-based institutional arrangements over state-led managerial skills development include increasingly dynamic global competition, technological change, and the high rate of private return to market-based skill investment. The returns are also greater if skills development and the timing of the training are closely linked to the managerial requirements of the organization in which the skills will be used. There are, however, a number of reasons why the market alone will fail to provide a sufficient level of investment in transferable managerial skills: imperfect information, capital constraints on individuals or small firms, a lack of internal firm capacity for effective management development, and the free-rider problem. To remedy such deficiencies, it is useful to have strong employer or professional organizations capable of collective action. These organizations can act as an effective conduit for state support for management development, overcoming market failures while at the same ensuring the relevance of the skills created to their members. The respective strengths and weaknesses of the German and U.S. institutional arrangements for management development are summarized below.

## Germany

The hallmark of the German management model is a commitment to professional preparation. Through a combination of theoretical and practical training provided by the state and strong intermediate institutions, the vast majority of managers can develop a very deep and rich understanding of their intended area of professional expertise. For students at the *Fachhochschulen*, as well as those at private universities, the combination of theory and practice is a standard part of the curriculum. For university graduates, completion of an apprenticeship and/or a management training program is increasingly used to complement their stricter theoretical training with hands-on experience. The *Meister*, *Fachwirt*, and *Fachkaufleute* courses ensure, moreover, that it is not just top managers, but also those at lower and middle levels of corporations who are comprehensively prepared for their jobs. The courses round out practical work experience with a more theoretical treatment of subjects related to supervision and management.

The emphasis on thorough initial training, a historical strength of the German system, may now be becoming a weakness. It has encouraged German firms to rely heavily on external mechanisms for management skill development and to concentrate their own development efforts on a select group of high-potential recruits. In the process, the functional or “single-career” management model became the accepted paradigm. Rapid economic and technological change mean, however, that the single-career model has become outdated as firms place greater emphasis on the need for functional breadth and continuous learning. In the emerging world economy, therefore, the high-quality initial management training received by most German managers will be a strength only if this acquired skill set can be continually expanded and upgraded.

The German case also suggests the advantages of public support for private initiative and the dangers of public regulation in the area of management development. Employer-dominated institutions such as the chambers of commerce and the RKW enable firms to act cooperatively to drive change using public policy in a supporting role. Further training courses are developed informally in conjunction with private industry. Consulting and other advising activities are likewise oriented toward meeting market demand. Public policy relies on employer organizations and other intermediate institutions to encourage and hasten the diffusion of innovation. Government support gives these organizations a degree of independence from the vagaries of the market, allowing them to continue their activities through recessions. By lowering the costs of training and consulting activities, government subsidies also allow these nonprofit organizations to reach a larger number of firms, including those that would not otherwise invest in management development.

In contrast to its positive role in supporting firm-based management development, the state bureaucracy appears to have hindered innovation in initial and graduate management education. Among the regulations that stifle competition are a cumbersome government approval process that limits the ability of institutions to respond to changing demands by developing new courses; a centralized admissions process that prevents universities from competing for the most able students; and civil service rules governing faculty salaries that limit the incentives for professors to work closely with industry. The

large public sector has also crowded out, or at least significantly reduced, the development of a thriving private sector in management development. Not surprisingly, most innovations have come from outside the public educational system in the form of private university education and MBA programs. Management developers and university professors alike agreed that the present system of management education could be improved by higher levels of competition between providers.

### **The United States**

The U.S. case illustrates both the strengths and weaknesses of a more market-driven approach to management development. Individuals, firms, and educators are the primary actors in this system; the government does not play a significant role. Individuals and firms are the initiators of, payers for, and beneficiaries of management education; they are also the source of demand in the system. Colleges and private training institutions supply management education in response to the changing business environment. Firms are becoming increasingly dominant players in the professional development marketplace. Because they are the largest source of funding for postemployment training, firms exercise great power in determining course offerings. In recent years, businesses have been demanding more customized training (or otherwise requiring that training be more firm-specific) in order to receive a greater return on their professional development investment.

The government does play a minor role in the management education marketplace, especially where public investment in training is viewed as a means of retaining or attracting business. The federal role is largely confined to student loans for low-income groups. States subsidize education and training while allowing firms and individuals to make the actual decisions about which schools to choose, how courses should be offered, and who should receive training. Where states have launched training programs, they have attempted to increase the return on this investment by tying the funding to demonstrated results. This approach fosters competition among trainers, flexibility of provision, and less bureaucracy while avoiding the crowding out of private trainers and slow rates of response to changing demands. But, in the

absence of regulation and national skill standards, it is often difficult for individuals or firms to ascertain the quality or impact of the many courses offered in the marketplace. Likewise, reliance on the market can exclude those actors—whether economically disadvantaged students or some small firms—that do not have the resources to invest in management development.

## Notes

1. Most *Fachhochschule* students take an apprenticeship instead of staying on in school to complete the *Abitur*, the academic upper secondary qualification, although a growing percentage now do both.
2. Under the Clinton administration, however, national standards for education in the United States are being seriously debated for the first time.
3. In a presentation to the *Deutsch-Japanischer Wirtschaftskreis* in Dusseldorf in May 1995, a Japanese manager put the comparative figures at 40,000 and 4,000. An official of the *Wirtschaftskreis* said that “exact figures cannot be verified, but that there were certainly many more Japanese managers coming to Germany than the reverse.”

## References

- Bassi, L., and S. Cheney. 1996. *Restructuring: Results from the 1996 Benchmarking Forum*. Alexandria, Virginia: American Society for Training and Development.
- Batt, R., and P. Osterman. 1993. *A National Policy for Workplace Training*. Washington, D.C.: Economic Policy Institute.
- Becker, G. 1975. *Human Capital*. Chicago: University of Chicago Press.
- Bundesministerium für Bildung und Wissenschaft. 1993–1994. *Grund- und Strukturdaten*. Bonn, Germany.
- Colvin, R., and L. Shorgren. 1997. “U.S. 4th Graders Score Strongly in Science and Math.” *Los Angeles Times* (June 11), Sec. A1.
- Commonwealth of Australia. 1982. *Inquiry into Management Education: Report*. Canberra, Australia, April.
- Crouch, C., D. Finegold, and M. Sako. 1999. *Are Skills the Answer? The Political Economy of Skill Creation in the Advanced Industrial Economies*. Oxford: Oxford University Press.

- Dore, R. and M. Sako. 1988. *Vocational Education and Training in Japan*. London: Routledge Press.
- Finegold, D. 1997. "Developing Global Capabilities." Paper presented at the Center for Effective Organizations Developing Global Capabilities seminar held in Los Angeles, California, April 1.
- Finegold, D., and D. Brewer. 1996. "Does Business School Quality Make a Difference? The Impact of Institutional Selectivity on MBAs' Starting Salaries." Working paper, Center for Effective Organizations, University of Southern California.
- Finegold, D., and G. Mason. 1996. "National Training Systems and Industrial Performance: U.S.-European Matched-Plant Comparisons." Paper presented at the ILR-Cornell Institute for Labor Market Policies conference "New Empirical Research on Employer Training" held in Ithaca, New York, November 15-17.
- Finegold, D., and D. Soskice. 1988. "The Failure of Training in Britain: Analysis and Prescription." *Oxford Review of Economic Policy* 2(2): 22-51.
- Finegold, D., and K. Wagner. 1997. "The Search for Flexibility: Workplace Innovation in the German Pump Industry." *The British Journal of Industrial Relations* 36(3): 469-487.
- Finegold, D., M. Robbins, L. Galway, C. Stasz, and T. Kaganoff. 1996. *Closing the Knowledge Gap for Transit Maintenance Employees*. Report for the Transportation Cooperative Research Program, RAND, Santa Monica, California.
- Finegold, David, Susan Schechter, Jeff Luck, Elan Melamid, Heide Phillips-Shockley, Brent Keltner, Brent Boultinghouse, Frank O'Carroll, Steen Scheuer, and Anne Kathrine Mandrup. 1994. *International Models of Management Development: Lessons for Australia*. RAND, MR-481-IET, Santa Monica, California.
- Fuchsberg, Gilbert. 1993. "Harvard Weighs One-Year Version of M.B.A. Program." *Wall Street Journal* (October 29), pp. B1, B6.
- Gaugler, Eduard, and Stefan Witz. 1993. *Personalwesen im Europäischen Vergleich: the Price Waterhouse Cranfield Project on International Strategic Human Resource Management*. Universität Mannheim-Lehrstuhl für ABWL, Personalwesen und Arbeitswissenschaft, Mannheim, Germany.
- Hall, P. 1986. *Governing the Economy*. Oxford, England: Polity Press.
- Haller, Sabine. 1993. "Marktanalyse: MBA-Programme in der Bundesrepublik." Working paper, Fachhochschule für Wirtschaft, Berlin, Germany.
- Handy, Charles. 1987. *The Making of Managers: A Report on Management Education, Training and Development in the USA, West Germany, France, Japan, and the UK*. National Economic Development Office, London, England.

- Haynes, P. 1991. "A Survey of Management Education." *The Economist* 318: S1–S14 (March 2).
- Herrigel, G. 1996. "Crisis in German Decentralized Production." *European Urban and Regional Studies* 3(1): 33–52.
- Hollingsworth, J.R., P. Schmitter, and W. Streeck. 1994. *Governing Capitalist Economics*. New York: Oxford University Press.
- International Institute for Management Development. 1993. *World Competitiveness Report*. Lausanne, Switzerland.
- Kiechel, W. 1994. "A Manager's Career in the New Economy." *Fortune* (April 4): 68–71.
- Lawler, E. 1996. *From the Ground Up: Six Principles for Building the New Logic Corporation*. San Francisco: Jossey-Bass.
- Lawler, E., S. Mohrman, and G. Ledford. 1995. *Creating High Performance Organizations*. San Francisco: Jossey-Bass.
- Lillard, Lee A., and H.W. Tan. 1986. *Private Sector Training: Who Gets It and What Are Its Effects?* RAND, R-3331-DOL/RC, Santa Monica, California.
- Lord, M. 1997. "After a Slowdown in the Early '90s, Demand for MBAs is Soaring." *U.S. News & World Report* (March 10): 80–81.
- Mason, G. 1996. *Shopfloor Management Skills in Manufacturing: The Formation of Supervisors in the U.S., Germany and Britain*. Report to the U.S. Department of Labor, Washington, D.C.
- Mason, G., and D. Finegold. 1997. "Productivity, Machinery and Skills in the U.S. and Western Europe." *National Institute Economic Review* 162(October): 85–97.
- National Center for Educational Statistics. 1995. *Vocational Education in the U.S.: The Early 1990s*. NCES 95-024, U.S. Department of Education, Washington, D.C.
- OECD. 1993. *Education at a Glance*. Paris: Organisation for Economic Co-operation and Development.
- \_\_\_\_\_. 1994. *The Jobs Study*. Paris: Organisation for Economic Co-operation and Development.
- \_\_\_\_\_. 1996. *Education at a Glance*. Paris: Organisation for Economic Co-operation and Development.
- Olson, M. 1971. *The Logic of Collective Action*. Cambridge: Harvard University Press.
- Porter, L., and L. McKibbin. 1985. *Management Education and Development*. New York: McGraw Hill.
- Reich, R. 1991. "The Real Economy." *Atlantic Monthly* (February): 35–52.
- RKW. 1992. *Jahresbericht*. Rationalisierungskomitee der deutschen Wirtschaft, Frankfurt.

- Ryan, P., ed. 1991. *International Comparisons of Vocational Education and Training for Intermediate Skills*. London: Falmer Press.
- Sabbagh, Karl. 1996. *21st Century Jet: The Making and Marketing of the Boeing 777*. New York: Scribner.
- Schneider, Ralf. 1993. "Umfrage zum Stand des MBA in Deutschland" (Parts 1–6). In the *Handelsblatt* Career section, every Friday between October 22/23 and December 24/25, Frankfurt.
- Scholz, D. 1996. "Neuprofilierung der Weiterbildung zum Industriemeister als Antwort auf neue betriebliche Anforderungen." *Berufsbildung in Wissenschaft und Praxis*, 5.
- Snow, Charles C., Scott A. Snell, and Sue Canney Davison. 1996. "Use Transnational Teams to Globalize Your Company." *Organizational Dynamics* 24(Spring): 50–67.
- Soskice, D. 1991. "Reconciling Markets and Institutions: An Interpretation of the German Apprenticeship System." Working paper, Wissenschaftszentrum Social Science Research Center, Berlin.
- Spreitzer, G., M. McCall, and J. Mahoney. 1997. "The Early Identification of International Executive Potential." *Journal of Applied Psychology* 82(1): 6–29.
- Stevens, M. 1996. "Transferable Training and Poaching Externalities." In *Acquiring Skills*, A. Booth and D. Snower, eds. Cambridge: Cambridge University Press.
- Streeck, W. 1987. *The Role of the Social Partners in Vocational Training in the Federal Republic of Germany*. Berlin: European Centre for the Development of Professional Training.
- \_\_\_\_\_. 1989. "Skills and the Limits of Neo-Liberalism." *Work, Employment and Society* 3: 90–104.
- Weiss, R. 1994. *Die 26-Mrd.-Investition—Kosten und Strukturen betrieblicher Weiterbildung*. Cologne, Germany: Deutscher Institut Verlag.
- Wever, K. 1995. *Negotiating Competitiveness: Employment Relations and Organizational Innovation in Germany and the U.S.* Boston: Harvard Business School Press.

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