The German Variety of Capitalism: Forces and Dynamics of Evolutionary Change

Harald Bathelt & Meric S. Gertler

Version Post-print/accepted manuscript

Citation Bathelt, H., & Gertler, M. S. (2005). The German variety of capitalism:
(published version) Forces and dynamics of evolutionary change. *Economic Geography*, 81(1), 1-9.

Copyright / License

Publisher's Statement This is the peer reviewed version of the following article: [Bathelt, H., & Gertler, M. S. (2005). The German variety of capitalism: Forces and dynamics of evolutionary change. *Economic Geography*, 81(1), 1-9.], which has been published in final form at:
<http://onlinelibrary.wiley.com/doi/10.1111/j.1944-8287.2005.tb00252.x/abstract>

This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Self-Archiving.

How to cite TSpace items

Always cite the published version, so the author(s) will receive recognition through services that track citation counts, e.g. Scopus. If you need to cite the page number of the TSpace version (original manuscript or accepted manuscript) because you cannot access the published version, then cite the TSpace version **in addition to** the published version using the permanent URI (handle) found on the record page.

Date: 23 October 2004 (last revision)

The German variety of capitalism: Forces and dynamics of evolutionary change¹

Harald Bathelt and Meric S. Gertler

Abstract. This paper introduces a special section of *Economic Geography* that explores the dimensions of evolutionary change in the German variety of capitalism. It reviews the principal forces and dynamics that have recently shaped the evolution of the German model: those forces that are challenging the German model in its existing form, as well as the efforts of agents to respond to these current pressures. Following this, we discuss how the papers in this special section sheds new light on the nature of this continuing evolution.

1. Introduction: The ‘German Model’ and Varieties of Capitalism

The German model of corporate governance and industrial relations has attracted much attention in academic work from different disciplines, such as economics, political science and economic geography, as well as from policy makers from all over the world. In the early 1990s, the discussion of the German economy focused on its apparent ability to weather the Fordist crisis (Hirsch and Roth 1986; Leborgne and Lipietz 1991; Jessop 1992) based on its particular system of collective agreements between workers and employers, stability in employment relations and high social security standards, and high productivity gains in manufacturing. The German or ‘Rhineland’ model came to be celebrated as an alternative to the American and British paths of deregulation, privatization and reduction of social security

¹ **Acknowledgements:** We would like to thank Bjorn Asheim for his editorial support and helpful comments in preparing this special issue. Special thanks are due to Armin Gräf for his thoughtful suggestions and views on this paper.

standards, which had produced growing disparities in income and living standards in these countries (see, for example, Hutton 1995).

Since the late 1990s, however, it has become clear that the German model is under heavy pressure, due to lower-cost competition (especially from countries in Eastern Europe and Asia), an increasingly problematic population structure (rapid aging, insufficient levels of immigration), the high economic cost of German Reunification, the internationalization strategies of German firms which has brought about substantial relocation of labor-intensive production operations to other countries, and so on. This has led to higher levels of unemployment, creating additional pressure on the social security system, and has encouraged widespread feelings of pessimism amongst the population. In order to overcome some of these problems, Gerhard Schröder's governing coalition of Social Democrats and the Green Party initiated the 'Agenda 2010' program, which aims to restructure fundamentally the German economy and the role of the state in order to improve international competitiveness. A substantial part of this program is directed towards a reduction of state-sponsored social security systems at all levels (i.e. unemployment benefits, health benefits and pension entitlements), while preaching stronger individual responsibility. In exchange for a smaller state role, and as a strategic tool to win support for these initiatives, personal and corporate income tax levels are being reduced.

Do such changes constitute an unraveling of the German model? It is certainly far too early to make any kind of definitive judgment. However, this question raises two closely related issues that we shall review in turn below. First, what are the fundamental features of this model that define its characteristic identity, and that have underpinned the successful performance of German firms in the post-World War II period? Second, what does the literature on 'varieties of capitalism' tell us about how such models evolve over time? In the following section, we outline the features of five key elements which together describe the

core characteristics underlying the German model: the system of finance and corporate governance, the system of industrial relations and structure of labor markets, the nature of inter-firm relations, the education and training system, and the social security system.

Together, these key elements form a complex set of complementary institutions that have produced a national system premised on high skills in the workforce, high productivity, high wages, and a competitive model based on quality and high performance characteristics.

While it may be possible to identify particular features that differentiate one national model from another, we argue that these national constellations should be thought of as continuously evolving manifestations of institutional conditions and economic structures that support and influence one another in a reflexive manner (Lundvall and Maskell 2000; Gertler 2004).

While the basic institutional structures remain fairly stable over time, changing relatively slowly, other aspects are more fluid and dynamic, adjusting themselves to fit the new circumstances of their environment and different strategies of the agents involved. In other words, such models follow processes of evolutionary change (Dosi 1988). But the path of this change is itself shaped and influenced by the institutional structures inherited from the past (Doremus, Pauly and Reich 1998). The articles collected for this special section each explore particular dimensions of this evolutionary change. Consequently, following our description of the four elements and the complementarities between them, we will review the principal forces and dynamics that have recently shaped the evolution of the German model: those forces that are challenging the German model in its existing form, as well as the efforts of agents to respond to these current pressures. Following this, we discuss how the papers in this special section shed new light on the nature of this continuing evolution.

2. Key Elements of the German Variety of Capitalism

To describe the German model of capitalism, it is necessary to outline the key individual elements or ‘subsystems’ that comprise it, as well as the overarching complementarities that give it internal coherence and the institutions that enable coordination between the major actors and subsystems. Indeed, as Hall and Soskice (2001) argue, the prominence of non-market forms of coordination alongside traditional market mechanisms is the defining feature of a group of national models – the German model among them – that they characterize as ‘coordinated market economies’. The description below draws heavily on their analysis.

The System of Finance and Corporate Governance

At the heart of the German model is a financial system that provides firms with ‘patient capital’ through private channels in place of the public capital markets that characterize the Anglo-American system. This financial system encourages firms to adopt long-term time horizons for both investment decisions and labor market practices (stable, long-term employment relations). Because financial performance data such as quarterly returns are not routinely available within this system, investors monitor firm performance through other means that depend on access to insider or private knowledge of the firm’s performance. Typically, this is achieved through the building of network relations between firms engaged in dense systems of cross-shareholding. These are further supported by close relations between firms and their suppliers, customers, and competitors, often mediated by active industry associations in which membership is widespread.

Furthermore, decision-making within the firm is rarely the unilateral responsibility of individual senior managers. These managers are compelled to consult supervisory boards whose membership includes worker representatives, as well as representatives of other firms holding shares in the company, banks, supplier and customer firms. This structure has at least two important effects: it facilitates the circulation of inside information concerning firm

performance, and it shapes strategic decisions in ways that reflect the priorities of this broad array of stakeholders. Preferences for long-term performance, and stability based on consensus are further reinforced by this decision-making structure.

The Industrial Relations System and Labor Market Structure

The industrial relations system in Germany is dominated by a corporatist system of national, industry-wide wage bargaining between employer associations and trade unions. Typically, the pattern for settlements across most industries will be set by lead negotiations within a prominent sector such as engineering (automotive, machinery, and metal fabricating industries), where the powerful IG Metall union negotiates with Gesamtmetall, its counterpart on the employer's side. These agreements (which are known as the *Flächentarif*) extend to union and non-union firms alike, through agreement within the employers' associations.

The principal benefit of this system is that it supports a production system built around a workforce with high levels of skill and workplace autonomy, and encourages freely shared worker knowledge concerning product and process improvements. By setting wages at the national-industry level, the industrial relations system discourages poaching of skilled workers by competitors, and encourages employers to invest in employee upgrading through training. This system also gives workers a high level of confidence that they are being remunerated fairly and at the same level as their counterparts throughout the same industry. Under such conditions, workers are considerably more likely to commit themselves to achieving high-quality production outcomes. Furthermore, as Thelen (2001, 85) notes, "Industry-level bargaining removes divisive distributional issues from the shop floor and it provides a uniform and concentrated timetable for negotiations – thus protecting firms from disruptive rolling wage disputes".

At the level of the individual firm, employees protect their interests by electing representatives to company works councils. These bodies enshrine employee participation in day-to-day production decisions, including those that determine working conditions and layoffs. This system of ‘co-determination’ (*Mitbestimmung*) further reinforces workers’ commitment to achieving high-quality production by providing a strong sense of security from layoffs and control over working conditions.

Inter-firm Relations

Because of the high degree of labor market stability and limited inter-firm mobility of workers within the German system, firms must rely on other ways to participate in technology transfer and knowledge sharing with one another. The industry-level employers’ associations discussed above play a lead role in this process by fostering the diffusion of common technical standards. They also work closely with federal and state level public agencies to design and deliver programs for upgrading firms’ product and process technologies on a continuous basis. The industry associations also help initiate research programs that are jointly funded by their member firms and are conducted in cooperation with publicly funded research institutes.

All of these initiatives encourage the creation of a commonly shared, industry-specific knowledge pool, which is further supported by training programs designed to produce industry-specific skills (see below). This is one of the features that facilitate the development of highly effective inter-firm collaboration within a network of highly specialized buyer and supplier companies. These close network relations are further enhanced by a system of contract law that encourages relational contracting between firms. In contrast to liberal market economies, such as those the American and British cases, such inter-firm networks in

Germany help develop a joint knowledge basis and support processes of ‘learning-by-interacting’.

Education and Training Systems

In a high-skill economy such as Germany’s, the system for educating and training workers is of obvious importance in imparting both industry-specific and firm-specific skills. Industry-based employer associations and unions jointly supervise the design and delivery of training systems, with the state as a third partner (through the provision of partial subsidies). Within the manufacturing sector, the ‘dual’ structure of this system arises through the pairing of industry-based formal educational programs with firm-specific training achieved through lengthy apprenticeships. This dual system ensures that workers will learn skills that are of direct relevance to the firm, while also enabling graduates to find work at other firms within the same industry if the firm with which they apprenticed cannot offer them a permanent job.

As noted earlier, the long-term nature of the employment relation and the industry-wide basis for wage determination provide the appropriate institutional context to support this training system by reducing inter-firm labor mobility and the temptation for competitors to poach each other’s skilled workers. Free-rider employers are further discouraged by the active intervention of employers’ associations to monitor firms’ participation in apprenticeship and training programs. These associations also serve as a forum for the negotiation of industry-wide skill categories, training protocols and quotas.

The Social Security System

One of the basic pillars of the German model is its densely knit, widely accepted social security system. This system provides basic security for employees, the elderly and the sick.

People with low skill levels in volatile, low-pay working environments have also benefited from this system. Its basic elements include unemployment, pension and health plans, whose costs are shared 50-50 between employees and employers, and social welfare programs financed by the state. The social security system has guaranteed that those who were temporarily (the unemployed) or permanently (retirees) excluded from the production sphere could still maintain a certain level of consumption. It has also underpinned the cooperative system of capital-labor relations described above, which have been so decisive in establishing practices of interactive learning and innovation within and between firms.

3. Forces Reshaping the German Model

Recent scholarship suggests that the stability of the German model described above is under siege from a number of different sources. Within the industrial relations system, the percentage of firms covered by employers' associations has declined, with small firms especially likely to defect. Similarly, the percentage of workers organized in unions has decreased (Hassel 1999; Berndt 2000).² In response to their decreasing membership, individual unions have merged into large union confederations during the 1990s, in an attempt to maintain their bargaining power. In addition, the state's position in labor-management negotiations has gradually evolved in a different direction in recent years. Originally a neutral

² Already since the 1980s, the large unions lost substantial support from the workforce. Between 1981 and 1994, the share of unionized employees in the metal sector (under the umbrella of *IG Metall*), the chemical/ ceramics sector (*IG Chemie*), the building sector (*IG Bau-Steine-Erden*) and the public sector/ transportation (*ÖTV*) dropped from 77% to 68%, from 77% to 73%, from 43% to 35% and from 77% to 42%, respectively. Parallel to this, the share of firms organized in the employers' association *Gesamtmittel* and the share of employees working in these firms decreased from 55% to 47% and from 73% to 70% between 1985 and 1990, respectively (Hassel 1999: 491 and 494).

organization exerting pressure on both parties to make reasonable demands in negotiations, the state has more recently tended to give more support to the employers, apparently prioritizing their interests above those of the workers.

This has altered the negotiation process substantially. While such processes used to be characterized by strong cooperative efforts, which existed despite the different positions of the two parties, negotiations have recently become much more confrontational and the willingness of workers to go on strike seems to have increased. Overall, recent changes have resulted in a stronger relative position for employers. As a consequence, an increasing number of firms have reduced bonus payments and demanded concessions regarding increases in weekly working hours without income compensation. The unions face major challenges, due to rising unemployment rates and the growing tendency for large manufacturing firms to relocate their more labor-intensive facilities to other countries, such as those in Eastern Europe and Asia. This serves to polarize existing views and has created even more discontent in the workforce. The cooperative, consensus-oriented negotiation process that was for so long the hallmark of German corporatist governance – and a key to international success for German industries – is now seriously threatened.

Furthermore, in recent years, employers have begun to argue that firm-level agreements that deviate from the general collective agreements are necessary to maintain their international competitiveness. This pressure has resulted in an increasing number of individual agreements between firms and their employees, which often undermine the *Flächentarif* (Hassel 1999).

While such firm-level bargaining in the past may have resulted in bonus payments at the firm

level, it has now become an instrument to undermine the power of general agreements achieved at the federal level, further weakening the overall bargaining position of unions.³

Furthermore, some forces on the horizon may have the potential to bring about significant changes to co-determination. The new European company statute of the European Union, which came into force on 8 October 2004, gives firms with operations in more than one EU member state the option of reorganizing themselves as a single legal entity, with unified systems of corporate governance, management and reporting of financial results. In responding to this new regulatory environment, firms can opt for a more streamlined, single-tier supervisory structure, in which the participation of employees in company management could be significantly undermined. As von Rosen (2004: 13) notes, “Foreign investors in particular would oppose any idea of extending to management boards the present parity between employee and shareholder representatives on supervisory boards”. At the same time, he acknowledges that Germany’s time-honored co-determination system “will not wither away without a considerable fight”.

In recent years, the social security system has been increasingly criticized by employers and politicians for being too expensive, and for weakening incentives for the unemployed to look for work. Experts have identified that high labor costs are one of the main problems of the German economy,⁴ challenging the competitiveness of the German model and encouraging

³ This is also due to the fact that the works councils, whose composition tended to be dominated by members of the unions, increasingly consist of non-union members who are somewhat critical of centralized, union-shaped agreements.

⁴ It should be mentioned, however, that there is debate on whether labor costs in Germany are really that much higher than in some other advanced economies, especially when considering productivity numbers (Lindlar and Scheremet 1999; Bathelt and Glückler 2003). Further, wage increases since the mid 1990s have been moderate compared to those in other countries (Müller 2004).

many firms to relocate parts of their operations to low-cost locations in other countries. As a consequence, the Schröder government (as part of its Agenda 2010 initiative) has pushed through adjustments in health care and unemployment regulations to reduce the employers' labor costs while shifting more responsibilities and additional costs onto employees. This higher financial burden has taken a significant bite out of workers' real incomes.

The demographic structure of German society presents further challenges. The German social security system is built on a social contract in which those who work pay for those who benefit from social security (Clark 2003). In a society with steady population growth, such a system reproduces itself and can be easily financed. However, German society is characterized by low birth rates, and thus a shortage of young workers and a rapidly aging population (Freutel 2004). It has also suffered from low rates of immigration. At the same time, unemployment levels have steadily increased since the mid-1990s. As a consequence, a static or declining number of employees have to pay for a growing number of social security recipients.

Due to the increased pressure on state finance, high unemployment rates and a seeming over-regulation of the German labor market, some observers have called for a reduction of formal skill requirements in production systems and lower overall government spending. According to this perspective, workers should take on greater personal responsibility for their education and training, and regulations constraining employers' use of labor should be reduced in order to increase both functional and numerical flexibility in the workplace. Further, in response to the shifting of labor-intensive production processes to lower-cost locations outside Germany, industry and government representatives have argued the need to establish a stronger low-cost segment in the German labor market. This would, of course, imply lower levels of education for these workers and a reduction of wage levels in certain jobs. If skill requirements are significantly reduced in the future, one of the core strengths of the German model could be

undermined – i.e. the reproduction of high skill levels and problem-solving capabilities in a large variety of occupational categories.

4. The Continuing Evolution of the German Model

The above discussion clearly demonstrates that the German model has been subjected to major forces of change since the late 1990s. Its corporatist structure and collective bargaining processes, and the institutional structure and conditions for its reproduction have been under considerable pressure to adjust to changing global competitive forces. Are these changes likely to lead to the unraveling of the German model as we know it? While the varieties-of-capitalism approach is well suited to exploring the features of the economic system in Germany compared to that in other countries, it is less well developed in explaining how and why this model changes over time. The implication that national economic systems remain stable over time is unconvincing, as the consequences of globalization processes and the leverage exerted by transnational firms over the contours of an economic system are not analyzed in detail. This literature also does not provide much insight into how institutions are, themselves, constantly shaped by the strategic actions of firms and consequently evolve in a reflexive manner. The articles in this special section clearly demonstrate that economic strategies, institutions and the features of the political economy, or in the terminology of Giddens (1984) ‘structure and agency’, are closely related to one another and evolve in an interdependent fashion through rounds of consecutive adjustments.

Addressing this issue, Hall and Soskice (2000: 64) tentatively suggest that some institutional changes may have greater significance than others in setting in motion a process of wholesale transformation: “Financial deregulation could be the string that unravels coordinated market economies”, if it makes it more difficult for employers to ensure stable, long-term employment for their workers. This, in turn, could precipitate a major shift in the nature of

production and innovation systems, since the viability of apprenticeships and on-the-job learning would be threatened.

In fact, Clark and Wójcik lead off this special section by arguing that the pressure for adjustment towards the Anglo-American model is particularly strong in the German financial system. They provide evidence to show that the highly concentrated ownership and cross-holdings that characterize the German system of corporate governance may be more of a liability than an asset in today's global financial environment. Their analysis finds that firms with a highly concentrated ownership structure performed less well when evaluated by daily stock market prices between 1997 and 2001. This finding was most pronounced amongst the largest German firms securing finance in global public capital markets. Moreover, they show that high levels of ownership concentration are more likely to occur in some regions of Germany (such as Baden-Württemberg) than others, making those firms based in such regions less attractive investments to global institutional investors. Clark and Wójcik suggest that this could lead to a scarcity of capital in the future, and attempts to overcome this may trigger further changes throughout the complementary institutions of the German model.

These findings appear to support Hassel (1999), who concludes that the German model failed to adjust sufficiently to the new global competitive conditions that emerged during the 1990s. On the other hand, some would argue that both institutional conditions and economic structures are adjusting effectively to the necessities of global exchange. However, this has not led to the demise of the German model. Specific national structures and practices continue to exist or even diverge from Anglo-American norms (Christopherson 2002). Kogut and Walker (2001) provide evidence that the basic network of corporate ownership linkages in Germany has not dissolved, despite the occurrence of mergers and acquisitions by firms from other countries. The findings suggest that the existing network of corporate linkages might even deepen rather than dissolve.

In other words, it may be the case that the German model can still reproduce its basic structure and maintain a difference between internal and external operations. In other words, it could be considered as a social system that is capable of defining its own basic conditions for reproduction (Bathelt 2003). While it is a well-established tradition to forecast doom and gloom for Germany, the system always seems to find unique ways, shaped by its own inherited institutional features, to respond in surprisingly successful fashion. This is clearly demonstrated in the article by Gertler and Vinodrai (*this issue*).

This paper provides a critical assessment of the frequently heard claims of growing convergence between characteristic national industrial practices, based on the study of industrial practices in German firms with manufacturing plants in three regions of North America. By analyzing modes of workplace organization, the nature of employment relations, the use of technology in production, and associative interaction within the region, it traces the extent to which characteristically German practices have been introduced in North American sites of production. It also examines the mechanisms for transfer of knowledge between German and North American operations, and the extent to which such transfers have been successful. Its overriding conclusion is that the progress of ‘strong convergence’ processes (which would require typically North American practices to be adopted in these firms’ German operations) has been far more limited than the received wisdom would suggest. At least in the world of manufacturing, practices learned and applied in North America have not had a major impact on industrial practices in Germany. In short, because the institutional structure required to support the use of North American practices is not present in Germany (and vice versa) the opportunities for transatlantic learning appear to be quite limited.

Depner and Bathelt’s case study of the genesis of the Shanghai automobile cluster, centered around Shanghai Volkswagen (SVW), provides further support for these conclusions. It documents how German firms have successfully shifted their export-oriented organization

towards one where production and supplier networks are being established overseas. The key to their success has been their realization of the need to modify their practices to conform to the institutional contours of the ‘host’ country environment. Although SVW originally enjoyed a monopoly as a foreign car producer in China due to its early investments, the local production system in Shanghai was not very innovative and focussed on the production of older models. Due to political pressure from the Chinese government to increase local content in production and the large investments of other carmakers, SVW established a supplier network in the Shanghai region that is similar in structure to the firm’s supplier network in Germany. Even small and medium-sized suppliers have established operations in Shanghai. They cooperate with Chinese partners in joint ventures and have learned to adjust their production to the socio-institutional conditions at hand, or have introduced new institutions at their Chinese sites. Of course, this has not always been a smooth process but has been characterized by many conflicts and misunderstandings between the Chinese and German managers.

The case studies contained in this special section represent an important step in the larger project of developing our understanding of how national models evolve over time. Each of these cases investigates a particular aspect of the German model, and does so within an explicitly geographical framework in which the local and national aspects of characteristically German practices are assessed within a global context. While these papers together make an important substantive contribution to this new understanding, they certainly do not constitute the last word on the subject. However, it is our sincere hope that they will inspire others to join in the project of documenting – and theorizing – the continuing evolution of capitalism in all its distinctive varieties.

References

- Bathelt, H. 2003. Geographies of production: Growth regimes in spatial perspective 1 - Innovation, institutions and social systems. *Progress in Human Geography* 27:763-778.
- Bathelt, H., and Glückler, J. 2003. *Wirtschaftsgeographie: Ökonomische Beziehungen in räumlicher Perspektive (Economic geography: Economic relations in spatial perspective)*. 2nd ed. Stuttgart: UTB - Ulmer.
- Berndt, C. 2000. The rescaling of labour regulation in Germany: From national and regional corporatism to intrafirm welfare? *Environment and Planning A* 32:1569-1592.
- Christopherson, S. 2002. Why do national labor market practices continue to diverge in the global economy? The 'missing link' of investment rules. *Economic Geography* 78:1-20.
- Clark, G. L. 2003. *European pensions & global finance*. Oxford: Oxford University Press.
- Doremus, P., Keller, W., Pauly, L. and Reich, S. 1998. *The Myth of the Global Corporation*. Princeton, NJ: Princeton University Press.
- Dosi, G. 1988. The nature of the innovative process. In *Technical change and economic theory*, ed. G. Dosi, C. Freeman, R. R. Nelson, G. Silverberg and L. L. G. Soete, 221-238. London, New York: Pinter.
- Freutel, A. 2004. Die verkannte Zielgruppe (The underestimated consumer group). *Frankfurter Rundschau* 27 August, 11.
- Gertler, M.S. 2004. *Manufacturing culture: The institutional geography of industrial practice*. New York: Oxford University Press.
- Giddens, A. 1984. *The Constitution of society: Outline of the theory of structuration*. Cambridge: Polity Press.

- Hall, P. A. and Soskice, D. 2001. An introduction to varieties of capitalism. In Hall, P. A. and Soskice, D. (eds.): *Varieties of capitalism: The institutional foundations of comparative advantage*. pp. 1-68. Oxford, New York: Oxford University Press.
- Hassel, A. 1999. The erosion of the German system of industrial relations. *British Journal of Industrial Relations* 37:483-505.
- Hirsch, J. and Roth, R. 1986. *Das neue Gesicht des Kapitalismus (The new face of capitalism)*. Hamburg: VSA.
- Hutton, W. 1995. *The State We're In*. London: Vintage.
- Jessop, B. 1992. Fordism and post-Fordism: A critical reformulation. In *Pathways to industrialization and regional development*, ed. M. Storper and A. J. Scott, 46-69. London, New York: Routledge.
- Kogut, B. and Walker, G. 2001. The small world of Germany and the durability of national networks. *American Sociological Review* 66:317-335.
- Leborgne, D. and Lipietz, A. 1991. Two social strategies in the production of new industrial spaces. In *Industrial change and regional development: The transformation of new industrial spaces*, ed. G. Benko and M. Dunford, 27-50. London, New York: Belhaven.
- Lindlar, L. and Scheremet, W. 1999. Arbeitskosten im internationalen Vergleich: Eine Auseinandersetzung mit bestehenden Konzepten (Labor costs in international comparison). *DIW-Wochenbericht* 38/99:681-688.
- Lundvall, B.-Å. and Maskell, P. 2000. Nation states and economic development – From national systems of production to national systems of knowledge creation and learning. In Clark, G. L., Feldman, M. P. and Gertler, M. S. (eds.): *The Oxford handbook of economic geography*. pp. 353-372. Oxford: Oxford University Press.
- Müller, M. 2004. Richtiger Maßstab (Adequate scale). *Frankfurter Rundschau* 23 July, 28.

- Thelen, K. 2001: Varieties of labor politics in the developed democracies. In Hall, P. and Soskice, D. (eds.) *Varieties of Capitalism*. Oxford: Oxford University Press, pp. 71-103.
- von Rosen, R. 2004: The gathering storm over corporate Germany. *Financial Times* 29 September, 13.