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The impact of global forces on the individual: Empirical evidence from the German clothing industry

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Empirical evidence from the German clothing industry

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Abstract

Starting from theoretical perspectives on globalisation, the following article analyses how current working conditions are affected by globalisation processes. For this purpose, recent developments in the German clothing sector are traced back to the power of economic globalisation processes. Characterising the German clothing sector as pioneer in economic globalisation, we use empirical findings to illustrate how current processes of globalisation influence the work At organisational level, corporate strategies rationalisation, standardisation and flexibilisation of work in order to response to the economic pressure of global markets. At individual level these strategies, in turn, speed up working processes and intensify working processes for the employees. Although these developments form strong trends, we conclude that the local embeddedness of companies is still of high importance with regard to organisational and individual consequences of globalisation.

Key word: globalisation, working conditions, clothing sector,

Germany, corporate strategies **JEL codes**: J81, L67, M16

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1. Introduction

Current working conditions can be considered critical spots where globalisation processes have a direct impact on individuals. Since most people commonly experience globalisation processes only in daily news about the loss of thousands of jobs caused by off-shoring processes, the actual phenomenon of globalisation remains unclear or often causes a feeling of insecurity. Even the scientific perspective clarifies only certain facets of a highly complex development. However, changes in labour policy regulation or increasing economic pressure on regional labour markets to adapt wages to lower international standards has now begun to be experienced in real and concrete terms by industrial societies in Western Europe. The intensive debates on European or international standards of labour regulation also show that changes are taking place in the working structure.

Since the 1990s, the processes of globalisation have entered a new phase thanks to modern information technologies and transport- and logistic systems which allow a more rapid exchange of data, goods and capital. In this context, new economic markets have developed from global linkages. These interconnection processes not only have an enormous influence on the political dimension of nation states and on national economies as a whole, but also on the restructuring of organisations and, last but not least, on individual working processes.

The notion that "the workplace is a place where a direct encounter takes place between the individual, on the one hand, and global forces on the other" (Huws 2006: 256) is the guiding hypothesis of the following article. Very little research has been carried out on the interconnection between these different analytical perspectives. One empirically based approach connecting these spheres was undertaken by Huws et al. (2003) in order to show how globalisation processes act on a work organisation. She analysed the international division of information services, mapping and quantifying the extent of the global spread as well as the working

conditions of eWork¹. Taking this approach into account, the present article will analyse the relationship between the dynamics of the global markets and the individual sphere. The question is thus whether it is empirically and theoretically possible to reconstruct a relationship between these two.

In order to answer this question, the article focuses on the relationship between the global and individual spheres to bridge the different levels in between. As an example, the German clothing sector was investigated with regard to the dynamics of globalisation. In order to identify recent developments in qualitative changes to working conditions, qualitative case studies were conducted which examined how firms and highly qualified employees in the clothing sector were affected by these economic processes².

As in other clothing sectors around the world, the German clothing sector also reacted very early to internationalisation processes, and is still facing the challenges posed by the processes of globalisation. The sector gained historical interest as it started the internationalisation of its production in the early 1970s and, therefore, offers a model of global production structures. Today, nearly all production is outsourced to sites all over the world. But this development did not mean the decline of the German clothing sector; it underwent a second phase of structural change in reacting to the demands of globalisation processes, and this phase was completed successfully.

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¹ This study was conducted within the framework of the EU research project EMERGENCE (2000-2003) (Huws 2003).

² This article presents the first empirical findings from the European research project WORKS. The project WORKS (2006-2009) comprises 18 partners in 13 European countries and is coordinated in Belgium. It analyses the restructuring of global value chains as a driving force for changes in work organisation in a knowledge-based society. One important aim of the project is to map the similarities and differences between the European countries in certain sectors. To achieve this, a comprehensive empirical survey is carried out. The Institute for Technology Assessment and Systems Analysis (ITAS) conducts research on the clothing and the IT sector, with case studies focusing on organisational restructuring and changes in occupational identities. Further information can be found at the homepage of the project (http://www.worksproject.be).

The following article is structured into three parts: Theoretical considerations on the current debate on globalisation processes are followed by an insight into current organisational and individual changes in work on the basis of an empirical study. Finally, the conclusion shows how the relationship between global economic processes on the one hand and the organisational and individual spheres on the other can be evaluated. Analysis shows that further research is necessary to properly understand the connection between the global and local levels.

2. From Internationalisation to Globalisation: Theoretical Considerations

Although the dynamics of the interaction between political deregulation, liberalisation and privatisation of public goods have been present since the mid-1970s, the term "globalisation" only became relevant in public discourse with the fall of the socialist systems after 1989. This historical event had a profound influence on the capacity for political and social alternatives to the dynamics of capitalist systems to be created. If one evaluates public discourse at the time, it seemed that there was no alternative to capitalist logic for the development of modern societies. It was particularly against this ideological background that the literature on "globalisation" grew in the 1990s (Enquete-Kommission 2002, Altvater 2006). Thus in contrast to the term "internationalisation", both public and scientific use of the term "globalisation" not only refer to economic processes (as was considered in the literature to be true of "internationalisation"), but indicate a political and cultural transformation process worldwide.³

However, critical perspectives mostly refer to historical analyses of the industrialisation process, which started in Europe in the 18th century from where it was exported to the United States and later to all the other continents. These processes were basically described as a normative and social programme, which created specific production and working patterns and has become the central

³ In public debate, the global perspective is very often expressed using terms like "global village", "global community", or "global governance". The intention behind these concepts is to strengthen the idea of a united and harmonious world society.

characteristic of modern societies (Wallerstein 1974, Polanyi 1978, Braudel in Altvater & Mahnkopf 1996).

In terms of a normative and Eurocentric concept, this programme was discussed as "the process of modernity as the already indicated rational management of the world-system. This position intends to recoup what is redeemable in modernity, and so halt the practices of domination and exclusion in the world system" (Dussel 1998). Chomsky focuses on this programme, too. He describes it critically as the end of the present stage of civilization because of three limits:

"These limits of modernity are, first, the ecological destruction of the planet. From the very moment of its inception, modernity has constituted nature as an "exploitable object", with the increase on the rate of profit of capital as its goal. The second limit is the destruction of humanity itself. "Living labor" is the other essential mediation of capital as such; the human subject is the only one that can "create" new value (surplus value, profit). The unemployed do not earn a salary, that is money, but money is the only mediation in the market through which one can acquire commodities to satisfy needs. [...] In any event, work that is not employable by capital increases, thus increasing unemployment and the proportion of needing subjects who are not solvents...The result is poverty, poverty as the absolute limit of capital. [...] The third limit is the impossibility of the subsumption of the populations, economies, nations and cultures that it has been attacking since its origin and has excluded from its horizon and corned into poverty" (Chomsky in Dussel 1998: 19ff.).

This view of the greatly destructive character of globalisation processes is also shared by Elmar Altvater and Birgit Mahnkopf, who describe the globalisation process as a "continuous process of global disembedding" (Altvater & Mahnkopf 1996). They were mainly referring to the works of Karl Polanyi, who considered the industrialisation process in England as a "great transformation" in terms of structural changes towards market-oriented production processes and forms of social life (Polanyi 1978). From a Marxist perspective, Polanyi considered these changes to be the transition from an agrarian-based economy to a total market economy, where capital, natural resources and human resources have been transformed into goods.

The main characteristic of this transition was – according to Polanyi – that these goods are controlled by the regime of the accumulation of capital.⁴

The above-mentioned description of the transformation of social and cultural production patterns into goods as a "disembedding process" for English society in the 19th century (Polanyi 1978 in Altvater & Mahnkopf 1996: 114) can be understood thus: all social, cultural and economic processes were subordinated to the capitalist logic of the markets and, therefore, dis-embedded from their original contexts such as in the rhythm of natural processes, work structure, social and cultural traditions, and values. In order to describe the complex character of the current globalisation discourse, Altvater & Mahnkopf further developed the idea of "disembedding processes" and fundamentally emphasised the following aspects (arguments in: Altvater & Mahnkopf 1996: 114ff., Altvater 2006):

There are different historical phases of this process, which are still going on and which have to be differentiated in terms of technological innovations, political values and national policies. For example, the new quality of globalisation in recent developments was facilitated by new transport and ICT technologies and the introduction of the World Wide Web at the beginning of the 1990s, all of which strongly influence the creation of global markets and the vision of a global economy.

From a more technology-driven perspective, there are different views and more optimistic approaches to globalisation processes. One very prominent example is Manual Castell's "theory of the network society" (Castells 1996), which is orientated to both its 'connected' dimension and its increasingly 'global' dimension. Castells, as the most prominent representative of the "network society", focuses on specific features that constitute the heart of the information technology paradigm. This description significantly characterises the new pattern of modern organisations,

⁴ The expression "accumulation of capital" goes back to the Marxist approach and means the tendency of capital to transform capital, natural resources and human labour into abstract goods in order to increase the capital stock. Accumulation refers not only to the constant capital, but also to the employees if part of the capital is used to employ more workers. In this case, variable capital has been accumulated because part of the surplus is used to increase the sum of salaries (see E. Mandel 1998).

where social hierarchies and the limitations of the markets decrease as decentralisation, integrated systems, flexible social structures and knowledge-based work gain importance (Castells 1996, Kenis & Schneider 1996).

This process did not take place without contradictions and social countermovements.⁵ The process thus cannot be described as a linear development, but as an open social and cultural process.

The intensity of these processes has grown because the capital of the markets has become increasingly independent of the "dis-embedded market". The development of global financial markets and their impact on production patterns as well as on public goods is currently being discussed critically in political and public debates.

The economic pressure caused by these markets has a profound influence on both national and global markets. This aspect has been discussed in the post-Fordist approach, which describes a new mode of production. This latter is characterised by features such as flexibility of the whole work organisation, higher quality of the products, decentralisation of the work structure, increasing proportion of research and development, higher qualification of the employees, and an increase in knowledge-based work (Hirsch & Roth 1986, Brand & Raza 2002).

Because of the globalisation of the economy, global actors are themselves increasingly able to act independently of national regulation policies as well as the international policies and rules of the nation states. National borders seem to erode as a framework for economic action; global value chains reorganise and become increasingly fragmented (Eckardt et al. 1999).

One very important aspect is the development of a global regime of time and space as opposed to regional and local patterns of time and space. In terms of space, processes of de-territoralization mean that the geographical location is becoming less

⁵ The international organisation ATTAC (Association pour une Taxation des Transactions financières pour l'Aide aux Citoyens), which was founded in France in 1998, can probably be considered the most important social movement. Following its original demand for political control of the financial markets, the organisation is now working in many fields dealing with the consequences of the

and less important as a factor for the organisation of production. In terms of time, the increasing economy of time means the adaptation of different temporal qualities (working time, leisure time, family time, creative time) to the rationality of the market logic. Thus time and space in the global economy are adapted to a monetary rationality.

The acceleration of processes at all levels of the global value chain can be considered as one fundamental effect of the increasing importance of the financial markets and the increasing pressure on the production systems. From a normative perspective, the discourse on the proliferation of global competition and economic pressure actually dominates not only managerial considerations but also political and scientific views of global economic development (UNCTAD 2002, Köhler 2004, Altvater & Mahnkopf 1996). Especially at the level of economic globalisation processes, the "rational management of the world system" (Dussel 1998) has found its continuation in a powerful discourse about economic growth and competition.⁶

Taking these considerations into account, globalisation can be described from a critical perspective as a profound transformation process, which is still going on and which affects national production systems, the organisation of nearly all sectors and branches and has at least a strong impact on the worldwide political and cultural constitution in different societies (James & Miyoshi 1998).

But how are these processes interrelated in the local and individual spheres? How can the global dynamic be operationalised empirically on the organisational and individual level? Using the example of the German clothing sector, globalisation processes will be analysed here on the basis of the following methodological indicators.

First, the methodological design focuses very much on the economic pressure of international markets, which are mainly produced by transnational corporations.

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⁶ In fact the activities of transnational corporations have increased dramatically. According to figures from the OECD, since the beginning of the 1990s, about 25-30% of international trade has been operated by transnational corporations (Boltanski & Chiapello 2003:23).

Second, the acceleration processes have only taken place thanks to new developments in information technologies and transport systems. This also seemed of great value in this sector when a second reorganisational phase was introduced at the beginning of the 1990s. And third, the structural changes of the sector towards a postfordist pattern can also be evaluated. In order to facilitate changes in organisational structure within companies, "flexibility" became the key word in organisational restructuring. Thus concepts of functional and numerical flexibility were discussed and introduced and have effectively changed individual working conditions.

3. Globalisation Processes Exemplified in the German Clothing Sector

3.1. Recent Developments and Characteristics of the German Clothing Sector

The German clothing sector has often been seen as a pioneer in the process of globalisation and is already of historical interest. The sector has experienced two different phases of structural change. In the first phase, outsourcing of production began early at the end of the 1970s, when internationalisation of the economy was still evolving in other sectors. A new division of labour at a global level was established as clothing manufacture was relocated to subsidiaries in low-wage countries⁷. This process was mainly driven by rationalisation strategies. Important preconditions were low investment costs and low demands on qualification, so that production could be realized effectively abroad.

The second phase of structural change took place in the 1990s with the development of new technologies and the increasing importance of knowledge as an important resource. In the course of globalisation, not only were processes accelerated greatly, but global competition also increased, leading to an intensification of market- and product-orientated organisation patterns. In order to exist in these accelerated

⁷ Actually, only 5% of production remains in Germany (Heymann 2005).

markets, technological innovations, use of knowledge, and new forms of work organisation became essential to fulfil the highly competitive speed and price demands of the sector. Accordingly, comprehensive standardisation and informatisation processes became important. Information technologies were used, for instance, to improve distribution processes through effective logistic systems or to enhance the coordination between design and production as well as between logistics and retail. Furthermore, the development of technical know-how on the use and invention of new materials or refinement-processes gained increasing significance.

As mentioned above, technical innovations and knowledge management are of particular importance for further development, because the structure of the sector is closely linked to certain market and technological factors. As Dunford (2004: 316f.) summarizes: "the fact that demand grows slowly, is often unstable and rapidly changing; the fact that the product range is limited and subject to rapid obsolescence". Firms have to react to these preconditions by constantly adapting their selection of products. Furthermore, there is "limited scope for economies of scale [...] and for learning curve effects" (Dunford 2004: 317) due to the fact that the manufacturing of clothes is very labour-intensive and that the products vary permanently. Hence, technological rationalisation is possible only to a limited extent.

Firms thus focused strongly on knowledge-intensive activities such as the business areas of marketing, design and logistics. These divisions became the core activities of the branch. The German clothing sector was very successful in this phase of organisational change, which has now been effectively completed. In globalisation terms, one can say that the sector developed effective strategies to react to the high economic pressure of evolving global markets. Currently, it has a strong position in the world market, ranked fourth in terms of export and second in import worldwide. Currently, 45 000 people are employed in this sector in Germany, working in all remaining business functions and producing a turnover of nine billion euros (data from 2004; Gesamtverband der deutschen Textil- und Modeindustrie 2005). To sum up, the second phase of structural change allowed a new model of international

division of labour, anchoring all tasks with a strong focus on knowledge in Germany, and outsourcing executive work processes.

Even though extremely dynamic markets are characteristic of this sector, and speed, creativity and flexibility remain as the central success factors of the branch (Faust, Voskamp & Wittke 2004; Heymann 2005), new business strategies such as the verticalisation of global value chains by H&M or Zara and new retail strategies in the low price segment via discounters have forced the branch to react to current developments. The concept of verticalisation in particular has had a high impact on company strategies, while development of the low-price segment primarily caused a reduction in the market share for the rest of the branch.

The strategy "low quality and low prices" proved successful for retail and notably reduced the market share, but reaction to competitors took the form of concentration on the companies' initial strengths such as quality or innovation (for further details, see Wortmann 2005). By contrast, the process of verticalisation posed a totally new production model which arose in response to the competitive global markets and allowed large single firms to gain control of all parts of the global value chain and thereby develop an aggressive cost and speed strategy. This production model functions in a similar way to the "old industrial model", which can be characterised by hard fights for market shares through rationalisation strategies.

In fact, the model serves as a normative paradigm for future developments in the rest of the industry. In contrast to other sectors, where strong fragmentation of the global value chain can generally be observed (e.g., automobile or electronics industry), in the clothing industry the verticalisation of global value chains was extremely successful. Not least, evidence from the clothing sector "gives reason to refrain from a generalized credo of unlimited splitting of value chains" (Faust et al. 2004: 46). The horizontal fragmentation of global value chains leading to production networks in place of vertically integrated firms is often generalised as the future model for global economic development. Prominent examples of the contrary business strategy 'verticalisation' are the so-called "new verticals" like H&M or Zara. The term 'verticalisation' describes how companies develop coordination and control of the

whole value chain from production to sale on their own. This allows them to realise very fast production cycles,⁸ and they can react to or even set current fashion trends (Stengg 2001). Faust et al. summarise the process of verticalisation as follows:

"Focusing on specific market segments and customers and emphasizing speed and flexibility throughout the value chain, in order to avoid the main risks of a divided value chain and the sharing of margins between retail and producer, vertical companies integrate branding (closely associated with the stores), marketing and sales in owned or franchised stores and a close control of the complete backward value chain. [...] The main feature of vertical integrated concepts, either starting from producers or from retailers, is the integration of branding/design and sales and the ability to translate the information lead from the tight coupling of functions into an accelerated production and procurement process." (2004: 45)

Verticalised firms rationalise via standardisation processes which form closer links between all parts of the value chain and accelerate the production cycle. As a general trend, it can be observed that, on the one hand this higher speed is evidenced by a higher number of shorter collection cycles, and on the other hand, the individual firms implement their verticalisation of value chains in their own way. The firms seek to influence both sides of the value chain - production and retail - by developing new shop and sales strategies. Close collaboration with production is not a new phenomenon, but interaction with retail is.

These general observations must be differentiated with regard to the strategies of single firms. In Germany, a few large firms exist which completely incorporated the verticalisation strategy and aimed at the lower end of the market. Other firms, mainly medium-sized ones that form the main part of the sector, developed their own strategy. They realised parts of the verticalisation strategy and had to adapt to the changed circumstances, such as the acceleration processes or closer connection with the business field retail. Simultaneously, however, they introduced a post-

⁸ They realise production cycles where an average of 10-15 days is needed from design to delivery. This influences retail as well, since the clothing is in the shops for no more than a month.

Fordist production pattern focusing on flexible organisational forms. Furthermore, they concentrated on special markets and emphasised their original areas of competence, developing their own special strengths such as in product quality, innovative technological knowledge, or extraordinary design requirements. Focus on strengths is often prominently anchored in the firm's strategy and values. Moreover, it guides strategic decisions such as the relationship and contract conditions with the suppliers or the marketing and retail strategies including, e.g. investment in and organisation of management logistics. For these firms, globalisation processes impose the necessity of concentrating strongly on market demands, developing and following up individual strategies, and focusing on well-defined internal organisation processes in addition to actual market trends.

3.2. Empirical Findings from the German Clothing Sector

In the following, we first present empirical results from the ongoing research project "Work organisation and restructuring in the knowledge-based society (WORKS)"9. In order to analyse the impact which global value-chain restructuring has on organisations as well as on individual working conditions, a qualitative empirical study was conducted. Company case studies were carried out in the clothing sector¹⁰. The focus was on changes in management and working conditions in the business functions of design and logistics; the findings from this research are presented in the context of this article. In addition, expert interviews with union representatives and sector associations were conducted; the appendix contains an overview of the case studies and expert interviews.

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¹⁰ The firms analysed in the case studies were all medium-sized and had undergone a "restructuring event", i.e., a modernisation or rationalisation process during the past five years. Between three and seven semi-structured interviews were conducted in order to map all hierarchical levels of the firms. In total, five case studies and two expert interviews were analysed (see appendix).

The empirical results of the case studies are presented by linking the main findings to recent theoretical considerations of the debate on the changes in work organisation at the company and individual levels.

3.2.1. Organisational Level

As described above, the concept of flexibility is one central aspect of a new mode of production. The increased insecurities experienced by markets over the course of globalisation processes formed the normative basis for flexibility strategies as firms laid claim to higher degrees of freedom by allocating human resources more flexibly in order to conduct their business effectively. As a consequence, there was a deregulation of labour markets to widen the scope for management action (Flecker 2005: 73ff.). Flexibility is often seen as an economic must in the discourse of globalisation which is necessary to maintain companies' competitiveness. Flexible forms of organisation are definitely a reaction to growing global market competition, which generates the need for constant modernisation and reorganisation in individual organisations¹¹.

In sociological literature, flexibility can be defined at the level of organisations as the capacity to adapt supply to changing demand requirements. Flecker et al. (2006: 54) identified two basic dimensions of these adjustment processes:

- "the *numerical-functional dimension*: adjustment processes are either (quantitative) or functional (qualitative). In the first case the objective of adjustment is the size of labour input, that is the number of workers or working hours, whereas in the second case the adjustment process focuses on the skills and tasks of a constant labour force;

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¹¹ The current debate on flexibility is very controversial, as shown by the 'flexicurity' discussion (Kronauer & Linne 2005a). Here, the ambivalent development of flexibility is reflected, discussing "flexicurity" as the political attempt to enhance both flexibility in labour markets and work organisation as well as employment security and social security (Kronauer & Linne 2005b).

- the *external-internal dimension*: here the difference is whether adjustment is achieved by using external sources of labour power or by relying on existing permanent staff."

The debate on flexibility is used here as a superordinate concept in analysing empirical findings in the clothing sector. The classification of flexibility developed by Flecker et al. (2006) is used to map changes that arise at the organisational level. Analysis of the empirical findings of the case studies is conducted along the different dimensions of flexibility, namely, the numerical/functional and the external/internal dimensions.

Going back to the first phase of structural change in the German clothing industry, external functional flexibility occurred right at the very beginning, when blue collar work began to be outsourced at the end of the 1970s. Simultaneously, there was external numerical flexibility as German production workers were discharged on a large scale, leading to decentralisation of production,. The empirical findings of the case studies showed that external numerical outsourcing can still be observed in current practice in the German clothing sector because previously permanent positions held by designers were partly reassigned to self-employment contracts. Accordingly, a new contractual flexibility was established which led to higher financial burdens and an increase in insecurity for the affected employees, who had to assume these risks and costs from the firms (CS Des 2).

As stated in the literature, recent research shows that *external functional flexibility* encompasses not only the outsourcing of tasks which can be carried out by low-skilled, low-qualified workers, but also - supported by IT - the adjustment of knowledge, skills and competence (Flecker et al. 2006: 54). In the empirical findings from the German clothing sector, at first sight there is little evidence of such a development. Knowledge-related business fields were identified as the core of the German clothing sector, technological and process-oriented knowledge was

defended as the virtual capital for maintaining a successful position in global markets. These findings can be illustrated by citing one of the interview partners:

"You could say 'o.k., I couldn't care less, where our own employees are. An Indian is as good as a Westphalian', only, if the Indian is in New Delhi, far away from the product and from... the creativity... from the contact to the products, then something is lost at that point..." (CS Log 2: 1709-1713).

At a second glance, ambivalent developments can be identified. While there are no serious attempts to outsource or offshore the business function of design, the outsourcing of logistics depends strongly on the strategic orientation of the firm. If logistics is seen as a core competence, high investments in technological rationalisation processes are realised in order to serve the demands of new developments in retail. However, the business of logistics is fairly easy to outsource, as service providers offer to take over the whole process which is utilized by several firms. As a result, insourcing and outsourcing strategies exist in parallel in logistics (Exp 1, CS Log 2).

At the internal level, numerical and functional flexibility can also be detected in the empirical material. While *internal numerical flexibility* in the case of the German clothing sector can be mainly found in terms of working time arrangements, internal functional flexibility is a complex development. Flexible working time is a well-known phenomenon in the organisation of knowledge-based work and is described widely in the literature. The focus of research here, however, lies particularly on the consequences which the numerical flexibility of working time has on qualitative arrangements (see Boes & Baukrowitz 2002, Eberling et al. 2004, Hielscher & Hildebrandt 1999, Jurczyk & Voß 2000). According to these authors, work is increasingly being organised on the basis of projects, leading to higher responsibility of the employees to fulfil the tasks.

The flexibility of working time in this context leads mainly to a higher amount of hours worked than to flexible use. Empirical evidence in the German clothing sector showed that long working hours and the strong orientation towards organisational requirements is a predominant development in the sector, too (CS Des 1, CS Log 1).

On the basis of the empirical material, *internal functional flexibility* can be identified in several aspects of current developments in the clothing sector. In the business areas of both design and logistics, an enrichment of working tasks could be observed. The tasks of the designers were widened by coordination tasks with production and by marketing and sales requirements, as is illustrated by the new occupational title 'product manager' which is widely used. This development led to a larger field of responsibility for the designers and got them closer to the management level of the firms (CS Des 1).

A significant up-skilling of the required tasks took place in the business area of logistics on the basis of technological innovations. Formerly, logistics tasks were characterized by a high number of low-skilled workers. Now logistics centres run on IT-based, fully automatic control systems which allow an enormous increase in productivity and require only a small number of highly skilled employees. Logistics gained a new quality with regard to knowledge intensity and is now highly shaped by knowledge management as the following quotation illustrates:

"Therefore at this point we are already quite perfect. Basically, it is possible to state in every second "where every single item is" and even better, we can even come after three years and still identify who made this piece, where did the raw material come from, when was it sent out, who bought it." (CS Log 2: 939-943)

Furthermore, empirical evidence of a process described in the literature as 'marketisation' can be observed (Kocyba 1999, Moldaschl & Sauer 2000). The concept of marketisation describes the omission of hierarchical control systems leading to the direct exposure of the employees to market forces. The empirical findings allow the general observation that the employees in both design and logistics gained higher degrees of responsibility, e.g. for delivery dates or for organisational processes. Furthermore, direct exposure to market processes can be found in individual cases through the assessment of designers by sales figures (CS Des 2). The following quotation shows how the process of marketisation leads to a direct price evaluation of an employee working in the field of distribution:

"Typical is, let's say, the distribution structures. Before we hired a sales agent in Holland and thought, hopefully he sells something. Today, our firm passes that point. We hire a sales agent, too, but we make him a plan and we control the payments every quarter of the year. Our sales director is over there every quarter, saying: 'So, dear Marc, how's the world looking?'" (CS Des 1, I: 348-352)

Moreover, in all the case studies analysed, the role of the customer was predominant. It is assumed that, strengenthened by the high economic pressure of the world market, the trend towards verticalisation of global value chains is being incorporated into the firms. Companies in the clothing sector seek to influence the markets directly, taking on functions and risks formerly held by retail. Accordingly they e.g. develop new shop systems or realise just-in-time deliveries. In the firms, therefore, the role of the customer increases significantly as the idealized customer becomes an important principle guiding strategic decisions (CS Des 1, CS Log 1, CS Log 2).

To sum up, at the organisation level, several changes due to globalisation processes can be identified. The described types of outsourcing of certain business functions serve as a direct cost-saving strategy, such as outsourcing of production or partial outsourcing of logistics. In order to manage the demands of speed and cost, several processes to increase the productivity of the single worker can be detected such as the enrichment and up-skilling of working tasks. Finally, the process of marketisation catches the new demands posed by globalisation by directly transferring market and time pressure to the single employee.

3.2.2. Individual Level

In this section, the consequences of globalisation processes are shown at the level of the individual. The acceleration processes of the branch placed new demands on the individual work performance of the employees. This is indicated by a higher number of collection cycles per year as well as the extension of the business field of the clothing sector further towards market orientation. Especially, the higher time pressure of the sector and the enrichment of working tasks lead to an enormous increase in the intensity of work¹². The processes of job enrichment, marketisation of work and flexibility of working time, identified as functional internal flexibility at the organisational level, have high impacts on the individuals. On basis of the case studies, these processes are used to explain how the work load of the individual employee is intensified.

The workload for the designers is higher due to the overall acceleration process in the sector that basically leads to a higher number of collections per year. There are shorter time cycles to sketch the models and to implement and coordinate the production process, although the use of IT and CAD programmes in general allow a faster working process. One designer described the greater time pressure from the changed circumstances like this:

"I've got, for example, for this ceremony, waistcoats, I've got four weeks throughput. That means for me, well quite, … yes, stress to get the pieces through that fast […] because I also depend on my fabric supplier, he doesn't weave that for me overnight either …" (CS Des 1, II: 386-391)

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Nowadays, individual working conditions are generally shaped by the new demands and requirements that knowledge-based work implies. German-speaking sociology offered two central concepts in order to explain the qualitative changes in the working conditions: the concept of the "delimitation" of work (Kratzer 2003, Minssen 2000, Voß & Pongratz 1998) and the concept of "subjectification" of work (Baethge 1991, Moldaschl & Voß 2003, Schönberger & Springer 2003). The delimitation of work arises out of the processes of flexibility, taking into account the erosion of traditional (Tayloristic) working standards. Consequently, a blurring of the boundaries between work and life takes place. Closely connected with these developments is the subjectification of work. This concept describes the process that employees increasingly bring individual properties into the working process, which are simultaneously claimed by the employers. For the individual employees, this development leads to a higher degree of self-fulfilment in work and greater importance for the individual identity.

The exposure of employees is even reinforced by the high orientation towards

markets, leading to a new assessment of work which is directly controlled by figures.

Furthermore, the designers have a broader field of activity with regard to marketing

and sales decisions, as well as planning and coordination tasks with other areas of

the firm. In this context there is a higher communication and coordination 'load'. The

organisation and fulfilment of the increased tasks lies in the responsibility of the

employees (CS Des 1).

A strong orientation towards the firms' needs arises in particular with regard to

working time. Long working hours, overtime, stress and permanent time pressure

are customary, as the accomplishment of the (increased) work tasks lies in the

responsibility of the employees, who organise their working time by themselves.

Leisure time, holidays and long working days are closely connected to the rhythm of

the sector and the individual firms, and determine when gaps are possible for

individual activities. In view of a work-life balance, the demands of the sector are

hard to combine with the needs of the private life, as an interview partner states:

Interviewee: "Well, the designers I know, who are in my vintage, are all unmarried,

those who then ... or that are mostly women and the women, who have a child, they all

don't work any longer"

Interviewer: "No longer?"

Interviewee: "No longer or at the level of a tailor." (CS Des 1, II: 807-813)

The increased intensity of the work due to the higher speed and the strong market

orientation of the sector directly influence the individual employees. Since they now

have a higher degree of responsibility, the individuals have to compensate for the

higher work load on their own. More and more, the employees use their private time

to balance the increased requirements their work tasks pose, leading to an

inconsistency between work and life. In so doing, they contribute to the accelerated

and hardened economic processes. But the apparent imbalance between work and

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life on the level of the individuals also affects the societal sphere, leading to a disregard of the private sphere and tasks carried out therein.

4. Conclusions

The hypothesis behind this article was that "the workplace is a place where a direct encounter takes place between the individual, on the one hand, and global forces on the other" (Huws 2006: 256). From the perspective of discussing globalisation as a process, which is actually mainly characterised by economic processes, we have tried to define interconnections between these processes and their consequences at the individual working level. Taking the example of the German clothing industry as a sector which seems 'classical' in terms of international division of labour, this relationship should be proved.

In terms of method, the interrelationship was reconstructed on the basis of three indicators: the impact of transnational corporations, the orientation of the companies toward flexibility, and the acceleration processes that appear due to technological innovations and organisational changes.

In order to reconstruct a causal relationship between the global processes and the individual working level, the analysis has to integrate several aspects. Although structural changes have been observed in the branch over the past 15 years, each of the firms analysed has its own way of reacting to external changes. In this context, the analysis shows that economic processes have to be translated into organisational, social and cultural processes. This is important in analysing correlations between structural conditions and subjects. As the empirical part showed, the organisational level allowed the indicators to bridge the gap between the global and the individual levels. The organisational level was considered an intermediary level which was

used to analyse the empirical findings on the basis of theoretical guidelines¹³. These indicators were based on findings in the rich literature about changes at the organisational level within the firms, which have been discussed intensively in German Industrial Sociology over the past 10 years. They include restructuring of temporal and spatial working patterns as well as new forms of control within the working structure (e.g. Flecker 2005, Hielscher & Hildebrandt 1999, Kocyba 1999, Voß & Pongratz 1998). The approach followed here goes beyond the current industrial sociological debate on changes at the organisational level. Thus these theory-based indicators can be used to explain the influence of global processes (e.g. acceleration processes of the global economy, further processes of standardisation of different products and even of administrative services) on individual working conditions.

At the structural level the following results can be summarised as a contribution to the broad debate on globalisation processes. First, according to economic and normative orientation, all firms in the German clothing sector reacted to the concept of verticalisation, which is used strongly by transnational corporations. With this concept, two objectives are pursued: on the one hand the ongoing process of rationalisation and standardisation of production patterns, and on the other hand the deepening of control within the segments of the global value chain. Thus the firms' strategy is to improve their control in the production system and in the market. Second, on the organisational level all firms used flexible production patterns in order to react to the high market pressure created by verticalised firms. These strategies could be principally detected at the level of work organisation. Third, at the level of the individuals, the use of these flexible production patterns had a significant influence on the individual employees in terms of intensification of work as well as of time requirements.

However, this general analysis must be differentiated in order to show how the firms in the German clothing sector react to globalisation processes. The sector consists

¹³ Basically the approach follows the empirical framework of Mayring (2000) in seeking to proceed systematically and to follow specific theoretical guidelines.

mostly of medium-sized companies which handle these challenges in a manifold way. On the one hand, they have a clear orientation towards the global economy. They have realised well-defined and adaptable supplier networks worldwide, organised by complex logistic management systems. Furthermore, they have a high export orientation. On the other hand, the firms are still embedded in regional structures, with a long tradition in certain locations, and a sense of responsibility to maintaining the long and stable relationships with their employees and using the creative potential which arises out of stable conditions. They place their emphasis on special markets, serving them on the basis of individual strengths such as quality or technological innovations.

To conclude, the picture is a multi-faceted. A general trend can be identified regarding the penetration of acceleration and market processes into the single firms, but no overall trend can be detected concerning the concrete reply-strategies of the firms. Evidence from the German clothing sector shows that a double-sided development is taking place. Globalisation processes and economic pressure from the global markets are prevalent in the firms and have an enormous influence on strategic decisions, leading, e.g. to flexible production processes as well as to customer-orientated production models. Nevertheless, these firms are still strongly embedded in traditional local contexts. In that sense, traditional common values, long-term relationships with employees as well as the relationship to regional contexts still play an important role within the strategic orientation of the firms. This orientation generally offers a continuation of stable work relations for the individuals. However, it remains unclear how the development will continue.

The second phase of global restructuring processes of the clothing sector can be considered – for now – successfully completed. Nevertheless, the clothing sector is extremely dynamic, with high degrees of speed and flexibility and, as evidence from other sectors (e.g. automotive) shows, development towards more globalised production patterns. Whether a traditional integrated structure will remain in the German clothing sector in the future or whether the branch will continue to open out to a more globalised work organisation is still an open question.

5. Literature

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6. Appendix

Overview of the empirical basis:

Case Study/	Business	Characteristics
Expert	function	
Interview		
CS Des 1	Design	Business field: Men's clothing
		• Employees: 180
		Production: Eastern Europe, China
		Sales: Europe, main focus Eastern Europe
CS Des 2	Design	Business field: Men's and women's clothing,
		underwear, socks
		• Employees: 1208
		 Production: Germany, Portugal
		Sales: Europe
CS Des 3	Design	Business field: Women's clothing
		• Employees: 220
		Production: China, Slovakia
		Sales: worldwide, with main focus Europe
CS Log 1	Logistic	Business field: special mail order company
		• Employees: 240
		Production: worldwide, main focus Europe
		Sales: Germany
CS Log 2	Logistic	Business field: Men's and women's clothing
		• Employees: 745
		Production: worldwide
		Sales: Europe
Expert 1	Design/	Union representative national level
	Logistic	
Expert 2	Design/	National German textile association
	Logistic	