Global Trends in Servicisation and Comparative HRM in Europe

Anton Kramberger
CHAPTER 1
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The industrial structure of national economies has been changing since the middle of the 19th century (or even earlier, around 1820, see more in Maddison 1980) and in recent decades is increasingly shifting towards service economies. For organisations, more services means at least more social interactions, internally and externally, which may limit the options open to management and which re-orient their business models from production to delivery of products and services (Wise et al 1999, Valminen et al 2008). Often, a kind of modern human resources management (HRM) approach is applied by management to adequately address a diverse workforce as well as new and more interactive (business and business-related social) situations (Kaufman 2007).

Of course, a modern HRM approach should not mean the same type of (convergent) HRM changes everywhere (Brewster 2007). The required human relations transformations within organisations are far from being standardised and are introduced in many diverse ways, along with many specific, even innovative actions in services (Lakshmanan 1987, Tomlinson 2002, Tether 2007), often under time pressure. Therefore, continuous research is needed in order to gather fresh evidence on how HRM is re-arranged, if at all, and how it adjusts to a more serviced environment.

We may also wish to consider Frenkel’s (2000) suggestion why services and their HRM practices are worth investigating, in spite of the frequent criticisms (that no real differences exist between service work and goods-producing work, and that the specificities and importance of service work are exaggerated; the new economy is not about services but rather about knowledge and intellectual property rights, etc.). Frenkel rejects such simplified explanations:

»... service work comprises a large and growing part of the workforce in the advanced societies, with knowledge work in both goods and service production making an increasingly important contribution to economic growth. The absence of debates about alternative ways of organising and supporting service work indicates that service work and its HRM implications have not received the attention they deserve. The heterogeneity of service work, including the settings in which it is undertaken, suggest a wide field for exploratory research« (Frenkel 2000: 469–474):

In this chapter we will focus on a European cross-section snapshot of the level of organisational servicisation from an HRM and business performance perspective, using the 2004 Cranet data. Taking into account the few and quite dispersed existing findings and the suggestions as well as the open problems about the possible links between the service economy and HRM, we will address a very basic question: How is the global increase in services, namely a »global trend in the tertiarisation process in terms of value added and employment«, as stated by Rubalcaba et al (2009: 40), associated with HRM practices within the EU organisations?

De-industrialisation, Servicisation, and HRM Practices

During the last few decades, and due to structural changes within the EU, services have become the most important economic sector. For example, in 2007 they generated a little over 70% of gross value added and a little below 70% of total employment (Rubalcaba et al 2009: 45–46). The authors noticed that the recent rapid growth of services in the EU region is still a result of the accelerated activities (i.e., of the specialisation in services) in some markets rather than just an outcome of the wide decline in manufacturing and agriculture. In this respect, the European economy (4.6% of agriculture and 24.8% of manufacturing employment in the EU-25 in 2005) is somewhat different to the USA (only 2.2% of agriculture and 18.1% of manufacturing employment in 2005), where clear job losses in manufacturing have been registered from around 2000 onwards.

Servicisation and its Implications: Broader Considerations

Regional transition patterns from the industrial to the post-industrial stage include both economic and social (and environmental) dimensions that have been historically intertwined. According to Rubalcaba et al (2009: 55–58), «the most developed nations and regions base their economies in services: the United States, the EU15, Australia, and Japan», while
the economies of the other less developed EU12 (or NMS) are still based on (heavy) industry. The patterns of different service sector models within the EU reflect the diversity of socio-political and economic state profiles and cultural models, and in turn influence the HRM practices applied.

Taking into account these broader findings on the varying roles of services, and applying a more theoretical perspective, the two classic approaches to services - either an assimilation of modernised business services (into manufacturing) or a sharp demarcation of services from manufacturing activities - are perhaps a less promising route to a proper understanding of the many transformations of human management that are currently taking place within quite unstable organisations, than it is usually suggested. The classical approaches are both too economically based and neglect the influences of culture and especially the role of (social as well as political) institutions on their daily life and performance. Therefore, for a better understanding of the service society (and not only the service sector) as well as its impact on organisational life (including HRM), a new synthesis is needed that will encompass both services and manufacturing as well as the public sector into a new social–system whole.

Until this achieved, one may at best guess what the regional differences mean and what kind of future transformations they may anticipate. For example, a new integrated approach would assume or even admit, contrary to the classic approaches, that each particular locus in an enlarged and integrated production–distribution–consumption sphere, challenged by serviceisation, nowadays has a potential to contribute its innovative force to the many everyday problems of de-stabilised people and organisations. Examples of new post-industrial economies, currently functioning visibly at the front-lines mainly (Frenkel et al 1999; Tomlinson 2001; Yang et al 2006; Van der Wiel et al 2008), have much more interactive, complex, client-oriented network structures than ever before. Therefore, a proper picture of a new economy ought to resemble a web of intertwined, inter-connected, mixed business functions, augmented perhaps by strong regional institutional drivers (Farraldale 2010), rather than the old model of an old economy and its industrial firm, based on the heavy production of tangible artefacts (Miles and Boden 2000: 247–258).

For EU countries (see Table 1) it has been observed that (Rubalcaba et al 2009: 38): "... the situation across European countries is heterogeneous regarding services. If these are classified into market, public and mixed services, the diversity across Europe is still the rule". In addition, the authors find no clear convergence pattern (no single model of structural change can be deduced), mainly due to variable dynamism in most vibrant services across countries.

Table 1: The evolution and share of services across countries, 1990–2005

<table>
<thead>
<tr>
<th>Sectoral value added (in % GDP)</th>
<th>Employment structure (in %)</th>
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<tbody>
<tr>
<td></td>
<td>Annual growth rate 1990-2005*</td>
</tr>
<tr>
<td></td>
<td>Agriculture</td>
</tr>
<tr>
<td>-3.4</td>
<td>-1.2</td>
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<tr>
<td>-3.7</td>
<td>-1.3</td>
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<tr>
<td>-3.7</td>
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<td>-2.6</td>
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<td>-6.4</td>
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<td>-5.1</td>
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<td>-3.0</td>
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<td>-2.9</td>
<td>1.6</td>
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<tr>
<td>-0.3</td>
<td>-0.4</td>
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</tbody>
</table>

Sources: * WB data from Rubalcaba et al (2009); ** EU-KLEMS data; *** Construction, mining, en-supply

Nevertheless, from a wider perspective, the gradual increase in services is clearly grasped as a complex, long-term technological, socio-economic as well as a (geo)political process. Historically, its cumulative curve has in essence a core-periphery character (Pain 2008; Butt 2004), revealing a gradual social diffusion process of services (see also Figure 1). Service innovations

The aim of the EU-KLEMS project was to create a comparable time series on production output and input factors across a number of countries to produce internationally comparable productivity figures.
were most often settled in the urban centre(s) of advanced societies from where they hesitatingly spread around the country and the world (Maddison 1980; Miles 1996). So, it might be that de-industrialisation along with sercivisation already affect the urban core, while its periphery remains under pressure from industrialisation.

The service economy is, however, more than just an artefact of special definitions and statistical counting. It might be a sign of an emergent international division of labour. With its special technology (Lakshmanan 1987, Miozzo and Soete 1990, Tether et al 1999) and consumer-oriented distribution, it transcends and subverts old industrial markets and the public architecture of nation states and brings innovative elements of an entirely new epoch, along with many social problems as well.

Serviceisation and Comparative HRM

At the organisational level, top management, including human resources management, copes with (global) serviceisation through organisational changes. It is thus plausible that new service jobs, which emerge elsewhere, may trigger important structural effects, detected not only within organisational life but also at the macro level. Or, conversely, the growing (macro) share of the service sector (in employment and in value added terms) can also be understood as the result of corporate strategies, as argued by Breitenfellner and Hildebrandt (2006: 116), with active shifts towards potential clients and customers. Furthermore, an autonomous customer-side contribution to recent service growth also exists - a greater number of people specialised in specific service jobs are accounted for by a greater consumption of services, either in the course of business or in the private lives of service workers (Buea and Kaboski 2009: 6).

Grounded theories of the post-industrial service economy started to develop in early organisational, business and (more or less strategic) management studies that dealt with firms and organisations rather than with the entire (macro) economy. It was the early management theories, which argued that the success of a firm depended on the quality of technology, organisation and people, that gave rise to the modern human relations and human resources theories.

It is fair to say that the concept of human resources management (HRM) remains in comparative studies a contested concept, with ambiguities concerning its nature, focus, and level of its application (Brewster 2007: 239–242). With an inherent aim to be diffused across the globe, (American) HRM practices were initially designed normatively (like a receptacle), with claims that the new 'high-road' HRM simply opposed the older 'low-road' HRM (Milgrome and Roberts 1995; Lindenberg 2000), inspired also by industrial relations literature after the breakdown in traditional forms of collective bargaining and decline in union power (Kochan et al 1986; Gomez and Melitz 2001; Mayrhofer et al 2002). Therefore, some analysts have warned that the very object of theorising in HRM, and especially in strategic HRM, is not very clear (Kaufman 2007: 3–4).

The main messages of the comparative research could be summarised by two opposing paradigmatic perspectives (Brewster 2007: 244): the universalist perspective that seeks the global convergence of HRM practices (an approach which dominates in the USA); and the contextual perspective that seeks regional convergence in practices (which dominates outside the USA, especially in Europe). These different perspectives are based on different historical experiences of the main role and direction of strategic management on the two continents. Claus demonstrated that 'European HRM is much more comfortable operating in a polycentric mode than U.S. HRM, which seeks universality and standardization' (Claus 2003).

In Europe it is more plausible that HRM practices are contingent upon organisational factors as well as environmental determinants, as many diverse institutional as well as historic parameters may influence human resources management (Brewster 2007: 246). One may consequently find much variance in authority relations, not only across European countries (as stated also by Frenkel et al 1999) due to varying institutional capacities and cultural values, but also within countries, which all may promote highly localised, even corporate-specific management styles (Pudelko and Harzing 2007; Kochan et al 1986; Sorge 1991; Huselid 1995; Brewster 1999). One of the main messages from the many comparative (academic) studies within the performance orientation of HRM studies (see for example studies by Becker and Gerhard 1996; Hunter 2000; Cunha et al 2002; Kramberger et al 2006) is that bundles of applied HRM practices roughly follow a wider socio-cultural framing of human resources management (influenced by the country, or a meaningful historic region), at least in Europe. Put more generally, they offer the simple conclusion that 'firms can maximise performance with many different employment systems' (Kaufman 2007: 2).
If we focus on servicisation as a possible major factor influencing the HRM, which is our primary focus in this chapter, we may observe some interesting (local) trends. A starting point would be an indirect recognition of the main determinants of the recent rise in services (possibly influencing HRM practices as well), which is summarised well by Rubalcaba et al. (2009: 38) as the changes in inputs (labour, human capital, technology), productive systems (flexibility and goods-services integration) and markets (economic growth, role of the State). Additionally, there is a rather dispersed array of research evidence which to a certain extent confirms that services matter for (HR) management decisions, too, at least in the case of the UK, where there is already a huge prevalence of service jobs across all sectors of the economy (over 80%, see Rose 2008). For example, it was found that «much of the dynamism of recent times is concentrated around the use of technology, HRM practices and also more concentrated in the new service economy than in manufacturing» (Tomlinson 2002: 2; see also Tomlinson 2001). Or, while commenting a recent Milmore et al. (2007) comprehensive overview of the global SHRM, Sheehan evaluates that «...more could be said about HRM’s role in the effective management of workforce flexibility, HRM outsourcing, the rise of the service sector ...» (Sheehan 2007: 139).

Likewise, Tether (2007: 28) reports an interesting empirical finding from his comparative research on the links between services and innovation systems across Europe: besides the traditional, well-known product and process innovations, there is also a specific (third kind of) mode of innovation, which so far has received little attention and which is more prominent in services than in manufacturing: »It is based on organisational changes and emphasises cooperative practices within supply-chains as well as workforce skills. It is a more devolved form of inter-organisational innovation.« This means that the improvement in services (through innovative efforts etc.) could have an important effect on an organisation’s performance. Can HRM practices be supportive in this sense?

Front-line Firms and a More Collaborative HRM?

The suggestion of a clearly exhibited dynamism in recent HRM practices within some services and also of innovative inter-organisational cooperative HRM practices in modern, supply-chains’ services within the „new service economy” needs further discussion.

For example, in the globalised market sector, changes to the specialisation (in manufacturing as well as in services) typically consist of (local) business restructuring (Wise and Baumgarter 1999; Huws 2006), often accompanied by previous (cross-border) takeovers and their horizontal as well as vertical rearrangements, perhaps oriented towards a clearer consolidation of ownership and global efficiency. In other words, a great transformation, which in market firms currently integrates services into manufacturing (or vice versa - when services become big business - for more on this see Becker et al. 2009; for a discussion of „service productisation”, see Valminen and Toivonen 2008), could be achieved either through service outsourcing or through service restructuring, namely, via service standardisation or specialisation or both (Yang et al. 2009, see also Tether et al. 1999).

Therefore, the comparative advantages of many national or global front-line firms (Van der Wiel et al. 2008) are often based on the innovative capabilities of their managers, including HR managers, as well as workers, on how they assemble their production lines, distribution channels and post-production activities into a new, longer, more sophisticated and also more customer-oriented „service whole” (see Yang et al. 2009 for a description of the Taiwanese experiences) with human resources that are capable of innovatively enhancing either the producer/provider or the customer side of the exchange (Becker et al. 2009: 10). An instant and anonymous market act (of buying and selling) from the industrial age is progressively being transformed into a contractual relation between producers and „customers”. Alternatively, as Howels puts it (2000: 16), »Intrinsic to this shift in the Innovation orientation of the company has been a de facto transition from a manufacturing type of contract with the customer to a service one.« The shift was supported especially by knowledge-intensive (business) services (Heidenreich 2004; Mühlau 2000), often indirectly, i.e. by securing different kinds of welfare to people and establishments (DiMeglio et al. 2009). Nevertheless, »...the global spread of knowledge-based services remains highly uneven.« (Howels 2000: 18-19).

Our next observation concerns the supposedly cooperative, customer-oriented HRM in services (see Tether 2007, above). This is based on the general belief that inter-organisational co-operation (as a special mode of innovation being a main characteristic for services in the new economy) should be adequately supported by more cooperative or collaborative HRM practices. Interestingly though, collaborative HRM practices (including
devolution) were found not to be at all important for organisational performance in Europe - based on the empirical research carried out by Gooderham et al (2006), who used the same Cranet-2004 data. However, organisational co-operation and collaborative HRM practices may be regarded as being of the utmost importance in special innovative services (defined as a special sector of service activity). This brings us to the unresolved issue of a proper service (sector) clustering (Tether, Hipp and Miles 1999: 3; Elfring 1988; Francois 1990).

It seems that more intensive HRM practices are attached not only to the service economy as a whole (i.e., at the macro level) but, more precisely to a few particular new services that operate at the organisational level, where major and minor adaptations are introduced daily to sustain the growing competitive pressure. But which types of HRM practices best fit to which kinds of services within particular service-oriented organisations? Again, we are confronted with the question of service heterogeneity, however, this time from a different angle of reasoning. While the global trend of servicisation - as expressed through aggregate figures (sales or employment) - is perhaps no longer questionable given the rise in global trading and the increase in interactions between different economic units, this macro trend becomes less certain when we examine the mezzo and micro processes of servicisation.

The role of state in improving adaptations of organisations to the global economic pressure is important, too. To illustrate this, an interesting message that the new (global market) economy requires renewed private as well as public services, comes from the periphery of the European Union. In their analysis of the adaptive 'catch-up' development of the Baltic states to new internal and international arrangements after the regime change around 1990, Bems and Vanags (2004: 24) note that «... the inherited services sector was inadequate for the needs of a market economy. So, transition to a market economy required two major structural changes: firstly the elimination of the inefficient industrial sector and secondly the creation of a modern service sector. This is exactly what happened.»

Even though authors from less developed (i.e. peripheral) regions often exaggerate when suggesting how to cope with developmental alternatives (Hansen 2005), it is reasonable to assume in this case that a focus on business-oriented HRM could also be triggered by an acceleration of servicisation. The question of how exactly to achieve this varies from country to country, as national actors are mostly path-dependent (for accountability of public services' devolution, see Ranis 2004: 22-23). For example, Breitenfellner and Hildenbrandt (2006) identify within the EU four tertiarisation models that can be associated with different geographic regions: the dynamic model - for the former colonial countries; the lagging model - for the core countries with corporatist traditions in strong manufacturing; the managed model - for countries with a late industrialisation but which nevertheless possess effective public services accompanying de-industrialisation; and the catching-up model - for peripheral countries with quite diverse situations.

**Model: Linking Micro Servicisation with HRM Practices**

Given the data limitations, it is essential to the design of our research to note that incremental increases in (modern) services elsewhere might be grasped at an abstract level as a global, long-term diffusion process of services with a variable carrying capacity across countries and over time (Gallouj and Gallouj 2000, Guerrieri et al 2005). As such, it should also inevitably be mirrored at the micro organisational level, where an ever greater number of service jobs (though varied in nature) are implemented by organisations of all sectors (see Figure 1).

**Conceptual (Research Design) Model**

In our research design, both processes in question, servicisation and HRM practices, are synchronised as two special data sets at the organisational level, controlled for economic sectors, country clustering and other basic moderators (see Figure 1, right side).
Our comparative empirical study is based on two assumptions. Firstly, we assume that the micro servicisation (of jobs) within an organisation (represented by the central arrow on Figure 1) is indeed a mirror of the global macro trend in service expansion or diffusion1 (see Figure 1, left side), with micro situational variations depending on a range of local determinants: adopted technology level; human capital quality and organisation; sector of activity; size (or age); urban-rural location; the international integration of the local economy; competitive pressure etc. Secondly, we argue that particular HRM practices across organisations, sectors, countries and regions do not necessarily converge (see Figure 1, right side).

Nevertheless, we may predict some significant interactions between the level of servicisation and selective HRM practices in spite of the immense diversity of HRM, for which we have developed a list of hypotheses around such predictions that are supported by the findings in previous research. In fact, our formal model, i.e. the multivariate regression model, is a complement to the main model as elaborated in Kramberger et al (2006), where – by way of performance orientation in comparative HRM research - we aim to identify the effects of (high-road) HRM practices on the performance outcomes in Europe. In this chapter we will concentrate on servicisation as a key factor affecting the applied (high-road) HRM practices in Europe.

**Econometric Model (regression)**

We assume that each of the eight bundles of HRM practices observed (i.e. SHRM and outsourcing; HRM devolution; recruitment HRM focusing on the internal labour market; indirect participative HRM, direct financial participative HRM; HR Development; HRM practices supporting positive performance outcomes; HRM practices supporting negative performance outcomes) within European organisations is a function of a number of determinants, including servicisation at the organisation level (SERV), augmented by the organisation's size (log-SIZE), and contextual factors (i.e., whether it is a front-line firm – FRONTL, the sector – SECT, and the country group – CLUST). To model the associations statistically, we introduce a multivariate linear regression model with the following basic specifications (only the final model is presented):

\[
HRM(m)(ijk) = a(m) \times SERV(m)(ijk) + \beta \times SIZE(m)(ijk) + \gamma \times SERV(m)(ijk) \times CLUST(m)(k) + \varepsilon(m)(ijk)
\]

with organisation \(i\), for sector \(j\) and for country \(k\), while \(m\) stands for one of the eight above mentioned HRM aspects in which we are interested. Each set of relations will be treated separately. SERV is a numeric variable, indicating the level of servicisation achieved at the organisation level: in a model, it may initially capture a direct effect of a job's servicisation of a particular HRM activity (\(a - \) main effect, main relation, main association). This main effect could be adjusted further due to moderations of log-SIZE (through \(\beta\)) and other contextual factors.

Among all possible interactions between the variables included in the model, we are primarily interested in the indirect effects of national contexts on the main relation (between SERV and a particular HRM practice), by introducing an interaction term (SERV x CLUST), where CLUST is a set of dummies for different pre-defined country groups that yields interaction effect (\(\gamma\)). FRONTL is a firm binary dummy for delineating global-frontier firms from other organisations in our sample, and we expect to observe

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1 In the marxist theory, a global 'diffusion' of services is just a false terminology for a political design of the global-capitalism's labour division between core countries and periphery (see more in Walker 2004).
a significant degree of intensity of the additional impact of servicisation over HRM practices in this subset of firms (with respect to non-front-line organisations). Finally, SECT is a standard set of dummies for economic sectors and is introduced into the regression as a control for unobserved heterogeneity. The error term ε is taken to be zero, as our first approximation.

A methodological examination of our specification reveals that we will be dealing with OLS regression, involving a dependent numeric variable (a particular HRM practice), as well as independent numeric variables (two variables – SERV, for the level of achieved servicisation at the organisational level, and SIZE, for the log-size of an organisation) and two categorical moderators which act as controls for directly unobserved but nevertheless important economic and in principle path-dependent determinants: main sector of activity (SECT), and cultural constraints through country clusters (CLUST). Such a conceptualisation, the *explanans* of which consist solely of numeric variables and a set of context-sensitive dummies, requires that the model specification includes not only additive terms (with estimated main effects of the independent numeric variables only), but also some multiplicative terms (with estimated interaction effects between the main numeric variable and the contextual dummies). Therefore, a methodological question is always how to specify *correctly* such a model (with interactions) so as to delineate and properly interpret the estimates of both the model’s intercept(s) as well as its slope(s).

We decided to use the partition approach, as this offers a more straightforward interpretation of the results than the base approach and proves superior to the base approach in those specifications in which there are two or more sets of high-level dummies (in our case these high-level dummies are SECT, CLUST, along with a simple binary FRONTL variable), as suggested by Yip and Tsang (2007). Both approaches (i.e. the partition as well as the base approach) turn out to be equivalent in method (mathematically, i.e., in what could be specified), but not equivalent in their interpretations of estimates. In the chosen partition approach, the main effects measure the intercept(s), while the interaction effects measure the slope of the (dummy) variable in question. The constant should be excluded from the model. Moreover, we have chosen to include only one single interaction term in the final model, revealing the regional diversity of the phenomenon we are mostly interested in (SERV x CLUST). So, for example, the main effects of the SECT dummy variables of our model will display initial differences (in the relation

between servicisation and a particular HRM) across sectors (through intercepts), while the interaction effects (through slopes) will display a shift in HRM intensity due to a unit change in servicisation within a given country cluster, all other things being equal.

**Hypothesis**

Based on our previous theoretical review and from the (diverse) messages of comparative HRM research, we may develop the following tentative hypothesis as to how micro servicisation may influence particular types of HRM practices in general, by taking into account a few contextual moderators. Thus, *a higher level of micro servicisation within an organisation*:

H1: ...proves to be unimportant for the strategic role of HRM along with HRM outsourcing (Kramberger et al. 2006, Kaufman 2007);

H2: ... is correlative with less devolution of HRM responsibilities (Mesner-Andolsek and Stebe 2005).

H3: ... means that the pattern of staffing HRM most likely remains unchanged (see Regini 2002: 22-24).

H4: ... is correlative with less (direct and indirect) non-financial participative HRM practices being applied;

H5: ... means that the financial participative HRM practices are likely to remain at the same level (for comparative evidence on these kinds of incentives see Pendleton et al. 2001);

H6: ... is associated with less HRD practices being employed (investments in human capital, career development, appraisal systems);

H7: ... suggests better positive performance outcomes (higher efficiency, effectiveness) of an organisation;

H8: ... correlates with a better situation with negative performance outcomes (less absenteeism, turnover);

H9: ... correlates with a greater degree of innovation in a front-line service-manufacturing firm, also with an intensification of their HRM practices;

H10: ... enhances all core HRM practices, especially in larger size organisations (in terms of employees);

H11: is correlative with a greater number of HRM practices being contingent upon contextual determinants and thus servicisation itself would not change the underlying contextual landscape very much.
Data, Description of Variables

We apply exploratory research using a cross-sectional research design (see Frenkel 2000: 471). We will be using data from the Cranet survey 2004, describing diverse HRM practices across selected European countries. To compensate for the lack of longitudinal data explicitly describing the steady influence of the underlying global process of servicisation, and to act as a control for the organisational as well as contextual variability, we have developed a set of micro indicators to describe our model (see specification of variables in the Appendix A).

Dependent Variables (HRM Practices)

First, we specify dependent variables, i.e. by using a set of 18 indicators for the HRM practices across organisations.6 In the first set of four indicators, which concern the strategic role of HRM, we apply no corrections with regard to the initial specifications and we follow the common reasoning of what the strategic role of HRM may mean: the more central the position of the HR department, the greater the level of delegation of decision-making to line managers (devolution), the more outsourcing of specific HR functions takes place, the higher the (log) number of HR specialists per employee, and the higher the value of the indicators concerned (demonstrating a higher strategic role of HRM).

In the second set of three HRM indicators, concerning staffing (recruitment) practices, we define the indicators in an opposite double 'rational' way from a corporate perspective, depending on whether it concerns the recruitment of managers or non-managerial staff. While the staffing of HR managers and other managers is usually more strategic if it is carried out internally, through half-closed labour market or more or less confidential and discretionary and supervised channels (thus providing the internal-circle's maintenance, a higher degree of internal experience, greater loyalty, insider information, shared networking etc.), the staffing of other employees is regarded as being more strategic if the candidates are chosen from a wider domain, in particular from an external, competitive, either open or half-closed professional labour market. Therefore, the higher the value of indicators for managers and for employees respectively, the more the former are recruited internally and the latter externally.

6 We slightly altered the definitions of some HRM variables described in the later chapter on Ageing (see lerodiakonou et al).

Independent Variables (micro servicisation)

Servicisation within organisations, defined as our primary independent variable, is gauged by six interdependent numeric indicators, split into two groups. The first group consists of four (direct) indicators which reveal the variability in the share (of different aspects) of service jobs across the observed units, giving us a rough indication of the quantity achieved as well as the quality of the process under observation (Xavier and Trigo, 2006): (1) the largest measure of the extent of achieved servicisation is the percentage of internal service of (non-manual) jobs within all jobs (employees); (2) a more focused measure is the percentage of 'knowledge-based' jobs (professional and technical jobs combined) within all jobs (employees); (3) the narrowest measure in
this same sense, with leadership included in the organisational knowledge base, is the percentage of supposedly leading, 'intellectual' jobs (professionals and managers put together) within all jobs (employees); and, finally, (4) we include a general measure of the required skill level of an organisation by the percentage of (post-secondary) graduates among all employees. All four indicators are represented as numeric variables.

The last two indicators of servicisation measure an interesting (indirect) aspect of the servicisation process, namely, its hierarchy or control structure, which, according to Korzynski (2002), is an important aspect in describing the differences in services. Frenkel (2000: 470) also notes that service work is heterogeneous in terms of «... abstract knowledge, skills, and creativity. This points to likely variations in control and employment arrangements».

So, the intensity of managerial control over the two specific groups of service workers/jobs within an organisation is grasped by (5) the number of managers per 100 non-manual employees, representing an indicator of the general intensity of managerial control over the service work, and (6) the number of managers per 100 professionals & technicians, representing a more focused, specific intensity of managerial control over the knowledge core.

Control Variables (service sectors, size, country clusters, front-line firms)

Taxonomy for modelling the heterogeneity of service sectors

In the preliminary empirical studies we developed a set of six rough indicators based on six different taxonomies of services (see Appendix D) to act as a control for a variety of (theoretical) definitions of services. All six indicators were derived by using particular theoretical justifications for combining the sixteen (16) original codes of the main economic activity (sector) of an organisation within the questionnaire into approximate theoretical categories; sometimes the (in)accuracy of codes available to us was less than ideal for our recoding purposes. All six taxonomies (see Appendix D for coding details) were applied to our preliminary models consecutively. The structure of the «service sector», defined in specific ways, was first modified into dummies and then applied (in regression models). We excluded agriculture as a special sector from our preliminary calculations.

The taxonomies listed were shown to be rather insignificant (or only weakly significant) for the specified models. Therefore, our 'best solution' (in terms of the explained variability) was a simple economic classification of activities consisting of only 4 well-known sectors. This final taxonomy was derived from the six-sector Eurostat scheme which contributed most of the additional 'explained variance' to our modelling efforts, namely: (1) private services; (2) public services; (3) manufacturing; (4) other industries, including construction and agriculture (for details on the recoding of the original sixteen codes in this solution, see Appendix B and C).

Size of Organisation, Country Clusters

We also use the (log)size of firms, augmented by indicators for (pre-defined) country clusters. We use two indicators for clusters in our analysis. The first indicator consists of just two categories (clusters): in one cluster there are 14 West European countries (Spain, Italy, Greece, France, Belgium, Switzerland, Austria, Germany, the Netherlands, Denmark, Sweden, Finland, the UK, Iceland); and in the other cluster we have 6 South East European countries (Cyprus, Slovenia, Hungary, the Czech Republic, Bulgaria, and Estonia). The second indicator is a more elaborated version of the first indicator and has five categories, by delineating two groups of Western European countries (the first sub-cluster with six 'maritime' countries: the UK, Sweden, Denmark, the Netherlands, Finland, and Iceland; the second sub-cluster with eight 'continental' countries: Spain, Italy, Greece, France, Belgium, Switzerland, Austria, and Germany) and three groups of South East European countries (the third 'liberal' sub-cluster: Cyprus, Hungary, and Estonia; and the fourth cluster: Bulgaria; and the fifth sub-cluster: Slovenia, and the Czech Republic).

Front-line Service-Manufacturing Firms

Management literature often refers to services as conceptually being part of a value chain (Davies 2003), centred on a core of modern manufacturing activities. Strictly speaking, such an approach represents a 'resource-based perspective' on firm development, where services, set around core industrial, i.e. product activities (Quinn 1992), may provide strategic added value (Haukness 2000: 44) to the development of their high-value service strategies. To put services more in a centre, Haukness notes that people/customers are becoming increasingly service orientated rather than product orientated, with manufacturing only supporting the services. The
The main results (chain of methods)

Technically, with chaining methods we again follow the procedure as originally suggested and applied in the subsequent Chapter (originally) suggested and applied in the subsequent Chapter. Here we resume the key steps with some brief comments on the results. We are interested, whether global front line firms can successfully em-
In the first subset four indicators and two factors were extracted: HRM Outsourcing' (PC1) consists of the 'Strategic Role of the HRM Department' and the 'Utilisation of External HRM Services', while 'HRM Devolution' (PC2) consists of the 'Responsibility of line Managers' and the 'Log (the number of employees per HRM Professional)'. In the second subset three indicators were used and one factor was extracted, namely the 'Internal Market Recruitment Focus' (PC3), consisting of 'HR Manager Recruitment', 'Other Manager Recruitment', and 'Employee Recruitment'. In the third subset four indicators of participative practices were used and two factors were extracted: 'Employee Participation' (PC4) consists of 'Direct Participation' and 'Indirect Participation', while 'Financial Participation' (PC5) consists of 'Manager Financial Participation' and 'Employee Financial Participation'. In the fourth subset three indicators were used and only one factor was extracted, namely, 'HR Development' (PC6), consisting of 'HRD Investment', 'Career Development', and 'Performance Appraisals'. Finally, in the fifth subset four indicators were used and two factors were extracted: the 'Positive Outcomes of HRM' (PC7) consists of 'Efficiency' and 'Effectiveness', while the 'Negative Outcomes of HRM' (PC8) consists of 'Labour Turnover' and 'Absenteism'.

**Step 2: Making the Independent Variables (micro servicisation) More Compact**

Since our main independent variable, servicisation, was a numerical construct using six different variables as inputs, we also apply a multiple factor analysis in order to make this dimension more compact as well. We were able to extract two factors and all original variables were present in the outcome: the first factor was the 'Servicisation of Jobs', consisting of four items, 'Percentage of Service Jobs', 'Percentage of Professional and Technical Jobs', 'Percentage of Intellectual Jobs', and 'Graduates as a Percentage of Total Employees'; and the second factor was 'Managerial Control Over Service Jobs', consisting of the 'Log Number of Managers per 1000 Service Jobs' and the 'Log Number of Managers per 1000 Professional and Technical Jobs'. The loadings of the original variables on these two components are shown in Table 3.

**Table 3: Principal Components Analyses of Servicisation (main independent variable)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Component 1: Servicisation of jobs</th>
<th>Component 2: Managerial Control of service jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Service jobs</td>
<td>0.851</td>
<td></td>
</tr>
<tr>
<td>Percent of Prof &amp; Tech jobs</td>
<td>0.853</td>
<td></td>
</tr>
<tr>
<td>Percent of 'Intellectual' jobs</td>
<td>0.927</td>
<td></td>
</tr>
<tr>
<td>Percent of graduates of all employees</td>
<td>0.667</td>
<td></td>
</tr>
<tr>
<td>(Log) Number of managers per 1000 service jobs</td>
<td>0.929</td>
<td></td>
</tr>
<tr>
<td>(Log) Number of managers per 1000 Prof &amp; Tech jobs</td>
<td>0.916</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.*

**Step 3: Correlations between the Main (numeric) Variables**

At this point, we also checked the first order (bi-variate) correlation between two independent variables which represented the achieved level of servicisation across organisations (the Servicisation of Jobs, and Managerial Control over Service Jobs) on one side, and the eight different components of human resources management, representing HRM practices, on the other (Table 4).
Table 4: Bivariate correlations between the level of achieved organisational Servicisation (two indicators) and HRM Practices (PCs)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Serviceisation of Jobs</th>
<th>Managerial Control over Service Jobs</th>
<th>Positive Outcomes of HRM</th>
<th>Financial Participation</th>
<th>HRM Devolution</th>
<th>HR Development</th>
<th>Internal Market Recruitment Focus</th>
<th>Positive Performance Outcomes</th>
<th>Financial Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.04</td>
<td>0.33</td>
<td>0.00</td>
<td>0.02</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.10</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>2</td>
<td>0.15</td>
<td>-0.06</td>
<td>0.00</td>
<td>-0.07</td>
<td>-0.01</td>
<td>0.00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>3</td>
<td>0.04</td>
<td>-0.38</td>
<td>0.00</td>
<td>0.02</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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</tr>
<tr>
<td>4</td>
<td>-0.03</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>5</td>
<td>0.05</td>
<td>-0.26</td>
<td>0.00</td>
<td>0.02</td>
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<td>0.00</td>
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</tr>
<tr>
<td>6</td>
<td>-0.15</td>
<td>-0.10</td>
<td>0.00</td>
<td>-0.01</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>7</td>
<td>-0.01</td>
<td>0.11</td>
<td>0.00</td>
<td>0.04</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>8</td>
<td>-0.10</td>
<td>-0.02</td>
<td>0.00</td>
<td>0.02</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001

Table 4 reveals that the 'Servicisation of Jobs' is positively correlated with the 'Positive Outcomes of HRM', 'Financial Participation' and (weakly) with the 'Internal Market Recruitment Focus'; it is negatively correlated with 'HRM Devolution', 'HR Development' and the 'Negative Outcomes of HRM'. The second independent variable, 'Managerial Control over Service Jobs', is significantly, but weakly negatively correlated only with 'HRM Devolution' (perhaps a reasonable explanation for this would be that where there are enough 'higher managers' acting at nearly the same level as the HR managers, then less devolution, i.e. transfers of responsibilities to line managers, is required to perform well a particular HRM task).

We also found significant correlations among particular pairs of principal components (none of them exceeds the value of 0.25; we report only those values above 0.20): Strategic HRM if presented enhances all other HRM practices, above all the Employment Participation, which, interestingly, is itself negatively correlated with Financial Participation. Financial Participation, however, seems to be positively correlated with HRD and Positive Performance Outcomes (efficiency, effectiveness).

Step 4: The Main Effects of Servicisation on HRM (by org-size and sector)

Each of the eight HRM practices (represented in compact form by PCs) were used consecutively in the first set of OLS regressions as the independent variable (Table 5a). The main independent variable was servicisation at the organisational level (represented by two factors – first, by the extent of services and, second, by the intensity of managerial control over service work). Two other independent variables, namely, organisational log-size (numeric) and the main sector of industry (the dummy), were used as controls. We applied the partition approach instead of the base approach, with additive terms only among the explanans (it was necessary for us to enter all the dummies in all categories and to exclude the constant from the model; then each of the estimated main coefficients of the dummies represents its particular intercept).
Table 5a: Linear Regression Analysis between the HRM Practices (PCs) and Servicisation (standardised beta coefficients)

<table>
<thead>
<tr>
<th>PC</th>
<th>Negative Outcomes</th>
<th>Positive Outcomes</th>
<th>Financial Participation</th>
<th>Employee Participation</th>
<th>Managerial Control of Service Jobs</th>
<th>Strategic HRM</th>
<th>HRM Devolution</th>
<th>HRM Outsourcing</th>
<th>HRM Development</th>
<th>HRM Staffing Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Strategic HRM</td>
<td>0.23 **</td>
<td>0.22 **</td>
<td>0.20 **</td>
<td>0.11 **</td>
<td>0.08 **</td>
<td>0.17 ***</td>
<td>0.01 **</td>
<td>0.09 **</td>
<td>0.06 **</td>
<td>0.06 **</td>
</tr>
<tr>
<td>2: HRM Devolution</td>
<td>0.93 ***</td>
<td>0.85 ***</td>
<td>0.73 ***</td>
<td>0.69 ***</td>
<td>0.68 ***</td>
<td>0.65 ***</td>
<td>0.63 ***</td>
<td>0.62 ***</td>
<td>0.61 ***</td>
<td>0.61 ***</td>
</tr>
<tr>
<td>3: HRM Staffing Practices</td>
<td>0.17 **</td>
<td>0.10 **</td>
<td>0.05 **</td>
<td>0.10 **</td>
<td>0.09 **</td>
<td>0.07 **</td>
<td>0.02 **</td>
<td>0.06 **</td>
<td>0.04 **</td>
<td>0.04 **</td>
</tr>
<tr>
<td>4: Financial Participation</td>
<td>0.02</td>
<td>0.03</td>
<td>0.05</td>
<td>0.05</td>
<td>0.03</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>5: Employee Participation</td>
<td>-0.20</td>
<td>-0.10</td>
<td>0.05</td>
<td>0.10</td>
<td>0.09</td>
<td>0.07</td>
<td>0.02</td>
<td>0.06</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>6: Internal Outsourcing</td>
<td>0.29 **</td>
<td>0.22 **</td>
<td>0.20 **</td>
<td>0.11 **</td>
<td>0.11</td>
<td>0.12</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>7: Positive Outcomes</td>
<td>0.09</td>
<td>0.08</td>
<td>0.05</td>
<td>0.05</td>
<td>0.03</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>8: Negative Outcomes</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001

Only six PCs (out of eight) were found to be significant in terms of being (significantly) sensitive to servicisation: neither 'Strategic HRM' along with its 'HRM outsourcing' habits nor the 'Internal Labour Market Staffing Practices' seem to be associated with an increased share of service jobs/workers. Conversely, micro servicisation was (significantly) positively associated with 'Financial Participation', 'HR Development', and 'Positive Outcomes', and negatively with 'HRM Devolution', 'Employee Participation' and 'Negative Outcomes'.

Step 5: The Compound Effects of Servicisation on HRM (two country clusters)

In this step we apply a set different regressions with six PCs only (namely those which were significant in the previous step) and explore an additional perspective by including a rough regional diversity indicator, and by questioning whether and how the membership in the Old EU (EU15) or the New EU (NMS) affects the main association(s) between servicisation and HRM practices (Table 5b). Using again the partition method for our model specification, we now introduce interaction terms for estimating the regional membership effects of servicisation across two regions (we thus included both the Old and New country-cluster membership but only three dummies out of four for the main sectors of organisations - one dummy, 'Other Industry', was left out). The interpretation of the estimates alters: namely, the effects of the main sector dummies still measure particular intercepts, while interaction coefficients provide us with the slope for the region in question.

In the case of the mixed specification of the OLS regression model (having additive as well as multiplicative terms among the explanans) and two or more sets of dummies, we must exclude one dummy from one set of the specification, enter all the compound dummies (for interaction terms) and exclude the constant from the model.
servicisation has only a weak and very selective impact on particular HRM practices.

More precisely, servicisation in the Old EU has a significant positive effect on the 'Financial Participation', 'HR Development', and 'Positive Outcomes', and a significant negative effect on the rest, namely, 'HRM Devolution', 'Employee Participation', and 'Negative Performance Outcomes' (due to our specification of this variable, this means good news for service industries: namely, the higher the servicisation level of an organisation, the lower the negative performance outcome, as measured by absenteeism and worker turnover).

In the New EU, servicisation has a (strongly significant) positive effect only on 'Positive Outcomes' and a (weakly significant) negative effect on 'HRM Devolution' and 'Negative outcomes'. In other words, the process of servicisation within the new (South-Eastern) part of EU seems to leave the other three HRM practices ('HRM Employee Participation', 'HRM Financial Participation', and 'HR Development') in essence unchanged.

Beyond these primary results, the size of an organisation matters greatly across the whole of the EU, by (strongly) enhancing all 'modern' HRM practices (the larger an organisation, the more high-road HRM is applied). The distinctive position of firms in global markets, as measured by the frontier indicator, also matters, albeit selectively: it improves nearly all HRM practices with the exception of 'HRM Devolution' and 'Negative Performance Outcomes'; it enhances 'HR Development' and contributes toward better 'Positive Performance Outcomes'.

**Step 6: the Compound Effects of Servicisation on HRM (five country clusters)**

The final set of regressions addresses the same question as was addressed in the previous step, except that country differences are elaborated in greater detail by including the five country clusters (instead of just two): the Old EU has thus two country sub-clusters (North-West countries, Continental States) and the New EU has three country sub-clusters (Hungary-Cyprus-Estonia; Czech Republic-Slovenia; and Bulgaria). The results (see Table 5c) offer some additional insights into the previous rough sketch of the Old-New EU.

---

**Table 5b: Linear Regression Analysis between the HRM Practices (PCs) and Servicisation in the EU15 and NMS (beta coefficients)**

<table>
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<td>-0.01</td>
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<tr>
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<td>-0.00</td>
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<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* * p < .05, ** * p < .01, *** * p < .001

We found that regional differences within the EU do indeed matter for the main association under investigation (regional differences in the link between servicisation and HRM). For the Old EU cluster, servicisation is significant for all tested HRM practices, while, for the New EU cluster,
Reading only the slopes in terms of interaction, we find that within the Old EU, North-West countries already experience a significant servicisation process over most core HRM practices (the only exception being 'Employee Participation HRM'). HRM in Continental states is somewhat different: servicisation in this region also strongly tends to relate to nearly all HRM practices, however, that it appears to be rather insignificant as regards both types of performance outcomes. In other words, while in the North-West subgroup of the Old EU servicisation seems to contribute to a better overall business performance, among the Continental subgroup of states it does not.

Within the New EU, where servicisation has on average a much weaker impact on core HRM practices, our three pre-defined country clusters behave (statistically) quite differently. Servicisation appears to have a significant impact on a few HRM practices within the sub-cluster that to a greater extent retains a 'co-ordinated' market economy, namely, the Czech Republic and Slovenia: we may trace a negative correlation between servicisation and Employment participation HRM in this group, which is a surprising result, and we may also observe a positive correlation with 'Positive Performance Outcome'. In the more 'liberal' sub-cluster of the NMS county group, consisting of Hungary, Cyprus and Estonia, we essentially find that the impact of servicisation is slightly different impact on HRM: among all HRM practices, the process of servicisation possibly enhances (positively) only 'Financial Participation' while leaving other HRM practices largely intact. Finally, in Bulgaria, perhaps the most 'easterly liberal' (thus highly non-coordinated) country of the NMS, servicisation appears to have had no real impact on domestic HRM practices: statistically, the process of servicisation is indeed (albeit weakly) associated with (both) performance outcomes only; however, any performance outcomes might or might not be related to, or - to put it more accurately - intermediated by, any special HRM practice (for critical notes on excessively flexible staffing and other labour-issu anomalies with the pre-accession Bulgarian employment relations see, Breuwer, Vatchkova, Petrov 1999).

In addition to the above, the main difference within the whole EU between services and manufacturing is that the greater degree of micro servicisation in services seems to have a positive influence primarily on 'Negative Performance Outcomes' (i.e., by improving its the once unpleasant absenteeism and turnover). In manufacturing it primarily has a influence on 'Positive Outcomes', increasing both the efficiency and effectiveness of market businesses. Interestingly, it is quite evident that servicisation plays a unique role in the 'public sector': it increases the chances for improved 'Employee Participation' and reduces the chance of 'Negative Performance Outcomes'.
Outcomes' (i.e. by ameliorating poor figures for absenteeism and turnover recorded in manufacturing), while the chances of 'Financial Participation' and 'Positive performance Outcomes' are significantly diminished (or limited), with regard to other sectors.

The General (overall) Impact of Servicisation on HRM

Our initial empirical findings (Table 5a) show that on average the process of micro servicisation does not interact significantly with two, oft-cited high-road HRM practices, which were therefore excluded from our further analysis: (1) 'SHRM' - strategic orientation of human resources management and HRM outsourcing (H1 accepted), and, (2) 'Recruitment Focus' - the internal staffing of management as well as the external recruitment of employees is a strong tradition in Europe (with the exception of North-West, where the external recruitment of managers does occur), a trend which has not so far been significantly dented (or amplified) by an increase in service jobs (H3 rejected).

Concerning the lack of impact of (HRM) outsourcing, it is well-known that most directors outsource to save money and hope to achieve better economics. However, because many companies cannot measure the productivity (gains) and costs of outsourcing with any great accuracy, as many additional activities are implemented, the possible outcome may make the case for outsourcing considerably less attractive. This is especially the case in services where end-user feedback information is crucial for a good final performance; outsourcing key jobs, including HRM functions, seems to be a rather weak, perhaps even an inappropriate, business strategy, since in most instances it does not improve the quality of the final, customer-oriented service delivery.

Generally speaking (see Table 5a), it should be no surprise that almost all types of core HRM practices are most sensitive to an organisation's size (with the interesting exception of classical HR development, which proves to be neutral in this respect). Larger organisations positively influence a greater level of financial participation by employees (.36), a higher HRM devolution or delegation of HR responsibilities (.31), the positive performance outcomes in terms of efficiency as well as effectiveness (.29), and the strategic role of the HRM department (.19), by removing negative outcomes (-.22). However, larger organisations diminish the role of employee participation (-.20) and internal staff recruitment (-.10), as per Klaas et al (2001).

With regard to servicisation, (a higher level of) servicisation appears to alter systematically the intensity of most HRM practices, with the exception of just two practices (as already stated), namely, the strategic HRM (with outsourcing), and internal staff recruitment. Therefore, a higher degree of servicisation enhances HR development (.19), financial participation (.17), and results in both positive (.14) as well as negative (-.15) performance outcomes, whilst it diminishes HRM devolution (-.16) and employee participation.

However, if we combine these mean results with the additional effects provided by the sectors, we can gain a more detailed insight. For example, a higher degree of servicisation indeed significantly enhances HR development, but primarily so in manufacturing (.11), and whilst it may also improve employee participation in public services (to a greater extent, with .28) and in manufacturing (to a lesser extent, with .10), it actually worsens all other employment relations managed by HRM across all services in terms of financial participation (it lowers financial participation) and both performance outcomes (resulting in less efficiency, and a higher level of absenteeism and turnover); this represents an especially harmful result for HRM in public services. These results give us a general informed impression of the at best narrowly positive impact of the process in question, namely, that a greater level of servicisation can be regarded as being somewhat 'productive' (including the special business-oriented role of HRM) only in manufacturing organisations, while in other sectors it is shown to be 'non-effective' - to contribute to a worsening of existing employment relations and triggers a less intensive human resources management.

Discussion of Findings in light of the Hypothesis, Including Regional Differences

We found that there is no common way that servicisation impacts on HRM across Europe; apparent differences exist across the regions observed. Nevertheless, links between servicisation and a particular core of HRM practices, controlled for country clusters, can be observed, thus yielding additional information about the unobserved impacts of cultural and political constraints on micro human resources management (Table 5c).

Specifically, (larger) micro servicisation has an unambiguously negative effect on 'HRM Devolution'; such an effect is most significant in the Old EU regions and less so in the New EU countries. From the previous research
it is highly likely that the size of an organisation, apart from its main sector of activity, matters for the delegation of HRM responsibilities to lower hierarchical levels (for example, Klaas et al 2001, Kramberger et al 2006). Thus, H2 is can be partially accepted.

Concerning 'Employee Participation', the results show that the impact of (an increased) servicisation is different in old and new regions of the EU. In the Old EU, the results reveal a similar pattern in both the North-West and Continental subgroups of states: in both of these regions the more serviced organisations enhance further 'Financial Participation', while 'Employee Participation' remains intact in the North-West and weakly diminished in the Continental States. In the New EU, these correlations are valid only selectively and are much less elaborated: a larger servicisation can be said to weakly enhance 'Financial Participation' only in the most liberal country sub-cluster of the NMS (i.e., in Hungary, Cyprus, Estonia), and it weakly diminishes 'Employee Participation' in the 'co-ordinated' transition economies only (i.e., in the Czech Republic and Slovenia). Thus, H4 and H5 are partially accepted.

'HR Development' (career planning, training investment, performance appraisal etc.) is significantly positively associated with a greater level of servicisation only in the Old EU regions. In the New EU proves to be completely insignificant. Therefore, H6 can be considered partially valid. An apparent increase in services in the new member states does not (yet) act as a driver to enhance such classical human resource management practices. Regions in the New EU still lack the capacity for providing a proper place or role for services as serious economic agents that are capable of enhancing either business or organisational performance via committed and rewarded people so that they can function in a 'more modern way'.

Finally, concerning 'HRM and Business Performance', we can trace a similar pattern in the North-West cluster of the Old EU countries and in the coordinated country cluster of the NMS (i.e., in the Czech Republic, Slovenia): a higher degree of servicisation enhances efficiency as well as effectiveness, and diminishes further negative performance outcomes (absenteeism, turnover); a weak indication of this same pattern also appears in Bulgaria. In other regions no such associations are evident. Therefore, H7 and H8 can be partially accepted. Given the considerable differences in the internal structures of services in the three country sub-clusters in which the pattern prevails - which could be considered as an indication of how flexible (or dualised) labour markets are in these regions - further research and investigation is required.

Concluding Discussion - the Social Implications of the Findings

From a wider social science perspective, the general impression given is one of a more elaborated core of HRM practices being related to servicisation; this in essence can be seen to be missing from the New EU when compared with the Old EU. In the NMS cluster applied HRM practices rather mediate between management and workers in such a way that their main aim is to support efficient outcomes (for profit goals) and are therefore primarily a business vehicle for raising profit rather than operating as a subsystem for increasing the welfare of the workforce. However, while improved business performance accompanies the process of increased servicisation, this trend happens selectively across regions; for instance, it is present in the North West of the Old EU and in some parts of the New EU (Bulgaria, the Czech Republic and Slovenia).

A further elaboration of heterogeneous services would probably improve our initial insights into the links between servicisation and core HRM across Europe, however, the conceptual weaknesses of the suggested service taxonomies, given the data limitations, did not allow us to attain this level of depth in the subject. Further research and improved sector data are required.

Nevertheless, the above results, as a whole, and anchored mainly around the process of micro servicisation - as an important determinant (Incentive/barrier) for a better/worse HRM and performance outcomes - confirm basic assumptions made in previous comparative HRM research. For example, in the Northern EU countries (especially in Scandinavia) the high-road HRM practices already matter for better human relations within organisations, while in more Continental states they basically work in favour of one-sided business functions, with employment relations being co-determined externally, by collective bargaining (Kramberger et al 2006). In addition to this and from the perspective of recent micro shifts to services, we could add that only those organisations in the North-West EU (Scandinavia included) are/were so far able to include (the renewed) services as well as high-road HRM practices into their organisational life and performance. This rearrangement may turn HRM into an additional management vehicle to improve, innovate, better control and re-integrate labour process, goods and services, outcomes, markets, clients etc. In all these respects, the New EU countries lag decisively
behind due to the many missing links in their societies which are required to bridge the gap rapidly from an industrial to a post-industrial or service-oriented stage of development (Stare 2007; Stare et al. 2010).

The apparent differences between the old and new EU regions, particularly in terms of the influence of increased services for core HRM practices, are indeed striking. Most likely, these differences derive from the inherited differences in the composition, recent dynamics, and main orientations of services within particular economies and societies, all of which may be important for the (un)suitable integration of goods and services into a larger economic and social system. The absence of any significant associations between servicisation and HRM practices in the New EU regions, which would reveal a better social welfare for the people involved rather than merely a profit-focused business orientation, is more than telling. The internal structure of services matters for the further development of this region and their organisational performance, including the specific role of IRM herein (see only 58 percent of services for the NMS).

Unfortunately, we were not able directly to control the quality of labour (employment) relations and workers’ contracts in our (regional) empirical models. We can assume that this might be true given the absence of any significant correlation between an increased servicisation and those more sensitive HRM practices (non-financial participation, HR development). However, Palier and Thelen (2010) note that a multi-layered and unpleasant institutional dualism of national labour markets across Europe (consisting of an optimum labour contract core and a periphery of worse positions, often associated with services) is in progress and may in fact be an indication of a forthcoming deeper labour market segmentation of European labour arrangements, with services playing a highly ambiguous role in this process.

Therefore, it would be wise to investigate the matter further and ask the question: Does ‘successful service work,’ at least from the perspective of the actively applied core HRM practices in the Old EU regions - which is perhaps the main finding of this chapter – provide an accurate representation of a more recent servicisation ‘reality’ elsewhere beyond this region, namely, in the other regions of the EU? It is possible that at the end of the day the so-called ‘successful core HRM engagement’ (as stated, for example, by Kabst and Matiaske 2005: 163) would give us just half a result (of what we desparately expect from HRM in terms of ‘human component’ and not only in terms of its ‘management component’; see a lucid discussion on this in Camacho and Mueller 1998) - a too narrow economic performance outcome only? Will it totally miss different goals, currently still a central focus of every type of social model in the EU. Namely, returns may easily go more to the capital than to the labour and, perhaps, to ‘creative industries alias services’ closely attached to capital as well (as stated by Florida, 2002). The flipside of the coin is that a majority of the simpler types of service jobs, including convergence-oriented administrative staff in many public services, may further be relaxed via rude deregulation, outsourcing and other quasi-market forces, which will have a major impact on nearly all social, gender, and family relations of all service employees within sectors, firms or organisations, and occupations (see Valenduc et al. 2007).

To sum up, the expanding peripheral labour market segments, which include the majority of (new) services, could be ‘successfully transformed’ into a politically manageable aggregate of ‘human resources’, acting efficiently (for owners) but being entirely socially ineffective due to the increasingly poor working and life conditions of the workforce (Kramberger 2010). If this undesired pattern of servicisation continues to expand, then perhaps a new Service society, emerging elsewhere, may finally give birth to a currently still hidden new global social order: a post-industrial consumer feudalism. This does not suggest a bright future, not even in the USA (Nelson 1994; Poindexter 2007; Vidal 2007), for either low skilled or for the skilled service workers, who are perhaps already aware that their workplaces are rapidly changing in terms of the increased flexibility, non-standard contracts (Kersley et al. 2006, cf. in Rose 2008: 969) and a weakened autonomy, but who nevertheless have little awareness of the nature of the leadership required in the new service and client- or customer-orientated environments (Davis and Blass 2007). What they experience is an increasingly service-orientated society that has not (yet) established a solid basis for holistic HRM practices that support both business efficiency as well as social effectiveness and the welfare of the workforce involved.

References


### Appendices A, B, C, D

#### Appendix A: Specification of variables, used in the modeling *

<table>
<thead>
<tr>
<th>No.</th>
<th>Original variable name</th>
<th>No.</th>
<th>Derived variables (&quot; - new)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(see Ageing chapter)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(this chapter)</td>
<td></td>
</tr>
<tr>
<td>A. Dependent variables: 5 subsets of HRM practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Strategic_HRM</td>
<td>1.</td>
<td>SHRM_position</td>
<td>[0 : 4]</td>
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<tr>
<td>2.</td>
<td>Outsourcing_HRM</td>
<td>2.</td>
<td>SHRM_outsourcing</td>
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<tr>
<td>3.</td>
<td>Devolution_HRM</td>
<td>3.</td>
<td>SHRM_devolution</td>
<td>[0 : 5]</td>
</tr>
<tr>
<td>4.</td>
<td>Employee_per_HRM (skewed)</td>
<td>4.</td>
<td>Log_Employees_per_HRM*</td>
<td>[1.96; 0.3]</td>
</tr>
<tr>
<td>II. Staffing practices</td>
<td>5.</td>
<td>HR_manager_recruitment</td>
<td>5.</td>
<td>STAFF_HRM</td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td>7.</td>
<td>STAFF_employees*</td>
<td>[0 : 3]</td>
</tr>
<tr>
<td>III. Participative practices</td>
<td>8.</td>
<td>Direct_info_participation</td>
<td>8.</td>
<td>PART_direct_info</td>
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<tr>
<td>9.</td>
<td>Indirect_info_participation</td>
<td>9.</td>
<td>PART_indirect_info</td>
<td>[0:10]</td>
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<tr>
<td>9.</td>
<td>Financial_participation</td>
<td>(PART_financial)</td>
<td>[0:24]</td>
<td></td>
</tr>
<tr>
<td>IV. HRD practices</td>
<td>10.</td>
<td>Training_investment</td>
<td>12.</td>
<td>HRD_training_invest</td>
</tr>
<tr>
<td>11.</td>
<td>Career_development</td>
<td>13.</td>
<td>HRD_career_devel</td>
<td>[0:15]</td>
</tr>
<tr>
<td>12.</td>
<td>Performance_appraisal (%)</td>
<td>14.</td>
<td>HRD_perf_appraisal</td>
<td>[0:100]</td>
</tr>
<tr>
<td>13.</td>
<td>Staff_turnover</td>
<td>15.</td>
<td>HRMO_turnover</td>
<td>[1:5]</td>
</tr>
<tr>
<td>14.</td>
<td>Absenteeism (days per year)</td>
<td>16.</td>
<td>HRMO_absenteeism</td>
<td>[0:45]</td>
</tr>
<tr>
<td>15.</td>
<td>Efficiency</td>
<td>17.</td>
<td>HRMO_efficiency</td>
<td>[1:5]</td>
</tr>
<tr>
<td>16.</td>
<td>Effectiveness</td>
<td>18.</td>
<td>HRMO_effectiveness*</td>
<td>[0:15]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Independent variables: (Indicators of) Serviceisation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Service jobs</td>
<td>1.</td>
<td>SERV_nonmanual_p</td>
</tr>
<tr>
<td>Percent of Prof &amp; Technical jobs</td>
<td>2.</td>
<td>SERV_proftech_p</td>
</tr>
<tr>
<td>Percent of Intellectual jobs</td>
<td>3.</td>
<td>SERV_intelect_p</td>
</tr>
<tr>
<td>Percent of graduates workers</td>
<td>4.</td>
<td>SERV_graduate_p</td>
</tr>
<tr>
<td>No. of managers per 1000 service jobs</td>
<td>5.</td>
<td>LogSERV_mper_1000service</td>
</tr>
<tr>
<td>No. of managers per 1000 proftech jobs</td>
<td>6.</td>
<td>LogSERV_mper_1000proftech</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Control variables (size, service sector, country)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of organisation</td>
<td>1.</td>
<td>LogSize</td>
</tr>
<tr>
<td>Service sectors (services, other)</td>
<td>2.</td>
<td>Sector3</td>
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<tr>
<td>3.</td>
<td>SERV_Elfing</td>
<td>[1 : 5]</td>
</tr>
<tr>
<td>4.</td>
<td>SERV_Eurostat</td>
<td>[1 : 6]</td>
</tr>
<tr>
<td>5.</td>
<td>SERV_Lopez_Godinho</td>
<td>[1 : 4]</td>
</tr>
<tr>
<td>7.</td>
<td>SERV_Korczynski</td>
<td>[1 : 4]</td>
</tr>
<tr>
<td>8.</td>
<td>Frontline_firms</td>
<td></td>
</tr>
</tbody>
</table>

* Compare with specifications in the Ageing ch. (by Jerodiakonou et al), this book
Appendix B: Original Cranet codes for an organisation’s (sector) activity (CRANET 2004, variable VI - 2)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Agriculture, Fishery, Hunting</td>
</tr>
<tr>
<td>02</td>
<td>Energy &amp; Water Supply</td>
</tr>
<tr>
<td>03</td>
<td>Chemicals, Mining</td>
</tr>
<tr>
<td>04</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>05</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>06</td>
<td>Construction</td>
</tr>
<tr>
<td>07</td>
<td>HORECA (Hotels, Retail, Catering) &amp; Motor repair</td>
</tr>
<tr>
<td>08</td>
<td>Wholesale, Traffic &amp; Communications</td>
</tr>
<tr>
<td>09</td>
<td>Financial &amp; Business Services</td>
</tr>
<tr>
<td>10</td>
<td>Personal, HH, Recreation Services</td>
</tr>
<tr>
<td>11</td>
<td>Other Services</td>
</tr>
<tr>
<td>12</td>
<td>Health Services</td>
</tr>
<tr>
<td>13</td>
<td>Education</td>
</tr>
<tr>
<td>14</td>
<td>Social Services</td>
</tr>
<tr>
<td>15</td>
<td>Public administration</td>
</tr>
<tr>
<td>16</td>
<td>Other, what?</td>
</tr>
</tbody>
</table>

Appendix C: Recoding of original Cranet activity codes – into the final SECTOR variable

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>07-10</td>
<td>Market (Private) Services</td>
</tr>
<tr>
<td>11-15</td>
<td>State (Public) Services</td>
</tr>
<tr>
<td>02-05</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>01-06</td>
<td>Other industries (Agriculture etc. &amp; Construction)</td>
</tr>
</tbody>
</table>

Appendix D: Details on re-coding of original activity codes into the six taxonomies

First taxonomy, encompassing all services in just one group, had just two simple categories: all services (original codes 7 thru 15), other activities (original codes 1 thru 6).

Second taxonomy was based on the Elfring’s taxonomy (Elfring 1988; see also Hauser and Daniels 2007, Rubalcaba et al 2009, Beyers 2010) and included (his) five well-known categories: producer services (original code 9), distribution services (original codes 7 and 8), personal services (original code 10), social services (original codes 11 thru 15), other activities (original codes 1 thru 6).

Third taxonomy relied on the Eurostat’s official taxonomy of activities (see for example European Business – Eurostat 2008) and had six categories: agriculture (original code 1), manufacturing (original codes 2 thru 5), construction (original code 6), distribution services (original codes 7, 8, and 10), financial services (original code 9), social services (original codes 11 thru 15).

Fourth taxonomy was based on the Lopez & Godinho’s taxonomy (Lopez and Godinho 2005) and had four categories (it is just a shortened version of the Eurostat’s taxonomy): non-financial services (original codes 7 8, and 10), financial services (original code 9), social services (original codes 11 thru 15), manufacturing and other activities (original codes 1 thru 6).

Last two taxonomies were inspired by the less economic accounts with service heterogeneity.

Fifth taxonomy followed the Gadrey’s taxonomy (Gadrey 1992, see also Miles and Boden 2000): its four item categorisation neglects a division between private and state-owned service activities and emphasises the main object of logistic manipulation instead: services in material logistics (original codes 7 and 8), information logistics (original codes 8, 12, 13, and 15), contact services (original codes 10, 11, and 14), and other activities (original codes 1 thru 6).

Finally, we also developed the sixth taxonomy along the Korczynski’s ideas (Korczynski 2002; see also Heidenreich 2004, Florida 2002, Florida and Atkinson 2005, Evetts 2003, Legge 2005), given our data limitations, with four categories: service factory’ category, based on standardised customer-oriented rules (original codes 7, 11, and 15), service shop’ category, based on scale economy, combining rules and some discretion of employees (original codes 8, 10, and 14), knowledge services, with highest possible level of discretion in the service delivery (original codes 9, 12, and 13), and all other activities (original codes 1 thru 6).

With an interesting, future-oriented or ‘new economy’ oriented definition of ‘distribution activities’. 