

Corporate Governance Regimes, Investments in Human Capital and Economic Growth

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Abstract

This paper uses a large-scale database to test the link between corporate governance regimes (specifically, the varieties of capitalism literature), investment in training and economic performance. The evidence presented here does not match with common assumptions that countries can be classified into Anglo-Saxon and other forms of capitalism, supporting a considerable body of the more empirically orientated literature on employment security and human resource development. We propose a new categorization of countries that links types of broad corporate governance regimes and associated sets of regulations with the relative propensity of firms to engage in specific types of investment towards a core stakeholder: employees.

Keywords: capitalist systems, corporate governance systems, employment practices

JEL Classifications: G30, P10, J24, O15

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Corporate Governance Regimes, Investments in Human Capital and Economic Growth

The collapse of communism in western Europe and the varying fortunes of the Japanese and US economies focused attention on the institutional foundations of different types of economic competitiveness. Within the emerging varieties of capitalism (VOC) literature, a common distinction has been drawn between liberal market economies (LMEs) and collaborative market economies (CMEs), the latter including Scandinavian and Rhineland Europe, and Japan (Lincoln and Kalleberg 1990; Dore 2000; Hall and Soskice 2001).¹

Central to VOC analysis is the notion of *complementarity*, in other words, a case where the presence or efficiency of one institution or associated sets of practices increases the returns or efficiency of another or both. Of particular concern are the complementarities “between institutions located in different spheres of the political economy” (Hall and Soskice 2001: 18), such as between national training systems, corporate governance regimes, and firm level human resource development policies and practices: in other words, the process by which a particular type of coordination in one sphere leads to complementary practices in other spheres. This distinction has important analytical implications: in this paper we aim not so much to test hypothesized *causes* of specific human resource development practices at firm level as to explore *correlations*, as the basis for shedding further light on potential complementarities within particular locales.

There is little doubt that the skills and capabilities of the available workforce are contributors towards the degree of success of a particular economy (Porter, 1990). One

¹ Later developments and critiques pointed to the greater diversity within the latter category: however, a consensus as to what defines the different types of CME has been slower in emerging (c.f. Amable 2003; Whitley 1999).

of the core differences between the varieties of capitalism is the type and nature of training systems provided at the national level and firm level (Estevez-Abe et al. 2001; Harcourt and Wood 2007; Supiot 2001). A key distinction is the relative emphasis given to academic versus on the job training. The former is aimed at the general job market, whilst vocational training – whether firm based or sectorally provided – is more likely to impart skills relevant to a particular company or type of company (Supiot 2001: 29). In particular, most CMEs have relatively strong vocational training systems, when compared to LMEs. However, there are exceptions to this rule: Sweden and Finland both have relatively weak ones likely to make for rather different sets of complementarities in firm practices than would normally be associated with the CME model (Amable 2003).

A further distinction reflects the degree of statutory job security: where this is weak, firms also tend to invest less in the long term skills development of their employees, even if higher staff turnover rates may force a greater spend on initial induction training. On the one hand, job protection in LMEs is generally weaker than in CMEs (Hall and Soskice 2001; Whitley 1999). On the other hand, within some types of CME, security of tenure is weaker than in others, reflecting trade offs that involve the state playing differing roles in training and development: the traditional high employment type CMEs and those following the “flexicurity” model.

Such differences raise the possibility of more than one “type” of CME, distinguished by distinct approaches to training and development. There have been two particularly influential attempts – Whitley (1999) and Amable (2003) – to draw distinctions between different forms of continental European economy in terms of the relationship between corporate governance regimes and firm practices. Whereas, Whitley (1999) focuses

primarily on differences between northern and certain types of southern European economy, and Far Eastern economies, Amable (2003) proposes a set of alternative categories based on different defining features. Both approaches are founded on broad macro-economic data, and anecdotal evidence of firm practices. In contrast, in this paper, we aim to draw distinctions on the basis of large scale comparative firm level data collected over a series of time-points, thus adding to the relatively few studies looking at effects of national training regimes at firm level using cross-national surveys and providing the first evidence of developments over time.²

Corporate Governance Regimes and Training Systems

This section of the paper reviews the predictions of the literature on the varieties of capitalism on labor market flexibility and staff training.

LMEs – Training and Development in a Climate of Low Employment Protection

Education and training in LMEs are complementary to highly fluid labor markets (Hall and Soskice 2001: 30). Vocational training is generally weak, and offered by formal educational institutions and centered on generic skills, as firms are reluctant to invest in apprenticeships that would strengthen applied industry specific skills (ibid.; Amable 2003: 161; c.f. Thelen 2004). This reluctance is due to the fact that it is relatively easy for competitors in the sector to free-ride in this area by poaching staff that others have

² Buyens and Wouters (2005) provide a study of the Belgian system based on firm-level survey data, Papealexandris and Chalikias (2002) study Greece, and Kjellberg et al. (1998) look at Sweden. Hanssen (2007) provides an excellent cross national study comparing specific organizational performance outcomes with training, but devotes rather less attention to the specific effects of national training systems and associated corporate governance regimes. Klarsfeld and Mabey (2004) approach the issue of national variations in management development from what is largely a cultural perspective, although some attention is devoted to institutional factors (see also Mabey and Ramirez 2005). Tregaskis et al. (2004) explore variations in practice between MNCs and their indigenous counterparts in a range of different national contexts. Drost et al. (2002) provide a more descriptive approach to national variations, focusing on cultural and sectoral differences.

trained. In addition, for individual job-seekers, career success is dependent on being able readily to change jobs, and hence they are likely to pursue skills that are generic, and that can be used in many organizational settings (ibid.: 30).

In practice, in LMEs such as the United Kingdom, state supported vocational training has, in many instances, been geared more towards providing firms with cheap short-term labor rather than long-term human resource development (Wood 2001: 261). In addition, employers have been reluctant to provide genuine training to more apprentices than their immediate needs (Supiot 2001: 30). Ireland can be considered to have retained many of the core aspects of the LME model in this regard, despite the infusion of aspects of the European social model, regarding tripartite trade offs between unions, employers and the state on issues such as reward systems and social support. More advanced state supported education has tended to focus on the provision of academic and general administrative skills. Given the lack of suitable apprenticeships that impart real vocational skills, even vocational courses in Further Education Colleges have tended to become more academic. As a result, compared to the rest of Europe, proportionately few British workers hold vocational qualifications (Mason and Van Ark 1994: 57).

Recent research by Wright and Dwyer (2006) has underscored the dualistic nature of work and employment in the USA – the “exemplar” LME – between low wage low skilled work based around fordist methods of organization and control commonly encountered in large areas of the service sector, and better rewarded, higher skilled work in radically innovative areas of economic activity. A good pool of general skills imparts advantage to radical product innovation: for example, in the US, the software industry can draw on large numbers of university level educated job seekers who, due to a highly

flexible labor market, are likely to have knowledge across a particular industry through regular job switching (Estevez-Abe et al. 2001: 149).

In contrast, many firms continue to rely on the standardized mass production of goods and mass provision of services, which do not require a highly trained workforce at all. Nonetheless, even in such occupations, a basic degree of dexterity will be required, which will necessitate some induction training; low security of tenure and high job turnover rates will hence impel firms to greater spending on training and development than a reliance on low cost low commitment production might suggest (Estevez-Abe et al.: 148; Harcourt and Wood 2007). In other words, it could be argued that high job turnover makes for lots of short bouts of training. Furthermore, given low trust relations between firms, individual organizations are less likely to pool resources, resulting in higher research and development bills – which again may skew internal training needs.

CMEs – High Job Security Economies

In CMEs firms depend on high industry specific skills or firm specific skills – and are heavily dependent on training systems capable of providing these skills (Thelen 2004). In many CMEs, including Germany, Sweden and Austria, employees have enjoyed high levels of job security providing them with an incentive to develop their human capital on company and industry specific lines (Hall and Soskice 2001). From an employers' standpoint, this means that investments in people are less likely to be reaped by competitors. The combination of a strong national vocational training system and high job security is particularly conducive to cumulative investments in skills on both a formal and informal basis (Whitley 1999: 62). A selection process during state education orientates pupils along different tracks from an early age, a differentiation that is

functional to occupational labor markets. A well developed welfare state supports individuals in particular occupations when there is a downturn: this provides a solid foundation, on which companies can build further organization-specific skills (Amable 2003: 161).

This poses coordination problems, as those undertaking apprenticeship must be confident that there will be demand for their skills on completing their training, whilst firms need to ensure that they do not end up “training for an industry”, with less principled competitors relying on poaching – not training – to meet skills shortfalls (Hall and Soskice 2001). In the case of Germany, employer associations limit free-riding by encouraging major firms to offer apprenticeships, and monitoring their progress in this demand (Hall and Soskice 2001); union pressures further restrict labor market mobility (Whitley 1999: 62). In any event, high job security means that there are fewer pressures for employees to job-hop or to constantly monitor the external labor market.

Another issue is the diffusion of skills across an economy as highly skilled employees are likely to enjoy high security of tenure, and be less likely to move jobs (Hall and Soskice 2001: 26). However, this problem is compensated for in the German case by strong inter-company relations based on systemically embedded trust. Complex arrangements involving inter-firm sharing of research and development may be difficult to sustain in the absence of formal contracts: again, in Germany, this problem is resolved through the active role of industry associations in promoting common standards and practices, and in dispute resolution (Hall and Soskice 2001).

Examples of high job security CMEs include Germany, Switzerland, Austria, and Norway. Whilst Sweden and Finland are generally held to be archetypical CMEs, they

differ from CMEs such as Germany and Austria in that they have weak vocational training systems. This means that even if they are similar to CMEs in other respects, firms could exhibit LME-like behavior when it comes to firm related training (Amable 2003: 161-2). France and Italy share many features of CMEs – most notably regarding stock market capitalization and employment protection – but are in somewhat a more ambiguous position; Hancke (2001: 307), for example, argues that France has become increasingly integrated into Anglo-Saxon model capital markets. According to Whitley (1999: 43), northern Italy constitutes a distinctive model, characterized by a relatively large proportion of small firms and by cooperative managerial paradigms, reliant on the use of skilled labor. Such potential distinctions merit further examination through assessing what sets of policies and practices are correlated in which specific context.

Key Differences between LMEs and CMEs

What are the key differences in training provision in these two ideal-type economies? First, higher job turnover rates in LMEs necessitate a greater investment in induction training even in the case of unskilled repetitive jobs. Conversely, state provided labor market training programs in CMEs (e.g. in the flexicurity countries) – and very much stronger initial training systems (in non-flexicurity CMEs) – reduce the training burden on firms. Second, firms in CMEs still have incentives to invest further in organization specific training given lower staff turnover rates, and the reliance of incrementally innovative production paradigms on high organization and sectorally specific skills. Yet, it is this type of training that will differ from LMEs. In LMEs it is likely to be shorter. This would reflect the demand for basic induction skills, given higher staff turnover rates.

There will be a further need for top-up training to make generic education relevant to organizational needs, whilst retaining an externally relevant face.

Weaknesses in training systems in LMEs will open up opportunities for external educational providers for in-company programs who will be able to reap economies of scale within particular industries. Again, the greater incidence of individual contracts within LMEs means that the use of internal training is more likely to be informed by individual appraisals. Given that lower security means that individuals have fewer incentives to invest in organization specific skills (Marsden 1999: 220-221; Thelen 2004) within LMEs, firms have to make training more attractive to employees: this means that individuals are more likely to be consulted regarding the provision of training. However, the weaker position of unions means that the latter are very much less likely to be involved than in CMEs, where they constitute a pillar of the system. Higher job turnover rates in LMEs means that less emphasis will be placed on experience in promoting learning. In radically innovative organizations in LMEs, very much more emphasis will be placed on network based learning than in their fordist national counterparts, or in incrementally innovative firms in CMEs.

Writing from a broadly cultural perspective, Klarsfeld and Mabey (2004) found persistent differences in approaches to management development in the areas of planning, “manpower internalization”, and the use of formal qualifications between Britain and Germany, reflecting fundamentally different approaches in the role of management in securing competitiveness (Mabey and Ramirez 2005). Whilst looking at training and development more broadly, Drost et al. (2002) encountered similar types of national distinction, which they again ascribed to culture. Whilst culturalist accounts can be

critiqued for their assumption that culture corresponds with national boundaries (c.f. House et al. 2004) and their broadly functionalist underpinnings (Bacharach 1989: 499), it is significant that differences encountered between Britain and Germany in this regard correspond to the LME/CME distinction. It is also of interest that Drost et al. (2002) also encountered differences at industrial level, an issue that will be further investigated in subsequent sections (Mabey and Ramirez 2005).

Data Sources and Descriptive Data Analysis

This paper is based on the international Cranet survey of HR managers. This survey explores a detailed range of firm-level HR practices, and variations in other organizational characteristics. It encompasses private and public organizations in 22 European countries, and other overseas countries (Brewster, Mayrhofer and Morley, 2004). The survey is conducted every four years. Approximately 70% of the returned questionnaires were filled in by the most senior personnel or human resource manager. The other observations involve less senior personnel practitioners, the CEO personally, or the company secretary (Brewster et al. 2007). For the purposes of this paper, we focus on private firms only from the 17 Western European countries in Cranet and on the surveys of 1991, 1995, 1999 and 2003.³

We commence our analysis with a descriptive assessment of the overall duration and nature of training provided. This revealed distinct variations on national lines: there was little evidence to suggest that firms independently adopted training structures irrespective of the wider institutional context, including national training systems.

³ Not all countries are covered in each of the four surveys.

Economic growth

Figure 1 shows the average growth rate of the GDP per capita (adjusted for inflation) as well as the standard deviation of the growth rate during 1987-2005 for the 17 Western European countries covered by the Cranet survey. The figure shows that there is quite a degree of diversity in terms of GDP per capita growth rates with Ireland forming the top of the league with an average growth rate of 5.5% and Switzerland forming the bottom with an average growth rate of only 0.8% over the period. There is a similar degree of diversity in terms of the volatility – as measured by the standard deviation – of the growth rates: Finland has the most volatile economy with a standard deviation of 3.3% and Italy has the least volatile economy with a standard deviation of only 1.2%.

Training and development activities

Figure 2 reports the average days of training for 1991 for the four categories of (a) managerial, (b) professional/ technical, (c) clerical and (d) manual employees. The UK has the lowest average number of training days for managers and is close to the cross-country average in terms of training provided to the three other categories of employees. Figure 3 shows the equivalent figures for 1995. There is more cross-country variation in 1995 than in 1991, yet no evidence of a degeneration to “diffuse diversity”. Similar to 1991, UK managers receive the lowest average number of training days. Professional/technical employees in the UK are given the second lowest number of training days after Switzerland. Clerical employees in the UK receive the third lowest average number of training days whereas UK manual workers receive a number of training days close to the cross-country average. Figures 4 and 5 confirm these patterns for 1999 and 2003, respectively. Again, the UK provides managerial,

professional/technical and clerical employees with very low, if not the lowest average numbers of training days. Similar to the two previous figures, manual workers in the UK have an average number of training days close to the cross-country average. Finally, whereas in 1995 Ireland gave more days of training to all four categories of employees as compared to the UK, in 1999 both countries have similar amounts of training, except maybe for manual employees.

Further, the average number of training days given to the four categories of employees in the CMEs of France, Germany and Spain – and Belgium and Italy to a lesser extent – is remarkably stable across time. Conversely, for the UK (and also to a lesser extent Finland and Sweden), the average number of training for a given category experiences much variation. For example, the average number of training days for clerical employees in the UK ranges from just below 3 in 1995 to almost double that figure in 2003 compared to e.g. Germany where the equivalent figure stays relatively constant at around 4 days over 1991-2003.

Figure 6 displays the average percentage of salaries and wages spent on training for (a) 1991, (b) 1995, (c) 1999 and (d) 2003. In each of the four years, the UK spending tends to be just above or below the cross-country average. The relatively high spending on staff training and development in the UK – compared to the relatively low number of training days provided – may be due to two factors: a high proportion of training activities provided by external contractors and/or a high staff turnover. Figures 7 and 8 explore these factors.

Figure 7 is on the changes in firms' use of external providers for their training and development in 2003.⁴ For each country, the figure shows the percentages of firms that did not use any external providers, and those that increased, decreased or kept constant their use of external providers during 2003. The UK – with the Netherlands, Denmark and Sweden – is one of the countries with the highest percentage of firms – 95 percent – using external providers for their training and development. It is also one of the countries with one of the highest proportions of firms having increased their use of external providers during 2001-3. This could reflect the rise of a specialized training industry to compensate for gaps in the national provision of training in industry specific skills. Figure 8 reports average staff turnover for (a) 1995, (b) 1999 and (c) 2003.⁵ Staff turnover in the UK is the highest across all the countries in 1999 and 2003, and the second highest in 1995. Some of the smaller CMEs such as Denmark and the Netherlands (the exemplar “flexicurity” countries) and Switzerland, also tend to have a relatively high turnover, and certainly a higher turnover than the large CMEs of France and Germany.

To summarize, Figures 2-8 suggest that LMEs (certainly the United Kingdom; the evidence is less clear for Ireland) are characterized by a relatively short duration of training provided per employee, an extensive use of external providers for training and development, and a consistently high staff turnover. Further, the average number of training days in the UK also varies more across time than that in the CMEs of France, Germany and Spain – and Belgium and Italy to a lesser extent. Finally, some of the smaller CMEs, such as Denmark, the Netherlands, Sweden and Switzerland, also

⁴ Unfortunately, these data are only available for 2003 and a reduced number of countries.

⁵ The equivalent figure is not available for 1991.

experience great volatility in the amount of training provided and/or high levels of staff turnover.

Table 1 depicts levels of state expenditure on labor market training programs provided in a range of different countries. As can be seen, the relative spend is particularly modest in LMEs such as the United Kingdom, and highest in Denmark, followed by the Netherlands, both countries where the state's emphasis on labor market training is particularly high, underpinning a flexicurity system: the latter aims to provide individuals with marketable skills throughout their working lives. We investigate these issues further in subsequent sections.

Cluster Analysis

The aim of this section is twofold, and centers on an attempt to further interrogate the predictions regarding differences between LMEs and CMEs; at the same time, given that the latter is a very broad category, we have devoted more attention to investigating the differences between different individual CMEs (Amable 2003). First, a two-step cluster⁶ analysis – based on the methodology developed by Chiu et al. (2001)⁷ – will try to identify relatively homogeneous groups of firms based on a range of specific characteristics. The underlying algorithm starts with each firm in a separate cluster and then combines clusters until only one is left. We choose the log-likelihood distance as a measure of similarity and Schwarz's Bayesian information criterion (BIC) for the

⁶ The two-step cluster analysis is able to deal with large samples and to deal simultaneously with categorical and continuous variables. Conversely, the hierarchical cluster analysis has been designed to deal with a few hundred cases only and with variables which are all of the same type (e.g. all continuous variables). Another advantage of the two-step cluster analysis is that it is able to determine automatically the optimal number of clusters.

⁷ See also Bacher et al. (2004) for a description of the method.

determination of the number of clusters.⁸ Second, the clusters obtained from this analysis will be compared with the two archetypes, LMEs and CMEs, and a closer examination of the latter category will be undertaken to explore the nature and origins of any diversity therein.

To start with, the characteristics that we use as the basis for the clusters are the country of origin (a categorical variable), the average numbers of training days for managerial employees, professional/technical employees, clerical employees and manual workers, the percentage of salaries and wages spent on training and the percentage of annual staff turnover. Table 2 reports the clusters that are obtained from these six characteristics. The analysis comes up with four clusters. A first glance at the table suggests that the cluster analysis works well as, for the case of each individual country, most of the companies (i.e. between 71% and 99%) are located within a single cluster.

The first cluster contains virtually all of the UK, Irish, Finnish and Swedish companies; it seems that, CMEs with relatively weak vocational training systems exhibit LME-like behavior in this regard. Table 3, as well as the figures in the appendix, show that this cluster is characterized by significantly below average numbers of training days for all four categories of employees, significantly below average expenditure on training, but slightly above average staff turnover.

Cluster 2 contains a mix of countries, those from Southern Europe (Greece, Portugal and Spain) and the smaller Northern European economies (Denmark, the Netherlands, Norway, and Switzerland). These countries are fairly close to the cross-country averages in terms of days of training, the percentage of wages and salaries spent on training and

⁸ We use SPSS version 14 to obtain the clusters.

staff turnover (see Table 3). Firms operating in Mediterranean capitalist countries exhibit similar behavior to those found in many CMEs, albeit for very different causal reasons, that will be outlined below. Significantly, three CMEs most commonly associated with flexicurity – the Netherlands, Denmark and Norway (Hanssen 2006) – are found in this cluster, reflecting the somewhat higher staff turnover rates than found in the traditional employment protection CME model, which is likely to serve to discourage firms from investing overly in on the job training in organization-specific skills.

Compared to all the other countries, firms from the three Southern European countries (Greece, Portugal and Spain) are spread much more across different clusters. Indeed, a much smaller percentage of these companies (71-76%) are located within a single cluster and a sizeable percentage are found within a separate cluster, cluster 4. There is a similar pattern, albeit much less pronounced, for Sweden: most Swedish firms are within a single cluster, but 12% are located within cluster 4. We shall come back to this pattern later on.

Cluster 3 contains the larger CMEs of Europe (France, Germany, and Italy) as well as Austria, Belgium and Iceland. These countries are traditionally associated with less flexible labor markets. This is reflected in cluster 3 which is characterized by turnover which is significantly below average, but also by very low spending on training and days of training. Given the presence of high levels of job protection and low turnover rates, training can be very cost effective, as the costs can be spread out over the many years of an employee's typical period of tenure.

The pattern uncovered above begs the question why between 24% and 29% of Greek, Portuguese and Spanish firms and 12% of Swedish firms end up within a cluster of their own, that is, cluster 4. This is an important question as Table 3 and the figures in the

appendix show that cluster 4 has characteristics that are substantially different from those of the other clusters. In particular, cluster 4 has training levels, expenditure on training and staff turnover that are between two and three times higher than the sample average. A visual inspection of the 286 firms in cluster 4 reveals that 207 of them are from four industries: Agriculture, Hunting, Forestry, & Fishing; Metal manufacture; Other manufacturing; and Other services. There are also higher percentages of firms in cluster 4 involved in a merger or acquisition (59% compared to 44% for the whole sample) and with their headquarters abroad (51% compared to 33%). Hence, the firms in cluster 4 are mainly the subsidiaries of foreign firms and/or those that have been recently taken over. These firms are likely to have a significantly higher turnover, training expenditure and training duration, reflecting greater organizational resources, the (periodic) need to move key staff between locations, and the effects of the country of origin on country of domicile HR behavior.⁹

We now return to Figure 1 on the GDP per capita growth rates and volatility in order to establish whether there is a link between types of training systems and economic growth. The countries in the diagram are grouped according to the three main clusters, starting with cluster 3 (Austria to Iceland), then cluster 2 (Spain to Switzerland), and finally cluster 1 (Ireland to Finland). The figure shows that there is a strong correlation between economic growth (and volatility) and types of training system. In detail, cluster 3, consisting of the high job security CMEs, has below median economic growth and below median volatility; cluster 2 is characterized by above median economic growth, but below median volatility; and cluster 1 has above median growth and volatility. Finally, as one

⁹ A detailed cross-national analysis of the behaviour of MNCs in different national locales may be found in Brewster et al. (2007).

would expect from the cluster analysis, the three countries in cluster 2, Greece, Spain and Portugal, which also have a significant proportion of their companies forming a cluster of their own, cluster 4, have higher GDP growth rates and volatility than the other countries forming cluster 2. Hence, there is a good correlation between economic growth and the four types of training system.

Alternative Typologies

It is evident from the data that CMEs do not constitute a coherent unit when it comes to dominant approaches to training and development at firm level. In addition to the archetypical high job security/industry specific skills vocational model associated with countries such as Germany (a model that is held to be the norm in CMEs), two alternative further categories of CME emerge from the data (and, indeed, echo key strands of the training and development literature), which reflect wider institutional realities specific thereto. They are the high employment security/flexicurity economies, and those CMEs with relatively weak vocational training systems, that exhibit LME-like features in this regard, even if in other respects, they are firmly in the collaborative camp. Finally, the survey findings underscore the distinct nature of firm level training and development policies and practices encountered in “Mediterranean capitalist countries”.

CMEs II – High Employment Security (Flexicurity) economies

An alternative form of collaborative model to the high job security one is the “flexicurity” model, typically encountered in prosperous smaller CMEs, such as Denmark, the Netherlands, and, to an extent, Norway (Hanssen 2006). In such systems, formal legal job protection is weaker. However, this is compensated for by a very much

greater concentration of resources into state supported continuous training programs, aimed at ensuring that individual job seekers – and those in employment – have the skills necessary to meet the changing needs of firms (Euractive 2005). The ability continuously to access training and develop skills ensures that individuals continue to gain access to decent work throughout their working lives, with generous social security bridging any interim periods of joblessness (Bredgaard et al. 2005).

Within flexicurity economies, high levels of foreign competition necessitate a skilled workforce, in order to remain competitive, whilst retaining relatively high wage levels (Amable 2003; van Lieshout and Wilthagen 2004). In such contexts, vocational training is provided in a cooperative manner at industry and company level (Amable 2003: 161). This is matched by high levels of state expenditure on labor market training programs aimed at supporting individuals throughout their working lives (OECD 2004).

Competitive pressures and the desire of the employability of individuals throughout their careers have led to a strong emphasis on constant retraining (Amable 2003: 109). At the same time, centralization and coordination encourages the clear definition and transferability of specific skills within individual industries (ibid.). In practice, however, approaches to training at the workplace may not be all that much different from many other CMEs (Jorgensen 2004: 463). Amable (2003: 162) argues that the role of employers in vocational training is similarly institutionalized in flexicurity economies such as the Netherlands, and high job protection CMEs such as Germany and Austria. In all three economies, employers may build on strong vocational training systems, allowing for focused and cost effective workplace based continuous training to fill in any gaps in needed organization-specific skills (Amable 2003: 162-163). For example, in the

Netherlands, whilst vocational qualifications are normally gained in full-time schooling, vocational schools have a very high rate of attendance among post-16 year olds; the resultant qualifications are highly regarded by Dutch employers (Mason and Van Ark 1994: 56).

Furthermore, existing flexicurity systems remain, as is the case with other CMEs, dependent on formal compromises between capital and labor, and unwritten rules of conduct (Bredgaard et al. 2005). Research has indicated that employees in flexicurity economies *perceive* their jobs as secure, even if formally-speaking they are not (Bredgaard et al. 2005; van Lieshout and Wilthagen 2004). This would reflect the fact that employers are encouraged to temper their greater capacity to dismiss workers (compared to other types of CME) in return for greater levels of trust and cooperation at the workplace.

Finally, even if formal employment protection is weaker in flexicurity economies, in practice employers appear less likely to act opportunistically in shedding labor than is the case in LMEs. Hence, overall levels of mutual commitment between employers and employees are likely to be higher, although perhaps less than in more traditional-type CMEs (Harcourt and Wood 2007). These issues are reflected by the distinct patterns of behavior regarding training and development, exhibited by the mode of firms operating in these countries.

CMEs III – Weak Vocational Training Systems

Amable (2003: 162) argues that despite differences in corporate governance, the relative propensity of governments to intervene, and different educational systems, two CMEs – Sweden and Finland have much in common in the area of training development, that

would echo aspects of the LME model. Previous research indicates that, whilst firms do place strong emphasis on continuing training, this is offset by little importance being attached to firm-provided or sponsored vocational training. In Sweden, there is a weak conventional apprenticeship system¹⁰ (Amable 2003: 163), whilst in Finland, the system is based around temporary employment and voluntarism (Keuda 2007). Reforms to the Finnish vocational training system in the 1980s shifted vocational training towards a more didactic model, “ending the networking between fields of industry or work life, administration and teachers” (Heikkinen 1997: 216-217). Such reforms have “deliberately weakened” the basis of vocational education in its entirety, and the relations between training institutions and real firms. In Sweden, whilst vocational training was traditionally separate from general academic/theoretical training, in recent years, there has been a move towards a more integrated system (Gibbons-Wood and Lange 2000: 28). The base of skills covered in the Swedish case is considerably more general than the industry-specific skills associated with Germany (Korpi and Mertens 2004: 94). Critics have charged that, as a result, the Swedish system has failed to equip workers with the core skills required by firms; “employers feel let down by the state education system” (Gibbons-Wood and Lange 2000: 28).

Weak and voluntaristic vocational training systems may encourage firms to free-ride on the efforts of others, acting as a disincentive for workplace based training (c.f. Hall and Soskice 2001: 25), as is also the case with LMEs such as the UK. This may be offset by formal and informal learning on the job. The relatively higher expenditure on this will be offset by very limited employer support for vocational training; the former is also likely

¹⁰ There is a “modern apprentice system” that now aims to deal with some of the associated problems, effectively infusing aspects of the German model (Gibbons-Wood and Lange (2000: 29)).

to be much shorter than the latter (Amable 2003: 161-162). However, given weak vocational training, it is likely that both employers and employees will share a strong interest in ensuring that at least some of the former takes place, both to meet organizational needs (in the case of employers) and to ensure marketable skills (in the case of employees, particularly if tenure is weak (Amable 2003: 161-162). Finally, weak vocational training may encourage firms to poach staff from others. This would underscore the extent to which similar complementarities may emerge in systems that are in many respects very different, in response to shared limitations in a specific area. Indeed, whilst in other respects (such as neo-corporatist practices at national level), Finland and Sweden are clearly CME-type economies, with high levels of collaboration in most areas of intra and inter-firm relations, weak vocational training systems appear to have made for LME-like policies and practices regarding training and development at firm level. The high levels of cooperation in other areas may help to compensate for weaknesses in this area; complementarity is often a process of compensating for specific systemic failings in a manner that builds on insider knowledge and past experiences.

Mediterranean Capitalism

The countries of southern Europe – Portugal, Greece, and Spain – occupy a somewhat ambiguous position between CMEs and LMEs (as is the case with CMEs with weak vocational systems, but for different reasons): they have a history of high levels of state intervention and large agricultural sectors that have left a legacy of capacities for state intervention, but have more liberal traditions in terms of their industrial relations (Hall and Soskice 2001: 21; Holman 2001: 47-69). Relatively under-developed capital goods sectors result in a more limited need for skilled workers (Holman 2001: 69). In Portugal,

vocational and educational training has been centralized, with social partners playing an important role in their management, and with measures in place to discourage the young from dropping out of the education and training system: as is the case with most CMEs, this would enable firms to assume a base of relevant vocational skills. In Spain, a multi-faceted vocational training system is in place, with mechanisms to ensure the system is responsive to regional needs, and to ensure that dropout rates are checked (ILO 2007). In Greece, vocational training has been rather more recent, and the system has a reputation for being sluggish, and unresponsive to changes in technologies and market demand (Patiniotis and Stavroulakis: 1997). As is the case with Spain and Portugal, however, the limited nature of the capital goods sector will reduce demand for vocational training (Holman 2001: 69). Again, these realities are associated with specific policies and practices to training and development at firm level, as born out by the survey data.

General Issues

We begin this section with a caveat. Any attempt to define specific clusters of countries associated with specific firm level practices – pointing in this case to specific complementarities between national level training systems, and firm level human resource development policies and practices – represents necessarily an incomplete project. Again, the relationship between state provided education and training systems and firm level training is a complex one: firms may be encouraged to spend more on training better skilled and educated workers than their less skilled counterparts as there is a solid base on which to build: training can be focused on topping up, rather than broad and basic education (Ariga and Brunello 2006: 626). On the other hand, more skilled

workers are already more productive, and there is a greater opportunity cost in removing them from work to undertake more training.

There is considerable evidence to suggest that specific sets of institutions may be associated with more than one set of alternative complementarities (Brewster et al. 2006; Streeck and Thelen 2005), whilst differences between countries in terms of specific aspects of training and development may be offset by many similarities in other areas (Klarsfeld and Mabey 2004: 656). The fact that some CMEs have LME-like training systems, does not mean that they are very like other CMEs in many other respects, such as regarding the presence of national level neo-corporatist frameworks. In other words, whilst the country typologies may be valuable in understanding the nature of associated institutions and practices associated with training and development, we cannot conclude that they will be similarly useful in understanding the relationship between, say, different forms of workplace based voice mechanisms, and the broader role of national labor movements. Again, different sets of complementarities may make for similar outcomes, without necessarily suggesting the superiority of any system (Hall and Soskice 2001). Nor for that matter, does it suggest that certain CMEs are evolving towards the LME model: systemic changes may encompass not only the substitution of one set of practices with another, but development, co-evolution and new departures (Boyer 2006). Finally, we found that foreign owned firms exhibited rather different patterns of behavior than their domestic counterparts, under specific sets of circumstances, reflecting the mixed effects of parent and host country pressures, echoing the findings of Tregaskis et al. (2001) (Brewster et al. 2007).

On the other hand, we found no evidence of simple diffuse diversity, or that certain CMEs are or are becoming wholly LME-like in behavior: rather we found evidence that specific national realities are associated with specific firm level practices, underscoring the existence of clear alternative clusters of institutions and practices, confirming the presence of underlying complementarities (Hall and Soskice 2001). This would indicate that national training systems seem, in most cases, to be fairly persistent; the process of change is a complex and multi-faceted one, and may involve the infusion of aspects of other systems, co-evolution or substitution, rather than a simple convergence or diffusion process (Hollingsworth 2006). Table 4 summarizes commonalities and differences between the identified clusters of nations. France and Italy are somewhat difficult to categorize, although the former and the north of the latter have much in common with the CME model (Hall and Soskice 2001; Whitley 1999).

As can be seen, there appears some relationship between relative economic performance and volatility, and national training systems (Figure 1). A possible explanation for this would be that certain types of training lend themselves better to specific forms of industrial activity, some of which – such as incrementally innovative manufacturing, that lies at the core of economic life in traditional CMEs – proved less dynamic but also less prone to volatility and speculative bubbles, than more high tech, and lower-skilled areas of service sector activity (Thelen 2001). As Thelen (2001; 2004) notes, industry specific skills underpin incrementally innovative manufacturing, and more generic skills high tech industry (Tregaskis et al. 2002). Similarly, Carlin and Mayer (2003) find that different financial systems – they distinguish between stock-market and bank-based systems – are

better at promoting certain types of industry. This is an area that would merit further examination that goes beyond the scope of this article.

Conclusions

A limitation with much of the existing VOC literature is that it is largely founded either on broad economy wide data or case studies; there is rather less recourse to comparative national and transnational survey evidence. This article seeks to redress this lacuna via the use of a major transnational survey dataset, systematically exploring relations between different sets of training and association practices at firm level, and the relationship to national training institutions, and broader socio-economic realities. Our findings highlight some of the limitations of the most common analytical categories highlighted in the VOC literature: our data points to the existence of an alternative set of country clusters, a finding that is supported by a considerable body of the more empirically orientated literature on employment security and human resource development. The distinct country categories that emerge highlight the complex nature of complementarities linking in-firm practices and national institutional realities.

Moreover, national training systems remain persistently distinct: there is no evidence that any changes represent the complete substitution of one system for another, but rather through a process of infusion, experimentation, innovation, retain distinctive features whilst adapting to changing external circumstances (Hollingsworth 2006). On the one hand, the identification of further distinct varieties of capitalism represents very much an open ended theoretical project that holds the distinct danger of sacrificing analytical distinctions based on core defining features on the alter of understanding detailed nuances

in practices (see Wood and Frynas 2006). On the other hand, training and development policies and practices, and associated staff turnover rates, represent one of the central functions of HRM, and, hence, of a firm's relationship with its employees (Storey 2001).

Finally, there appears some relationship between the volatility and strength of national economic performance, and specific training systems. Specific training systems are particularly conducive to specific types of economic activity (Thelen 2004). However, the specific effects of national training systems on firm level HRD practices may vary from context to context within national boundaries (Ariga and Brunello 2006). Since the late 1980s, certain sectors have proved more dynamic – but also more volatile – than others. This raises complex policy questions as to the relative worth of specific areas of economic activity, and the role that governments and other social players can play in promoting specific types of training to help underpin growth, whilst mediating the effects of volatility (Hollingsworth 2006; Thelen 2004). Hence, it is hoped that the country categories derived will be of value in facilitating further analysis as to the complex relationship between economic growth, the manner and context in which firms are governed and their behavior within this area.

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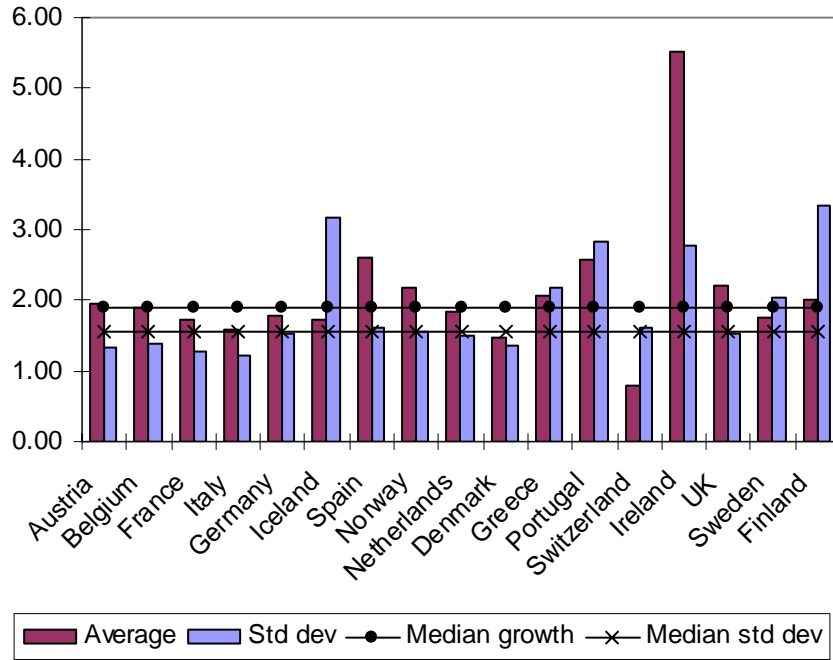
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Figure 1: GDP Per Capita Growth (%) 1987-2005



Source: World Bank

Figure 2: Average Days of Training in 1991

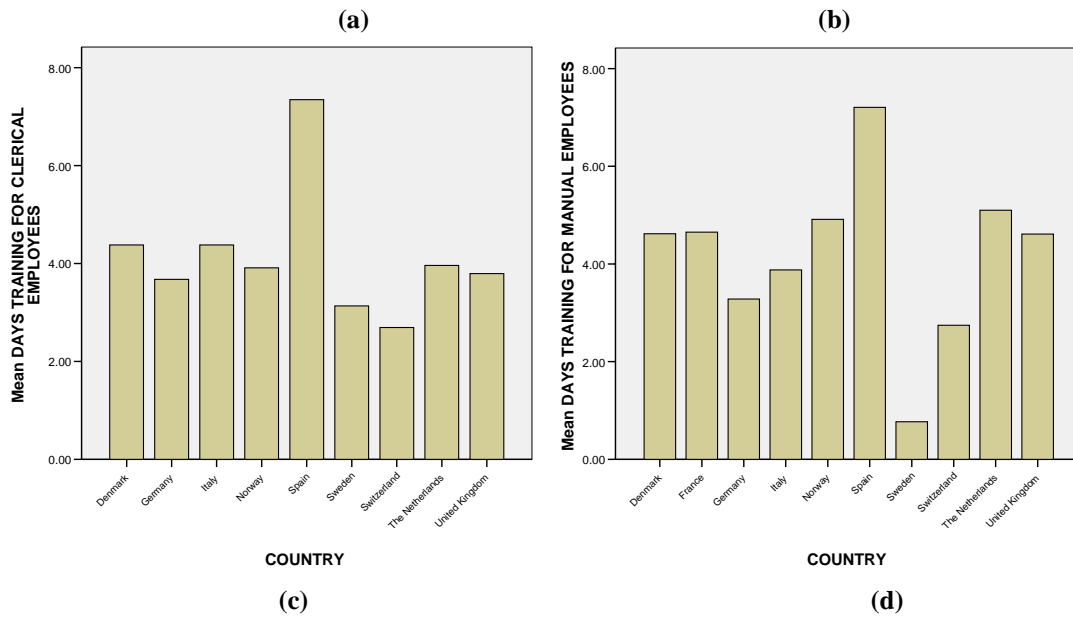
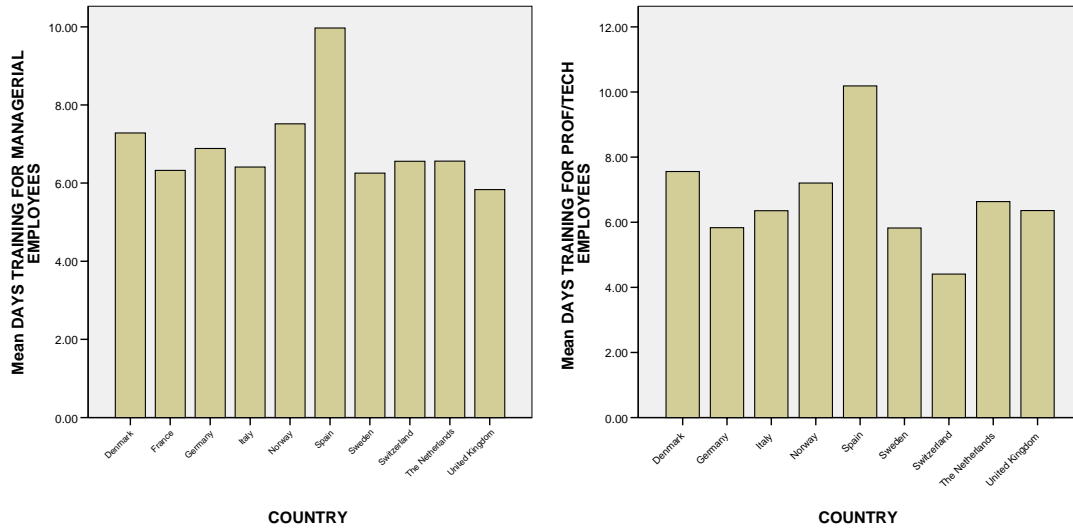
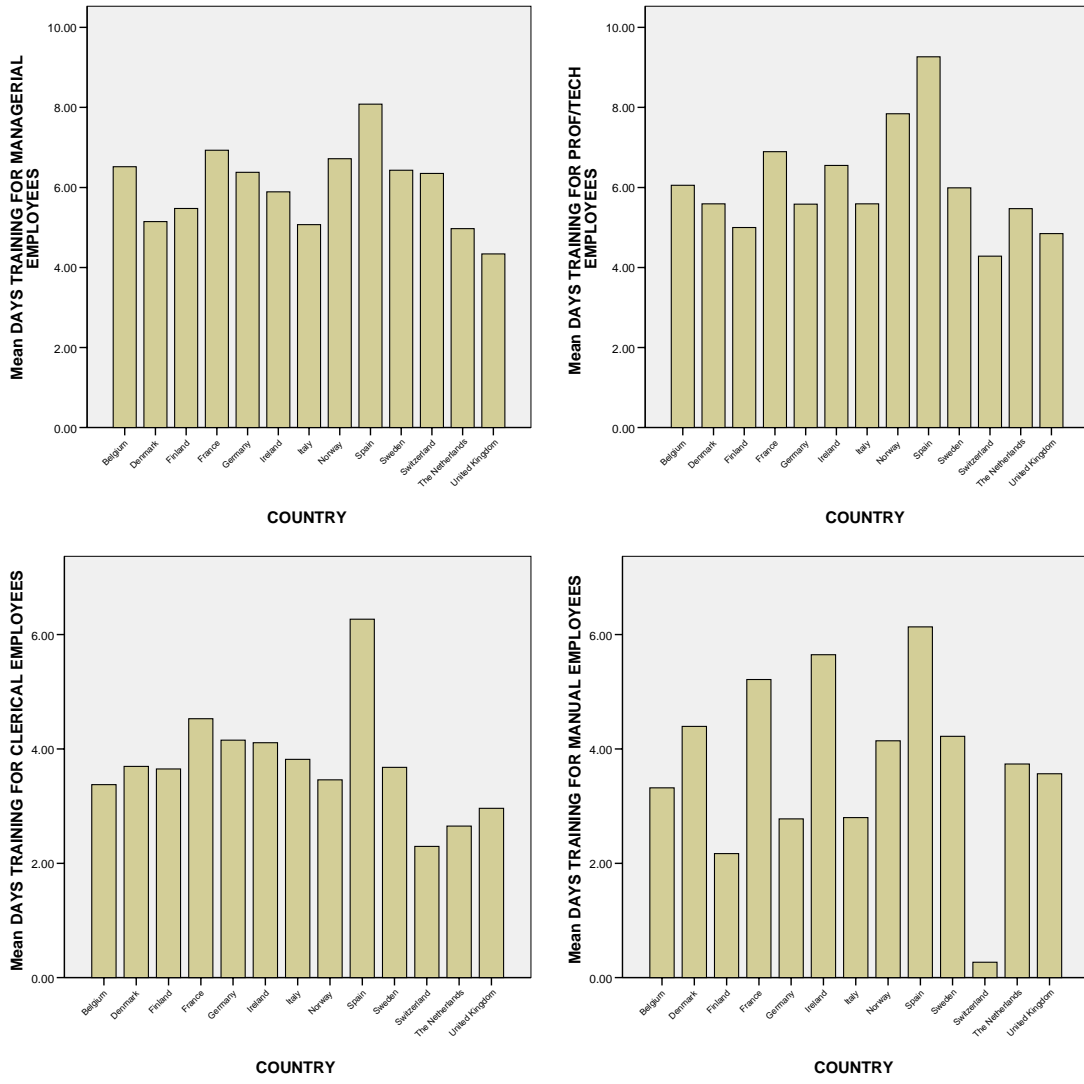


Figure 3: Average Days of Training in 1995



(d)

Figure 4: Average Days of Training in 1999

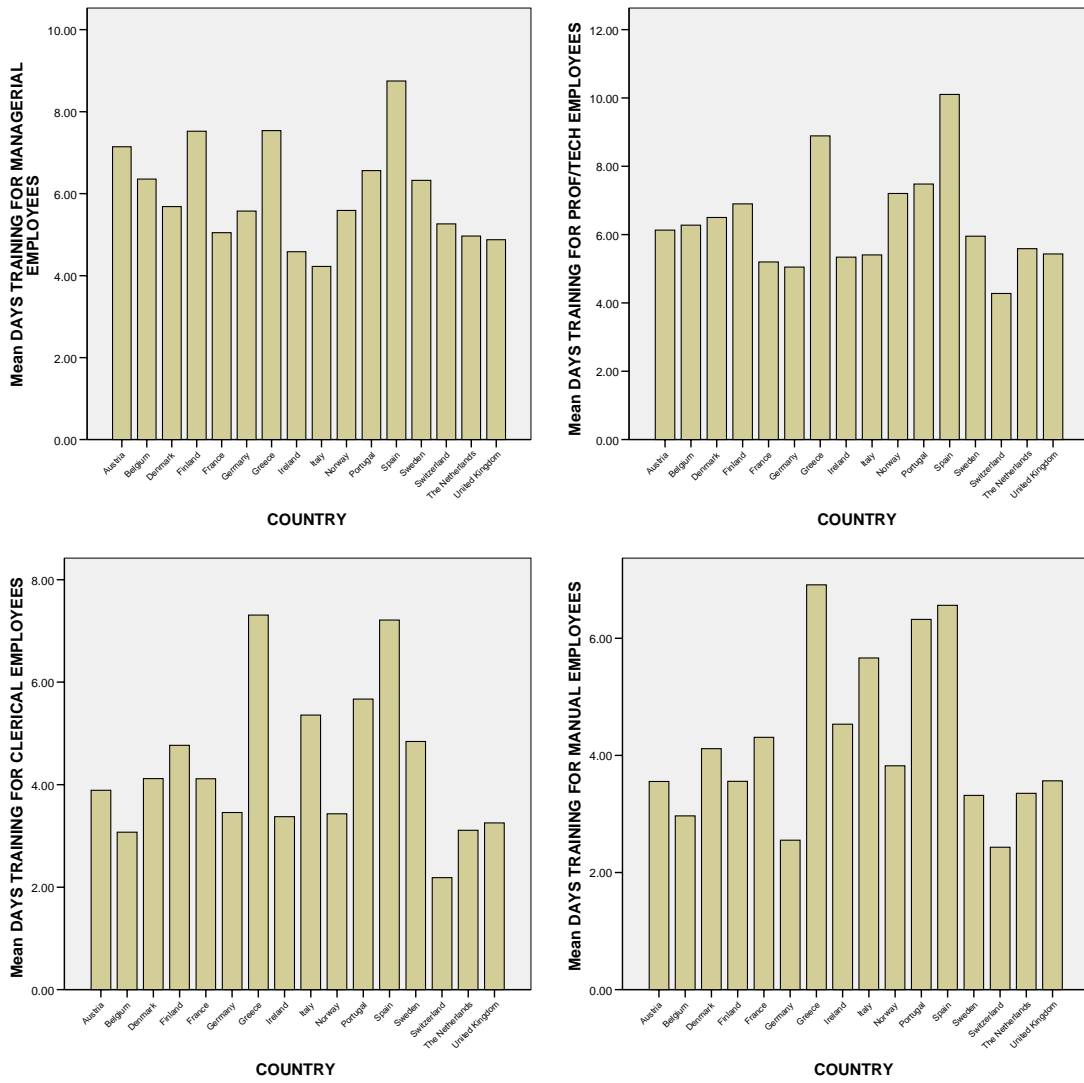


Figure 5: Average Days of Training in 2003

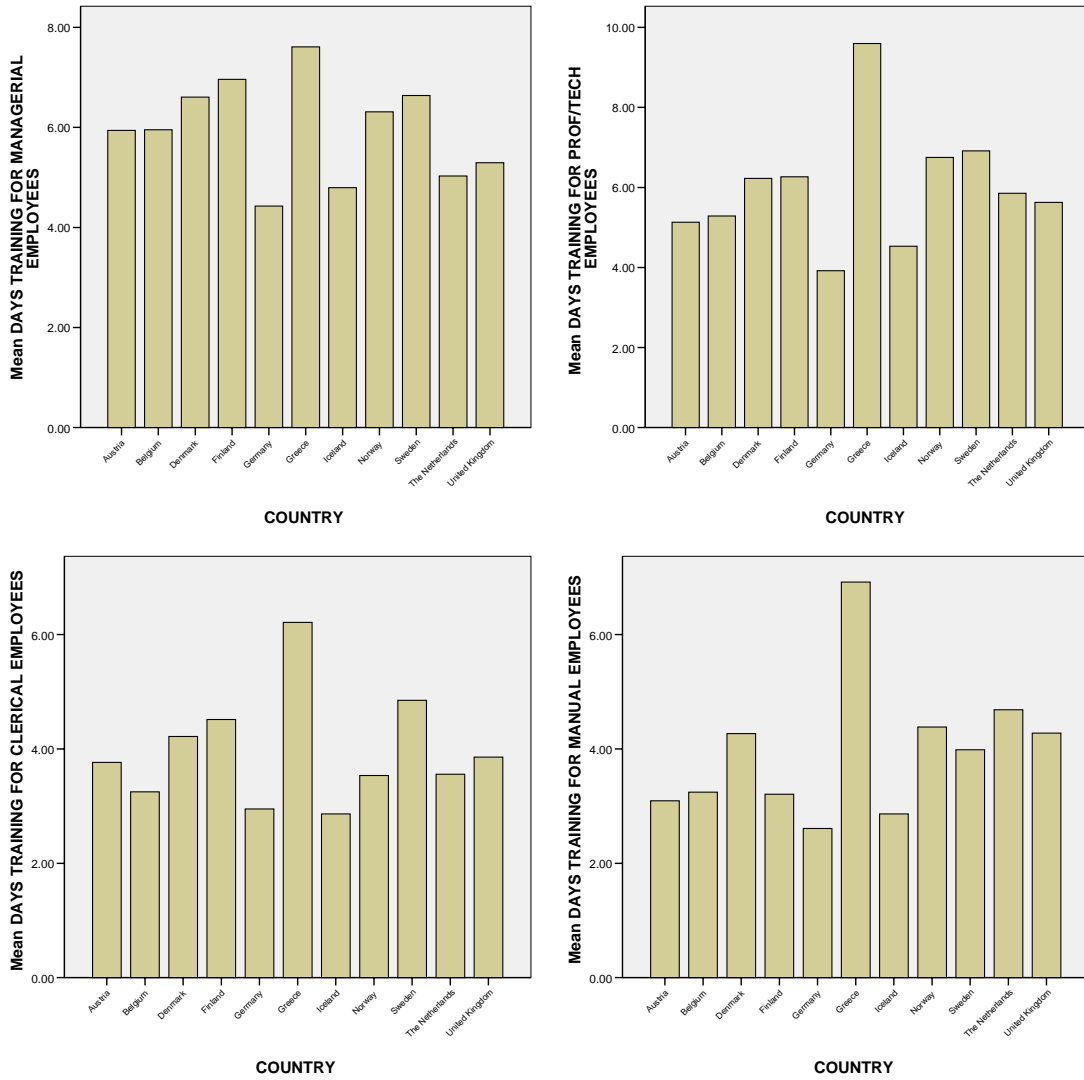
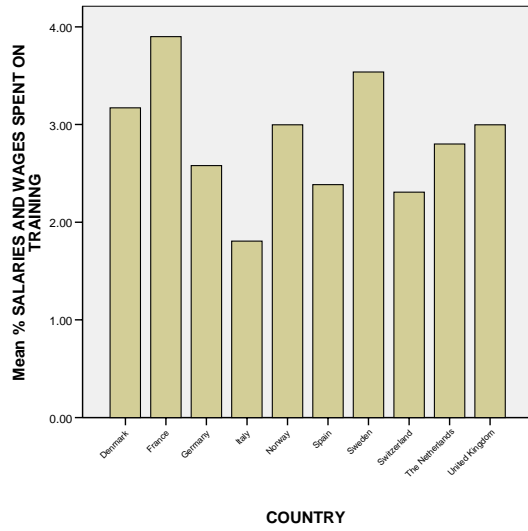
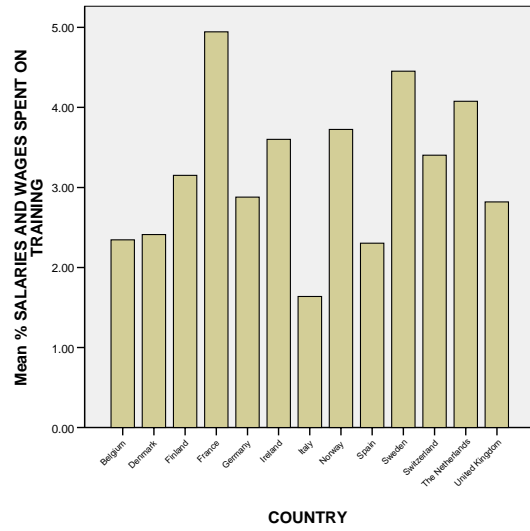


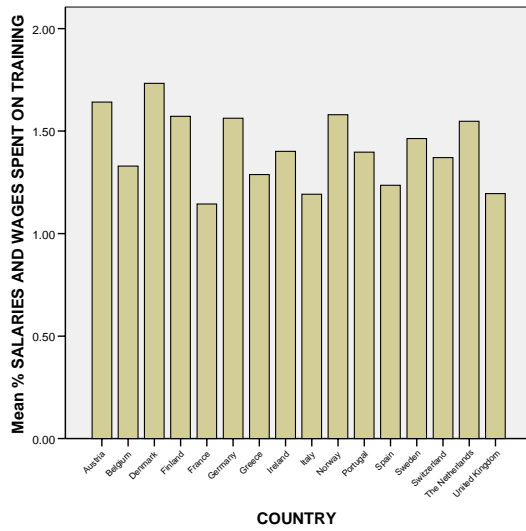
Figure 6: Percentage of Salaries and Wages Spent on Training



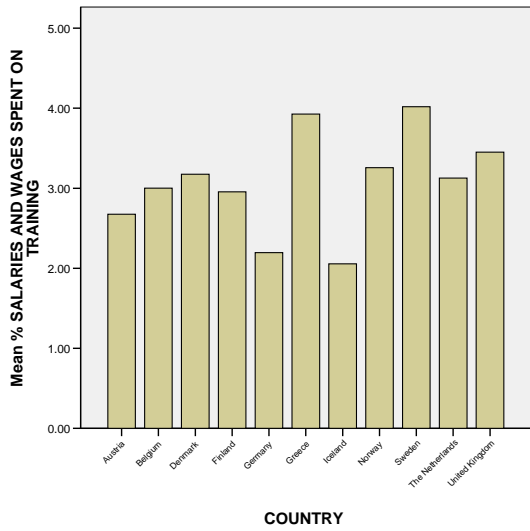
(a) 1991



(b) 1995



(c) 1999



(d) 2003

Figure 7: Change in the Use of External Providers for Training and Development – 2003

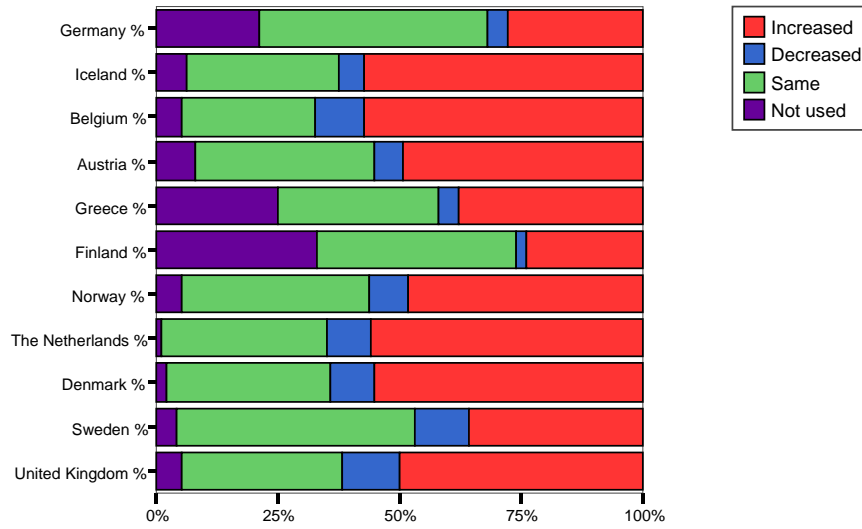
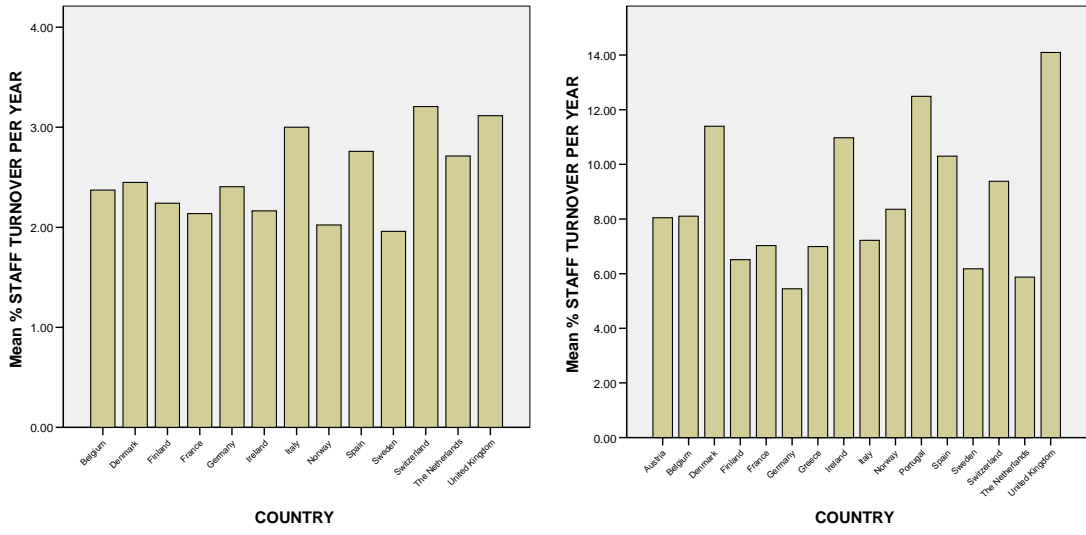


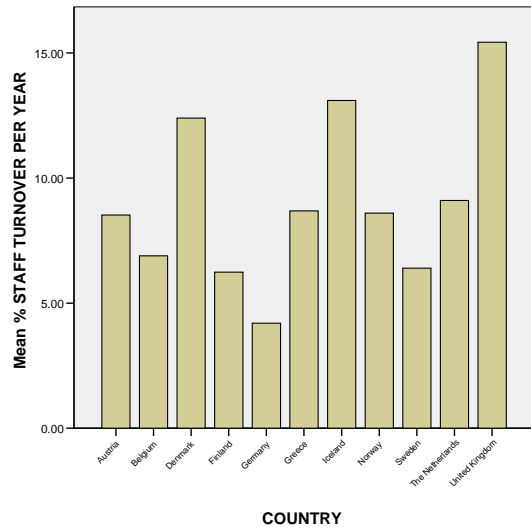
Figure 8: Staff Turnover



8

(a) 1995

(b) 1999



(c) 2003

Table 1: Comparative Levels of Labour Market Training

Country	Public Expenditure as % of GDP	Participant Inflows as % of Labour Force
Austria 2001-2002		
<i>Training for unemployed adults/those at risk</i>	0.65	0.19
<i>Training for Employed Adults</i>	0.21	0.02
Denmark 2000		
<i>Training for unemployed adults/those at risk</i>	0.86	5.76
<i>Training for Employed Adults</i>	0.67	10.15
Finland 2002		
<i>Training for unemployed adults/those at risk</i>	0.27	2.51
<i>Training for Employed Adults</i>	0.03	0.44
France 2002		(2001)
<i>Training for unemployed adults/those at risk</i>	0.21	1.73
<i>Training for Employed Adults</i>	0.02	0.54
Germany 2002		
<i>Training for unemployed adults/those at risk</i>	0.32	1.24
<i>Training for Employed Adults</i>	–	–
Ireland 2001		
<i>Training for unemployed adults/those at risk</i>	0.15	1.43
<i>Training for Employed Adults</i>	0.01	–
Netherlands 2002		
<i>Training for unemployed adults/those at risk</i>	0.6	1.44
<i>Training for Employed Adults</i>	0.52	2.53

Norway		
<i>Training for unemployed adults/those at risk</i>	0.05	0.99
<i>Training for Employed Adults</i>	–	–
Sweden 2002		
<i>Training for unemployed adults/those at risk</i>	0.28	0.24
<i>Training for Employed Adults</i>	0.01	0.10
United Kingdom 2002-2003		
<i>Training for unemployed adults/those at risk</i>	0.01	0.26
<i>Training for Employed Adults</i>	0.01	–

(OECD 2004)

Table 2: Cluster Analysis Based on Average Days of Training, Percentage of Staff Turnover and Proportion of Wages Spent on Training

Country	Cluster									
	1		2		3		4		Combined	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
United Kingdom	624	92.4%	0	.0%	0	.0%	51	7.6%	675	100.0%
France	0	.0%	0	.0%	182	93.8%	12	6.2%	194	100.0%
Germany	0	.0%	0	.0%	286	94.4%	17	5.6%	303	100.0%
Sweden	177	87.6%	0	.0%	0	.0%	25	12.4%	202	100.0%
Spain	0	.0%	101	71.1%	0	.0%	41	28.9%	142	100.0%
Denmark	0	.0%	219	95.6%	0	.0%	10	4.4%	229	100.0%
The Netherlands	0	.0%	243	97.6%	0	.0%	6	2.4%	249	100.0%
Italy	0	.0%	0	.0%	21	91.3%	2	8.7%	23	100.0%
Norway	0	.0%	183	90.6%	0	.0%	19	9.4%	202	100.0%
Switzerland	0	.0%	78	98.7%	0	.0%	1	1.3%	79	100.0%
Ireland	144	95.4%	0	.0%	0	.0%	7	4.6%	151	100.0%
Portugal	0	.0%	37	75.5%	0	.0%	12	24.5%	49	100.0%
Finland	250	92.9%	0	.0%	0	.0%	19	7.1%	269	100.0%
Greece	0	.0%	29	70.7%	0	.0%	12	29.3%	41	100.0%
Austria	0	.0%	0	.0%	95	92.2%	8	7.8%	103	100.0%
Belgium	0	.0%	0	.0%	219	89.8%	25	10.2%	244	100.0%
Iceland	0	.0%	0	.0%	32	80.0%	8	20.0%	40	100.0%

Table 3: Centroids Based on Average Days of Training, Percentage of Staff Turnover and Proportion of Wages Spent on Training

Topic	Cluster									
	1		2		3		4		Combined	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
DAYS TRAINING FOR MANAGERIAL EMPLOYEES	5.1135	3.10698	5.5284	3.15659	5.0757	3.02841	5.9136	4.39244	13.1818	8.01002
DAYS TRAINING FOR PROF/TECH EMPLOYEES	5.1186	3.02035	5.8565	3.54011	4.6174	2.81944	5.9658	4.80695	14.0956	9.47092
DAYS TRAINING FOR CLERICAL EMPLOYEES	3.3101	2.11811	3.3808	2.18801	3.0105	1.87429	3.8288	3.55563	10.0175	7.70013
DAYS TRAINING FOR MANUAL EMPLOYEES	3.2972	2.53167	3.6118	2.87821	2.6911	2.12129	3.8039	4.11085	10.0065	9.21199
% SALARIES AND WAGES SPENT ON TRAINING	2.0419	1.75118	2.2188	1.86847	1.8975	1.43741	2.3337	3.13758	5.2981	8.60016
% STAFF TURNOVER PER YEAR	7.5291	8.00234	7.4110	6.72190	4.8828	4.97163	7.4963	10.15488	15.5650	24.79939

Table 4: Commonalities and Differences in National Training Systems

National Archetypes	LME	High Job Security CME	Flexicurity CME	Weak Vocational CME	Mediterranean Capitalism
Examples	United Kingdom, Ireland	Germany, Austria, Belgium, France*	Netherlands, Denmark, Norway	Sweden, Finland	Spain, Portugal, Greece, Italy**
Tradition of Corporatism/ Neo-Corporatism/ Tripartism	No	Yes	Yes	Yes	Yes
National vocational training system	Weak	Strong	Intermediate	Weak	Yes, however, poor matching with employer demand
Legal Job protection	Weak	Strong	Intermediate to limited	High	Mixed
Staff turnover rates	High	Low	Intermediate	Higher than average	Intermediate
Average duration of training	Low	Low	Intermediate	Lower than average	Intermediate
Average spend on training	Low	Low	Intermediate	Lower than average	Intermediate
Economic Performance and Volatility Since 1987	Moderate to high growth and volatility	Moderate growth, moderate volatility	Moderate to good growth, moderate volatility	Moderate to high growth, high volatility	Low to moderate growth, low volatility

* France does not closely respond to either the LME or CME ideal types; however, levels of employment protection are closer to the CME than LME ideal type (see Hall and Soskice 2001; Harcourt and Wood 2007).

** Italy is another example of a mixed system: the bulk of the country closely follows the Mediterranean archetype, although the highly developed northern region in many respects constitutes an institutional environment of its own (Whitley 1999).

Appendix A

DAYS TRAINING FOR MANAGERIAL EMPLOYEES

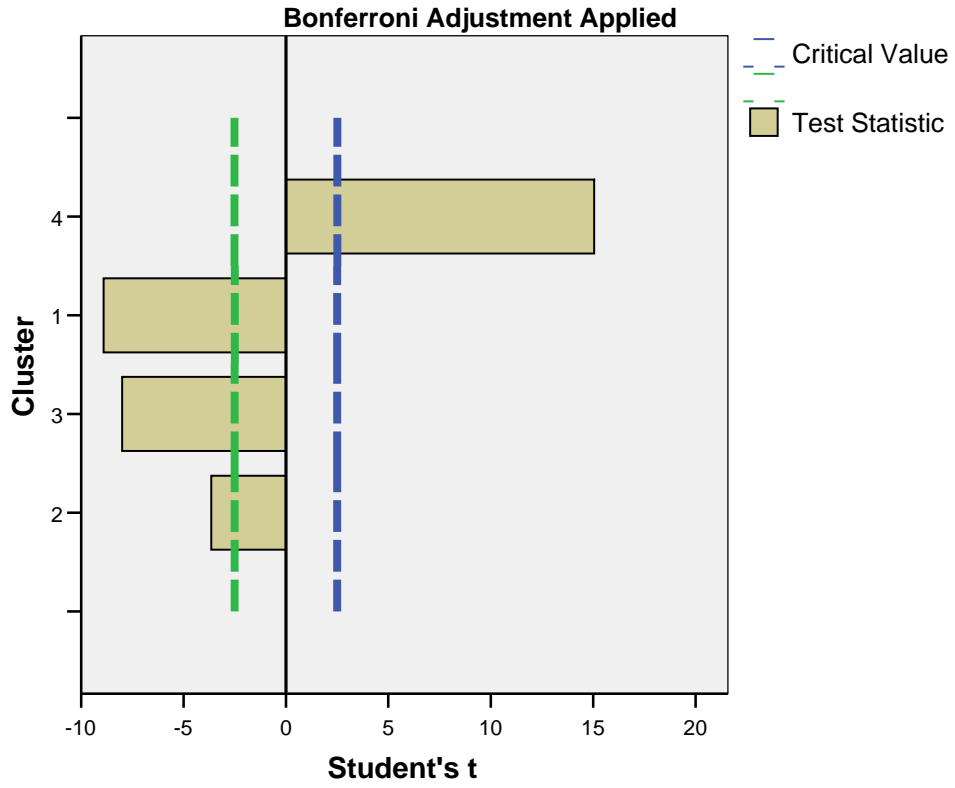


Figure A.1

DAYS TRAINING FOR PROF/TECH EMPLOYEES

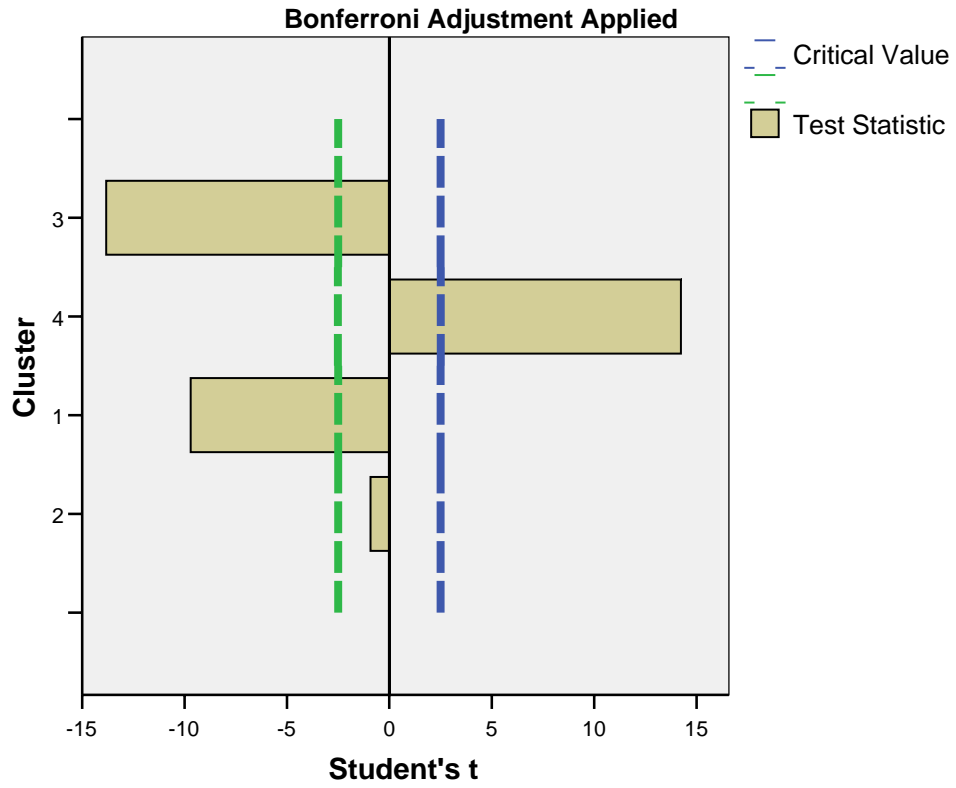


Figure A.2

DAYS TRAINING FOR CLERICAL EMPLOYEES

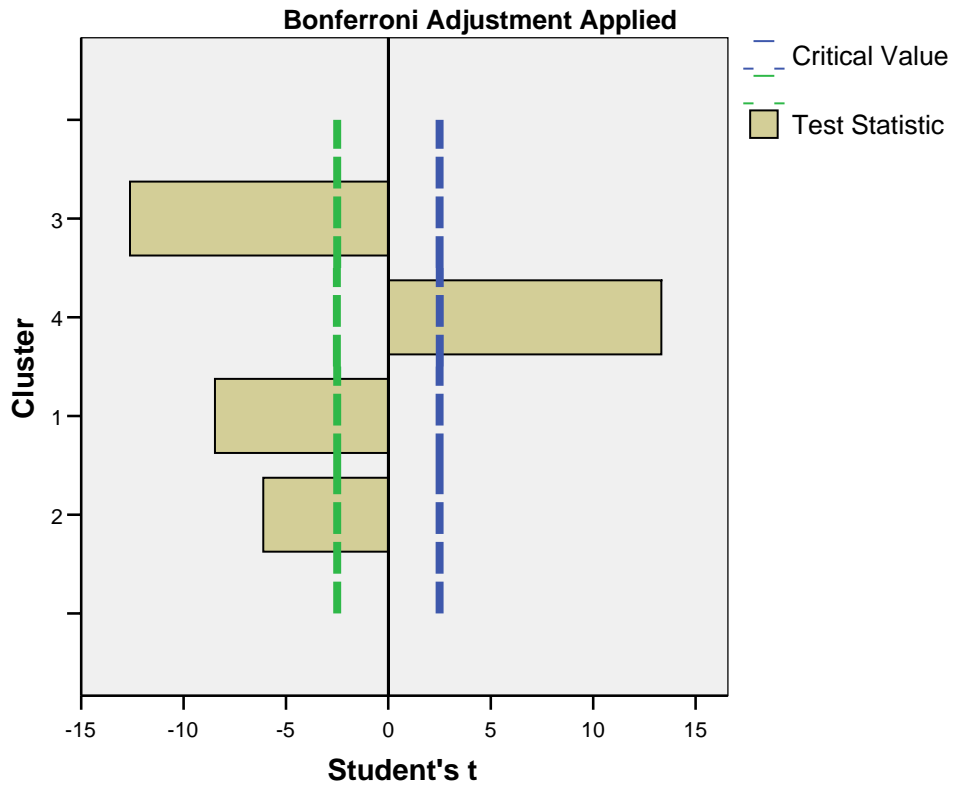


Figure A.3

DAYS TRAINING FOR MANUAL EMPLOYEES

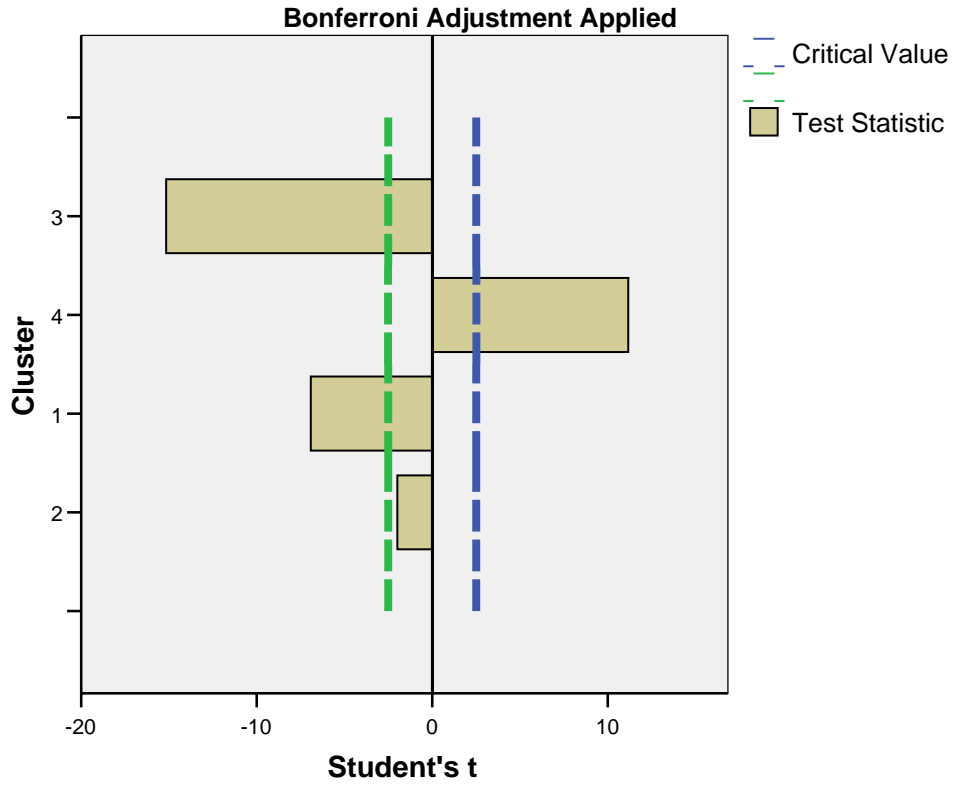


Figure A.4

% SALARIES AND WAGES SPENT ON TRAINING

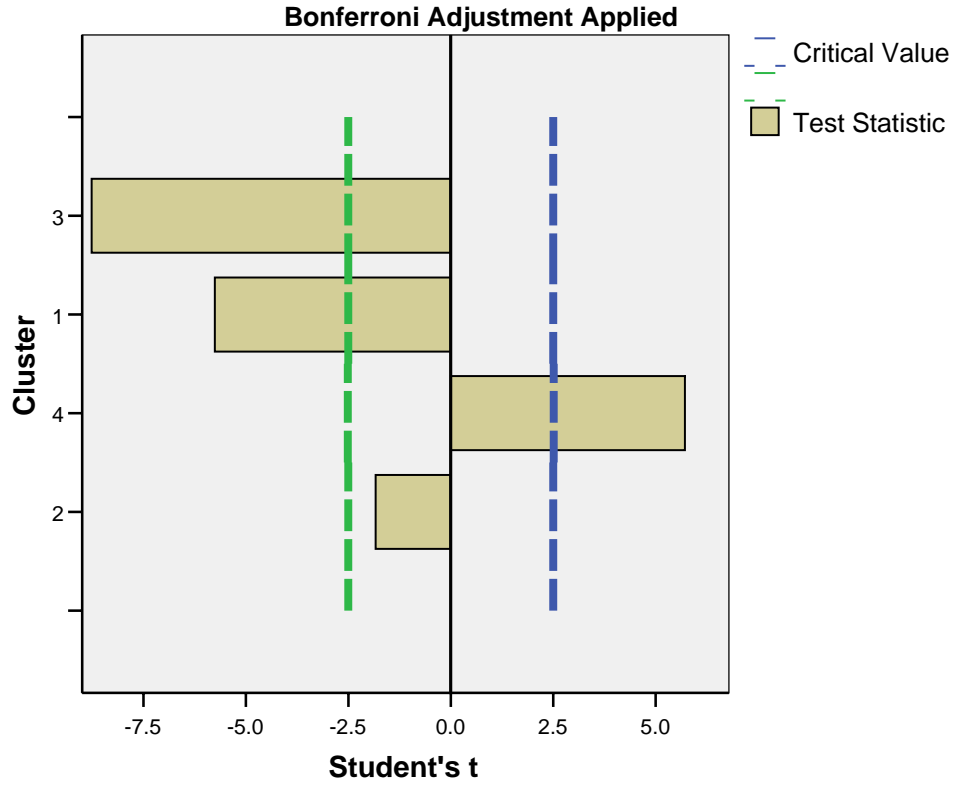


Figure A.5

% STAFF TURNOVER PER YEAR

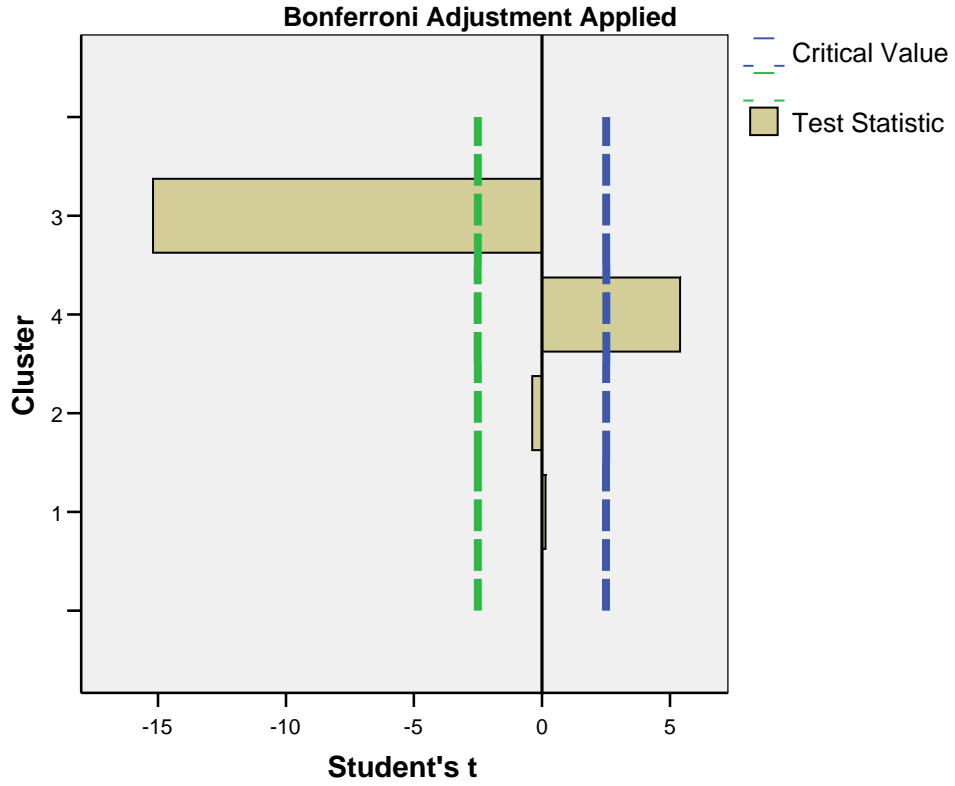


Figure A.6

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The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

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