



*Reports and Bulletins*

## Executive Stock Options in Germany: The Diffusion or Translation of US-Style Corporate Governance?

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**Abstract.** Equity-based pay in the form of executive share options (ESOs) is a controversial part of the typical, US-style governance package, and ESOs in Germany are the focus of this paper. A conventional view would see ESOs as a US-style organizational innovation *diffusing* globally in general, and to Germany in particular.

As an alternative to innovation diffusion, however, a *translation* perspective would suggest that the diffusion of apparently similar governance devices around the world hides the actual adoption of different practices.

US/German comparative case studies are presented as an empirical contribution that generally shows a pattern so far consistent with this translation view. In addition, intriguing and contrasting results are shown for UK/German comparisons in the sense that actual UK ESO plans are discovered to be more distant from the US standard than German ones.

**Key words:** corporate governance, executive pay, translation

### 1. Executive Rewards in Germany, the USA and UK

In the USA and UK, where shareholders mainly buy and sell dispassionately on stock markets, rather than invest in more deeply-committed relationships with investee firms, shareholders arguably try to align the interests of executives as their agents by ensuring that most executive pay packages have an important element of rewards based on share price (Buck et al., 2003). These elements include executive share options (ESOs) with and without performance conditions and conditional long-term incentive plans (LTIPs) that increase the importance of stock price movements to executives.

From a non-agency perspective, however, many executives may have been able to introduce ‘softness’ into their own pay packages, with little restraint from shareholders (Bebchuk et al., 2002). Company collapses and executives’ excesses at companies like Enron in the USA and Marconi in the UK suggest a need for tighter regulation in this area of corporate governance.

**In the USA**, however, the regulation of executive pay strategies has been relatively weak to date, with a philosophy that, so long as shareholders are well-informed about packages, boards can be left to make their own decisions. Arguably as a result, average US CEO total rewards in large firms (with sales of \$500 m or more) averaged \$1.93 m in 2000/01 (Towers Perrin, 2002), or on average 531-times the average wages of hourly employees. Of this, only \$0.53 m (27%) was in base salary with the rest made up of bonus, benefits and ESOs, mostly the latter. These American ESOs are mostly of the 'naked' or 'plain vanilla' variety, i.e. without performance conditions, and executives automatically benefit if share price rises.

**In the UK**, average CEO pay in large firms was \$0.67 in 2000/01, or 25-times average hourly pay. Base salary contributed 43% of this total, and control over executive pay is mainly achieved by self-regulation, with the accountancy profession, the London Stock Exchange and institutional investors prominent.

Structural differences make precise comparisons between the UK, USA and **Germany** difficult. For example, there is no exact equivalent in large German firms of the Chief Executive Officer (CEO). The *Vorstandsvorsitzender* or *Vorstandssprecher* (referred to now as CEOs for brevity) and other senior managers have traditionally been controlled mainly through the participation of other stakeholders in decisions: banks and employees impose their influence through the upper-tier board (*Aufsichtsrat*) and shareholders are usually related to the firm in some other way, e.g. as bankers or even competitors, besides being shareholders (Schilling, 2001). This ties shareholders to the firm in the long-term. The large German firm is said to be a 'community' (*Gemeinschaft*) of stakeholders (Driver and Thompson, 2002), but in addition to this supposed community within the firm, the State is significantly involved in regulating executive pay, with its Commercial Codes.

In large firms, an average German CEO-equivalent's income in 2000/01 was only \$0.45 m (a mere 11-times average hourly-paid employees), with 52% of this as base salary (Towers Perrin, 2002). There were only isolated examples of German ESO schemes in the early 1990s but share liquidity has gradually increased, with German stock market capitalization increasing from 23% of GDP in 1990 to 40% in 1997 (Megginson, 2000). Therefore stock price movements are now likely to play a stronger role in the discipline and motivation of senior managers. We know from announcements in the *Bundesanzeiger* (Stock Exchange Gazette) that forty-three large quoted firms disclosed by end-2001 at least the existence of ESOs, listed in Table II and discussed later.

To summarise, according to some codified, formal traits, a spectrum of executive pay is supposed to exist, configured as follows. At one end, extremely high CEO pay occurs in the USA, largely due to ESOs, with base salary fairly insignificant. Somewhere in the middle comes the UK, characterised by more self-regulation, and with more moderate levels of average pay and more moderate levels of ESOs. Large German firms are at the opposite end of the spectrum, being more egalitarian, sharing the power and wealth of CEOs with others. Consequently, rela-

tively low levels of CEO pay have been found in Germany, with base salaries more important than ESOs and bonus.

Recently, however, at a surface level, ESOs seem to be diffusing rapidly among large German firms. This paper looks under the surface from a perspective provided by the translation theory of innovations.

## 2. German ESOs: Diffusion or Translation?

A head-count of large German firms shows that ESOs, a pay innovation pioneered in the USA, are diffusing quickly. Such a view corresponds with the zero/one, adoption/rejection model common in the innovation diffusion literature (Rogers, 1995). In other fields, however, it has already been found that organisational innovations may be *customized* to suit local contingencies and cannot be treated as singular, discrete or one-dimensional phenomena (Westphal et al., 1999). The question now arises whether customization has been a significant feature of German ESOs. It is proposed that actor-network theory, and specifically the translation theory of innovation derived therefrom, provides a convenient and fruitful framework for analysis, including hypothesis generation and case study explorations.

While innovation translation was developed in the context of innovations in physical science (Latour, 1987), it seems particularly suited to business structures since it denies that social and technological factors can be cleanly separated, and addresses the question of how organizational innovations travel and evolve (Meyer, 1996). In translation theory, all innovations are seen to be the outcome of a process of negotiation between organizations and people in them ('actors'). Boundaries are unclear and purposes opaque (Meyer, 1996). In these circumstances, worldwide trends and fashions (Meyer, 1996) and even 'crazes' (Rottenburg, 1996) are important and actors have socially-constructed identities. Researchers must now be aware of the surface façade that may cover innovation diffusion, and all social practice (including innovation adoption) must be traced back by actors to patterns that give it meaning and legitimacy (Rottenburg, 1996). A permanent struggle between interest groups is envisaged, and the adoption of an innovation may be a 'shrewd camouflage' (Rottenburg, 1996, p. 240) that conceals its embeddedness in antecedent culture, institutions and knowledge structures that influence cognition (Zeitj et al., 1999). There can be no transmission of innovations without translation, as they are transformed to suit legitimate interest groups (Latour, 1996). Each interest group in a network is seen to set up obligatory 'passage points' before innovations are accepted (Rottenburg, 1996, p. 197), and actors shape and give direction to innovations in a way that reflects their own role, context and intentions.

What then are the specific implications of translation theory for German ESOs? First, the ESO must be embedded among different interest groups and, second, among complementary governance institutions.

In terms of interest groups, senior managers in large German firms have traditionally made recommendations concerning important strategic decisions

Table I. Dimensions of national culture

	UK	USA	Germany
Collectivism	Low (11)	Low (9)	Moderate (33)
Uncertainty avoidance	Low (35)	Low (46)	Moderate (65)
Power distance tolerance	Low (35)	Low (40)	Low (35)

*Notes:* The ratings are based on national rankings obtained from Hofstede (1997, pp. 26, 53, 113). The raw Hofstede scores are shown in parentheses. Note however that the Hofstede scores for individualism were subtracted from 100 to give a score for collectivism.

(e.g. executive pay) to *Aufsichtsräte* (supervisory boards) where there are strong representations of employees (in turn reflecting the views of *Betriebsräte*, or works councils), banks, family shareholders and the nominees of related firms linked through cross-shareholdings (Adams, 1998). It is interesting to consider whether these institutions of supervisory boards and works councils themselves reflect a German national culture featuring high collectivism an high uncertainty avoidance, see Table I.

In the language of translation, the *Aufsichtsräte* and *Betriebsräte* of large German firms may be effective points of passage for governance institutions like ESOs. The banks and labour unions that lie behind bank and employee representatives on *Aufsichtsräte* are themselves associated networks of interested parties. In these circumstances, an organizational innovation such as the ESO, designed in the USA to suit local actors, may contradict prevailing German contingencies and coalitions of interests, making them liable to drastic translation.

Turning to the complementary governance institutions that tend to reinforce each other universally (Hall and Gingerich, 2001), it should be remembered that forty-three large German firms have appeared to adopt the ESO innovation within a local environment that features low share liquidity, few hostile takeovers, weak information disclosure and fairly undispersed shareholders who often have other roles within the firm (e.g. as bankers or competitors). This institutional environment occurs within, or arguably because of, a German national culture of relatively high collectivism and low power-distance tolerance (see Table I and Newman and Nollen, 1997). Employees acting collectively and resisting CEO power may influence the design of ESOs, that may be adopted as a totem (Rottenberg, 1996, p. 196) without mimicking the detailed characteristics of ESO schemes in the USA. For example, with few German shares in free float, share price movements may be an insensitive indicator of firm performance, executives may find it relatively easy to influence share price other than through performance-directed efforts, and weak information disclosure may make shareholders suspicious of ESOs. In these circumstances, German ESOs may be a translation of American schemes, where apparent adoption may conceal their essentially 'German' character. This conclusion has implications for the generation of hypotheses.

Large German firms may now be seen as a 'community' of long-term shareholders and other stakeholders like employees, with participatory decision structures and employees in charge of passage points. An organizational innovation like the ESO may now be expected to undergo translation, becoming more egalitarian under the influence of employees refusing collectively to tolerate power-distance between CEOs and other employees (Hofstede, 1997). ESO schemes may therefore be extended to cover *larger numbers* of senior managers and other employees than in the USA and UK. While major ESOs in the USA are typically offered to a small group of peak-level executives, it is predicted that:

- (H1) *German ESOs will cascade further down a firm's vertical hierarchy to include a greater proportion of the total labour force than in the USA and UK.*

A similar logic may be extended to the *value* of ESO schemes, in addition to the number of managers covered. If the *Aufsichtsrat* is seen to be an important passage point (Rottenburg, 1996) in major strategic decisions such as executive reward packages, then relatively collectivist employees, intolerant of power-distance, may exert influence to translate ESO schemes and thus produce more egalitarian schemes, in the sense of smaller ESO tranches as well as a larger number of potential beneficiaries. Therefore, we propose:

- (H2) *smaller proportions of total firm shares under option in German ESO schemes than in the USA and UK.*

In addition to the spread and value of ESOs, demanding performance conditions represent an important constraint on the ability of peak-level executives to make reward packages softer (Buck et al., 2003). Now, employees in large German firms, refusing to tolerate high power-distance between themselves and executives, may collectively impose pressure through board representation and at other passage-points (Rottenburg, 1996) to increase the *quantity* of performance conditions applying to ESOs. For example, ESO exercise prices may be indexed, and share price performance may be measured against a market or industry index, and/or the performance of a comparator group of peer companies. In addition, in Germany the 1998 Aktiengesetz explicitly required at least one performance condition for ESOs, while no such regulation exists in the USA.

- (H3) *the attachment of a greater number of performance conditions to ESO awards in Germany can be expected compared with the USA and UK.*

Following H3, the use of *qualitatively* more demanding performance indicators in Germany can be predicted from the same notions of innovation translation, passage points and employees with a collective outlook refusing to tolerate high power distance between themselves and senior executives.

The strictness of performance conditions is more complicated than their mere number, however. For example, indexing against retail prices generally represents a less challenging performance condition than indexing against capital market trends, industrial trends or trends in a bespoke peer group of firms. (This progression corresponds to that in New Bridge Street (1996).) In addition, however, stricter

conditions involve earnings per share (EPS) and total shareholder return (TSR). Following Murphy (2000) and Wright and Kroll (2002), external performance indicators that are subject to some degree of managerial discretion are considered to provide softer targets. Since dividend announcements can affect EPS, this is considered to be a softer performance condition than TSR. A list of different performance conditions in order of strictness is given as a footnote to Table III, below. We now propose:

- (H4) *German ESO schemes will employ qualitatively stricter performance conditions than comparable schemes in the USA and UK.*

### 3. Paired Case Studies in Germany, the USA and UK

As reported above, we know from announcements to shareholders in the *Bundesanzeiger*, that forty-three quoted firms declared by end-2001 at least the existence of ESOs in their companies, though these announcements generally provide no details of the schemes. Nevertheless, the use of other sources allows us to make a first peep under the curtain of non-disclosure to develop case-studies.

For example, of the forty-three firms listed in Table II as declaring the existence of ESOs, eleven disclose details of ESO schemes because they have voluntarily adopted accounts based on US Generally Accepted Accounting Principles (GAAP). A further ten companies provide information on executive pay in their proxy statements to the US Stock Exchange Commission as a result of their Level 2 or 3 American Depository Receipts (ADR) listings. Because some companies have both US GAAP and ADRs, the total number of quoted firms disclosing details of ESOs is only fourteen out of forty-three.

In future, information disclosure promises to improve, though there are no guarantees. Many large German firms will voluntarily adopt US GAAP accounting standards, others will float Level 2 or 3 ADRs on the American market, and German accounting standards will in any case require all large firms before 2005 to adopt IAS standards that seem likely to require full ESO disclosure. Interim studies may be made with small samples, however, since the disclosure of full ESO details by most German firms is still quite uncertain.

A sample of forty-three quoted firms in Germany with ESOs, and only fourteen disclosing necessary details for tests on the four hypotheses developed in this paper, are quite inadequate for proper hypothesis testing. Furthermore, the prevalence and characteristics of ESOs in the USA and UK have been shown to vary consistently by size of firm and industry (Murphy, 1999). Thus, a large sample is needed in order to apply controls for size, industrial classification and possibly firm performance. Nevertheless, there are signs that German firms are currently adopting US GAAP and IAS in significant numbers, and a methodology should be developed for the short- and long-term.

In the long-term, databases of large numbers of firms in Germany and the USA can be assembled (say  $n > 100$  for each country). With a particular ESO character-

Table II. DAX100 firms: ESO Disclosure and Details (January 2002)

Dax 100 Firms: Existence of ESO Disclosed in 'Bundesanzeiger' [43 Companies]	Detailed disclosure through adoption of US-GAAP [11 Cos]	Detailed disclosure through ADRs (Level 2 or 3) [10 Cos]	Rest: No detailed disclosure of existing ESO [29 Cos]
1 Adidas-Salomon AG			/
2 Altana AG			/
3 Baader Wertpapierhandelsbank AG		/	
4 Babcock Borsig AG			/
5 BASF AG	/	/	
6 Beate Uhse AG			/
7 Bilfinger+Berger Bauaktiengesellschaft	/		
8 Buderus			/
9 Cargolifter AG			/
10 Celanese AG			/
11 Continental AG	/		
12 Daimler Chrysler AG	/	/	
13 Deutsche Bank AG		/	
14 Deutsche Telekom AG		/	
15 Deutz AG			/
16 Dresdner Bank AG			/
17 ESCADA AG			/
18 FAG Kugelfischer Georg Schäfer AG		/	
19 Fresenius Medical Care AG	/	/	
20 Gold Zack AG			/
21 Heidelberger Druckmaschinen AG		/	
22 Henkel KgaA			/
23 HOCHTIEF AG			/
24 Jenoptik AG			/
25 Kamps AG			/
26 Lufthansa AG			/
27 Merck KgaA			/
28 Metallgesellschaft AG (MG Technologies)	/		
29 Norddeutsche Affinerie AG			/
30 Phoenix AG			/
31 Puma AG			/
32 RWE AG			/
33 SAP AG	/	/	
34 Schering AG		/	
35 Schwarz Pharma AG	/		
36 SGL Carbon AG	/	/	
37 Siemens AG	/	/	
38 SIXT AG			/
39 TECIS Holding AG			/
40 VCL Film + Medien AG			/
41 Veba AG (E.ON)	/	/	
42 Volkswagen AG			/
43 Vossloh AG	/		

istic taken from H1 to H4 (e.g. proportion of total shares covered by the largest ESO scheme, for H2) as the dependent variable, regressions could proceed with size, industry, performance and country dummies as independent variables. Significant coefficients on the German country dummy would denote rejection or otherwise of H2 and hence conclusions on whether German ESOs represent convergence on US-style governance.

In the short-term, however, large samples are not available to permit the luxury of regression analysis. In these circumstances, an interim methodology may be used, with controlling for industry and size by 'pairing' firms. This facilitates a methodology using paired case studies, proposed by Yin (1995) and further developed in the context of executive rewards by Combs and Skill (2003). German firms disclosing ESO details may be *matched* with US firms of equivalent size and industrial affiliation. In the longer term, paired *t*-tests may be applied to the means of the German sample and its comparator group in the USA (Combs and Skill, 2003) to see if differences are insignificant, i.e. whether diffusion has occurred without translation.

In the current situation, however, a sample of  $n = 14$  German companies disclosing ESO details at the start of 2002 makes even this methodology problematical. For example, 'pairings' of equivalent firms are not always available, since a double-coincidence of industrial affiliation and size (in terms of the value of turnover) is needed. This reduces the sample further. In this study, paired US (and also UK) and German firms reporting their largest single ESO in 2001 for the year 2000/2001 were required to be, first, in the same industry and, second, with the sales turnover of the German firm between 50% and 200% of its comparator firm in the USA or UK. Industrial classifications and turnover figures were taken from Fortune (2001), and seven German-US pairs were established, see the upper half of Table III. In addition, it was possible to pair the same seven German firms with UK firms, making fourteen pairs in total. While this number is small, the seven German firms did represent 22.4% of total DAX market capitalisation at January 2001.

#### 4. Paired Case Study Results

Analysis of the paired firms in Table III can be used exploratively, to reflect on hypotheses and to suggest modifications. Of course one cannot test hypotheses conclusively using a small number of cases.

Table III shows outcomes consistent ( $\checkmark$ ) and inconsistent ( $\times$ ) with the four hypotheses developed above. For the *seven German, and seven US firms* in the same industries, having approximately the same sales revenue, case study observations may be made for the financial year 2000/01, see the upper half of Table III:

(H1) In four out of six German firms (not seven, since SAP disclosed no information on the number of executives required for H1), ESOs did indeed

Table III. ESO Comparisons of Paired German/US, German/UK Firms (2000/01)

	H1: Greater number of key execs. Involved	H2: Smaller proportion of total shares	H3: Greater number of performance conditions	H4: More stringent conditions
German/US companies				
1 MG Tech/Textron	×	✓	✓	✓
2 Schwarz Pharma/Endo Pharma	✓	✓	×	×
3 Vossloh/Wabtec Group	✓	×	✓	✓
4 SAP/AOL	Unknown	✓	✓	✓
5 SGL Carbon/Crane Co.	×	✓	✓	✓
6 Deutsche Bank/JP Morgan Chase	✓	✓	×	×
7 Deutsche Telekom/Worldcom	✓	✓	✓	✓
Consistent with hypotheses	4/6	6/7	5/7	5/7
German/UK companies				
1 MG Tech/Johnson Matthey	×	×	×	×
2 Schwarz Pharma/Celltech	✓	×	×	×
3 Vossloh/Henlys Group	✓	×	×	×
4 SAP/Reuters	Unknown	×	×	×
5 SGL Carbon/T.T. Electronics	✓	×	×	✓
6 Deutsche Bank/HSBC	✓	×	×	×
7 Deutsche Telekom/British Telecom	×	✓	×	×
Consistent with hypotheses	4/6	1/7	0/7	1/7

Notes: Outcomes consistent with appropriate hypothesis are denoted by (✓) Outcomes refuting hypotheses shown as (×).

Based on New Bridge Street (1996), performance conditions were ranked according to their strictness: (*Less strict to more strict*)

No condition (i.e. 'naked' option).

Rate of inflation adjustment to exercise price.

Indexation according to changes in total stock market changes.

Indexation according to changes in stock market changes in appropriate sector only.

Idiosyncratic Peer Group comparison.

TSR condition.

EPS condition.

Additional conditions, e.g. pre-tax dividend income and income from dividends reinvested (in underlying shares) added to appropriate rate of return.

cover a larger group of senior managers and employees than equivalent schemes in the USA. (In the case of Deutsche Telekom, its main scheme covered 350 senior managers, compared with 4 executives in its doomed US comparator firm, Worldcom.)

Looking at the two exceptional pairs, MG Tech's ESO covered only a small proportion of total employees (180 out 38,145 in 2000/01), lower than its paired US company, Textron. However, MG Tech could be considered an atypical German firm in that 21% of its shares were US-owned, and UK financial institutions owned a further 20%. The SGL/Carbon/Crane comparison is also a potential outlier in the

sense that the German firm (SGL) had a lower proportion of employees covered by its ESO, but the difference in proportions was quite small (1.9%, SGL and 2.1%, Crane).

(H2) Despite German schemes generally covering greater numbers of managers than in US firms (see H1), in six out of seven cases, German firms did have ESO schemes covering a smaller proportion of the firm's total shares than equivalent schemes in US firms. This result is consistent for H2, and a detailed investigation of the exceptional Vossloh/Wabtec case reveals that the proportion of shares covered by ESOs in each paired company was quite low (2.9% in Vossloh, covering 45 executives, and 1.8% in Wabtec, covering only 5 executives). By definition of course, other things being equal, if the number of executives covered by an ESO were very low, this would limit the proportion of total shares covered by the ESO.

(H3) Performance conditions attached to ESOs are an attempt to ensure that executives 'earn' their gains, and five out of seven German firms had quantitatively more numerous performance conditions attached than paired US schemes. This is broadly consistent with H3. Further analysis of the Deutsche Bank/JP Morgan Chase pairing shows that, although the Deutsche Bank ESO had did not have more performance conditions attached (i.e. each paired firm had an EPS performance condition, contrary to H3), the Deutsche Bank scheme did involve a discount of up to two-thirds on the exchange of shares for bonds that depended on share price. This element amounted to an unconventional performance condition, consistent with H3.

Deeper analysis of the Schwarz Pharma/Endo Pharma pairing revealed that, although Schwarz had fewer and less demanding performance conditions (H3, H4) than the US firm according to the conditions listed at the end of Table III, Schwarz did have an additional, unconventional condition involving a premium on the ESO exercise price. Thus, it could be argued that the cases contradict H3 owing to a technicality in the way in which performance conditions are defined.

(H4) The results for H4 interestingly mirrored H3: five out of seven German firms had more stringent performance conditions attached to ESOs than in US firms, which were mostly 'naked'. These are the same firms that had quantitatively more conditions (see H3). The same observations made under H3 for Deutsche Bank/JP Chase Morgan and for Schwarz Pharma/Endo Pharma also apply here for H4.

These case study results demonstrate how subsequent, formal tests may be performed. So far, there is little evidence of German convergence on US-style ESOs: the ESOs that have been introduced and observed so far mostly seem to have an essentially 'German' flavour compared with the USA in the sense of less generous schemes in terms of the quantity and quality of performance conditions and the number of shares involved. German ESOs also generally extend further down the managerial ladder than in the USA.

The bottom half of Table III provides information for comparisons between the seven matched *German and UK firms*. UK corporate governance is usually

bracketed with US-style Stock Market Capitalism, and it was noted above in section (1), reflected also in Table I in terms of national cultural characteristics, that the UK generally occupies an intermediate position between Germany and the USA in terms of elements of national culture and patterns of executive reward. It is interesting to note from Table III, however, that in terms of the detailed characteristics of ESO schemes, UK firms do *not* generally occupy an intermediate position between the USA and Germany. ESO schemes in the seven, paired UK cases seem to be emphatically more 'German' (in the sense of being more egalitarian) than actual German schemes in terms of the quantity and quality of performance conditions and the proportion of total shares under option.

(H1) The exception to this conclusion relates to the numbers of executives covered by ESO schemes. As in comparisons with the cases in the USA, there was a pattern in the UK/German cases of German ESOs involving greater numbers of executives. There were two exceptions to this pattern.

The first involved Deutsche Telekom, with a narrow, 'un-German' ESO in 2000/01. After 2001 however, DT announced a new ESO that increased coverage from 300 to 3,000 managers.

MG Tech did report a higher proportion of labour force covered by its ESO than its paired UK firm, Johnson Matthey, but MG was quite unusual in having a high proportion of US and UK shareholders, see above. This could explain the narrow, 'un-German' nature of its ESO scheme.

(H2) Only one of the seven German firms showed a smaller proportion of total shares covered by ESO schemes when compared with their UK paired firms. Thus, Deutsche Telekom conformed with H2 but the other six firms refuted it. The exceptional case of DT may have been the result of the conservative influence of high State ownership in 2000/01, with the State owning 43% of total shares directly, plus another 17% indirectly through the German Development Bank.

(H3) The seven German/UK paired firms unanimously refuted H3, with each firm having fewer performance conditions than its UK counterpart.

(H4) Again contrary to the hypothesis, only one German firm (SGL Carbon) had more stringent performance conditions attached to its ESO scheme, compared with its 'twin' in the UK. Further analysis of the SGL Carbon/TT pair of cases shows that SGL technically had a stiffer performance condition in the form of total shareholder return (TSR) than the earnings per share (EPS) target for TT Electronics in the UK, since TSR has been rated as a more demanding condition than EPS (New Bridge Street, 1996). However SGL's required increase in TSR is only 15% at the time of exercise, which can be up to ten years after the ESO award. This is emphatically *not* a demanding performance condition, though the use of TSR as a performance condition usually indicates a stiff condition. TT's target was annual EPS growth of 2% above the rate of retail price inflation over five years.

In general, ESO schemes in the UK, with the exception of H1, seem to have been less 'executive friendly' than German ESOs in paired companies, and this pattern is addressed in the conclusions that follow.

## 5. Conclusions

It is difficult to under-estimate the importance of changes currently taking place in German corporate governance, particularly in executive pay, and this paper seems to support the claim made earlier that they represent a 'crossroads' for Germany and global governance (Berndt, 1998). ESOs are clearly an organisational innovation imported from the USA, but the main purpose of this paper has been to understand how and why their design may have diverged from US patterns in German firms. Four hypotheses may be used ultimately to test for diffusion/translation. This framework is grounded in the translation theory of innovation and we would submit that the theory is widely applicable to global governance and organisational innovations of all kinds.

A first empirical conclusion from this project, however, has been that the ESO, an innovation imported from the USA, has emphatically *not* been accompanied by US-style levels of information disclosure. At the start of 2002, forty-three quoted firms had announced the existence of ESO schemes, but only fourteen disclosed ESO details. These numbers seem set to increase, but it is interesting how an innovation previously associated with Stock Market Capitalism seems to have been modified to match the disclosure levels associated with Welfare Capitalism. In the case of the German public and commercial services firm SAP, disclosing some minimal information in its ADR return and US GAAP-based accounts, the firm refused to give the authors even information on the number of employees covered by their ESO. This decision to withhold quite innocuous information on ESOs from researchers and shareholders seems strange for an ostensibly US-style executive pay device that is supposed to promote shareholders' interests by incentivising managers. It is also paradoxical that in a country where various stakeholders voice their deep concern for fairness in business, the disclosure of information on ESOs as an important component of executive pay is very thin.

Although only a small number of German firms have disclosed ESO details so far, methodologies have been described for ultimate hypothesis testing in relation to comparisons with US firms, and exploratory results based a limited number of case studies have been presented. Any conclusions from these case studies must be considered as being highly tentative. So far, however, they suggest that US-style ESO schemes have been translated to meet the needs of interest groups in German firms, and to fit in with the wider governance environment in Germany. German ESOs do not seem to provide an example of convergence on US-style governance structures.

Based on ESO comparisons between firms in Germany and the UK, the intriguing possibility arises that both Germany and the UK have each resisted

the blind adoption of this US-style governance innovation, and have produced different, more egalitarian, path-dependent ESOs. Furthermore, self-regulation in the UK appears to have produced a stricter regime for ESOs than stakeholder governance and regulation by the State in Germany. On the other hand, the UK has had longer experience with ESOs, perhaps more acquaintance with executives' abuses of ESOs, and this outcome may be the result of the passage of time as much as regulatory differences.

Future tests on the four ESO hypotheses will be crucial but the case study comparisons suggest that refined measures of the severity of performance conditions are needed that take account not only the form of the performance condition (TSR vs EPS, etc.) but also the demanding nature of the target in terms of the firm's recent achievements. In addition, the idiosyncratic German use of convertible bonds, associated with various discounts and premia, should be embraced as variations on more universally accepted performance conditions.

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