

New
Models
of

High Performance Work Systems

The Business Case for Strategic HRM, Partnership
and Diversity and Equality Systems

New Models of High Performance Work Systems

The Business Case for Strategic
HRM, Partnership and Diversity
and Equality Systems

January 2008



Dublin City University
Patrick C. Flood
Thaddeus Mkamwa
Cathal O' Regan



Kansas University
James P. Guthrie



University of Limerick
Wenchuan Liu
Claire Armstong
Sarah MacCurtain

First published January 2008 by

The Equality Authority

2 Clonmel Street

Dublin 2

**National Centre for
Partnership & Performance**

16 Parnell Square

Dublin 1

© 2008 Equality Authority and
National Centre for Partnership & Performance

ISBN 13: 978-1-905628-72-8

The views expressed in this report are those of the authors and do not necessarily represent those of the Equality Authority or the National Centre for Partnership and Performance.

Contents

| | |
|---------------------------|----|
| Foreword | 5 |
| Authors' Acknowledgements | 8 |
| Executive Summary | 10 |

Part 1

The Search for High Performance

| | |
|--------------------------------------|----|
| 1.1 Introduction | 13 |
| 1.2 Organisation of report | 14 |
| 1.3 Expanding the definition of HPWS | 14 |

Part 2

Research Approach

| | |
|----------------------------------|----|
| 2.1 Methodology | 16 |
| 2.2 Sampling | 17 |
| 2.3 Profile of Respondents | 15 |
| 2.4 Industry and Company Profile | 15 |

Part 3

A Descriptive Overview of Workplace Policies and Practices in Irish Industry

| | |
|--|----|
| 3.1 Introduction | 17 |
| 3.2 Strategic Human Resource Management (SHRM) | 20 |
| 3.3 Workplace Partnership | 25 |
| 3.4 Diversity and Equality | 29 |
| 3.5 Flexible Working | 33 |

Part 4

Exploring New Models of High Performance Work Systems

| | | |
|-----|---|----|
| 4.1 | Introduction | 37 |
| 4.2 | Outcome measures | 37 |
| 4.3 | HPWS Model 1 – High Performance Through Strategic Human Resource Management | 38 |
| 4.4 | HPWS Model 2 – High Performance Through SHRM and Partnership | 38 |
| 4.5 | HPWS Model 3 – High Performance Through DES and FWS | 40 |
| 4.6 | HPWS Model 4 – High Performance Through SHRM, Partnership, DES and FWS | 41 |

4 >

Part 5

| | | |
|--|-------------|----|
| | Conclusions | 41 |
|--|-------------|----|

Part 6

| | | |
|--|------------|----|
| | References | 45 |
|--|------------|----|

Foreword

Irish-based manufacturing and services companies operate in an environment of intense globalised competition, where many external factors impact on the viability of their enterprises. In this challenging climate, time and again we see inspirational examples of companies safeguarding their future through successful innovation – not only in the design and implementation of new products and services, but in workplace innovation – improving the processes and systems for organising and managing work.

It is increasingly apparent that one of the keys to successful organisational performance is the people within the organisation, and the management systems that harness their talents and capabilities. *New Models of High Performance Work Systems* breaks new ground in our quest to understand the nature of high-performing organisations, focussing on key elements of workplace innovation – employee involvement and participation and equality and diversity systems.

Drawing on a detailed survey of 132 medium to large companies in Ireland, the research explores how the management policies and practices that are found in both multinational and indigenous Irish firms are related to organisational performance. The findings once again underscore the fact that companies with higher levels of productivity, innovation and employee retention manage their organisations in ways that are demonstrably different from the average company.

This analysis of High Performance Work Systems (HPWS) examines some of the key components of the 'Workplace of the Future', as set out in the National Workplace Strategy (2005). These include approaches to workplace partnership (or employee involvement and participation systems), and proactive management of diversity (or equality and diversity systems). The research allows us to move beyond the realm of expert opinion and case study, to firmly and quantifiably establish the business case for HPWS. The results highlight that the gains in productivity and innovation levels associated with HPWS represent far more than merely interesting statistical findings: in stark economic terms, the order of magnitude can, for many companies, be the difference between success and failure.

This research helps us to understand more fully the nature of the differences between high-performing and average-performing companies. The report reveals that high-performing companies in Ireland are concerned with managing a range of issues that include the management of employee involvement and participation, and of diversity and equality systems. The research establishes the quantifiable and positive impact of equality and diversity strategies and of employee involvement and participation on labour productivity, workforce innovation and employee turnover. These findings clearly reinforce the business imperative for

managing employee involvement and participation, and implementing diversity and equality strategies, as legitimate concerns for organisational strategy in their own right.

The findings demonstrate the powerful and synergistic effect of a multi-dimensional model of HPWS, where the net impact of combining strategic human resource management (HRM) with employee involvement and participation systems, equality and diversity systems and flexible working systems, significantly exceeds the impact of any of these systems in isolation. In economic terms, the median-sized company in this sample (270 employees) employing the multi-dimensional model of HPWS would have performance advantages including almost €12,000,000 (or €44,399 per employee) in labour productivity, and €556,200 (or €2,061 per employee) in workforce innovation. Such findings mean, in other words, that we can only begin to fully understand management systems in high performance companies when we think of them as sophisticated systems

where strategic HRM is integrated into, and balanced with, systems for managing employee involvement and participation, diversity and equality, and flexible working.

The findings have important implications on a number of levels, not just for those with leadership or management responsibilities at enterprise level, but for public policy makers and for the academic research community. The findings reaffirm the organisational development framework set out in the National Workplace Strategy, which sees the Workplace of the Future being shaped by concerns including employee involvement and participation, and equality and diversity strategies. The findings should encourage researchers, practitioners and the public policy community alike to confidently redefine the scope of HPWS, and to focus attention on the need for employee involvement and participation, equality and diversity strategies and flexible working systems to emerge as mainstream concerns in defining better ways forward for the Irish economy.

New Models of High Performance Work Systems is part of an ongoing joint programme of work by the Equality Authority and the National Centre for Partnership and Performance to explore the business case for workplace innovation strategies. It further underpins a business imperative for employers to implement employee involvement and participation strategies and equality and diversity strategies across all sectors of the economy. Such strategies could usefully be supported by public policy and the further development of the resources and support infrastructure available to businesses.

We are grateful to Professor Flood and the research consortium from Dublin City University, University of Limerick and Kansas University for the quality and expertise of their work on this research project. We are also grateful to the team that managed the project on behalf of the sponsors – Laurence Bond at the Equality Authority, and Larry O’Connell, Cathal O’Regan, Conor Leeson and Julia Kelly at the National Centre for Partnership and Performance.



Lucy Fallon-Byrne
Director
National Centre for Partnership
and Performance



Niall Crowley
Chief Executive Officer
Equality Authority

Authors' Acknowledgements

The authors wish to acknowledge the financial support of the National Centre for Partnership and Performance (NCPP) and the Equality Authority. We would also like to thank Lucy Fallon Byrne and Dr. Larry O'Connell at the NCPP together with Niall Crowley and Laurence Bond at the Equality Authority.

About the Authors

Patrick C. Flood, Ph.D. received his doctorate from the London School of Economics. He is currently Professor of Organisational Behaviour at Dublin City University. Previous appointments include Professor at the University of Limerick (where he directed the Strategic Leadership Research Programme and the High Performance Research Group), the Australian Graduate School of Management, London Business School, Irish Management Institute, the R.H. Smith School of Business, University of Maryland at College Park and the London School of Economics. He was recently appointed Honorary Professor at Northeastern University China. He is a former Fulbright Scholar, and has published and taught extensively on the topics on human resource strategy, top management teams and organisational effectiveness.

James P. Guthrie, Ph.D. is the William and Judy Docking Professor with the School of Business at the University of Kansas. He received his B.A. and M.B.A. from the State University of New York at Buffalo and his PhD from the University of Maryland. He was Visiting Professor with the Kemmy Business School, University of Limerick. He has previously held visiting faculty appointments with the University of Waikato in New Zealand and with the Consortium of Universities for International Business Studies in Italy. He has published widely on the impact of HR policies and practices on firm performance.

Wenchuan Liu, Ph.D. is Postdoctoral Fellow at the University of Limerick. He previously worked as an Assistant Professor at Northeastern University, China. He gained his PhD from the Kemmy Business School, University of Limerick for a study of the economic impact of high performance work systems in Irish industry.

Claire Armstrong, Ph.D. is a Research Scholar at the Kemmy Business School, University of Limerick. She received her PhD from the University of Limerick in 2004. She has conducted research and published internationally on organisational justice, the psychological contract, absenteeism, continuing professional education, and health services management.

Sarah MacCurtain, Ph.D. is a Lecturer with the Kemmy Business School, University of Limerick. She received her PhD from Aston University. She is co-author of *Effective Top Teams* (2001, Blackhall) and *Managing Knowledge Based Organisations* (2002, Blackhall).

Thaddeus Mkamwa is a registered doctoral student at Dublin City University Business School. His research topic is on HPWS and diversity management in Irish workplaces. He received his STB from Pontifical University Urbaniana at St.Paul's, Tanzania. He also graduated with BA and MS from Elmira College, New York. He has also lectured on Development Studies at St. Augustine University of Tanzania.

Cathal O'Regan is Head of Workplace Strategy at the National Centre for Partnership and Performance. He is a registered doctoral student at Dublin City University Business School investigating the relationship between partnership and business performance.

Executive Summary

This report highlights the findings of a detailed survey of medium to large companies in the manufacturing and services industries in Ireland. The research set out to examine the nature of management and workplace practices in Irish-based private sector companies, and to explore how such practices are related to business performance outcomes.

The research was jointly commissioned by the National Centre for Partnership and Performance and the Equality Authority, and was carried out during 2006 by a research consortium from University of Limerick and University of Kansas. Detailed survey data was gathered from a total of 132 companies, using two survey instruments targeting both the CEO (or MD) and the HR director in the sample companies.

The researchers conducted sophisticated multiple regression analyses on the data to explore a number of alternative models of

Table 0.1
Summary of Multivariate Modelling of High Performance Work Systems

| | MODEL 1 | MODEL 2 |
|----------------------|---|--|
| | <ul style="list-style-type: none"> ▶ Strategic HRM | <ul style="list-style-type: none"> ▶ Strategic HRM ▶ Partnership |
| Labour Productivity | <ul style="list-style-type: none"> ▶ Greater use of SHRM associated with increased labour productivity. SHRM accounts for 12.4% variance ($p < .01$) ▶ Statistically significant ($p < .01$) positive relationship between change of HPWS and change of labour productivity (based on comparison of 2004 and 2006 panel data) | <ul style="list-style-type: none"> ▶ Greater use of SHRM and Partnership associated with increased productivity. ▶ SHRM accounts for 10% variance ▶ Partnership accounts for 3.9% variance ▶ SHRM partially mediates between Partnership and labour productivity |
| Workforce Innovation | <ul style="list-style-type: none"> ▶ SHRM associated with greater workforce innovation | <ul style="list-style-type: none"> ▶ SHRM associated with greater workforce innovation (5% of variance) ▶ SHRM also mediates relationship between partnership and workforce innovation. Partnership does not have a direct association, but companies with partnership are likely to have greater levels of SHRM |
| Employee Turnover | <ul style="list-style-type: none"> ▶ SHRM associated with decreased employee turnover | <ul style="list-style-type: none"> ▶ Strategic HRM associated with decreased employee turnover (4% of variance, $p < .01$) ▶ SHRM also mediates relationship between partnership and employee turnover. |

High Performance Work Systems (HPWS). The initial model explored the standard set of factors associated with HPWS, which relate to strategic human resource management in the company. However, the researchers then expanded their analysis to examine factors beyond strategic HRM, including workplace partnership, diversity and equality management, and flexible working systems.

The results of the initial model of HPWS reconfirm what previous research by the NCPP and others has shown – that strategic human resource management

practices are clearly associated with business performance outcomes, including labour productivity, innovation levels, and employee wellbeing. The more novel findings relate to the discovery that other factors, including diversity and equality systems, and workplace partnership systems, are positively and synergistically associated with significantly higher levels of labour productivity, workforce innovation, and reduced employee turnover.

The key findings from four alternative models of HPWS are highlighted in Table 0.1 below.

| MODEL 3 | MODEL 4 |
|---|--|
| <ul style="list-style-type: none"> ▶ Diversity and Equality Systems ▶ Flexible Work Systems | <ul style="list-style-type: none"> ▶ Strategic HRM ▶ Partnership ▶ Diversity and Equality Systems ▶ Flexible Work Systems |
| <ul style="list-style-type: none"> ▶ Diversity and Equality system accounted for 6.5% of variance in labour productivity ▶ No significant association between FWS and labour productivity | <ul style="list-style-type: none"> ▶ Four elements together (SHRM, Partnership, DES, FWS) account for 14.8% of variance in labour productivity. While only SHRM is significant, other three variables are in a positive direction. Total economic value in this sample equates to €44,399 per employee, or almost €12,000,000 in the median sized company with 270 employees. |
| <ul style="list-style-type: none"> ▶ DES accounts for 7.9% of variance ($p < .01$) ▶ No significant association between FWS and workforce innovation | <ul style="list-style-type: none"> ▶ Four elements together (SHRM, Partnership, DES, FWS) account for 12.2% of variance in workforce innovation. SHRM and DES are significant, while Partnership and FWS affects in positive direction. Total economic value in this sample equates to €2,061 per employee, or €556,200 in the median-sized company with 270 employees. |
| <ul style="list-style-type: none"> ▶ DES accounts for 4.4% variance in employee turnover ($p < .01$) ▶ No significant association between FWS and employee turnover | <ul style="list-style-type: none"> ▶ Four elements together (SHRM, Partnership, DES, FWS) account for 7.7% of variance in employee turnover. Partnership is significant at 4% of variance explained. Total economic value in this sample equates to retention of up to 2 additional employees in the median-size company. |

In this sample of companies, a broad model of HPWS (incorporating strategic HRM, workplace partnership, diversity and equality systems and flexible work systems) was found to be associated with 14.8% of variance in labour productivity, 12.2% of variance in workforce innovation, and 7.7% of variance in employee turnover.

While the analyses do not suggest a causal relationship between HPWS and business performance outcomes, they do make important reading for any company that is seeking to build competitive advantage through workplace innovation. They demonstrate a strong business case for building management systems that deal effectively with issues including strategic human resource management, employee involvement and participation, diversity and equality management, and flexible working. Where companies are found to manage these issues more extensively, higher levels of business performance can be demonstrated. Where companies are found to manage these issues in a more cohesive management system, even greater effects are found in terms of business performance.

These results challenge public policy makers, researchers, and management practitioners to think of high performance work systems in a more expansive way than has been the norm until now. While strategic human resource management will clearly remain a core concern in terms of best practices approaches to the management of companies, it is becoming increasingly clear that companies may find competitive advantage through more effective approaches to managing employee involvement and participation, and diversity and equality in the workplace. Such issues should no longer be considered as issues to be managed only for the purposes of regulatory compliance, but as organisational factors that can impact significantly on productivity and innovation levels in the company.

The Search for High Performance

1.1 Introduction

Economic and social indicators have for some time now charted Ireland's progressive emergence as a knowledge-based society. The changing structure of the economy and increasingly globalised competition has exposed Irish-based companies to greater levels of competition from across the globe. Across the economies of the OECD, companies are pursuing strategies for building competitive advantage through higher productivity levels and better product and service innovation. In this search for competitive advantage, organisational or workplace innovation is widely seen as being a key factor in allowing companies to design and implement workplace policies and practices that support higher levels of productivity and innovation.

Over recent years, a clear view has emerged in terms of public policy in Ireland, which adopts the perspective that sustainable improvements in organisational performance will be determined by the interaction of a wide range of factors within the workplace. The National Workplace Strategy (2005) articulated a comprehensive workplace development framework that encompassed nine organisational characteristics: agile, customer-centred, networked, highly productive, responsive to employee needs, knowledge-based, continuously learning, involved and participatory, and proactively diverse.

For several decades, researchers have been developing increasingly effective approaches to examining how behaviours and practices within organisations relate to business performance. The general proposition underlying much of this research is that high-performing companies that compete successfully on the basis of productivity and innovation levels also tend to have more sophisticated, extensive and effective management systems. In examining this proposition, the concept of High Performance Work Systems (HPWS) provides a useful means of describing and explaining the observed differences in workplace behaviours between high-performing organisations and average-performing organisations. Put simply, HPWS are bundles of work practices and policies that are found more extensively in high performing organisations.

This report examines HPWS found in manufacturing and services companies operating in Ireland, and describes how these practices are related to labour productivity, product and service innovation, and

employee well-being. Commissioned jointly by the National Centre for Partnership and Performance and the Equality Authority, the report builds on previous research by the NCPP¹ that examined the relationship between management practices and business performance outcomes.

The rationale for conducting this further research was to develop a more expansive view of what HPWS entails in an Irish context. Specifically, the research focuses beyond the traditional model of HPWS that is dominated by human resource management concerns, to look at management practices including workplace partnership, diversity and equality systems, and flexible working systems. Such issues have historically been regarded, at least in some quarters, as issues of compliance rather than as potential sources of competitive advantage.

However, international and domestic research² continues to strengthen the business case for partnership, diversity and equality. This report examines both the stand-alone and synergistic effects of these management issues in high performing Irish-based manufacturing and service companies. The report findings support the case for an expanded concept of High Performance Work Systems, which raises some important considerations for policy makers, academics and for people in leadership positions at enterprise level.

1.2 Organisation of the Report

The report is presented in five parts:

- **Part 1** describes the origins of the report, highlighting the rationale and research objectives, and examining some of what is already known about high performance work systems
- **Part 2** details the research design and methodology, the response rate and the profile of survey respondents
- **Part 3** presents the descriptive results from the survey, illustrating the range and prevalence of management practices found in the survey sample, and highlighting longitudinal trends in management practices based on comparisons with a previous survey conducted in 2004
- **Part 4** looks at how HPWS is associated with high performance, and presents a number of HPWS models that will be of interest both to practitioners of organisational change (including managers, trade union representatives and employees generally) and to policy makers
- **Part 5** presents the conclusions of the report, and considers the implications of this analysis for both the theoretical treatment of management systems and the practical challenges for those at the enterprise level engaged in the search for greater competitiveness

1 Flood, P., Guthrie, J.P., Liu, W., and MacCurtain, S. (2005). High Performance Work Systems in Ireland – The Economic Case. National Centre for Partnership and Performance.

2 Including research from the National Centre for Partnership and Performance and the Equality Authority.

1.3 Expanding the definition of HPWS

A growing body of research suggests that the use of a set of HR practices, including comprehensive employee recruitment and selection procedures, compensation and performance management systems, information sharing, and extensive employee involvement and training, can improve the acquisition, development and retention of a talented and motivated workforce³. These HR practices are usually referred to as *high involvement*⁴, *high commitment*⁵, or *high performance*⁶ work systems.

Much of the analysis of HPWS originates from the study of strategic human resource management (SHRM), where researchers have examined the impact of “bundles” of HR practices on organisational outcomes. The idea that a system of HR practices may be more than the sum of the parts gives rise to debate as to the specific configuration of practices constituting a high performance system. Some work suggests “universal” HPWS effects⁷, while other work suggests that HPWS effects may depend on conditions such as competitive strategy or industry⁸. One way or another, a system or set of management practices is considered to be more difficult for competitors to imitate than individual practices.

The growing body of research on HPWS enables us to develop a more useful understanding of the nature of the relationship between business performance and management systems. Researchers have examined a range of configurations of HPWS to better understand the relative importance and synergistic effect of different management and workplace practices. This approach establishes the context for the present report, which sets out to develop new conceptual insights into what constitutes high performance work systems by looking beyond the prevalent HRM-centred model. The current research seeks to examine the business case for new models of HPWS, using empirical evidence to explore how a broad set of management practices which includes strategic human resource management, workplace partnership, diversity and equality management, and flexible working might relate to high performing organisations.

3 E.g. Arthur, 1994; Batt, 2002; Becker and Gerhart, 1996; Datta et al., 2005; Guthrie, 2001; Huselid, 1995; Huselid and Becker, 1996; Jones and Wright, 1992; MacDuffie, 1995; United States Department of Labour, 1993.

4 E.g. Guthrie, 2001.

5 Arthur, 1994.

6 Datta et al., 2005; Pfeffer, 1994, Huselid, 1995.

7 E.g. Huselid, 1995.

8 E.g. Datta et al., 2005.

Research Approach

2.1 Methodology

The methodology adopted draws on previous research including NCPP (2003, 2004), Flood et al. (2005); Guthrie, (2001); Guthrie, Spell & Nyamori (2002); Datta et al. (2005).

Two survey instruments, designed according to the Total Design Method , were issued. The first, the "HRM survey", targeted the senior HR manager, and solicited information on the management policies and practices in the organisation. The second, the "GM survey", targeted the General Manager or CEO, and solicited measures of competitive strategy and entrepreneurial orientation of the organisation, as well as business performance metrics.

The surveys elicited descriptions of four discrete elements of High Performance Work Systems, including:

- Strategic Human Resource Management (SHRM), including management practices in the areas of communication and participation; training and development; staffing and recruitment; performance management and remuneration
- Employee Involvement and Participation / Workplace Partnership System (WPS)
- Diversity and Equality System (DES)
- Flexible Working System (FWS)

Three business performance variables were measured by the surveys, including:

- Labour productivity
- Workforce innovation
- Employee turnover

2.2 Sampling

The survey sample was drawn from “The Irish Times Top 1000 Companies”⁹ database, which is a representative, multi-industry set of Irish-based operations. The sample includes both indigenous Irish companies and foreign-owned companies with operations in Ireland. 1005 companies were contacted to participate in the survey, of which 241 companies responded. Data was utilised from the 132 companies that completed both the HR and GM surveys, resulting in an overall response rate of 13.2%. This response rate is in line with typical response rates for research of this nature, ranging from 6% to 20%.

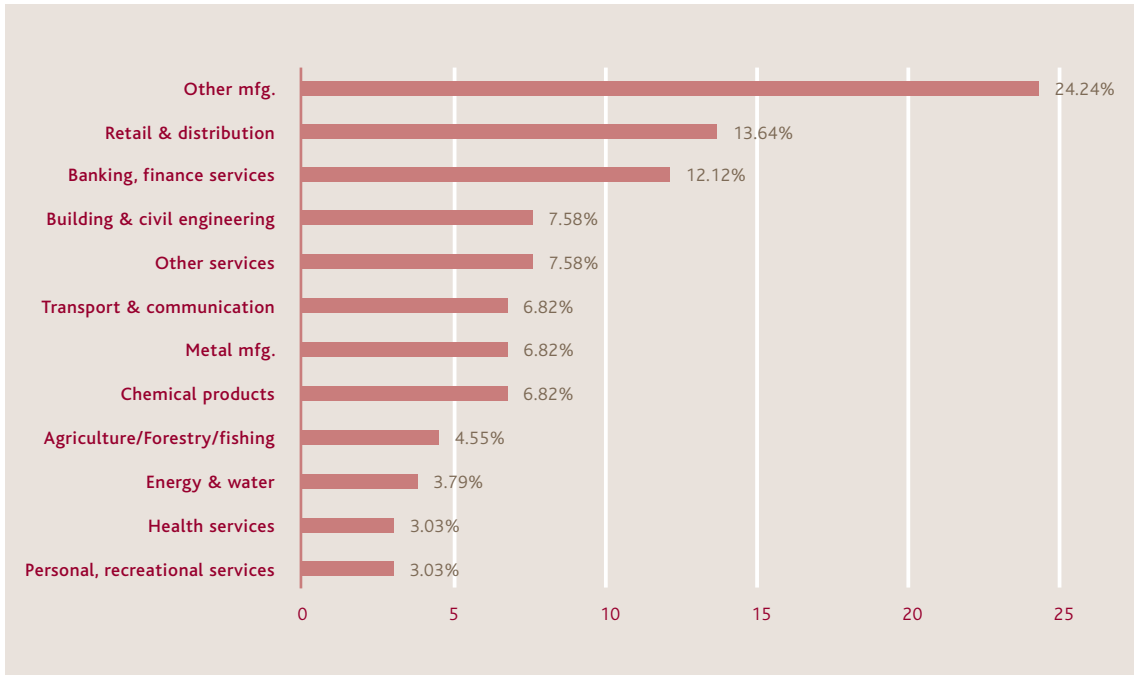
2.3 Profile of Respondents

For the HRM survey, 70% of respondents were from the HR function, 20% were other senior executives (e.g. Managing Director / CEO), and 10% were other executives (e.g. Financial Officer, Operating Officer). For the GM survey, 70% of respondents were Senior Executives (e.g. Managing Director, CEO), while the remaining 30% were other Executives (e.g. HR Officer, Financial Officer, Operating Officer).

2.4 Industry and Company Profile

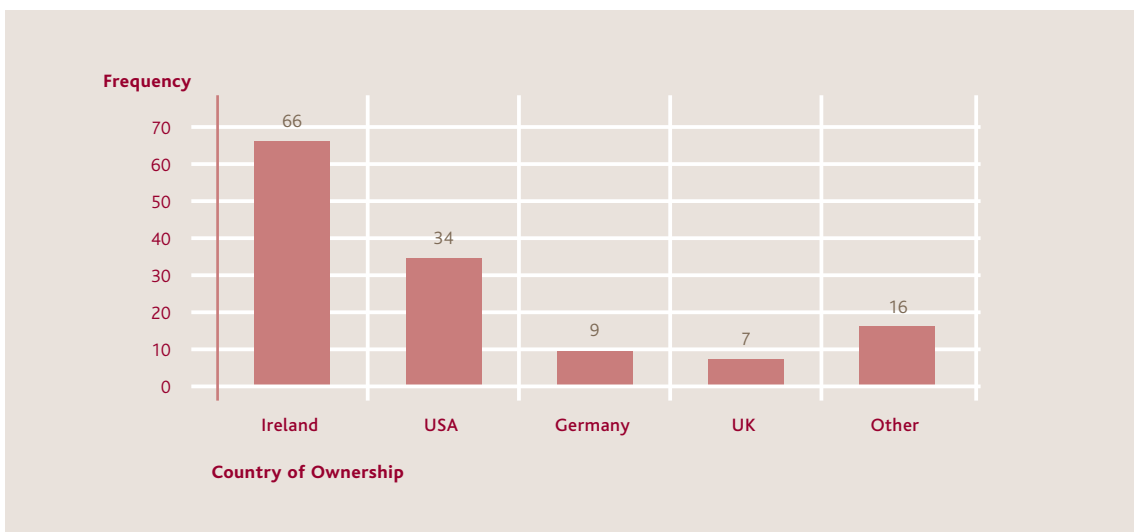
The profile of participating companies is commensurate with the general profile of larger industry in Ireland. Figure 2.1 shows approximately one third are in manufacturing, 27% are in service industries (finance, personal, recreational, health and other services) while less than 4% of companies are from energy or water industry. As shown in Figure 2.2, 50% of the companies were indigenous Irish-owned companies, with the remaining 50% being subsidiaries of foreign companies, including USA (25.8%), Germany (6.8%), and UK (5.3%). Unions represented 33.7% of participating companies’ employees. The average company had been established for about 37 years, and the median number of employees was 270. The companies were at the higher end of R&D activity in Irish terms, with average R&D investment equating to 3.89% of annual turnover.

Figure 2.1
Industry distribution of participating companies



18 >

Figure 2.2
Country of ownership of participating companies



A Descriptive Overview of Workplace Policies and Practices in Irish Industry

3.1 Introduction

This section examines the research findings to describe the workplace policies and practices reported by survey respondents. The analysis in this section is aimed primarily at understanding how extensively these practices are found across different types of companies. The analysis relies heavily (though not exclusively) on the use of index scores, which provide a reliable and effective way of measuring variation between companies. While an index score represents a proxy indicator of difference between companies, it does not represent a full audit of practices within these companies.

The analysis is structured around four themes:

- Strategic HRM (SHRM)
- Partnership
- Diversity and Equality
- Flexible Working

These themes also provide the basis for more advanced analyses later in the report, where the index scores are again utilised to explore new models of HPWS.

3.2 Strategic Human Resource Management (SHRM)

3.2.1 Overview

The first theme examined is *strategic human resource management* (SHRM). This has been the traditional focus of HPWS research, and in many instances the term SHRM is used interchangeably with HPWS. SHRM is generally understood as a set of inter-related HR practices that include staffing, performance management and remuneration, training and development, communication and participation. The common theme in the literature on SHRM is a set of practices that provide employees with skills, information, motivation and latitude, resulting in a workforce that is a source of competitive advantage. Huselid's (1995) landmark study examined the relationship between the use of high performance work systems and company performance. His main finding was that greater use of these types of SHRM practices was associated with decreased turnover and higher levels of productivity and profitability. Similarly, Flood et al. (2005) highlighted the economic benefits associated with high performance work practices in people management, employee involvement, and training and development.¹⁰

3.2.2 Measuring SHRM

In measuring SHRM practices, researchers looked separately at two categories of employees. Group A comprised production, maintenance, service and clerical employees, while Group B comprised executives, managers, supervisors and professional/technical employees.

For this study, 18 survey items were compiled to create a SHRM Index,¹¹ which resulted in each company receiving a single SHRM score on the index. The 18-item SHRM Index incorporated practices in areas including staffing, performance management and remuneration, training and development, and communication and employee participation. Using the number of employees in each occupational group, a weighted average for each practice was computed. The SHRM Index had a Cronbach's alpha reliability rating of 0.85, giving confidence that the SHRM Index was a reliable indicator of the extent of its SHRM practices at the time of the survey, and represents a state-of-the-art profile of SHRM in medium to large companies in Irish industry.

Table 3.1 highlights the 18 items and their average score for each occupational group. The SHRM Index yields an average score of 48.81% across all companies and both occupational groups.

20 >

¹⁰ In their report, Flood et al. (2005) categorised the three main areas as four components in terms of staffing, performance management and remuneration, training and development, and communication and participation.

¹¹ Based on methodology employed previously by Huselid (1995), Guthrie (2001), Datta et al. (2005), and Flood et al. (2005)

Table 3.1
SHRM Systems in Irish Companies

| STAFFING: | |
|---|----------------------|
| What proportion of your employees..... | Score |
| Are administered one or more employment tests (e.g., skills tests, aptitude tests, mental/cognitive ability tests) prior to hiring? | 24.19% |
| Are hired on the basis of intensive/extensive recruiting efforts resulting in many qualified applicants? | 57.67% |
| Hold non-entry level jobs as a result of internal promotions (as opposed to hired from outside of the organisation)? | 34.37% |
| Hold non-entry level jobs due to promotions based upon merit or performance, as opposed to seniority? | 44.99% |
| TRAINING & DEVELOPMENT: | |
| What proportion of your employees..... | |
| Have been trained in a variety of jobs or skills (are "cross trained") and/or routinely perform more than one job (are "cross utilized")? | 53.72% |
| Have received intensive/extensive training in company-specific skills (e.g., task or firm-specific training)? | 73.58% |
| Have received intensive/extensive training in generic skills (e.g. problem-solving, communication skills, etc.)? | 37.23% |
| PERFORMANCE MANAGEMENT & REMUNERATION: | |
| What proportion of your employees..... | |
| Receive formal performance appraisals and feedback on a routine basis? | 67.32% |
| Receive formal performance feedback from more than one source (i.e., feedback from several individuals such as supervisors, peers etc.)? | 20.57% |
| Receive compensation partially contingent on group performance (e.g., profit-sharing, gainsharing, team-based)? | 34.44% |
| Are paid primarily on the basis of a skill or knowledge-based pay system (versus a job-based system)? That is, pay is primarily determined by a person's skill or knowledge level as opposed to the particular job that they hold | 28.16% |
| COMMUNICATION & PARTICIPATION: | |
| What proportion of your employees..... | |
| Are involved in programmes designed to elicit participation and employee input (e.g., quality circles, problem-solving or similar groups)? | 36.88% |
| Are provided relevant operating performance information (e.g., quality, productivity, etc.) | 72.22% |
| Are provided relevant financial performance information? | 68.04% |
| Are provided relevant strategic information (e.g., strategic mission, goals, tactics, competitor information, etc.) ? | 67.41% |
| Are routinely administered attitude surveys to identify and correct employee morale problems?. | 37.63% |
| Have access to a formal grievance/complaint resolution procedure | 96.17% |
| Are organized in self-directed work teams in performing a major part of their work roles? | 36.09% |
| | Average score |
| HPWS Index | 48.81% |

Figure 3.1 to Figure 3.4 illustrates some interesting findings regarding SHRM:

- The use of SHRM varies significantly depending on the nature of the industry. Companies in the personal services sector reported most extensive use of SHRM (64.41%), while those working in health services have the least extensive use of SHRM (only 35.77%).
- The use of SHRM appears to be much more extensive in subsidiaries of foreign companies than Irish indigenous companies (57.29% vs. 38.72%).
- The use of SHRM was linked with workforce size, with companies with more than 500 employees being more likely to use SHRM than companies with less than 500 employees (58.01% vs. 45%).
- There is no significant difference between the levels of SHRM used in non-unionised companies and unionised companies.
- Companies that have implemented a partnership policy are significantly more likely to utilise SHRM.

22 >

Figure 3.1
Strategic HRM Usage x Type of Industry

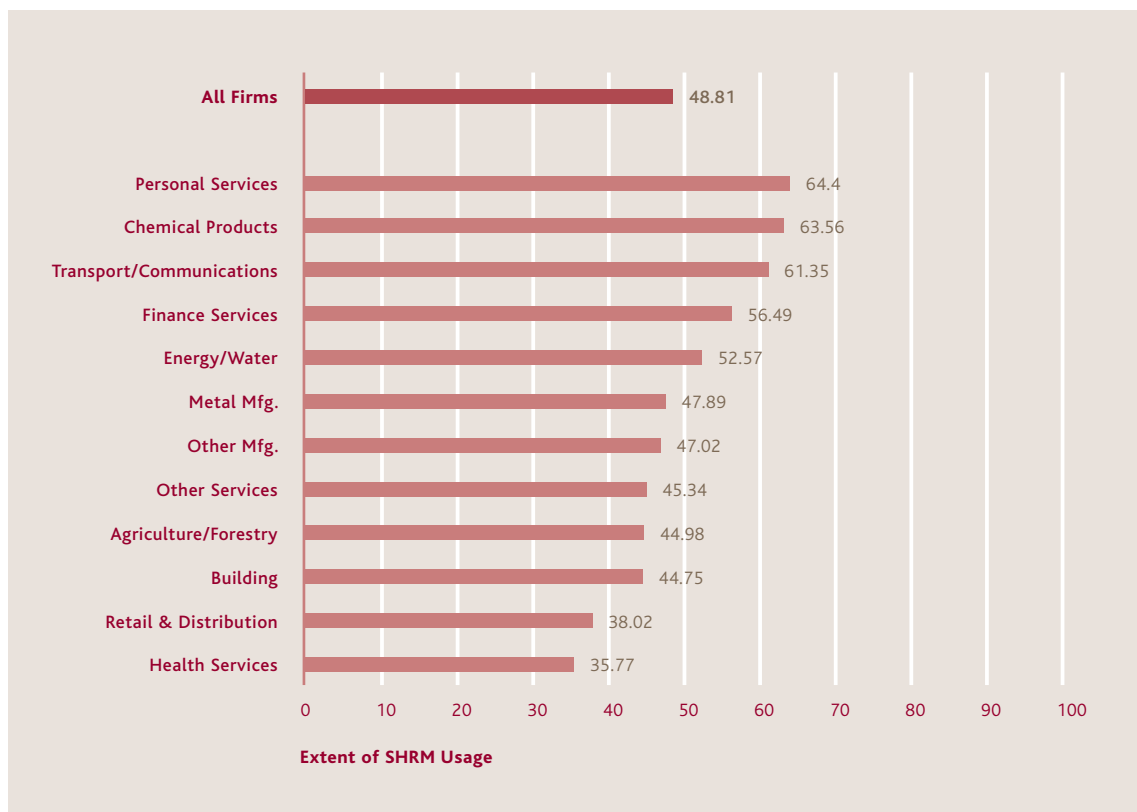


Figure 3.2
Strategic HRM x Country of Ownership

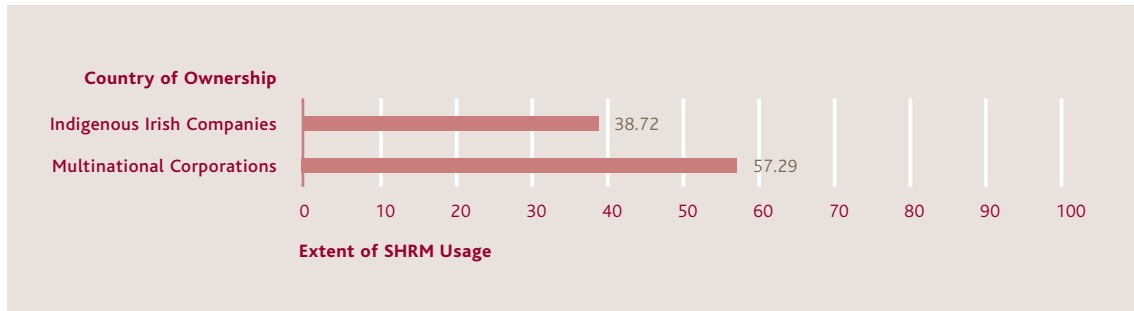
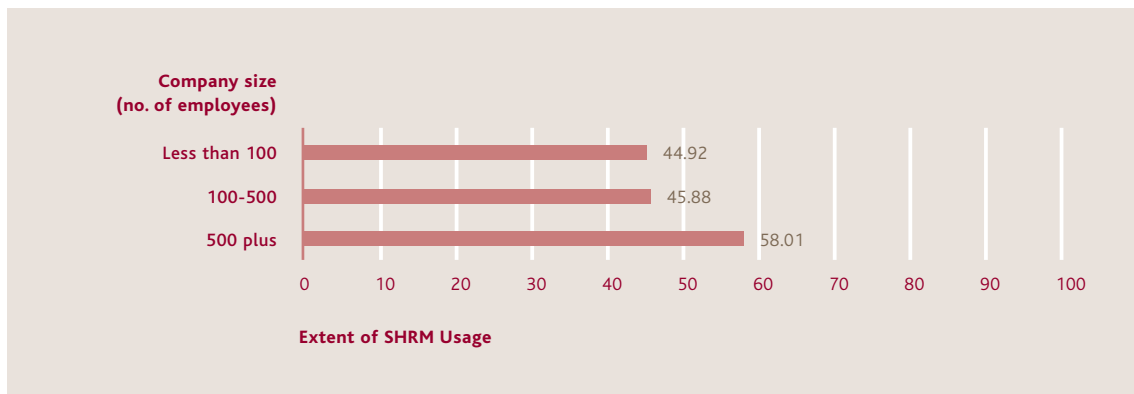
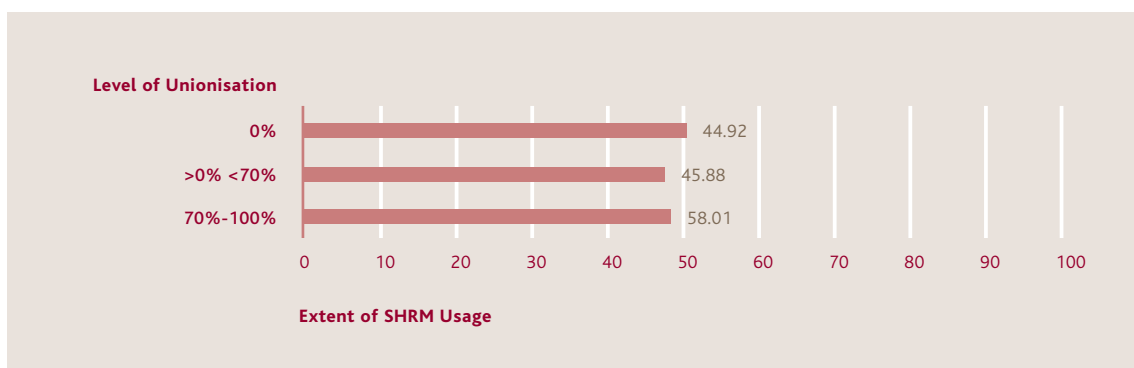


Figure 3.3
Strategic HRM x No. of Employees



< 23

Figure 3.4
Strategic HRM x Level of Unionisation



3.2.3 SHRM Trends 2004–2006

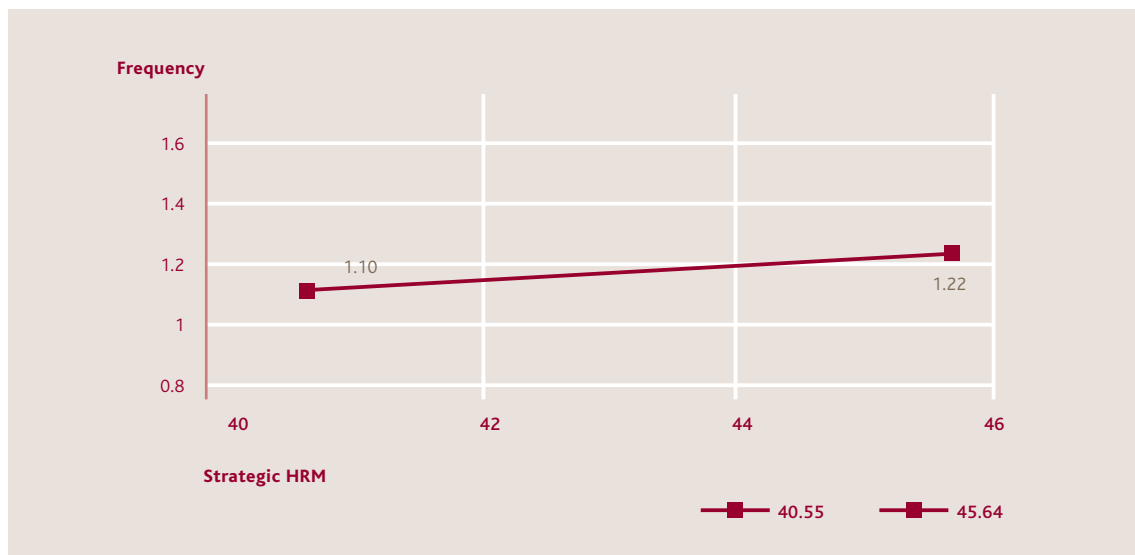
The research included a sub-set of paired ('panel') data from 48 companies that had previously responded to a 2004 survey (Flood, P. et al., 2005). A comparison of the 2004 and 2006 data on SHRM from these companies shows a sizeable positive increase in the average SHRM Index score, from 40.55% in 2004 to 45.64% in 2006, as illustrated in Figure 3.5, below.

Other changes in the panel companies over the same period included

- A significant increase of 11.2% in labour productivity¹³
- Increased levels of R&D investment¹⁴ from an average of 3.23% in 2004 to 3.29% in 2006
- Increased employment growth, up on average by 11 employees per company
- Increased unionisation, with the number of unionised employees in the panel of companies up by 3.48%, up from 40.55% in 2004 to 44.03% in 2006

Figure 3.5
SHRM Trends 2004–2006

24 >



¹³ Labour productivity, calculated as the log of sales revenue per employee, increased from a score of 1.10 in 2004 to 1.22 in 2006. The analysis used the mean of labour productivity scores from both HR and GM surveys.

¹⁴ R&D Investment – calculated as a percentage of annual turnover.

3.3 Workplace Partnership

3.3.1 Overview

The next theme considered is Partnership. Guest and Peccei (2001) describe partnership as a concerted effort by owners and managers to create an environment where employees take a significant psychological stake in the success of the organisation. This is achieved through building high levels of attachment, commitment, and involvement in the enterprise. A partnership philosophy relies on both employees and management to focus on shared goals and interests without being derailed by potentially different positions on specific issues (Guest & Peccei, 2001). As such, partnership represents a philosophy of integration and mutuality, with a move away from conflicting positions and distinctions (Martinez Lucio & Stuart, 2002). McCartan discusses the primary values espoused by partnership philosophies including: mutual trust and respect, a joint vision for the future, continuous information exchange, employment security, and dispersed decision-making (2002: p. 60).

Partnership has been argued to increase productivity, boost quality, provide a more motivated workforce, and precipitate drops in absenteeism and turnover (Roscow & Casner-Lotto, 1998), likely resulting in higher degrees of collaboration and knowledge sharing, which ultimately builds social capital.

Guest and Peccei (2001) presented a framework for the analysis of partnership, emphasizing the principles, practices and outcomes of partnership. Using samples of 54 UK management and employee representatives, they found a link between partnership principles and practices and employee attitudes and behaviour. Their findings support the thesis that mutual gains are achievable in labour management partnerships.

3.3.2 Measuring Partnership

For this study, a Partnership Index was constructed using four survey items, which resulted in each company receiving a single score on the Partnership Index. The Partnership Index gauges variation between companies, and does not represent an audit approach to measuring partnership at company level. Future research may well adopt alternative indices of partnership. Table 2.2 describes these practices in the responding companies.

Table 3.2
Partnership in Irish Companies

| Item | Scale | Score |
|---|--|---------------|
| There is a high level of trust between management and employees | Strongly disagree (1) ... Strongly agree (5) | 3.61 |
| Employees are well informed on the views and concerns of company management | Strongly disagree (1) ... Strongly agree (5) | 3.80 |
| Company management are well informed on the views and concerns of employees | Strongly disagree (1) ... Strongly agree (5) | 3.72 |
| Workplace partnership is... | 0 (Non-existent); 1 (Largely confined to a few key individuals); 2 (Largely confined within formal partnership structures); 3 (Evident in at least certain parts); 4 (Evident across most of it); 5 (Now the norm for working). | 3.95 |
| | | Average score |
| Partnership | | 3.80 |

Figure 3.6 to Figure 3.9 shows the use of partnership as a function of organisational type. In terms of country of origin, the subsidiaries of foreign companies reported slightly higher adoption of partnership than Irish indigenous companies (3.94 vs. 3.67).

In terms of company size, companies with employee numbers greater than 100 are more likely use partnership than smaller companies. In general, the effect of unionisation on the use of partnership is not significant.

Figure 3.6
Partnership Usage x Type of Industry

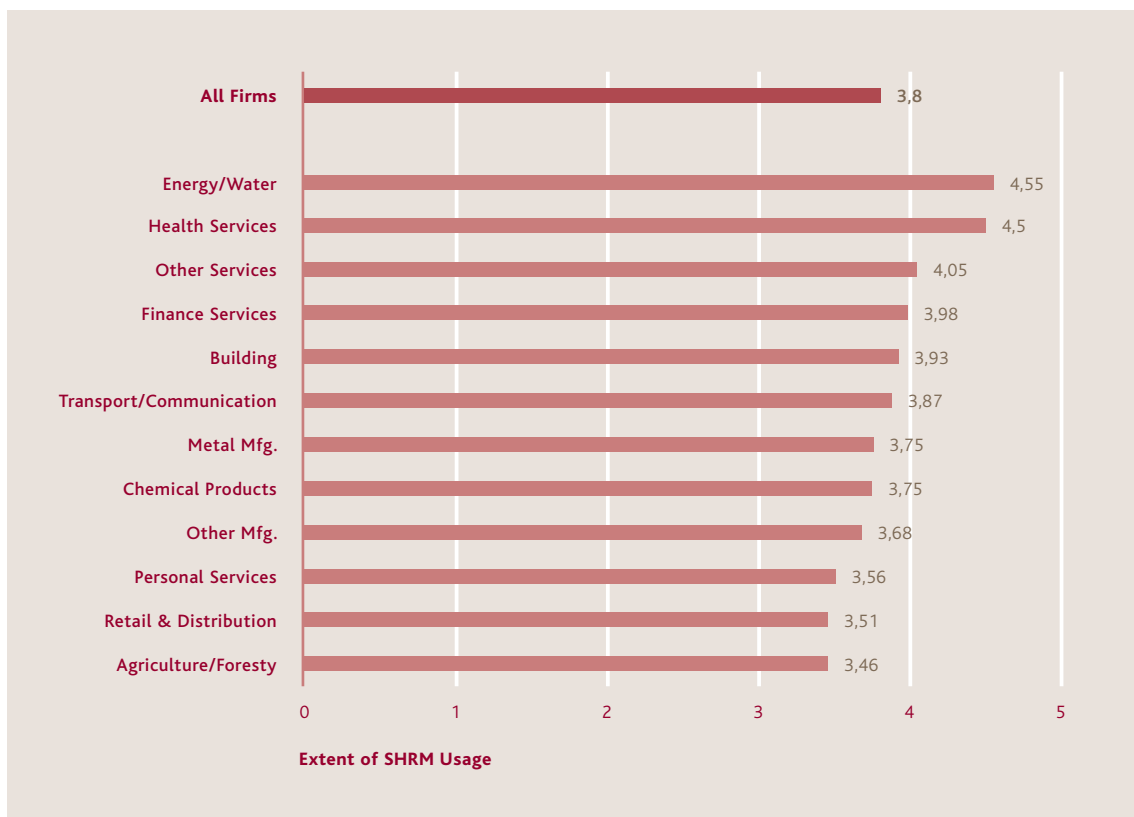


Figure 3.7
Partnership Usage x Country of Ownership

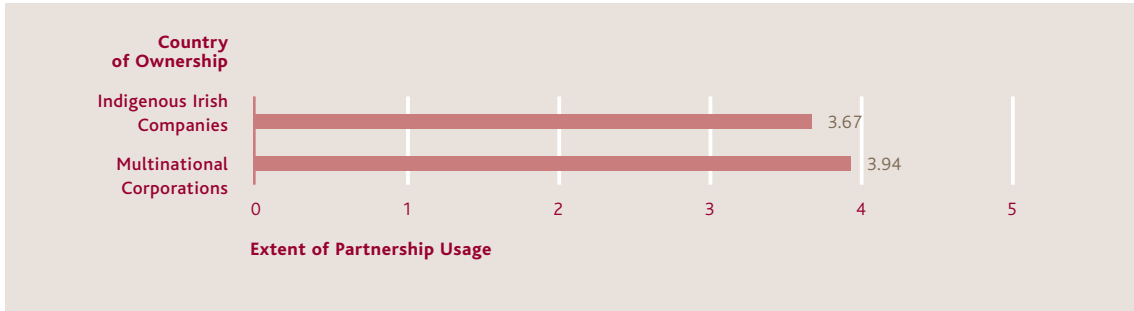
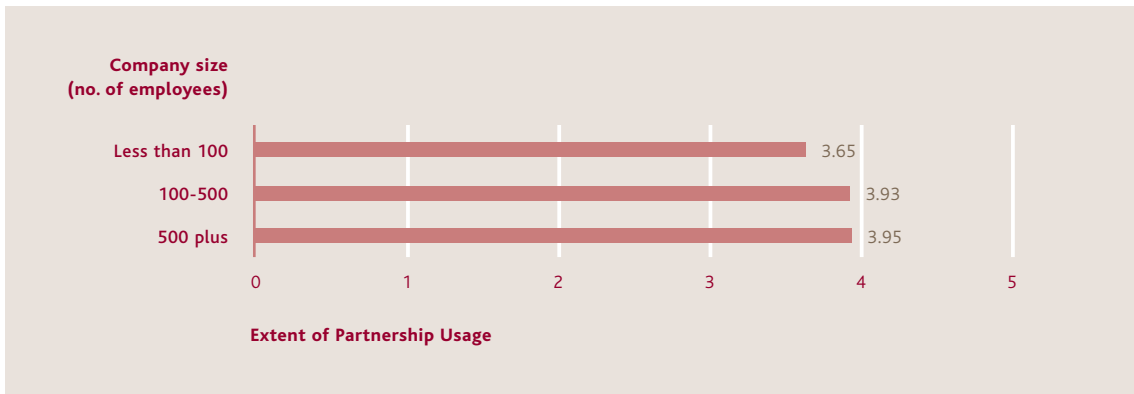
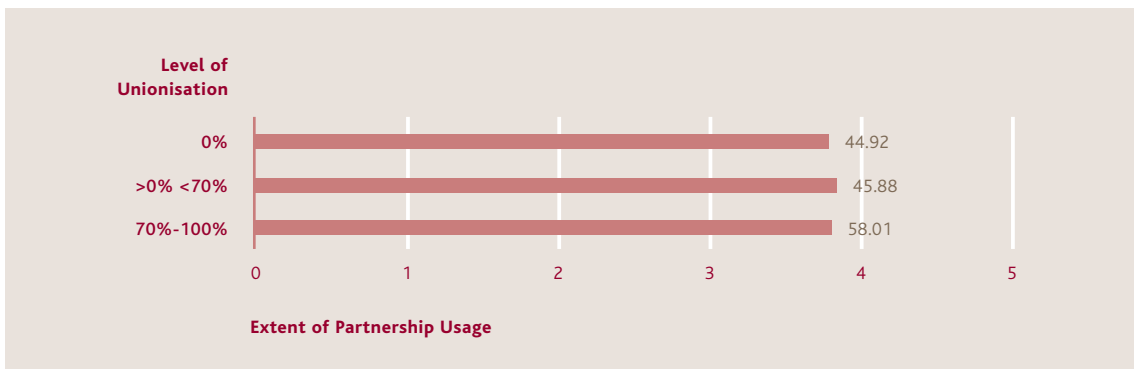


Figure 3.8
Partnership Usage x No. of Employees



28 >

Figure 3.9
Partnership Usage x Level of Unionisation



3.4 Diversity and Equality

3.4.1 Overview

Both at public policy level and at the level of the enterprise, policies that promote equality of opportunity and accommodate diversity are understood to have a key role in mobilising an increasingly diverse labour force. This is a particularly important issue in contemporary Ireland, where the labour force has developed an unprecedented level of diversity stemming from a significant increase in the participation rate of women, as well as record levels of inward migration from both non-EU states and EU Member states.

O’Connell and Russell (2005) report that, as well as the direct benefits to employees (for example, through reduced work-related stress), diversity and equality policies can also benefit the organisation in terms of increased job satisfaction and greater organisational commitment among employees. Kochan et al. (2002) and Yasbek (2004), among others, found that gender diversity has positive effects on performance. Monks (2007) identified a range of business and employee benefits associated with diversity and equality systems, including reduced absenteeism and staff turnover, improved employee relations and workplace innovation and creativity. Importantly, Monks found that the success of equality and diversity initiatives depends greatly on the extent of their integration into an organisation’s strategy and culture, so that they shape the way in which the organisation’s business is conducted and its individual employees work.

3.4.2 Measuring Diversity and Equality

For this report, 17 survey items¹⁵ were selected and compiled¹⁶ to create the DES Index, providing a single score representation of DES. The DES Index had a Cronbach’s alpha reliability rating of 0.823. Table 2.3 describes these practices and their percentage usage in the responding companies.

3.4.3 Diversity and Equality (DES) Findings

Overview of Workforce Profile

Among the sample of respondent companies,

- Women account for 35.8% of their workforce
- Employees age 50 or greater account for 12.4% of their workforce
- Non-Irish employees account for 17.7% of their workforce. Of the non-Irish employees, 38.8% are from Western Europe, 41.2% are from Eastern Europe, and 6.0% are from Asia.

Further analysis of the data revealed some potentially interesting trends. Organisations that reported having a diverse workforce tended to be Irish companies rather than multinationals, to be more recently established, and to have low rates of unionisation and employee partnership. They also tended to operate in the financial services, building and civil engineering and retail and distribution sectors. The companies were unlikely to operate in the chemical industry.

15 Most of these practices are legislative contents of The Employment Act 1998 and 2004. Note that, when monitoring these matters, companies must ensure that monitoring is done in a manner that ensures that any information gathered cannot be used to discriminate.

16 Since some items had different response scales, the DES index was calculated as the average Z-score of the 17 items.

Table 3.3
Diversity and Equality Practices in Irish Companies

| Item | Score |
|---|----------------------|
| What proportion of your total employees receive equality/diversity training? | 25.32% |
| To what extent is equality and diversity integrated into overall corporate strategy? | 51.49% |
| Has a senior manager been designated to champion equality and diversity in your organisation? | 37.69% |
| Does this workplace have a formal written policy on equal opportunities? | 84.73% |
| Does this workplace have a formal written policy on managing diversity? | 40.00% |
| Do you monitor recruitment and selection by gender? | 20.76% |
| Do you monitor recruitment and selection by ethnic background? | 11.63% |
| Do you monitor recruitment and selection by disability? | 10.85% |
| Do you monitor recruitment and selection by age? | 12.40% |
| Do you monitor promotions by gender? | 13.08% |
| Do you monitor promotions by ethnic background? | 5.38% |
| Do you monitor promotions by disability? | 2.31% |
| Do you monitor promotions by age? | 3.85% |
| Do you monitor relative pay rates by gender? | 5.34% |
| Do you monitor relative pay rates by ethnic background? | 3.05% |
| Do you monitor relative pay rates by disability? | 2.29% |
| Do you monitor relative pay rates by age? | 3.05% |
| | Average score |
| DES | 19.35% |

Interestingly, the financial services sector appears to have a preference for employing Western but not Eastern Europeans. The retail and distribution sector appears to have a preference for employing Asians and the building and civil engineering sector appears to have a preference for employing Eastern Europeans.

Organisational Characteristics

Figure 3.10 to Figure 3.13 shows the use of DES in relation to organisational characteristics. While the average of use of DES is 19.35%, there appears to be considerable variation depending on the sector that the company is in. In terms of country of origin, the subsidiaries of foreign companies

reported higher adoption of DES than Irish indigenous companies (21.92% vs. 16.74%). The use of DES was linked with workforce size, with companies with more than 500 employees being more likely to use DES than companies with less than 500 employees. In addition, unionisation has a positive impact on the use of DES, with unionised companies more likely to use DES than those without unions (21% vs. 16%).

Companies whose diversity and equality policies are integrated into overall corporate strategy tend to be larger multinationals, rather than indigenous Irish companies. They also tend to be making a more significant investment in R&D, and use employee partnership practices more extensively.

Figure 3.10
Diversity and Equality Systems x Type of Industry

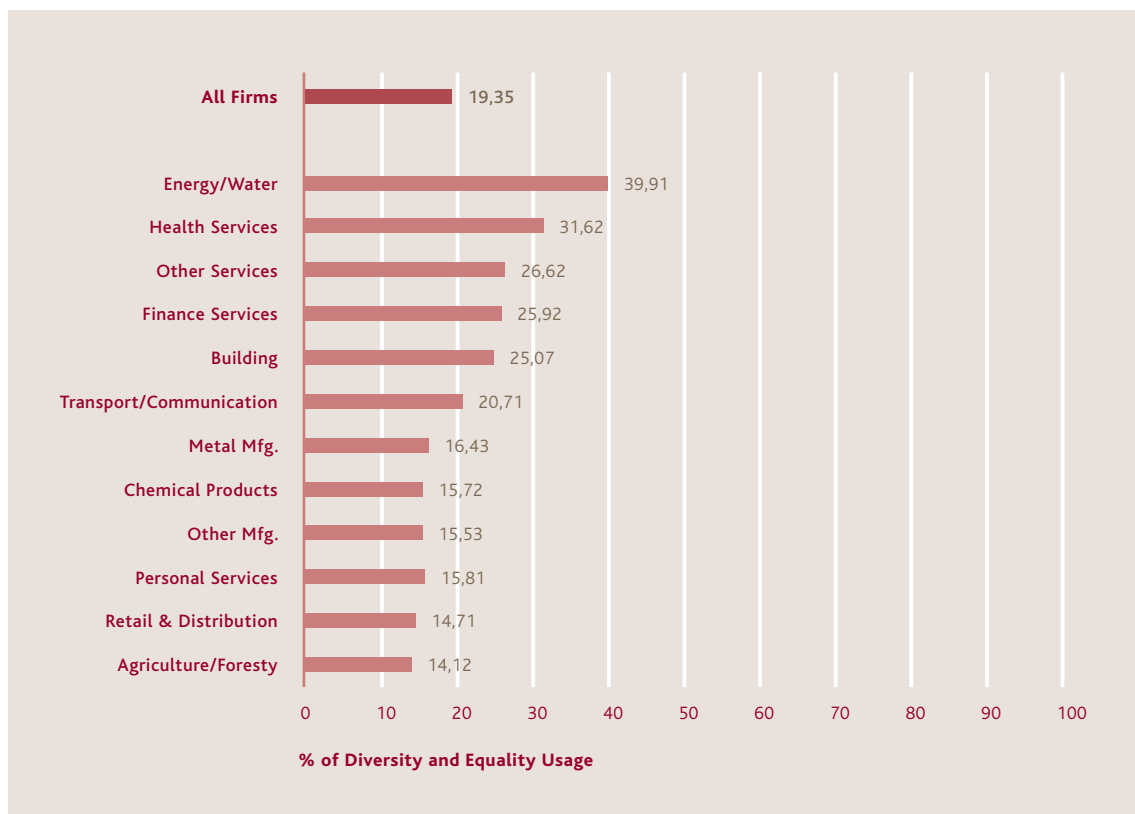


Figure 3.11
Diversity and Equality Systems x Country of Ownership

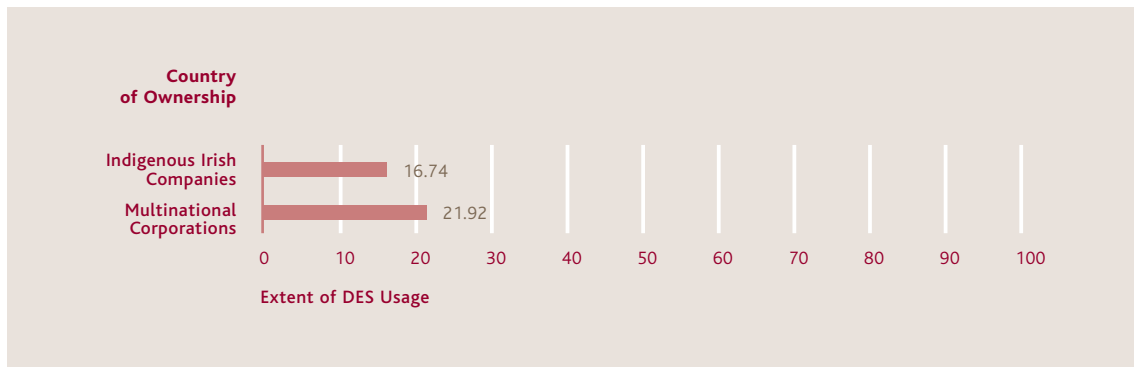
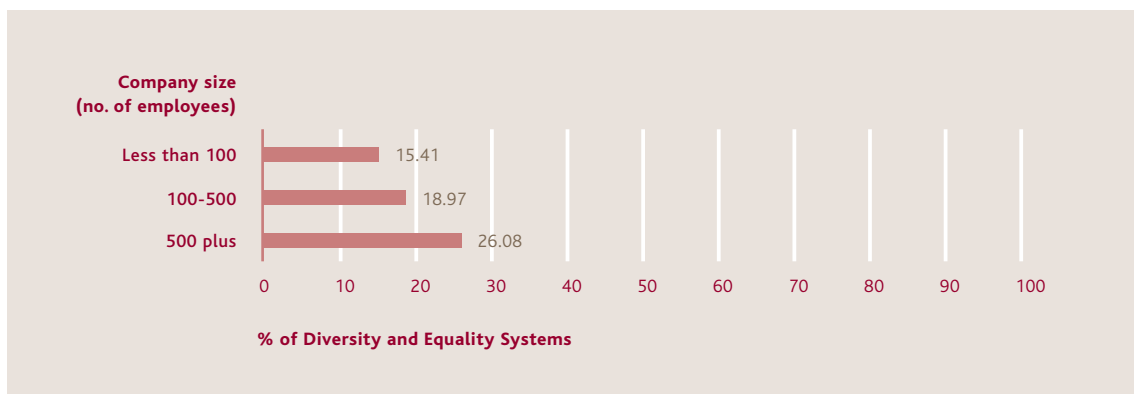
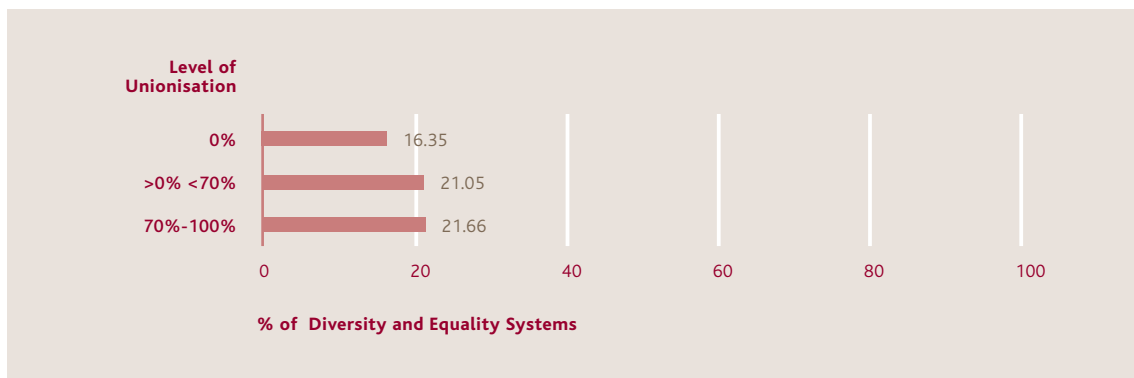


Figure 3.12
Diversity and Equality Systems x No. of Employees



32 >

Figure 3.13
Diversity and Equality Systems x Level of Unionisation



Diversity and Equality Policies

The majority of companies (84.73%) reported having formal written policies on equal opportunities. Significantly fewer companies (40%) reported having a formal written policy on managing diversity. Taking the two issues together, 51.49% of companies reported that the issues are integrated into overall corporate strategy, with 37.69% of companies reporting that they have a designated senior manager to champion equality and diversity in the organisation.

Diversity and Equality monitoring

Generally, across all monitoring issues (recruitment and selection, promotion, pay rates), more companies appear to monitor gender than ethnic background, disability and age.

In the recruitment and selection of employees, 20.8% of companies monitor it with respect to employee gender, with fewer companies monitoring it with respect to ethnic background (11.6%), disability (10.85%) and age (12.4%).

In relation to the promotion of employees, 13.10% of companies monitor it with respect to gender, again with fewer companies monitoring it with respect to ethnic background (5.28%), disability (2.31%) and age (3.85%).

In relation to the monitoring of pay rates with respect to gender, ethnic background, disability, and age, the proportion of companies engaged in any form of monitoring was universally low, though still slightly higher in relation to gender pay differences (3.45%).

Diversity and Equality Training

The data reveals that 25.3% of employees received diversity/equality training. Further analysis reveals that these tended to be larger multinational organisations rather than Irish indigenous companies, pursuing a product differentiation rather than low cost strategy, investing significant amounts in R&D, and with an emphasis on partnership with employees.

3.5 Flexible Working

3.5.1 Overview

Flexible working practices are generally considered to entail benefits including increased employee satisfaction, improved staff retention and reduced turnover, increased employee productivity and enhanced organisational reputation. Dex and Smith (2002) provide a useful review of the literature on the effects of family-friendly working arrangements in the UK. They found that the provision of family-friendly policies relating to working at home and childcare was associated with greater employee commitment. Shepard et al. (1996) also found that flexible working practices led to an increase in productivity.

3.5.2 Flexible Working Systems (FWS) Index

For this report, five survey items were selected and compiled to create the FWS Index, providing a single score representation of FWS. The FWS Index had a Cronbach's alpha reliability rating of 0.712. The average score of FWS across all companies is 16.55%. Table 2.4 describes these practices and their percentage usage in the responding companies.

Table 3.4
Flexible Working Practices in Irish Companies

| Item | Score |
|---|----------------------|
| What proportion of your total employees are afforded the opportunity to reduce working hours? | 20.85% |
| What proportion of your total employees are afforded the opportunity to increase working hours? | 25.05% |
| What proportion of your total employees are afforded job sharing schemes? | 11.00% |
| What proportion of your total employees are afforded flexi-time? | 14.59% |
| What proportion of your total employees are afforded ability to change shift patterns? | 20.35% |
| | Average score |
| FWS | 16.55% |

34 >

3.5.3 Flexible Working Systems Findings

Characteristics of FWS organisations

Figure 3.14 to Figure 3.17 reveal some interesting results regarding the frequency with which flexible working systems are found in the survey sample. While the average usage of FWS is 16.55%, there is significant variation between companies depending on the sector that they operate in. Companies in the personal services industry reported the most use of FWS (41.67%), while those working in the manufacturing sector, and the services sector (excl. personal services, finance services, and health services) are least likely to use FWS (8.25%).

Those organisations that afford employees opportunities to increase or decrease working hours tend to be in the services sector rather than the manufacturing sector, tend to be larger multinationals rather than

indigenous Irish companies, tend to place an emphasis on workplace partnership and employee involvement, and tend to pursue a product differentiation rather than low cost strategy.

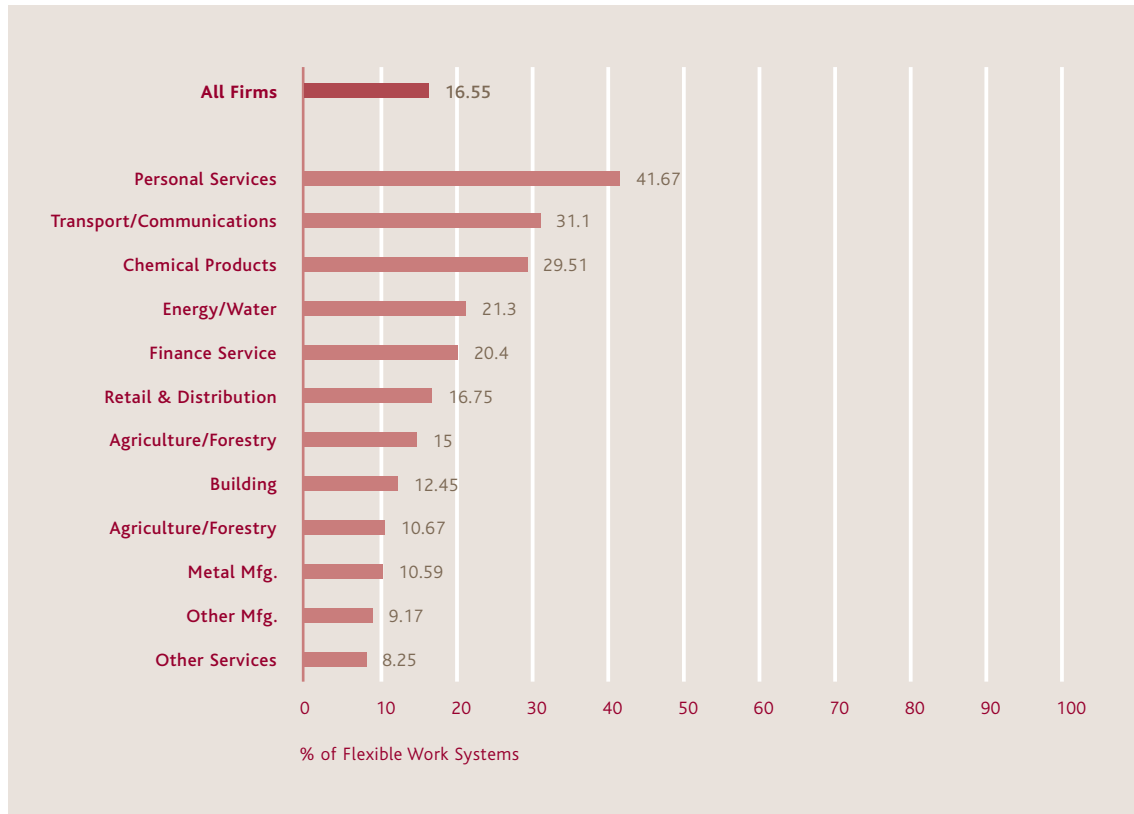
In terms of country of origin, the subsidiaries of foreign companies reported slightly higher adoption of FWS than Irish indigenous companies (18.92% vs. 14.31%). The use of FWS was linked with workforce size, with companies with more than 500 employees being more likely to use FWS than companies with less than 500 employees.

Table 3.5 presents an overview of the frequency with which flexible working practices are found in the sample of companies surveyed.

3.5.4 Additional flexible work practices

This section highlights information on a number of flexible work practices additional to those included in the FWS Index.

Figure 3.14
Flexible Work Systems x Type of Industry



< 35

Table 3.5
Flexible Working Arrangements

| Practice | Percentage of Companies |
|-----------------------------------|-------------------------|
| Ability to increase working hours | 25.05% |
| Ability to reduce working hours | 20.85% |
| Ability to change shift | 20.35% |
| Flexi-time | 14.59% |
| Job sharing schemes | 11% |
| Night working | 9.35% |
| Working compressed hours | 5.23% |
| Working at home | 4.88% |

Figure 3.15
Flexible Work Systems x Country of Ownership

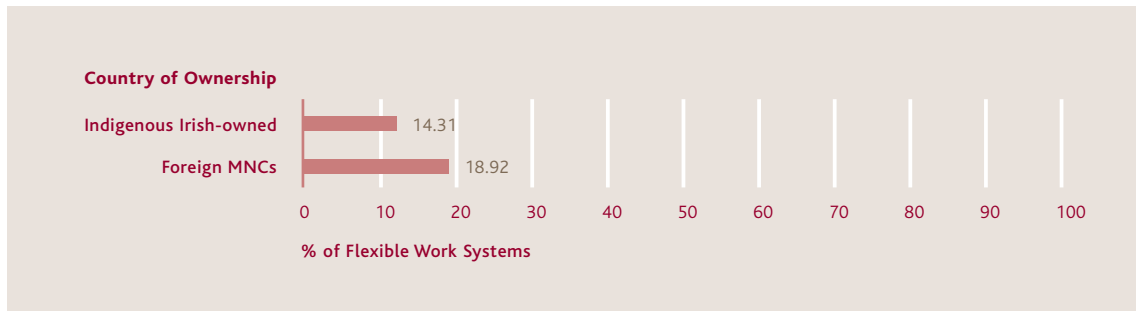
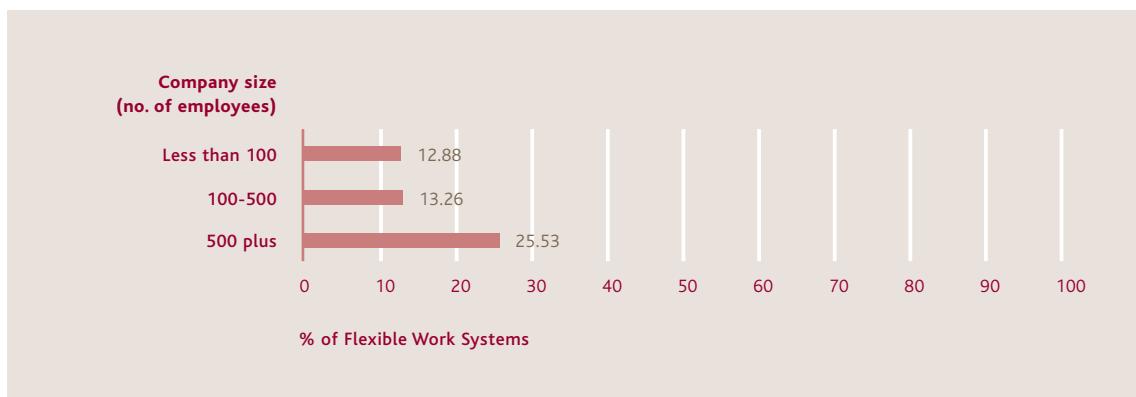
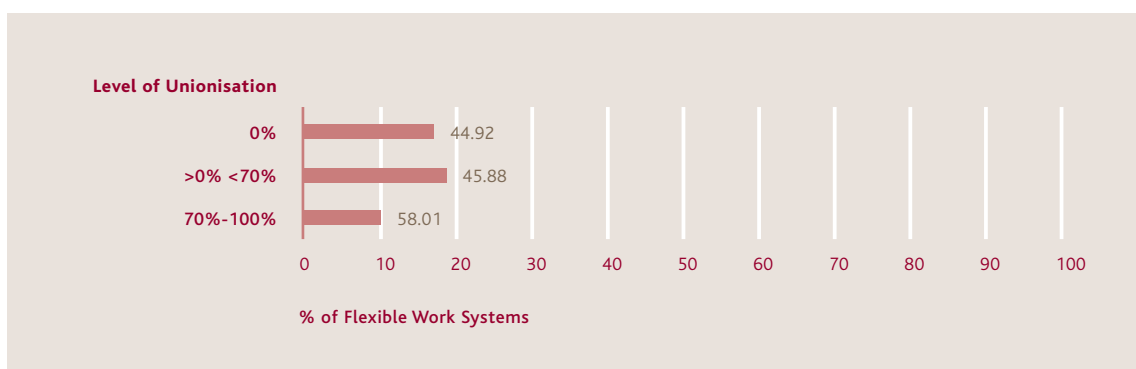


Figure 3.16
Flexible Work Systems x No. of Employees



36 >

Figure 3.17
Flexible Work Systems x Level of Unionisation



Exploring New Models of High Performance Work Systems

4.1 Introduction

This section examines how management practices are associated with business performance. Using three important outcome measures (labour productivity, workforce innovation and employee turnover), we examine the unique and synergistic effects of a broad range of management policies and practices, across four thematic areas (strategic HRM, workplace partnership, equality and diversity, and flexible working).¹⁷

4.2 Outcome Measures

Labour productivity is generally defined as “total output divided by labour inputs”. It indicates the extent to which a company’s human capital is efficiently creating output. In this research, revenue per employee was used as a measure of labour productivity. Data on the most recent estimates of total sales and total employment were collected via the GM and HR questionnaires.¹⁸

Workforce Innovation is a useful way to measure workforce performance, in terms of the company’s ability to efficiently generate revenue through the introduction of new products and services. Workforce innovation was operationalized using data on number of employees, sales revenue and responses to the question: “What proportion of your organisation’s total sales (turnover) comes from products or services introduced within the previous 12 months?” The response to this question was multiplied by total sales to yield an estimate of sales revenue generated by new sales. This sales figure was then divided by the number of employees to obtain our measure of workforce innovation – an indication of per capita sales derived from recently introduced products or services.

¹⁷ Tables detailing the multivariate regression analyses are available, on request, from the authors.

¹⁸ A log of average of labour productivity from GM and HR surveys was used as the dependent variable in the multiple regression analysis.

Employee Turnover rates can be considered a useful proxy indicator of employee well-being in the company. In this research, the measure of employee turnover rates was taken from responses to the following survey question: "Please estimate your annual voluntary employee turnover rate (percent who voluntarily departed your organisation)." This question was asked separately for both categories of employees (Group A comprised production, maintenance, service and clerical employees; Group B comprised executives, managers, supervisors and professional/technical employees). A weighted average of these separate estimates was computed to represent the overall average rate of employee turnover for each company.

4.3 HPWS Model 1 – High Performance through Strategic Human Resource Management

The first High Performance Work Systems model examined is the SHRM model. NCPP research data from 2004 has already established the association between SHRM and outcome measures including profitability, innovation, labour productivity and employee turnover.

Similar analyses on the current data again demonstrate the association between SHRM and higher labour productivity and workforce innovation and lower employee turnover rates, with greater use of SHRM accounting for 12.4% variance in labour productivity ($p < .01$).

A still more compelling correlation emerges through the analysis of panel data¹⁹ from the 2004 and 2006 surveys. The panel data, drawn from companies which responded to the surveys in both 2004 and 2006, allows for a more extensive exploration of the role of SHRM as a factor in company performance, by examining the impact of *change in HPWS on change in labour productivity*. Using multivariate statistical models to control for a range of variables²⁰, the data reveals a statistically significant, positive relationship ($p < .01$) between increased levels of HPWS and increased labour productivity.²¹

4.4 HPWS Model 2 – High Performance through SHRM and Partnership

In previous studies of partnership, no evidence has shown if the observed relationship between partnership and business performance levels (either positive or negative) is based on an environment with SHRM practices. Likewise, previous studies of SHRM (and research generally on HPWS), have paid very little attention to partnership.

As discussed by O'Connell (2003), high-involvement or high-performance HR practices are central to the notion of "partnership". Partnership denotes a philosophy of collaboration or mutuality between management and employees for the purpose of organisational problem-solving and functioning. According to O'Connell, partnership indicates an "employee-centred"

19 Described perviously in Section 3.2.3

20 Including Firm size; Firm age; Industry sector; Country of ownership; R&D intensity; Partnership philosophy; Differentiation/ Low cost firm strategy; Voluntary employee turnover; Absenteeism rates.

21 This finding is particularly impressive given the relatively small panel data size (48 companies), which would make it more difficult to establish statistically significant results. It provides further evidence, if this were needed, that the use of SHRM is closely related to business performance levels, and is a key component of high performance work systems.

organisation design. One way to think of high-performance HR practices is as an operationalisation or implementation of the partnership philosophy. Similar to O'Connell's description, authors in the SHRM literature (e.g., Guthrie, 2001) also describe companies utilising high-performance HR practices as employee-centred organisations. This is because information and decision-making power is dispersed throughout the organisation with employees at all levels taking on greater responsibility for the operation and success of the organisation.

Clearly, "partnership" and "high performance HR practices" are closely linked. Research in international settings has suggested that, as a form of partnership, high performance HR practices can help create and sustain competitive advantage. This second model of HPWS examines SHRM practices together with partnership in relation to labour productivity, workforce innovation and employee turnover.

4.4.1 HPWS Model 2 (SHRM and Partnership) and Labour productivity

A multivariate regression analysis was conducted to examine the association between HPWS Model 2 (SHRM and partnership) and labour productivity. After controlling for company age, company size, R&D investment, unionisation, differentiation / low cost company strategy, country of ownership, and industry sector, the analysis showed that greater use of Partnership and SHRM is associated with increased labour productivity.

Partnership was entered first and accounts for 3.9% of variance in labour productivity ($p < .01$). SHRM was entered second and explained an additional 10% of variance, ($p < .001$). This result shows that greater use of partnership and SHRM is associated with increased labour productivity.

If we conceive of SHRM as an operationalization of a partnership philosophy, this implies a mediating relationship where the effect of partnership on productivity may be partially due to the increased likelihood that "partnering" companies will more likely use SHRM. A formal test confirms that SHRM partially mediates the relationship between partnership and productivity (Sobel test statistic = 1.649; $p = .049$, one-tailed).

4.4.2 HPWS Model 2 (SHRM and Partnership) and Workforce innovation

After controlling for company age, company size, R&D investment, unionisation, differentiation/ low cost company strategy, country of ownership, and industry sector, our regression analysis shows that greater use of SHRM is associated with greater workforce innovation. Partnership is not found to have a direct association here with workforce innovation, but does play a role in that companies that have higher levels of partnership will likely have higher levels of SHRM, which is shown to be associated with higher levels of innovation.

Partnership was entered first and accounts for 1.4% of variance in workforce innovation ($p < .10$). SHRM was entered second and explained another 5% of variance ($p < .01$) and reduces the influence of partnership to non-significance. However, a partnership philosophy does affect innovation since it leads to an increased probability of SHRM use which, in turn, is associated with higher levels of innovation. A formal test confirms that SHRM mediates the relationship between partnership and innovation (Sobel test statistic = 1.450; $p = .074$, one-tailed).

4.4.3. HPWS Model 2 (SHRM and Partnership) and Employee turnover

After controlling for company age, company size, R&D investment, unionisation, differentiation/ low cost company strategy, country of ownership, and industry sector, our regression analysis shows that greater use of SHRM, but not partnership, is associated with decreased employee turnover.

Partnership was entered first and accounts for 4% of variance in employee turnover ($p < .01$). SHRM was entered second and explained an additional 2% of variance ($p < .10$) and reduced the influence of partnership. This suggests that SRHM may mediate the partnership – employee turnover association.

4.5 HPWS Model 3 – High Performance through DES and FWS

Diversity and equality systems and flexible work practices can motivate employees through an improved sense of equality in the workplace and the achievement of a positive work-life balance. There is evidence that a sense of equality and work-life balance influences a number of attitudes and behaviours of both personal and organisational relevance (Siegel et al., 2005). The more that employees perceive limited work-life balance practices and programmes in their organisation, the more they will display negative attitudes and dissatisfaction towards the organisation (Osterman, 1995; Lambert, 2000). On the other hand, the more that employees perceive that the organisation is providing them with a working environment where social benefits and a sense of equality are important, the more motivated they will be to provide their organisation with non-discretionary effort in return for the extra benefits they received (Lambert, 2000).

This third model of HPWS examines DES and FWS in relation to labour productivity, workforce innovation and employee turnover.

4.5.1 HPWS Model 3 (DES and FWS) and Labour productivity

After controlling for company size, R&D investment, unionisation, differentiation/ low cost strategy, country of ownership, and industry sector, the analysis showed that DES accounted for 6.5% of variance in labour productivity ($p < .01$). No direct effect was found between FWS and labour productivity.

4.5.2 HPWS Model 3 (DES and FWS) and Workforce innovation

After controlling for company age, company size, R&D investment, unionisation, differentiation/ low cost company strategy, country of ownership, and industry sector, the analysis showed that DES accounts for 7.9% of variance, ($p < .01$). Once again, no similar relationship between FWS and workforce innovation was found.

4.5.3 HPWS Model 3 (DES and FWS) and Employee turnover

After controlling for company age, company size, R&D investment, unionisation, differentiation/ low cost company strategy, country of ownership, and industry sector, the analysis shows that DES accounts for 4.4% of variance in employee turnover ($p < .01$).

4.6 HPWS Model 4 – High Performance through SHRM, Partnership, DES and FWS

The final model explored the broadest perspective on high performance work systems, including all four elements (Strategic HRM, Partnership, Diversity and Equality Systems, Flexible Working Systems) in a 2-step multiple regression analysis. All control variables were entered first, including company age, company size, R&D investment, unionisation, differentiation/ low cost company strategy, country of ownership, and industry sector. The four variables (SHRM, Partnership, DES, and FWS) were entered second.

4.6.1 HPWS Model 4 (SHRM, Partnership, DES, FWS) and Labour productivity

Our analysis shows that SHRM, Partnership, DES, and FWS together can account for 14.8% of variance of labour productivity. Only SHRM is significant, while the effects of other three variables on labour productivity are also in a positive direction (positive Beta value). Therefore, the increased use of HPWS, partnership, DES and FWS is positively associated with greater labour productivity.

This finding, which is very robust, translates into economic terms as follows:

In the particular sample of companies surveyed here (larger companies with significant turnover levels), productivity levels averaged €299,992 per employee. As noted, the four elements (SHRM, Partnership,

DES and DWS) in Model 4 account for 14.8% of this productivity, or €44,399 per capita. Extrapolating this value to the median company in our sample (270 employees), would amount to a total annual economic value of €11,987,730 in productivity attributable to these four management systems.

4.6.2 HPWS Model 4 (SHRM, Partnership, DES, FWS) and Workforce innovation

Our analysis shows that that SHRM, Partnership, DES, and FWS together can account for 12.2% of variance of workforce innovation. SHRM and DES are significant, while the effects of Partnership and FWS on workforce innovation are also in a positive direction. Therefore, greater workforce innovation is associated with greater use of SHRM, Partnership, DES and FWS.

Again, in addition to being statistically significant, these results have important economic benefits for companies. Sample companies (132 larger, high turnover companies) generated on average €16,893 in revenue from new products and services per employee per annum. The combined effects of SHRM, Partnership, DES and DWS (12.2% of variance) equates to €2,061 per employee. Extrapolating this to the median-sized company in our sample, this would amount to €556,200 in sales from new products and services. Since these offerings are new to the product or service life cycle, this understates the economic effect since future returns will also be substantial.

4.6.3 HPWS Model 4 (SHRM, Partnership, DES, FWS) and Employee turnover

Our analysis shows that SHRM, Partnership, DES, and FWS together can account for 7.7% of variance of employee turnover. Partnership accounted for 4% of variance in employee turnover ($p < .01$). SHRM explained an additional 1.9% of variance ($p < .10$), but does not significantly mediate (alter the impact of) partnership on voluntary turnover. Partnership and DES are also significant, as are Partnership and FWS. Therefore, greater use of SHRM, Partnership, DES, and FWS is associated with decreased employee turnover.

Average voluntary turnover rates of 5.4% suggest that the median sample company from this sample loses approximately 15 employees each year. The aggregate affect of the above four practices would lead to the retention of an additional 1 – 2 employees per year. Recent work suggests that voluntary turnover has substantial negative implications for company performance, often costing as much as 150% of the departing employee's annual salary (Cascio, 2006).

Conclusions

Our analysis examined the association between a range of workplace and management practices (including strategic human resource management, partnership, diversity and equality systems, and flexible working systems) and business performance outcomes including labour productivity, workforce innovation and employee turnover.

Our results clearly indicate that the adoption of high performance work systems differs between companies depending on factors such as type of industry, country of ownership, company size and unionisation rate. To summarise, we found that a broad management approach involving SHRM, DES, FWS and Partnership is more extensively used in larger companies, and more extensively in multinational rather than indigenous Irish companies. There is no significant difference between unionised companies and non-unionised companies in terms of their use of strategic HRM and partnership. On the other hand, unionised companies do have more extensive diversity and equality systems. The results for flexible working systems are mixed. The data will require secondary analysis to further explore the effects of variables such as unionisation level on business performance outcomes.

The research approach and analytical techniques adopted in this research offer powerful insights into the nature of high performing companies. While the statistical analyses establish clear correlations between management policies and practices and business performance outcomes, they do not purport to establish a causal relationship between the two. Nevertheless, the research has unearthed extensive evidence that high performance companies with higher levels of labour productivity and workforce innovation, and lower levels of employee turnover, are managing their organisations in ways that are distinctly different from average performing companies. The

strength of these correlations must represent a compelling business case to any company seeking to enhance its performance through improved productivity, innovation or quality of working life.

The results also confirm that we need to continue thinking about high performance work systems in a sophisticated way, where we recognise the individual and synergistic effects

of strategic HRM, partnership, diversity and equality, and flexible working on business performance. The combined effect of these as four elements of a broad model of high performance work systems equates to 14.8% of variance of labour productivity, 12.2% of variance of workforce innovation and 7.7% of variance of employee turnover. This suggests that the synergistic effects of implementing certain work practices are strongly associated with organisational performance and value creation.

Table 5.1
Summary of Multivariate Modelling of High Performance Work Systems

44 >

| | MODEL 1 | MODEL 2 |
|----------------------|---|--|
| | <ul style="list-style-type: none"> ▶ Strategic HRM | <ul style="list-style-type: none"> ▶ Strategic HRM ▶ Partnership |
| Labour Productivity | <ul style="list-style-type: none"> ▶ Greater use of SHRM associated with increased labour productivity. SHRM accounts for 12.4% variance ($p < .01$) ▶ Statistically significant ($p < .01$) positive relationship between change of HPWS and change of labour productivity (based on comparison of 2004 and 2006 panel data) | <ul style="list-style-type: none"> ▶ Greater use of SHRM and Partnership associated with increased productivity. ▶ SHRM accounts for 10% variance ▶ Partnership accounts for 3.9% variance ▶ SHRM partially mediates between Partnership and labour productivity |
| Workforce Innovation | <ul style="list-style-type: none"> ▶ SHRM associated with greater workforce innovation | <ul style="list-style-type: none"> ▶ SHRM associated with greater workforce innovation (5% of variance) ▶ SHRM also mediates relationship between partnership and workforce innovation. Partnership does not have a direct association, but companies with partnership are likely to have greater levels of SHRM |
| Employee Turnover | <ul style="list-style-type: none"> ▶ SHRM associated with decreased employee turnover | <ul style="list-style-type: none"> ▶ Strategic HRM associated with decreased employee turnover (4% of variance, $p < .01$) ▶ SHRM also mediates relationship between partnership and employee turnover. |

Table 5.1 summarises the key findings from each of the four models of HPWS examined using multivariate regression analysis.

Findings from the analysis of panel data based on 48 companies that responded to the surveys both in 2004 and 2006 reveals a significant increase in SHRM since 2004. In the same period, labour productivity in these companies also increased by 11%, while investment in R&D as a percentage of turnover grew from 3.23% to 3.29%. Such

positive results serve to further corroborate the importance of HPWS and their association with important organisational outcomes.

The findings of this research have important implications for policy makers, managers, unions, employees, and researchers.

- Work organisation, management policies and management practices are strongly correlated with business performance

| MODEL 3 | MODEL 4 |
|---|--|
| <ul style="list-style-type: none"> ▶ Diversity and Equality Systems ▶ Flexible Work Systems | <ul style="list-style-type: none"> ▶ Strategic HRM ▶ Partnership ▶ Diversity and Equality Systems ▶ Flexible Work Systems |
| <ul style="list-style-type: none"> ▶ Diversity and Equality system accounted for 6.5% of variance in labour productivity ▶ No significant association between FWS and labour productivity | <ul style="list-style-type: none"> ▶ Four elements together (SHRM, Partnership, DES, FWS) account for 14.8% of variance in labour productivity. While only SHRM is significant, other three variables are in a positive direction. Total economic value in this sample equates to €44,399 per employee, or almost €12,000,000 in the median-sized company with 270 employees. |
| <ul style="list-style-type: none"> ▶ DES accounts for 7.9% of variance ($p < .01$) ▶ No significant association between FWS and workforce innovation | <ul style="list-style-type: none"> ▶ Four elements together (SHRM, Partnership, DES, FWS) account for 12.2% of variance in workforce innovation. SHRM and DES are significant, while Partnership and FWS affects in positive direction. Total economic value in this sample equates to €2,061 per employee, or €556,200 in the median-sized company with 270 employees. |
| <ul style="list-style-type: none"> ▶ DES accounts for 4.4% variance in employee turnover ($p < .01$) ▶ No significant association between FWS and employee turnover | <ul style="list-style-type: none"> ▶ Four elements together (SHRM, Partnership, DES, FWS) account for 7.7% of variance in employee turnover. Partnership is significant at 4% of variance explained. Total economic value in this sample equates to retention of up to 2 additional employees in the median-sized company. |

outcomes. Any public policy or company strategy that seeks to develop competitiveness in Irish industry through improved productivity, improved innovation or improved quality of working life must recognise the importance of organisational factors including management policies and practices.

- There is a strong imperative to develop a better capacity within Irish companies for high performance work systems that include strategic human resource management, partnership, diversity and equality systems, and flexible working.
- The advocacy case for best practice approaches to workplace partnership, diversity and equality, and flexible working has a strong economic argument as well as having a legislative and humanitarian basis. The economic argument puts forward clear business performance benefits for both employers and employees.
- In view of the synergistic effects on business performance of Strategic HRM, partnership and Diversity and Equality Systems, we propose that the current research agenda on high performance work systems and workplace factors underpinning competitiveness should be expanded to take a more comprehensive perspective on the issues that require examination.

Part 6

References

- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Ithaca, London: ILR Press.
- Cascio, W. F. 2006. *Managing human resources (7th Ed.)*. NY: McGraw-Hill.
- CIPD (2006). *Achieving Best Practice in Your Business: High Performance Work Practices: Linking Strategy and Skills to Performance Outcomes*, London: CIPD
- Datta, D.K., Guthrie, J.P. & Wright, P.M. (2005). HRM and labor productivity: Does industry matter? *Academy of Management Journal*, 48(1): 135-145.
- Dex, S. and Smith, C. (2002) *The Nature and Pattern of Family-friendly Policies in Britain*. Oxford: The Policy Press.
- Dillman, D. A. (2000). *Mail and Internet Surveys (2nd ed.)*. New York: John Wiley & Sons, Inc.
- Flood, P., Guthrie, J., Liu, W., and MacCurtain, S. (2005). High Performance Work Systems in Ireland: The Economic Case. National Centre for Partnership and Performance.
- Guthrie, J. P. (2001). "High Involvement Work Practices, Turnover and Productivity: Evidence from New Zealand." *Academy of Management Journal*, Vol. 44, pp. 180-190.
- Guthrie, J.P., Spell, C. & Nyamori, R. (2002). Correlates and consequences of high involvement management: The role of competitive strategy. *The International Journal of Human Resource Management*, 13(1): 183-197.
- Huselid, M. A. (1995). The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance. *Academy of Management Journal*, Vol. 38, pp. 635-672.
- International Labour Office (2006), *High Performance Work Research Project Case Studies*. Available online http://www.ilo.org/public/english/employment/skills/workplace/case/case_toc.htm
- Lambert, S. J. (2000). Added benefits: the link between work-life benefits and organisational citizenship behavior. *Academy of Management Journal*, 43(5), 801-815.
- MacDuffie, J. P. (1995). Human Resource Bundles and Manufacturing Performance: Organisational Logic and Flexible Production Systems in the World Auto Industry. *Industrial and Labor Relations Review*, Vol. 48, pp.197-221.
- Monks, K. (2007). The Business Impact of Equality and Diversity – The International Evidence. National Centre for Partnership and Performance / Equality Authority
- O'Connell, L. (2003). Achieving high performance: Partnership works – The international evidence. *Forum on the Workplace of the Future*, National Centre for Partnership Performance.
- O'Connell, P and Russell, H. (2005). *Equality at Work? - Workplace Equality Policies, Flexible Working Arrangements and the Quality of Work*. Dublin: The Equality Authority. <http://www.equality.ie/index.asp?locID=105&docID=269>
- Osterman, P. (1995). Work/family programs and the employment relationship. *Administrative Science Quarterly*, 40, 681-700.
- Sheppard, E., Clifton, T. and Kruse, D (1996) Flexible Work Hours and Productivity: Some Evidence from the Pharmaceutical Industry. *Industrial Relations*, Vol. 35, No. 1.
- Siegel, P. A., Post, C., Garden, C., Brockner, J., & Fishman, A. (2005). The moderating influence of procedural fairness on the relationship between work-life conflict and organisational commitment. *Journal of Applied Psychology*, 90(1), 13-24.
- Yasbek, P. (2004). *The business case for firm-level work-life balance policies: a review of the literature*. (Labour Market Policy Group, Department of Labour.) Wellington, NZ. Retrieved March 3, 2006 from <http://www.dol.govt.nz/publication-iew.asp?ID=191>.



THE EQUALITY AUTHORITY
AN tÚDARÁS COMHIONANNAIS

National Centre for
Partnership  Performance

Equality Research Series

ISBN 978-1-905628-72-8



9 781905 628728

The Equality Authority

2 Clonmel Street, Dublin 2

Public Information Centre:
LoCall 1890 245 545

Telephone 01 417 3333

Business queries 01 417 3336

Text phone 01 417 3385

Fax 01 417 3331

Email info@equality.ie

www.equality.ie

National Centre for Partnership and Performance

16 Parnell Square, Dublin 1

Telephone 01 814 6300

Fax 01 814 6301

Email info@ncpp.ie

www.ncpp.ie

www.workplacestrategy.ie