Chapter One
Inclusive Regional Learning?

Introduction

> The fruits of a rapidly growing economy based on innovations and hard work are patently obvious. Less obvious are the costs absorbed by individuals as they take on the attributes required to succeed … Sustaining the new economy means building a new set of social institutions to support it. (Carnoy 2002: x)

> 'It's important that people talk about these work-life challenges. There are a lot of women, like myself, who are just so busy getting on with it, just so busy just trying to stay quiet. This type of material, it needs to be fed back, people need to stop and think about it'. Software Business Development Manager, female, two young children, 3-day work week, IT MNC, Dublin

Over the last two decades, the shifting spatial and temporal boundaries between work, home and family that have accompanied the transition to the so-called 'new economy' have been hotly debated. As firms reorganise work in response to globalisation and new technological opportunities, 'flexibility' for many workers has come to mean increased workloads, less predictable work schedules and more unsocial work hours as firms demand they work longer and harder to minimise labour costs. Simultaneously, household life has also become more complex as female labourforce participation rates continue to grow and an ever-increasing proportion of workers are part of dual-earner households. These problems are reinforced by the decline of the extended family, increasing lone-parent households and greater eldercare responsibilities through increased life expectancy.

Work-Life Advantage: Sustaining Regional Learning and Innovation, First Edition. Al James.

Simultaneously, the neoliberal attack on social provisioning has transferred the burden of care down to the 'natural' level of home (Bakker and Gill 2003) where most women retain the major responsibility for the 'messy and fleshy' components of domestic and family life (Katz 2001; Crompton and Brockmann 2006). The overall result is a complex, gendered, multi-variable balancing act between the competing demands of paid work and responsibilities, commitments and life interests beyond the workplace, for which workers have only 'finite resources in terms of time and energy' (Cooper et al. 2001: 50).

In response, the desirability and means of achieving an appropriate 'work-life balance' (WLB) has received widespread attention from governments, managers, trade unions, academics and the media. At the individual level, WLB refers to 'the absence of unacceptable levels of conflict between work and non-work demands' (Greenblatt 2002: 179). While encompassing earlier family-friendly perspectives, the work-life balance term was intended to broaden the debate beyond working mothers to include all workers, and hence a wider diversity of personal life needs, interests and responsibilities such as religious attendance, sports, hobbies, and community and charity work. Alternative WLB monikers include work-life reconciliation, work-personal life integration, work-personal life harmonisation and work-life articulation. But whatever the label used, the societal and moral significance of the successful integration of paid work with other meaningful parts of life is profound. Study after study has documented how a lack of work-life balance can result in increased stress, deleterious effects on psychological and physical well-being, and increased family and marital tensions (e.g. Burchell et al. 1999, 2002; Frone et al. 1994; Lewis and Cooper 1999; Scase and Scales 1998). Moreover, given persistent gender variations in work-life stress as women make the greatest compromises to fit paid work around family (Moen 2003; McDowell et al. 2005), studies have also highlighted the importance of work-life provision by employers as a means for improving gender equity in market employment and household caring (Wise and Bond 2003; World Economic Forum 2005). The labour movement has also emphasised the social importance of WLB as a means of improving workers' quality of life and combating the increasing work pressures that are destabilising households and societal integration.

Employer-provided WLB arrangements are typically split across four categories, in terms of those providing workers with greater temporal flexibility of work, greater spatial flexibility of work, reduced total work hours and childcare assistance. But despite government efforts, evidence of progress in employers providing comprehensive suites of work-life arrangements remains uneven, resulting in continuing hardship for many workers and their families. Indeed, these problems have also been exacerbated in the aftermath of the 'global' economic downturn which created new gendered work-life demands through rapid and dramatic labour market change, heightened fears of job loss, increased workloads and understaffing (e.g. Fawcett Society 2009; TUC 2009). With employers keen to effect cost savings, workplace arrangements designed to help

reconcile workers' competing commitments around work, home and family have not been immune (Galinksy and Bond 2009). At the heart of this disjuncture, many scholars argue that employers are simply unlikely to implement meaningful WLB arrangements unless they can identify bottom-line economic advantages that arise from doing so (e.g. Healy 2004; Hyman and Summers 2004; Dex and Scheibl 1999; Dex and Smith 2002). Importantly, this 'WLB business case' also lies at the heart of UK, Irish and US government policy interventions in this area, with employer benefits from WLB provision widely touted by policy-makers as improved recruitment, retention, morale and productivity, and reduced stress, absenteeism and costs. Yet despite its popularity, there remains a relative dearth of empirical evidence to support these claims in practice (Beauregard and Henry 2009). In addition, 'few scholars have demonstrated the mechanisms through which such [WLB] policies function (or do not) to enhance firm performance' (Eaton 2003: 145–146).

Work-Life Advantage takes issue with this major knowledge gap and its negative social consequences for workers and their families, whose collective labours are ultimately responsible for (re)producing and sustaining some of the world's most high-profile high-tech regional economies. In so doing, the book develops a new analytical approach that connects the burgeoning research agenda on gendered labour geographies of work-life balance, social reproduction and care with an equally expansive research agenda on regional learning and innovation. Importantly, both agendas ultimately respond to the emergence of 'flexible' production processes in the wake of Fordism from the late 1970s onwards: one then exploring the territorial forms of flexible production (firm-centric focus), and the other, dramatic changes in the organisation of flexible paid work and working times as experienced by workers and their families (workerist focus). Yet despite these common roots, these two research agendas remain oddly disconnected. In seeking to bridge them, the hybrid analysis developed in this book answers four major research questions. What are the common, everyday experiences and outcomes of gendered work-life conflict amongst knowledge workers and their families in high-tech regional economies? What kinds of employer-provided WLB arrangements do different cohorts of knowledge workers find most useful in overcoming those conflicts? How does the uptake of these worker-preferred WLB arrangements enhance (vs. constrain) the kinds of intra-firm and cross-firm learning and innovation processes widely identified as enabling regional advantage? And do those WLB learning outcomes vary both within and between regional economies, particularly as a function of national welfare regimes? In so doing, the book responds to earlier calls by Lewis et al. (2003) to develop a 'dual agenda' that moves beyond either/or thinking to consider *both* business and social imperatives in pursuit of optimal work-life balance outcomes, set within a regional learning framework.

This analysis is developed through a case study of information technology (IT) workers and firms in Dublin, Ireland and Cambridge, UK prior to and after the

onset of the Great Recession in 2008. Crucially, both regions have figured prominently in regional learning and innovation studies to date, and are recognised as important European clusters of IT growth of interest to policy-makers elsewhere. Additionally, IT represents a knowledge-intensive industry at the vanguard of new working practices, in which firms compete to bring new products to market quickest and in which 'work' and 'life' are significantly blurred. Work-life balance has also come to assume a strong national significance in both Ireland and the UK, as a function of long average work hours relative to other EU member states. The book builds on 10 years of research, including an ESRC-funded research project (2006–2009): *The Impacts of Work-Life (Im)Balance on Innovation and Learning in Regional Economies* (RES-000-22-1574-A). Its critical analysis draws on a rich, multi-method evidence base comprising two regional surveys of IT employers (150 firms with combined local employment of 8,068 workers); 68 in-depth interviews with female and male IT workers, HR managers and labour organisers; and a WLB/labour mobility survey of 162 female IT workers (conducted through a number of women's IT networking organisations: Girl Geek Dinners, Women In Technology, WITS Ireland). It also draws on recessionary data from a second survey of 139 female IT workers conducted in December 2010.

This introductory chapter continues with some vivid examples of the daily realities of gendered conflicts between work, home and family that I have documented amongst IT workers in the UK and Irish contexts, with varying levels of employer support. These examples are juxtaposed against an increasingly abstract and firm-centric regional learning and innovation literature in which workers are treated 'not as social agents capable of making landscapes in their own right but, rather, as simply an aspect of capital' (Herod 2001: 22). Consequently, these studies have paid almost zero attention to how workers' gendered identities, varied responsibilities of care and personal-life interests beyond the workplace unavoidably shape their (non-)participation in the relational networks and communities of practice widely theorised as enabling regional learning and innovation.

This chapter also outlines the book's wider contribution to an enhanced interdisciplinary conversation between economic, labour and feminist geography, as part of an 'intellectual trading zone' (Barnes and Sheppard 2010) to develop richer, pluralistic understandings of how regional economies function – explored through the everyday work-lives of the engineers, scientists and technologists whose collective labours are ultimately responsible for (re)producing and sustaining them. The wider policy significance of this push for 'engaged pluralism' is also introduced as part of a holistic regional development agenda (Pike et al. 2006), which integrates mainstream economic concerns around competitiveness, growth and productivity with normative questions around labour market inclusion, gender equity, worker well-being and social reproduction (see also Rees 2000; Perrons 2001; Blake and Hanson 2005). The final section sets out the structure of the book on a chapter-by-chapter basis.

Unlearning Regional Learning? (Or why economic geographers need to get out more)

It is now widely accepted that fundamental changes within advanced capitalist economies since the 1970s herald a new era of capitalist economic development, whose geographical form is marked by a decisive reagglomeration of production and the rise of regions as the salient foci of wealth creation (Martin and Sunley 2003). Characteristic in their high rates of technological learning and innovation,[1] the workings of these 'industrial agglomerations' or 'clusters' have become a fixation for successive cohorts of economic geographers ever since. Newcomers to this literature are now confronted with an overwhelming plethora of territorial innovation models and concepts used to unpack the learning advantages of 'being there' (Gertler 2003). In a nutshell, this 'regional advantage' (Saxenian 1994) is understood as emergent from enhanced access to external information flows and knowledge spillovers between co-located firms, research organisations and public agencies; rooted in networks of repeated face-to-face interaction, the cross-firm mobility of talent and through processes of new firm formation and spin-off. Geographers have also analysed differences in firms' 'absorptive capacities' (Cohen and Levinthal 1990), understood as the distinctive sets of 'shared' socio-cultural norms and conventions upon which actors routinely draw to assimilate and apply externally derived information and knowledge within the firm to develop new products or services, new technological capabilities and/or new ways of organising production processes and service delivery.

Without doubt, this literature has yielded important insights into the socio-cultural foundations of regional economic advantage, fundamentally shaped the content and focus of regional economic development policies worldwide and become a major cornerstone of economic geography as a sub-discipline. Yet (as I explore in Chapter 2), the international research agenda around regional learning and innovation continues to suffer from a series of peculiar blindspots, emergent from: reductionist treatments of labour as passive inputs to firms' innovation activities; repeated analytical exclusions of female workers; and an overriding tendency to artificially divorce networks of knowledge production from extra-firm networks of social *re*production. And all this despite a high-profile call-to-arms over a decade ago:

> Neither of the NEGs [New Economic Geographies] pays any attention to questions in the immediate sense of the social division of labour between different kinds of paid work and between paid work and caring, or the wider sense of establishing sustainable regional development. Yet these dimensions are central to understanding the well-being of people within regions and therefore to regional or spatial development as a whole. (Perrons 2001: 211)

The societal significance of this peculiarly narrow focus of the regional learning agenda is poignantly illustrated in the following quotes, which juxtapose some

core tenets of the regional learning literature and its simplistic treatment of labour as 'knowledge agents' with personal testimonies of the everyday lived realities of doing knowledge work by IT workers in Dublin and Cambridge, two of Europe's leading high-tech clusters:

> The active units behind the formation of new knowledge are 'epistemic communities', simply defined as groups of knowledge-driven agents linked together by a common goal, a common cognitive framework and a shared understanding of their work. (Cohendet et al. 2014: 930)

> 'I'm the CEO of [IT company] and I'm also the mum of two kids. So as an employer, I'm thinking about how I want to create an environment for the people who work in my company, and also honour the commitments I have to my shareholders. Pretty much the stress comes from wanting to be successful at work, and also wanting to be successful as a mother, or wanting to be successful at a hobby, or wanting to do a lot of different things and having the conflict'. CEO, female, IT start-up, UK SE region

> Agglomeration does not ensure learning or determine its content. [Rather] the use and development of information in such a way that technological learning takes place has to do with the qualitative behaviours of agents in a network. (Storper 1997: 135)

> 'Your life is lived at a pace, it's lived at a speed … you actually don't know what it is to relax … so in 20 years' time what will we all have remembered of this period in our lives? What will the children remember? What will their experience of being a child in our home be? What will my personal experience be? What will [my husband]'s experience be? … There will be a lot more money in the bank, that's if we're still alive, if we're all still talking to each other, if, you know, the kids haven't gone off the rails because we haven't had time to sit down and talk because there hasn't been proper family conversation.' Software Business Development Manager, female, two young children, 3-day work week, MNC, Dublin

These examples of the daily realities of juggling work, home and family are drawn from workers who populate the same high-tech knowledge-intensive sectors and regional industrial clusters that have long formed the substantive focus of the regional learning literature. They raise important questions concerning the wider social impacts of current modes of time-based competition and high-tech regional development on workers and their families. But these questions remain unanswered (if indeed they are even posable at all) within an increasingly abstract regional learning and innovation literature which offers minimal engagement with the critical labour geographies agenda instead concerned 'to see the making of the economic geography of capitalism through the eyes of labour' (Herod 1997: 30; see also Castree 2007; Lier 2007; Coe and Lier 2011; Rutherford 2010). The danger, then, is that the negative social outcomes of routine innovation and learning activities – as experienced by workers and their families – are ignored. Worse still, copycat cluster policies based on emulating other economically

successful regions run the risk of reproducing those negative social outcomes and work-life conflicts elsewhere (see also Rees 2000).

The core argument here, then, is that we need to disrupt or 'unlearn' a series of widely held 'economic universals' (Gibson-Graham 2006) within the regional learning literature, rooted in genderless conceptions of 'human capital' as factor inputs to firms' knowledge production and exchange processes. These include the masculinist myth of the disembodied 'ideal worker' for whom work is primary and the demands of family and personal life insignificant; taken-for-granted assumptions regarding the rootedness of cross-firm knowledge spillovers in apparently 'boundaryless careers' and a singular commitment to advancing technological innovation above all else; and the (falsely) assumed autonomy of regional 'innovative milieux' from regional 'social *re*productive milieux'. The broader project is long overdue, motivated by the recognition that 'the full complexity of modern economies only becomes apparent when we move outside what are often still considered to be the "normal" territories of economic inquiry. Then a whole new world hoves into view' (Thrift and Olds 1996: 311).

Extending the Feminist/Labour/Economic Geography Trading Zone

Work-Life Advantage connects ongoing debates in economic geography around the regional foundations of learning and innovation to a high-profile set of feminist and labour debates around the shifting boundaries between work, home and family, and the stubborn resilience of gender inequalities in paid work and caring. In so doing, it responds to recent calls for a greater level of 'engaged pluralism' across multiple sub-disciplinary communities of practice and cultures of inquiry within human geography (Barnes and Sheppard 2010), through the development of new intellectual 'trading zones' based on mutual dialogue and productive conversation. In the process, scholars are encouraged to step outside their intellectual comfort zones and sub-disciplinary specialisms, trade ideas and theories around common problems, expose conversational partners to alternative viewpoints and critiques which prompt them to question their own position, and thereby catalyse new understandings and possibilities through give and take. Barnes and Sheppard contrast this with the 'fragmented pluralism' that they identify within contemporary economic geography rooted in 'a series of intellectual solitudes that has created isolation, producing monologues rather than conversation, and raising the question of how knowledge production should proceed' (2010: 193). The ultimate aim, then, is to develop genuinely new hybrid understandings of the complex geographies of economies, in a manner that moves away from the (re)production of economic geography 'versus' feminist geography as institutionally bounded sub-disciplines.

Crucially, it is important to recognise that a feminist/labour/economic geography trading zone *already* exists, albeit one that is partial and asymmetrical,

based on feminist scholars engaging with and recasting economic and labour theory (rather than 'mainstream' economic geographers reaching out from the other direction). This trading zone is evident in relation to major advances in our understanding of the relationship between patriarchy and capitalism (e.g. McDowell 1991; Gibson-Graham 1993); gendered labour market inequalities and exclusionary masculinist workplace cultures (e.g. McDowell 1997); female labour market precarity and feminised labour organising (Hardy 2010); gendering the financial crisis and feminised financialisation (e.g. McDowell 2010; Pollard 2012); and gendered divisions of 'hidden' household reproductive labour and 'life's work' (e.g. Massey 1997; Mitchell et al. 2004). This work has generated a series of fascinating new empirical, conceptual and theoretical insights, new socio-economic imaginaries, new vocabularies, new methodological innovations, and given new analytical voice to previously marginalised actors and places. Most notably, it has disrupted conventional masculinist conceptions of work as something that is done in the public sphere outside the home, for a wage, governed by an employment contract (compare with a broader conception of work done for love, without a wage, within the home, without an employment contract, typically by women (Massey 1997)). In so doing, feminist geographers have sought to reimagine economy and to challenge male economic 'universals' at the heart of commonly accepted theories of how we think economies and labour markets function.

However, whilst recognition of the significance of gender divisions – and associated body of feminist scholarship – has the potential to transform economic geography through new dialogues, key research agendas in economic geography remain limited in their analytical engagement with gendered social relations and the ways in which they are both partly constituted by and affect economic processes (McDowell 2000). Conspicuously, the regional learning and innovation agenda does not figure prominently within this feminist/economic geography pluralist project. Many feminist geographers steer well clear of what they perceive to be an increasingly abstract, self-referential and myopic regional learning and innovation literature narrowly focused on the minutiae of firms' productive processes at the expense of broader labour concerns of gender inequality and female worker empowerment. The aim in this book, then, is to extend that trading zone to the regional learning and innovation research agenda, in order to challenge its stubborn analytical silence on female worker agency in actively (re)producing regional geographies of learning, innovation and growth in practice. It is also concerned to analyse the variety of gendering and sexing practices which shape the different terms on which female and male workers – with a variety of caring responsibilities and personal life commitments – are able to engage in the relational networks of learning and communities of practice long theorised as underpinning regional advantage. This in ways that necessarily make those regional learning dynamics much more complex than we have previously recognised (and indeed been *willing* to recognise).

For my part over the last decade, stepping into the feminist/labour/economic geography trading zone has involved critical dialogue with colleagues with overlapping interests in gendered geographies of economies (albeit with different sub-disciplinary identities, backgrounds and training).[2] These conversations have focused around the workplace and labour market exclusions of female technologists; gender, motherhood and the economic marginalisation of women; femininities in white collar workplaces; gendered health geographies of work-life conflict; feminist 'neoliberalisms'; and on situating and disrupting 'universal' theories of economy. As part of this process, I have also presented and debated my evolving research ideas around gendered regional learning at multiple forums including: the ESRC workshop series on feminism and futurity; European seminars on regional learning and innovation; the Medical Research Council seminar series on gender and public health; feminist geographies and labour geographies sessions at the annual international conferences of the RGS-IBG, AAG and Nordic Geographers Meeting; the lifelong learning seminar series at the UK's Institute for Education; and 'straight' economic geography seminars. However, this process of constructive pluralistic dialogue did not always live up to the positive and encouraging portrayal laid out by Barnes and Sheppard. Whilst a common critique from regional learning scholars was that this work is 'not economic enough' (!), from some feminist scholars I was charged with 'missing the point', on the basis that a focus on 'the WLB business case' subverts the genuine moral and ethical claims for work-life balance and inclusive workplaces.

Similar criticisms also emerged as a product of the peer review process for the *Journal of Economic Geography*, *Gender, Place and Culture* and *Gender, Work and Organisation*, with reviewer comments typically centred within (and hence perpetuating) clearly defined sub-disciplinary domains (typically regional learning *or* feminist geography, but rarely both). In this way, the journal peer review process is exposed as part of the material research practices that reproduce disciplinary boundaries, in which research activities are validated, sub-disciplinary cultures learned and 'credentialed practitioners' promoted who can speak with authority within specified disciplinary communities of practice (Schoenberger 2001: 370; Miller and Fox 2001). This is reinforced by increasingly strict journal word count limits which too often preclude wide-ranging, integrative literature reviews drawn from multiple research agendas. This sub-disciplinary boundedness was also evident in the comments of one reviewer of this book proposal, that 'the mainstream economic geographers interested in questions of regional innovation and competitiveness will not read the book', whilst also preaching to the choir in feminist geography *already* interested in questions of work-life and labour. The point of this book, then, is to bring these multiple versions of earlier papers together and to engage with a broader audience of human geographers on their own terms – this through a much deeper and integrative analysis than has previously been possible through journal publication. The luxury of 95,000 words certainly helps, coupled with a diverse editorial review team of eight colleagues drawn from multiple

sub-disciplinary backgrounds across human geography who were willing to take the chance. This remains a distinctive and attractive feature of the RGS-IBG book series.

Advancing the Holistic Regional Development Agenda

> Who pays for the kids? This is the short version of a larger question: How are the costs of caring for ourselves, our children, and other dependents distributed amongst members of society? These costs are largely paid by women, both inside and outside the money economy. And they seem to be increasing. (Folbre 1994: i)

The wider policy relevance of the analysis developed in this book stems from its empirical and conceptual contributions to a growing agenda around 'holistic regional development' (Pike et al. 2006). This project is concerned with expanding the narrow analytical focus of regional studies beyond economistic – or 'dessicated' (Morgan 2004) – indicators of competitiveness, growth and productivity, also to include gender equity, quality of life and well-being amongst workers and their families. A core challenge involves identifying the *practical* and *organisational* means for promoting more socially inclusive forms of growth, in a manner that challenges the labour market marginalisation of relatively excluded, disadvantaged and vulnerable groups, in pursuit of more evenly shared prosperity. Indeed, these concerns have grown particularly in the wake of the financial crisis, economic downturn and subsequent period of austerity, with policy interest in socially inclusive growth also increasingly evident amongst national and international governments and think tanks (e.g. European Commission 2010a; OECD 2014). In sum, this international agenda seeks to foster:

> Long-term sustainable economic growth that creates economic opportunity in the form of decent and productive employment … that may be accessed by all of society regardless of economic status, gender or ethnicity, thus enabling all of society to both directly benefit from and participate in economic activity and future growth. (Rodríguez-Pose and Wilkie 2015: 13)

As such, this progressive agenda positions the twin policy ideals of economic prosperity and social inclusion as not simply potentially reconcilable, but argues that social inequity is simply bad for economic growth (Benner and Pastor 2015). Accordingly, it emphasises the importance of enabling increased labourforce participation and labour market opportunity amongst marginalised groups, on the basis that sustained growth requires a diverse employment base. Overlapping concepts include: good growth (PWC and Demos 2013), just growth (Benner and Pastor 2012) and equitable economic growth (Rodríguez-Pose and Wilkie 2015). Regardless of the label used, the consensus is that 'other forms of growth'

are possible (and needed), and that the traditional priority of first 'fixing the economy' as a prelude to and platform for securing social well-being is insufficient (Pike et al. 2006: 256).

I argue that the mainstream regional learning agenda – with its general lack of engagement with questions of gender equity, female worker agency, social well-being and the negative work-life outcomes of high-tech regional development – runs the risk of becoming marginalised from (indeed irrelevant to) an ascendant international policy agenda around socially inclusive growth. In this way, it is imperative that regional learning scholars respond to growing calls for economic geographers to develop more critical, heterodox and pluralist analyses of *how* and *where* economies function, *for whom*, and *to what ends* (Christophers et al. 2016). Previous work has explored how the pursuit of more socially inclusive modes of economic growth is dependent upon concerted action and the development of supportive forms of governance and social regulation at the local, urban, national and supra-national scales (Benner and Pastor 2012, 2015). However, less attention has been paid within inclusive growth debates to employers as institutions that differently govern the work-lives and well-being of workers and their families. And this despite the prioritization of employment accessibility over *ex post* redistribution as a means for reconciling potential tensions between economic growth and social equity, on the basis that 'increased labour force participation will support and perhaps even act as a catalyst for continued growth' (Rodríguez-Pose and Wilkie 2015: 1). Key questions remain, therefore, around the potential role of different forms of work-life balance provision by employers as viable levers for promoting socially inclusive growth and increasingly feminised labour markets in high-tech regional economies. Specifically, what is the scope for enabling *more* rather than less *accessible* forms of employment for workers with significant caring responsibilities, through the provision of 'alternative' or 'non-standard' working arrangements designed to help workers reconcile ongoing conflicts between paid work, home and family that would otherwise force them to quit?[3] Herein lies the wider relevance of the expanded regional learning agenda and intellectual trading zone outlined above, concerned to identify gendered social inequities in the work-life experiences of similarly qualified workers in doing regional learning and innovation in practice, and to consider business, labour and social imperatives in pursuit of optimal work-life balance outcomes.

Work-Life Advantage: Building the Argument

The original analysis developed over the next seven chapters of this book brings the everyday labour struggles of technology workers and their families to combine work, home and family to the fore of an expanded regional learning agenda. In the next chapter, I provide a critical introduction to the expansive regional learning and innovation research literature, through which geographers have so

far advanced our theoretical understandings of (masculinist) regional advantage. These intellectual contributions are illustrated through a range of influential studies, yet whose contributions are also striking in their firm-centrism, gender myopia and/or rootedness in the myth of the disembodied 'ideal worker' (Williams 2000) for whom work is primary, time available to work unlimited, and the demands of family and personal life insignificant. In seeking to disrupt these economic orthodoxies, the chapter documents a growing body of alternative geographical research that builds on Massey's classic (1995) study of female technologists in masculinised 'high-tech monasteries' to explore female worker agency, female-dedicated cross-firm learning infrastructures and feminised high-tech communities of practice. This alongside the increasing numbers of 'Silicon Cowboys' who are hanging up their spurs and undertaking significant caring responsibilities outside of paid work. These changes in turn underscore the crucial significance of the holistic regional development agenda, with its attendant focus on work-life balance, care, quality of life and gender inclusion as vital (albeit strangely neglected) factors for reproducing regional learning and innovation in practice.

The expansive work-life balance research agenda forms the second major research stream which frames this monograph, and this is introduced in Chapter 3. Here, I explain the phenomenal rise of the WLB agenda over the last two decades; outline multiple and competing work-life terminologies; and explore the labour market, health and family consequences of work-life conflict. The chapter also examines the increasing salience, policy appeal and limits to the WLB 'business case', juxtaposed against its major conceptual/methodological limits namely: (i) prioritisation of employer needs at the expense of workers and their families; (ii) limited focus on output measures of firm performance, rather than sources of long-term sustainable competitive advantage (learning and innovation capacities); and (iii) atomisation of firms from the regional industrial systems of which they form part. These three critiques motivate the alternative regional learning/WLB 'mutual gains' approach developed in the subsequent chapters of the book.

Chapter 4 contextualises the two regional case studies (Dublin and Cambridge) and explores the methodological practicalities of researching regional geographies of work-life balance and learning in practice. The book draws on 10 years of research, including two major periods of fieldwork undertaken with IT workers and firms in Dublin, Ireland and Cambridge, UK prior to (2006–2008) and subsequent to (2010) the onset of the economic downturn. The multi-method data collection and analysis strategies are outlined, with the latter connecting managers' and workers' perceptions and lived experiences of the learning benefits of WLB provision within their respective firms, with measured changes in the performance of those same firms across multiple metrics over the same time period.

Based on these data, Chapter 5 explores the multiple negative outcomes of work-life conflict experienced by IT workers and their families – this as they

seek to grapple with the wider social consequences of time-based competition, in ways previously undocumented in regional learning analyses. In addition to compromising workers' health, well-being and quality of life, the analysis also identifies negative outcomes for firm competitiveness through employees underperforming through stress and a perceived lack of employer support; female workers often taking compromise jobs which reduce work strain but ultimately under-utilise their skill-sets, knowledge and experience; and some women quitting IT employment altogether. In response to those difficulties, the chapter also explores IT workers' preferred WLB arrangements to reduce those tensions (mutual gains Part I), compared with the kinds of WLB arrangements most commonly provided by their IT employers. Chapter 5 also identifies a series of varied changes in IT workers' experiences of work-life conflict through the recession, set against wider claims that, in the wake of the economic downturn and job losses, calls for enhancing work-life provision may seem a 'little indulgent' (EHRC 2009: 6).

Chapter 6 explores how, by making available the kinds of WLB arrangements identified by workers in Chapter 5 as offering meaningful reductions in gendered work-life conflicts, employers can also enhance capacities for learning and innovation within the firm (mutual gains Part II). Over half the managers responding to the employer survey (N = 150) indicated 'an improved corporate environment for learning and creativity' as a result of their total bundles of WLB provision, perceptions that were also consistent with measured improvements in firm performance over the same timeframe. Chapter 6 delineates three sets of causal mechanisms which underpin these patterns, centred on: (i) increased self-determination of temporal pattern and spatial location of work; (ii) increased work team heterogeneity and enhanced repertoires of competencies and networks of external contacts; and (iii) increased sustainability of learning through worker engagement. Chapter 6 also identifies some constraints on firms' learning capacities that arise from non-traditional working arrangements (e.g. around practices of agile software development), and critically examines a variety of homeworking and communication technologies used by some firms to reduce them. However, for some workers these technologies are also revealed to be a double-edged sword, blurring further the spatial and temporal boundaries between work and home and generating new work-life conflicts.

In Chapter 7 I extend the intra-firm analysis developed in Chapter 6 to explore the connections between work-life balance and *cross-firm* learning networks through worker (im)mobility. The analysis reveals a darker side to the kinds of worker mobility so widely celebrated in the regional learning literature – and in regional development policy – as accelerating the transfer of embodied knowledge, expertise and technological capabilities between firms. In sum, these patterns of mobility and knowledge spillovers are also premised on gendered dissatisfactions with work-life conflict; unequal divisions of household labour; uneven and often inadequate employer WLB provision (formal arrangements and informal support

practices); and worker concerns that stretch far beyond 'technological innovation' around issues of care and improved quality of life. Enhanced WLB provision increases firms' abilities to attract talented workers relative to firms with lower levels of provision. But the analysis also shows how work-life concerns *constrain* cross-firm job-to-job mobility and knowledge spillovers, as some female IT workers seek to avoid the potentially disruptive impacts of a new job on delicately balanced daily trajectories between different urban sites of paid work and social reproductive care. In so doing, the analysis questions the widely espoused, firm-centric, regional learning mantra that worker mobility is always and everywhere a good thing.

In closing the book, Chapter 8 returns to the two major research literatures whose limitations framed the alternative analysis developed here, and summarises its core arguments, major findings, and wider intellectual and policy significance. It highlights the particular irony of employers rolling back work-life provision in pursuit of short-term cost savings (see e.g. Kossek et al. 2011), which not only perpetuates significant hardships for workers and their families, but also risks removing the very same 'alternative' working arrangements which this book has identified as positively underpinning firms' learning and innovative capacities, and long-term sustainable competitive advantage. Chapter 8 also identifies several future research possibilities which emerge from this research. They include shifting the dominant focus of the WLB literature beyond how best to flexibilise work and employment around an assumed female majority responsibility for childcare, to explore how best to support men who are 'going against the grain' (Ranson 2010) in assuming a greater proportion of childcare. Likewise, extending the analysis to workers and firms in the Global South, in order that we begin to provincialise 'universal' notions of the WLB metaphor which originated in the Western context (Lewis et al. 2007), and thereby give voice to a wider variety of situated WLB experiences and knowledges. In so doing, I am keen to encourage and enable younger colleagues to extend this exciting research agenda.

Notes

1 Learning is understood as 'the process by which firms, regions, industries and countries absorb information, develop knowledge, and use this information and knowledge to improve their economic performance'; and innovation as 'new creations of economic significance of various types, including new products and services, new technological capacities, and new ways of organizing production processes and the delivery of services' (Benner 2003: 1811).

2 These conversation partners included: Mia Gray around the workplace and labour market exclusions of female technologists; Cathy McIlwaine around gender, motherhood and the economic marginalisation of women; Kim England on femininities in white collar workplaces; Carol Emslie and Kate Hunt on gendered health

geographies of work-life conflict; Wendy Larner and Erica Pani on feminist 'neoliberalisms'; and Jane Pollard and Kavita Datta on the need to situate and disrupt 'universal' theories of economy.

3 Following Gibson-Graham (2006), the potential dangers of using the terms alternative or non-standard to describe working arrangements are that this terminology 'subordinates what it designates to the "mainstream"… [and] affirms the dominant by identifying the deviant' (p. xxii). Usefully, however, it also signals that the status quo is problematic, and that there is a push to change things, to pose a challenge to 'mainstream' work norms.