



# Not Just Arms and Legs: The Impact of Student Working on Local Labour Markets

**Damian Whittard**

*University of the West of England (UWE), Bristol*

**Hilary Drew**

*University of the West of England (UWE), Bristol*

**Felix Ritchie**

*University of the West of England (UWE), Bristol*

***Economics Working Paper Series***

1905

# Not Just Arms and Legs: The Impact of Student Working on Local Labour Markets

Damian Whittard<sup>1</sup>, Hilary Drew<sup>2</sup> and Felix Ritchie<sup>1</sup>

<sup>1</sup> Bristol Centre for Economics and Finance, University of the West of England

<sup>2</sup> Human Resources, Work and Employment Group, University of the West of England

## Abstract

The growth in HE student employment implies increasing competition for jobs in the low-wage labour market. Economic theory suggests that higher-educated, more flexible students have an advantage over the non-student local labour force competing for the same jobs. However human resource theory, placing more emphasis on finding roles for heterogeneous staff, suggests that the student and non-student labour forces may be complimentary and allow firms to fill job niches.

This paper discusses the findings of a qualitative study of employers in South-West of England and South Wales. In contrast to much of the economic literature, it finds more support for the ‘complementarity’ hypotheses: student workers often fill ‘residual’ roles for both large and small firms. These effects depend on the local supporting infrastructure, labour market conditions and the financial profiles of students attending the local university.

The study also suggest some long-term structural changes. The availability of the student workforce, combined with technological development, may lead to jobs being re-designed to meet the students’ ‘frame of reference’ – potentially a form of indirect displacement for the local non-student labour force. We also note that managers’ ‘frame of reference’ are changing. Managers who themselves worked as students engage more actively with the student workforce; in the longer term, this may also lead to the redesign of part-time jobs, linking them more formally to career structures.

In order to better understand this complex and changing landscape, we draw our findings together to develop a new model framework that allows both a static and dynamic analysis of the low wage labour market.

**Corresponding author:** Damian Whittard, Bristol Centre for Economics and Finance, Bristol Business School, University of the West of England, Coldharbour Lane, Bristol BS16 1QY. Email [damian2.whittard@uwe.ac.uk](mailto:damian2.whittard@uwe.ac.uk).

## 1. Introduction

Recent years have seen an increase of those in full-time education working part-time, both in terms of numbers and hours worked (Lucas and Ralston, 1997; Roberts and Li, 2017). Over the period 1992-

2002 the number of students aged 16-24 in full-time education and working increased from 685,000 to over a million, before settling around the 900,000 mark in recent years; students now represent 29.1% of the 18-24 workforce (Office for National Statistics, 2019). This growth in the supply of flexible, temporary, part-time workers has the potential for significant impacts on the economy, business structures and local labour markets.

The most obvious impact may be on those non-student workers who compete with students for the same jobs. Students are likely to be employed in seasonal work and within the hospitality and retail sectors (Canny, 2002; Curtis, 2007; Curtis and Lucas, 2001). These are typically low-skilled, low status roles, filled on a part-time and temporary basis. Ex-ante, one would expect students to be a more appealing to employers than non-students: they are, by definition, better educated on average than the non-student workforce, and may be more willing to accept low-paid work as they know that it is a temporary stage in their career. Students may also be easier to manage: they may be young, relatively inexperienced, and less willing to complain about a temporary job. If this is the case, then the growing student labour force is potentially creating an underclass of poorly-qualified workers.

Student working may also influence the type of jobs that are available. As the supply of workers looking for temporary low-skilled jobs increases, employers may, in the long-term, change working practices to accommodate this flexible low-cost workforce. This in turn is likely to affect productivity, and affects the opportunities for non-students to progress up the career ladder.

The assumption that student and non-student workforces compete for the same jobs might be misleading. While economists tend to emphasise the possibility of substitution between workers for the same job, researchers in other disciplines, for example, business management and human resource management (HRM), tend to emphasise the value of differentiated workers for meeting different workforce needs.

These effects might be mitigated by local differences. Students tend to live and work in large, growing urban environments; indeed, the growth may be partially caused by the increase in demand as a result of student numbers, implying that the supply of and demand for workers balances out to some extent. Nevertheless, changes in the structure of jobs caused by more student working may spill over into non-student localities.

Given the policy interest in local area development, it seems surprising that the potential for such shifts in structure has gone largely unrecognised in the academic literature. Most of the studies of UK student working are from 1990 – 2010. The most recent substantive analysis of this sector, Green et al (2016), uses data from 2009-2010. Outside the UK, the literature on student working is similarly

sparse, with exceptions being research conducted in Germany (Winkler, 2009), the Netherlands (Hofman and Steijn, 2003; Van der Meer and Wielers, 2001) and China (Tam Oi and Morrison, 2005).

This paper presents findings from interviews with employers in South Wales and South-West England, which form the basis of wider study of three low-wage job sectors (hospitality, retail and call centres) with high volumes of student and non-student workers. The project focuses on Bristol and Cardiff, two areas with very different characteristics, to contrast and generalise findings. The study aims to go some way to address gaps in the academic literature around student and non-student work by looking at its impact on employability, how employers perceive this relationship and the part that the students play in workforce planning. The research questions addressed by the study are as follows:

- To what extent does student employment create a displacement effect within local labour markets?
- How do employers view student employment?
- Does student employment result in de-skilling and/or restructuring of low-paid jobs?
- Are there any discernible spatial effects of student employment?

This study finds that the dominant effect appears to be complementarity between the student and non-student workforce, rather than competition. Students and non-students have different characteristics, both positive and negative, and employers are effective at exploiting those, treating students as the 'residual' workforce (that is, filling a gap), but in quite different ways. There is no empirical evidence that student workers have an advantage in applying for higher-skilled positions, but student working contributing to a societal change in the way jobs are organised cannot be ruled out.

Building on the work of Munro et al. (2009) and Green et al., (2016), this paper proposes a dynamic model of low-skilled/low-wage employment. This provides a lens to explore the conditions under which student part-time labour is more likely to be complimentary or in competition to the local economically active population.

The next section draws on the academic literature on student working and its impact on the local labour market, from both an economic and management perspective. This section also presents some theoretical lenses to understand the impact of student working and to establish labour market displacement. Section 3 outlines the data collection methods and interpretation and Section 4 presents results. Section 5 presents a discussion of their implications and presents the New Dynamic Model of the Low-wage Labour Market. Finally, section 5 provides a conclusion to the paper.

## 2. Background

Labour market participation amongst university students has continued to increase over the past three decades. This section explores a number of push and pull factors, which have contributed to this growth in student employment, before attempting to put forward some theoretical perspectives for understanding the impact of these factors on student and non-student employment and local labour markets.

### 2.1 Push and pull factors

#### 2.1.1 Changing HE sector

Transformation within the UK HE sector can be traced back to the expansion of the university sector in 1992 (Lucas and Ralston, 1997), kick-starting a revolution in mass higher education, with post 1992 universities leading the way in widening participation for students from middle England, working class areas and ethnic minorities<sup>1</sup>. There was a growing sense that it was unfair for the state to subsidise these young people, who individually would benefit from higher wages (Barr, 2001), thus, to accommodate this growth, the cost of university has shifted from the state to the individual<sup>2</sup>.

Many studies have looked at the motivation behind student employment, building on 1990s studies (see Hodgson and Spours, 2001) around economic necessity after 1992. There is consensus in the literature that student engagement in the labour market is mainly driven by financial pressures (Callander and Kempson, 1996; Curtis and Lucas, 2001; Curtis and Williams, 2002; Forde et al., 1995; Hesketh, 1996; Lashley, 2005; Lucas and Lammont, 1998; Kelly, 1999; Manthei and Gilmore; 2005; Sorensen and Winn, 1993). There is empirical evidence that students who work, need the money to pay for basic essentials, such as food, rent, bills, and books, and that most would stop working if they could afford to do so (CHERI, 2005; Curtis and Williams, 2002; Smith and Taylor, 1999). Having said this, it is important to note that students are not a homogeneous group and socio-economic and cultural differences exist which explain students' motives and patterns of work. Students from poorer backgrounds are much more likely to work than are those from middle-class households, as they are far less likely to obtain money from parents to avoid the need to work (CHERI, 2005; Humphrey, 2006; Moreau and Leathwood, 2006; UNITE, 2007).

---

<sup>1</sup> It is estimated that 49% of young people will participate in Higher Education by age 30 (Department for Education, 2017).

<sup>2</sup> Initially, there was a shift to student loans from maintenance grants, followed by charging of course fees – initially £1,000 in 1998, before raising to £3,000 in 2006 and £9,000 in 2012. In England the cap on tuition fees is currently £9,250.

The increase in young people entering university has inevitably increased competition for high quality graduate jobs, leading to students actively working in order to enhance skill-sets and gain experience (Hall, 2010). Many authors have examined how student working has become a distinct feature of the HE sector, in terms of employability and graduate employment outcomes (see, for example, Qenani et al., 2014; Rothwell et al., 2008; Wan et al., 2014; Weiss et al., 2014). Watts and Pickering (2000) reported that students acquire personal transferable skills, enhanced employability and increased confidence, while Lucas and Lammont, (1998) reported that work experience helped students to develop their softer skills such as team working, communication, customer care and practical skills.

### *2.1.2 Changing UK labour markets, industrial and organisational structures*

Academics have discussed the changing structure of the jobs market and the push for greater flexibility for decades. For example, business management literature has long recognised the importance of internal organisational structure and its implications for labour market practices. These changes have been accelerated by the shift towards services from manufacturing<sup>3</sup> (Wilson et al., 2014) and a corresponding increase in demand for non-standard employment (Maguire and Maguire, 1997).

Whereas the post-2008 recession recovery has been sluggish, in terms of economic output and productivity, growth in the labour market has been strong<sup>4</sup>. The tightening of the labour market has meant businesses have needed to find new and growing sources of flexible labour; an effect, which may be further compounded with the UK's impending exit from the European Union (Brexit) and the potential loss of one of the UK's traditional sources of low paid flexible workers – EU migrants.

The evidence is that students can provide the employers with a more flexible workforce (Lucas and Ralston, 1996). This is particularly true for part-time service sector, especially customer-facing, employment (Krahn and Lowe, 1999; Felsted et al. 1999). Work by Curtis and Lucas (2001) provides support for Atkinson's seminal (1984) model on the flexible firm, where they evidence how students meet employer needs of numerical flexibility through willingness to work at short notice, often acting as an 'on-tap workforce'. Curtis and Lucas (2001) also note that students work well within specific industries where age profile is important, more important than educational background, such as retail, hotels and restaurants. Van Klaveren, et al., (2009) suggests that the growth of the IT sector

---

<sup>3</sup> Between 1997 and 2018 service sector employment grew from 72% of the labour force to 80% (ONS, 2019).

<sup>4</sup> In March 2019, the UK recorded the record number of persons in employment (ONS, 2019).

has also led to greater opportunities for students as employers also perceive students as more IT literate and prefer student employment in order to encourage flexibility.

There is some evidence of a polarisation in occupational structures within the service sector, demonstrated by growth in the extremes of relatively low-skilled and high-skilled services, with strong growth at the lower skill end of the market (Goos and Manning, 2007). Green et al. (2016) report that an increase in part-time, low-skilled (services) work since recession has been partly fuelled by an influx of students, as organisations demand increased numerical, functional and financial flexibility.

Labour market deregulation, which is often characterised by fragmentation, insecurity and instability (Green et al., 2016; Standing, 2012), has driven the move towards greater flexibility, and, hence, growth in student employment<sup>5</sup>. The most extreme excesses of this drive towards flexibility can be seen in the growth of zero hour contracts and employment in the 'gig economy' – types of work which can suit the short-term focus of student employment.

Students may be perceived to represent short-term employment solutions for employers, as students are usually only around for the length of the programme and potentially just during term-time. Within the limited life of student employment, however, there is also evidence of stability of employment at the individual level. For example, in a study of full-time hospitality students, Barron and Anastasiadou (2009) reported that students working part-time on average had been with their current employer for 14 months.

This perceived short-termism, however, can lead to the segmentation of the low pay labour market because it can be more costly to employ a student for certain roles (e.g. those requiring high level of initial training and/or certification), leading to potential for students to be restricted to low level jobs. Potentially this is compounded further with the bias employers show to investing in training in full-time employees as opposed to part-time (Arulampalam and Booth, 1998). For many employers, however, in the drive towards agile and flexible delivery, this short-termism is generally considered to be of benefit to the employers in their pursuit of numerical flexibility (Curtis and Lucas, 2001).

Linked to the notion of short-termism is what the literature refers to as a miss-allocation of the labour resource, known as over-education. This may occur as a result of both students and graduates taking jobs for which their skills and knowledge are under-utilised (Norlund, 2018). Authors argue that this misuse of resources can last for many years into the working lives of some graduates, particularly in

---

<sup>5</sup> For example, the changing legislation on retail opening times has increased the need for nonstandard contracts that have suited students (Canny, 2002).

certain sectors, while others may never recover from this initial miss-allocation (Norlund, 2018; Thurow 1976; Baert, Cockx, and Verhaest, 2013; Büchel and Mertens, 2007).

### *2.1.3 Student characteristics*

Students as a source of labour may have grown to a sufficient scale to have significant effects of their own. These may be direct and indirect and they may have both positive and negative aspects. The possibility that student work has wider labour-market consequences is probably heightened by the fact that it is concentrated in selected industries and occupations, and that these tend to be 'entry-level' positions (Munro, 2009).

The main advantage students have over the local low-wage population is their schooling as, by definition, they are likely to be better educated than the local low pay workforce. The evidence is, however, that for low-skilled jobs, employers do not place much emphasis on intelligence, but place most emphasis on soft skills – attitudes rather than formal qualifications (Hasluck, 2011; Newton et al., 2005). This should place local job seekers at an advantage.

However, as well as employers perceiving students as intelligent, there is also evidence that they also perceive them as possessing well developed soft skills. Students are viewed by employers as good communicators, easy to train and willing to follow instructions, as well as displaying a strong work ethic, and dependability (Lamont and Lucas, 1999; Lucas and Ralston, 1997). Curtis and Lucas (2001) support these findings, arguing that students can offer a high quality service to customers due to being better educated, more conscientious and articulate.

There is also some evidence that employers see students as more engaged. Canney (2002) reports that students may be preferred to unqualified young people as they are regarded as 'opting out' and showing 'lack of commitment' because they had terminated their education. There is also some evidence that particular groups demonstrate different levels of engagement with the labour market. For example, Barron and Anastasiadou (2009) reported students from Eastern European backgrounds worked considerably longer hours than home students.

Conversely, employers may also perceive students to lack engagement and motivation, be unreliable, less loyal, naïve and transient. Curtis and Lucas (2001) reported that the high volume of student turnover caused problems for employer. Other researchers, however, provide contradictory evidence and report that students are generally long serving and experienced, resulting from the fact that many students already have part-time work experience prior to starting university (Curtis and Lucas, 2001; Ford et al. 1995).



Students are perceived to have low power in the workplace. Curtis and Lucas (2001) suggest that employers demand for students is linked to their desire to control the workforce, for example, through lower wage costs (Walsh, 1990) and a reduction in employee benefits (McMullen, 1995), when compared to full-time, permanent employees. Van Klavern et al. (2009) found evidence of recurrent low pay workers complaining about unilateral decisions by employers regarding working times and days off. Lucas (1997) reported that employers use both frequency and quality of future work to exert control over the students.

From the HRM canon, Legge (1998) highlights that students' proclivity to part-time work is important in understanding the power dynamics, as individuals who are unable to work full-time are "hardly a free agent or a powerful bargainer in the labour market" (p.288). Similarly, Curtis and Lucas (2001) noted that "[students] tolerate low pay and exploitative employers as part of the price of their degree" (p.51). However, Curtis and Lucas (2001) report conflict arose when employers' needs took precedence and employers put pressure on students to work, even when they should be in class. Lucas and Lammont (1998) and Lamont and Lucas (1999), however, challenge this notion of students as passive agents, reporting evidence of students challenging unfair managerial behaviour.

#### *2.1.4 Spatial/ industrial and occupational effects of students*

Students also have very distinctive labour market characteristics in as much as they are highly concentrated in particular sectors and types of occupations (Munro et al., 2009). Moreover, as students tend to live and work in close proximity to their university (Rugg et al, 2000), there is likely to be significant impacts in certain spatial areas and particular 'young' industries.

Student labour is particularly interesting at a spatial level because it is concentrated, uneven and has locally distinctive impacts (Green et al., 2016). There is evidence that students cluster in local areas and show a high degree of segregation from local populations (Munro et al., 2009). Smith's important contributions (Smith, 2005; Universities UK, 2006) have led to the recognition of the many facets of what he has termed 'studentification', whereby an expanding population of students causes significant change to local areas, both positive and negative (social, cultural, physical and economic change). Macintyre's (2003) work on 'new urbanism' reports that students can help create lively, mixed-community neighbourhoods with an attractive mix of uses, high levels of local services, and vibrant cultural activities.

However, high concentrations of students are generally depicted as having strongly negative consequences for neighbourhoods (Allison, 2006). Munro et al. (2009) point to student turnover being sufficiently high to cause significant neighbourhood and community disruption in major cities.

Hubbard (2006) suggests that students are frequently seen by locals as unwelcome outsiders, to the extent that there are wide campaigns to halt their encroachment in residential areas.

## 2.2 Impacts on local labour markets and labour market displacement

The combined pull factors of organisational and industrial change, with the push factors of growth in numbers, increasing diversity and rising costs of Higher Education outlined above, have all been clearly significant in driving the growth of student part-time employment. Similarly, it has been seen that the perceived characteristics of the student population go some way to explain why they may be favoured by employers, as well as why they may actively seek work in specific sectors associated with low pay. What is less clear is the effect that this growth has had on the local economically active population, particularly those at the low-wage end of the distribution. This sub-section attempts to address these questions.

### 2.2.1 Labour market displacement

According to Human Capital Theory (Becker 1993), the higher the educational level, the greater likelihood of labour market establishment and social mobility (Norlund, 2018). Through this lens, employer preferences and differentials in wage/working conditions that are not accounted for in differences in education alone may be understood. For example, student labour may be seen as preferable to local employment, due to higher levels of education, but also in terms of other characteristics such as employers seeing them as more motivated and having better communication skills.

One hypothesis is that students displace local workers, causing challenges around labour market participation for these disadvantaged groups and potentially creating a 'local underclass' (Devlin et al., 2014). Canny (2002) argues that there may be evidence of students crowding out non-student workers from some segments of the labour market where previously they would have secured employment. As such, it has been suggested that the disadvantage felt by those with no or low qualifications has made them hostile to an incoming labour force taking these role (Green et al., 2016).

One such model that goes some way to explaining this direct displacement is Thurow 's (1976) Job Competition Model, particularly in times of recession. Within this model it is easy to see how a student, or graduate, will directly replace low-skilled workers if there is a scarcity of jobs overall, even if there is a relative abundance of low-wage jobs. Norlund (2018) provides empirical support for this model. Using Swedish micro-level longitudinal data to follow graduates from 2003 to 2012, Norlund (2018) concluded that, to an increasing extent, when graduates had low-wage jobs, the unskilled

were increasingly represented in the unemployment statistics, despite the growth of low-wage jobs in recent years.

Seen through the lens of Thurow's model, growth in student employment suggests unqualified locals will find it increasingly difficult to gain entry into the labour market (Furlong and Cartmel, 1997; Wyn and White, 1997), if competing for smaller number of full-time jobs.

### *2.2.2 Indirect displacement*

Munro et al. (2009) discuss the wider impacts of student labour, including the potential indirect displacement effects from entry level jobs, of increasing the use of flexible working practices. Munro et al. (2009) perceive a marked difference between students and the local population's experience of the labour market, as students are able to find work if they want to, albeit this being marginally easier in buoyant labour markets.

Green et al.'s recent work (2016) points to increasing 'indirect' displacement of local labour with a growing and better educated student labour force. They suggest that indirect displacement occurs through the compartmentalising of the labour market as students are able to influence employers to shape employment opportunities in line with their 'frames of reference'<sup>6</sup>. These new flexible roles, shaped by short-term aims brought about by increased financial pressures, are at the expense of the longer-term aspirations of local workers.

As well as current 'indirect' displacement, student employment can lead to 'career displacement'. There is evidence that employers often used student part-time employment as a mechanism by employers to screen for future managers (Curtis and Lucas, 2001). Further evidence that employers were identifying future managers from the student workforce is reported by Canny (2002) in a study of the retail grocery sector. Canny (2002) reported that, in some cases, employers were actively encouraging the students to think of applying for junior management positions on completion of their studies.

Hence, this type of employment can act as a stepping-stone for students, while confining others to low-wage, low-skilled jobs in the long-term. In the absence of the better qualified students, the local workforce may have been encouraged to apply for these positions. This results in jobs for the unqualified (mainly working class) being short-term, poorly paid and dead end; all of which perpetuates the cycle of disadvantage and exclusion (see Coles, 1995; Furlong, 1993; Gray and Sime, 1990; Grey et al., 1990; Morris, 1994, 1995).

---

<sup>6</sup> Frames of reference are shaped by experience and short- and long-term aspirations (Green et al., 2016)

Both Munro et al. (2009) and Green et al. (2016) suggested that direct and indirect displacement would be greater in times of recession, however career displacement may be less affected by the economic cycle.

### *2.2.3 Student employment as complementary*

An alternative hypothesis, based on Atkinson's (1984) work<sup>7</sup>, is that due to their different characteristics and motivations, students actually compliment the native workforce. Rather than displace the local workforce, they supplement them through taking on hard-to-fill jobs.

In addition to the value they add to the local low pay labour market, students and graduates are key inputs into driving local economic growth and the creation of new jobs for the local labour force, including the low pay population. For example, they can provide flexible, skilled labour to spatially concentrated, innovative, knowledge based industries, as well as directly evolving research based spin off companies (Drucker and Goldstein, 2007; Glasson, 2003).

Therefore, even in low-wage, low-skilled sectors, one would expect to see differences in the wages/working conditions of student and local populations. For example, for a low-skilled job which requires a higher degree of functional flexibility, one may expect that a student may be preferred by the employer to undertake such a role and potentially could be paid a higher wage to do so. Alternatively, an employer may have a low pay job requiring training and certification where productivity should increase through experience. Consequently, there preference may be for local employment as certification can be expensive and local employees are less mobile and transient and therefore more likely to remain attached the company.

Canney (2002) suggests there has been growth in students working unsociable shift patterns, such as Sundays, evenings and nights. Further evidence of this can be found in Shildrick et al. (2010), who reported that natives seek local, and stable employment rather than precarious jobs with unsocial hours. Green et al. (2016) also posit that the two groups had different preferences for working arrangements and locations.

Fine and Milkman (2016) further argue that there are some hard to fill vacancies at the very bottom of the labour market which the local labour force will not fill. They argue that migrant workers [and by inference potentially student workers also] offer a ready solution to this problem, precisely

---

<sup>7</sup> Atkinson's model separated jobs into a primary group and a secondary group, broken down to a first peripheral group, second peripheral group and 'outside' group. Viewed within this model the local low pay labour force would form the first periphery group (fulltime but with limited career aspirations) and the students would be part of the second peripheral group (non-standard contracts including part-time and unsociable hours working).

because their social status is not linked to their job. They also suggest that this complimentary labour allows locals to maintain better quality jobs.

### 3. Methodology

No existing quantitative datasets directly address the research questions identified in section 1, which require a knowledge of attitudes. In contrast, the qualitative research design used here aims to generate rich data (Silverman, 2013), by providing opportunities for employers to reflect upon and discuss their experiences of employing students.

Thirteen semi-structured interviews of 30-60 minutes were carried out with employers in the three industrial sectors (hospitality and catering, retail, and contact centres) and recruitment agencies specialising in the low-wage sector. The companies were based across two geographical regions (South Wales, South-West England). A mix of sizes was targeted: specialist food retailers as well as large supermarket stores, boutique hotels as well as chains.<sup>8</sup>

Initial respondents were contacted through one of two methods

- Physically visiting locations (retail and hospitality) to identify managers
- Personal contacts (all sectors)

The physical visits had mixed outcomes. The hospitality units and food retailers responded positively to a request for an interview. However, non-food retailers typically referred the researchers to head offices, who failed to respond to repeated email requests. Personal contacts responded positively, but were not always able to participate in interviews.

A snowballing technique (Bryman and Bell, 2011) was used to identify further employers. This approach was perceived as appropriate as it is helpful in breaking down some of the natural barriers that prevent individuals from taking part in research which may be perceived as sensitive (Atkinson and Flint, 2001).

To facilitate the semi-structured interviews, a list of indicative questions was sent in advance, to enable respondents to prepare, and, most importantly, to understand the remit of the study in order to limit apprehension about engaging in conversations (Bryman and Bell, 2011).

---

<sup>8</sup> An initial investigation into care homes clarified that students in these organisations are employed in hospitality-type roles, so this sector was excluded from further analysis.

Interviews were digitally recorded, with permission from the respondents, and transcribed. In order to add rigour to the analysis of the qualitative findings (Richards and Richards, 1991), the software package, NVivo, was utilised to code and to analyse the data.

Five key themes were identified; these included employee characteristics; treatment of workforce; design of jobs; career opportunities; and spatial effects. The transcriptions were then reviewed for a second time and salient quotes were allocated to the relevant theme. Quotes were coded by location/sector/company interviewed (e.g. CH1). The following table provides a framework for the possible coding permutations.

**Table 1: Coding Framework**

Location	Sector	Company number
Cardiff (C)	Agency (A)	1
Bristol (B)	Contact Centre (CC)	2
	Hospitality (H)	3
	Retail (R)	4

## 4. Empirical findings

### 4.1 Competitors or compliments?

From the employers' interviews, there was very limited evidence of direct competition between student workers and the local low-skilled labour force brought about through deskilling of jobs.

*"[Jobs] are deliberately deskilled so they can have that sort of nonskilled labour come in and do it with what we would term, as **arms and legs** really." (CA1)*

However, there was much more evidence of both direct and indirect competition brought about through other factors. One of the most important mechanisms for this was through the recruitment process.

Some employers discussed how they directly targeted students for recruitment at 'freshers' fairs,' whilst others accessed student networks, through 'word of mouth' using existing student employers. One employer even offered financial inducements to do so:

*“We rely on the student’s word of mouth... we do recommend a friend and you get a £50 voucher and stuff like that”. (BA1)*

While the issue of indirect competition has been discussed by a number of authors in relation to recruitment advertising (Green et al., 2016; Waldinger and Lichter, 2003; Wills et al., 2010), this research identified that companies may be using recruitment processes that indirectly discriminate against local low-wage labour force at the interview stage. This is because companies may be biasing the assessments by testing for skills and attributes that are more prevalent in the student population compared to the local low-skilled labour force.

*“Problem solving...perhaps students are more open to those types of [interview] questions where there will be certain local people where that isn’t something they have encountered... I can’t really say I notice the gap when people are working with us but perhaps actually there is a gap at interview stage” (CH4)*

Green et al. (2016) reported that there was further evidence of indirect competition between the full-time student labour force and the low-skilled labour market with local employers restructuring their workforce and developing jobs that fit with their ‘frames of reference’. This research supports this finding in as much as there was significant evidence of student participation in the labour market influencing the design of jobs. For example, employers reported being happy to work around student term-time teaching and exam schedules, whilst keeping jobs open over the summer months for leaving students and employing students who return home for the summer on short-term contracts.

*“We are very flexible, if it’s the right person then we will bend over backwards to accommodate and try and look after them. Work around people’s schedules and specific requirements” (CH1)*

Our evidence suggests however, that rather than indirectly displacing the low-wage local labour force (Green et.al, 2016), this change is complimentary in nature and has allowed businesses to grow and create more of the long-term, stable employment which is more suitable to the requirements of the local labour market.

*“Bringing in new people [students] every year and at different parts of the year only really helps the business. You get fresh ideas, different ways of working, it forces us to look at things, to train again. If we had a very static workforce that didn’t change I think we would actually lose out.” (CH1)*

Building on the work of Green et al. (2016), for the first time, we report evidence of a ‘second generation, frame of reference’ effect. Along with the changing experience of the student, the experience of managers has transformed. Many were the first generation of students who had to

pay their course fees and therefore had to work to fund themselves through university. This experience has made them more aligned to students' ways of thinking and therefore better able to exploit the opportunities that students can bring.

*"[Students] say I am going home at this time of the year, I can't do this because of exams, I can't do this because I have got to get papers in. I get it. I was part of it, I understand completely." (CH2)*

Our evidence, admittedly collected after a prolonged period of economic growth, is somewhat different from that reported by Green et al. (2016). Rather than shaping jobs to displace the local labour force, managers are using their knowledge of the student experience to design jobs to compliment the local labour force in order to become more productive. However, the concern for the local low-wage labour force must be that they will face increased competition once the UK enters the recessionary part of the economic cycle.

Some employers expressed that it was helpful to have a mixed labour market force in terms of skills, attributes and age. Some employers commented on the different needs of the two populations within the local labour force; non-students sought more secure employment, whereas students were more inclined, and able, to take on more flexible employment opportunities, such as zero hours contracts and working unsociable hours. This complimentary effect was summed as:

*"[Students] fill those little gaps. Those little chinks in the armour, those little pieces of the jigsaw that need filling in". (BH2)*

Overall, employers saw students and the low-skilled local labour force as compliments, rather than competitors, to each other. Employers discussed the fact the sustained period of growth has meant that employers have "struggle to recruit", implying there is little scope for competition.

#### 4.2 Employee Characteristics

The evidence from the employers was mixed as to the costs and benefits of employing students and/or the local low-wage labour force. Some employers did not differentiate between students and the local labour force, focusing instead on the skills and abilities of the individual, regardless of educational background.

*"I don't just employ anybody with **two arms and two legs**. They have to show me some sort of common sense and sort of positive attitude". (BH2)*

There was some evidence that manager's believed that local people had better developed interpersonal skills than the non-students.



*"I would say local people would be more prone to have interpersonal skills than students... But there is a small majority that don't have any interpersonal skills at all." (CH3)*

However, the majority of employers commented on the positive characteristics that students bring to the labour force, citing self-confidence; faster learners; greater functional and numerical flexibility; better interpersonal skills and having a stronger work ethic. One employer acknowledged that students' heightened commitment to the labour force was in some part driven by their "need to work financially" (CH1). This knowledge potentially allows students to be exploited, both in terms of working condition and pay – as one employer notes.

*"Those who are at university... cost less." (CH1)*

The benefits students bring in relation to functional and, in particular, numerical flexibility was a recurring theme throughout the interviews. Employers particularly valued students' ability and willingness to work evenings, weekends and other unsociable hours. Filling these hard to fill vacancies meant that employers could then utilise the local low-wage labour force to make sure

*"we have got the heads in for the whole other opening times" (BA1).*

Employers also valued the computer skills that the younger generation workforce bring to the business. It was generally acknowledged that age, rather than student-status, drove this advantage. However, given the predominance of young workers in the student population, on the whole, this advantage was greater for students than the local low-wage population.

The employers cited the young people's ability to adapt more quickly and require less training, hence reducing cost for the business. There was also evidence that employers are gaining an advantage from their students by using their IT skills and knowledge to drive change and innovation within the workplace.

*"[Students] bring to us some of the new channels to contact centres such as social media, web chat and all the other non-telephone work that now comes into a contact centre". (CCC1)*

On the negative side, as commitment to their studies was a prime focus for students, some employees considered them less committed to the role, which directly affected the quality of their work. Employers commented on students' lack of reliability, particularly for early morning shifts, and because of "*party[ing] too much*" (BH1). Concerns were expressed about students' naivety, limited understanding of professional culture and lack of practical experience.

*"Sometimes the students, not that they need reigning in, but it is teaching them the way of working" (CA1)*

An additional concern for employers was around students' attachment to the role, questioning whether students could be relied upon to fill roles in the long-term. Several also commented on the lack of flexibility and availability around exam time and when students return home for the summer months.

To mitigate against this, the study found evidence of employers implementing recruitment practices and employment processes to limit negative effects. For example, some retail chains allowed students to transfer to a store local to their parental home during the summer months. Other employers planned for the regular student turnover and employed different approaches to manage this such as using students to find their successors.

*"She is a student. She knows that when the time comes for her to leave, her sister wants a job"* (BH2)

However, some employers had no issue with the student timeline. They noted that when taking on a student in the early years of their study, they could be reasonably certain of keeping that student throughout the entire degree course. As one employer put it, 'three years is not short-term'.

This highly developed sense of student loyalty to one employer can, in some part, be explained by the high transaction costs involved in searching for jobs: students see this work as temporary, and so would not spend time looking for other jobs as long as the role was satisfactory.

#### 4.3 Treatment of workforce

Evidence of the treatment of student workers and the local low-skilled workforce presented another mixed picture, with many employers commenting that both students and non-students were subject to equal treatment in terms and conditions, as well as in pay. This is because the employers were more interested in skill set and ability of the individual rather than their status. One employer, in particular choose to pay 'efficiency wages' in an attempt to increase productivity of both their student and non-student populations.

*"We actually don't differentiate. So everyone gets paid the above 25 rate...we want you to work really well therefore regardless of how old you are"* (CH4)

For others, however, the choice to employ a student or non-student was based on two-way flexibility. If the employer required a stable part-time, or full-time employee, their preference would be to go for local labour.

*"We don't really go for students in the 16 hour or full-time remit"* (CH3)

For the less stable and more numerically flexible labour contracts (e.g. zero hour contracts), students were preferred. Employers perceived that students are more suited to these type of contracts,

welcoming the flexibility to work more or less hours at certain times of the year, depending on the requirements of their studies.

*"[Locals apply for] zero hour contracts and when we explain to them a lot might drop out from the interview process because they feel it's not for them because they want 16+." (CH3).*

Employers seemed aware of the increased financial pressures faced by students and there was some evidence that this knowledge is being used to control and exploit them. For example, there was some indication of students being coerced into taking zero hours contracts and working more hours than their preference. Employers were conscious of the contractual and financial benefits to their company of pursuing these more flexible contracts.

*"This also has financial benefit since as casual workers there is no pension, holiday pay etc." (CH1)*

In terms of training, again the evidence was somewhat mixed with some employers offering equal training opportunities to both students and local low-skilled labour force. In general, however, employers felt that students were more focused on their degree, would only be with the company for a limited time and were not looking for opportunities to progress. Therefore, employers tended to favour investing in training for the local non-student labour force.

*"The training process can take up to 2 to 4 weeks and if they are only here for a short amount of time then [...] it's not a good investment for us." (BCC1)*

#### 4.4 Spatial Effects

The data was analysed for any spatial effects that were influencing the recruitment and employment of students in Cardiff and/or Bristol. The evidence suggest that the economic cycle has had a significant effect on the recruitment of students in Cardiff, but this was more pronounced in Bristol. This potentially reflects the more buoyant economy of Bristol, compared to Cardiff<sup>9</sup>.

Employers report that, if it were not for the student population, then there would be considerable job vacancies in local labour markets. This further suggests that students are not in direct competition with the local low-skilled labour force but, at least in the expansionary stage of the economic cycle, offer a complimentary workforce that allows businesses to be more productive and offer greater employment opportunities to the local labour force.

*"If it wasn't for students I think there would be a lot of job vacancies because obviously we employ a lot of students and I know a lot of other shops do as well. It's good for the economy". (BR1)*

---

<sup>9</sup> In 2015, GVA per head in Bristol was £30,850 compared to £25,243 in Cardiff.

In both Bristol and Cardiff, there was evidence that employment is highly localised around university campuses. Employers with multiple sites reported that similar jobs in the outskirts of the regions tend to be taken by local employees rather than students.

*“It’s on the outskirts of Cardiff; therefore the people living in the local area tend to want to work in that hotel” (CH4)*

This idea of localised employment around university campus was further expanded with employers reporting that the characteristics of the students at the different institutions affected their level of engagement with labour market. For example, one employer of students in both Cardiff and Bristol reported that students from Bristol University were more interested in work experience related to their course, and less interested in paid employment. The employer perceived that this was different to students from Cardiff University and suggested this was due to the more affluent profile of the University of Bristol students<sup>10</sup>.

*“The last figure I looked up was 46% of students entering Bristol university come from private schools versus Cardiff which was under 15%. I would guess there is a difference in funding from parents and therefore the need for money.” (CH4)*

This suggestion was further supported by another employer in Bristol, who was close to the out of town campus of the University of the West of England, Bristol<sup>11</sup> (UWE). Being a post 92 university, UWE has a more diverse student population than its neighbouring university in the centre of Bristol. This employer reported that

*“We have got more students in this shop purely because of where we are, our position, our location... by the uni [UWE]. We don’t find recruitment a problem because of the catchment area”. (BR1)*

The local infrastructure also had an impact on student employment and this seemed to negatively impact Cardiff more than Bristol. The highly developed and flexible student accommodation market in Cardiff, which allows student to sign very short-term contracts, encouraged them to return home for the holiday periods in order to save rent money. This meant that employers struggled for staff around peak seasons, which was keenly felt in the busy Christmas period.

---

<sup>10</sup> Further support for this can be found in Munro et al. (2009), who revealed relatively few students from the affluent population of Oxford and Cambridge have jobs. Anecdotally there is also evidence that students in the most prestigious universities are actively dissuaded from working well studying full-time.

<sup>11</sup> UWE is post 92 University with a more diverse student cohort than its neighbours at the University of Bristol.

Other employers cited the less-developed transport infrastructure in Cardiff as deterring students from taking on work assignments outside of the localised environment, especially outside normal working hours.

*“It can be especially with the trains and the buses, the end times around Cardiff, it’s not like in London where its 24/7, it can impact on who can work”. (CH3)*

## 5. Discussion

### 5.1 Students versus non-students

From the employers’ perspective there was some evidence that the local low-wage labour force is in competition with the student part-time labour force, but such competition is mainly indirect in nature. There was also some evidence that this disadvantage is embedded in the interview stage where skills and abilities tested can favour the student population.

There was also evidence that more subtly jobs might be changing to reflect skills and recruitment (e.g. IT) with the shifts benefiting students more. In addition, as the workforce increasingly includes managers who worked as students, we suggest that this is also likely to change perception and practices in the future. This could be a concern for the local labour force who may fear that they will be edged out of the labour market when we enter the recessionary phase of the economic cycle.

Overall, however, the main finding from the research was that rather than being in competition with each other, the student and local low pay labour forces are complimentary to each other (Atkinson, 1984), at least in the short-term. Equilibrium models would suggest that employers are able to combine the skills and attributes of students with that of the local labour force to drive improvements in productivity and create additional jobs for both groups. We recognise that this analysis was undertaken after a prolonged period of economic growth with tight labour markets, and therefore the finding may not hold under alternative market conditions.

### 5.2 Employee characteristics

In terms of characteristics, treatment and career opportunities offered to the local labour force and student working population, the evidence again was generally mixed. Some employers focused on the individual and therefore perceived no difference in the treatment and opportunities offered. Others focused on the requirements and strengths of the local employers, mainly in terms of the need for secure employment and the resulting level of commitment and longevity that brings. As such, for some employers, this encouraged more function specific training and career development opportunities for the local labour force.

However, in line with the literature, employers generally thought students came with greater skills and more flexibility. There was some evidence on a case-by-case basis that employers did target high-performing students to take on graduate/management positions, with some, albeit limited, evidence of formal structural mechanisms in place.

*“We have offered more [students] over in our head office, they have offered graduate schemes” (BA1)*

Given the second generational effect that had been noted within this study, and the changing employer ‘frame of reference’ this implies, we expect to see a deepening of the links between student part-time employment and formal career structures in future.

### 5.3 Spatial Effects

In terms of spatial effects, it was clear that due to the long period of growth and the tight labour markets in both Bristol and Cardiff, students were a vital source of labour for the employers who otherwise would be unable to fill all vacancies. The effects, however, were strongly localised with employers based close to university campuses benefitting most from student labour, while those employers that were further away focussed more on the local population. There was some evidence of the profile of the student cohort having an effect on labour market engagement. Our results suggest in areas hosting wealthier universities, students are essentially consumers, whereas post-92 university students tend to be both producers and consumers, potentially improving the productivity of the area.

### 5.4 Developing a model to explore local low-wage, low-skilled labour markets

As discussed above, there is a gap in the literature around the impact of student working on local labour markets. The nearest study to this one is Green et al’s., (2016) study. Nevertheless, Green et al.’s work was undertaken in 2010, just after the end of the deepest recession since the Great Depression. Since 2009, we have had ten years of sustained growth, particularly in the labour market and, given the tightening of the labour market conditions, the experience of local and student workers has changed somewhat.

For example, as jobs are currently relatively abundant, we find that students compliment rather than compete with and non-student labour force. However, we do recognise that under alternative market conditions, there is the potential for increased indirect competition, potentially to a greater extent than seen before. This is because second and third generation working students will be better placed to reshape the low-wage labour market to maximise the opportunities student labour offers.

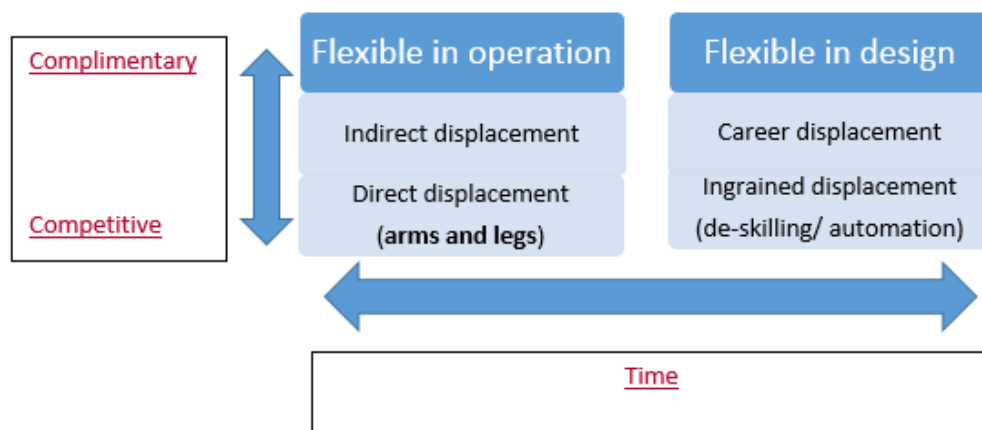
In addition, the model of work has changed and inevitably will continue to do so. Green et al (2016) noted, for example that in 2010 students had an advantage in applying for jobs as they were more

technically literate. In 2019 our studies show that, as firms move to the use of social media and other free sources for recruitment, age rather than education is the determining factor in finding those positions.

Given the complex and changing dynamics that influence the labour market, we have developed a new model framework that allows for both a static and dynamic analysis of the low wage labour market.

Building on the work of Munro et al.'s (2009), who identified four potential labour impacts – 1. direct substitution, 2. influencing employer attitudes and the terms and conditions of work, 3. filling hard-to-fill jobs and 4. driving economic growth, we have developed a framework which can be applied at a point-in-time and/or across time. The model is designed so it can be applied at multiple levels of aggregation (e.g. firm, occupation, sector, region).

**Figure 1: New Dynamic Model of the Low-wage Labour Market**



The vertical axis represents the current view the labour force, from homogenous (and therefore competitive) at the bottom to heterogeneous (and therefore complimentary) at the top. The horizontal axis represents the options available over different time periods. In the short-term, employment decisions are constrained by immediate operational needs and existing structures and skills. In the longer term, organisations can redesign systems to exploit structural shifts in the economy (e.g. improvements in IT literacy and changes in the labour market conditions).

Our analysis, undertaken during the expansionary period of the economic cycle, revealed that there were some companies in the *'arms and legs'* segment. However, the majority of the companies were either moving towards the top end of the indirect displacement segment (primarily driven by recruitment practices) or in the flexible-in-operation segment. This flexibility was driven by students

generally operating in a second peripheral group, filling hard-to-fill roles. Whereas the local low-wage labour force were in the first peripheral group (Atkinson, 1984).

The time element allows employers and policy makers to consider how the economy could develop over time and therefore consider the effects this could have on productivity, jobs and the careers of the low-wage labour force. For example, continued advances in technology and increases in automation mean that the future of low-wage labour could be challenging for both the local low-skilled workforce and student population. We could see both sets of workers displaced from the workplace by machines and an intensification of competition between the two groups for the remaining jobs (ingrained displacement).

Alternatively, as the economy thrives from structural changes, employment opportunities for both groups can flourish and the struggle may move from indirect competition for jobs to indirect competition for careers. This should benefit the student population as second, third and fourth generation managers, will better understand the long-term aspirations of undergraduates and have the opportunity to embed student centric structured approaches to career development within a low pay, part-time, working framework.

On the other hand, rather than at the exclusion of, but also for the benefit of the local labour force, over-time through design, employers/policy makers can restructure the labour market to increase productivity while simultaneously increasing labour market outcomes (including career) of both groups simultaneously. For example, as well as using student 'frames of reference' to develop career structures, employers could use the localised labour force 'frames of reference' to do likewise. This could mean that employers develop localised management schemes which are developed to meet the needs of a more geographically and potentially functionally limited localised workforce.

## 6. Conclusion

The introduction of student tuition fees in 1998 has led to considerable growth in the numbers of students working part-time. Currently approaching 1 million students are now working part-time and this has led to significant effects on the local labour market. This paper contributes to the literature by providing four fresh insights around student engagement within the low-skilled labour market.

First, the analysis shows that student labour is in the main complimentary to the local low-skilled labour. This finding is in contrast to much of the previous economic analysis, but in line with the management literature.

Second, we note that participation reflects the local area characteristics: the low pay limits these jobs to those resident in the local area (travel costs and time matter), and not all student groups face the



same financial constraints. If, as seems to be the case, students are not crowding-out non-students but are contributing to both consumption and production, this has implications for local area development. It suggests that a thriving student population may benefit all parts of the labour force.

Third, there is evidence of long-term structural changes partially brought about by use of technology and changes to the labour market composition. For example, we record a second generation effect: ex-students who had to work their way through university are now managers and are better able to harness and focus students' skills to drive innovation and improve productivity. In the longer term, this may be expected to further change the way that part-time jobs are designed and embedded within formal career structures.

Finally, in order to allow a static and dynamic analysis of the labour market, we present a new model framework to assist in the analysis of the low-wage labour market.

There are two caveats to this paper. First, the analysis was carried out in two growing economies with 'tight' labour markets. It may be that findings about the complimentary/competitive nature of student working may not survive a significant downturn.

Second, selecting employers in a range of sizes, sectors and locations meant that our results may be biased by the choice of an unrepresentative interviewee. However, the interviews generally identified a similar pattern of responses. As such, we are confident that findings about students as producers/consumers, and on the second-generation effect, reflect fundamental characteristics of the low-wage economy.

## References

- Allison, J. (2006). Over-educated, over-exuberant and over here: the impact of students on cities. *Planning Practice and Research* 21, 79–94
- Arulampalam, W., & Booth, A. (1998). Training and Labour Market Flexibility: Is There a Trade-off?, *British Journal of Industrial Relations*, 36(4), 521-536,
- Atkinson, J. (1984). Manpower Strategies for Flexible Organisations. *Personnel Management*, 26-31
- Atkinson, R., & Flint, J. (2001). Accessing hidden and hard-to-reach populations: Snowball research strategies. *Social research update*, 33 (1), 1-4
- Baert, S., Cockx, B., and Verhaest, D. (2013). Overeducation at the start of the career: stepping stone or trap? *Labour Economics*, 25, 123-140
- Barr, N. (2001). *The Welfare State as Piggy Bank: Information, Risk, Uncertainty and the Role of the State* (Oxford University Press, Oxford)
- Barron, P and Anastasiadou, C. (2009). Student part-time employment: Implications, challenges and opportunities for higher education. *International Journal of Contemporary Hospitality Management*. 21 (2), 140-153.
- Becker, G.S. (1993). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education* (3rd ed.). Chicago: University of Chicago Press.
- Bryman, A. and Bell, E. (2011). *Business research methods*. Cambridge: Oxford University Press.
- Büchel, F and Mertens, A. (2007). Overeducation, undereducation, and the theory of career mobility. *Applied Economics* 36 (8), 803-816
- Callender, C., and Kempson, E. (1996). *Student finances: income, expenditure and the take-up of student loans*. Policy Studies Institute, London.
- Canny, A. (2002). Flexible labour? The growth of student employment in the UK. *Journal of education and work*, 15(3), 277-301.
- Coles, B. (1995). *Youth and Social Policy: youth citizenship and young careers*. London, University College London

CHERI, (2005). *Survey of higher education students' attitudes to debt and term-time working and their impact on attainment*. Centre for Higher Education Research and Information, The Open University, London

Curtis, S., & Lucas, R. (2001). A coincidence of needs? Employers and full-time students. *Employee relations*, 23(1), 38-54.

Curtis, S. and Williams, J. (2002). The reluctant workforce: undergraduates' part-time employment, *Education and Training*, Vol. 44 Issue: 1, 5-10

Devlin, C., Bolt, O., and Patel, D. (2014). *Impacts of Migration on UK Native Employment: An Analytical Review of the Evidence*. Occasional Paper 109, London: Home Office/BIS

Drucker, J., Goldstein, H. (2007). Assessing the regional economic development impacts of universities: a review of current approaches. *International Regional Science Review* 30, 20–46

Fine, J., Milkman, R., Iskander, N. and Waldinger, R. (2016). Celebrating the enduring contribution of Birds of Passage. *ILR Review*, 69 (3) 774-782.

Felstead, A., Krahn, H., and Ashton, D. (1999). Young and old at risk: comparative trends in 'non-standard' patterns of employment in Canada and the United Kingdom. *International Journal of Management*, 20, 277–296

Ford, J., Bosworth, D., & Wilson, R. (1995). Part-time work and full-time higher education. *Studies in Higher Education*, 20(2), 187-202.

Furlong A., Cartmel F. (1997). *Young People and Social Change: individualization and risk in late modernity*. Buckingham, Open University Press

Furlong, A. (1993). *Schooling for Jobs: changes in the career preparation of British secondary school children*. Aldershot, Avebury

Glasson, J. (2003). The widening local and regional development impacts of the modern universities—a tale of two cities (and North–South perspectives). *Local Economy* 18, 21–37

Gray, J. & Sime, N. (1990). Extended routes and delayed transitions amongst 16–19 year olds: national trends and local contexts. *British Journal of Education and Work*, 3, 3–40.

Gay, J., Jenson, D., Pattie, C. & Sime, N. (1990) The inner city dimension in Britain's youth labour market. *Employment Gazette*, 98, 455–463.

- Green, A., Atfield, G., & Purcell, K. (2016). Fuelling displacement and labour market segmentation in low-skilled jobs? Insights from a local study of migrant and student employment. *Environment and Planning A*, 48(3), 577-593.
- Goos, M., Manning, A. (2007). Lousy and lovely jobs: The rising polarization of work in Britain. *Review of Economics and Statistics* 89, 118–133.
- Hall, R. (2010). The work–study relationship: experiences of full-time university students undertaking part-time employment. *Journal of Education and Work*, 23(5), 439-449.
- Hasluck, C. (2011). *Employers and the Recruitment of Unemployed People: An Evidence Review*. UKCES Briefing Paper, Wath-upon-Deane: UKCES.
- Hesketh, a., (1996). Towards an economic sociology ofn the student financial experience of higher education, *Journal of Education Policy*, 14(4), 385-410
- Hodgson, A., & Spours, K. (2001). Part-time work and full-time education in the UK: the emergence of a curriculum and policy issue. *Journal of education and work*, 14(3), 373-388.
- Hofman, W. H. A., & Steijn, A. J. (2003). Students or lower-skilled workers? ‘Displacement at the bottom of the labour market. *Higher Education*, 45(2), 127-146.
- Hubbard, P. (2006). NIMBY by another name? A reply to Wolsink. *Transactions of the Institute of British Geographers, New Series*, 31, 92–94
- Humphrey, R. (2006). Pulling structured inequality into higher education: the impact of part-time working on English university students. *Higher Education Quarterly*, 60(3), 270-286.
- Kelly, P. (Ed.) (1999). *Working in Two Worlds: Students and Part-time Employment*. Scottish Low Pay Unit, Glasgow.
- Krahn, H. & Lowe, G. (1999) School-to-work transitions and postmodern values: what’s changing in Canada, in: W.R. HEINZ (Ed.) *From Education to Work: cross-national perspectives*, 260–283 (Cambridge, Cambridge University Press).
- Lammont, N., and Lucas, R. (1999). Getting by’ and ‘getting on’ in service work: lessons for the future of accounting. *Critical Perspectives on Accounting*, 10(6), 809-30.
- Lashley, C. (2005), *Student Part-time Employment in Nottingham's Tourism Sector*. Nottingham Trent University, Nottingham.
- Legge, K. (1998). Flexibility: the gift-wrapping of employment degradation?, in Sparrow, P. and Marchington, M. (Eds), *Human Resource Management, The New Agenda*, Pitman Publishing, London

- Lucas R. (1997). Youth, gender and part-time employment: a preliminary appraisal of student employment. *Employee relations*, 19(1), 51-66
- Lucas R., & Lammont. (1998). Combining work and study: an empirical study of full-time students in Scholl, college and university. *Journal of Education and Work* 11(1), 41-56
- Lucas, R., & Ralston, L. (1997). Youth, gender and part-time employment: a preliminary appraisal of student employment. *Employee Relations*, 19(1), 51-66.
- Macintyre C. (2003). New models of student housing and their impact on local communities. *Journal of Higher Education Policy and Management*, 25(2), 109-118
- Maguire, M. & Magure, S. (1997) Young people and the labour market, in: R. McDonald (Ed.) *Youth, the 'Underclass' and Social Exclusion*. London, Routledge.
- Manthei, R., and Gilmore, A. (2005). The effect of paid employment on university students' lives. *Education + Training*, 47(3), 202-215
- McMullen, J. (1995). Flexible working practices, *Industrial Relations Law*, 30, 2-15.
- Moreau, M. P., & Leathwood, C. (2006). Balancing paid work and studies: working (-class) students in higher education. *Studies in Higher Education*, 31(1), 23-42.
- Morris, L. (1994) *Dangerous Classes: the underclass and social citizenship*. London, Routledge.
- Morris, L. (1995) *Social Divisions: economic decline and social structural change*. London, University College London.
- Munro, M., Turok, I. and Livingston, M. (2009). Students in cities: a preliminary analysis of their patterns and effects. *Environment and Planning A*. 41, 1805-1825.
- Newton, B. Hurstfield, J., and Miller, L. (2005). *What employers look for when recruiting the unemployed and inactive: skills, characteristics and qualifications*. Department for Work and Pensions Research Report 295, Leeds: Corporate Document Services
- Norlund, M. (2018). Tertiary graduates in low wage jobs in Sweden. *Journal of education and work*. 31 (5-6), 461-477.
- Office for National Statistics (2019) *Statistical bulletin: Employment in the UK: May 2019*. Newport
- Qenani, E., MacDougall, N., & Sexton, C. (2014). An empirical study of self-perceived employability: Improving the prospects for student employment success in an uncertain environment. *Active Learning in Higher Education*, 15(3), 199-213.
- Richards, T.J., & Richards, L. (1994). Using computers in qualitative research. N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (445-462). Thousand Oaks: Sage.

- Roberts, S., & Li, Z. (2017). Capital limits: Social class, motivations for term-time job searching and the consequences of joblessness among UK university students. *Journal of Youth Studies*, 20(6), 732-749.
- Rothwell, A., Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students. *Journal of vocational behavior*, 73(1), 1-12.
- Rugg, J., Rhodes, D., Jones, A. (2000) *The Nature and Impact of Student Demand on Housing Markets*. Joseph Rowntree Foundation, York
- Shildrick, T., MacDonald, R., and Webster, C. (2010). *The Low-Pay, No-Pay Cycle: Understanding Recurrent Poverty*, York: Joseph Rowntree Foundation.
- Silverman, D. (2013). *Doing qualitative research: a practical handbook*. Sage Publications, London
- Smith, D. (2005). Studentification': the gentrification factory, in *Gentrification in a Global Context: The New Urban Colonialism* Eds Atkinson, R, Bridges, G (Routledge, London) pp 72–89
- Smith, N., and Taylor, P. (1999). Not for lipstick and lager: students and part-time work. *Scottish Affairs Journal*, 28, 147–163
- Sorensen, L., and Winn, S. (1993). Student loans: a case study. *Higher Education Review*, 25(3), 48-65
- Standing, G. (2012). *The Precariat*, London: Bloomsbury.
- Tam Oi I, B., & Morrison, K. (2005). Undergraduate students in part-time employment in China. *Educational studies*, 31(2), 169-180.
- Thurow, L. (1976). *Generating Inequality*. McMillan. UK: Palgrave
- Universities UK. (2006). 'Studentification': a guide to opportunities, challenges and practices, Universities UK, London
- Van der Meer, P., & Wielers, R. (2001). The increased labour market participation of Dutch students. *Work, Employment and Society*, 15(1), 055-071.
- Van Klaveren, M., Salverda, W. and Tijdens, K. (2009). Retail jobs in the Netherlands: Low pay in a context of long-term wage moderation. *International Labour Review*. 148 (4), 413-436.

Wan, Y. K. P., Wong, I. A., & Kong, W. H. (2014). Student career prospect and industry commitment: The roles of industry attitude, perceived social status, and salary expectations. *Tourism Management*, 40, 1-14.

Waldinger, R. and Lichter, M. (2003). *How the other half works: immigration and the social organisation of labour*. University of California Press, California

Walsh, T. (1990). Flexible labour utilisation in the private service sector. *Work, Employment and Society*, 4(4), 517-30.

Waldinger, R., and Lichter, M. (2003). *How the Other Half Works: Immigration and the Social Organization of Labor*, London: University of California Press.

Weiss, F., Klein, M., & Grauenhorst, T. (2014). The effects of work experience during higher education on labour market entry: learning by doing or an entry ticket? *Work, employment and society*, 28(5), 788-807.

Wills, J, Datta, K, Evans, Y (2010) *Global Cities at Work*, London: Pluto.

Wilson, R., Beaven, R., and May-Gillings, M. (2014). *Working Futures 2012–2022*. Evidence Report 83, Wath-upon-Dearne: UKCES

Winkler, I. (2009). Term-time employment: Exploring the influence of self-identity, motivation and social issues. *Education+ Training*, 51(2), 124-138.

Wyn, J. and White, R. (1997). *Rethinking Youth*. London, Sage

### **Recent UWE Economics Papers**

See <https://www1.uwe.ac.uk/bl/research/bcef/publications.aspx> for a full list.

### **2019**

1905 **Not Just Arms and Legs: The Impact of Student Working on Local Labour Markets**

Damian Whittard

Hilary Drew

Felix Ritchie

1904 **Runners, Repeaters, Strangers and Aliens: Operationalising efficient output disclosure control**

Kyle Alves

Felix Ritchie

1903 **Artificial Intelligence and the UK Labour Market: Questions, Methods and a Call for a Systematic Approach to Information Gathering.**

Tim Hinks

1902 **Robots and Life Satisfaction**

Tim Hinks

1901 **Education and the Geography of Brexit**  
Robert Calvert Jump and Jo Michell

## **2018**

1807 **Learning, Heterogeneity, and Complexity in the New Keynesian Model**  
Robert Calvert Jump, Cars Hommes, and Paul Levine

1806 **DSGE Models and the Lucas Critique. A Historical Appraisal**  
Francesco Sergi

1805 **A new approach to estimating interregional output multipliers using input-output data for South Korean regions**  
Malte Jahn, Anthony T. Flegg and Timo Tohmo

1804 **Urban food security in the context of inequality and dietary change: a study of school children in Accra**  
Sara Stevano, Deborah Johnston and Emmanuel Codjoe

1803 **The use of differential weighting and discounting in degree algorithms and their impact on classification inflation and equity: A further analysis**  
David O. Allen

1802 **Unambiguous inference in sign-restricted VAR models**  
Robert Calvert Jump

1801 **Degree algorithms, grade inflation and equity: the UK higher education sector**  
David O. Allen

## **2017**

1706 **Internal rationality, heterogeneity and complexity in the new Keynesian model**  
Cars Hommes, Robert Calvert Jump and Paul Levine

1705 **The regionalization of national input–output tables: a study of South Korean regions**  
Anthony T. Flegg and Timo Tohmo

1704 **The impact of quantitative easing on aggregate mutual fund flows in the UK**  
Iris Biefang-Frisancho Mariscal

1703 **Where are the female CFOs?**



Gail Webber, Don J Webber, Dominic Page and Tim Hinks

1702 **Mental health and employment transitions: a slippery slope**  
Don J Webber, Dominic Page and Michail Veliziotis

1701 **SMEs access to formal finance in post-communist economies: do institutional structure and political connectedness matter?**  
Kobil Ruziev and Don J Webber

## **2016**

1611 **Curriculum reform in UK economics: a critique**  
Andrew Mearman, Sebastian Berger and Danielle Guizzo

1610 **Can indeterminacy and self-fulfilling expectations help explain international business cycles?**  
Stephen McKnight and Laura Povoledo

1609 **Pricing behaviour and the role of trade openness in the transmission of monetary shocks**  
Laura Povoledo

1608 **Measuring compliance with minimum wages**  
Felix Ritchie, Michail Veliziotis, Hilary Drew and Damian Whittard

1607 **Can a change in attitudes improve effective access to administrative data for research?**  
Felix Ritchie

1606 **Application of ethical concerns for the natural environment into business design: a novel business model framework**  
Peter Bradley, Glenn Parry and Nicholas O'Regan

1605 **Refining the application of the FLQ Formula for estimating regional input coefficients: an empirical study for South Korean regions**  
Anthony T. Flegg and Timo Tohmo

1604 **Higher education in Uzbekistan: reforms and the changing landscape since independence**  
Kobil Ruziev and Davron Rustamov

1603 **Circular economy**  
  
Peter Bradley

1602 **Do shadow banks create money? 'Financialisation' and the monetary circuit**  
Jo Michell

1601 **Five Safes: designing data access for research**  
Tanvi Desai, Felix Ritchie and Richard Welpton

## **2015**

1509 **Debt cycles, instability and fiscal rules: a Godley-Minsky model**  
Yannis Dafermos

1508 **Evaluating the FLQ and AFLQ formulae for estimating regional input coefficients: empirical evidence for the province of Córdoba, Argentina** Anthony T. Flegg, Leonardo J. Mastronardi and Carlos A. Romero

1507 **Effects of preferential trade agreements in the presence of zero trade flows: the cases of China and India** Rahul Sen, Sadhana Srivastava and Don J Webber