

# CELMR Research Digest



## What is CELMR?

CELMR is the Centre for European Labour Market Research and is made up of 12 faculty from the Economics Department at the University of Aberdeen plus associate members from across the world. The Centre prides itself on high quality, policy relevant research examining a whole range of labour market issues based primarily around four themes:

- Education, Skills and Labour Mobility
- Inequality in the Labour Market
- Health and Work
- Wage Determination

More information about CELMR can be found on our website:  
<http://www.abdn.ac.uk/business/research/celmr/index.php>

## CELMR News Quick Hits

- **Bon Voyage!** Two CELMR staff have recently left the University. Emeritus Professor Tim Barmby, formerly the Jaffrey Chair in Political Economy, has retired and moved back to England to continue his study of labour contracts in lead mining in the 18<sup>th</sup> and 19<sup>th</sup> Century. Dr Fraser Summerfield, a CELMR Research Fellow, has taken up a position as Assistant Professor at Lakehead University in Thunder Bay, Canada. Best wishes to you both!
- **Hot off the Press – forthcoming publications in 2016/17:**
  - Keith **Bender** and J.S. Heywood, “Educational Mismatch and Retirement,” forthcoming, *Education Economics*.
  - John D.F. **Skåtun**, “Bargaining on Your Spouse: Coasean and non-Coasean Behaviour within Marriage,” forthcoming, *Journal of Family and Economic Issues*.
  - John D.F. **Skåtun**, “Taxation, Risk Aversion and the Wage Gaps in Tournaments,” forthcoming, *Oxford Economic Papers*.

## Editors’ Corner

Welcome to the sixth CELMR Research Digest! We have had an excellent reception to the previous editions and are pleased to bring you further highlights of some of the recent papers and projects authored by faculty and staff associated with CELMR. We hope that you find it of interest and continue to welcome any feedback that you might have about this publication or the summaries contained here.

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## 'Looking After Number Two? Competition, Cooperation and Workplace Interaction'

Tim Barmby, J.G. Sessions and Alexandros Zangelidis

*Journal of Economic Behavior and Organization*  
Vol. 131, Part A, Nov 2016: 166-82.



Dr Alexandros Zangelidis

Economists have traditionally said relatively little about the effect of relationships between family, friends, neighbours and work colleagues. In our study, we model and measure the relationship between cooperation in the workplace and absenteeism. Every worker has a tolerance level of sickness, determined by wages, sick pay and working hours. The decision to go to work or not depends on their own health and reservation level of sickness. However, very few employees work in complete isolation and so one would expect employee-interaction to be important for many workplace decisions, such as absenteeism. In a two-worker framework, work is interdependent since the absence of one worker imposes a cost on the other, possibly in terms of extra effort that is equivalent to working longer hours.

When workers do not cooperate, if a worker is likely to be absent then the other worker is also more likely to be absent, given the potentially higher costs of attendance. In this case, each worker has a lower reservation level of sickness, compared to when working alone, and an inefficiently higher level of absence. In contrast when workers act cooperatively, workers have a higher tolerance level of sickness as compared to the non-cooperative situation. This permits an efficient level of absence to be reached.

We test our theory by comparing the absence rates of optometrists who work either alone (single-testing) or in pairs (double-testing) and ascertain whether the evidence suggests a cooperative or competitive outcome. When an optometrist is absent, the scheduled appointments are cancelled

and rescheduled unless a substitute optometrist is found. Optometrists who are absent one day are not expected to make up all cancellations the next day. However, when double-testing, in the absence of one optometrist, the other optometrist may pick up additional appointments, without extra pay. Our findings suggest that optometrists exhibit lower absence when working in teams of two as compared to when working alone, with a potential relative fall in the probability of absence of 30 percent. This result lends support to the cooperative outcome.

Our results shed light on how people may interact in the workplace and the effect of this interaction on absenteeism. What we show is that people cooperate and don't selfishly maximise their own utility, as it is commonly assumed in standard economic analysis. This is an important finding that warrants further investigation. If this evidence can be extended to other settings, then we are potentially revealing something profound about human behaviour.

(For further information please contact Dr Zangelidis: [a.zangelidis@abdn.ac.uk](mailto:a.zangelidis@abdn.ac.uk))

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Dr Yu Aoki

## 'Donating Time to Charity: Working for Nothing?'

Yu Aoki

*Oxford Economic Papers,*  
forthcoming.

Millions of people across the world work for voluntary organisations and invest their abundant energies to help their communities. Globally, 21% of individuals volunteered in 2013, with Americans recording the highest volunteer participation rate of 44% in developed countries. Despite its enormous potential effects given the scale of volunteer activity, the studies on the effects of voluntary work, especially its effects on the recipients of service, are scarce.

This paper explores the causal effects of volunteer work on the recipients of volunteer service by studying the consequences of an unexpected increase in the level of volunteering following an earthquake in Japan. In 1995, the city of Kobe was hit by an earthquake of magnitude 7.3 which took away the lives of over 6,400 people.

Over the year following the earthquake, approximately 1.4 million people volunteered, roughly 70% of whom were volunteering for the first time. This large-scale volunteer activities following the earthquake were broadcast as a new social phenomenon, and subsequently served to popularise volunteer activity in Japan.

This paper specifically focuses on the volunteer work providing the elderly with informal care, such as visits to homes for a chat and assistance with daily tasks. The number of volunteers who engage in this type of volunteer work considerably increased only in the municipalities hit by

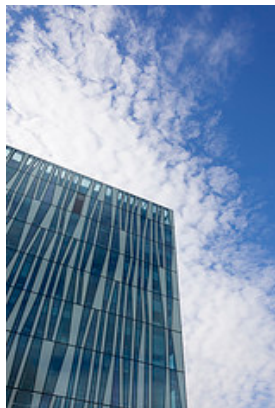
the earthquake, and this exogenous variation in volunteering is exploited to identify the causal effects on mortality. To address the obvious issue that the earthquake increased mortality, the year of the earthquake is excluded from the sample, and only the municipalities that recorded no or little loss of life due to the earthquake are retained in the sample. Based on a comparison of elderly mortality between the municipalities that recorded no or little loss of life because of the earthquake, and the nearby municipalities that were not hit by the earthquake, the voluntary provision of informal care was found to reduce elderly mortality.

The finding suggests that societies facing population ageing can consider encouraging voluntary work for the elderly as a means to provide support for the elderly. It is also worth noting that a non-trivial proportion of individuals

who are not in the labour force engage in volunteer work (e.g., 22% and 37% in case of Japan and the United Kingdom, respectively). It would be beneficial to have more studies to investigate the production capacity of these individuals, as society is facing a shrinking labour force that presents a challenge to accommodate the growing needs of an ageing population.

(For further information about this paper, please contact Dr Aoki: [y.aoki@abdn.ac.uk](mailto:y.aoki@abdn.ac.uk).)

***In Japan, the voluntary provision of daily care to the elderly significantly reduced elderly mortality suggesting that governments may wish to encourage voluntary work for the elderly to provide much needed support for this vulnerable demographic group.***



## 'Self-Employment and the Paradox of the Contented Female Worker'

Keith Bender and K. Roche

*Small Business Economics*,  
Vol. 47, no. 2, 2016, pp. 421-35.



Prof Keith Bender

There has been a growing literature in economics that examines the subjective wellbeing of workers. One of the most consistent empirical findings of this literature is that, *ceteris paribus*, women report having higher levels of wellbeing than men, in spite of the lower earnings levels of women. This result is so persistent across studies that some researchers have named it, 'The Paradox of the Contented Female Worker'. Explanations of this 'Paradox' range from some research suggesting that it is about men and women having different expectations about the workplace while other research finding that it is about the characteristics of the jobs themselves.

The starting point of this paper is the recognition that the previous literature has focused only on employees. Given the large number of self-employed workers in developed economies and their importance in job creation, it is surprising that there has been so little research comparing the job satisfaction of male and female entrepreneurs. Thus, this paper is the first to examine if the 'Paradox' occurs among the self-employed and if the differential exists, what are the reasons for the higher job satisfaction for female entrepreneurs.

To address this issue, we use data from the 2003 US National Survey of College Graduates which

***In spite of earning lower pay, self-employed women are happier than self-employed men because they match better on key job attributes such as independence, responsibility and contribution to society.***

contains data on over 80,000 university graduates whose degrees are in science, technology, engineering or mathematical (STEM) fields or who are currently working in a STEM field. Results suggest that the 'Paradox' is even more apparent among the self-employed – the female-male job satisfaction differential is higher among the self-employed than for employees.

The next part of the research was to identify why this is the case. It is long known in the self-employment literature that the characteristics of entrepreneurial and wage and salary jobs are very different. The NSCG asks a series of questions about how important various aspects of the job are to workers – such as advancement, benefits, salary, independence, contribution to society, intellectual challenge and responsibility. In addition, the survey asks how well a worker's job satisfies these criteria. Thus, we are able to determine whether there is a 'gap' between what is desired in a job and how that job fulfils that characteristic. Controlling for this gap, we find that there is no residual difference in job satisfaction. This result suggests that women are far better than men in matching to jobs with the characteristics that they want out of a job, such as independence, responsibility and contribution to society.

(For further information, please contact Prof Bender: [kabender@abdn.ac.uk](mailto:kabender@abdn.ac.uk)).

