

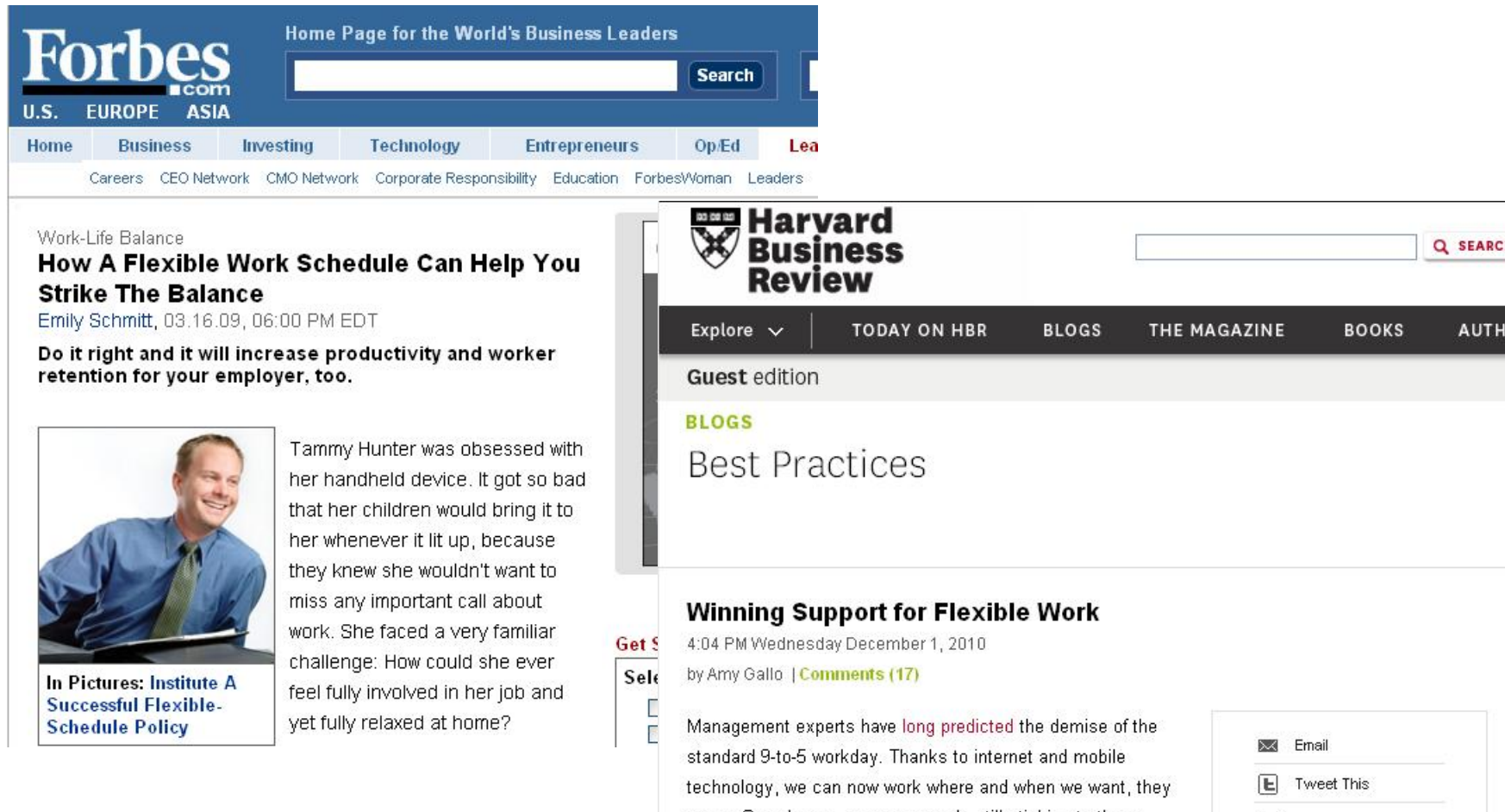
“Organisation of working time: implications for productivity”  
2<sup>nd</sup> of June, European Foundation

The varying company performance outcomes of  
working-time flexibility practices

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# Background



The image shows a screenshot of two web pages. The top page is the Forbes.com homepage, featuring the logo, navigation tabs for 'Home', 'Business', 'Investing', 'Technology', 'Entrepreneurs', 'Op/Ed', and 'Lea', and a search bar. The bottom page is the Harvard Business Review website, showing the logo, navigation tabs for 'Explore', 'TODAY ON HBR', 'BLOGS', 'THE MAGAZINE', 'BOOKS', and 'AUTHOR', and a search bar. The main content area of the Harvard Business Review page features a 'Guest edition' section with a 'BLOGS' sub-section titled 'Best Practices'. A specific article is highlighted with the title 'Winning Support for Flexible Work', dated '4:04 PM Wednesday December 1, 2010', and written by 'Amy Gallo'. The article text begins with 'Management experts have long predicted the demise of the standard 9-to-5 workday. Thanks to internet and mobile technology, we can now work where and when we want, they...'. To the right of the article text are social media sharing options for 'Email' and 'Tweet This'.

Work-Life Balance

## How A Flexible Work Schedule Can Help You Strike The Balance

Emily Schmitt, 03.16.09, 06:00 PM EDT

Do it right and it will increase productivity and worker retention for your employer, too.



In Pictures: Institute A Successful Flexible-Schedule Policy

Tammy Hunter was obsessed with her handheld device. It got so bad that her children would bring it to her whenever it lit up, because they knew she wouldn't want to miss any important call about work. She faced a very familiar challenge: How could she ever feel fully involved in her job and yet fully relaxed at home?



Explore

TODAY ON HBR

BLOGS

THE MAGAZINE

BOOKS

AUTHOR

Guest edition

BLOGS

## Best Practices

### Winning Support for Flexible Work

4:04 PM Wednesday December 1, 2010

by Amy Gallo | [Comments \(17\)](#)

Management experts have long predicted the demise of the standard 9-to-5 workday. Thanks to internet and mobile technology, we can now work where and when we want, they...

Email

Tweet This

## Background

- Not much empirical evidence in a cross-national comparative perspective
- Flexibility arrangements may have different implications depending on the context- country/sector (Mills & Täht, 2010; Anderson et al., 2002; Blair-Loy & Wharton, 2002)
- Examine the impact of working-time flexibility arrangements and its varying impact in different countries and sectors

# The Data

Which international or national data sources would allow to research more closely the question whether and which impact working time flexibility have on either individual/company/sectoral level labour productivity?

## International data sources

- Establishment Level
  - European Company Survey (ECS) 1<sup>st</sup>, 2<sup>nd</sup> wave – comparability
  - European Union Company survey of Operating hours, Working times and Employment ([EUCOWE](#))
- Individual level
  - European Working Conditions Survey
  - European Social Survey (2<sup>nd</sup> 5<sup>th</sup> waves)

## National data sets

- Matched employer-employee data
  - NL: OSA- labour demand/supply panel
  - DE: IAB – [Establishment Panel](#)
  - UK: [Workplace Employment Relations Survey](#)
- Other company surveys – more commercial, smaller N

## Establishment Survey on Working Time

- European Establishment Survey on Working Time and Work-life Balance (ESWT or 1st wave ECS)
- European Foundation (Dublin Foundation)
- 2004(EU15) 2005(6 new accession: HU, CZ, CY, SI, PO, LT)
- 21000 companies, Managers and Employee-Reps
- Covering vast range of flexibility, work life balance issues

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## Arrangement included in the analysis

<b>Arrangements used</b>	<b>Information</b>
Overtime	Use
Unusual hours	Use
Shift work	Use
Part-time work	Use
Right to reduce working hours	Availability
Flexible working hours	Use
Leave for care or illness in family	Availability
Leave for education	Availability
Leave for other purposes	Availability



## Why bundles?

- Arrangements used in combination
- Complimentary, substitution effects
- Ambiguity – hard to distinguish

## Working time flexibility components

Variable	employee	both	employer	Uniqueness
Care leave	<b>0.82</b>	0.10	0.01	0.32
Education leave	<b>0.83</b>	0.06	0.04	0.31
Other leave	<b>0.69</b>	0.05	0.00	0.52
Overtime	-0.02	0.27	<b>0.34</b>	0.81
Unusual hours	-0.02	0.04	<b>0.81</b>	0.35
Shift work	0.07	0.02	<b>0.79</b>	0.37
Flexible working	0.08	<b>0.45</b>	-0.03	0.79
Part-time work	0.03	<b>0.77</b>	0.05	0.40
Reduce working hours	0.16	<b>0.75</b>	0.04	0.41

Varimax rotation method, bold representing the highest loadings

$R^2=52.44\%$

N=17,200

# The Theory

## Outcomes of employee-oriented WTFC

- Cost reduction
- Increase in productivity
- Costs as well... direct costs, supervision costs, administration costs...

## Outcomes of employer-oriented WTFC

- Direct benefits
- Performance
- Health and safety consequences
- Impact on families and society as a whole

## Cross-country and cross-sectoral variations

- Characteristics of the arrangements
- Different starting points
- Different possible problems – due to the nature and situation of sector and country

## Dependent variables

- ***HR problem indicators (dichotomous measurement)***
  - High absenteeism and/or high sickness rate
  - Difficulties in finding staff (for skilled or unskilled)
  - Difficulties in retaining staff
  - Low motivation of staff
  - 'Other' problems (not defined)
- Total number of problems in the company (scale: aggregated number of problems from the individual problem area)
- ***Economic situation (1-4)***

## Control variables

- Sector – 13 categories, dummy variables – reference: manufacturing
- Public vs. private sector – dummy variable (reference: private company)
- Establishment size – 6 categories
- Composition – proportion of female workers – 5 categories
  - “ skilled workers
  - “ younger workers (younger than 30)
  - “ older workers (older than 50)
- Existence of employee representative body – dummy variable (reference: no employee representative)
- Headquarters, subsidiary or single-site – dummy variables (reference: single-site)
- Provision of work-life balance facilities/service



## Problems with performance analysis

- Observed causalities will not always be clear cut – reverse causality
- Problems may be endogenous to other company HR practices
- However based on theories and other previous studies we can (loosely) link performance outcomes with working time practices – but always take these problems in mind!

# Results

## Correlations of working-time flexibility component scores and company performance outcomes [establishment weighted / bi-variate]

	sickness & absenteeism	hard to find workers	hard to retain	low motivation	other	total number	economic situation
Employee-WTC	0.003	-0.068 <sup>***</sup>	-0.006	-0.026 <sup>***</sup>	0.032 <sup>***</sup>	-0.035 <sup>***</sup>	0.025 <sup>**</sup>
Both-WTC	0.062 <sup>***</sup>	0.006	0.017 <sup>*</sup>	0.029 <sup>***</sup>	0.049 <sup>***</sup>	0.053 <sup>***</sup>	0.003
Employer-WTC	0.104 <sup>***</sup>	0.108 <sup>***</sup>	0.075 <sup>***</sup>	0.097 <sup>***</sup>	0.064 <sup>***</sup>	0.162 <sup>***</sup>	-0.028 <sup>***</sup>

## The effect of working-time flexibility components controlled for various company level characteristics

	sickness & absenteeism		hard to recruit workers		hard to retain workers		low motivation of workers		other problems	
	Prb.	sig	Prb.	sig	Prb.	sig	Prb.	sig	Prb.	sig
constant	25.8	***	48.0		10.8	***	18.6	***	5.1	***
Employee WTFC	0.5		-0.8	*	0.2		-0.5		2.0	**
Both WTFC	0.8		0.9	**	1.1		1.6	**	2.9	***
Employer WTFC	4.4	***	3.6	***	3.9	***	3.8	***	2.2	**

## The effect of working-time flexibility components controlled for various company level characteristics

	total number of problems		Economic situation	
	B	sig	B	sig.
constant	1.091	***		
Employee-WTFC	0.000		0.015	***
Both-WTFC	0.031	***	0.005	
Employer WTFC	0.100	*** (RE)	-0.016	***

	employee	both	employer
Belgium	0.00	0.04	<b>0.21</b>
Denmark	-0.03	0.02	0.05
Germany	0.00	0.01	<b>0.11</b>
France	0.08	<b>0.10</b>	<b>0.09</b>
Greece	0.02	0.03	<b>0.12</b>
Spain	-0.03	0.01	<b>0.10</b>
Ireland	-0.04	0.06	<i>0.11</i>
Italy	0.00	0.03	<b>0.10</b>
Luxembourg	<b>0.16</b>	0.00	<b>0.22</b>
Netherlands	-0.02	-0.02	0.03
Austria	0.01	0.02	0.06
Portugal	0.00	<b>0.09</b>	<b>0.08</b>
Finland	<b>-0.10</b>	<i>0.07</i>	<b>0.11</b>
Sweden	0.01	-0.05	<b>0.10</b>
United Kingdom	<b>-0.11</b>	<b>0.12</b>	<b>0.20</b>
Czech Rep.	0.02	-0.03	0.07
Cyprus	-0.01	0.07	0.00
Latvia	<i>0.10</i>	0.05	0.09
Hungary	<i>0.07</i>	0.06	0.04
Poland	0.01	0.00	<b>0.07</b>
Slovenia	0.07	<b>0.19</b>	0.08

	employee	Both	employer
Mining & quarrying	<i>-0.215</i>	<b>0.232</b>	0.132
Manufacturing	<i>-0.011</i>	0.004	<b>0.089</b>
Electricity, gas and water supply	<i>-0.078</i>	0.015	<i>-0.014</i>
Construction	0.021	<b>0.086</b>	<i>0.058</i>
Retail & repair	<i>-0.004</i>	<b>0.051</b>	<b>0.152</b>
Hotel & restaurant	0.035	0.062	0.040
Transport	0.027	0.048	<i>0.065</i>
Financial intermediation	<i>-0.023</i>	<i>0.085</i>	0.058
Real estate	<i>-0.003</i>	0.047	<b>0.184</b>
Public administration	0.017	<b>0.062</b>	<b>0.137</b>
Education	<i>-0.002</i>	0.021	<b>0.140</b>
Health & Social service	<i>-0.057</i>	0.079	<b>0.130</b>
Other services	0.049	0.074	<b>0.112</b>

## Summary I

- Employee-oriented working time component decreases the chance of companies facing problems in recruiting both high/low skilled workers,(motivation of workers) however may increase “other problems”
- Employer-oriented working time component increases the chance of companies facing problems in sickness, absenteeism, recruiting, maintaining workers, motivation, as well as other problems, thus increasing total number of problems the company faces.
- Both-working time component increases some problem aspects, but not as bad as the employer-oriented



## Summary II

- There are cross-country variation in the relationship
- There are cross-sector variation in the relationship

## Conclusions

- Employee-oriented flexibility can be beneficial in the longer-term for company performance
- The use of employer-oriented flexibility practices should be taken with caution
- There is no-size-fits-all approach to flexibility

## Further research

- Why are there these cross-national, cross-sectoral variances in the relationships – especially for employee-oriented working time component
- Variance in the performance outcome of specific working time arrangements?
- Test this further longitudinal data is needed which covers the wide range of arrangements, with various corporate managerial practices, and performance outcomes indicators
- ? – both working time... rid of or keep??
- Focus on individual arrangement of work-life balance policies?